CITY OF LAS VEGAS GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 'UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA', LATEST ISSUE; THE 'UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA', LATEST REVISED EDITION; THE 'SUMMERLIN IMPROVEMENT STANDARDS' FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS DEVIATIONS FROM STANDARDS:
2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCE'S WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE ONE-HALF INCH (½') ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
9. CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.
12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY WESTERN TECHNOLOGIES INC., REPORT # 126JD030, DATED OCTOBER 12, 2016, APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
13. EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.

   WALL NOTES:
16. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC, THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO 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.
21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND 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 AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS. THE LOCATION SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION MAPS MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTAINTIES OF +/- 0.9 METERS (+/- 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMPUTER FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).
22. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST EDITION.
23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

CITY OF LAS VEGAS STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION, AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION.
2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC/ELECTRICAL FIELD OPERATIONS DIVISION AND THE CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623.1.0.03 (E) OF THE SPECIFICATIONS.
3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
4. ALL EMPTY CONDUIT SHALL HAVE PULL STRINGS INSTALLED PRIOR TO FINAL INSPECTION.
5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE OF EIGHTEEN INCHES (18") TO THE FACE OF STREET LIGHTING POLE ON ALL SIDES WHEN STREETLIGHT IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.
6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE ELECTRICAL SERVICES SECTION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
7. SERVICE POINT SHALL BE COORDINATED WITH NEVADA POWER COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE PLANS.
8. IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.
9. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREET LIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED BEFORE STREETLIGHT BASES ARE INSTALLED AT NO EXPENSE TO THE CITY OF LAS VEGAS.
10. THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
11. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO BOND RELEASE OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREETLIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE THE CITY OF LAS VEGAS FOR ALL NEW PUBLIC STREET LIGHT/S AND/OR SERVICE/S 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 (TEFO) AT (702) 229-6331.

DEVIATION FROM STANDARDS

NONE

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT # 125105

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICAL SHALL BE GIVE 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 PM THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
2. 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 THE UDACS SHALL SUPERCEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES OR SMALLER FROM LVVWD 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 LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.
14. THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (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 BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDED THE PLACEMENT OF 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 LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

1ST APPROVED 10/19/17

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

PROJECT NO. 125105 DATE: 8/16/18

SWPPP NOTES

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVED ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAYS OF THE CITY OF LAS VEGAS AND 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 THE CITY OF LAS VEGAS AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES 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 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 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 INSPECTION MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO 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.

CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
3. CHISEL "S" OR "G" 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 "Y" S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. 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.
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 MAIN THAT 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.

CLARK COUNTY DEPARTMENT OF PUBLIC WORKS DEVELOPMENT REVIEW NOTES

1. INSPECTIONS ARE REQUIRED. CALL 24 HOURS IN ADVANCE, (702) 455-4610. THE PERMIT, APPROVED PLANS, AND BARRICADE PLANS FOR THIS WORK SHALL BE ON THE JOB SITE AT ALL TIMES.
2. EXACT LOCATION OF ALL SAW-CUT LINES SHALL BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
3. CURB AND GUTTER WITH A GRADE OF LESS THAT 4/10 OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
4. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF (1/2") INCH ABOVE THE LIP OF THE GUTTER (INCLUDING OPEN GRADE).
5. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS AND STANDARD DRAWINGS CLARK COUNTY AREA NEVADA AND CLARK COUNTY SUPPLEMENT TO UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, LATEST REVISION EXCEPT FOR LUMINAIRES. REFER TO CLARK COUNTY PUBLIC WORKS QUALIFIED PRODUCTS LIST "QPL" FOR LED LUMINAIRES. QPL CAN BE FOUND ONLINE AT HTTP://WWW.CLARKCOUNTYNV.GOVPUBLIC-WORKS/PAGES/DEFAULT.ASPX
6.
7. PRIVATE STREETS, CURB & GUTTER AND VALLEY GUTTERS REFLECTED ON THESE PLANS SHALL BE INSPECTED BY A CLARK COUNTY INSPECTOR.
8. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS SHALL BE DETERMINED IN THE FILED BY CLARK COUNTY PUBLIC WORKS INSPECTOR.
9. PROPER SIGNS, BARRIERS, BARRICADES AND LIGHTS SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE LATEST "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS." TRAFFIC, SCHOOL, OR STREET SIGNS OF ANY KINO SHALL NOT BE MOVED FOR ANY REASON WITHOUT FIRST COORDINATING WITH THE DEPARTMENT OF PUBLIC WORKS INSPECTOR @ (702)455-4610.
10. THIS PLAN DOES NOT AUTHORIZE CLOSURE OF ANY ROAD OR STREET.
11. NO OPEN TRENCH SHALL BE ALLOWED ACROSS ANY STREET OR WITHIN TEN (10') OF ANY TRAVEL-WAY, EXCEPT WHEN WORK IS IN ACTUAL PROGRESS. AREAS COVERED BY ACCEPTABLE STEEL PLATE SHALL NOT BE CONSTRUED AS A TRENCH. NO OPEN TRENCH IS PERMITTED IN EXCESS OF 500 FEET OR LENGTH NECESSARY TO ACCOMMODATE PIPE INSTALLATION IN A SINGLE DAY, WHICH EVER IS GREATER. ALL TRENCH CROSSINGS AND BACKFILL SHALL MEET THE STANDARD SPECIFICATION UNLESS OTHERWISE STATED.
12. A TEMPORARY PATCH SHALL BE IN PLACE AT THE END OF EACH WORK DAY WHERE THE BACKFILL IN THE TRENCH HAS BEEN COMPLETED AND PRIOR TO OPENING THE WORK AREA BACK TO TRAFFIC AND SHALL BE MAINTAINED BY THE PERMITEE. A PERMANENT PATCH SHALL BE IN PLACE WITHIN THIRTY (30) DAYS AFTER THE INSTALLATION OF THE TEMPORARY PATCH.
13. COMPACTION TESTS ARE REQUIRED.

LAS VEGAS FIRE & RESCUE GENERAL NOTES FOR HYDRANTS AND ACCESS

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE #6325 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICT'S – APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. [IFC 105.7.12]
4. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW. [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. Center loading is acceptable for the hydro tests with prior Fire Prevention approval. [IFC 106.3]
7. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.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 1,000 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]
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 C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AND 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 [IFCC102.7]
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. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN. [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% FPR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE

CONSTRUCTION QUANTITIES

NO	ITEM	UNIT	PUBLIC	PRIVATE
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216	LF	1,283	71
2	SAWCUT NEAT & MATCH EXISTING	LF	930	–
3	ASPHALT S/W 2" AC OVER 6" TYPE II	SF	173	–
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I	EA	9	–
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234	SF	5,754	–
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016	SY	3,839	–
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE# 17-41363	SY	3,731	–
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225	SF	3,422	–
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229	SF	1,008	–
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219	SF	2,120	–
11	DEMOLISH AND REMOVE EXISTING ASPHALT	SY	5,732	–
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4	SF	2,010	–
13	CONCRETE BARRIER PER CCAUSD NO. 237	EA	12	–
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL), CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED	–	–	–
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236	EA	2	–
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2	EA	2	–
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219	LF	2,385	–

TRAFFIC QUANTITIES CONTINUED

NO	ITEM	UNIT	PUBLIC	PRIVATE
1	INSTALL TURN ARROW AND PAVEMENT MARKINGS PER CCAUSD #246 (RPM)	EA	13	–
2	INSTALL 24" WIDE STOP BAR AND/OR CROSSWALK MARKINGS PER CCAUSD #254	LF	84	–
3	INSTALL LANE DELINEATION WITH 24" CHEVRONS PER CCAUSD #245	LF	272	–
4	INSTALL 24"X30" R3-4 (NO U-TURN SIGN)	EA	1	–
5	INSTALL TYPE 4 LANE LINE	LF	277	–
6	INSTALL 24"X30" R2-1 (SPEED LIMIT SIGN)	EA	2	–
7	INSTALL 12"X18" R7-1 (NO PARKING SIGN)	EA	4	–
8	INSTALL FORCED LEFT MARKER OR RIGHT TURN STORAGE LANE MARKER PER CCAUSD #246.6	EA	6	–
9	INSTALL 30"X30" R3-7R (RIGHT TURN ONLY)	EA	2	–
10	INSTALL 24"X36" R3-5zP (BUS EXEMPT SIGN)	EA	2	–
11	INSTALL #7 PULL BOX PER CCAUSD #326	EA	4	–
12	INSTALL BICYCLE LANE APPROACH TO EXCLUSIVE RIGHT TURN LANE PER CCAUSD #246.1	EA	1	–
13	INSTALL LED FIXTURE CA22-LE-160 LA-AW-UMIV-BLP PER TOWN CENTER STDS. POLE AND FOUNDATION PER CCAUSD #314, #320 & #321	EA	7	–
14	INSTALL 1-1/4" PVC STREET LIGHT CONDUIT AND WIRE	LF	1,256	–
15	INSTALL R4-4 (BEGIN RIGHT TURN LANE YIELD TO BIKERS)	EA	1	–
16	INSTALL R3-17 (RIGHT TURN BIKERS ONLY)	EA	1	–
17	INSTALL R4-7 & R3-4 SIGNS	EA	1	–
18	INSTAL (2) 3" CONDUITS WITH (1) #8 BARE TRACER WIRE	LF	264	–
19	INSTALL 6" SOLID WHITE LINE (TAPE OR PAINT)	LF	794	–
20	INSTALL BICYCLE LANE DELINEATION PER CCAUSD #244.9	EA	10	–
21	INSTALL MEDIAN NOSE MARKINGS PER CCAUSD #248 & K-71 FLEXIBLE MARKER POST	EA	7	–
22	INSTALL FLASHING YELLOW ARROW U-TURN SIGNAL WITH U-TURN YIELD SIGN	EA	1	–
23	OBLITERATE EXISTING STRIPING	LF	1,074	–
24	INSTALL 15' MAST ARM 250W STREETLIGHT AND FOUNDATION PER CCAUSD #316, #320, AND #321	EA	1	–
25	INSTALL 4' F.A.S.T. INTERCONNECT CONDUIT CONTAINING (1) #8 BARE WIRE	LF	1231	–
26	INSTALL P-30 PULL BOX PER CCAUSD #326	EA	2	–
27	INSTALL R6-1R (ONE WAY)	EA	1	–
28	INSTALL R3-16A (BIKE LANE ENDS)	EA	1	–
29	24" WHITE CROSSWALK PER CCAUSD #254	LF	280	–

WATER CONSTRUCTION QUANTITIES

NO	ITEM	UNIT	PUBLIC	PRIVATE
1	WET TAP EX. 10" PVC WATER WITH 10"x 10" TAPPING SLEEVE W/ 10" TAPPING VALVE PER UDACS SECTION 2.24.01A, EXCAVATE PER UDACS PLATE 17, 19 & 34.	EA	2	–
2	INSTALL 10" PVC WL – C900, CLASS 150	LF	46	–
3	STUB & CAP – FOR FUTURE CONTINUATION	EA	3	–
4	INSTALL CAP & 2" MANUAL BLOW OFF ASSEMBLY PER UDACS PLATE 36	EA	3	–
5	INSTALL FIRE HYDRANT PER UDACS PLATE 40	EA	1	–
6	INSTALL 10" x 6" TEE W/ 6" GATE VALVE, 10" GATE VALVE, AND 10" x 8" TEE W/ 8" GATE VALVE PER UDACS PLATE 30, 31 & 39	EA	1	–
7	INSTALL 6" PVC WL – C900, CLASS 150	LF	14	–
8	RELOCATE FIRE HYDRANT PER NOTE ON SHEET P1	EA	1	–
9	ADJUST EX GATE VALVE TO GRADE PER UDACS PLATE 39	EA	6	–
10	INSTALL 6" RESTRAINED JOINT (RJ) DIP WL – CLASS 350	LF	15	–
11	ADJUST TO FINAL GRADE, 2" BLOW OFF PER UDACS PLATE 36	EA	1	–

QUANTITIES NOTE

QUANTITIES SHOWN ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN ESTIMATE FOR BIDDING AND SHALL BID A COMPLETE JOB. CONTRACTOR SHALL ADVISE OWNER AND ENGINEER OF ANY APPARENT DISCREPANCIES IN ESTIMATE.

AVOID LIFTING EQUIPMENT POWER LINES. IT'S CRITICAL. CALL BEFORE YOU OVERHEAD 1-702-227-2929

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

Call before you Dig AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S CRITICAL. CALL 811 OR 1-800-227-2600

1ST APPROVED 10/19/17

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NUMBER 125105 DATE: 5/16/18
APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

CC#: PW17-41363-CMF
CLV#: 67712

CLV#: 107V7168

No.	REVISIONS	DATE	BY
2	UPDATED TRAFFIC NOTES & QUANTITIES	8-6-18	SB
1	UPDATED NOTES & QUANTITIES	5-23-16	SB

Kimley»Horn
6671 LAS VEGAS BLVD. S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

PROFESSIONAL ENGINEER STATE OF NEVADA TIMOTHY WILEY CIVIL No. 17819

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

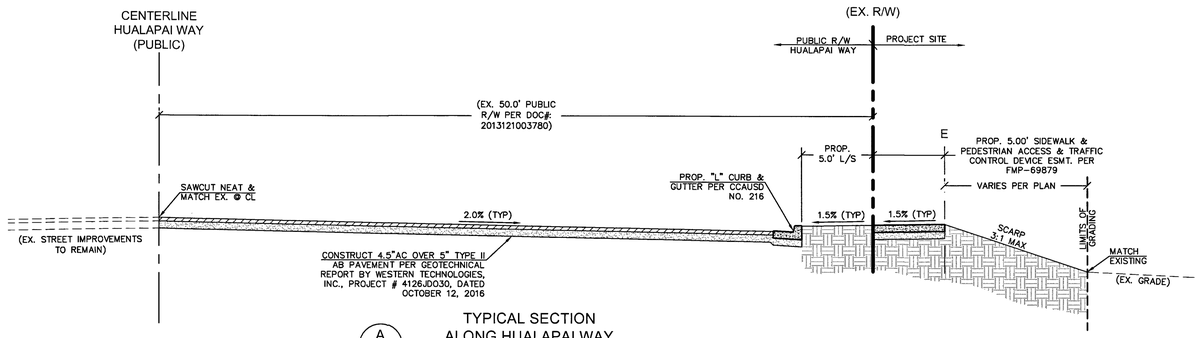
QUANTITIES

COMMERCIAL SUBDIVISION
@ SEC DEER SPRINGS & HUALAPAI

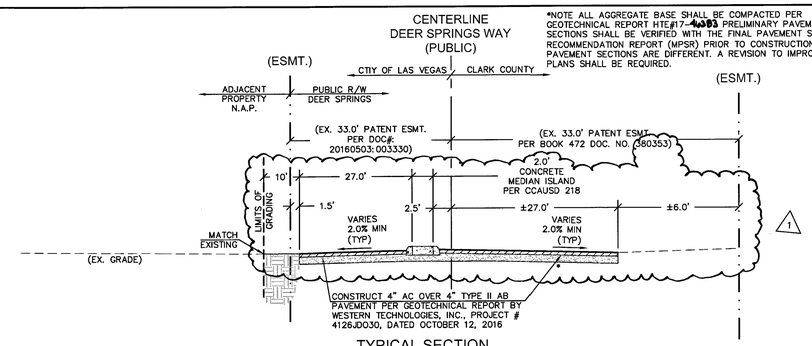
3 OF 17 SHEETS
C3

PROJ#:125105 AGR:116197 QS:125-19-SW

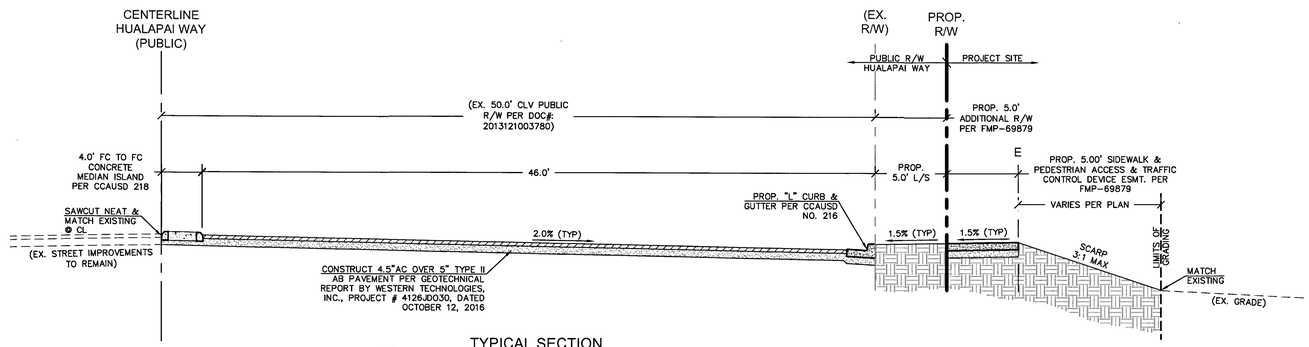
Plotted By:Zito, JoLynn Sheet Set:Kha Layout:C3 April 17, 2018 12:38:03pm W:\61153_LAURICH\DWG\MPROWGS\OFFSITE\01-61153-C1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



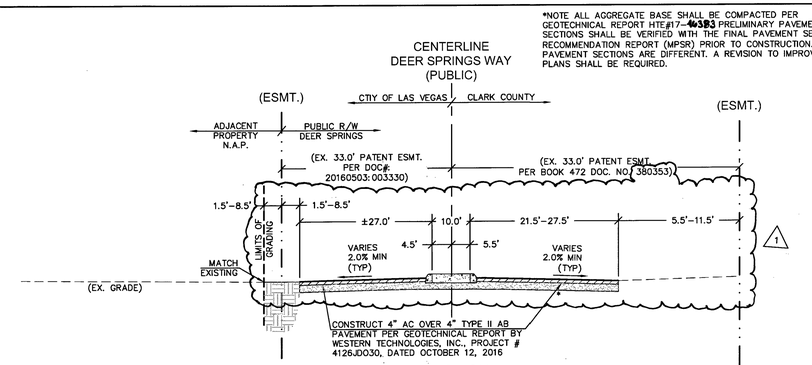
A / D1 TYPICAL SECTION ALONG HUALAPAI WAY
N.T.S.



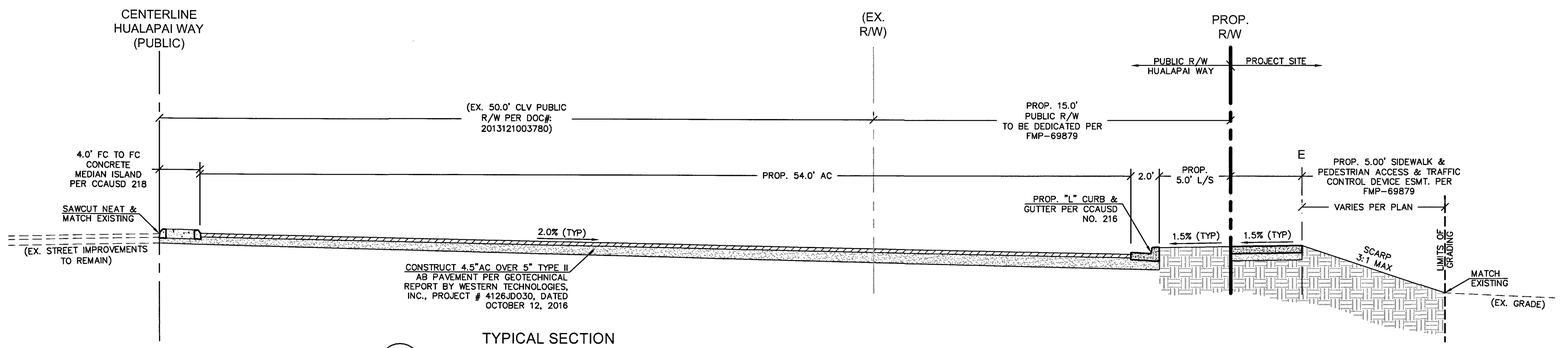
E2 / D1 TYPICAL SECTION ALONG DEER SPRINGS WAY
N.T.S.



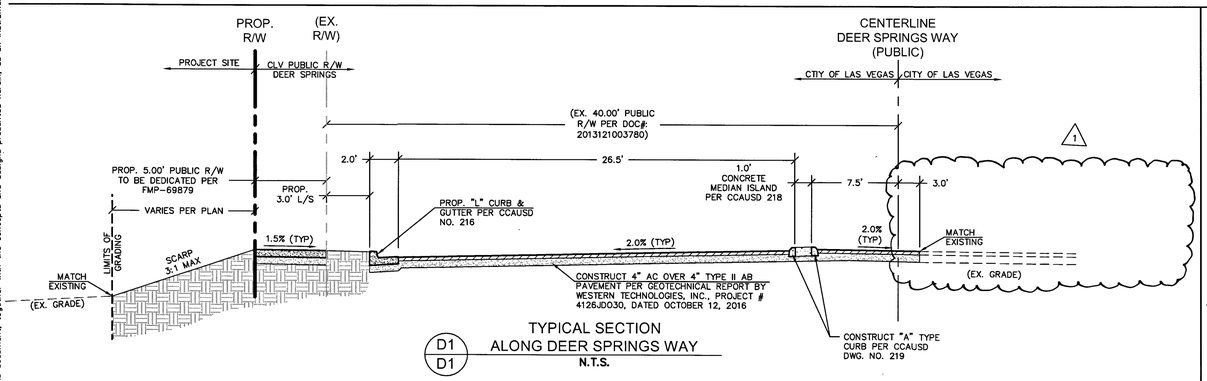
B / D1 TYPICAL SECTION ALONG HUALAPAI WAY
N.T.S.



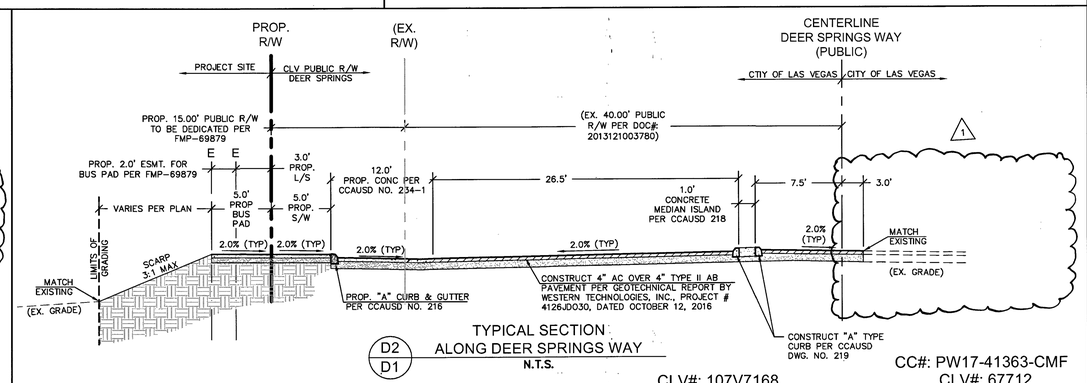
F / D1 TYPICAL SECTION ALONG DEER SPRINGS WAY
N.T.S.



C / D1 TYPICAL SECTION ALONG HUALAPAI WAY
N.T.S.



D1 / D1 TYPICAL SECTION ALONG DEER SPRINGS WAY
N.T.S.



D2 / D1 TYPICAL SECTION ALONG DEER SPRINGS WAY
N.T.S.

CC#: PW17-41363-CMF
CLV#: 107V7168

No.	REVISIONS	DATE	BY
1	UPDATED SECTION D1, D2, E2 & F, UPDATED PATENT ESMT DOC. NO. PER CCPW CMTS	5-21-19	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA PROFESSIONAL ENGINEER JESSE J. WOLF No. 17519 EXP. 12/31/19

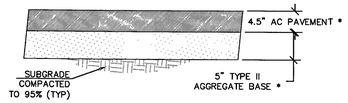
KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

TYPICAL SECTIONS

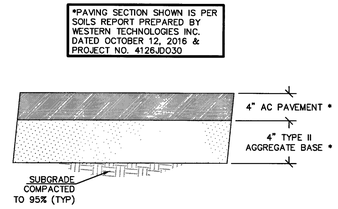
CALL BEFORE YOU OVERHEAD 1-702-227-2929
FAST Call before you UnderGround 1-702-432-5300 FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION
Call before you Dig AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. CALL 811 OR 1-800-227-2600

COMMERCIAL SUBDIVISION @ SEC DEER SPRINGS & HUALAPAI

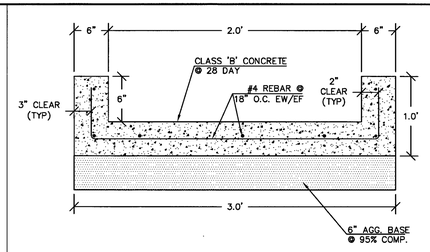
Plotted By:Zito, JoLynn Sheet Set:Kha Layout:D1 April 17, 2018 12:38:10pm W:\61153_LAURICH\DWG\IMPRDWGS\OFFSITE\02-61153-D1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



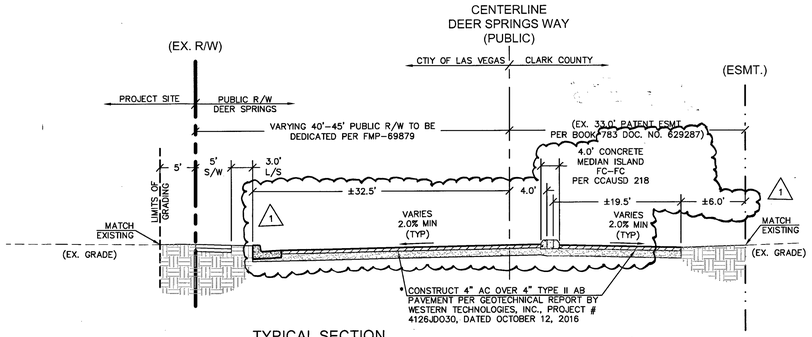
1 / D2 HUALAPAI PAVEMENT SECTION
(NOT TO SCALE)



2 / D2 DEER SPRINGS PAVEMENT SECTION
(NOT TO SCALE)

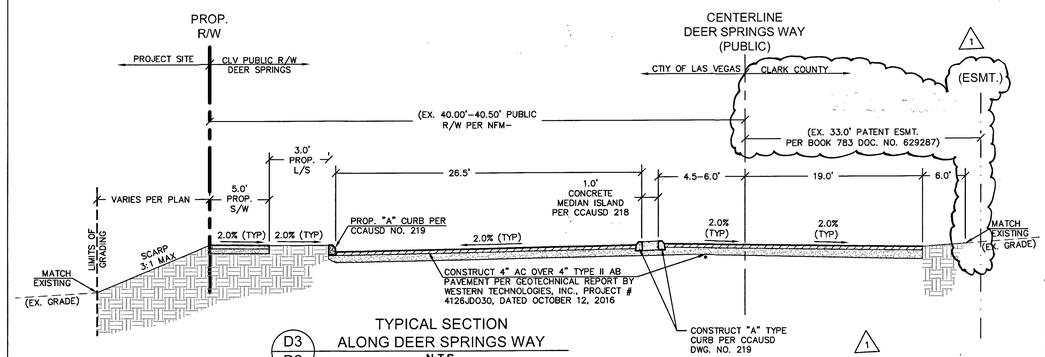


3 / D2 2' CONCRETE FLUME
(NOT TO SCALE)



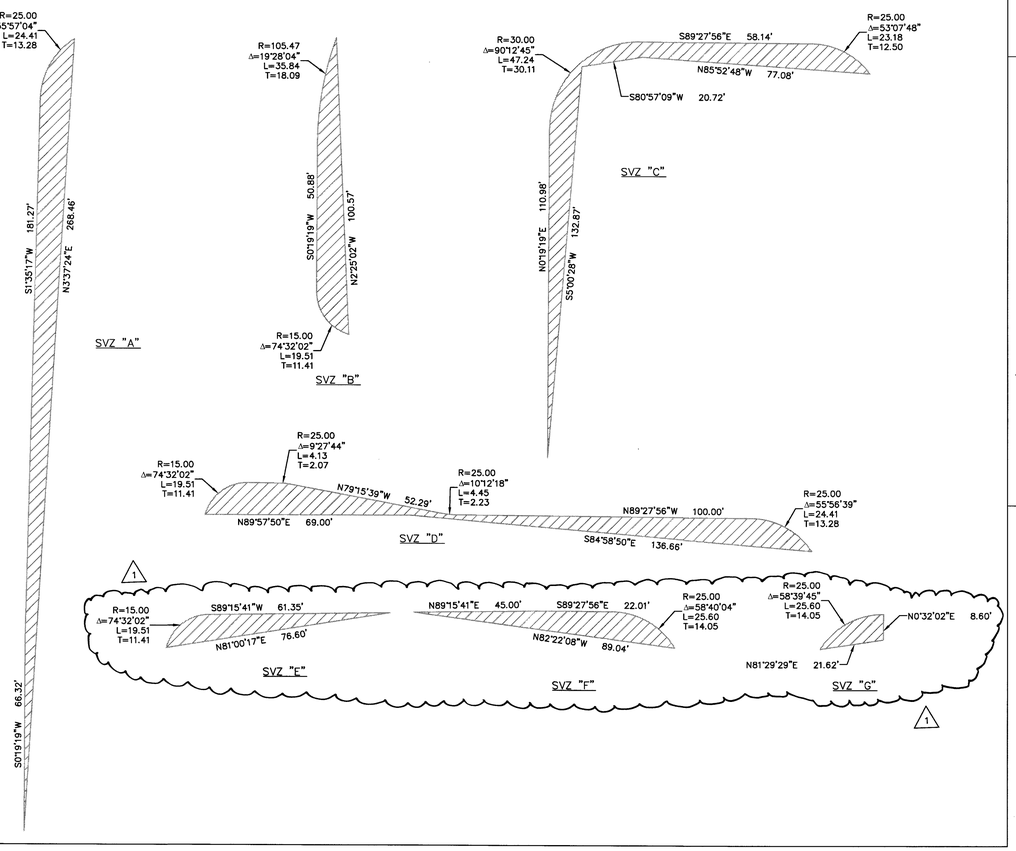
E1 / D2 TYPICAL SECTION ALONG DEER SPRINGS WAY
N.T.S.

*NOTE ALL AGGREGATE BASE SHALL BE COMPACTED PER GEOTECHNICAL REPORT (HTE#17-40393). PRELIMINARY PAVEMENT SECTIONS SHALL BE VERIFIED WITH THE FINAL PAVEMENT SECTIONS RECOMMENDATION REPORT (MPSR) PRIOR TO CONSTRUCTION. IF FINAL PAVEMENT SECTIONS ARE DIFFERENT, A REVISION TO IMPROVEMENT PLANS SHALL BE REQUIRED.



D3 / D2 TYPICAL SECTION ALONG DEER SPRINGS WAY
N.T.S.

*NOTE ALL AGGREGATE BASE SHALL BE COMPACTED PER GEOTECHNICAL REPORT (HTE#17-40393). PRELIMINARY PAVEMENT SECTIONS SHALL BE VERIFIED WITH THE FINAL PAVEMENT SECTIONS RECOMMENDATION REPORT (MPSR) PRIOR TO CONSTRUCTION. IF FINAL PAVEMENT SECTIONS ARE DIFFERENT, A REVISION TO IMPROVEMENT PLANS SHALL BE REQUIRED.



- / D2 SIGHT VISIBILITY ZONE DETAIL
(NOT TO SCALE)

No.	REVISIONS	DATE	BY
1	UPDATED SECTION E1, REVISED SIZE'S & ESMTS PER CCPW CMTS	5-24-18	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

PROFESSIONAL ENGINEER STATE OF NEVADA No. 17979 — 4/17/18

KHA PROJECT	61153.52
DATE	10/6/17
SCALE	AS SHOWN
DESIGNED BY	JZ
DRAWN BY	JZ
CHECKED BY	TW

TYPICAL DETAILS

COMMERCIAL SUBDIVISION @ SEC DEER SPRINGS & HUALAPAI

CLV#: 107V7168

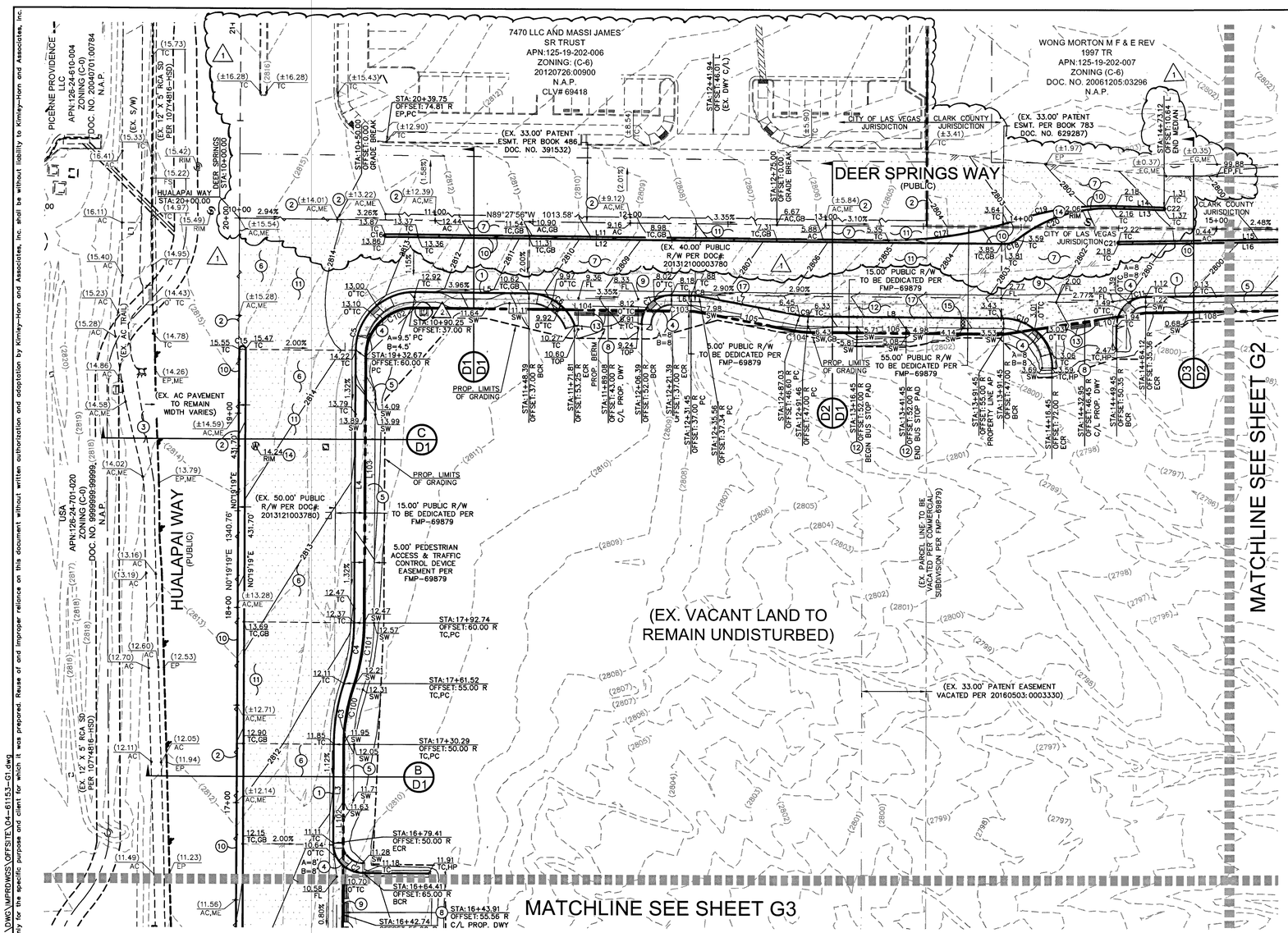
CC#: PW17-41363-CMF
CLV#: 67712

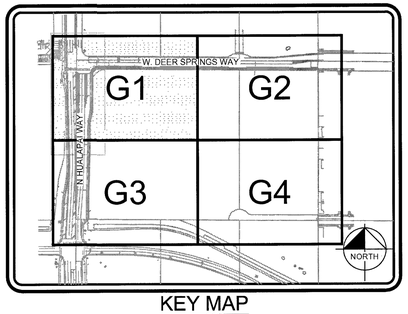
AVOID HITTING OVERHEAD POWER LINES. IT'S DEADLY.
CALL BEFORE YOU OVERHEAD
1-702-227-2929

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

Call before you Dig
AVOID HITTING UNDERGROUND UTILITY LINES. IT'S DEADLY.
CALL 811 OR 1-800-227-2600

Plotted By:Zito, JoLynn Sheet Set:Kha Layout:D2 April 17, 2018 12:38:13pm W:\61153_LAURICH\DWG\MPRDWGS\OFFSITE\02-61153-D1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.





KEY MAP
N.T.S.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60
SCALE: 1" = 30'

BOUNDARY CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

BOUNDARY LINE TABLE		
LINE	LENGTH	BEARING
L100	88.23'	N00°19'19"E
L101	225.06'	S01°35'42"W
L102	87.55'	N81°27'05"E
L103	136.93	N00°19'19"E
L104	141.18'	N89°27'56"W
L105	51.98'	N79°15'39"W
L106	100.00'	N89°27'56"W
L107	73.77'	N81°27'05"E
L108	150.99'	N89°15'41"E
L109	67.74'	N89°27'56"W

OFF-SITE CURB LINE TABLE		
LINE	LENGTH	BEARING
L1	88.23'	N0°19'19"E
L2	181.28'	N1°35'17"E
L3	50.88'	N0°19'19"E
L4	139.93'	N0°19'19"E
L5	58.14'	N89°27'56"W
L6	10.06'	N89°27'56"W
L7	52.29'	N79°15'39"W
L8	100.00'	N89°27'56"W
L9	125.84'	N89°15'41"E
L10	22.24'	N89°15'41"E
L11	257.69'	N89°27'56"W
L12	317.18'	N89°27'56"W
L13	24.62'	N88°11'35"W
L14	27.19'	N88°11'35"W
L15	101.41'	N89°15'41"E
L16	102.18'	N89°15'41"E
L17	68.23'	N89°27'56"W
L18	65.55'	N89°27'56"W
L19	277.39'	S89°27'56"E
L20	148.50'	N89°27'56"W
L21	49.30'	N89°27'56"W
L22	22.01'	N89°27'56"W
L23	3.00'	N00°44'19"W
L24	3.00'	N00°44'19"W

OFF-SITE CURB CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	25.00'	38.71'	88°43'37"	24.45'
C2	15.00'	23.56'	90°00'00"	15.00'
C3	100.00'	31.76'	18°11'42"	16.01'
C4	100.00'	31.76'	18°11'42"	16.01'
C5	30.00'	47.24'	90°12'45"	30.11'
C6	25.00'	30.33'	69°30'46"	17.35'
C7	15.00'	23.56'	90°00'00"	15.00'
C8	25.00'	4.13'	9°27'44"	2.07'
C9	25.00'	4.45'	10°12'18"	2.23'
C10	25.00'	39.27'	90°00'00"	25.00'
C11	15.00'	23.23'	88°43'37"	14.67'
C12	25.00'	39.27'	90°00'00"	25.00'
C13	25.00'	39.27'	90°00'00"	25.00'
C14	1.50'	4.71'	180°00'00"	INFINITY
C15	1.50'	4.71'	180°00'00"	INFINITY
C16	0.50'	1.57'	180°00'00"	INFINITY
C17	200.00'	65.72'	18°49'35"	33.16
C18	10.00'	6.86'	39°17'28"	3.57'
C19	150.00'	52.62'	20°05'56"	26.58'
C20	73.00'	51.68'	40°33'50"	26.98'
C21	0.50'	1.57'	180°00'00"	INFINITY
C22	0.50'	1.57'	180°00'00"	INFINITY
C23	10.00'	5.28'	30°16'24"	2.71'
C24	10.00'	4.81'	27°32'10"	2.45'
C25	74.00'	40.74'	31°32'47"	20.90'
C26	74.00'	37.21'	28°48'33"	19.01'
C27	1.50'	4.71'	180°00'00"	INFINITY
C28	1.00'	3.14'	180°00'00"	INFINITY
C29	200.00'	40.07'	11°28'42"	20.10'
C30	200.00'	40.07'	11°28'42"	20.10'
C31	5.00'	15.71'	180°00'00"	INFINITY

CONSTRUCTION NOTES

NO	ITEM
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2	SAWCUT NEAT & MATCH EXISTING
3	ASPHALT S/W 2" AC OVER 6" TYPE II
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE #17-46383
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219
11	DEMOLISH AND REMOVE EXISTING ASPHALT
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4
13	CONCRETE BARRIER PER CCAUSD NO. 237
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL). CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219

CLARK COUNTY DEPARTMENT OF PUBLIC WORKS DEVELOPMENT REVIEW

8/22/18
ACCEPTANCE OF PLANS FOR FILING BY
8/26/18

ACCEPTANCE OF THESE PLANS FOR FILING SHALL NOT BE CONSTRUED TO BE A PERMIT FOR OR AN APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS AND/OR SPECIFICATIONS. CLARK COUNTY SHALL BE HELD FREE FROM DAMAGES WHICH MAY RESULT FROM CONSTRUCTION OF THE IMPROVEMENTS FROM THE ENGINEERING DESIGN DEPICTED HEREIN.

NOTE: POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE CLARK COUNTY.

STORMWATER MANAGEMENT NOTES:

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 CITY OF LAS VEGAS BUILDING ADMINISTRATIVE CODE 24.40 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 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 ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.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.

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, CLV DS4809 & CLARK COUNTY HTE #16-48274 & 17-28627.

TREASEA WOLF, P.E. No. 17819 — DATE 4-17-18

CC#: PW17-41363-CMF
CLV#: 107V7168 CLV#: 67712

NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT. AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

CLARK COUNTY CONCURRENCE

NO WORK TO BE PERFORMED IN CLARK COUNTY RIGHT-OF-WAY UNTIL CLARK COUNTY APPROVAL IS OBTAINED

LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PROJECT NO. 4126JD030.

2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.

3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).

4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION

5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.

6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.

7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

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

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
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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

No.	REVISIONS	DATE	BY
2	ADDED TRANSFORMER	9-6-18	SJS
1	UPDATED NOTE 9, S/Z NOTE & UPDATED MEDIAN PER CC CMTS, UPDATED LINE & CURVE TABLE & ADDED TYING INTO NORTH	5-24-18	SB
	ADJACENT PROPERTY IMPROVEMENTS		

Kimley»Horn
6671 LAS VEGAS BLVD. S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA — TREASEA WOLF — CIVIL EDP-23010 — No. 17819 — PROFESSIONAL ENGINEER

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

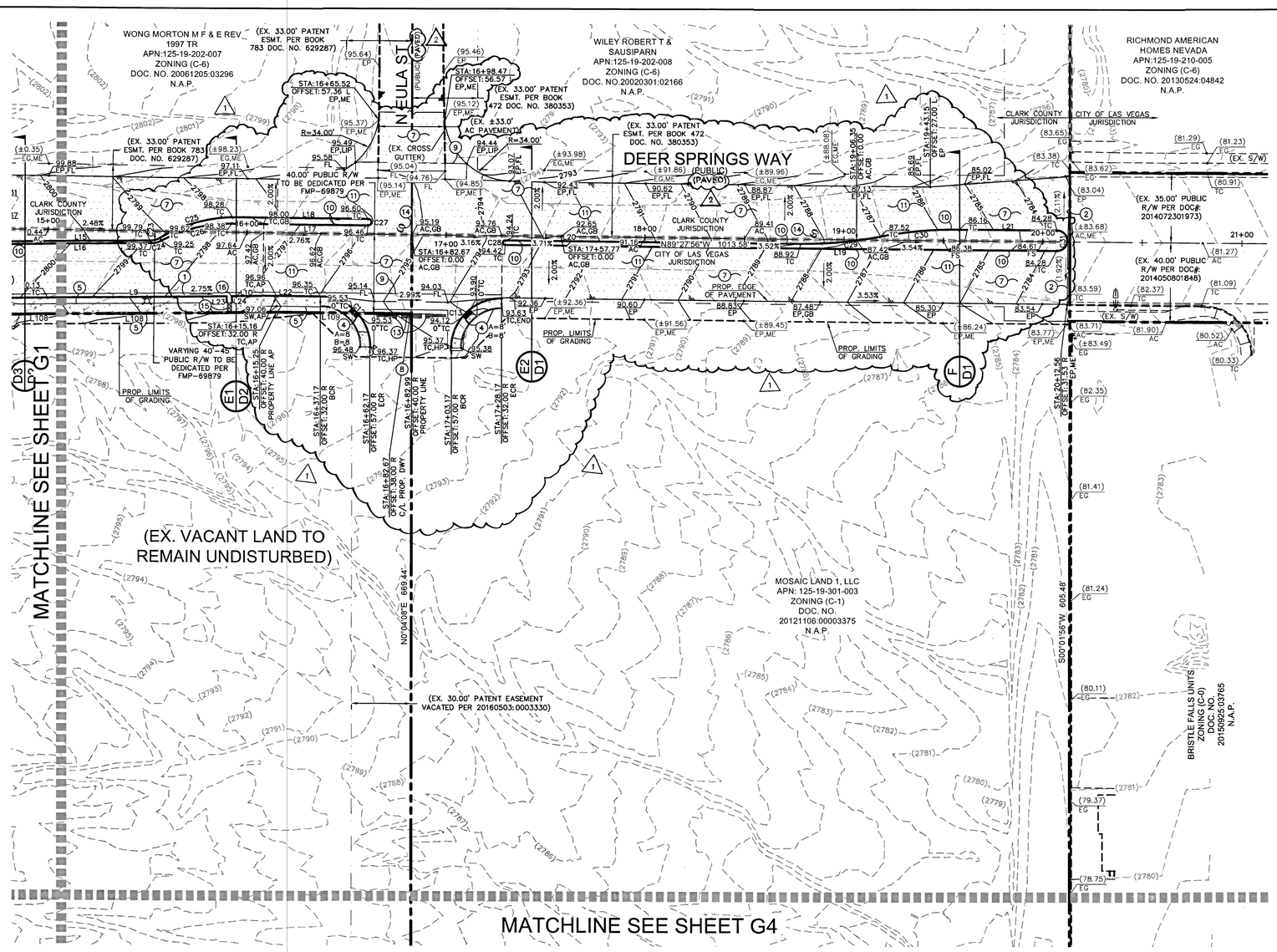
PRECISE GRADING PLAN SHEET 1 OF 4

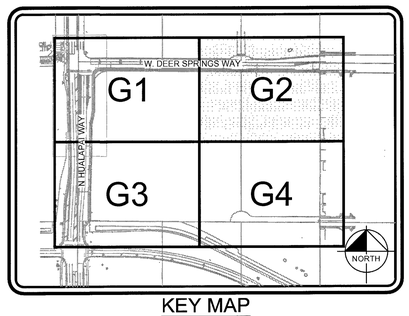
COMMERCIAL SUBDIVISION @ SEC DEER SPRINGS & HUALAPAI

6 OF 17 SHEETS

G1

Plotted By:Zito, Jaylynn Sheet Set:Kha Layout:G1 April 17, 2018 12:38:50pm W:\61153_LAURICH\DWG\MPRD\WGS\OFFSITE\04-61153-G1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.





KEY MAP
N.T.S.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60
SCALE: 1" = 30'

BOUNDARY CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

BOUNDARY LINE TABLE		
LINE	LENGTH	BEARING
L100	88.23'	N00°19'19"E
L101	225.06'	S01°35'42"W
L102	87.55'	N81°27'05"E
L103	136.93	N00°19'19"E
L104	141.18'	N89°27'56"W
L105	51.98'	N79°15'39"W
L106	100.00'	N89°27'56"W
L107	73.77'	N81°27'05"E
L108	150.99'	N89°15'41"E
L109	67.74'	N89°27'56"W

OFF-SITE CURB LINE TABLE		
LINE	LENGTH	BEARING
L1	88.23'	N0°19'19"E
L2	181.28'	N1°35'17"E
L3	50.88'	N0°19'19"E
L4	139.93'	N0°19'19"E
L5	58.14'	N89°27'56"W
L6	10.06'	N89°27'56"W
L7	52.29'	N79°15'39"W
L8	100.00'	N89°27'56"W
L9	125.84'	N89°15'41"E
L10	22.24'	N89°15'41"E
L11	257.69'	N89°27'56"W
L12	317.18'	N89°27'56"W
L13	24.62'	N88°11'35"W
L14	27.19'	N88°11'35"W
L15	101.41'	N89°15'41"E
L16	102.18'	N89°15'41"E
L17	68.23'	N89°27'56"W
L18	65.55'	N89°27'56"W
L19	277.39'	S89°27'56"E
L20	148.50'	N89°27'56"W
L21	49.30'	N89°27'56"W
L22	22.01'	N89°27'56"W
L23	3.00'	N00°44'19"W
L24	3.00'	N00°44'19"W

OFF-SITE CURB CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	25.00'	38.71'	88°43'37"	24.45'
C2	15.00'	23.56'	90°00'00"	15.00'
C3	100.00'	31.76'	18°11'42"	16.01'
C4	100.00'	31.76'	18°11'42"	16.01'
C5	30.00'	47.24'	90°12'45"	30.11'
C6	25.00'	30.33'	69°30'46"	17.35'
C7	15.00'	23.56'	90°00'00"	15.00'
C8	25.00'	4.13'	9°27'44"	2.07'
C9	25.00'	4.45'	10°12'18"	2.23'
C10	25.00'	39.27'	90°00'00"	25.00'
C11	15.00'	23.23'	88°43'37"	14.62'
C12	25.00'	39.27'	90°00'00"	25.00'
C13	25.00'	39.27'	90°00'00"	25.00'
C14	1.50'	4.71'	180°00'00"	INFINITY
C15	1.50'	4.71'	180°00'00"	INFINITY
C16	0.50'	1.57'	180°00'00"	INFINITY
C17	200.00'	65.72'	18°49'35"	33.16
C18	10.00'	6.86'	39°17'28"	3.57'
C19	150.00'	52.62'	20°05'56"	26.58'
C20	73.00'	51.68'	40°33'50"	26.98'
C21	0.50'	1.57'	180°00'00"	INFINITY
C22	0.50'	1.57'	180°00'00"	INFINITY
C23	10.00'	5.28'	30°16'24"	2.71'
C24	10.00'	4.81'	27°32'10"	2.45'
C25	74.00'	40.74'	31°32'47"	20.90'
C26	74.00'	37.21'	28°48'33"	19.01'
C27	1.50'	4.71'	180°00'00"	INFINITY
C28	1.00'	3.14'	180°00'00"	INFINITY
C29	200.00'	40.07'	11°28'42"	20.10'
C30	200.00'	40.07'	11°28'42"	20.10'
C31	5.00'	15.71'	180°00'00"	INFINITY

CONSTRUCTION NOTES	
NO	ITEM
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2	SAWCUT NEAT & MATCH EXISTING
3	ASPHALT S/W 2" AC OVER 6" TYPE II
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE# 17-40363
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219
11	DEMOLISH AND REMOVE EXISTING ASPHALT
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4
13	CONCRETE BARRIER PER CCAUSD NO. 237
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL), CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219

CLARK COUNTY DEPARTMENT OF PUBLIC WORKS DEVELOPMENT REVIEW

8/22/18 ACCEPTANCE OF PLANS FOR FILING BY 4/26/18

ACCEPTANCE OF THESE PLANS FOR FILING SHALL NOT BE CONSTRUED TO BE A PERMIT FOR OR AN APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS AND/OR SPECIFICATIONS. CLARK COUNTY SHALL BE HELD FREE FROM DAMAGES WHICH MAY RESULT FROM CONSTRUCTION OF THE IMPROVEMENTS FROM THE ENGINEERING DESIGN DEPICTED HEREIN.

NOTE: POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE CLARK COUNTY.

STORMWATER MANAGEMENT NOTES:

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 CITY OF LAS VEGAS BUILDING ADMINISTRATIVE CODE 24.40 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 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 ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.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.

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, CLV DS4809 & CLARK COUNTY HTE#16-48274 & HTE#17-28627.

TREASEA WOLF, P.E. No. 17879 — DATE 4-17-18

CC#: PW17-41363-CMF
CLV#: 107V7168
CLV#: 67712

NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT. AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

CLARK COUNTY CONCURRENCE

NO WORK TO BE PERFORMED IN CLARK COUNTY RIGHT-OF-WAY UNTIL CLARK COUNTY APPROVAL IS OBTAINED

LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PROJECT NO. 4126JD030.

2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.

3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).

4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION

5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.

6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.

7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

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

Call before you Dig
AND DIGING UNDERGROUND UTILITY LINES, IT'S USEFUL.
CALL 811 OR 1-800-227-2600

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

AVOID VISITING OVERHEAD POWER LINES, IT'S USEFUL.
CALL BEFORE YOU OVERHEAD 1-702-227-2929

No.	REVISIONS	DATE	BY
2	CCPW COMMENTS	4-4-18	SB
1	UPDATED DRIVEWAY LOCATION, MEDIANS, NOTE 9, SVZ NOTE, LINE & CURVE TABLE	5-29-18	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

PROFESSIONAL ENGINEER STATE OF NEVADA TREASEA WOLF CIVIL EXP.6-30-20 No. 17879 4-17-18

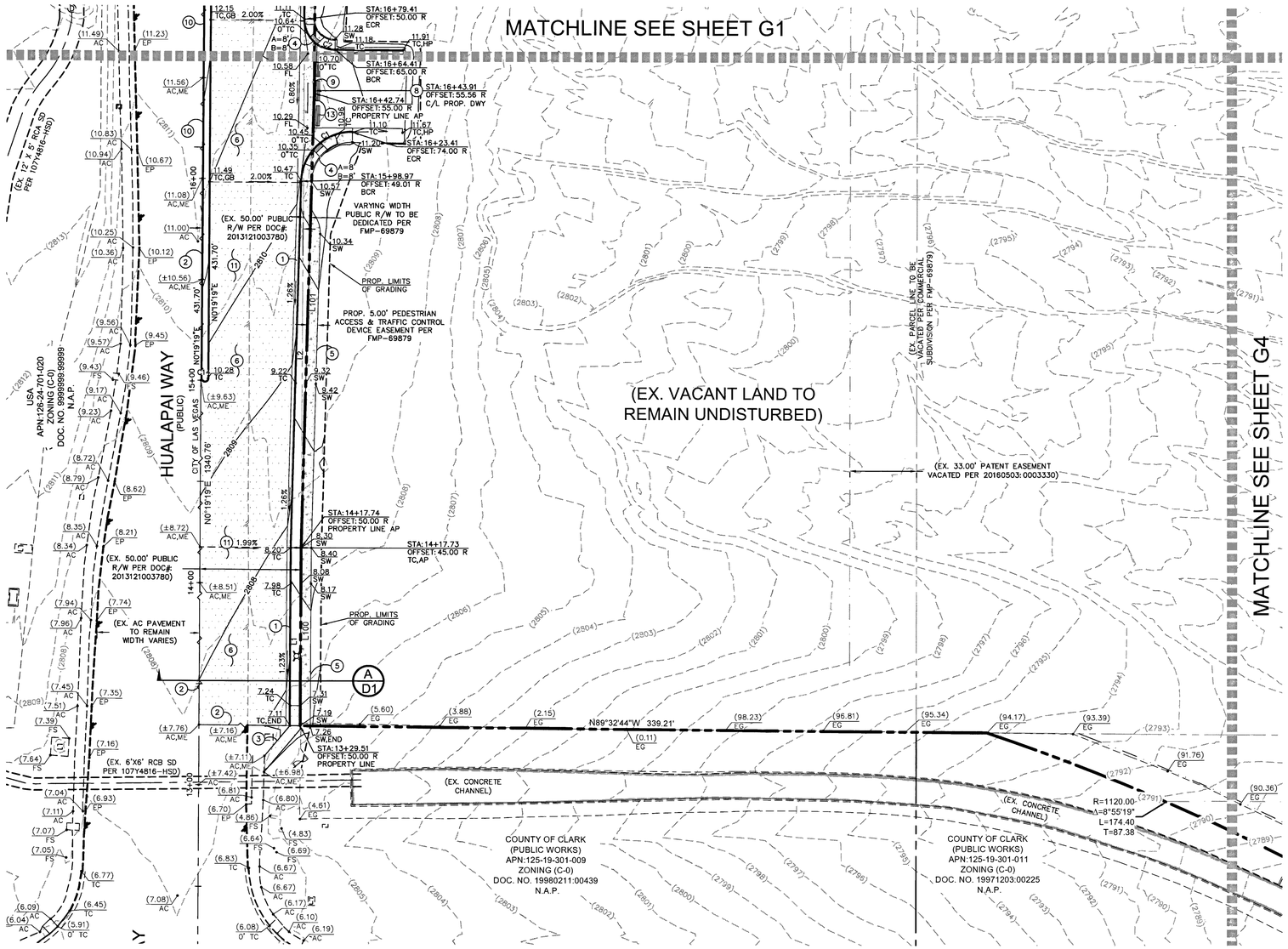
KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

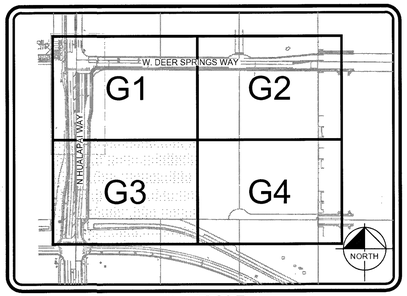
PRECISE GRADING PLAN
SHEET 2 OF 4

COMMERCIAL SUBDIVISION @ SEC DEER SPRINGS & HUALAPAI

7 OF 17 SHEETS
G2

Plotted By:Zito, JoLynn Sheet Set:Kha Layout:G2 April 17, 2018 12:39:07pm W:\61153_LAURICH\DWG\MPROWGS\OFFSITE\G4-61153-G1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.





KEY MAP

N.T.S.

BOUNDARY CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

BOUNDARY LINE TABLE		
LINE	LENGTH	BEARING
L100	88.23'	N00°19'19"E
L101	225.06'	S01°35'42"W
L102	87.55'	N81°27'05"E
L103	136.93	N00°19'19"E
L104	141.18'	N89°27'56"W
L105	51.98'	N79°15'39"W
L106	100.00'	N89°27'56"W
L107	73.77'	N81°27'05"E
L108	150.99'	N89°15'41"E
L109	67.74'	N89°27'56"W

OFF-SITE CURB LINE TABLE		
LINE	LENGTH	BEARING
L1	88.23'	N0°19'19"E
L2	181.28'	N1°35'17"E
L3	50.88'	N0°19'19"E
L4	139.93'	N0°19'19"E
L5	58.14'	N89°27'56"W
L6	10.06'	N89°27'56"W
L7	52.29'	N79°15'39"W
L8	100.00'	N89°27'56"W
L9	125.84'	N89°15'41"E
L10	22.24'	N89°15'41"E
L11	257.69'	N89°27'56"W
L12	317.18'	N89°27'56"W
L13	24.62'	N88°11'35"W
L14	27.19'	N88°11'35"W
L15	101.41'	N89°15'41"E
L16	102.18'	N89°15'41"E
L17	68.23'	N89°27'56"W
L18	65.55'	N89°27'56"W
L19	277.39'	S89°27'56"E
L20	148.50'	N89°27'56"W
L21	49.30'	N89°27'56"W
L22	22.01'	N89°27'56"W
L23	3.00'	N00°44'19"W
L24	3.00'	N00°44'19"W

1

OFF-SITE CURB CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	25.00'	38.71'	88°43'37"	24.45'
C2	15.00'	23.56'	90°00'00"	15.00'
C3	100.00'	31.76'	18°11'42"	16.01'
C4	100.00'	31.76'	18°11'42"	16.01'
C5	30.00'	47.24'	90°12'45"	30.11'
C6	25.00'	30.33'	69°30'46"	17.35'
C7	15.00'	23.56'	90°00'00"	15.00'
C8	25.00'	4.13'	9°27'44"	2.07'
C9	25.00'	4.45'	10°12'18"	2.23'
C10	25.00'	39.27'	90°00'00"	25.00'
C11	15.00'	23.23'	88°43'37"	14.67'
C12	25.00'	39.27'	90°00'00"	25.00'
C13	25.00'	39.27'	90°00'00"	25.00'
C14	1.50'	4.71'	180°00'00"	INFINITY
C15	1.50'	4.71'	180°00'00"	INFINITY
C16	0.50'	1.57'	180°00'00"	INFINITY
C17	200.00'	65.72'	18°49'35"	33.16
C18	10.00'	6.86'	39°17'28"	3.57'
C19	150.00'	52.62'	20°05'56"	26.58'
C20	73.00'	51.68'	40°33'50"	26.98'
C21	0.50'	1.57'	180°00'00"	INFINITY
C22	0.50'	1.57'	180°00'00"	INFINITY
C23	10.00'	5.28'	30°16'24"	2.71'
C24	10.00'	4.81'	27°32'10"	2.45'
C25	74.00'	40.74'	31°32'47"	20.90'
C26	74.00'	37.21'	28°48'33"	19.01'
C27	1.50'	4.71'	180°00'00"	INFINITY
C28	1.00'	3.14'	180°00'00"	INFINITY
C29	200.00'	40.07'	11°28'42"	20.10'
C30	200.00'	40.07'	11°28'42"	20.10'
C31	5.00	15.71'	180°00'00"	INFINITY

1

CONSTRUCTION NOTES	
NO	ITEM
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2	SAWCUT NEAT & MATCH EXISTING
3	ASPHALT S/W 2" AC OVER 6" TYPE II
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE# 17-46383
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219
11	DEMOLISH AND REMOVE EXISTING ASPHALT
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4
13	CONCRETE BARRIER PER CCAUSD NO. 237
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL). CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219

1

STORMWATER MANAGEMENT NOTES:

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 CITY OF LAS VEGAS BUILDING ADMINISTRATIVE CODE 24.40 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 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 ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.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.

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, CLV DS4809 & CLARK COUNTY HTE#16-48274 & HTE#17-28627.

TREASEA WOLF, P.E. No. 17879 — DATE 4-17-18

NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

SIGHT VISIBILITY ZONES NOTE

1

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT. AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PROJECT NO. 4126JD030.

2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.

3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).

4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION

5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.

6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.

7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

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

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
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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

CLV#: 107V7168

CC#: PW17-41363-CMF
CLV#: 67712

No.	TABLE	REVISIONS	DATE	BY
1	UPDATED NOTE 9, SYZ NOTE & LINE & CRVE		5-24-18	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

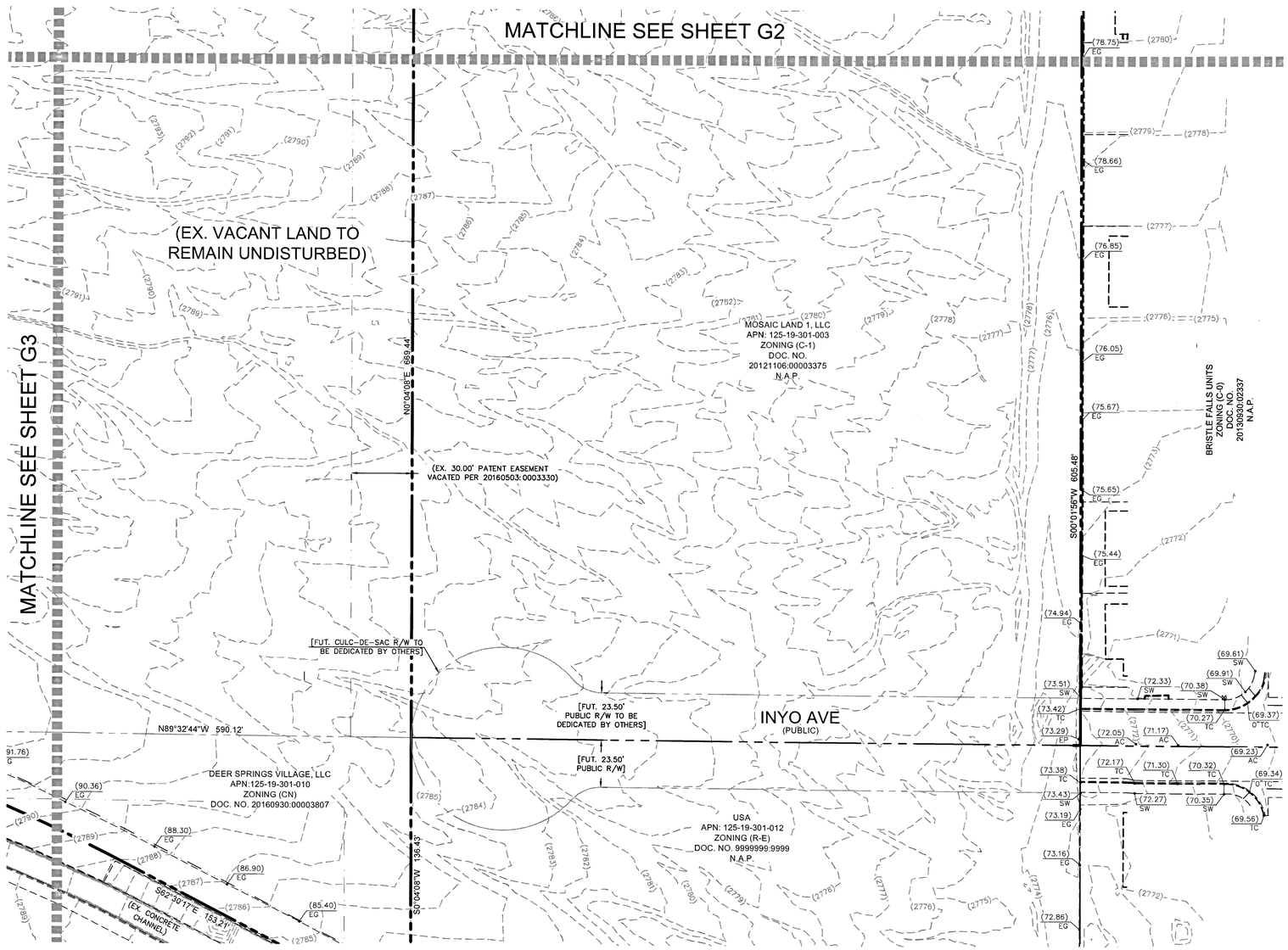
STATE OF NEVADA — TREASEA WOLF — No. 17879 — PROFESSIONAL ENGINEER — CIVIL — EXPIRES 6/30/18 — 4-17-18

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

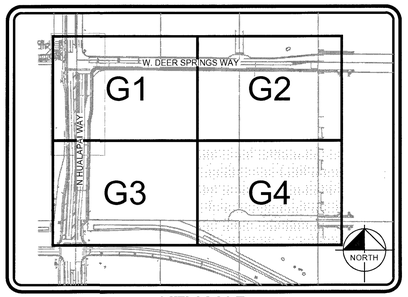
PRECISE GRADING PLAN
SHEET 3 OF 4

COMMERCIAL SUBDIVISION
@ SEC DEER SPRINGS & HUALAPAI

Plotted By:Zito, JoLynn Sheet Set:Kha Layout:G3 April 17, 2018 12:39:25pm W:\61153_LAUR(CH\DWG\MPROWS\OFFSITE\04-61153-G1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



GRAPHIC SCALE IN FEET
0 15 30 60
SCALE: 1" = 30'



KEY MAP
N.T.S.

BOUNDARY CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

BOUNDARY LINE TABLE		
LINE	LENGTH	BEARING
L100	88.23'	N00°19'19"E
L101	225.06'	S01°35'42"W
L102	87.55'	N81°27'05"E
L103	136.93	N00°19'19"E
L104	141.18'	N89°27'56"W
L105	51.98'	N79°15'39"W
L106	100.00'	N89°27'56"W
L107	73.77'	N81°27'05"E
L108	150.99'	N89°15'41"E
L109	67.74'	N89°27'56"W

OFF-SITE CURB LINE TABLE		
LINE	LENGTH	BEARING
L1	88.23'	N0°19'19"E
L2	181.28'	N1°35'17"E
L3	50.88'	N0°19'19"E
L4	139.93'	N0°19'19"E
L5	58.14'	N89°27'56"W
L6	10.06'	N89°27'56"W
L7	52.29'	N79°15'39"W
L8	100.00'	N89°27'56"W
L9	125.84'	N89°15'41"E
L10	22.24'	N89°15'41"E
L11	257.69'	N89°27'56"W
L12	317.18'	N89°27'56"W
L13	24.62'	N88°11'35"W
L14	27.19'	N88°11'35"W
L15	101.41'	N89°15'41"E
L16	102.18'	N89°15'41"E
L17	68.23'	N89°27'56"W
L18	65.55'	N89°27'56"W
L19	277.39'	S89°27'56"E
L20	148.50'	N89°27'56"W
L21	49.30'	N89°27'56"W
L22	22.01'	N89°27'56"W
L23	3.00'	N00°44'19"W
L24	3.00'	N00°44'19"W

OFF-SITE CURB CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	25.00'	38.71'	88°43'37"	24.45'
C2	15.00'	23.56'	90°00'00"	15.00'
C3	100.00'	31.76'	18°11'42"	16.01'
C4	100.00'	31.76'	18°11'42"	16.01'
C5	30.00'	47.24'	90°12'45"	30.11'
C6	25.00'	30.33'	69°30'46"	17.35'
C7	15.00'	23.56'	90°00'00"	15.00'
C8	25.00'	4.13'	9°27'44"	2.07'
C9	25.00'	4.45'	10°12'18"	2.23'
C10	25.00'	39.27'	90°00'00"	25.00'
C11	15.00'	23.23'	88°43'37"	14.67'
C12	25.00'	39.27'	90°00'00"	25.00'
C13	25.00'	39.27'	90°00'00"	25.00'
C14	1.50'	4.71'	180°00'00"	INFINITY
C15	1.50'	4.71'	180°00'00"	INFINITY
C16	0.50'	1.57'	180°00'00"	INFINITY
C17	200.00'	65.72'	18°49'35"	33.16
C18	10.00'	6.86'	39°17'28"	3.57'
C19	150.00'	52.62'	20°05'56"	26.58'
C20	73.00'	51.68'	40°33'50"	26.98'
C21	0.50'	1.57'	180°00'00"	INFINITY
C22	0.50'	1.57'	180°00'00"	INFINITY
C23	10.00'	5.28'	30°16'24"	2.71'
C24	10.00'	4.81'	27°32'10"	2.45'
C25	74.00'	40.74'	31°32'47"	20.90'
C26	74.00'	37.21'	28°48'33"	19.01'
C27	1.50'	4.71'	180°00'00"	INFINITY
C28	1.00'	3.14'	180°00'00"	INFINITY
C29	200.00'	40.07'	11°28'42"	20.10'
C30	200.00'	40.07'	11°28'42"	20.10'
C31	5.00'	15.71'	180°00'00"	INFINITY

CONSTRUCTION NOTES	
NO	ITEM
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2	SAWCUT NEAT & MATCH EXISTING
3	ASPHALT S/W 2" AC OVER 6" TYPE II
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE# 17-46383
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219
11	DEMOLISH AND REMOVE EXISTING ASPHALT
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4
13	CONCRETE BARRIER PER CCAUSD NO. 237
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL), CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219

NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT. AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR LEGAL DESCRIPTION.

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PROJECT NO. 4126JD030.

2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.

3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).

4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION

5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.

6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.

7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

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

STORMWATER MANAGEMENT NOTES:

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 CITY OF LAS VEGAS BUILDING ADMINISTRATIVE CODE 24.40 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 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 ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.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.

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, CLV DS4809 & CLARK COUNTY HTE#16-48274 & HTE#17-28627.

TREASEA WOLF, P.E. No. 17879 — DATE 4.17.18

CC#: PW17-41363-CMF
CLV#: 107V7168
CLV#: 67712

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
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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

No.	REVISIONS	DATE	BY
1	UPDATED NOTE 9, SVZ NOTE, LINE & CURVE TABLE	5-24-18	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA — TREASEA WOLF — No. 17879 — PROFESSIONAL ENGINEER — CIVIL — 4-17-18

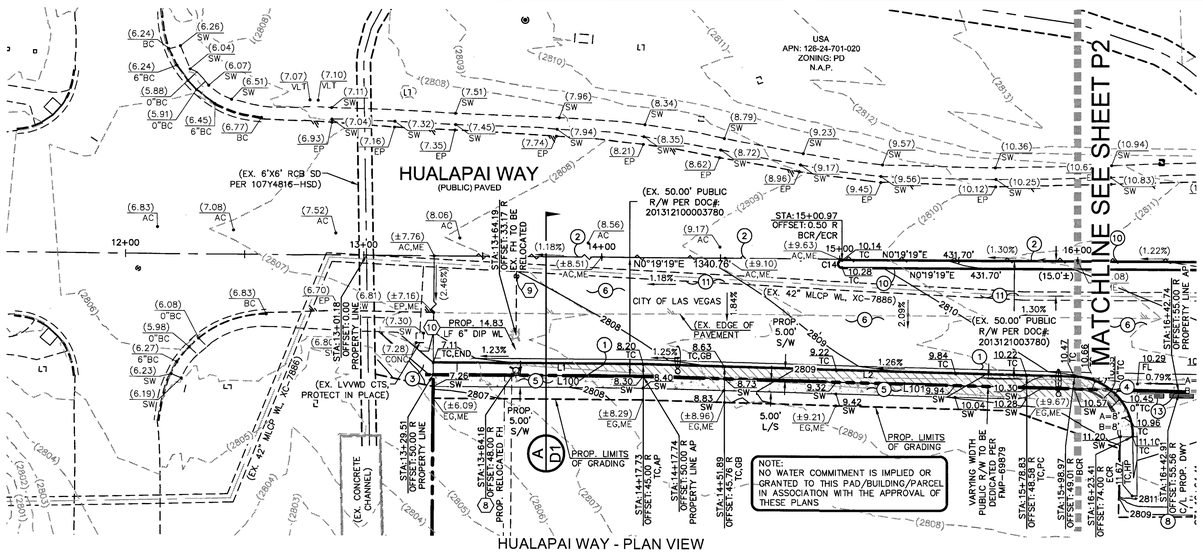
KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

PRECISE GRADING PLAN
SHEET 4 OF 4

COMMERCIAL SUBDIVISION
@ SEC DEER SPRINGS & HUALAPAI

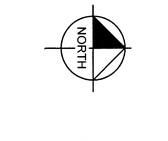
9 OF 17 SHEETS
G4

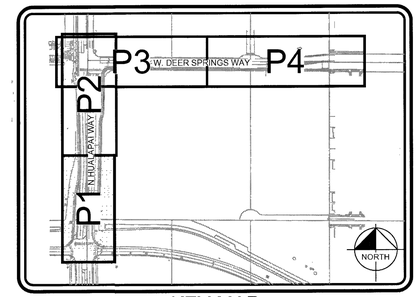
Plotted By:Zito, Jaylynn Sheet Set:Kho Layout:G4 April 17, 2018 12:39:41pm W:\61153_LAURICH\DWG\MPROWGS\OFFSITE\04-61153-G1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



HUALAPAI WAY - PLAN VIEW
STA: 12+00 TO STA: 16+00

SCALE: 1"=30'





KEY MAP
N.T.S.

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT. AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

LVVWD NOTE:

THE DISTRICT CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER THAT MAY IMPEDE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRAIL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

RELOCATION OF FIRE HYDRANTS:

(EXTENSION OF EXISTING LATERALS)
THE CONTRACTOR SHALL REMOVE AND RELOCATE BOTH THE UPPER AND LOWER BARRELS OF THE EXISTING FIRE HYDRANT(S) WHERE SHOWN, EXTEND THE EXISTING LATERALS AS REQUIRED, AND REINSTALL SUCH HYDRANT(S) AT THE NEW LOCATION(S) INDICATED. FIRE HYDRANTS SHALL BE TESTED PRIOR TO AND AFTER RELOCATION, UNDER DIRECTION OF THE DISTRICT, TO ENSURE QUALITY. INSTALLATION SHALL BE IN ACCORDANCE WITH UDACS PLATE 40. LATERALS MADE OF UNAPPROVED MATERIALS SHALL BE REPLACED FROM THE MAIN TO THE FIRE HYDRANT. RELOCATIONS WHERE THE LATERAL CANNOT BE EXTENDED SHALL BE TREATED AS NEW INSTALLATIONS.

CONSTRUCTION NOTES

NO	ITEM
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2	SAWCUT NEAT & MATCH EXISTING
3	ASPHALT S/W 2" AC OVER 6" TYPE II
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE# 17-40363
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219
11	DEMOLISH AND REMOVE EXISTING ASPHALT
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4
13	CONCRETE BARRIER PER CCAUSD NO. 237
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL), CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219

WATER CONSTRUCTION NOTES

NO	ITEM
1	WET TAP EX. 10" PVC WATER WITH 10"x 10" TAPPING SLEEVE W/ 10" TAPPING VALVE PER UDACS SECTION 2.24.01A, EXCAVATE PER UDACS PLATE 17, 19 & 34.
2	INSTALL 10" PVC WL – C900, CLASS 150
3	STUB & CAP – FOR FUTURE CONTINUATION
4	INSTALL CAP & 2" MANUAL BLOW OFF ASSEMBLY PER UDACS PLATE 36
5	INSTALL FIRE HYDRANT PER UDACS PLATE 40
6	INSTALL 10" x 6" TEE W/ 6" GATE VALVE, 10" GATE VALVE, AND 10" x 8" TEE W/ 8" GATE VALVE PER UDACS PLATE 30, 31 & 39
7	INSTALL 6" PVC WL – C900, CLASS 150
8	RELOCATE FIRE HYDRANT PER NOTE ON SHEET P1
9	ADJUST EX GATE VALVE TO GRADE PER UDACS PLATE 39
10	INSTALL 6" RESTRAINED JOINT (RJ) DIP WL – CLASS 350
11	ADJUST TO FINAL GRADE, 2" BLOW OFF PER UDACS PLATE 36

BOUNDARY LINE TABLE

LINE	LENGTH	BEARING
L100	88.23'	N00°19'19"E
L101	225.06'	S01°35'42"W
L102	87.55'	N81°27'05"E
L103	136.93	N00°19'19"E
L104	141.18'	N89°27'56"W
L105	51.98'	N79°15'39"W
L106	100.00'	N89°27'56"W
L107	73.77'	N81°27'05"E
L108	150.99'	N89°15'41"E
L109	67.74'	N89°27'56"W

BOUNDARY CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

OFF-SITE CURB LINE TABLE

LINE	LENGTH	BEARING
L1	88.23'	N0°19'19"E
L2	181.28'	N1°35'17"E
L3	50.88'	N0°19'19"E
L4	139.93'	N0°19'19"E
L5	58.14'	N89°27'56"W
L6	10.06'	N89°27'56"W
L7	52.29'	N79°15'39"W
L8	100.00'	N89°27'56"W
L9	125.64'	N89°15'41"E
L10	22.24'	N89°15'41"E
L11	257.69'	N89°27'56"W
L12	317.18'	N89°27'56"W
L13	24.62'	N88°11'35"W
L14	27.19'	N88°11'35"W
L15	101.41'	N89°15'41"E
L16	102.18'	N89°15'41"E
L17	68.23'	N89°27'56"W
L18	65.55'	N89°27'56"W
L19	277.39'	S89°27'56"E
L20	148.50'	N89°27'56"W
L21	49.30'	N89°27'56"W
L22	22.01'	N89°27'56"W
L23	3.00'	N00°44'19"W
L24	3.00'	N00°44'19"W

OFF-SITE CURB CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	25.00'	38.71'	88°43'37"	24.45'
C2	15.00'	23.56'	90°00'00"	15.00'
C3	100.00'	31.76'	18°11'42"	16.01'
C4	100.00'	31.76'	18°11'42"	16.01'
C5	30.00'	47.24'	90°12'45"	30.11'
C6	25.00'	30.33'	69°30'46"	17.35'
C7	15.00'	23.56'	90°00'00"	15.00'
C8	25.00'	4.13'	9°27'44"	2.07'
C9	25.00'	4.45'	10°12'18"	2.23'
C10	25.00'	39.27'	90°00'00"	25.00'
C11	15.00'	23.23'	88°43'37"	14.67'
C12	25.00'	39.27'	90°00'00"	25.00'
C13	25.00'	39.27'	90°00'00"	25.00'
C14	1.50'	4.71'	180°00'00"	INFINITY
C15	1.50'	4.71'	180°00'00"	INFINITY
C16	0.50'	1.57'	180°00'00"	INFINITY
C17	200.00'	65.72'	18°49'35"	33.16
C18	10.00'	6.86'	39°17'28"	3.57
C19	150.00'	52.62'	20°05'56"	26.58'
C20	73.00'	51.68'	40°33'50"	26.98'
C21	0.50'	1.57'	180°00'00"	INFINITY
C22	0.50'	1.57'	180°00'00"	INFINITY
C23	10.00'	5.28'	30°16'24"	2.71'
C24	10.00'	4.81'	27°32'10"	2.45
C25	74.00'	40.74'	31°32'47"	20.90'
C26	74.00'	37.21'	28°48'33"	19.01'
C27	1.50'	4.71'	180°00'00"	INFINITY
C28	1.00'	3.14'	180°00'00"	INFINITY
C29	200.00'	40.07'	11°28'42"	20.10'
C30	200.00'	40.07'	11°28'42"	20.10'
C31	5.00'	15.71'	180°00'00"	INFINITY

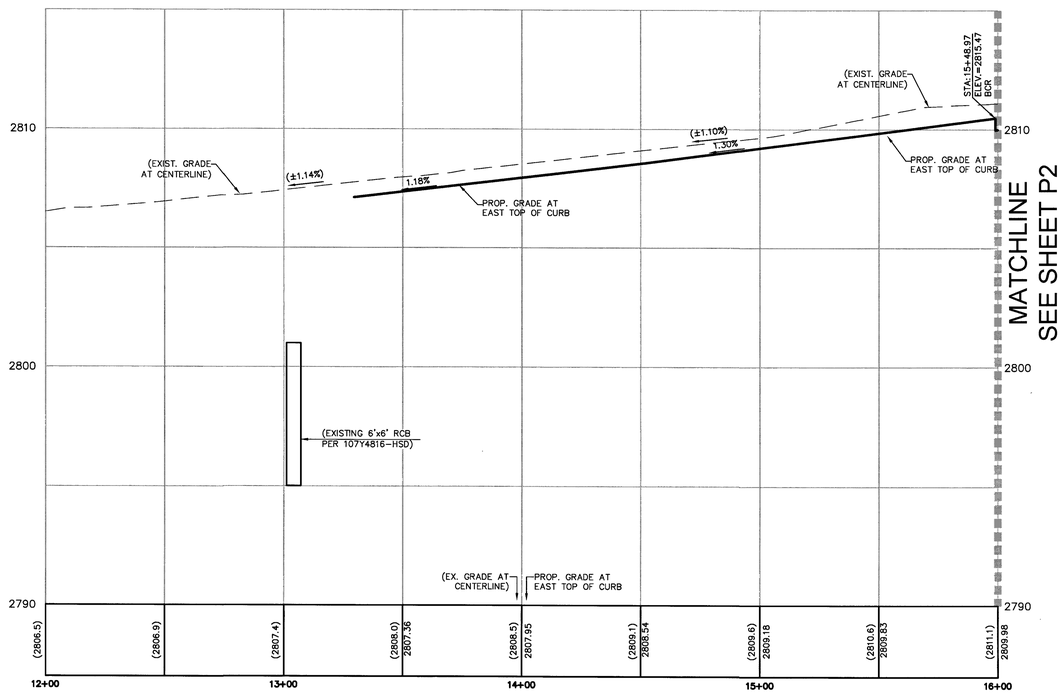
NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PROJECT NO. 4126JD030.
2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.
3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).
4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION
5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.
6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.
7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.
9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.



HUALAPAI WAY - PROFILE
STA: 12+00 TO STA: 16+00

SCALE: 1"=30' – HORZ
1"=3' – VERT

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY CABLES, PIPES OR WIRES!
CALL 811 OR 1-800-227-2600

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

AVOID LIFTING OVERHEAD POWER LINES, IT'S USEFUL.
CALL BEFORE YOU OVERHEAD
1-702-227-2929

APPROVED FOR CONSTRUCTION

1ST APPROVED 10/15/17

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NUMBER 125105 DATE: 5/16/18
APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

CLV#: 107V7168

CC#: PW17-41363-CMF
CLV#: 67712

No.	REVISIONS	DATE	BY
1	UPDATED SYZ NOTE, LINE & CURVE TABLE & CONSTRUCTION NOTE	5-21-19	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

NEVADA PROFESSIONAL ENGINEER JAMES RANDALL WOLF CIVIL No. 17819

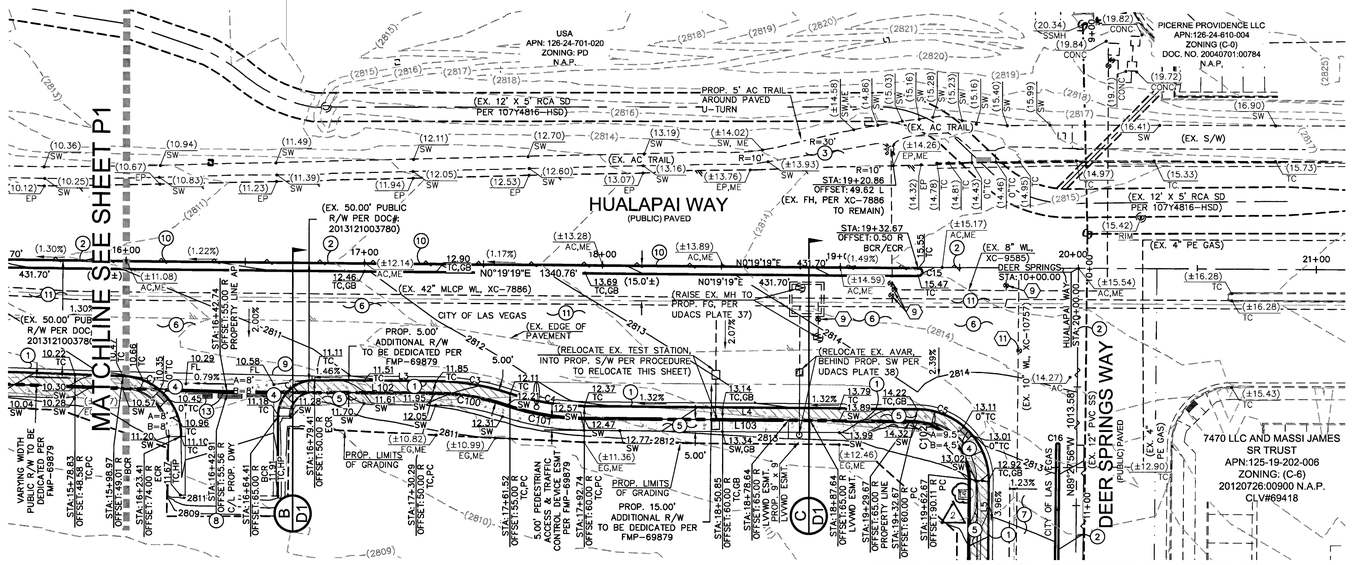
KHA PROJECT	61153.52
DATE	10/6/17
SCALE	AS SHOWN
DESIGNED BY	JZ
DRAWN BY	JZ
CHECKED BY	TW

PLAN & PROFILE
HUALAPAI WAY
STA: 12+00 TO STA: 16+00

COMMERCIAL SUBDIVISION
@ SEC DEER SPRINGS & HUALAPAI

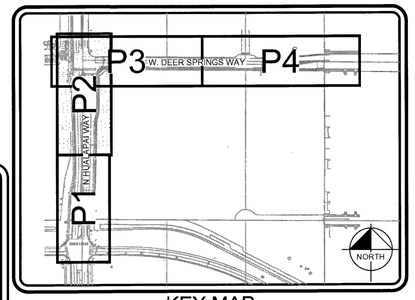
PROJ#:125105 AGR:116197 QS:125-19-SW

Plotted By:Zito, JoLynn Sheet Set:Kha Layout:P1 April 17, 2018 12:40:11pm W:\61153_LAURICH\DWG\MPRDWGS\OFFSITE\05-61153-P1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



HUALAPAI WAY - PLAN VIEW
STA: 16+00 TO STA: 21+00
SCALE: 1"=30'

FOR REFERENCE-SEE SHEET P3



KEY MAP
N.T.S.

GRAPHIC SCALE IN FEET
0 15 30 60
SCALE: 1" = 30'

PROCEDURES TO RELOCATE A CORROSION TEST STATION:

1. EXPOSE THE TEST STATION(S) AND LABEL ALL LEADS ACCORDING TO THE TYPICAL TEST BOARD DETAIL.
2. THE LEADS THAT ARE CONNECTED TO THE PIPE REQUIRE #6 COPPER WIRE WITH A HMWPE JACKET SUCH AS RAYCHEM PERMARAD.
3. THE LEAD THAT IS CONNECTED TO THE REFERENCE CELL REQUIRES #14 COPPER WIRE WITH A HMWPE JACKET SUCH AS RAYCHEM PERMARAD.
4. CONNECT THE TWO WIRES TO BE SPLICED WITH A COPPER BUTT CONNECTION USING THE PROPER CRIMPING TOOL.
5. MAKE SURE SPLICE USING A SCOTCHCAST RESIN SPLICING KIT, DURO-CAST UNIVERSAL SPLICE KIT, OR A RAYCHEM ANODE SPLICE ENCAPSULATION KIT.
6. RECONNECT THE TEST BOARD TO PROPER LEADS, AND PLACE THE TEST BOX AT THE NEW SITE.
7. THE TEST BOX AT THE NEW SITE WILL BE INSTALLED ACCORDING TO THE TYPICAL TEST BOX DETAIL.
8. ALL TEST LEADS AND ANODE LEADS INSIDE THE TEST BOX SHALL BE BUNDLED TOGETHER AT 8 INCH INTERVALS WITH NYLON TIES AND SHALL BE PROVIDED WITH A MINIMUM OF 4 FEET OF SLACK.
9. ALL TEST LEADS AND ANODE LEADS SHALL BE COLOR CODED WITH COLORED TAPE AT EACH END, AND AT LEAST 4 FEET INTERVALS.
10. RELOCATED TEST STATION TO BE TESTED BY CERTIFIED CATHODIC PROTECTION SPECIALIST, CORROSION SPECIALIST, OR REGISTERED PROFESSIONAL CORROSION ENGINEER. RESULTS TO BE SUBMITTED IN WRITING TO LVVWD CONSTRUCTION DIVISION.

CONSTRUCTION NOTES

NO	ITEM
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2	SAWCUT NEAT & MATCH EXISTING
3	ASPHALT S/W 2" AC OVER 6" TYPE II
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE#17-403635
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219
11	DEMOLISH AND REMOVE EXISTING ASPHALT
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4
13	CONCRETE BARRIER PER CCAUSD NO. 237
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL). CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219

WATER CONSTRUCTION NOTES

NO	ITEM
1	WET TAP EX. 10" PVC WATER WITH 10"x 10" TAPPING SLEEVE W/ 10" TAPPING VALVE PER UDACS SECTION 2.24.01A, EXCAVATE PER UDACS PLATE 17, 19 & 34.
2	INSTALL 10" PVC WL – C900, CLASS 150
3	STUB & CAP – FOR FUTURE CONTINUATION
4	INSTALL CAP & 2" MANUAL BLOW OFF ASSEMBLY PER UDACS PLATE 36
5	INSTALL FIRE HYDRANT PER UDACS PLATE 40
6	INSTALL 10" x 6" TEE W/ 6" GATE VALVE, 10" GATE VALVE, AND 10" x 8" TEE W/ 8" GATE VALVE PER UDACS PLATE 30, 31 & 39
7	INSTALL 6" PVC WL – C900, CLASS 150
8	RELOCATE FIRE HYDRANT PER NOTE ON SHEET P1
9	ADJUST EX GATE VALVE TO GRADE PER UDACS PLATE 39
10	INSTALL 6" RESTRAINED JOINT (RJ) DIP WL – CLASS 350
11	ADJUST TO FINAL GRADE, 2" BLOW OFF PER UDACS PLATE 36

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT. AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

BOUNDARY LINE TABLE

LINE	LENGTH	BEARING
L100	88.23'	N00°19'19"E
L101	225.06'	S01°35'42"W
L102	87.55'	N81°27'05"E
L103	136.93	N00°19'19"E
L104	141.18'	N89°27'56"W
L105	51.98'	N79°15'39"W
L106	100.00'	N89°27'56"W
L107	73.77'	N81°27'05"E
L108	150.99'	N89°15'41"E
L109	67.74'	N89°27'56"W

OFF-SITE CURB LINE TABLE

LINE	LENGTH	BEARING
L1	88.23'	N0°19'19"E
L2	181.28'	N1°35'17"E
L3	50.88'	N0°19'19"E
L4	139.93'	N0°19'19"E
L5	58.14'	N89°27'56"W
L6	10.06'	N89°27'56"W
L7	52.29'	N79°15'39"W
L8	100.00'	N89°27'56"W
L9	125.84'	N89°15'41"E
L10	22.24'	N89°15'41"E
L11	257.69'	N89°27'56"W
L12	317.18'	N89°27'56"W
L13	24.62'	N88°11'35"W
L14	27.19'	N88°11'35"W
L15	101.41'	N89°15'41"E
L16	102.18'	N89°15'41"E
L17	68.23'	N89°27'56"W
L18	65.55'	N89°27'56"W
L19	277.39'	S89°27'56"E
L20	148.50'	N89°27'56"W
L21	49.30'	N89°27'56"W
L22	22.01'	N89°27'56"W
L23	3.00'	N00°44'19"W
L24	3.00'	N00°44'19"W

BOUNDARY CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

OFF-SITE CURB CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	25.00'	38.71'	88°43'37"	24.45'
C2	15.00'	23.56'	90°00'00"	15.00'
C3	100.00'	31.76'	18°11'42"	16.01'
C4	100.00'	31.76'	18°11'42"	16.01'
C5	30.00'	47.24'	90°12'45"	30.11'
C6	25.00'	30.33'	69°30'46"	17.35'
C7	15.00'	23.56'	90°00'00"	15.00'
C8	25.00'	4.13'	9°27'44"	2.07'
C9	25.00'	4.45'	10°12'18"	2.23'
C10	25.00'	39.27'	90°00'00"	25.00'
C11	15.00'	23.23'	88°43'37"	14.67'
C12	25.00'	39.27'	90°00'00"	25.00'
C13	25.00'	39.27'	90°00'00"	25.00'
C14	1.50'	4.71'	180°00'00"	INFINITY
C15	1.50'	4.71'	180°00'00"	INFINITY
C16	0.50'	1.57'	180°00'00"	INFINITY
C17	200.00'	65.72'	18°49'35"	33.16
C18	10.00'	6.86'	39°17'28"	3.57'
C19	150.00'	52.62'	20°05'56"	26.58'
C20	73.00'	51.68'	40°33'50"	26.98'
C21	0.50'	1.57'	180°00'00"	INFINITY
C22	0.50'	1.57'	180°00'00"	INFINITY
C23	10.00'	5.28'	30°16'24"	2.71'
C24	10.00'	4.81'	27°32'10"	2.45'
C25	74.00'	40.74'	31°32'47"	20.90'
C26	74.00'	37.21'	28°48'33"	19.01'
C27	1.50'	4.71'	180°00'00"	INFINITY
C28	1.00'	3.14'	180°00'00"	INFINITY
C29	200.00'	40.07'	11°28'42"	20.10'
C30	200.00'	40.07'	11°28'42"	20.10'
C31	5.00'	15.71'	180°00'00"	INFINITY

1STAPPROVED 10/15/17

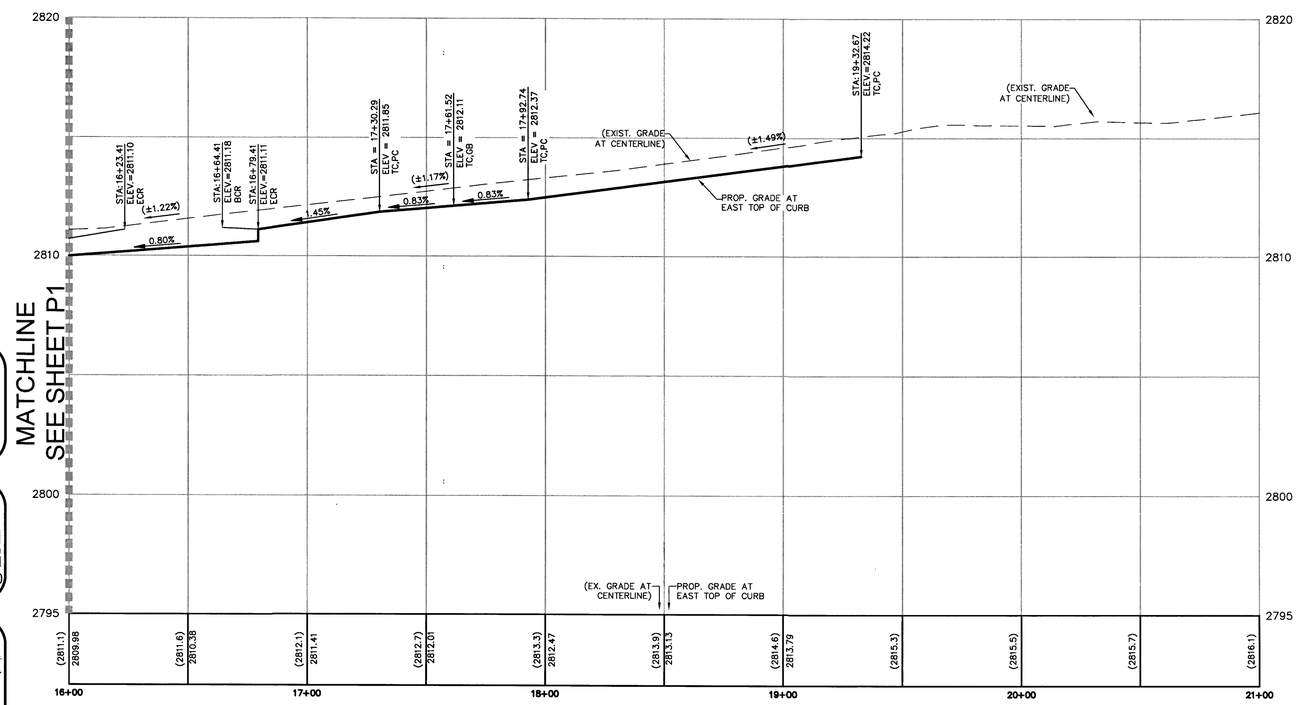
NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PROJECT NO. 4126JD030.
2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.
3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).
4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION
5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.
6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.
7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.
9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.



HUALAPAI WAY - PROFILE
STA: 16+00 TO STA: 21+00
SCALE: 1"=30' – HORZ
1"=3' – VERT

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NUMBER 125105 DATE: 5/16/18
APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

CLV#: 107V7168

CC#: PW17-41363-CMF
CLV#: 67712

No.	REVISIONS	DATE	BY
2	ADDED PROPOSED TRANSFORMER	9-6-18	KR
1	UPDATED SVZ NOTE, LINE & CURVE TABLE	5-24-18	SB
	TYING INTO NORTH ADJACENT PROPERTY MPS		

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

PROFESSIONAL ENGINEER STATE OF NEVADA JAMES E. WEST CIVIL No. 17879 EXP. 6/30/18

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

PLAN & PROFILE HUALAPAI WAY STA: 16+00 TO STA: 21+00

COMMERCIAL SUBDIVISION @ SEC DEER SPRINGS & HUALAPAI

11 OF 17 SHEETS
P2

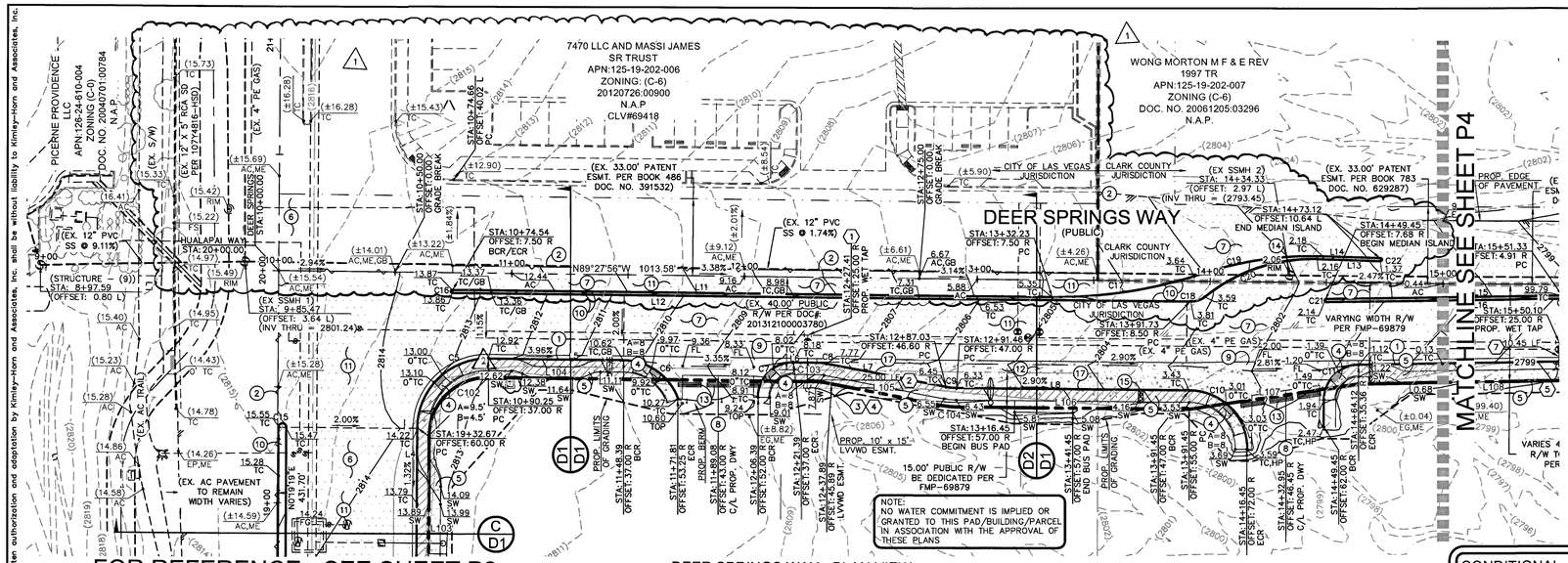
PROJ#:125105 AGR:116197 QS:125-19-SW

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
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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

Plotted By: Zito, JoLynn Sheet Set: Kha Layout: P2 April 17, 2018 12:40:20pm W:\61153.J.LAUR\CIV\DWG\MPRDWGS\OFFSITE\05-61153-P1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTE:
NO WATER COMMITMENT IS IMPLIED OR GRANTED TO THIS PAD/BUILDING/PARCEL IN ASSOCIATION WITH THE APPROVAL OF THESE PLANS

DEER SPRINGS WAY - PLAN VIEW
STA: 9+50 TO STA: 15+00
SCALE: 1"=30'

LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

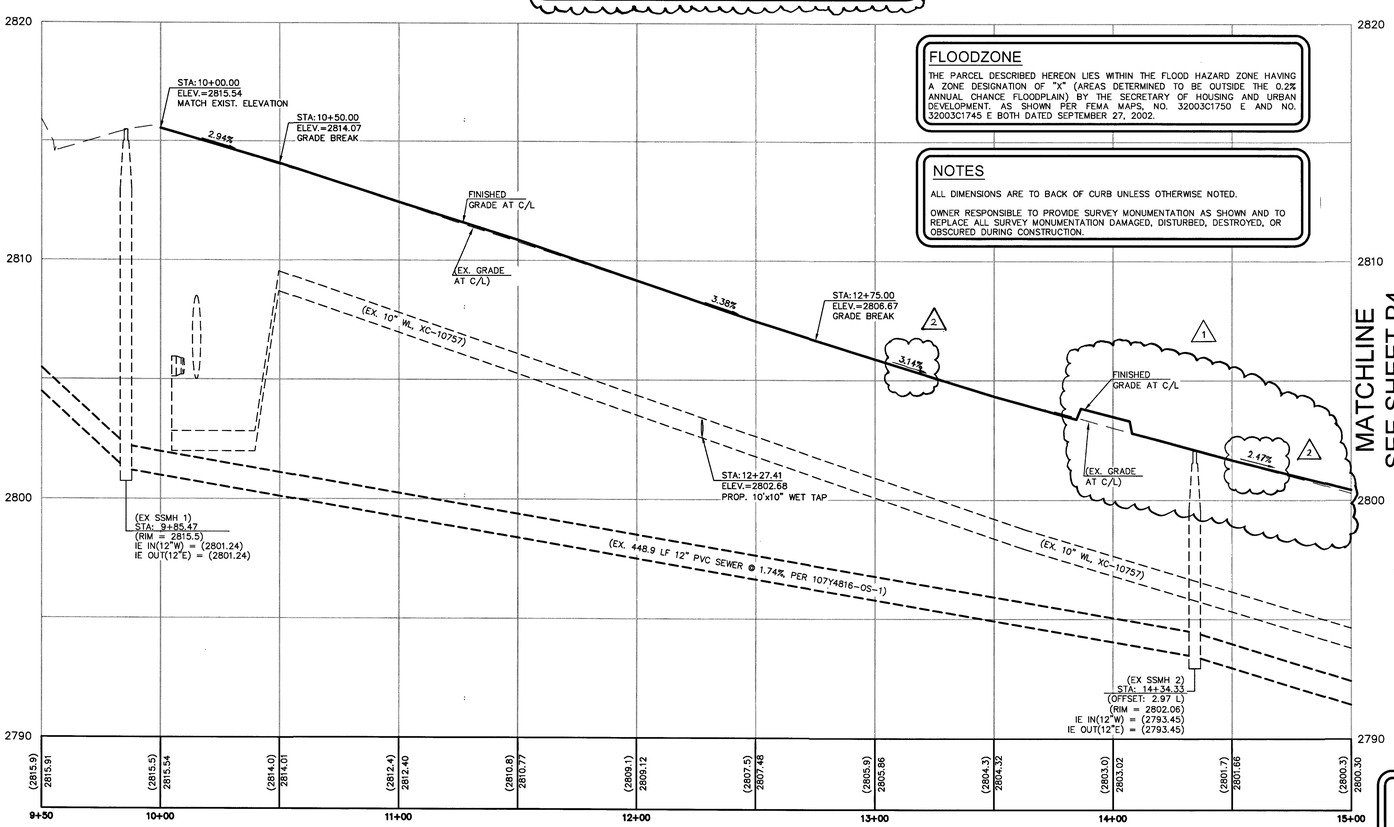
FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT, AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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



DEER SPRINGS WAY - PROFILE
STA: 9+50 TO STA: 15+00
SCALE: 1"=30' – HORZ
1"=3' – VERT

BOUNDARY CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

OFF-SITE CURB CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	25.00'	38.71'	88°43'37"	24.45'
C2	15.00'	23.56'	90°00'00"	15.00'
C3	100.00'	31.76'	18°11'42"	16.01'
C4	100.00'	31.76'	18°11'42"	16.01'
C5	30.00'	47.24'	90°12'45"	30.11'
C6	25.00'	30.33'	69°30'46"	17.35'
C7	15.00'	23.56'	90°00'00"	15.00'
C8	25.00'	4.13'	9°27'44"	2.07'
C9	25.00'	4.45'	10°12'18"	2.23'
C10	25.00'	39.27'	90°00'00"	25.00'
C11	15.00'	23.23'	88°43'32"	14.67'
C12	25.00'	39.27'	90°00'00"	25.00'
C13	25.00'	39.27'	90°00'00"	25.00'
C14	1.50'	4.71'	180°00'00"	INFINITY
C15	1.50'	4.71'	180°00'00"	INFINITY
C16	0.50'	1.57'	180°00'00"	INFINITY
C17	200.00'	65.72'	18°49'35"	33.16
C18	10.00'	6.86'	39°17'28"	3.57'
C19	150.00'	52.62'	20°05'56"	26.58'
C20	73.00'	51.68'	40°33'50"	26.98'
C21	0.50'	1.57'	180°00'00"	INFINITY
C22	0.50'	1.57'	180°00'00"	INFINITY
C23	10.00'	5.28'	30°16'24"	2.71'
C24	10.00'	4.81'	27°32'10"	2.45'
C25	74.00'	40.74'	31°32'47"	20.90'
C26	74.00'	37.21'	28°48'33"	19.01'
C27	1.50'	4.71'	180°00'00"	INFINITY
C28	1.00'	3.14'	180°00'00"	INFINITY
C29	200.00'	40.07'	11°28'42"	20.10'
C30	200.00'	40.07'	11°28'42"	20.10'
C31	5.00'	15.71'	180°00'00"	INFINITY

OFF-SITE CURB LINE TABLE		
LINE	LENGTH	BEARING
L1	88.23'	N0°19'19"E
L2	181.28'	N1°35'17"E
L3	50.88'	N0°19'19"E
L4	139.93'	N0°19'19"E
L5	58.14'	N89°27'56"W
L6	10.06'	N89°27'56"W
L7	52.29'	N79°15'39"W
L8	100.00'	N89°27'56"W
L9	125.82'	N89°15'41"E
L10	22.24'	N89°15'41"E
L11	257.69'	N89°27'56"W
L12	317.18'	N89°27'56"W
L13	24.62'	N88°11'35"W
L14	27.19'	N88°11'35"W
L15	101.41'	N89°15'41"E
L16	102.18'	N89°15'41"E
L17	68.23'	N89°27'56"W
L18	65.55'	N89°27'56"W
L19	277.39'	S89°27'56"E
L20	148.50'	N89°27'56"W
L21	49.30'	N89°27'56"W
L22	22.01'	N89°27'56"W
L23	3.00'	N00°44'19"W
L24	3.00'	N00°44'19"W

1st Approved 10/16/17

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NUMBER 125105 DATE: 5/16/18
APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

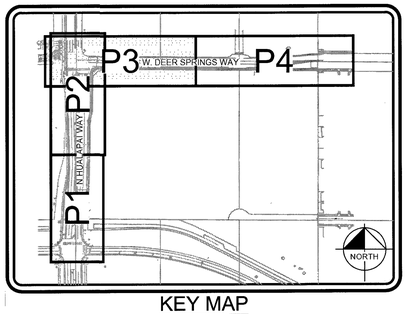
NORTH

GRAPHIC SCALE IN FEET
0 15 30 60
SCALE: 1" = 30'

Call before you Dig
AVOID OUTAGES, UNDERGROUND VALLEY LINES. IT'S QUICKLY.
CALL
811
OR
1-800-227-2600

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

AVOID VISITING OVERHEAD POWER LINES. IT'S VISIBLE.
CALL BEFORE YOU OVERHEAD
1-702-227-2929



KEY MAP

N.T.S.

CONSTRUCTION NOTES	
NO	ITEM
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2	SAWCUT NEAT & MATCH EXISTING
3	ASPHALT S/W 2" AC OVER 6" TYPE II
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE # (11-46383)
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219
11	DEMOLISH AND REMOVE EXISTING ASPHALT
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4
13	CONCRETE BARRIER PER CCAUSD NO. 237
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL). CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219

WATER CONSTRUCTION NOTES	
NO	ITEM
1	WET TAP EX. 10" PVC WATER WITH 10"x 10" TAPPING SLEEVE W/ 10" TAPPING VALVE PER UDACS SECTION 2.24.01A, EXCAVATE PER UDACS PLATE 17, 19 & 34.
2	INSTALL 10" PVC WL – C900, CLASS 150
3	STUB & CAP – FOR FUTURE CONTINUATION
4	INSTALL CAP & 2" MANUAL BLOW OFF ASSEMBLY PER UDACS PLATE 36
5	INSTALL FIRE HYDRANT PER UDACS PLATE 40
6	INSTALL 10" x 6" TEE W/ 6" GATE VALVE, 10" GATE VALVE, AND 10" x 8" TEE W/ 8" GATE VALVE PER UDACS PLATE 30, 31 & 39
7	INSTALL 6" PVC WL – C900, CLASS 150
8	RELOCATE FIRE HYDRANT PER NOTE ON SHEET P1
9	ADJUST EX GATE VALVE TO GRADE PER UDACS PLATE 39
10	INSTALL 6" RESTRAINED JOINT (RJ) DIP WL – CLASS 350
11	ADJUST TO FINAL GRADE, 2" BLOW OFF PER UDACS PLATE 36

CLARK COUNTY DEPARTMENT OF PUBLIC WORKS DEVELOPMENT REVIEW

ACCEPTANCE OF PLANS FOR FILING BY
8/22/18
8/26/18

ACCEPTANCE OF THESE PLANS FOR FILING SHALL NOT BE CONSTRUED TO BE A PERMIT FOR OR AN APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS AND/OR SPECIFICATIONS. CLARK COUNTY SHALL BE HELD FREE FROM DAMAGES WHICH MAY RESULT FROM CONSTRUCTION OF THE IMPROVEMENTS FROM THE ENGINEERING DESIGN DEPICTED HEREIN.

NOTE: POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE CLARK COUNTY.

ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PROJECT NO. 4126JD030.
2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.
3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).
4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION
5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.
6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.
7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.
9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.

CLV#: 107V7168

CC#: PW17-41363-CMF
CLV#: 67712

No.	REVISIONS	DATE	BY
2	ADDED PROPOSED TRANSFORMER & CCPW	9-6-18	SB
	COMMENTS		
1	UPDATED DRIVEWAY, MEDIANS, S/V, NOTE, UPDATED TO SHOW TWO NORTH, ADJACENT PROPERTY IMPROVEMENTS, LINE & CURVE TABLE	5-24-18	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA
TRESSEL WOLF
CIVIL
EXPIRES 06-30-19
No. 17819
PROFESSIONAL ENGINEER
8/17/18

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

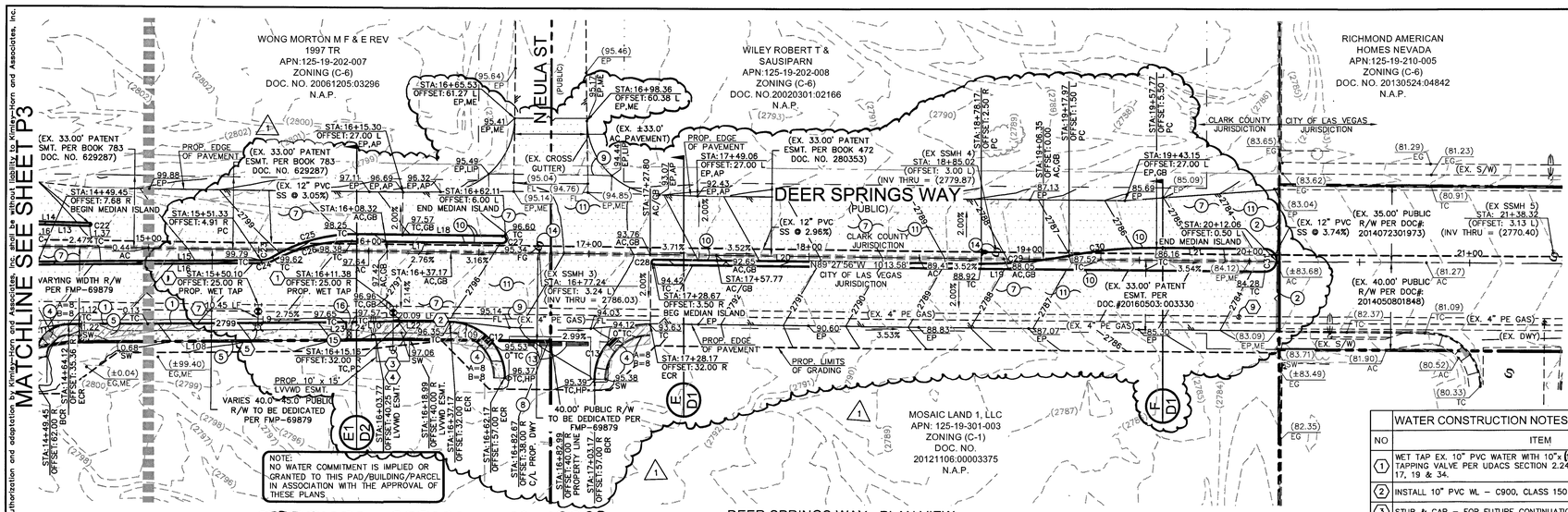
PLAN & PROFILE
DEER SPRINGS WAY
STA: 9+50 TO STA: 15+00

COMMERCIAL SUBDIVISION
@ SEC DEER SPRINGS & HUALAPAI

12 OF 17 SHEETS
P3

PROJ#:125105 AGR:116197 QS:125-19-SW

Plotted By:Zilo, JoLynn Sheet Set:Vho Layout:P3 April 17, 2018 12:40:56pm W:\61153.1_LAS\RICH\LDWG\IMPRDWGS\OFFSITE\06-61153-P3.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



DEER SPRINGS WAY - PLAN VIEW
STA: 9+50 TO STA: 15+00
SCALE: 1"=30'

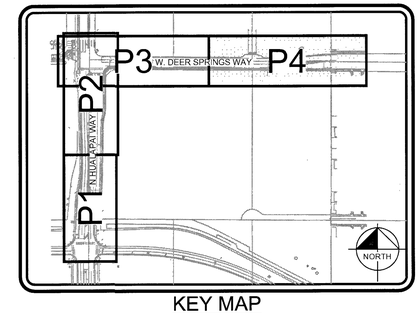
SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

WATER CONSTRUCTION NOTES	
NO	ITEM
1	WET TAP EX. 10" PVC WATER WITH 10"x(10"/6") TAPPING SLEEVE W/ (10"/6") TAPPING VALVE PER UDACS SECTION 2.24.01A, EXCAVATE PER UDACS PLATE 17, 19 & 34.
2	INSTALL 10" PVC WL – C900, CLASS 150
3	STUB & CAP – FOR FUTURE CONTINUATION
4	INSTALL CAP & 2" MANUAL BLOW OFF ASSEMBLY PER UDACS PLATE 36
5	INSTALL FIRE HYDRANT PER UDACS PLATE 40
6	INSTALL 10" x 6" TEE W/ 6" GATE VALVE, 10" GATE VALVE, AND 10" x 8" TEE W/ 8" GATE VALVE PER UDACS PLATE 30, 31 & 39
7	INSTALL 6" PVC WL – C900, CLASS 150
8	RELOCATE FIRE HYDRANT PER NOTE ON SHEET P1
9	ADJUST EX GATE VALVE TO GRADE PER UDACS PLATE 39



KEY MAP
N.T.S.

CONSTRUCTION NOTES	
NO	ITEM
1	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2	SAWCUT NEAT & MATCH EXISTING
3	ASPHALT S/W 2" AC OVER 6" TYPE II
4	CONSTRUCT SIDEWALK RAMP PER CCAUSD NO. 235 CASE I
5	CONSTRUCT SIDEWALK PER CCAUSD NO. 234
6	CONSTRUCT 4.5" AC OVER 5" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016
7	CONSTRUCT 4" AC OVER 4" TYPE II AB PAVEMENT PER GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PER CCPW HTE#17-10383
8	CONSTRUCT COMMERCIAL CURB RETURN DRIVEWAY PER CCAUSD NO. 222.1 & 225
9	CONSTRUCT 8' CONCRETE VALLEY GUTTER PER CCAUSD NO. 228 & 229
10	CONSTRUCT MEDIAN ISLAND PER CCAUSD DWG NO. 218 AND WITH "A" TYPE ISLAND CURB PER CCAUSD NO. 219
11	DEMOLISH AND REMOVE EXISTING ASPHALT
12	CONSTRUCT BUS STOP & PAD PER CCAUSD NO. 234.1, 234.2 & 234.4
13	CONCRETE BARRIER PER CCAUSD NO. 237
14	ADJUST EX. MANHOLE & COLLAR, VAULT, PULLBOX, VALVE OR BOX TO FINISHED GRADE (TYPICAL), CONTRACTOR TO VERIFY EX. LID IS TRAFFIC RATED IF APPLICABLE & PROVIDE TRAFFIC RATED LID WHERE REQUIRED
15	CONSTRUCT S/W DRAIN PER CCAUSD NO. 236
16	CONSTRUCT 2' CONCRETE FLUME PER DETAIL 3 ON SHEET D2
17	CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219

LVVWD NOTE:

THE DISTRICT CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER THAT MAY IMPEDE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRAIL SHUTDOWN.

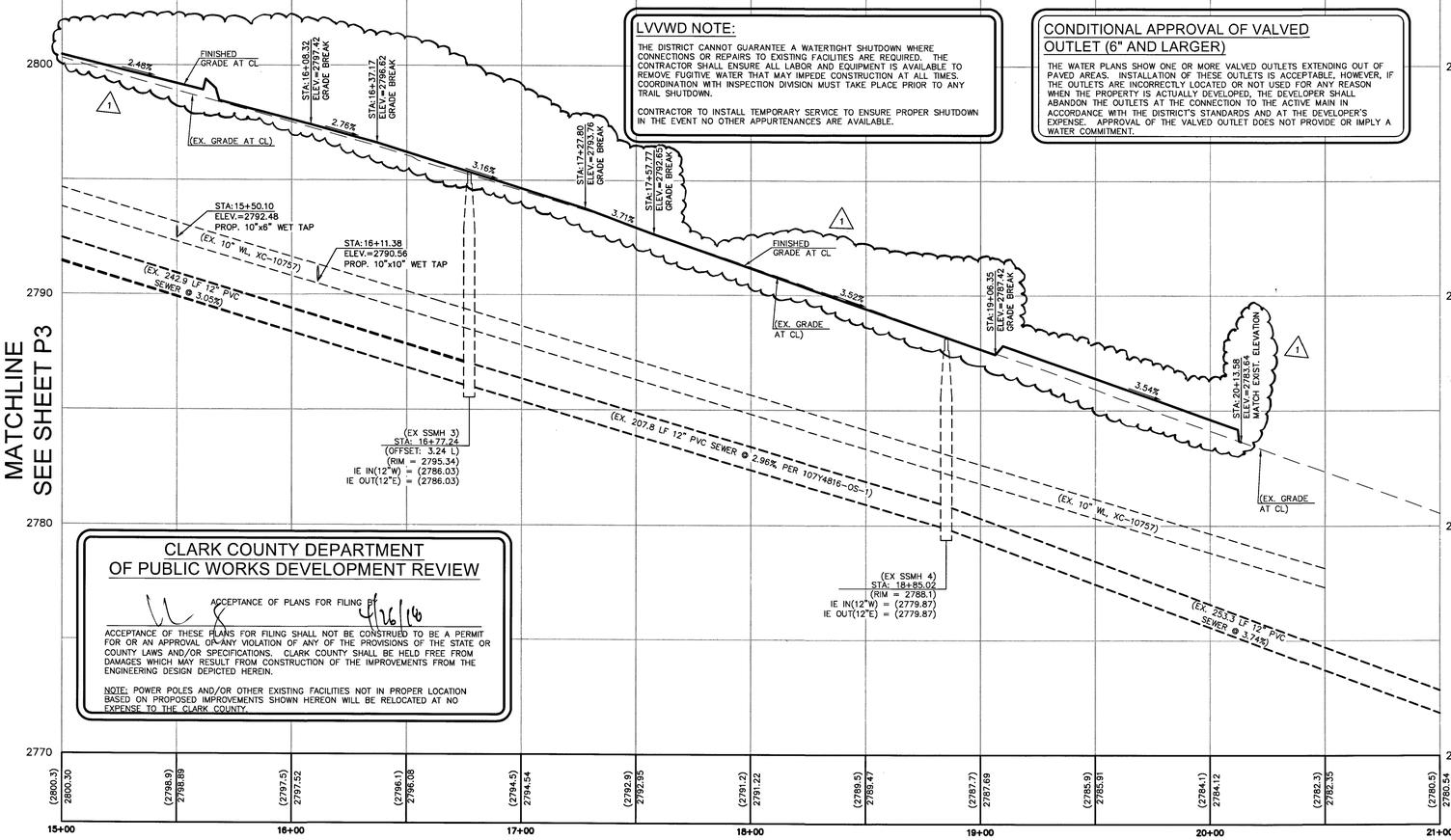
CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

GRAPHIC SCALE IN FEET
0 15 30 60
SCALE: 1" = 30'

NORTH



DEER SPRINGS WAY - PROFILE
STA: 15+0 TO STA: 21+00
SCALE: 1"=30' – HORZ
1"=3' – VERT

BOUNDARY CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

OFF-SITE CURB CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	25.00'	38.71'	88°43'37"	24.45'
C2	15.00'	23.56'	90°00'00"	15.00'
C3	100.00'	31.76'	18°11'42"	16.01'
C4	100.00'	31.76'	18°11'42"	16.01'
C5	30.00'	47.24'	90°12'45"	30.11'
C6	25.00'	30.33'	69°30'46"	17.35'
C7	15.00'	23.56'	90°00'00"	15.00'
C8	25.00'	4.13'	9°27'44"	2.07'
C9	25.00'	4.45'	10°12'18"	2.23'
C10	25.00'	39.27'	90°00'00"	25.00'
C11	15.00'	23.23'	88°43'37"	14.62'
C12	25.00'	39.27'	90°00'00"	25.00'
C13	25.00'	39.27'	90°00'00"	25.00'
C14	1.50'	4.71'	180°00'00"	INFINITY
C15	1.50'	4.71'	180°00'00"	INFINITY
C16	0.50'	1.57'	180°00'00"	INFINITY
C17	200.00'	65.72'	18°49'35"	33.16
C18	10.00'	6.86'	39°17'28"	3.57'
C19	150.00'	52.62'	20°05'56"	26.58'
C20	73.00'	51.68'	40°33'50"	26.98'
C21	0.50'	1.57'	180°00'00"	INFINITY
C22	0.50'	1.57'	180°00'00"	INFINITY
C23	10.00'	5.28'	30°16'24"	2.71'
C24	10.00'	4.81'	27°32'10"	2.45'
C25	74.00'	40.74'	31°32'47"	20.90'
C26	74.00'	37.21'	28°48'33"	19.01'
C27	1.50'	4.71'	180°00'00"	INFINITY
C28	1.00'	3.14'	180°00'00"	INFINITY
C29	200.00'	40.07'	11°28'42"	20.10'
C30	200.00'	40.07'	11°28'42"	20.10'
C31	5.00'	15.71'	180°00'00"	INFINITY

OFF-SITE CURB LINE TABLE		
LINE	LENGTH	BEARING
L1	88.23'	N0°19'19"E
L2	181.28'	N1°35'17"E
L3	50.88'	N0°19'19"E
L4	1.39.93'	N0°19'19"E
L5	58.14'	N89°27'56"W
L6	10.06'	N89°27'56"W
L7	52.29'	N79°15'39"W
L8	100.00'	N89°27'56"W
L9	125.84'	N89°15'41"E
L10	22.24'	N89°15'41"E
L11	257.69'	N89°27'56"W
L12	317.18'	N89°27'56"W
L13	24.62'	N88°11'35"W
L14	27.19'	N88°11'35"W
L15	101.41'	N89°15'41"E
L16	102.18'	N89°15'41"E
L17	68.23'	N89°27'56"W
L18	65.55'	N89°27'56"W
L19	277.39'	S89°27'56"E
L20	148.50'	N89°27'56"W
L21	49.30'	N89°27'56"W
L22	22.01'	N89°27'56"W
L23	3.00'	N00°44'19"W
L24	3.00'	N00°44'19"W

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT, AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES, INC. DATED OCTOBER 12, 2016 PROJECT NO. 4126JD030.
2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.
3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).
4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION
5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.
6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.
7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.
9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.

1ST APPROVED 10/19/17

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NUMBER 125105 DATE 5/16/18
APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

CLV#: 107V7168

CC#: PW17-41363-CMF
CLV#: 67712

CLARK COUNTY DEPARTMENT OF PUBLIC WORKS DEVELOPMENT REVIEW

ACCEPTANCE OF PLANS FOR FILING BY 4/26/18

ACCEPTANCE OF THESE PLANS FOR FILING SHALL NOT BE CONSTRUED TO BE A PERMIT FOR OR AN APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS AND/OR SPECIFICATIONS. CLARK COUNTY SHALL BE HELD FREE FROM DAMAGES WHICH MAY RESULT FROM CONSTRUCTION OF THE IMPROVEMENTS FROM THE ENGINEERING DESIGN DEPICTED HEREIN.

NOTE: POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE CLARK COUNTY.

LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

No.	REVISIONS	DATE	BY
1	UPDATED DRIVEWAY, MEDIANS, NOTE 9, UPDATED S/Z NOTE, LINE & CURVE TABLE	5-24-18	SA

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

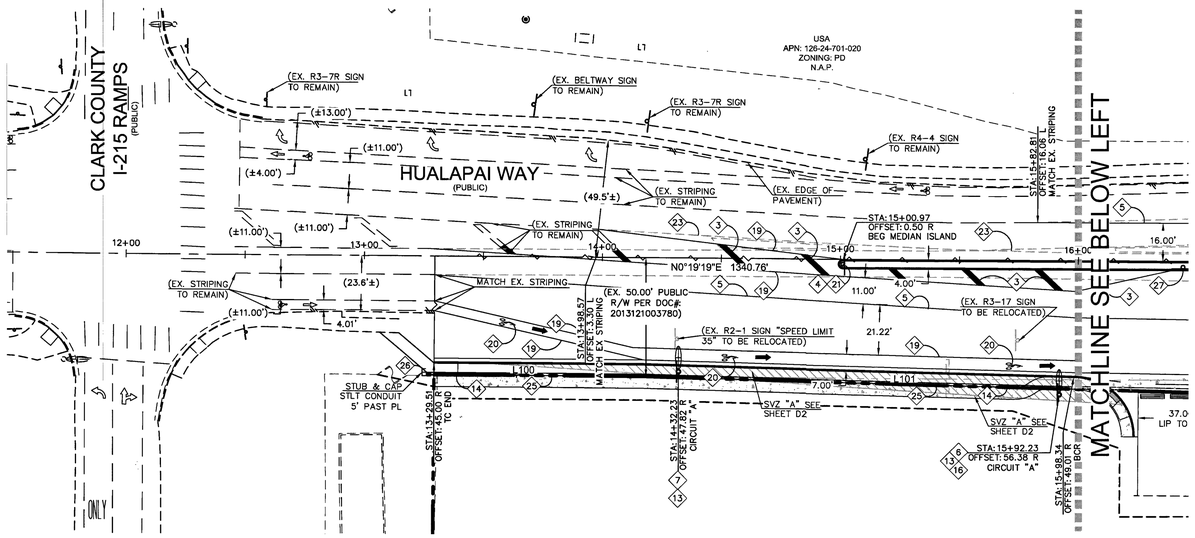
PLAN & PROFILE DEER SPRINGS WAY STA: 15+00 TO STA: 21+00

COMMERCIAL SUBDIVISION @ SEC DEER SPRINGS & HUALAPAI

13 OF 17 SHEETS
P4

PROJ#:125105 AGR:116197 QS:125-19-SW

Plotted By:Zito, Jaylynn Sheet Set:Kho Layout:P4 April 17, 2018 12:41:13pm W:\61153_LAURICH\DWG\WPRDWGS\OFFSITE\06-61153-P3.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

NOTES:

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED. OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

LEGEND

- PROPERTY LINE
- STREET CENTERLINE
- PROPOSED BUILDING
- PROPOSED CURB & GUTTER
- PROPOSED CURB
- EXISTING CURB & GUTTER
- EXISTING CURB
- EXISTING STRIPING
- PROPOSED STRIPING
- FAST CONDUIT
- STREET LIGHT CONDUIT
- SCREEN WALL/RETAINING
- PULLBOX
- 200 AMP SERVICE PEDESTAL
- 250 W STREET LIGHT
- 400 W STREET LIGHT
- FIRE HYDRANT
- SITE VISIBILITY ZONE

CONTRACTOR NOTES:

1. CONTRACTOR SHALL CONTACT CITY OF LAS VEGAS TRAFFIC OPERATIONS AT 229-6075 TO SCHEDULE CITY TRAFFIC STAFF TO LOCATE UNDERGROUND STREETLIGHTING AND SIGNAL FACILITIES IN THE PROJECT AREA. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED PRIOR TO THEIR OPERATION.

   HOURS OF OPERATION ARE: 6:30AM-3:00PM, MONDAY THROUGH FRIDAY, EXCLUDING HOLIDAYS.

2. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS OR PAVEMENT MARKINGS) UNDER CITY OF LAS VEGAS JURISDICTION THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITY TO CITY OF LAS VEGAS SATISFACTION. ALL MATERIALS USED SHALL MEET CITY OF LAS VEGAS' SPECIFICATIONS, OR WILL BE AN APPROVED EQUIVALENT.

3. NO STRUCTURE, VEGETATION, OR OBJECT 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.

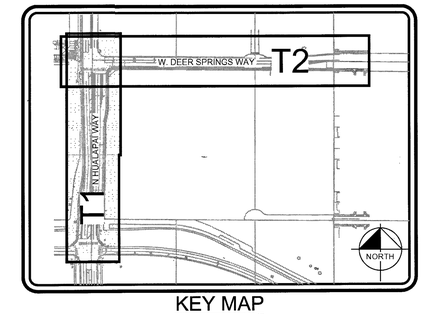
4. CONTRACTOR TO REVIEW UNDERGROUND CONSTRUCTION PER THIS PLAN SET PRIOR TO CONSTRUCTION OF ANY TRAFFIC CONTROL DEVICES

STREET LIGHTING NOTES:

ALL PROPOSED STREET LIGHTS ALONG HUALAPAI WAY, TO MATCH THE EXISTING DECORATIVE LIGHTS.

CLARK COUNTY CONCURRENCE

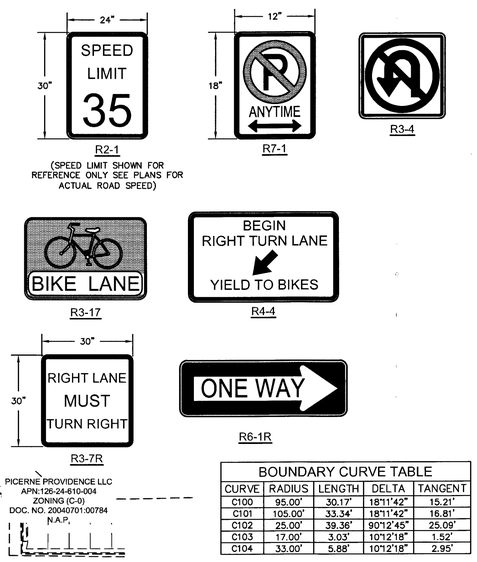
NO WORK TO BE PERFORMED IN CLARK COUNTY RIGHT-OF-WAY UNTIL CLARK COUNTY APPROVAL IS OBTAINED



KEY MAP
N.T.S.

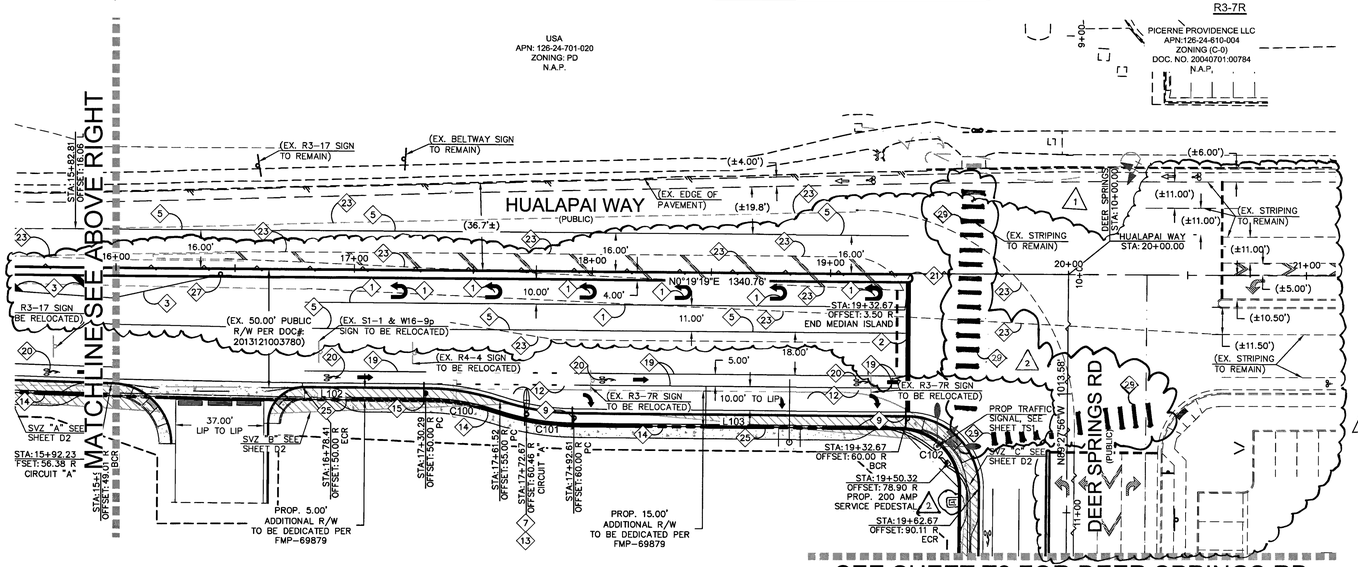
NORTH

GRAPHIC SCALE IN FEET
0 15 30 60
SCALE: 1" = 30'



BOUNDARY CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

BOUNDARY LINE TABLE		
LINE	LENGTH	BEARING
L100	88.23'	N00°19'19"E
L101	225.06'	S01°35'42"W
L102	87.55'	N81°27'05"E
L103	136.93	N00°19'19"E
L104	141.18'	N89°27'56"W
L105	51.98'	N79°15'39"W
L106	100.00'	N89°27'56"W
L107	73.77'	N81°27'05"E
L108	150.99'	N89°15'41"E
L109	67.74'	N89°27'56"W



SEE SHEET T2 FOR DEER SPRINGS RD

TRAFFIC NOTES	
NO	ITEM
1	INSTALL TURN ARROW AND PAVEMENT MARKINGS PER CCAUSD #246 (RPM)
2	INSTALL 24" WIDE STOP BAR AND/OR CROSSWALK MARKINGS PER CCAUSD #254
3	INSTALL LANE DELINEATION WITH 24" CHEVRONS PER CCAUSD #245
4	INSTALL 24"X30" R3-4 (NO U-TURN SIGN)
5	INSTALL TYPE 4 LANE LINE
6	INSTALL 24"X30" R2-1 (SPEED LIMIT SIGN)
7	INSTALL 12"X18" R7-1 (NO PARKING SIGN)
8	INSTALL FORCED LEFT MARKER OR RIGHT TURN STORAGE LANE MARKER PER CCAUSD #246.6
9	INSTALL 30"X30" R3-7R (RIGHT TURN ONLY)
10	INSTALL 24"X36" R3-5zP (BUS EXEMPT SIGN)
11	INSTALL #7 PULL BOX PER CCAUSD #326
12	INSTALL BICYCLE LANE APPROACH TO EXCLUSIVE RIGHT TURN LANE PER CCAUSD #246.1
13	INSTALL LED FIXTURE CA22-LE-160 LA-AW-UMV-BLP PER TOWN CENTER STDS. POLE AND FOUNDATION PER CCAUSD #314, #320 & #321
14	INSTALL 1-1/4" PVC STREET LIGHT CONDUIT AND WIRE
15	INSTALL R4-4 (BEGIN RIGHT TURN LANE YIELD TO BIKERS)
16	INSTALL R3-17 (RIGHT TURN BIKERS ONLY)
17	INSTALL R4-7 & R3-4 SIGNS
18	INSTALL (2) 3" CONDUITS WITH (1) #8 BARE TRACER WIRE
19	INSTALL 6" SOLID WHITE LINE (TAPE OR PAINT)
20	INSTALL BICYCLE LANE DELINEATION PER CCAUSD #244.9
21	INSTALL MEDIAN NOSE MARKINGS PER CCAUSD #248 & K-71 FLEXIBLE MARKER POST
22	INSTALL FLASHING YELLOW ARROW U-TURN SIGNAL WITH U-TURN YIELD SIGN
23	OBLITERATE EXISTING STRIPING
24	INSTALL 15' MAST ARM 250W STREETLIGHT AND FOUNDATION PER CCAUSD #316, #320, AND #321
25	INSTALL 4" F.A.S.T. INTERCONNECT CONDUIT CONTAINING (1) #8 BARE WIRE
26	INSTALL P-30 PULL BOX PER CCAUSD #326
27	INSTALL R6-1R (ONE WAY)
28	INSTALL R3-16A (BIKE LANE ENDS)
29	24" WHITE CROSSWALK PER CCAUSD #254

No.	REVISIONS	DATE	BY
2	ADDED TRAFFIC NOTES CROSSWALK & TRANSFORMER	9-6-18	SB
1	UPDATED SVZ NOTE & STRIPING PER NORTHERN ADJ PROPERTY IMPROVEMENTS	5-24-18	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

PROFESSIONAL ENGINEER STATE OF NEVADA
JAMES CHRISTOPHER WEGELIN
CIVIL
EXPIRES 06/30/19
No. 17837

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

TRAFFIC CONTROL PLAN
SHEET 1 OF 2

COMMERCIAL SUBDIVISION
@ SEC DEER SPRINGS & HUALAPAI

CALL BEFORE YOU OVERHEAD 1-702-227-2929

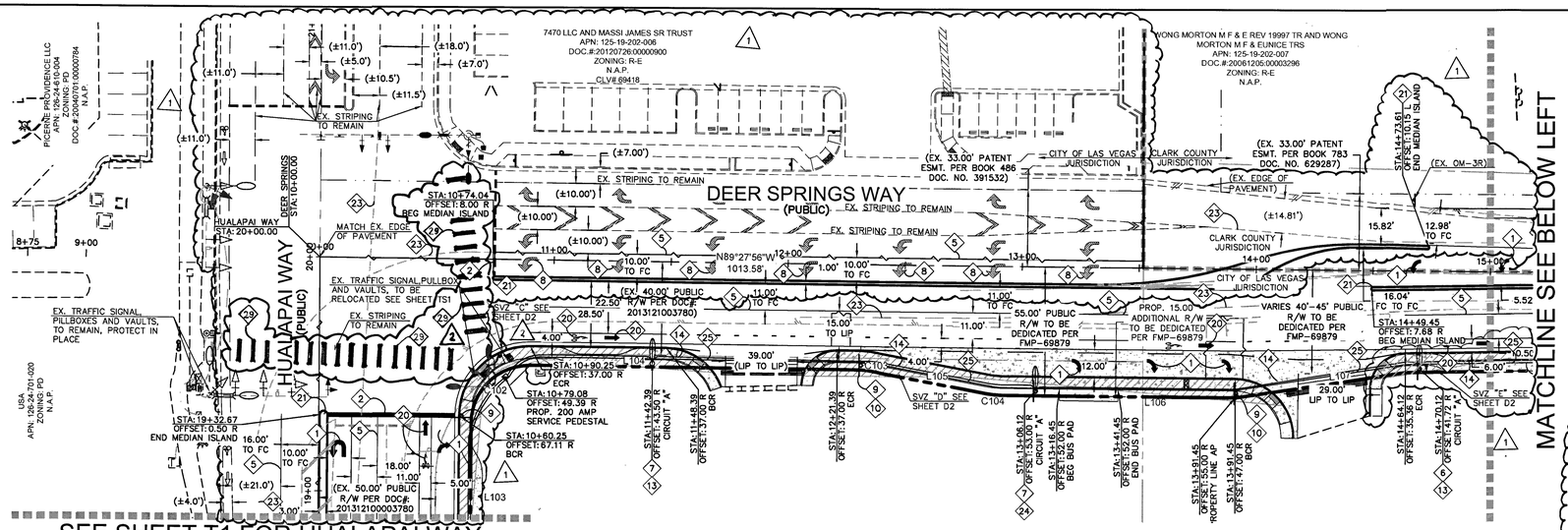
FAST Call before you UnderGround 1-702-432-5300 FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

Call before you Dig CALL 811 OR 1-800-227-2600

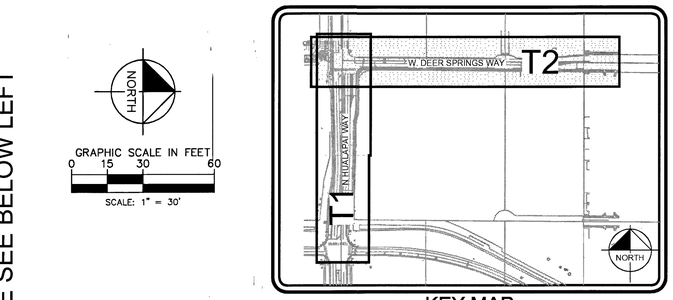
CLV#: 107V7168

CC#: PW17-41363-CMF
CLV#: 67712

Plotted By: Zito, Jaylynn Sheet Set: Kho Layout: T1 April 17, 2018 12:41:30pm W:\61153.LAURICH\DWG\MPRDWGS\OFFSITE\07-61153-T1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

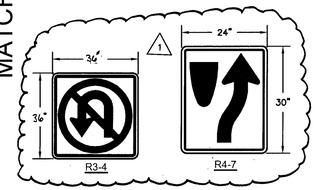


SEE SHEET T1 FOR HUALAPAI WAY



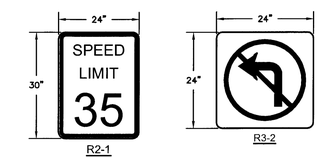
KEY MAP
N.T.S.

GRAPHIC SCALE IN FEET
0 15 30 60
SCALE: 1" = 30'

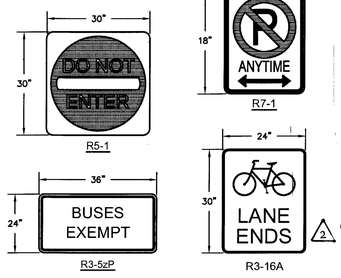


BOUNDARY CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C100	95.00'	30.17'	18°11'42"	15.21'
C101	105.00'	33.34'	18°11'42"	16.81'
C102	25.00'	39.36'	90°12'45"	25.09'
C103	17.00'	3.03'	10°12'18"	1.52'
C104	33.00'	5.88'	10°12'18"	2.95'

BOUNDARY LINE TABLE		
LINE	LENGTH	BEARING
L100	88.23'	N00°19'19"E
L101	225.06'	S01°35'42"W
L102	87.55'	N81°27'05"E
L103	136.93	N00°19'19"E
L104	141.18'	N89°27'56"W
L105	51.98'	N79°15'39"W
L106	100.00'	N89°27'56"W
L107	73.77'	N81°27'05"E
L108	150.99'	N89°15'41"E
L109	67.74'	N89°27'56"W



R2-1
(SPEED LIMIT SHOWN FOR REFERENCE ONLY SEE PLANS FOR ACTUAL ROAD SPEED)
R3-2



R5-1
R7-1
R3-5zP
R3-16A

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.06m = 2815.17aft. (NAVD 88)

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS AID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

NOTES:

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED. OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

LEGEND

- PROPERTY LINE
- STREET CENTERLINE
- PROPOSED BUILDING
- PROPOSED CURB & GUTTER
- PROPOSED CURB
- EXISTING CURB & GUTTER
- EXISTING CURB
- EXISTING STRIPING
- PROPOSED STRIPING
- FAST CONDUIT
- STREET LIGHT CONDUIT
- SCREEN WALL/RETAINING
- PULLBOX
- 200 AMP SERVICE PEDESTAL
- 250 W STREET LIGHT
- 400 W STREET LIGHT
- FIRE HYDRANT
- SITE VISIBILITY ZONE

CLARK COUNTY CONCURRENCE

NO WORK TO BE PERFORMED IN CLARK COUNTY RIGHT-OF-WAY UNTIL CLARK COUNTY APPROVAL IS OBTAINED

CONTRACTOR NOTES:

1. CONTRACTOR SHALL CONTACT CITY OF LAS VEGAS TRAFFIC OPERATIONS AT 229-6075 TO SCHEDULE CITY TRAFFIC STAFF TO LOCATE UNDERGROUND STREETLIGHTING AND SIGNAL FACILITIES IN THE PROJECT AREA. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED PRIOR TO THEIS OPERATION.

   HOURS OF OPERATION ARE: 6:30AM-3:00PM, MONDAY THROUGH FRIDAY, EXCLUDING HOLIDAYS.

2. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS OR PAVEMENT MARKINGS) UNDER CITY OF LAS VEGAS JURISDICTION THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITY TO CITY OF LAS VEGAS SATISFACTION. ALL MATERIALS USED SHALL MEET CITY OF LAS VEGAS' SPECIFICATIONS, OR WILL BE AN APPROVED EQUIVALENT.

3. NO STRUCTURE, VEGETATION, OR OBJECT 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.

4. CONTRACTOR TO REVIEW UNDERGROUND CONSTRUCTION PER THIS PLAN SET PRIOR TO CONSTRUCTION OF ANY TRAFFIC CONTROL DEVICES

CLARK COUNTY SALVAGE NOTE

CONTRACTOR SHALL EXERCISE CARE WITH ALL SALVAGED ITEMS AND SHALL ASSUME THAT ITEMS WILL BE RE-USED AGAIN BY CLARK COUNTY. ALL SALVAGED 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 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.

STREETLIGHT CIRCUIT CAPACITY VERIFICATION FOR CIRCUIT "A" HUALAPAI WAY

IS THERE AN EXISTING SERVICE PEDESTAL IN THE FIELD (NOT PROPOSED) ADJACENT TO THIS PROPERTY THAT MIGHT BE ABLE TO BE USED TO POWER THIS PROJECT'S STREETLIGHTS? (CIRCLE)	YES	CONTACT CITY OF LAS VEGAS TRAFFIC ENGINEERING DIVISION AT 702-229-6327 TO PERFORM CIRCUIT CAPACITY VERIFICATION
	NO	INSTALL A NEW PEDESTAL
SERVICE PEDESTAL LOCATION: SEC OF HUALAPAI WAY & DEER SPRINGS WAY; STA:19+50.32		

LAS VEGAS (COMPLETE IF EXISTING SERVICE)

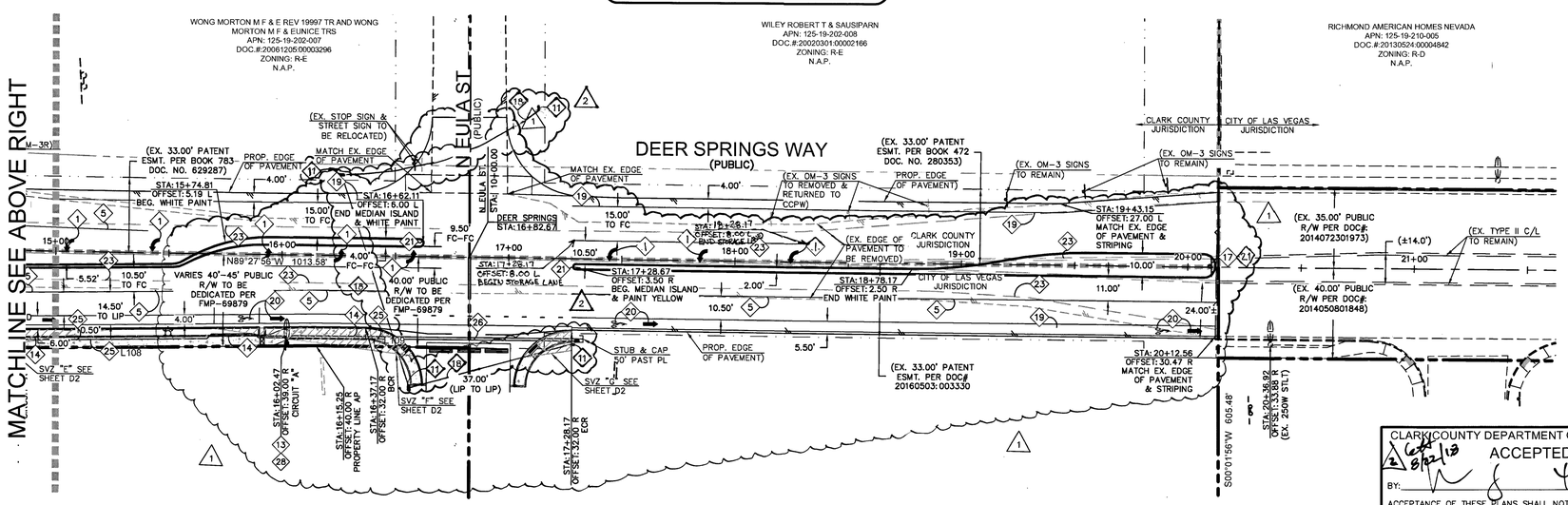
DATE OF CAPACITY VERIFICATION	NA

OFF-SITE PLANS ENGINEER

PERSON WHO DID THE CALCULATIONS	TREASEA WOLF, PE
CONSULTING ENGINEERING FIRM	KIMLEY HORN ASSOCIATES

CAPACITY CALCULATIONS

1		CIRCUIT CAPACITY:	60	AMPS
2		MAXIMUM CONTINUOUS CURRENT DRAW (80%)	48	AMPS
3		EXISTING CIRCUIT LOAD (ENTER 0 IF NEW)	0	AMPS
4		AVAILABLE (2 MINUS 3)	48	AMPS
PROPOSED LUMINAIRE LOAD TO CIRCUIT:				
5	0	NUMBER OF 100 WATT STLTS @ 1.0 AMPS/EA	0	AMPS
6	7	NUMBER OF 250 WATT STLTS @ 1.5 AMPS/EA	10.5	AMPS
7		TOTAL PROPOSED ADDITIONAL LOAD (5 + 6)	10.5	AMPS
REMAINING AVAILABLE LOAD (4 MINUS 7)			37.5	AMPS



CLARK COUNTY DEPARTMENT OF PUBLIC WORKS
ACCEPTED
BY: 4/26/18
ACCEPTANCE OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF STATE, COUNTY OR FEDERAL LAW, SPECIFICATIONS, OR THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

TRAFFIC NOTES

NO	ITEM
1	INSTALL TURN ARROW AND PAVEMENT MARKINGS PER CCAUSD #246 (RPM)
2	INSTALL 24" WIDE STOP BAR AND/OR CROSSWALK MARKINGS PER CCAUSD #254
3	INSTALL LANE DELINEATION WITH 24" CHEVRONS PER CCAUSD #245
4	INSTALL 24"X30" R3-4 (NO U-TURN SIGN)
5	INSTALL TYPE 4 LANE LINE
6	INSTALL 24"X30" R2-1 (SPEED LIMIT SIGN)
7	INSTALL 12"X18" R7-1 (NO PARKING SIGN)
8	INSTALL FORCED LEFT MARKER OR RIGHT TURN STORAGE LANE MARKER PER CCAUSD #246.6
9	INSTALL 30"X30" R3-7R (RIGHT TURN ONLY)
10	INSTALL 24"X36" R3-5zP (BUS EXEMPT SIGN)
11	INSTALL #7 PULL BOX PER CCAUSD #326
12	INSTALL BICYCLE LANE APPROACH TO EXCLUSIVE RIGHT TURN LANE PER CCAUSD #246.1
13	INSTALL LED FIXTURE CA22-LE-160 LA-AW-UMIV-BLP PER TOWN CENTER STDS. POLE AND FOUNDATION PER CCAUSD #314, #320 & #321
14	INSTALL 1-1/4" PVC STREET LIGHT CONDUIT AND WIRE
15	INSTALL R4-4 (BEGIN RIGHT TURN LANE YIELD TO BIKERS)
16	INSTALL R3-17 (RIGHT TURN BIKERS ONLY)
17	INSTALL R4-7 & R3-4 SIGNS
18	INSTALL (2) 3" CONDUITS WITH (1) #8 BARE TRACER WIRE
19	INSTALL 6" SOLID WHITE LINE (TAPE OR PAINT)
20	INSTALL BICYCLE LANE DELINEATION PER CCAUSD #244.9
21	INSTALL MEDIAN NOSE MARKINGS PER CCAUSD #248 & K-71 FLEXIBLE MARKER POST
22	INSTALL FLASHING YELLOW ARROW U-TURN SIGNAL WITH U-TURN YIELD SIGN
23	OBLITERATE EXISTING STRIPING
24	INSTALL 15' MAST ARM 250W STREETLIGHT AND FOUNDATION PER CCAUSD #316, #320, AND #321
25	INSTALL 4' F.A.S.T. INTERCONNECT CONDUIT CONTAINING (1) #8 BARE WIRE
26	INSTALL P-30 PULL BOX PER CCAUSD #326
27	INSTALL R6-1R (ONE WAY)
28	INSTALL R3-16A (BIKE LANE ENDS)
29	24" WHITE CROSSWALK PER CCAUSD #254

CALL BEFORE YOU OVERHEAD 1-702-227-2929

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

Call before you Dig CALL 811 OR 1-800-227-2600

CC#: PW17-41363-CMF
CLV#: 67712
CLV#: 107V7168

No.	REVISIONS	DATE	BY
2	UPDATED TRANSFORMER LOCATIONS.	9-6-18	SB
1	ADDED PULL BOX CROSSWALK & CONDUIT UPDATED DWY, MEDIANS, STRIPING & SVZ'S	5-24-18	SB
	UPDATED NOTE 1, UPDATED SVZ NOTE & LINE WORK FOR NORTHERN ADJ PROPERTY		

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

PROFESSIONAL ENGINEER STATE OF NEVADA TREASEA WOLF No. 17819

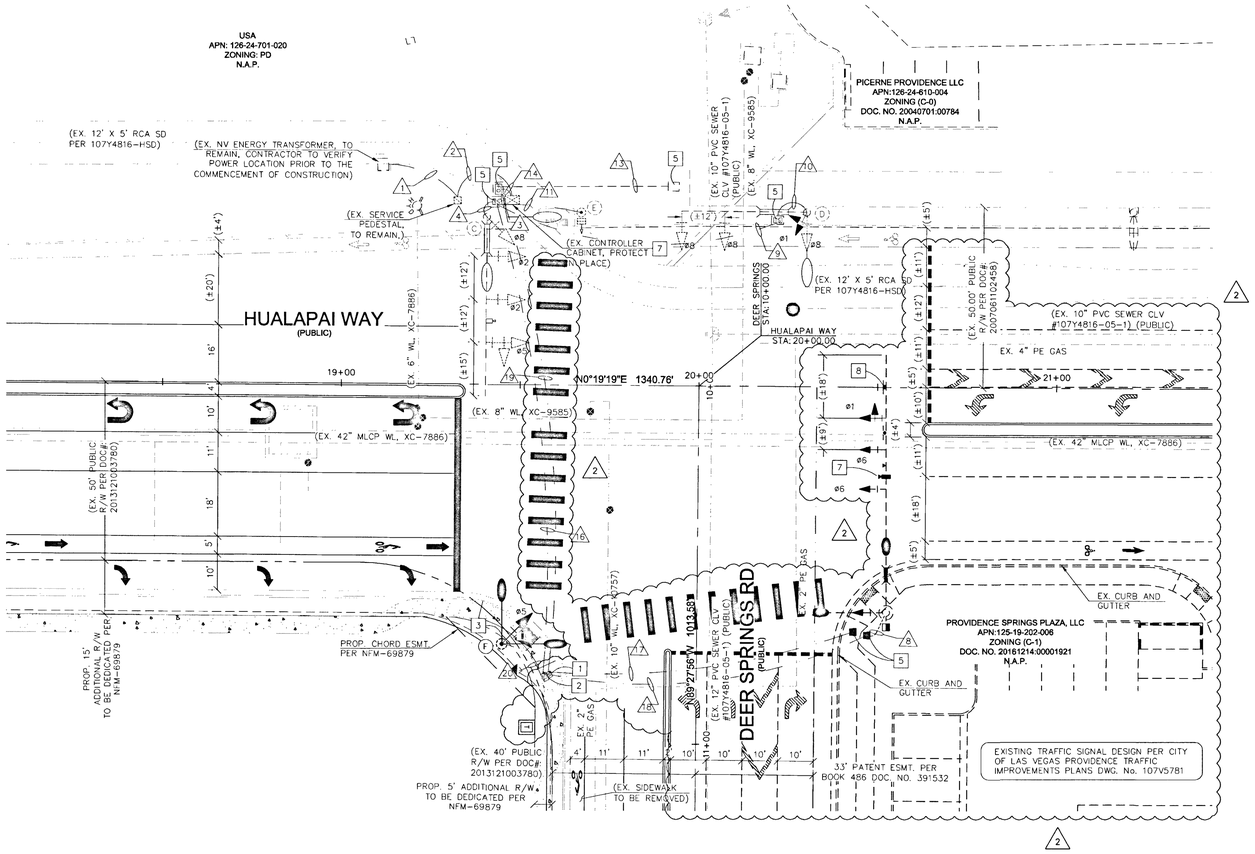
KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

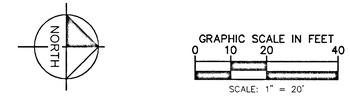
TRAFFIC CONTROL PLAN SHEET 2 OF 2

COMMERCIAL SUBDIVISION @ SEC DEER SPRINGS & HUALAPAI

15 OF 17 SHEETS
T2

Plotted By:Zito, JoLynn Sheet Set:Kha Layout:T2 April 17, 2018 01:03:21pm W:\61153_LAURICH\DWG\MPRDWGS\OFFSITE\08-61153-T2.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



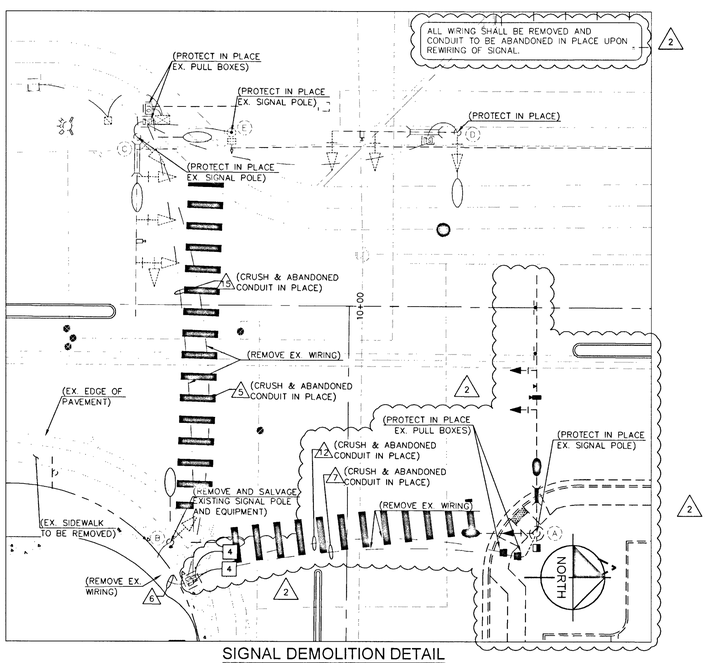


	TRAFFIC SIGNAL CONSTRUCTION NOTES	
NO	ITEM	
1	INSTALL DOUBLE STACKED NO. 5 PULL BOX PER U.S.D. 329 & 706.	
2	INSTALL P30 PULL BOX PER U.S.D. 710, 711 & 761.	
3	INSTALL TRAFFIC SIGNAL POLE LUMINARIES. PROPOSED LUMINARIES SHALL CONFORM CURRENT (AS OF THE DATE OF INSPECTION) CITY STANDARDS AND SPECIFICATIONS.	
4	EXISTING PULL BOX TO REMOVED.	
5	EXISTING PULL BOX TO REMAIN, PROTECT IN PLACE.	
6	EXISTING TRAFFIC SIGNAL POLE AND EQUIPMENT TO REMAIN, PROTECT IN PLACE	
7	CONTRACTOR SHALL COORDINATE WITH CITY TRAFFIC INSPECTOR REGARDING THE REPROGRAMMING OF TRAFFIC SIGNAL VIDEO DETECTION ZONES	
8	EXISTING R3-4 (U-TURN PROHIBITED) TO BE REMOVED. INSTALL MODIFIED R3-4 (U-TURN PERMITTED)	2

PHASE DIAGRAM

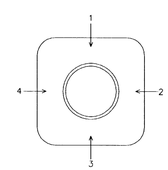
Ø1	Ø2	Ø3	Ø4
	FYA	N/A	N/A
Ø5	**Ø6**	**Ø7**	**Ø8**
		N/A	

CONFLICT FLASH - ALL RED



SIGNAL DEMOLITION DETAIL

SCALE: 1" = 20'



QUADRANT

ARM, SIGNAL, PED BUTTON (TOP VIEW)

SIGNAL GENERAL NOTES:

1. CONTRACTOR SHALL CONTACT CITY OF LAS VEGAS TRAFFIC OPERATIONS AT 229-6075 TO SCHEDULE CITY TRAFFIC STAFF TO LOCATE UNDERGROUND STREETLIGHTING AND SIGNAL FACILITIES IN THE PROJECT AREA. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED PRIOR TO THIS OPERATION.

   HOURS OF OPERATION ARE: 6:30AM-3:00PM, MONDAY THROUGH FRIDAY, EXCLUDING HOLIDAYS.

2. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS OR PAVEMENT MARKINGS) UNDER CITY OF LAS VEGAS JURISDICTION THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITY TO CITY OF LAS VEGAS SATISFACTION. ALL MATERIALS USED SHALL MEET CITY OF LAS VEGAS' SPECIFICATIONS, OR WILL BE AN APPROVED EQUIVALENT.
3. EXISTING TRAFFIC SIGNAL SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION.
4. CONTRACTOR TO REVIEW UNDERGROUND CONSTRUCTION PER THIS PLAN AND CITY OF LAS VEGAS PROVIDENCE TRAFFIC IMPROVEMENTS DWG. No. 107V5781 SET PRIOR TO CONSTRUCTION OF ANY TRAFFIC CONTROL DEVICES
5. CONDUIT ROUTING AND PULLBOX PLACEMENT LOCATIONS ARE SHOWN SCHEMATICALLY ON THE PLANS AND MAY VARY IN THE FIELD.
6. COORDINATE WITH CITY INSPECTOR ON RETURN OF SALVAGED TRAFFIC SIGNAL EQUIPMENT.
7. CONTRACTOR SHALL MAINTAIN EXISTING TRAFFIC SIGNAL PHASING.

NOTE

REFER TO SHEET TS2 FOR CONDUIT, WIRE & POLE SCHEDULE

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066'm = 2815.17s'ft. (NAVD 88)

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

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

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL
OR
1-800-227-2600

CLV#: 107V7168

CC#: PW17-41363-CMF
CLV#: 67712

No.	REVISIONS	DATE	BY
2	UPDATED TRAFFIC SIGNAL CONDUIT & ADJ PROPERTY TO THE NORTH & ADDED CROSSWALK & TRANSFORMER	9-6-18	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA
TRISHA WOLF
PROFESSIONAL ENGINEER
No. 17819
8-7-18

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY MS
DRAWN BY MS
CHECKED BY TA

TRAFFIC SIGNAL PLAN SHEET 1 OF 2

COMMERCIAL SUBDIVISION @ SEC DEER SPRINGS & HUALAPAI

16 OF 17 SHEETS

TS1

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.
Plotted By:Zilo, Ugyen Steel Set:Kho Layout:TS1 August 07, 2018 08:12:22am J:\61153.52\FDWD\CLV\PDD\CS\DFS\TE\03-61153_TS1.dwg

Plotted By:Zilo, JoLynn Sheet Set:Kha Layout:TS2 October 06, 2017 09:52:26am W:\61153_LAURCH\DWG\MPRDWGS\OFFSITE\09-61153-TS1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

POLE SCHEDULE

POLE NO.	LOCATION STATION & OFFSET	POLE TYPE HEIGHT	POLE FOUND	MAST ARM QUAD	MAST ARM LENGTH	LUMINAIRE QUAD	LUMINAIRE LENGTH	SIGNALS VEHICLE TYPE	SIGNALS VEHICLE QUAD	SIGNALS PEDESTRIAN TYPE	SIGNALS PEDESTRIAN QUAD	PEDESTRIAN PUSH BUTTON ARROW	PEDESTRIAN PUSH BUTTON QUAD	REMARKS
A	STA: 20+52.73 OFF: 62.88' RT	(EX)	(EX)	(EX)	(EX)	(EX)	(EX)	(2) M-2 (EX) (1) B-1T (EX) (1) MODIFIED R3-4	MA (EX) MA (EX) 3 (EX)	–	–	–	–	
B	STA: 19+50.32 OFF: 66.27' RT	(EX)	(EX)	(EX)	(EX)	(EX)	(EX)	(1) B-8T (EX)	3 (EX)	(EX)	(EX)	(EX)	(EX)	
C	STA: 19+40.42 OFF: 46.72' LT	(EX)	(EX)	(EX)	(EX)	(EX)	(EX)	(1) M-2AS(EX), (2) M-2(EX), (1) B-2T(EX)	MA (EX) MA (EX) MA (EX) 3 (EX)	–	–	–	–	
D	STA: 20+29.94 OFF: 48.65' LT	(EX)	(EX)	(EX)	(EX)	(EX)	(EX)	(2) M-2(EX), (1) B-1T(EX)	MA (EX) MA (EX) 4 (EX)	–	–	–	–	
E	STA: 19+64.87 OFF: 46.26' LT	(EX)	(EX)	(EX)	(EX)	(EX)	(EX)	–	–	(EX)	(EX)	(EX)	(EX)	
F	STA: 19+45.24 OFF: 72.38'	XX	H	2	–	1 2	15' 15'	(1) B-8T	3	W-OT	1	RIGHT	2	

* PROPOSED LUMINARIES SHALL CONFORM WITH CURRENT (AS OF THE DATE OF INSPECTION) CITY OF LAS VEGAS STANDARDS & SPECIFICATIONS

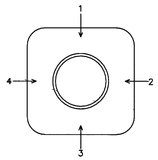
CONDUIT AND WIRE SCHEDULE

WIRE & CABLE	FROM	TO	CONDUIT 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PER NV ENERGY PLAN	RS-19	SERVICE PEDESTAL	O*																			
(4) No. 4 AWG THW, 1-8 SERVICE ENTRANCE	SERVICE PEDESTAL	CONTROLLER		O																		
(1) 25 COND. No. 14, (4) No. 10, (1) No. 8 8281 COAX VIDEO, (3)16 COND. PVC JACKETED OPTICOM CABLE	CONTROLLER	POLE A			O		O		O	O												
~~(1) 25 COND. No. 14 (4) No. 10, (1) No. 8, (3) No. 16 COND. PVC JACKETED~~	~~CONTROLLER~~	~~POLE B~~			O		O	O														
(1) 25 COND. No. 14 (1) No. 8 OPTICAL CABLE 8281 COAX VIDEO (4) No. 10 (3) 16 COND. PVC JACKETED	CONTROLLER	POLE C			O	O	CRUSH & ABANDONED	CRUSH & ABANDONED	CRUSH & ABANDONED				CRUSH & ABANDONED			CRUSH & ABANDONED						
(1) 25 COND. No. 14 (1) No. 8 OPTICAL CABLE 8281 COAX VIDEO (2) No. 10 (3) 16 COND. PVC JACKETED	CONTROLLER	POLE D			O					O	O		CRUSH & ABANDONED				CRUSH & ABANDONED					
(1) 15 COND. No. 14 (1) No. 8	CONTROLLER	POLE E			O							O										
PULL STRING & TRACER WIRE, [BY CONTRACTOR]	EX. PULLBOX	CONTROLLER												O	O	O	O					
(1) No. #8 (2) No. 4	CONTROLLER	STREETLIGHTS			O	O	O	O	O	O	O	O										
(1) 25 COND. No. 14 (1) No. 8 8281 COAX VIDEO (4) No. 10 (3)16 COND. PVC JACKETED OPTICOM CABLE	CONTROLLER	POLE A			●					●								●	●			
(1) 25 COND. No. 14 (1) No. 8 8281 COAX VIDEO (4) No. 10 (3)16 COND. PVC JACKETED OPTICOM CABLE	CONTROLLER	POLE F			●													●				●
FAST WIRING (MATCH EXISTING)																				●	●	
No. OF CONDUITS – CONDUIT SIZE:			(1)-2"	(1)-2"	(4)-3"	(1)-3"	(2)-3"	(1)-3"	(3)-3"	(1)-3"	(2)-3"	(1)-3"	(1)-2"	(1)-4"	(1)-4"	(1)-4"	(2)-3"	(3)-3"	(1)-4"	(1)-4"	(1)-3"	

CONTRACTOR SHALL INSTALL TRACER WIRE IN ALL CONDUITS THAT ARE EMPTY (NO CONDUCTORS/CABLING)
* CONTRACTOR SHALL COORDINATE WITH NV ENERGY TO CONNECT PROPOSED SERVICE PEDESTAL TO SERVICE POINT

O EXISTING CONDUIT

● PROPOSED CONDUIT



QUADRANT

ARM, SIGNAL, PED BUTTON (TOP VIEW)

TRAFFIC SIGNAL CONSTRUCTION NOTES

NO	ITEM
1	INSTALL DOUBLE STACKED NO. 5 PULL BOX PER U.S.D. 329 & 706.
2	INSTALL P30 PULL BOX PER U.S.D. 710, 711 & 761.
3	INSTALL TRAFFIC SIGNAL POLE LUMINARIES. PROPOSED LUMINARIES SHALL CONFORM CURRENT (AS OF THE DATE OF INSPECTION) CITY STANDARDS AND SPECIFICATIONS.
4	EXISTING PULL BOX TO REMOVED.
5	EXISTING PULL BOX TO REMAIN, PROTECT IN PLACE.
6	EXISTING TRAFFIC SIGNAL POLE AND EQUIPMENT TO REMAIN, PROTECT IN PLACE
7	CONTRACTOR SHALL COORDINATE WITH CITY TRAFFIC INSPECTOR REGARDING THE REPROGRAMMING OF TRAFFIC SIGNAL VIDEO DETECTION ZONES
8	~~EXISTING R3-4 (U-TURN PROHIBITED) TO BE REMOVED.~~ INSTALL MODIFIED R3-4 (U-TURN PERMITTED)

2

TRAFFIC SIGNAL EQUIPMENT LEGEND

EXISTING / PROPOSED

- CENTERLINE
- RIGHT OF WAY LINE
- STREETLIGHT CONDUIT
- TRAFFIC SIGNAL CONDUIT
- FIBER OPTIC CONDUIT
- SERVICE PEDESTAL
- CONTROLLER CABINET
- TRAFFIC SIGNAL PULL BOX
- FIBER OPTIC P30 PULL BOX
- FIBER OPTIC T200 VAULT
- ILLUMINATED STREET NAME SIGN
- 400W LUMINAIRE
- VIDEO IMAGE DETECTOR
- TRAFFIC SIGN
- SIGNAL POLE AND FOUNDATION
- OPTICOM (ONE-WAY)
- OPTICOM (TWO-WAY)
- PEDESTRIAN SIGNAL HEAD
- STANDARD 3 BULB (12" HEAD) TRAFFIC SIGNAL HEAD WITH BACKPLATE
- STANDARD 3 BULB (12" HEAD)TRAFFIC SIGNAL HEAD WITH DIRECTIONAL ARROW AND BACKPLATE
- STANDARD 4 BULB (12" HEAD)TRAFFIC SIGNAL HEAD WITH DIRECTIONAL ARROW AND BACKPLATE

NOTE

REFER TO SHEET TS1 FOR TRAFFIC SIGNAL PLAN

BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

CLV TRAFFIC SIGNAL NOTES:

1. ALL WORK PERFORMED ON ANY TRAFFIC SIGNAL COMPONENT MUST BE UNDER THE DIRECT ON-SITE SUPERVISION OF AN IMSA CERTIFIED TECHNICIAN. THE LEVEL OF CERTIFICATION REQUIRED SHALL BE LEVEL II EFFECTIVE MARCH 30, 2001.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL EXISTING UTILITIES. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATIONS OF THEIR INSTALLATIONS 72 HOURS PRIOR TO CONSTRUCTION.

   CALL-BEFORE-YOU-OVERHEAD 1-702-593-6111
   CALL-BEFORE-YOU-DIG 1-800-227-2600
   STREETLIGHTS (NIVA EVANS) 1-702-229-6331
   F.A.S.T. (JESUS MARMOLEJO) 1-702-432-5300
3. ALL TRAFFIC SIGNAL INSTALLATIONS SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, VOLUMES I AND II, ADOPTED BY THE REGIONAL TRANSPORTATION COMMISSION APRIL 8, 1992 WITH ALL SUBSEQUENT REVISIONS.
4. SERVICE SHALL HAVE 1-60 AMP SINGLE POLE BREAKER FOR SIGNAL, AND ONE 40 AMP SINGLE POLE BREAKERS FOR STREET LIGHTS. SERVICE SHALL BE 200 AMP PADMOUNT.
5. LINE SIDE OF METER TO BE WIRED WITH THREE #3/0 AWG THW. LOAD SIDE SHALL BE WIRED WITH FOUR #4 AWG THW (2 BLACK, 2 WHITE) AND ONE #8 AWG THW (GREEN).
6. LUMINAIRES ON ALL SIGNAL POLES SHALL BE 400 WATT HIGH PRESSURE SODIUM CUTOFF (G.E. M400A) WITH MC-111 DISTRIBUTION. EACH LUMINAIRE SHALL HAVE AN INDIVIDUAL 1000 WATT P.E. CONTROL. FOR LUMINAIRES THERE SHALL BE 2(TWO)-#4 AWG THW CONDUCTORS FROM THE SERVICE TO THE CABINET. IN THE CABINET, THE #4 AWG THW CONDUCTORS SHALL BRANCH OFF INTO #10 AWG THW CONDUCTORS INDIVIDUALLY FUSED WITH 10 AMP FUSES. THERE SHALL BE NO SPLICES BETWEEN THE CABINET AND LUMINAIRE FIXTURES.
7. THE INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE WIRED TO THE LUMINAIRES PHOTO CELL FOR CONTROL WITH #10 AWG THW COPPER STRANDED WIRE (TYPICAL). IN THE EVENT THERE IS NO LUMINAIRE ON THE TRAFFIC SIGNAL POLE, THE 1000 WATT P.E. CONTROL SHALL BE MOUNTED ON THE POLE CAP.
8. CHECK CONDUIT AND CABLE SCHEDULE FOR CONDUIT, CABLE, AND WIRE SIZE. VERIFY ALL EXISTING CONDUIT RUNS.
9. ALL PULLBOXES SHALL BE IN ACCORDANCE WITH UNIFORM STANDARD DRAWINGS NO. 404.110, NO. 404.120, AND NO. 404.130.
10. TRAFFIC SIGNAL CABLE SHALL BE 15 OR 25 CONDUCTOR #14 AWG SOLID (TYPICAL) CABLE AND SHALL CONFORM TO IMSA SPEC. NO. 20-1.
11. PEDESTRIAN PUSH BUTTONS SHALL BE AUDIBLE TACTILE "POLARA NAVIGATOR" TYPE (2 WIRE SYSTEM) IN ACCORDANCE WITH CITY OF LAS VEGAS SPECIAL PROVISIONS AND SECTION 623 OF THE CCA USS. PUSH BUTTON SIGNS SHALL BE R10-3e PER MUTCD, 2003 EDITION WITH FULL MOUNTING BRACKETS. ALL PUSH BUTTONS TO BE MOUNTED 42" ABOVE SIDEWALK. THE MAXIMUM HORIZONTAL REACH DISTANCE IS TO BE 24". SIDEWALK RAMPS WILL BE ACCORDING TO U.S.D. No. 235 (1-4) LATEST EDITION.
12. THE ROUTING AND TERMINATION OF CONDUITS AND THE PLACING OF POLES AND CABINETS SHALL BE AS INDICATED ON THE PLANS. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
13. MAST ARM R10-12 SIGNS TO BE ADJACENT (NO GAP) TO THE M-5 SIGNAL HEAD.
14. INSTALL TYPE VIII CABINET. THIS IS COMMONLY REFERRED TO AS AN "R" CABINET. THE CABINET SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS, CLARK COUNTY AREA, NEVADA. INSTALL CABINET NEAR THE R.O.W. LINE OR AS SHOWN ON THE DRAWINGS.
15. THE CONTRACTOR SHALL SUPPLY A 2070N OR M53 CONTROLLER TO THE CITY OF LAS VEGAS TRAFFIC SIGNAL REPAIR SHOP, FOURTEEN DAYS PRIOR TO SIGNAL TURN-ON, FOR TESTING PURPOSES. THE CONTRACTOR SHALL DELIVER THE CONTROLLER TO, AND PICKUP THE CONTROLLER AT 2801 E. CHARLESTON BOULEVARD. CONTRACTOR SHALL NOTIFY THE TRAFFIC SIGNAL REPAIR SHOP (229-6075) SEVEN DAYS PRIOR TO PICK UP. ALL 2070N CONTROLLERS MUST BE COMPATIBLE WITH AND FUNCTION PROPERLY WITH OSS 1996 OPERATION SYSTEM; THE LATEST REVISION OF THE "NEXT PHASE INTERSECTION MANAGEMENT SOFTWARE" (SIEMENS) AND THE ICONS (SIEMENS) GENERAL SOFTWARE.
16. CONTRACTOR SHALL POTHOLE SIGNAL POLE LOCATIONS PRIOR TO ORDERING OF POLES.
17. ALL MAST ARMS TO BE HOT-DIP GALVANIZED BY THE MANUFACTURER THE MAST ARM IS TO BE FABRICATED WITH END TENON ONLY. THE END TENON SHALL BE FACTORY INSTALLED AND THE REMAINING TENONS SHALL BE FABRICATED IN THE FIELD AT THE LOCATION SHOWN ON THE PLANS OR AS DIRECTED BY THE TRAFFIC ENGINEER AND/OR HIS AUTHORIZED REPRESENTATIVE. FOR TENON FABRICATION DETAILS SEE CLARK COUNTY AREA U.S.D. NO. 404.406 SHEET 2. ALL WELDING SHALL CONFORM TO AWS D 2.0, "SPECIFICATION FOR WELDED HIGHWAYS AND RAILWAY BRIDGES," AND TO ANY ADDITIONAL REQUIREMENTS OF SECTION 623 T.02.09 OF THE SPECIFICATIONS. ALL EXPOSED WELDS, SHALL BE PAINTED AS PROVIDED FOR REPAIRING DAMAGED GALVANIZED SURFACES.
18. ALL VEHICLE AND PEDESTRIAN SIGNAL INDICATIONS SHALL HAVE LIGHT EMITTING DIODE (LED) TYPE INDICATIONS, IN CONFORMANCE TO CITY OF LAS VEGAS SPECIAL PROVISIONS TO SECTION 623 OF THE CCA USS. ALL PEDESTRIAN SIGNAL FACES SHALL PROVIDE "WALKING PERSON," "HAND," AND "COUNTDOWN" MESSAGES AS PROVIDED BY DURALIGHT MODEL #JXM-300VIE OR DIALIGHT MODEL #430-6479-801 OR APPROVED EQUAL.
19. VIDEO DETECTION SYSTEMS WILL BE EITHER ITERIS EDGE 2, AUTOSCOPE 2020 OR AUTOSCOPE 2020-V8 WHEN VIDEO DETECTION IS SPECIFIED ON THE TRAFFIC SIGNAL PLANS. ALL VIDEO DETECTION SYSTEMS WILL BE STAND ALONE SYSTEMS TO INCLUDE ALL NECESSARY EQUIPMENT TO PROGRAM THE VIDEO DETECTION SYSTEM. A PROGRAMMING "MOUSE", KEYPAD OR LAPTAOP COMPUTER (IF REQUIRED FOR PROGRAMMING THE VIDEO DETECTION SYSTEM) AND APPROPRIATE SOFTWARE WILL BE SUPPLIED WITH EACH VIDEO SYSTEM. PERSONAL COMPUTERS (PCs) MAY NOT BE SUBSTITUTED FOR LAPTOPS. A VIDEO MONITOR (BLACK AND WHITE OR COLOR) 9" TO 13" WILL BE SUPPLIED WITH EACH VIDEO DETECTION SYSTEM. EACH VIDEO CAMERA WILL HAVE POWER (3#16 CONDUCTORS OR PVC JACKETED) AND 8281 COAXIAL CABLE (SOLID CENTER CONDUCTOR) DIRECTLY FROM THE CABINET. CAMERAS WILL BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS AND PER CLV TRAFFIC ENGINEER APPROVAL. "BNC" ARE THE ONLY ACCEPTABLE TERMINATION OF COAXIAL CABLES. EXTENSION BRACKETS (TYPE AB-0166-5-62 OR EQUIVALENT) WILL BE USED WHEN MOUNTING VIDEO CAMERAS ON MAST ARMS. A VIDEO FILTER (CX06-BNYC OR EQUIVALENT) WILL BE INSTALLED IN THE SIGNAL CABINET FOR EACH CAMERA VIDEO INPUT.
20. LOOP DETECTORS SHALL BE PREFORMED LOOPS AS MANUFACTURED BY RENO A & E OR NEVER-FAIL LOOP SYSTEMS. TWO (2) CHANNEL RACK- MOUNTED DETECTOR AMPLIFIERS SHALL BE INSTALLED IN THE CONTROLLER CABINET WHICH ACCOMMODATE 24 SEPARATE CHANNELS. LOOP LEAD-IN CABLE SHALL BE 6-PAIR 18 AWG MULTIPLE CONDUCTOR CABLE AS SPECIFIED IN SECTION 623T.02.04 OF THE CLV SPECIAL PROVISIONS. ALL WIRING HARNESSES, RACK POSITIONS, AND LOOP LEAD-IN CABLE SHALL BE CLEARLY MARKED AS TO THE APPROPRIATE PHASE AND LETTER DESIGNATION TO WHICH IT BELONGS AS SHOWN ON THE TRAFFIC SIGNAL PLANS. ALL LOOPS SHALL BE INSTALLED IN THE ROADWAY PRIOR TO PLACEMENT OF THE FINAL PAVEMENT LIFT. LOOPS SHALL BE LOCATED AS SHOWN ON THE TRAFFIC SIGNAL PLANS AND APPROVED BY THE CLV TRAFFIC ENGINEERING DIVISION PRIOR TO INSTALLATION. REFER TO SECTION 623T.02.04 OF THE CLV SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
21. OPTICAL PREEMPTION UNITS WILL BE 3M (ENCODING CAPABLE), MODEL 754 PHASE SELECTOR INSTALLED IN A MODEL 760 CARD RACK; OPTICAL SENSORS WILL BE MODEL 722 AND WILL BE INTERFACED TO THE TRAFFIC SIGNAL CONTROLLER CABINET WITH M-138 CABLE.
22. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY CONSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE CITY.
23. INTERCONNECT CABLE SHALL BE AS SHOWN IN THE WIRE SCHEDULE.
24. THE CONTRACTOR SHALL INSTALL CROSSWALKS, STOP BARS, STRIPING AND SIGNS AS IDENTIFIED ON THE PLANS.
25. WHERE THE PLANS CALL FOR REMOVAL AND SALVAGE OF EXISTING TRAFFIC SIGNAL EQUIPMENT, THE CONTRACTOR SHALL CONTACT KARL KELLEY, THE TRAFFIC SIGNAL SUPERVISOR, AT 702-229-4086 TO ARRANGE FOR DELIVERY TIMES AND LOCATIONS.
26. THE CONTRACTOR SHALL MAINTAIN EXISTING SIGNALS THROUGH THE LIFE OF THE PROJECT PER SECTION 623 G.03.01N OF THE CLV SPECIAL PROVISIONS.

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

FAST Call before you UnderGround 1-702-432-5300
SECURITY AND SAFETY IN A SYSTEM OF TRANSPORTATION

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL 811 OR 1-800-227-2600

CLV#: 107V7168

CC#: HTE: 17-41363
CLV#: 67712

No.	REVISIONS	DATE	BY
2	UPDATED TRAFFIC SIGNAL NOTE & TABLE	9-6-18	SB

Kimley»Horn
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA PROFESSIONAL ENGINEER No. 17519 CIVIL EXPIRES 12/31

KHA PROJECT 61153.52
DATE 10/6/17
SCALE AS SHOWN
DESIGNED BY MS
DRAWN BY MS
CHECKED BY TA

TRAFFIC SIGNAL PLAN
SHEET 2 OF 2

COMMERCIAL SUBDIVISION
@ SEC DEER SPRINGS & HUALAPAI

17 OF 17 SHEETS
TS2