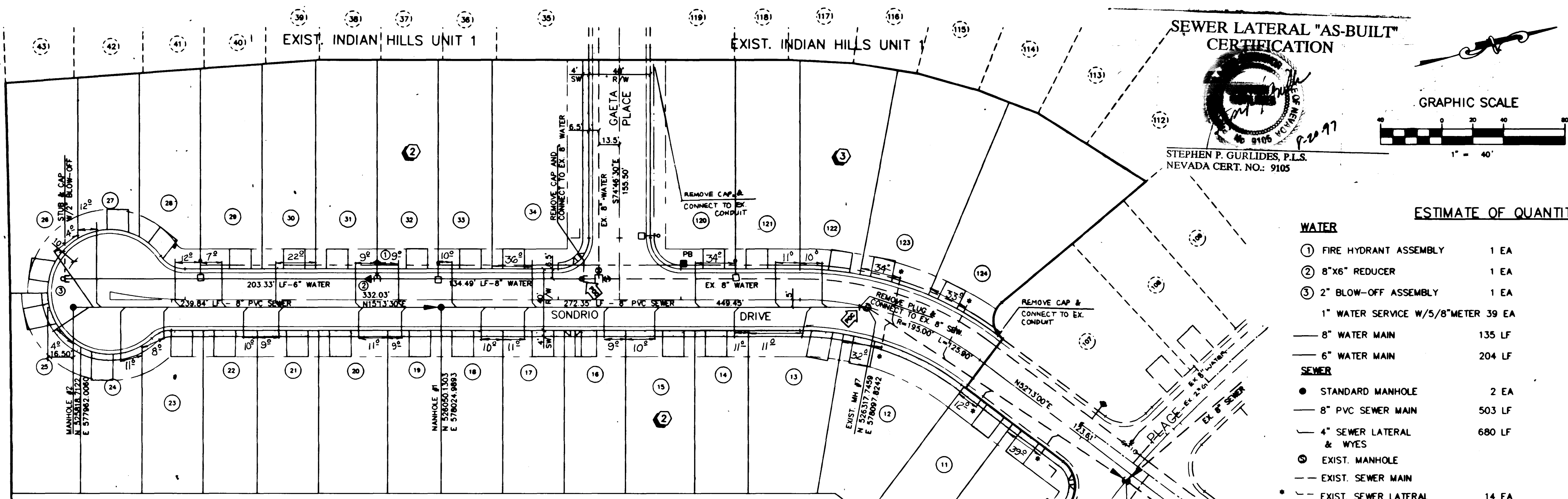


LOT 9 PER SUMMERLIN VILLAGE 7 -
THE TRAILS - UNIT NO. 2
BOOK 62 PAGE 95



SEWER LATERAL "AS-BUILT" CERTIFICATION

STEPHEN P. GURLIKES, P.L.S.
NEVADA CERT. NO. 9105

GRAPHIC SCALE

1" = 40'

ESTIMATE OF QUANTITIES

WATER

1 FIRE HYDRANT ASSEMBLY	1 EA
2 8"x6" REDUCER	1 EA
3 2" BLOW-OFF ASSEMBLY	1 EA
1" WATER SERVICE W/5/8" METER	39 EA
8" WATER MAIN	135 LF
6" WATER MAIN	204 LF

SEWER

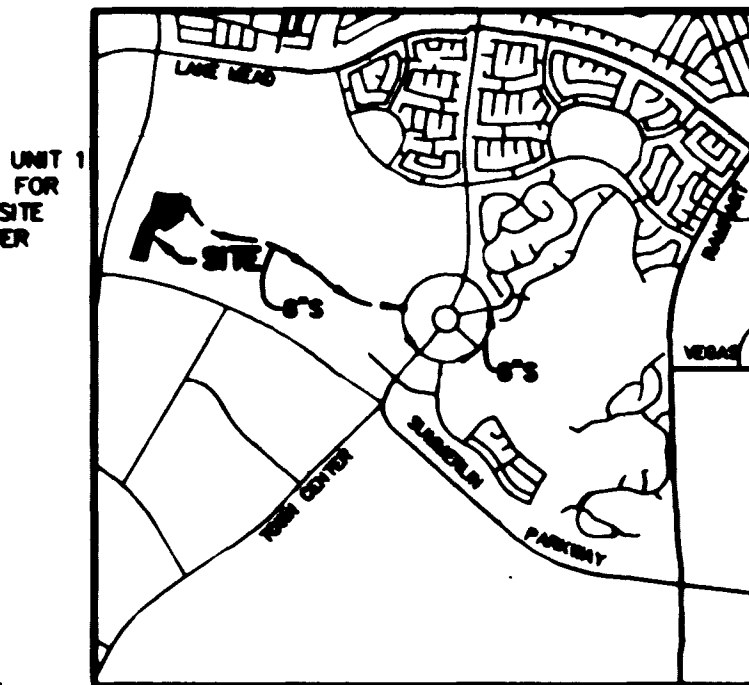
STANDARD MANHOLE	2 EA
8" PVC SEWER MAIN	503 LF
4" SEWER LATERAL & WYES	680 LF
EXIST. MANHOLE	
EXIST. SEWER MAIN	
EXIST. SEWER LATERAL & WYES INSTALLED W/UNIT 1	14 EA

STREET LIGHT

TYPE 3B	5 EA
3-1/2" PULL BOX	1 EA
1-1/4" PVC CONDUIT W/MRES	555 LF
STREET NAME SIGN	2 EA

POINT OF CONNECTION

DRIVEWAY LOCATION (SCHEMATIC ONLY)



EXISTING MOUNTAIN GATE WEST SUBDIVISION BY OTHERS
BOOK 69 OF PLATS, PAGE 66

FIRE DEPARTMENT NOTES

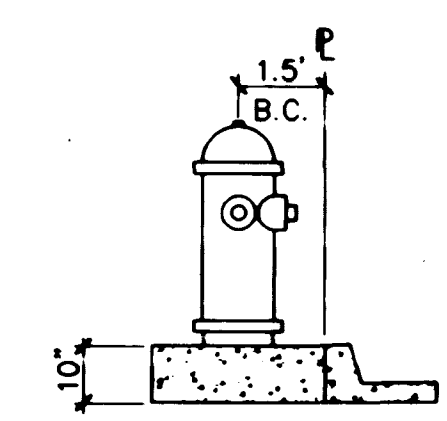
WATER DISTRICT STANDARD NOTES

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, 480 HOUR NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATIONS SUPPORT CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION.
- ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB CUTTERS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND A SANITARY OR STORM SEWER LINE CROSS:

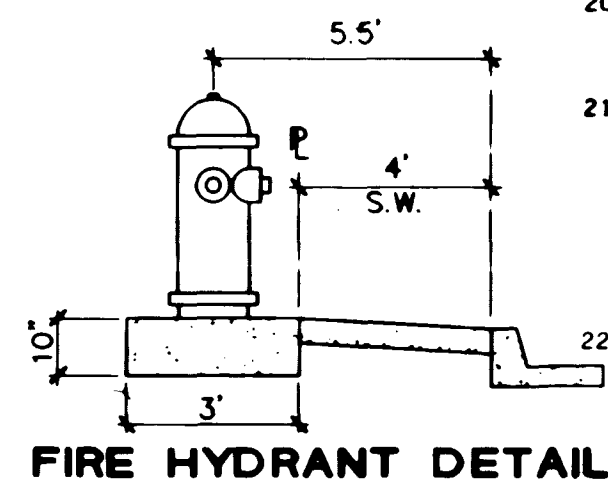
A MINIMUM EIGHTEEN (18) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:

- POTABLE WATER SUPPLY QUALITY MATERIAL.
 - ENCASEMENT WITH FOUR (4) INCH CONCRETE (MINIMUM).
 - SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.
- EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM 10 FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.
- WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
 - ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO CONNECTING TO THE LVVWD'S DISTRIBUTION SYSTEM.
 - THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-FOUR (48) HOURS PRIOR TO THE LVVWD'S DISTRIBUTION SYSTEM.
 - CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 PM AND 6 AM, SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEES BE INSTALLED WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEES MUST HAVE PRIOR LVVWD APPROVAL.
 - ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

(8/24/95)



ALT FH DETAIL
(WHERE THERE IS
NO SW ADJ. TO CURB)



FIRE HYDRANT DETAIL

BENCHMARK

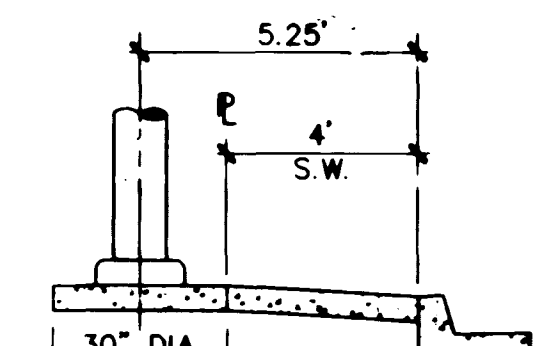
CONTROL POINT "SPANKY" A
BRASS CAP SET IN CONCRETE STAMPED
"442" SET BY GC WALLACE ENGINEERING AND
USED FOR BENCHMARK FOR SUMMERLIN
CONSTRUCTION.

ELEVATION: 2825.38 (NVD/29)

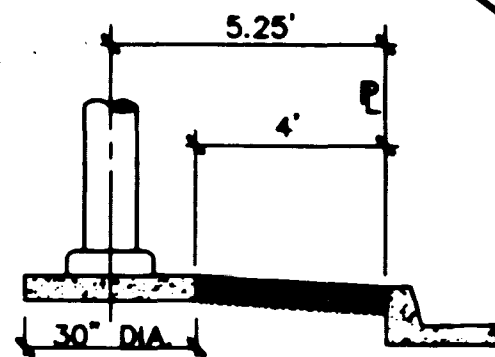
ELEVATION EQUATION: (NVD/29) ELEV. +2.437 = NAVD 88 ELEV.

2 working
days
Call
before you
Dig

1-800-227-2600



STREET LIGHT DETAIL



ALT ST-LT DETAIL
(WHERE THERE IS
NO SW ADJ. TO CURB)

CITY OF LAS VEGAS SEWER NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
- 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 CONTROLLING AGENCY.
- MINIMUM "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034, SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE 11 GRAVEL.
- ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
- A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN, MUST BE REINFORCED CONCRETE ENCASED FOR A DISTANCE, NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.
- THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED AND REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY.

LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 1500 GALLONS/MIN. AT 20 LBS./SQ. IN. RESIDUAL.

BASED ON:

SQUARE FOOTAGE: 1470 SF
LARGEST AREA BETWEEN SEPARATION WALLS: N/A
HEIGHT: N/A
TYPE OF CONSTRUCTION: TYPE V-N
EXPOSURES: N/A
SPRINKLER SYSTEM: NONE
OCCUPANCY: SINGLE FAMILY
ROOF CONSTRUCTION: TILE

REVIEWED BY:

DATE:
PROVIDE FIRE LANE IDENTIFICATION PER CITY ORD. 3677

STREET LIGHT NOTE

ALL STREET LIGHTING INSTALLATION SHALL CONFORM TO SUMMERLIN IMPROVEMENT STANDARDS AND SUMMERLIN STANDARD DRAWINGS.

SEWER CONTRIBUTION

AVG = 0.0098 M.G.D.

PEAK = 0.0323 M.G.D.

Service laterals for Lots 1-9 Block 4, Lots 10-16 Block 2 and Lots 120-124 Block 3 will be tapped on existing main by Owner's contractor under direction of the LVVWD.

WATER CROSSING NOTE

THE FOLLOWING ARE THE REQUIREMENTS THAT MUST BE MET WHEN THERE IS A WATER-SEWER CROSSING:

- WHEN PROTECTION OF THE WATERLINE IS CONSIDERED, THE MINIMUM VERTICAL DISTANCE OF 18 INCHES MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SEWER/STORM LINE. IF THIS DISTANCE CANNOT BE MAINTAINED BECAUSE OF PHYSICAL OBSTRUCTIONS OR THE WATERLINE MUST BE PLACED UNDER THE SEWER/STORM LINE, THE SEWER/STORM LINE MUST BE CONSTRUCTED WITH ANY ONE OF THE FOLLOWING:
- EXTRA HEAVY CAST IRON OR DUCTILE IRON PIPE
 - WATER SUPPLY QUALITY MATERIAL
 - ENCASEMENT WITH 4 INCHES MINIMUM OF CONCRETE OR SLEEVING WITH WATER QUALITY PIPE

EACH OF THESE PROVISIONS MUST BE EXTENDED FOR 10 FEET ON EITHER SIDE OF THE WATERLINE AT 90 DEGREES TO THE CROSSING.

APPROVAL:

LAS VEGAS VALLEY WATER DISTRICT
DATE: 2/13/96

CITY OF LAS VEGAS FIRE MARSHALL
DATE: 2/24/96

NEVADA POWER COMPANY
DATE: 1/24/96

NEVADA POWER COMPANY APPROVAL IS ONLY FOR THE PLACEMENT AND CLEARANCE OF STREET LIGHT AND SIGNAL LIGHT INSTALLATION.

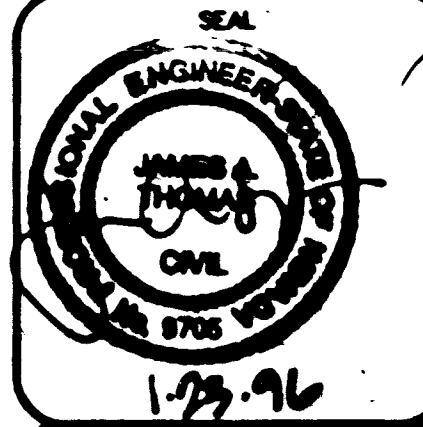
PLASTER DEVELOPMENT
CITY OF LAS VEGAS

SEWER AS-BUILT

INDIAN HILLS
UNIT 2

CONSULTING ENGINEERS PLANNERS & LAND SURVEYORS
2727 SOUTH RAMON BOULEVARD
LAS VEGAS, NEVADA 89102-5148 PHONE (702) 873-7550 FAX (702) 362-2597

vtm nevada



NO. 4820-2
BY: RTS/JEM
DATE: NOV. 08
SCALE: HORIZ. VERT.
SHEET: 5

"AS BUILT" 307Y-4440-2

