

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. CONTRACTOR TO NOTIFY ENGINEER OF ANY CHANGES OR DISCREPANCIES.

Call
811

FAST

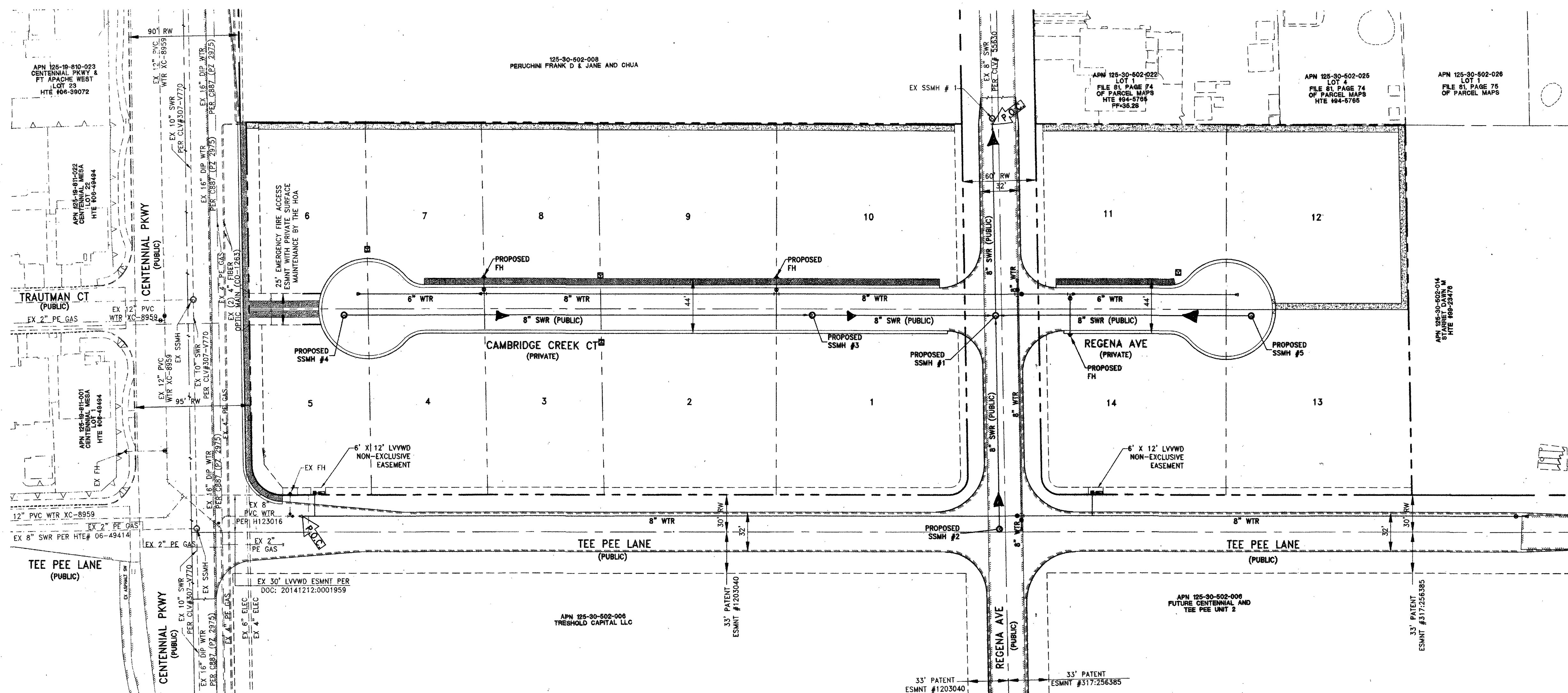
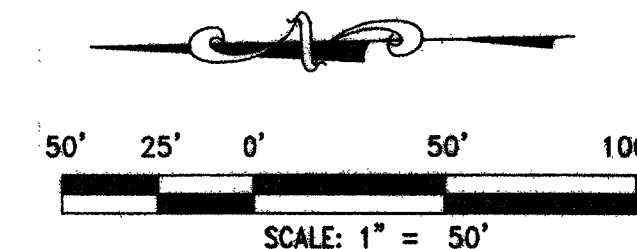
Call
before you
Underground
1-702-432-5300
FREEWAY AND ARTERIAL
CONSTRUCTION

1-702-227-2929

CITY OF LAS VEGAS BENCHMARK 6LV99 24SES
A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF
CENTENNIAL PARKWAY AND HUALAPAI WAY.

ELEVATION=844.924 METERS (NAVD'88)
ELEVATION=2772.06 US SURVEY FEET (NAVD'88)

SOUTH 89°47'00" EAST BEING THE BEARING OF THE NORTH LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE IN FILE 89, PAGE 3 OF SURVEYS.



SEWER MANHOLE TABLE					
MH ID	TMH	INV IN:	INV OUT:	NORTHING:	EASTING:
1	2638.4±	2625.40 (W) 2625.40 (N) 2625.40 (S)	2625.20 (E)	7045.01	11866.18
2	2643.2±		2633.17 (E)	7045.54	11893.20
3	2640.5±	2631.60 (N)	2631.40 (S)	7194.92	11869.48
4	2646.4±		2638.89 (N)	7577.35	11877.92
5	2635.8±		2628.61 (N)	6836.28	11861.57

APPROVED FOR CONSTRUCTION

Y. D. Sharma, P.E.

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: *12/17/15* PROJECT# 122286

LVVWD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL

CLARK COUNTY FIRE DEPARTMENT APPROVAL

BY: *EJ Kaminski* 12-10-15 DATE

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR OR ANY APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVVWD. 15-6288

FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL

REV	DESCRIPTION	BY	APPD	DATE
	DATE: December 08, 2015			
	HORIZ. SCALE: 1"=50'			
	VERT. SCALE: N/A			
	DRAWN BY: MJD/GRB			
	DESIGNED BY: AW			
	CHECKED BY: CZ			
	APPROVED BY: CZ			
	PROJECT # 39440.00338			

LENNAR®
2400 PASO PASE DRIVE PARKWAY SUITE 120 HENDERSON, NV 89074
PHONE: (702) 736-9100 FAX: (702) 736-9200

RCI Engineering
4325 Dean Martin Road, Suite 300, Las Vegas, NV 89103
PH702.653.0000 FAX702.653.0001

**CENTENNIAL AND TEE PEE UNIT 1
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
MASTER UTILITY PLAN**

CHRISTOPHER R. ZRINYI
Exp. 6/30/2016
CIVIL
No. 13976

12-9-15

DRAWING

MU-1

SHT 9 OF 21

HTE NUMBER
14-23518

D:\3040_LEN\0038_Centennial and Tee Pee_CIVIL_IPS\UNIT 1\S005_MU01.dwg chrivers 12/08/15 5:49pm

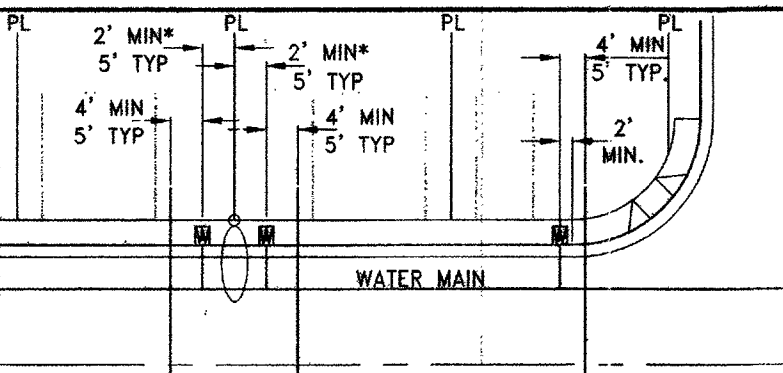
DISCLAIMER NOTE:

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

FAST
Call before you Dig
Underground
1-702-432-5300

CALL BEFORE YOU DIG
AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY.



TYPICAL WATER AND SEWER LATERAL LOCATIONS

*MINIMUM SEPARATION OF 5-FEET REQUIRED FROM STREET LIGHT CENTER TO WATER METER BOX CENTER

SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNSIDE SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSIDE SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSIDE SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

WATER NOTE FOR ALL LOTS

1. THIS PROJECT RESIDES WITHIN THE 2860 WATER ZONE. THEREFORE ALL LOTS WITH A FINISH FLOOR ELEVATION LESS THAN 2851.4 WILL REQUIRE AN INDIVIDUAL, ON-SITE (PRIVATE) PRESSURE REDUCING VALVE.
2. THIS PROPERTY HAS STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THEREFORE LOTS WITHIN THIS PROJECT REQUIRE PRESSURE REDUCING VALVES. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRIVATE'S ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

EXISTING UTILITY NOTE:

1. EXISTING UTILITIES AS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY BOTH VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITIES SHOWN INCORRECTLY OR OTHERWISE NOT SHOWN.

WATER MAIN JOINT DEFLECTION (PVC 4'-24")

PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

NOTE: INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15

NOTES:

1. ADJUST WATER VALVE BOXES TO FINISH GRADE PER UDACS PLATE NO. 39. VALVES SHALL BE ACCESSIBLE AT ALL TIMES.
2. ALL SEWER/STORM DRAINS CROSSING WATERLINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSING AND CLEARANCES.
3. ALL WATER PIPE DIMENSIONS SHOWN ARE GIVEN FROM FITTING TO FITTING AND ARE FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL DIMENSION PRIOR TO CONSTRUCTION.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1"

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLIES SHALL BE INSTALLED PER THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT TO ALLOW THE DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

BUILDING INFORMATION

TYPE OF CONSTRUCTION: V-B
TOTAL LIVING AREA: < 5,000 S.F.
TOTAL SF UNDER ROOF: < 6,000 S.F.
NUMBER OF STORES: 2
BUILDING USE: SINGLE FAMILY RESIDENTIAL
SPRINKLERED: NO
NUMBER OF FIRE HYDRANTS: 3
FIRE FLOW: 2,000 GPM AT 20 PSI RESIDUAL

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 6LV99 24SE5
A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF CENTENNIAL PARKWAY AND HUALAPAI WAY.
ELEVATION=844.924 METERS (NAVD'88)
ELEVATION=2772.06 US SURVEY FEET (NAVD'88)

BASIS OF BEARINGS

SOUTH 89°47'00" EAST BEING THE BEARING OF THE NORTH LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE IN FILE 89, PAGE 3 OF SURVEYS.

BACKWATER VALVE

(BW) ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

PRESSURE REDUCING VALVE

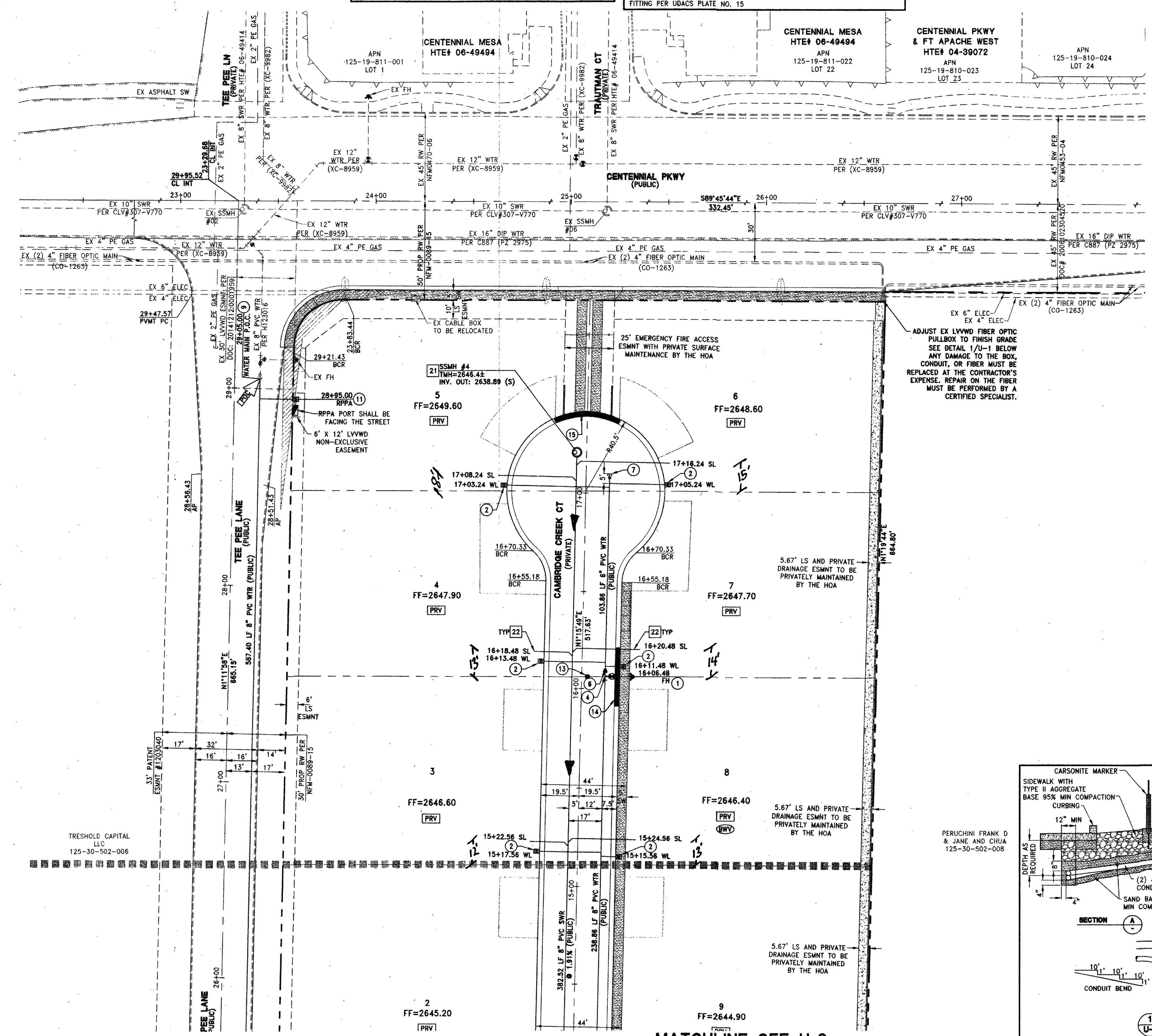
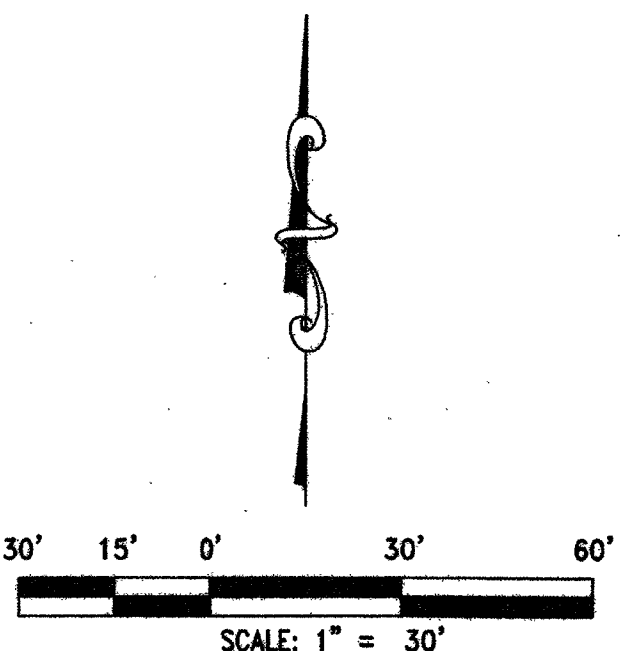
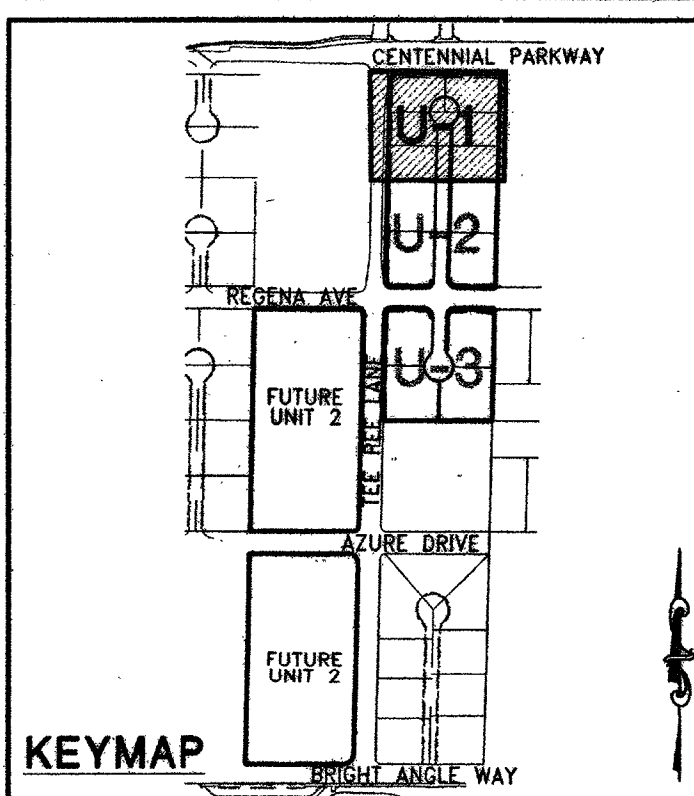
(PRV) ALL LOTS WITH THIS SYMBOL REQUIRE A PRESSURE REDUCING VALVE

UTILITY LATERAL NOTE:

WATER AND SEWER LATERAL STATIONS SHOWN ON THIS PLAN SET ARE CALCULATED AT THE BACK OF CURB

WASTEWATER FLOW CALCULATION

14 ERU (14 LOTS) * 250 GPD = 0.0035 MGD
= 0.0035 * 3.5 = 0.0123 MGD PEAK
DESIGN FLOW (25% WET WEATHER ALLOWANCE)
DESIGN FLOW 0.0123 + 25% = 0.0154 MGD



WATER CONSTRUCTION NOTES

1. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40 (INCLUDES 6" GATE VALVE)
2. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE NO. 2
3. INSTALL 8" GATE VALVE PER UDACS PLATE NO. 30 & NO. 39
4. INSTALL 8" X 6" TEE PER UDACS PLATE NO. 31
5. INSTALL 8" CROSS PER UDACS PLATE NO. 31
6. INSTALL 8" X 6" REDUCER PER UDACS PLATE NO. 30
7. INSTALL 6" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE NO. 36
8. INSTALL 8" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE NO. 36
9. REMOVE EX. CAP AND BLOWOFF AND CONNECT TO EXISTING WATER MAIN PER UDACS PLATE NO. 36
10. INSTALL (2) 4" SCHEDULE 40 PVC IRRIGATION SLEEVES
11. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE NO. 3 & 4 (1" BRASS WATERLINE BETWEEN METER AND RPPA)
12. INSTALL 1" COPPER SERVICE LATERAL WITH 1" METER PER UDACS PLATE NO. 4
13. INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACE, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, OR FIRE LANES
14. PAINT CURB RED IN FRONT OF FIRE HYDRANT
15. PAINT CURB RED IN FRONT OF FIRE DEPARTMENT EMERGENCY ACCESS

SEWER CONSTRUCTION NOTES

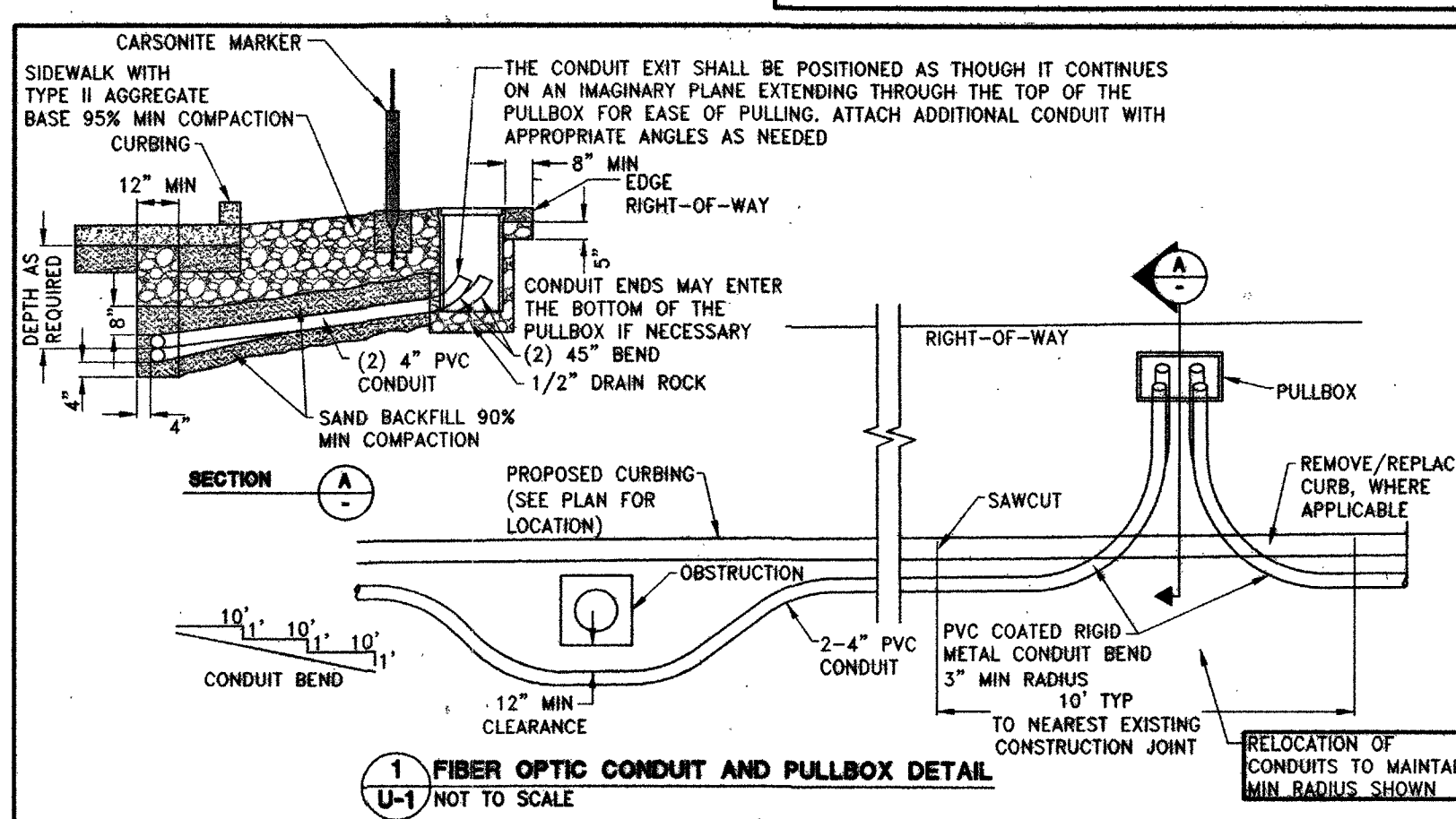
21. INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. NO. SD-1A, SD-4, SD-5 & SD-6) WITH SINGLE COVER.
22. (TYP) INSTALL 4" SEWER LATERAL (PER DCSWCS STD. NO. SD-17, SD-20, SD-22 & SD-25)
23. TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
24. INSTALL 8" SEWER CAP AND 1 CU-FT THRUST BLOCK @ CAP

FOR DRY UTILITY SEPARATION WITH WATER:

- MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING.
- MAINTAIN A MINIMUM 3" PARALLEL SEPARATION.
- ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPPER SERVICE LATERALS. ANY COPPER SERVICE LATERAL KINKED, BENT, OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.

CLARK COUNTY FIRE DEPARTMENT APPROVAL

APPROVED FOR CONSTRUCTION
DATE: 12-17-15
PROJECT: 122286
LVVWD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL



DATE: December 08, 2015

HORIZ. SCALE: 1"=30'

VERT. SCALE: N/A

DRAWN BY: JAV

CHECKED BY: CZ

APPROVED BY: JAV

PROJECT #: 3040.0038

LENNAR

2600 PASO VIEJO PARKWAY SUITE 120 HENDERSON, NV 89074

PHONE: (702) 796-9100 FAX: (702) 796-9200

RCI Engineering

4325 DAWN MOUNT ROAD SUITE 300 LAS VEGAS, NV 89103

PHONE: (702) 486-0000 FAX: (702) 486-0001

IMPROVEMENT PLANS FOR

CENTENNIAL AND TEE PEE UNIT 1

A SINGLE FAMILY RESIDENTIAL SUBDIVISION

UTILITY PLAN

(SHEET 1 OF 3)

NEVADA

CLARK COUNTY

12-9-15

U-1

SHT 10 OF 21

HTE NUMBER 14-23518

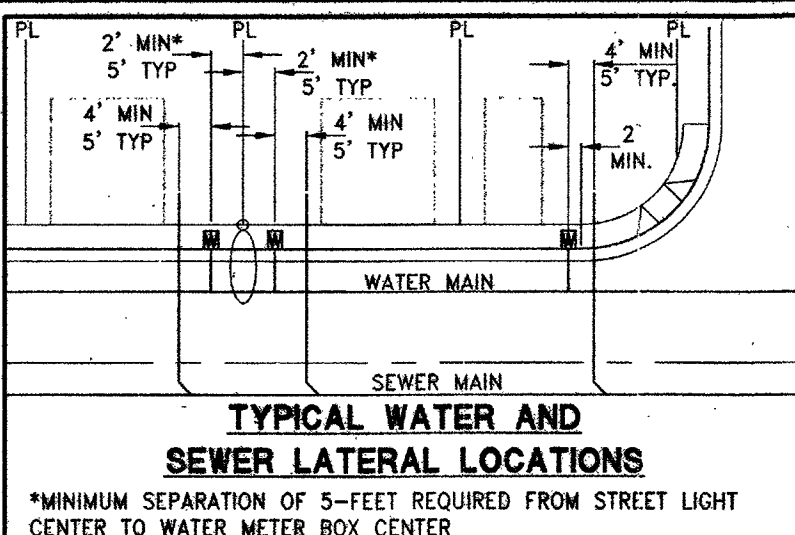
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Call before you Dig
Call 811
1-800-227-2600

Call before you UnderGround
1-702-432-5300

Call before you Overhead
1-702-227-2929



TYPICAL WATER AND SEWER LATERAL LOCATIONS

*MINIMUM SEPARATION OF 5-FOOT REQUIRED FROM STREET LIGHT CENTER TO WATER METER BOX CENTER

WATER NOTE FOR ALL LOTS

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FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

NOTE:

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15

NOTES:

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BUILDING INFORMATION

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TOTAL SF UNDER ROOF: < 6,000 S.F.
NUMBER OF STORIES: 2
BUILDING USE: SINGLE FAMILY RESIDENTIAL
SPRINKLERED: NO
NUMBER OF FIRE HYDRANTS: 3
FIRE FLOW: 2,000 GPM AT 20 PSI RESIDUAL

BENCHMARK

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BACKWATER VALVE

ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

PRESSURE REDUCING VALVE

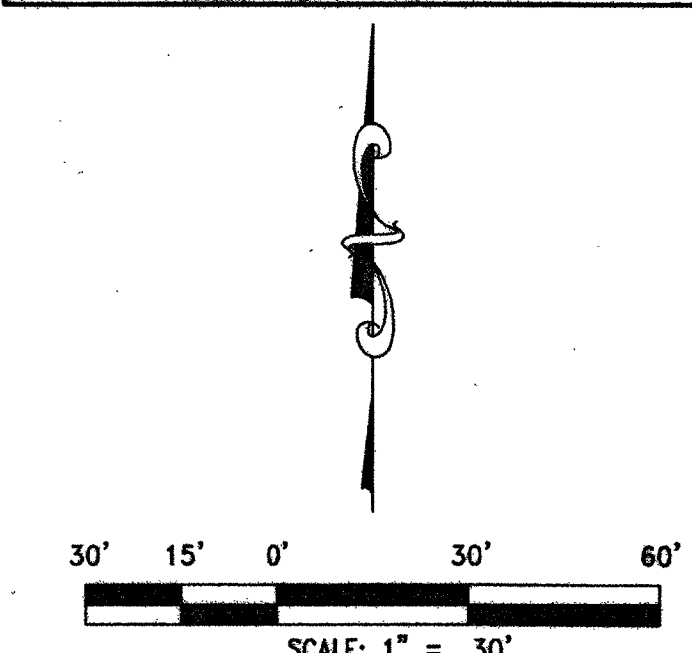
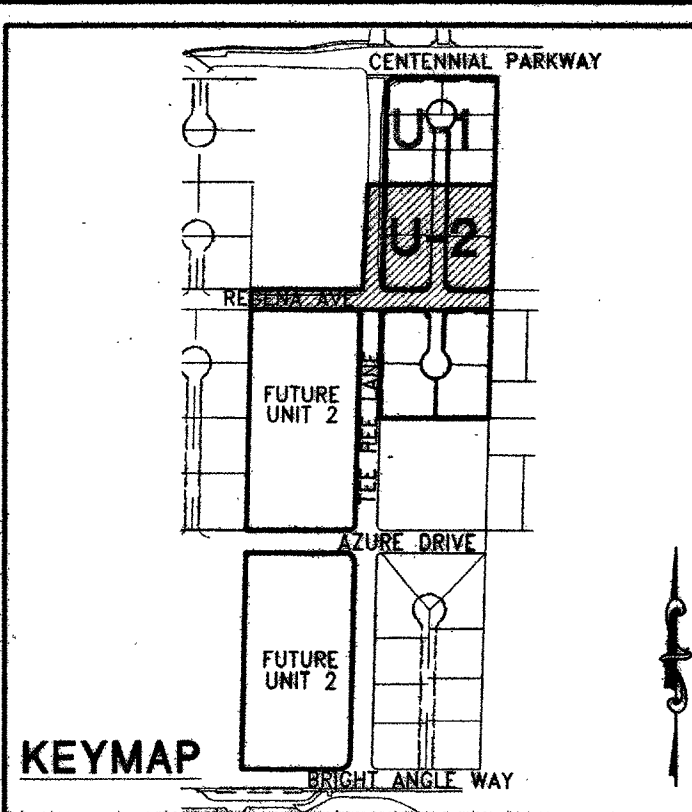
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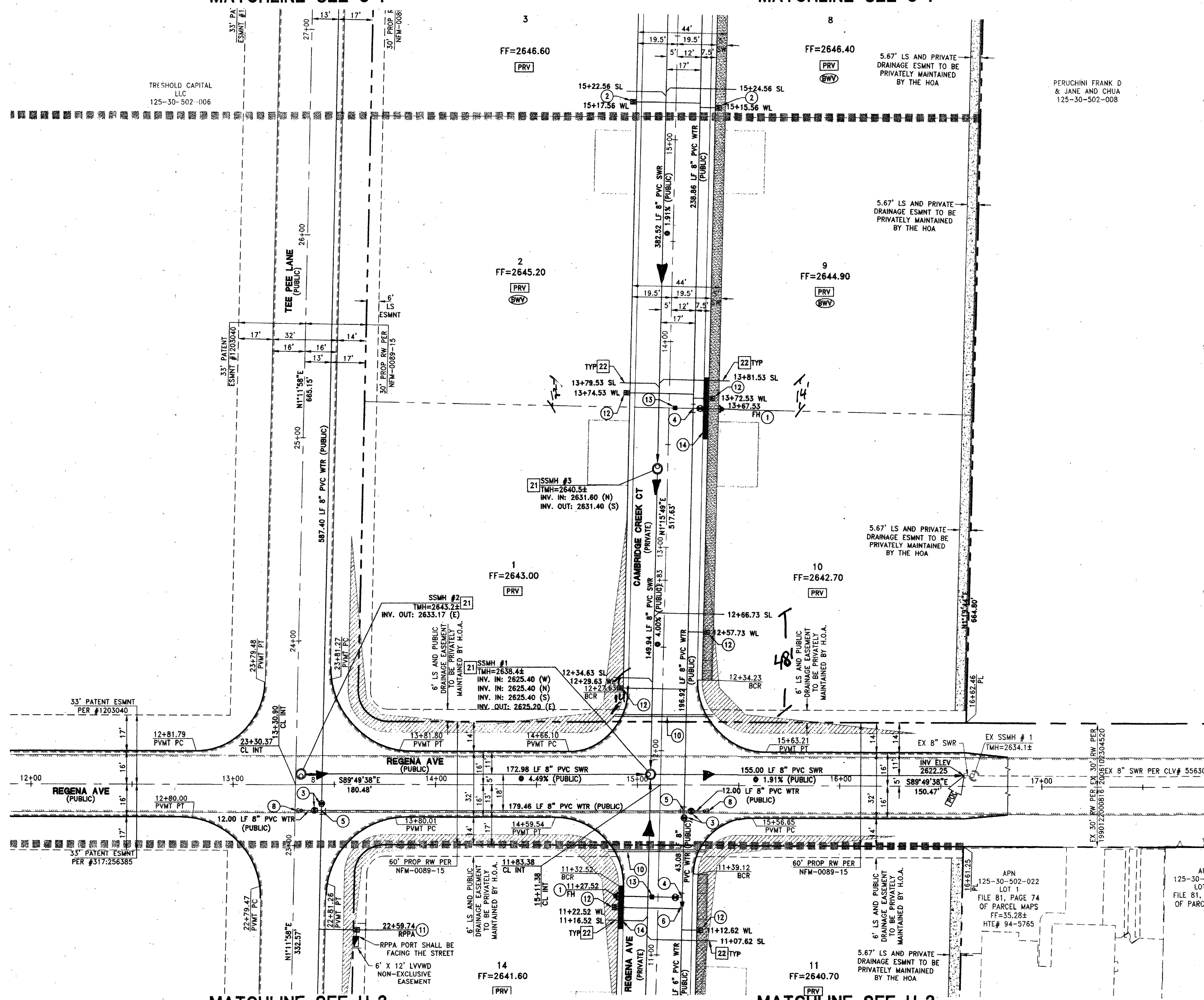
WASTEWATER FLOW CALCULATION

14 ERU (14 LOTS) * 250 GPD = 0.0035 MGD
= 0.0035 * 3.5 = 0.0123 MGD PEAK
DESIGN FLOW (25% WET WEATHER ALLOWANCE)
DESIGN FLOW 0.0123 + 25% = 0.0154 MGD



MATCHLINE SEE U-1

MATCHLINE SEE U-1



MATCHLINE SEE U-3

MATCHLINE SEE U-3

WATER CONSTRUCTION NOTES

1. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40 (INCLUDES 6" GATE VALVE)
2. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE NO. 2
3. INSTALL 8" GATE VALVE PER UDACS PLATE NO. 30 & NO. 39
4. INSTALL 8" X 6" TEE PER UDACS PLATE NO. 31
5. INSTALL 8" CROSS PER UDACS PLATE NO. 31
6. INSTALL 8" X 6" REDUCER PER UDACS PLATE NO. 30
7. INSTALL 6" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE NO. 38
8. INSTALL 8" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE NO. 38
9. REMOVE EX. CAP AND BLOWOFF AND CONNECT TO EXISTING WATER MAIN PER UDACS PLATE NO. 36
10. INSTALL (2) 4" SCHEDULE 40 PVC IRRIGATION SLEEVES
11. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE NO. 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND RPPA)
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14. PAINT CURB RED IN FRONT OF FIRE HYDRANT
15. PAINT CURB RED IN FRONT OF FIRE DEPARTMENT EMERGENCY ACCESS

SEWER CONSTRUCTION NOTES

21. INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. NO. SD-1A, SD-4, SD-5 & SD-6) WITH SINGLE COVER.
22. (TYP) INSTALL 4" SEWER LATERAL (PER DCSWCS STD. NO. SD-17, SD-22 & SD-25)
23. TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
24. INSTALL 8" SEWER CAP AND 1 CU-FT THRUST BLOCK @ CAP

FOR DRY UTILITY SEPARATION WITH WATER:

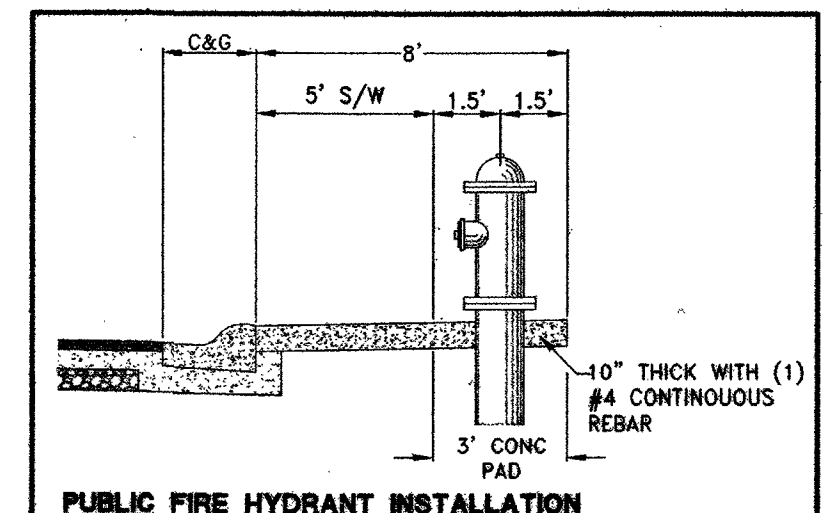
- MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING.
- MAINTAIN A MINIMUM 3' PARALLEL SEPARATION.
- ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPPER SERVICE LATERALS. ANY COPPER SERVICE LATERAL KINKED, BENT, OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.

CLARK COUNTY FIRE DEPARTMENT APPROVAL

APPROVAL OF THESE PLANS SHALL NOT BE CONSIDERED TO BE A PERMIT FOR, OR ANY APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.
APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVVWD.
FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL

APPROVED FOR CONSTRUCTION

1. DISHARI BR. JSM
LAS VEGAS WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 12/11/15 PROJECT: 122288
LVVWD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL



IMPROVEMENT PLANS FOR CENTENNIAL AND TEE PEE UNIT 1 A SINGLE FAMILY RESIDENTIAL SUBDIVISION UTILITY PLAN (SHEET 2 OF 3)

LENNAR®
2400 PASEO VIBRANTE PARKWAY SUITE 220 HENDERSON, NV 89074
PHONE: (702) 736-5100 FAX: (702) 736-5200

RCI Engineering
4925 Dean Martin Road, Suite 300, Las Vegas, NV 89103
PHONE: (702) 453-0000 FAX: (702) 453-0001

NEVADA
CLARK COUNTY

12-9-15
DRAWING
U-2
SHEET 11 OF 21
HTE NUMBER
14-23518

DISCLAIMER NOTE:

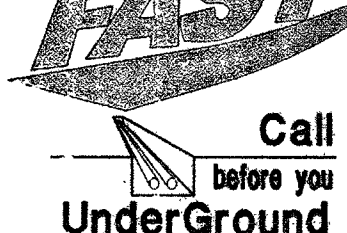
UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. CONTRACTOR TO NOTIFY ENGINEER OF ANY CHANGES OR DISCREPANCIES.

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



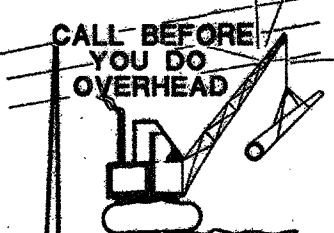
1-800-227-2600

Call before you Dig
UNDERGROUND
SYSTEMS OF TRANSPORTATION

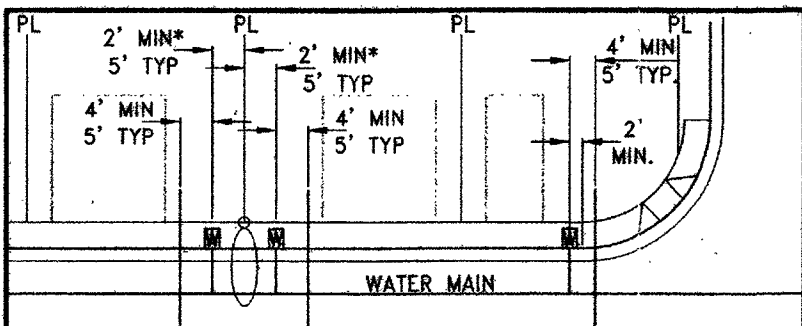


1-702-432-5300

Call before you Dig
OVERHEAD
POWER LINES. IT'S COSTLY.



1-702-227-2929



TYPICAL WATER AND SEWER LATERAL LOCATIONS

*MINIMUM SEPARATION OF 5'-FEET REQUIRED FROM STREET LIGHT CENTER TO WATER METER BOX CENTER

SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPERS OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

WATER NOTE FOR ALL LOTS

1. THIS PROJECT RESIDES WITHIN THE 2860 WATER ZONE. THEREFORE ALL LOTS WITH A FINISH FLOOR ELEVATION LESS THAN 2651.4 WILL REQUIRE AN INDIVIDUAL, ON SITE (PRIVATE) PRESSURE REDUCING VALVE.
2. THIS PROPERTY HAS STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THEREFORE LOTS WITHIN THIS PROJECT REQUIRE PRESSURE REDUCING VALVES. THE UNIFORM PLUMBING CODE, REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

EXISTING UTILITY NOTE:

1. EXISTING UTILITIES AS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY BOTH VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITIES SHOWN INCORRECTLY OR OTHERWISE NOT SHOWN.

WATER MAIN JOINT DEFLECTION (PVC 4"-24")

PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

NOTE:

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15

NOTES:

1. ADJUST WATER VALVE BOXES TO FINISH GRADE PER UDACS PLATE NO. 39. VALVES SHALL BE ACCESSIBLE AT ALL TIMES.
2. ALL SEWER/STORM DRAINS CROSSING WATERLINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSING AND CLEARANCES.
3. ALL WATER PIPE DIMENSIONS SHOWN ARE GIVEN FROM VERIFY TO FITTING AND ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD ALL DIMENSION PRIOR TO CONSTRUCTION.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY SHALL BE INSTALLED PER THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT TO ALLOW THE DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

BUILDING INFORMATION

TYPE OF CONSTRUCTION: V-B
TOTAL LIVING AREA: < 5,000 S.F.
TOTAL SF UNDER ROOF: < 6,000 S.F.
NUMBER OF STORIES: 2
BUILDING USE: SINGLE FAMILY RESIDENTIAL
SPRINKLERED: NO
NUMBER OF FIRE HYDRANTS: 3
FIRE FLOW: 2,000 GPM AT 20 PSI RESIDUAL

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 6LV99 24SES
A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF CENTENNIAL PARKWAY AND HUALAPAI WAY.
ELEVATION=844.924 METERS (NAVD'88)
ELEVATION=2772.06 US SURVEY FEET (NAVD'88)

BASIS OF BEARINGS

SOUTH 89°47'00" EAST BEING THE BEARING OF THE NORTH LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE IN FILE 89, PAGE 3 OF SURVEYS.

BACKWATER VALVE

ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

PRESSURE REDUCING VALVE

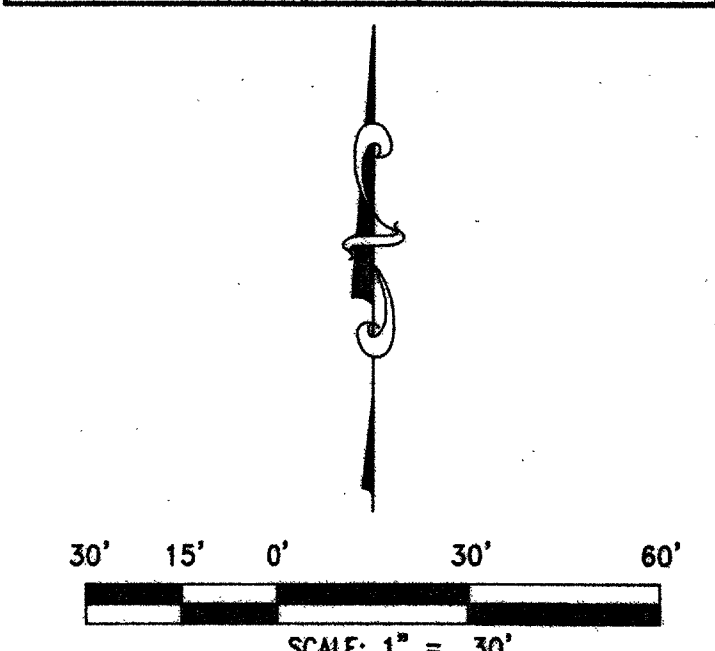
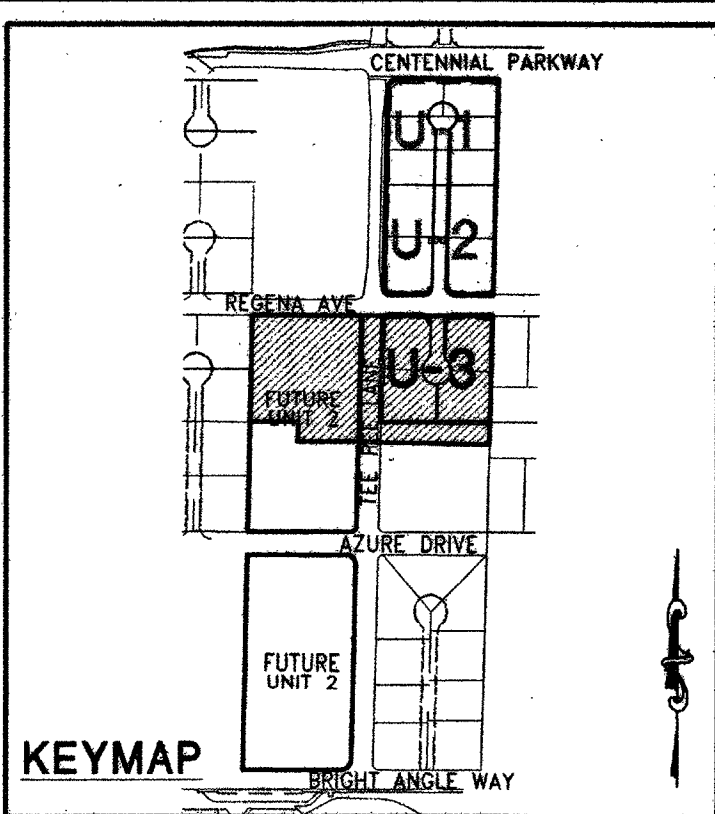
ALL LOTS WITH THIS SYMBOL REQUIRE A PRESSURE REDUCING VALVE

UTILITY LATERAL NOTE:

WATER AND SEWER LATERAL STATIONS SHOWN ON THIS PLAN SET ARE CALCULATED AT THE BACK OF CURB

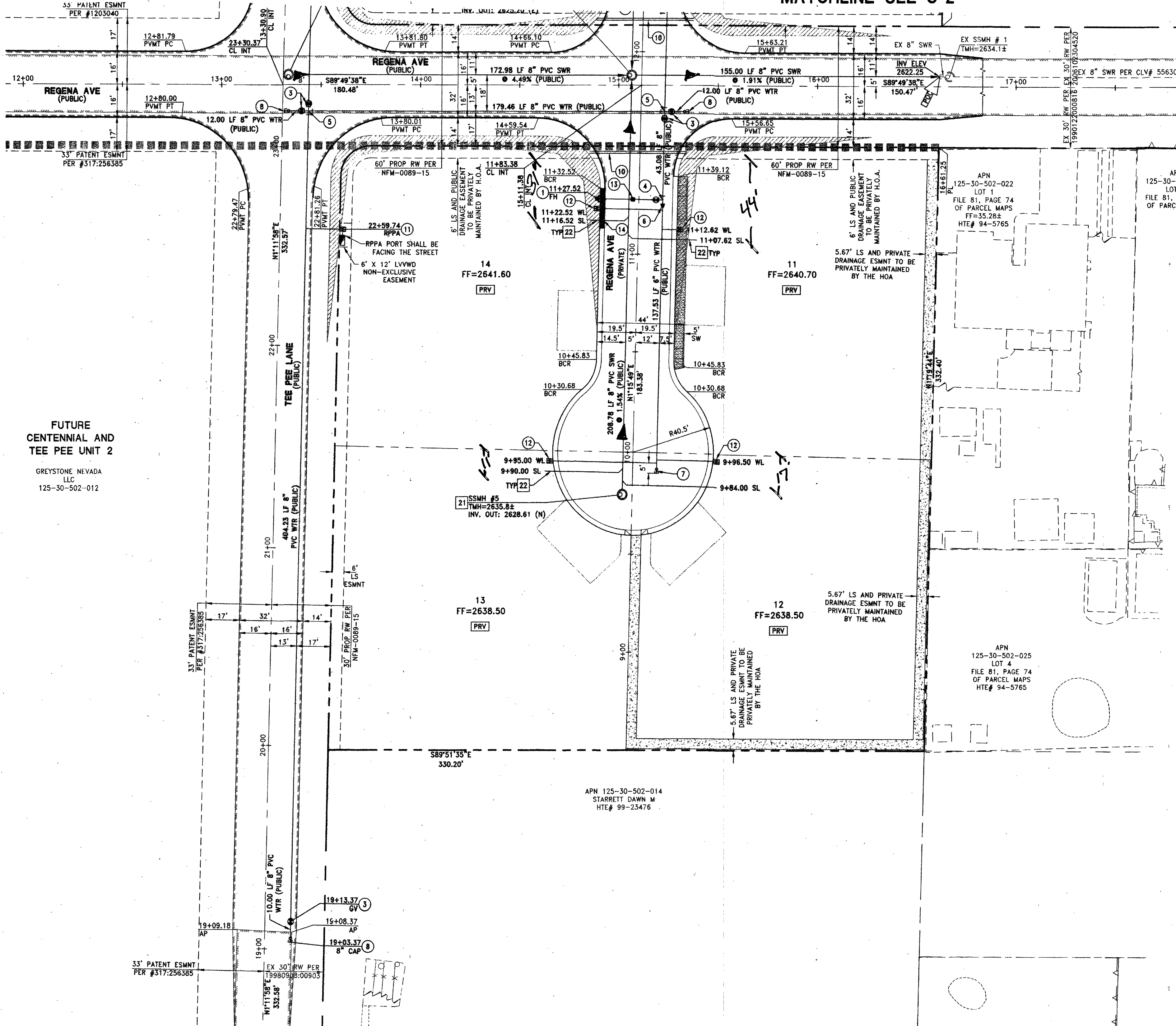
WASTEWATER FLOW CALCULATION

14 ERU (14 LOTS) * 250 GPD = 0.0035 MGD
= 0.0035 * 3.5 = 0.0123 MGD PEAK
DESIGN FLOW (25% WET WEATHER ALLOWANCE)
DESIGN FLOW 0.0123 * 25% = 0.0154 MGD



MATCHLINE SEE U-2

MATCHLINE SEE U-2



WATER CONSTRUCTION NOTES

1. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40 (INCLUDES 6" GATE VALVE)
2. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE NO. 2
3. INSTALL 8" GATE VALVE PER UDACS PLATE NO. 30 & NO. 39
4. INSTALL 8" X 6" TEE PER UDACS PLATE NO. 31
5. INSTALL 8" CROSS PER UDACS PLATE NO. 31
6. INSTALL 8" X 6" REDUCER PER UDACS PLATE NO. 30
7. INSTALL 6" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE NO. 36
8. INSTALL 8" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE NO. 36
9. REMOVE EX CAP AND BLOWOFF AND CONNECT TO EXISTING WATER MAIN PER UDACS PLATE NO. 36
10. INSTALL (2) 4" SCHEDULE 40 PVC IRRIGATION SLEEVES
11. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE NO. 4 & 8 (1 BRASS WATERLINE BETWEEN METER AND RPPA)
12. INSTALL 1" COPPER SERVICE LATERAL WITH 1" METER PER UDACS PLATE NO. 4
13. INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACE, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, OR FIRE LANES
14. PAINT CURB RED IN FRONT OF FIRE HYDRANT
15. PAINT CURB RED IN FRONT OF FIRE DEPARTMENT EMERGENCY ACCESS

SEWER CONSTRUCTION NOTES

21. INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. NO. SD-10, SD-14, SD-4, SD-5 & SD-6) WITH SINGLE COVER.
22. (TYP) INSTALL 4" SEWER LATERAL (PER DCSWCS STD. NO. SD-17, SD-22 & SD-25)
23. TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
24. INSTALL 8" SEWER CAP AND 1 CU-FT THRUST BLOCK • CAP

FOR DRY UTILITY SEPARATION WITH WATER:

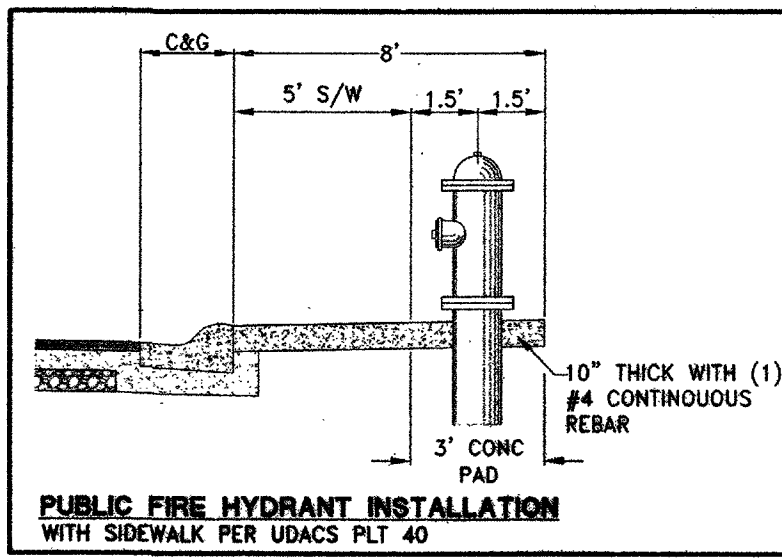
- MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING.
- MAINTAIN A MINIMUM 3" PARALLEL SEPARATION.
- ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPPER SERVICE LATERALS. ANY COPPER SERVICE LATERAL KINKED, BENT, OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.

CLARK COUNTY FIRE DEPARTMENT APPROVAL

BY: *Christopher R. Zrinyi* DATE: 12-10-15
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR ANY APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.
APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVWD.
FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL 15-6288

APPROVED FOR CONSTRUCTION

BY: *Christopher R. Zrinyi* DATE: 12-11-15
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT # 122286
LVWD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL
H#58307
307V1109



DATE: December 08, 2015
HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=10'
DRAWN BY: MJD
CHECKED BY: JAW
DESIGNED BY: JAW
APPROVED BY: JAW
PROJECT #: 3040.0038

LENNAR®
2400 PASADENA AVENUE, SUITE 100, LAS VEGAS, NV 89074
PHONE: (702) 736-5100 FAX: (702) 736-9000

RCI Engineering
4325 Dean Martin Road, Suite 300, Las Vegas, NV 89109
PHONE: (702) 651-0000 FAX: (702) 651-0001

NEVADA
CENTENNIAL AND TEE PEE UNIT 1
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
UTILITY PLAN
(SHEET 3 OF 3)

CLARK COUNTY
12/08/15 5:40pm
C:\3040_LCNR\0038_Centennial and Tee Pee Unit\PS UNIT 1\3040_LCNR_0038.dwg

U-3
SHEET 12 OF 21
HTE NUMBER
14-23518