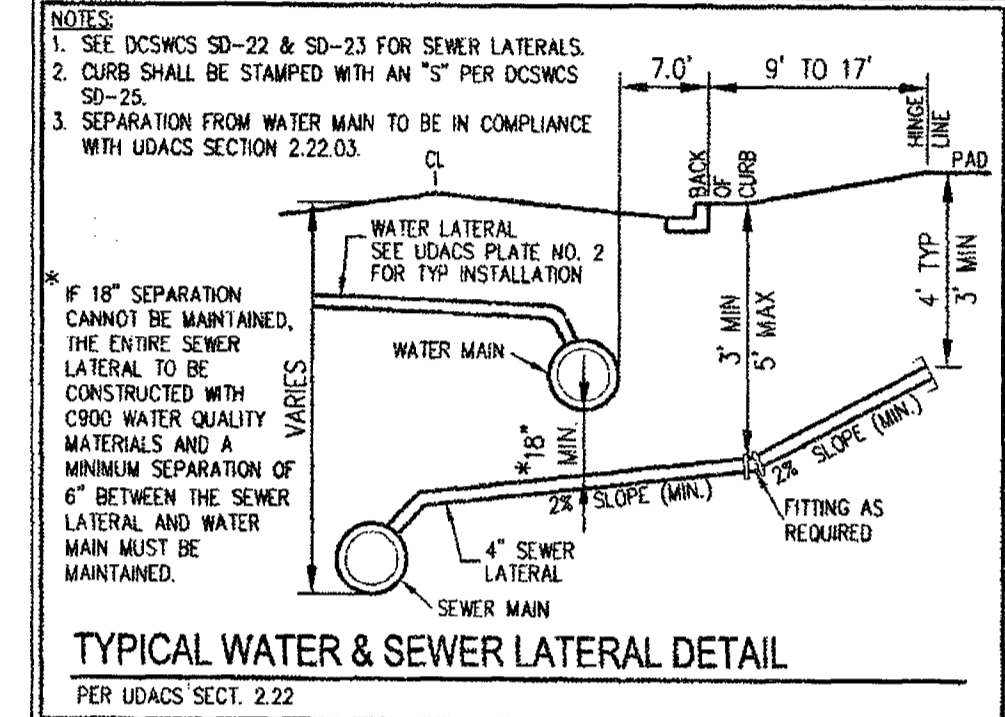
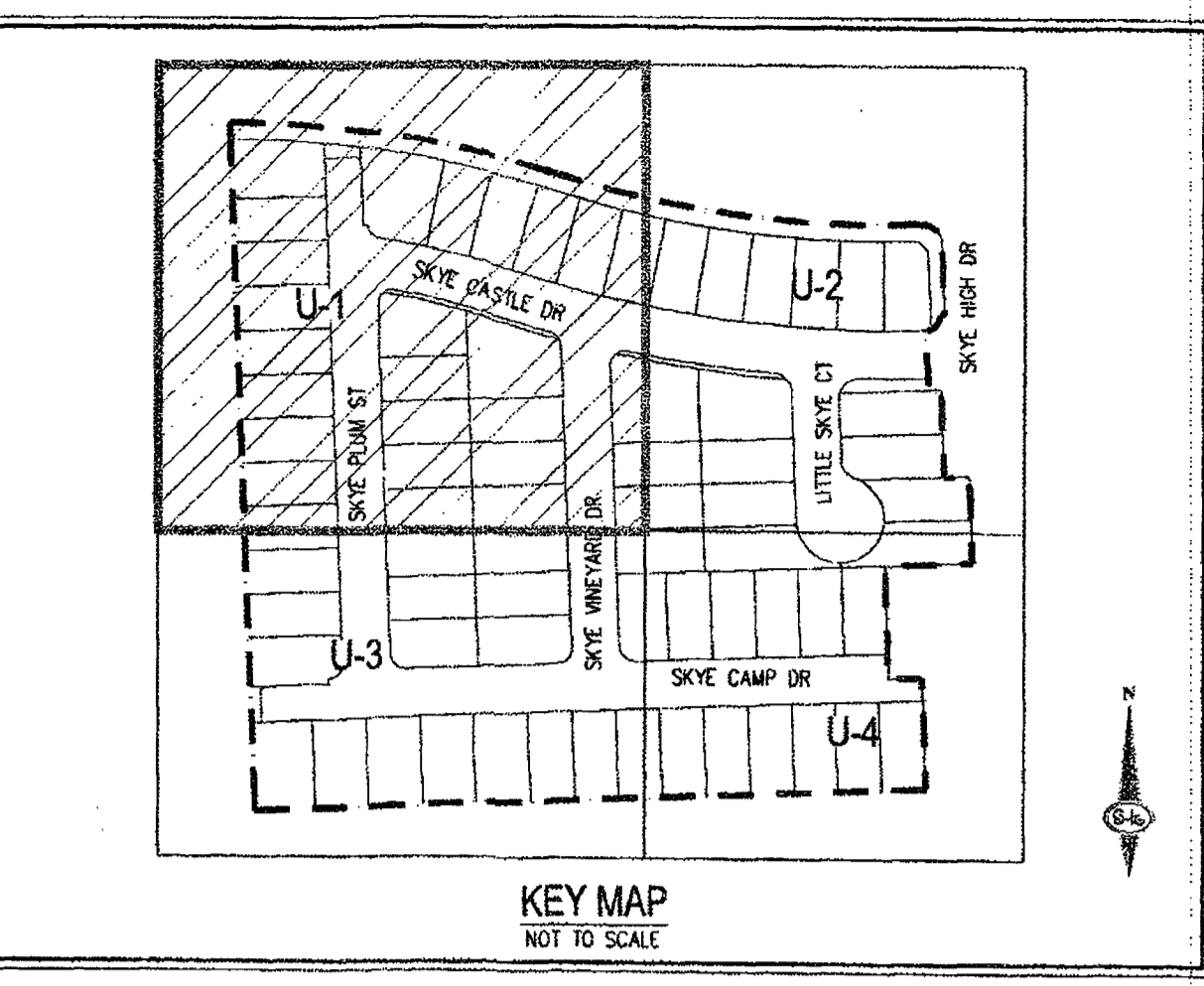


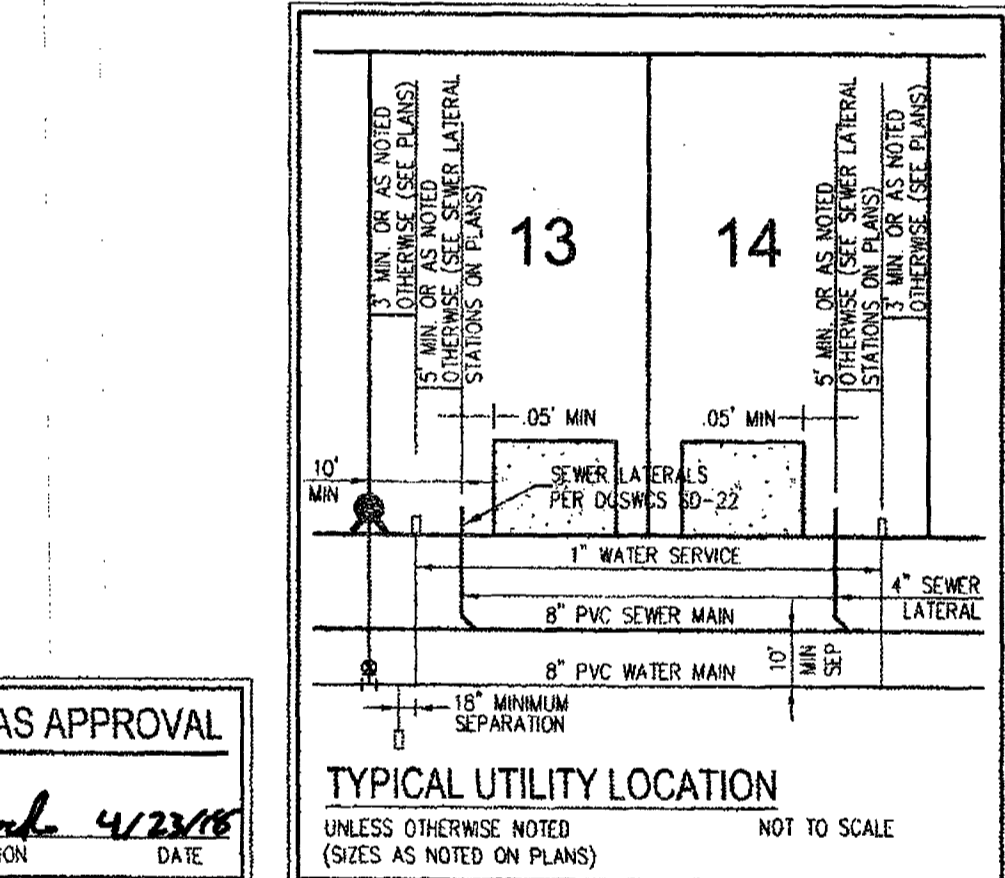
ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS
 50 UNITS X 250 GPD/UNIT = 12,500 GPD = 0.013 MGD
 TOTAL PEAK FLOW = 0.013 X 3.65 (PEAK FACTOR) = 0.04745 MGD

FIRE FLOW CALCULATIONS
 FIRE FLOW 1500 GPM AT 20 P.S.I. RESIDUAL

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (BC)	TYP. V. 43007
SQUARE FOOTAGE	N/A
LARGEST AREA BETWEEN 4 HOUR WALLS	235
BUILDING HEIGHT	ND
NO. OF STORES INCLUDING BASEMENT	ND
FIRE SPRINKLER	ND
NO. OF HYDRANTS INSTALLED	5



- WATER NOTES**
- INSTALL 8" 5' BEND PER UDCS PLATE NO. 31 (MECHANICALLY RESTRAINED)
 - INSTALL 8" 11.25' BEND PER UDCS PLATE NO. 31
 - INSTALL 8" 22.5' BEND PER UDCS PLATE NO. 31
 - INSTALL 8" PVC WATER PIPE PER UDCS PLATE NO. 17
 - REMOVE CAP & BLOW-OFF ASSEMBLY PER UDCS PLATE NO. 35 & CONNECT TO 6" WATER PIPE WITH FIRE HYDRANT ASSEMBLY PER UDCS PLATE NO. 40
 - INSTALL 8" x 8" TEE PER UDCS PLATE NO. 31
 - INSTALL 8" x 6" TEE PER UDCS PLATE NO. 31 AND FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDCS PLATE NO. 40
 - INSTALL 8" GATE VALVE WITH VALVE BOX PER UDCS PLATE NO. 30 & 39
 - REMOVE CAP & BLOW-OFF ASSEMBLY PER UDCS PLATE NO. 35 & CONNECT TO WATER PIPE (SIZE PER PLANS) (SKYE CANYON PARCEL 2.29 PHASE 1 LVWD PROJ#125894)
 - INSTALL 1" COPPER SERVICE W/ 3/4" METER PER UDCS PLATE NO. 1
 - INSTALL 8" CAP WITH BLOWOFF PER UDCS PLATE NO. 36
 - INSTALL 8" x 6" REDUCER PER UDCS PLATE NO. 31
 - INSTALL 6" CAP WITH BLOWOFF PER UDCS PLATE NO. 36
 - INSTALL 6" 5' BEND PER UDCS PLATE NO. 31 (MECHANICALLY RESTRAINED)
 - INSTALL 6" PVC WATER PIPE PER UDCS PLATE NO. 17
 - WATER SERVICE LATERAL TO BE WET TAPPED ON EXISTING MAIN (XC-11361) BY OWNERS CONTRACTOR UNDER DIRECTION OF THE LVWD



SOUTHWEST GAS APPROVAL
Ray Starnes 4/22/18
 SOUTHWEST GAS CORPORATION DATE

- WATER NOTES**
- WATER MAIN JOINT DEFLECTION (PVC 42" x 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 UDCS 2.07(D) AND 2.07(D) WHERE APPROPRIATE. FITTINGS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.
 - APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPP) SHALL BE INSTALLED PER THE UDCS 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 EASMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT FRONT-OF-WAY. EASMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.
 - ALL SEWER, STORM DRAIN, CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UDCS. THE LVWD CANNOT GUARANTEE A WATERPROOF 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 IMPERE 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 APPEARANCES ARE AVAILABLE.
 - MINIMUM 24" COVER PER UDCS SEC. 2.08(D) GRADING BE COMPLETE PRIOR TO WATERLINE INSTALLATION.
 - ALL ABOVE GROUND UTILITY APPEARANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.06 & 19.08.
 - DISCLAIMER: EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
 - DISCLAIMER: FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAW CUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROPOSED CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION. IF PROPOSED CURB LINE IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOT NOTIFY THE ENGINEER.

- SEWER NOTES**
- INSTALL 48" SPMV PER DCSWS SD-1A THRU SD-4 AND SD-9 WITH 24" SINGLE UD
 - INSTALL 6" SPMV PER DCSWS SD-15 AND SD-17
 - INSTALL 4" SEWER LATERAL (PRIVATE) PER SD-22, SD-23, & SD-25 W/8" x 4" WYE (TYPICAL) (C-900 WHERE SHOWN ON PLANS)
 - REMOVE CAP AND CONNECT TO EXISTING 8" PVC SS (SKYE CANYON PARCEL 2.29 PHASE 1 CLV#1075064-1)
 - INSTALL 8" C-900 SS PER DCSWS SD-1A THRU SD-4 AND SD-9
 - EX 48" SPMV (SKYE CANYON PARCEL 2.29 PHASE 1 CLV#1075064-1)

OWNER/DEVELOPER
 GREYSTONE NEVADA, LLC
 2400 PHASE 2 VERDE PARKWAY #120
 PH: (702) 458-7700
 FX: (702) 284-5300
 CONTACT: ROBERT JOHNSON

ENGINEER
 SLATER HANFAN GROUP, INC.
 5740 S. ARVILLE STREET, SUITE 216
 LAS VEGAS, NV 89118
 PH: (702) 284-5300
 FX: (702) 284-5300
 CONTACT:

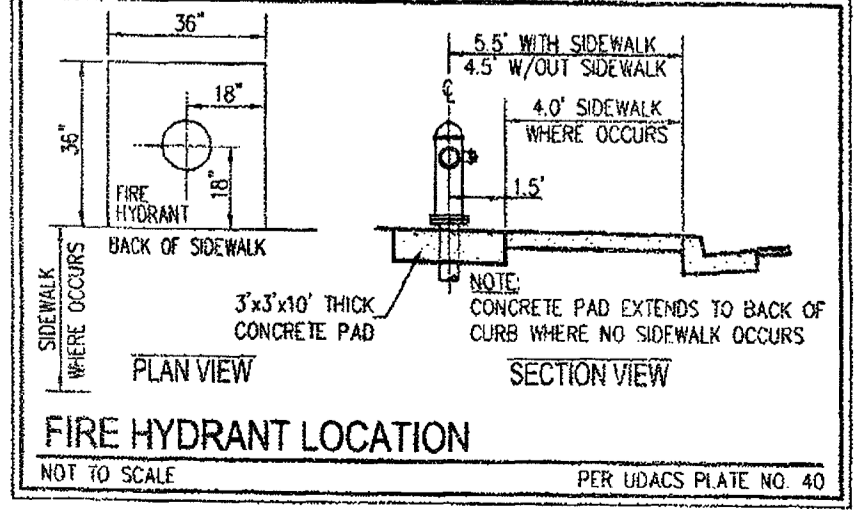
APPROVAL
R. Smith 4/19/18
 LAS VEGAS FIRE AND RESCUE DATE

APPROVED FOR CONSTRUCTION
Y. Shadi
 LAS VEGAS WATER DISTRICT ENGINEERING SERVICES
 PROJECT NO. 126256 FIRST APPROVED DATE: 5/13/18
 LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

BENCHMARK
 USDA BRASS CAP ON AN IRON PIPE, 140' SOUTHWEST OF TELEPHONE POLE #28991, SOUTHWEST CORNER OF THE U.S. 95/KYLE CANYON TURNOFF.
 ELEVATION = 2817.62 FEET, 858.813 METERS
 N.A.S.D. 88 PER THE CLARK COUNTY VERTICAL CONTROL LAST REVISED 2003

DEPTH OF COVER DURING CONSTRUCTION
 MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDCS SECTION 2.08(D) OVER EXISTING WATER MAIN DURING CONSTRUCTION.

SERVICE LATERALS NOTE
 SERVICE LATERALS FOR LOTS 5-12, 41-48, 75-85, AND 116-121 WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVWD.



ABANDONED VALVES
 ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE II AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI.

FOR ALL DRY UTILITY CROSSINGS

- MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING
- MAINTAIN 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.

LEGAL DESCRIPTION
 BEING A PORTION OF ALL OF GOVERNMENT LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 AND 16 OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST, N.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

BASIS OF BEARINGS
 SOUTH 00°00'57" WEST, BEING THE BEARING OF THE EAST LINE OF THE SOUTHWEST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST, N.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREON IN BOOK 147, PAGE 71 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

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.

FAST
 Call before you Dig
 UnderGround
 1-702-432-6300
 FREWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
 Call before you Dig
 YOU DO OVERHEAD
 1-702-227-2929

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

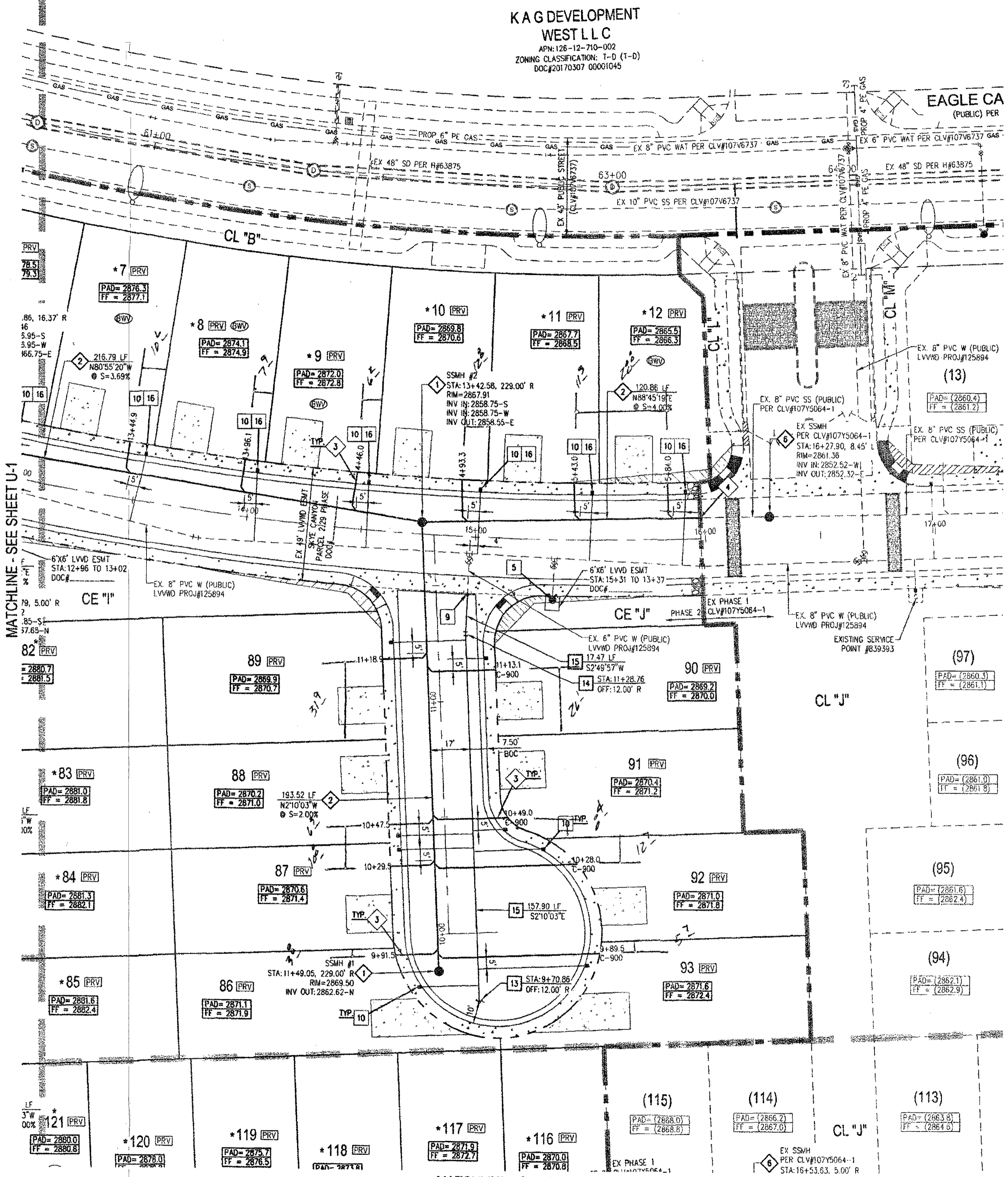
SLATER HANFAN GROUP
 CONSULTING ENGINEERS & PLANNERS
 5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
 PHONE (702) 284-5300 FAX (702) 284-5309

GREYSTONE NEVADA, LLC
 SKYE CANYON II PARCEL 2.29 - PHASE 2
 UTILITY PLAN - I

CITY OF LAS VEGAS, NV
 DATE: 04/18/18
 DRAFTER: DNP
 DESIGNER: BCC
 CHECKED: STS
 PROJECT NO. OLY1710-001

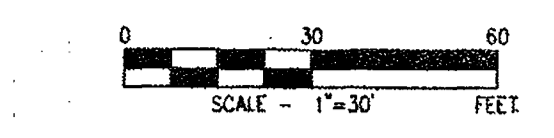
PROF. ENGINEER
 Y. SHADI
 CIVIL
 LICENSE NO. 14167
 STATE OF NEVADA

U-1
 SHEET 20 OF 27
 L18-00149
 DWG NO. 107Y5064-2



KAG DEVELOPMENT WEST LLC
 APN: 126-12-710-002
 ZONING CLASSIFICATION: T-0 (1-0)
 DOC# 20170730700001045

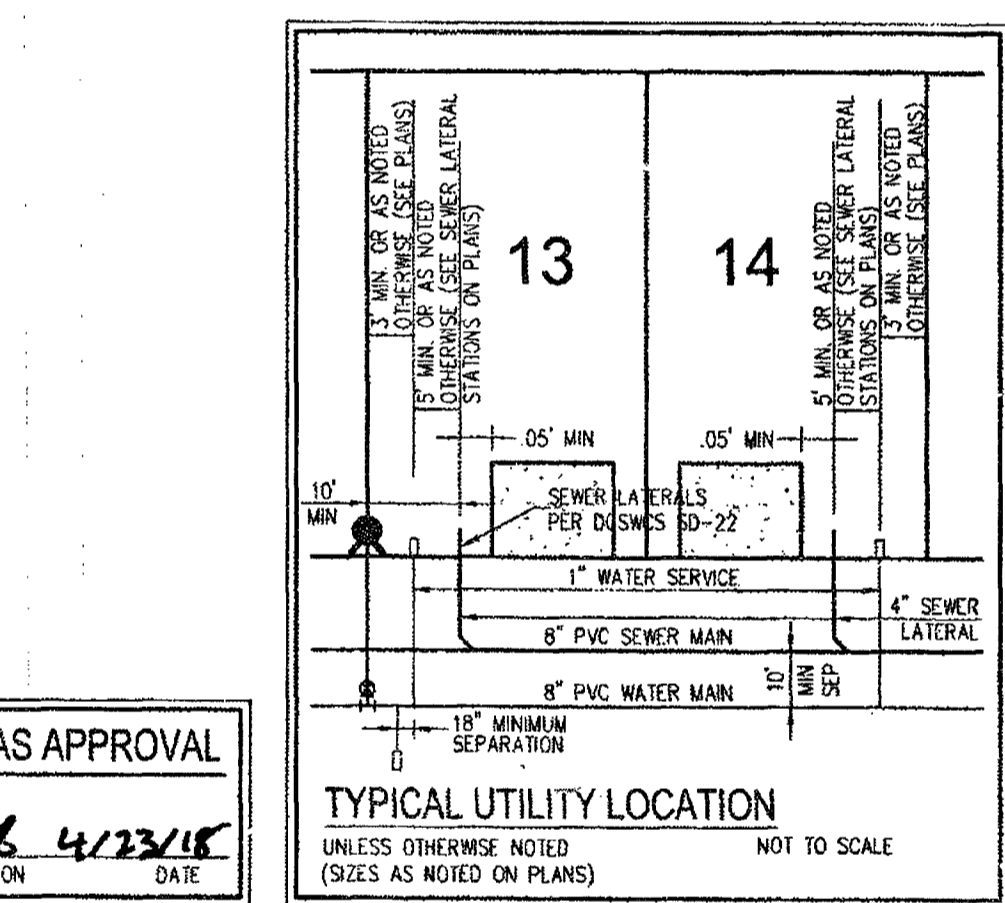
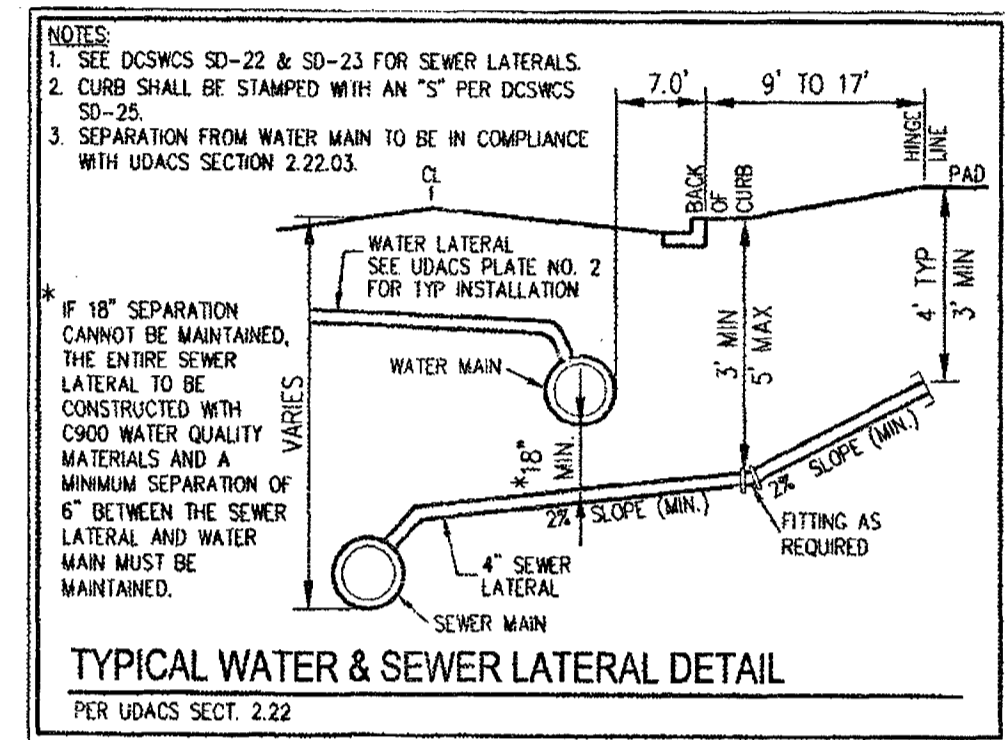
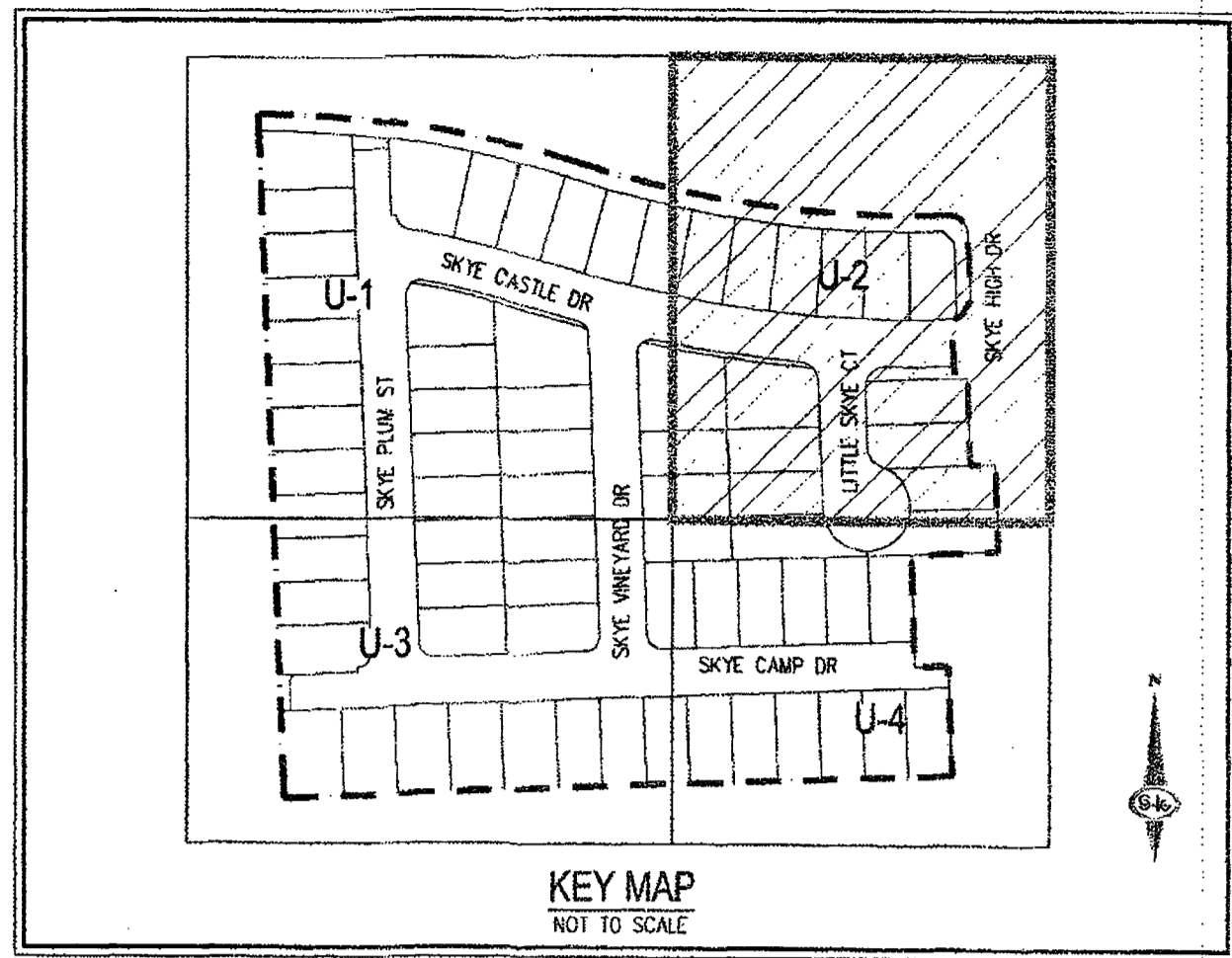
EAGLE CA (PUBLIC) PER



ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS
 50 UNITS X 250 GPD/UNIT = 12,500 GPD = 0.013 MGD
 TOTAL PEAK FLOW = 0.013 X 3.65 (PEAK FACTOR) = 0.04745 MGD

FIRE FLOW CALCULATIONS
 FIRE FLOW 1500 GPM AT 20 P.S.I. RESIDUAL

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (BC)	TYPE V
SQUARE FOOTAGE	3507
LARGEST AREA BETWEEN 4 HOUR WALLS	N/A
NO OF STORES INCLUDING BASEMENT	35
FIRE SPRINKLER	NO
NO OF HYDRANTS INSTALLED	5



- WATER NOTES**
- INSTALL 8" 5' BEND PER UDACS PLATE NO. 31 (MECHANICALLY RESTRAINED)
 - INSTALL 8" 11.25' BEND PER UDACS PLATE NO. 31
 - INSTALL 8" 22.5' BEND PER UDACS PLATE NO. 31
 - INSTALL 8" PVC WATER PIPE PER UDACS PLATE NO. 17
 - REMOVE CAP & BLOW-OFF ASSEMBLY PER UDACS PLATE NO. 36 & CONNECT TO 6" WATER PIPE WITH FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40
 - INSTALL 8" x 8" TEE PER UDACS PLATE NO. 31
 - INSTALL 8" x 6" TEE PER UDACS PLATE NO. 31 AND FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDACS PLATE NO. 40
 - INSTALL 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39
 - REMOVE CAP & BLOW-OFF ASSEMBLY PER UDACS PLATE NO. 36 & CONNECT TO WATER PIPE (SIZE PER PLANS) (SKYE CANYON PARCEL 2.29 PHASE 1 LVMW PROJ#125894)
 - INSTALL 1" COPPER SERVICE W/ 3/4" MEIER PER UDACS PLATE NO. 1
 - INSTALL 8" CAP WITH BLOWOFF PER UDACS PLATE NO. 36
 - INSTALL 8" x 6" REDUCER PER UDACS PLATE NO. 31
 - INSTALL 6" CAP WITH BLOWOFF PER UDACS PLATE NO. 36
 - INSTALL 8" 5' BEND PER UDACS PLATE NO. 31 (MECHANICALLY RESTRAINED)
 - INSTALL 8" PVC WATER PIPE PER UDACS PLATE NO. 17
 - WATER SERVICE LATERAL TO BE MET TAPPED ON EXISTING MAIN (XC-11361) BY OWNERS CONTRACTOR UNDER DIRECTION OF THE LVMW

- SEWER NOTES**
- INSTALL 48" SSMH PER DCSWS SD-1A THRU SD-4 AND SD-9 WITH 24" SINGLE LID
 - INSTALL 8" PVC SS PER DCSWS SD-15 AND SD-17
 - INSTALL 4" SEWER LATERAL (PRIVATE) PER SD-22, SD-23, & SD-25 W/8" x 4" WYE (TYPICAL) (C-900 WHERE SHOWN ON PLANS)
 - REMOVE CAP AND CONNECT TO EXISTING 8" PVC SS (SKYE CANYON PARCEL 2.29 PHASE 1 CLV#1075064-1)
 - INSTALL 8" C-900 SS PER DCSWS SD-1A THRU SD-4 AND SD-9
 - EX 48" SSMH (SKYE CANYON PARCEL 2.29 PHASE 1 CLV#1075064-1)

SOUTHWEST GAS APPROVAL
Ryan Hancock 4/23/18
 DATE
 SOUTHWEST GAS CORPORATION

- WATER NOTES**
- WATER MAIN JOINT DEFLECTION (EVC 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(D) AND 2.07(E). FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.
 - REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPP) 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 LVMW. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.
 - ALL SEWER STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
 - FITTINGS SHALL NOT FALL UNDER CURBS, SIDEWALKS OR SIDEWALKS.
 - INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15.
 - THE LVMW 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 IMPERE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRENCH SHUTDOWN.
 - CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
 - MINIMUM 24" COVER PER UDACS SEC. 2.08.04 GRADING BE COMPLETE PRIOR TO WATERLINE INSTALLATION.
 - ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.06 & 19.08.
 - DISCLAIMER: EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
 - DISCLAIMER: FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROCEED UP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

OWNER/DEVELOPER
 GREYSTONE NEVADA, LLC
 5740 S. ARVILLE STREET, SUITE 216
 LAS VEGAS, NV 89118
 PH: (702) 458-7700
 FX: (702) 284-5300
 CONTACT: ROBERT JOHNSON

ENGINEER
 SLATER HANIFAN GROUP, INC.
 5740 S. ARVILLE STREET, SUITE 216
 LAS VEGAS, NV 89118
 PH: (702) 284-5300
 FX: (702) 284-5399
 CONTACT:

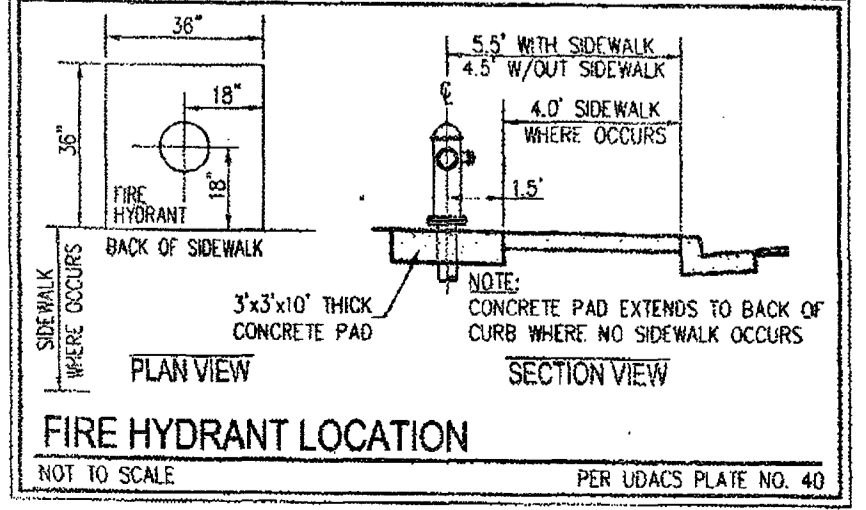
APPROVAL
[Signature] 4/19/18
 DATE
 LAS VEGAS FIRE AND RESCUE

APPROVED FOR CONSTRUCTION
[Signature]
 LAS VEGAS WATER DISTRICT ENGINEERING SERVICES
 PROJECT NO. 126256 FIRST APPROVED DATE: 5/16/18
 LVMW APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

BENCHMARK
 USDA BRASS CAP ON AN IRON PIPE 140' SOUTHWEST OF TELEPHONE POLE #269941, SOUTHWEST CORNER OF THE U.S. 95/SKYLINE CANYON TURNOFF.
 ELEVATION = 2817.6 FEET, 858.813 METERS
 N.A.V.D. 88
 PER THE CLARK COUNTY VERTICAL CONTROL LAST REVISED 2003

DEPTH OF COVER DURING CONSTRUCTION
 MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04 OVER EXISTING WATER MAIN DURING CONSTRUCTION.

SERVICE LATERALS NOTE
 SERVICE LATERALS FOR LOTS 6-12, 41-48, 75-85, AND 116-121 WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVMW.



ABANDONED VALVES
 ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE II AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI.

FOR ALL DRY UTILITY CROSSINGS

- MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING
- MAINTAIN 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.

LEGAL DESCRIPTION
 BEING A PORTION OF ALL OF GOVERNMENT LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 AND 16 OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 99 EAST, N.M.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREON IN BOOK 147, PAGE 71 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

BASIS OF BEARINGS
 SOUTH 00°09'50" WEST, BEING THE BEARING OF THE EAST LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 99 EAST, N.M.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREON IN BOOK 147, PAGE 71 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

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 CONTRACTOR SHALL BE RESPONSIBLE FOR 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.

FAST
 Call before you dig
 1-702-432-6300
 FREWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
 Call before you dig
 YOU DO IT
 1-702-227-2929

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

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
 5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
 PHONE (702) 284-5300 FAX (702) 284-5399

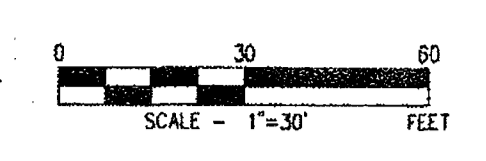
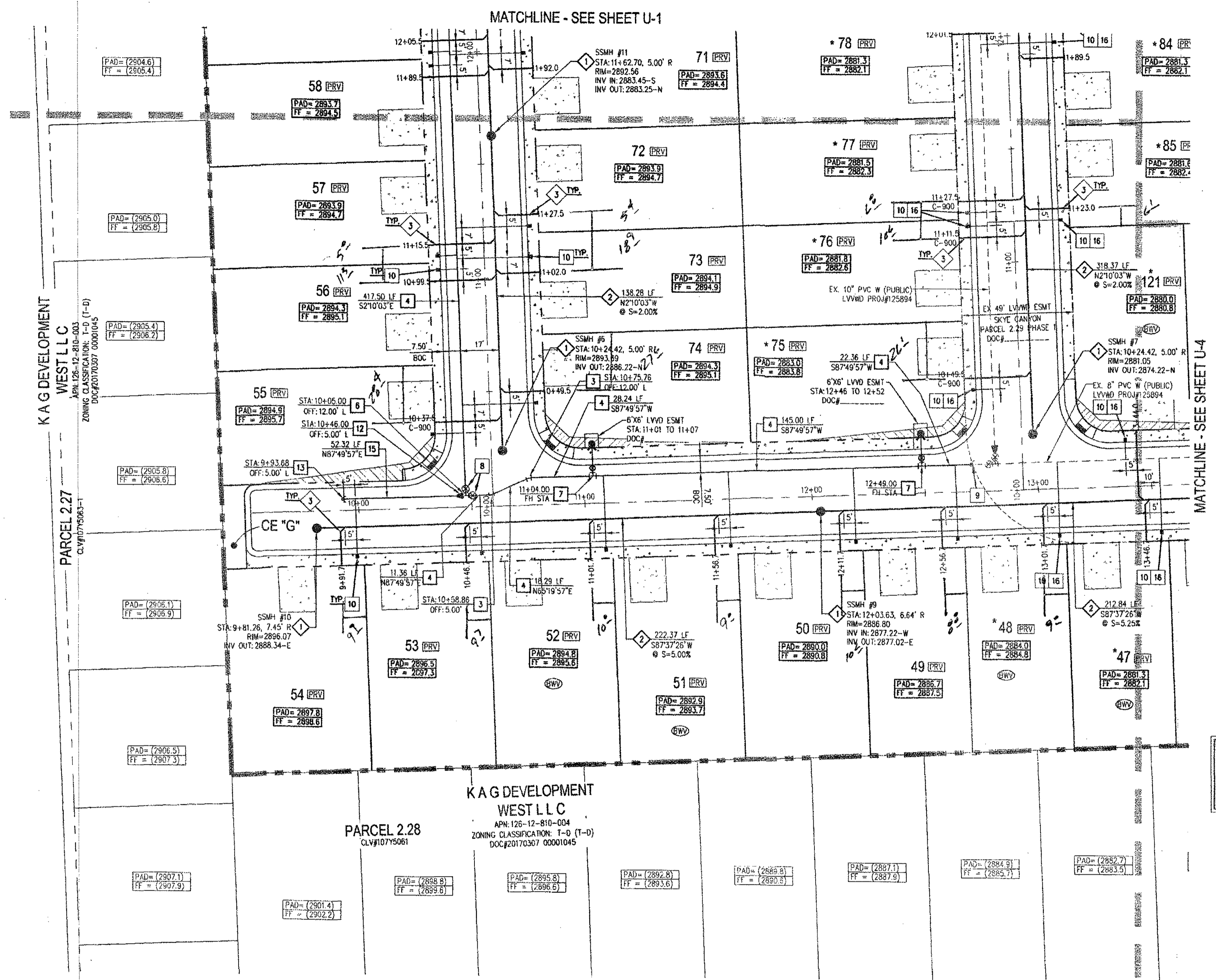
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CITY OF LAS VEGAS, NV

GREYSTONE NEVADA, LLC
SKYE CANYON II PARCEL 2.29 - PHASE 2
UTILITY PLAN - II

DATE: 04/18/18
 DRAFTER: DNP
 DESIGNER: BCC
 CHECKED: STS
 PROJECT NO. OLY1710-001
 SHEET 21 OF 27
 118-00149
 DWG NO. 1075064-2

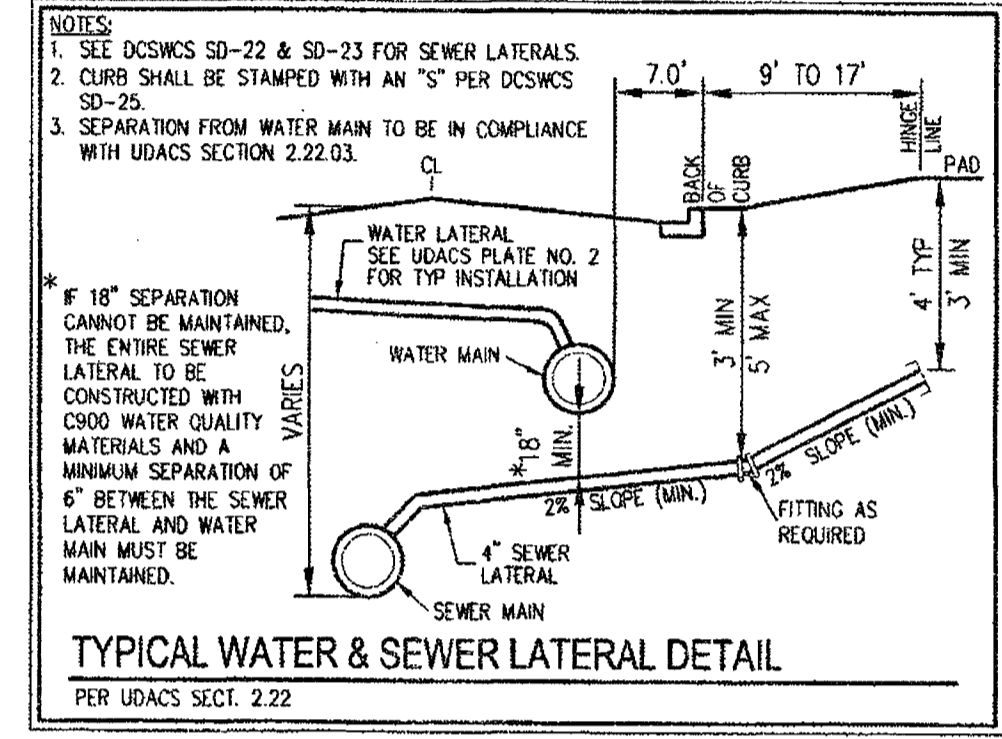
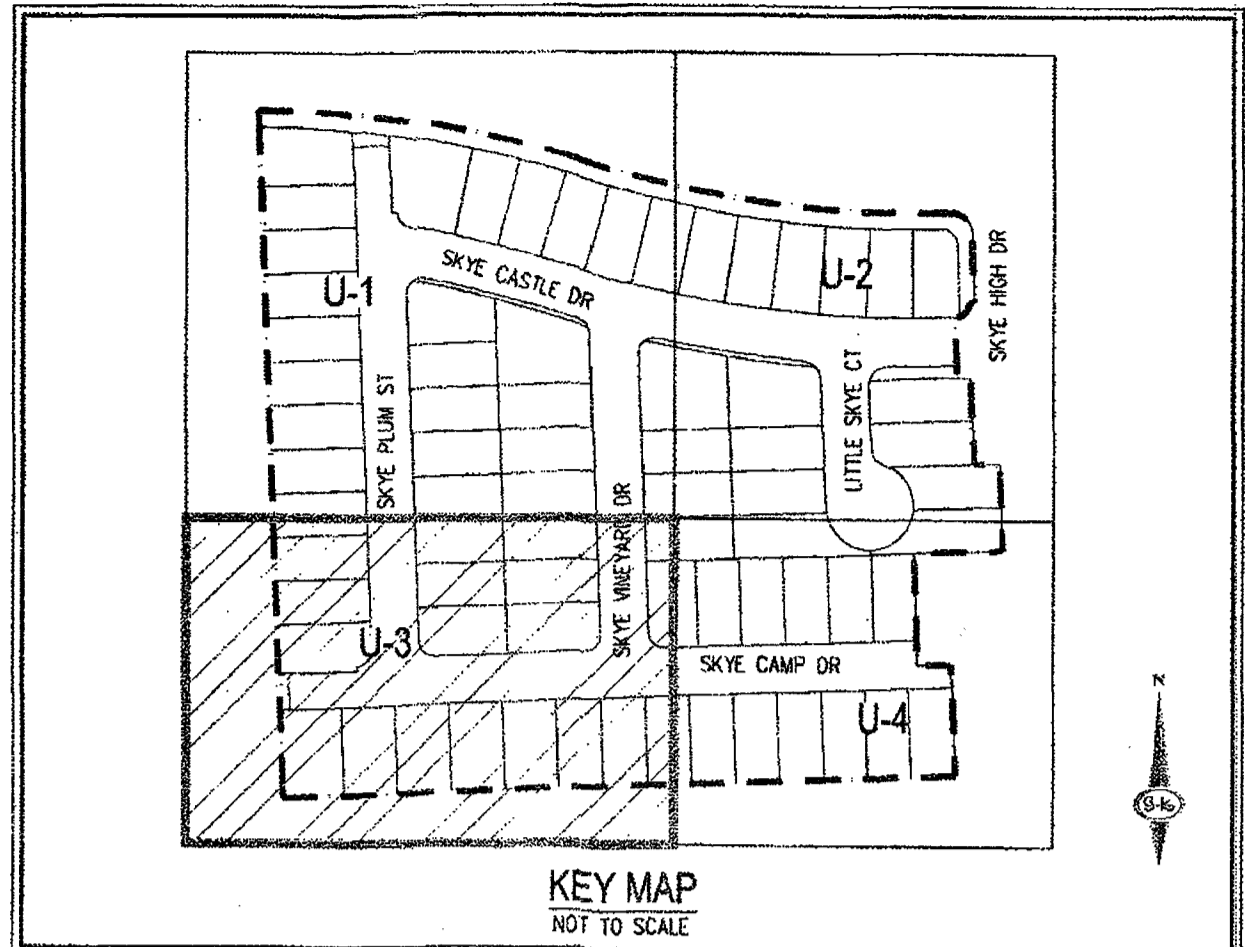
PROJ#126256 AGR#16761 QS-126-12-SE XC 11413



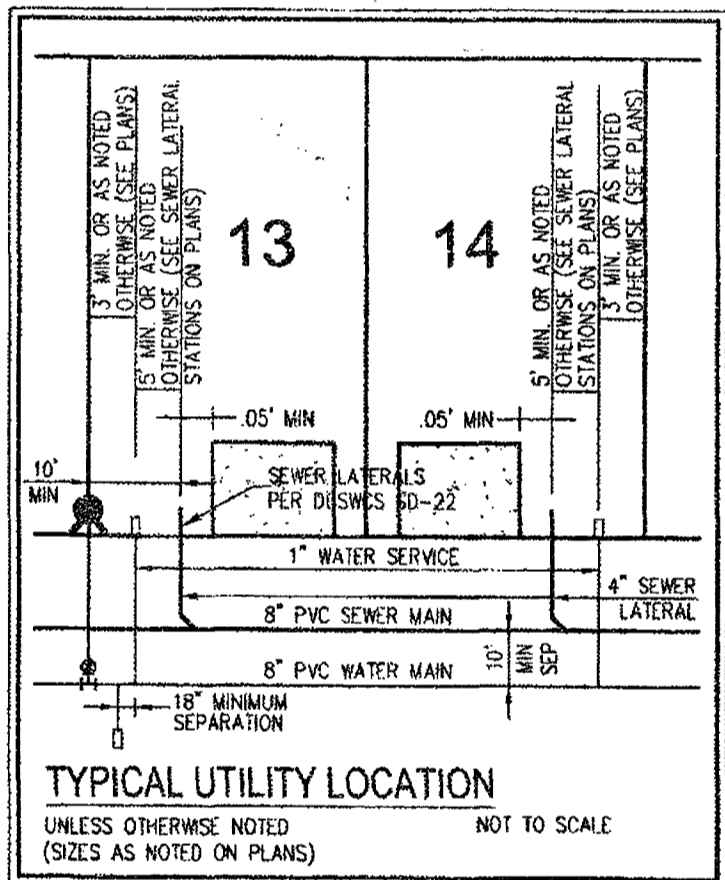
ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS
 50 UNITS X 250 GPD/UNIT = 12,500 GPD = 0.013 MGD
 TOTAL PEAK FLOW=0.013 X 3.65 (PEAK FACTOR)=0.04745 MGD

FIRE FLOW CALCULATIONS
 FIRE FLOW 1500 GPM AT 20 P.S.I. RESIDUAL

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (BOC)	TYPE V
SQUARE FOOTAGE	33507
LARGEST AREA BETWEEN 4 HOUR WALLS	N/A
BUILDING HEIGHT	2
NO OF STORES INCLUDING BASEMENT	2
FIRE SPRINKLER	NO
NO OF HYDRANTS INSTALLED	2



- WATER NOTES**
1. INSTALL 8" 5' BEND PER UDACS PLATE NO. 31 (MECHANICALLY RESTRAINED)
 2. INSTALL 8" 11.25' BEND PER UDACS PLATE NO. 31
 3. INSTALL 8" 22.5' BEND PER UDACS PLATE NO. 31
 4. INSTALL 8" PVC WATER PIPE PER UDACS PLATE NO. 17
 5. REMOVE CAP & BLOW-OFF ASSEMBLY PER UDACS PLATE NO. 36 & CONNECT TO 6" WATER PIPE WITH FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40
 6. INSTALL 8" x 8" TEE PER UDACS PLATE NO. 31
 7. INSTALL 8" x 6" TEE PER UDACS PLATE NO. 31 AND FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDACS PLATE NO. 40
 8. INSTALL 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39
 9. REMOVE CAP & BLOW-OFF ASSEMBLY PER UDACS PLATE NO. 36 & CONNECT TO WATER PIPE (SIZE PER PLANS) (SKYE CANYON PARCEL 2.29 PHASE 1 LVVWD PROJ#125894)
 10. INSTALL 1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 1
 11. INSTALL 8" CAP WITH BLOWOFF PER UDACS PLATE NO. 36
 12. INSTALL 8" x 6" REDUCER PER UDACS PLATE NO. 31
 13. INSTALL 8" CAP WITH BLOWOFF PER UDACS PLATE NO. 36
 14. INSTALL 6" 5' BEND PER UDACS PLATE NO. 31 (MECHANICALLY RESTRAINED)
 15. INSTALL 6" PVC WATER PIPE PER UDACS PLATE NO. 17
 16. WATER SERVICE LATERAL TO BE WET TAPPED ON EXISTING MAIN (XC-11361) BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVVWD



- SEWER NOTES**
1. INSTALL 48" SSMH PER DCSWCS SD-1A THRU SD-4 AND SD-9 WITH 24" SINGLE LID
 2. INSTALL 8" PVC SS PER DCSWCS SD-15 AND SD-17
 3. INSTALL 4" SEWER LATERAL (PRIVATE) PER SD-22, SD-23, & SD-25 W/6" x 4" WYE (TYPICAL) (C-900 WHERE SHOWN ON PLANS)
 4. REMOVE CAP AND CONNECT TO EXISTING 8" PVC SS (SKYE CANYON PARCEL 2.29 PHASE 1 CLV#1075064-1)
 5. INSTALL 8" C-900 SS PER DCSWCS SD-1A THRU SD-4 AND SD-9
 6. EX 48" SSMH (SKYE CANYON PARCEL 2.29 PHASE 1 CLV#1075064-1)

SOUTHWEST GAS APPROVAL
[Signature] 4/23/18
 SOUTHWEST GAS CORPORATION DATE

- SEWER NOTES**
1. 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 1150 FEET PER UDACS 2.07 (1) AND 2.07 (2).
 2. REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPP)
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY SHALL BE INSTALLED PER 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 FORM MATERIAL SHALL BE DISCARDED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.
 3. ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
 4. FITTINGS SHALL NOT FALL UNDER CURBS, CUTTERS OR SIDEWALK.
 5. INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15.
 6. THE LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING UTILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER THAT MAY IMPED CONSTRUCTION AT COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
 7. CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPOINTMENTS ARE AVAILABLE.
 8. MINIMUM 24" COVER PER UDACS SEC. 2.08.04 GRADING BE COMPLETE PRIOR TO WATERLINE INSTALLATION.
 9. ALL ABOVE GROUND UTILITY APPOINTMENTS SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.06 & 19.08.
 10. DISCLAIMER: EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREIN. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPOSED LOCATION.
 11. DISCLAIMER: FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROPOSED LINE OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

OWNER/DEVELOPER
 GREYSTONE NEVADA, LLC
 2490 PASADENA PARKWAY #120
 PHOENIX, AZ 85016
 CONTACT: ROBERT JOHNSON

ENGINEER
 SLATER HANIFAN GROUP, INC.
 5740 S. ARVILLE STREET, SUITE 216
 LAS VEGAS, NV 89118
 PH: (702) 438-7700
 FX: (702) 284-5300
 CONTACT: ROBERT JOHNSON

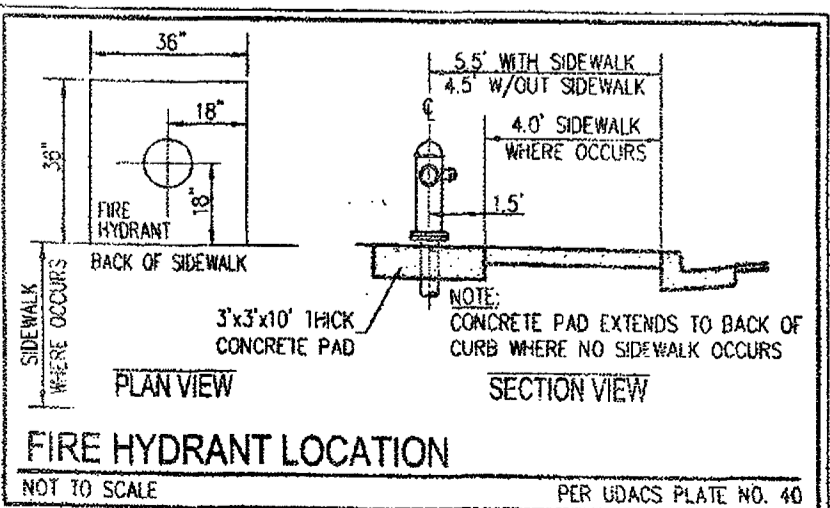
APPROVAL
[Signature] 4/19/18
 LAS VEGAS FIRE AND RESCUE DATE

APPROVED FOR CONSTRUCTION
[Signature] 5/11/18
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING
 PROJECT NO. 1702-284-5300
 LVVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

BENCHMARK
 USDA BRASS CAP ON AN IRON PIPE, 140' SOUTHWEST OF TELEPHONE POLE #269941, SOUTHWEST CORNER OF THE U.S. 95/KYLE CANYON TURNOFF.
 ELEVATION = 2817.62 FEET, 858.813 METERS
 N.A. VD 89
 PER THE CLARK COUNTY VERTICAL CONTROL LAST REVISED 2003

DEPTH OF COVER DURING CONSTRUCTION
 MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04 OVER EXISTING WATER MAIN DURING CONSTRUCTION.

SERVICE LATERALS NOTE
 SERVICE LATERALS FOR LOTS 5-12, 41-48, 125-260, AND 116-121 WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVVWD.



ABANDONED VALVES
 ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE II AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2000) PSI.

FOR ALL DRY UTILITY CROSSINGS

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

LEGAL DESCRIPTION
 BEING A PORTION OF ALL OF GOVERNMENT LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 AND 16 OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 39 EAST, N.M.S., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

BASIS OF BEARINGS
 SOUTH 070°58' WEST, BEING THE BEARING OF THE EAST LINE OF THE SOUTHWEST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 39 EAST, N.M.S., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN ON MAP THEREOF IN BOOK 147, PAGE 77 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

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. ONCE SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

FAST
 Call before you Dig
 UnderGround
 1-702-432-5300
 FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)

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

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

SLATER HANIFAN GROUP
 CONSULTING ENGINEERS & PLANNERS
 8740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
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 FAX (702) 284-5399

ASTUTT

CITY OF LAS VEGAS, NV
 GREYSTONE NEVADA, LLC
 SKYE CANYON II PARCEL 2.29 - PHASE 2
 UTILITY PLAN - III

DATE: 04/18/18
 DRAFTER: DNP
 DESIGNER: BCC
 CHECKED: STS
 PROJECT NO. OLY1710-001

U-3
 SHEET 22 OF 27
 L18-00149
 DWG NO. 1075064-2

PROJ.#: 1702-284-5300 AGR: 116761 QS: 126-12-SE XC 11413

