DS #: 05115-1

APN: 137-26-101-001

PROJECT: Summerlin West Village 21 - Red Pass Drive - Update #1
(Desert Foothills Dr. to Kettle Ridge Dr.

SUBMITTAL: 3rd

SCANNED BY/DATE:

CHECKED BY/DATE:

CITY OF LAS VEGAS
NEVADA

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: September 8, 2020
TO: **Land Development Services** Department of Building & Safety				FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: **Summerlin West Village 21 – Red Pass Drive – Update #1** **(Desert Foothills Dr. to Kettle Ridge Dr.)**			**COPIES TO:** VTN Nevada, Inc.
Cross Streets:	Red Pass Drive & Desert Foothills Drive			Howard Hughes Company
File Number:	F:\Depot\DSMemos\DS5115D.doc			Bart Anderson, P.E., DevCo
Parcel Number:	137-26-101-001			CCRFCD
Zoning Action:	N/A			
FEMA Flood Zone	YES	NO	**X**	
Proposed Storm Drain	YES	NO	**X**	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal	3/21/2019 & 7/1/2019	7/29/2019	Not Approved	$400.00	3057846: $400
2nd Submittal	7/31/2019	8/8/2019	Conditional Approval	$400.00	3508903: $400
CCRFCD & Structural Review	9/4/2019 & 10/28/2019	10/28/2019	Concurrence & Structural Approval Recv'd	N/C	N/C
3rd Submittal	8/27/2020	9/8/2020	See Comments Below	$100.00	3969967: $100
			TOTAL FEES (LDDRS):	**$900.00**	**----**

REMARKS:

3rd Submittal: Update #1 to remove storm drain stubs in red Pass Drive due to the consolidation of Parcels P, Q & R

The Drainage Study for the subject project has been reviewed and:

X	is approved subject to conformance to all City standards and the following conditions:
	must be resubmitted or supplemented including the following:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

1. The project proposes temporary berm/swales along the proposed *Red Pass Drive* for flood protection. Prior to final plan approval the developer must complete a maintenance and liability agreement for the interim drainage improvements and post a minimum maintenance bond of $50,000 or 50-percent of the construction cost for the improvements, whichever is greater. The engineer must submit an estimate of the quantities for constructing the facility and an exhibit that adequately shows the location and limits of the drainage facility to *City of Las Vegas Flood Control* for approval. Once the drainage study is conditionally approved, the engineer should contact the City's Land Development Section (229-6371) to begin the agreement process.

   In order for the maintenance bond to be released in the future, a drainage update / letter will be required to justify that the offsite berms / channels are no longer necessary and can be removed.

2. All offsite interim flood control facilities such as but not limited to berms/ditches and temporary sump are privately owned and to be privately maintained by the *Howard Hughes Company*.

NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Update and accepted by the *City of Las Vegas Flood Control Section*. Additionally, conditional acceptance of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the *Nevada Division of Environmental Protection* a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see http://ndep.nv.gov/bwpc/storm01.htm or call (775) 687-9429.

END OF REMARKS

ays

T/R/S: T20S/R59E/26
AREA K-26

Update #1 to the Technical Drainage Study for

Summerlin West Village 21
Red Pass Drive
(Desert Foothills to Kettle Ridge Drive)

Las Vegas, Nevada

Prepared for:
Howard Hughes Company, LLC

Submitted to:
City of Las Vegas
Public Works

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL

DRAINAGE STUDY INFORMATION FORM

Name of Development: Summerlin West Village 21 Red Pass Drive-Desert Foothills to Kettle Ridge Date: August 26, 2020

Location of Development: a) Descriptive (Cross Streets) North/South: Carriage Hill Drive

East/West: Summerlin Parkway

b) Section: 26 Township: 20S Range: 59E

c) APN : 137-27-599-001

Name of Owner: The Howard Hughes Company, LLC

Telephone No.: (702) 791-4336 Fax No.: (702) 791-4453 E-Mail Address: April.Chapman@howardhughes.com

Address: 10801 W. Charleston Blvd. LV, NV, 89135

Contact Person-Name: Joanna Ayson **Telephone No.:** (702)-873-7550

* **E-Mail Address:** jayson@vtnnv.com **Fax No.:** (702)-362-2597

Firm: VTN Nevada

Address: 2727 S. Rainbow Blvd, LV, NV, 89146

Type of Land Development/Land Disturbance Process:

☐	Rezoning	☐	Subdivision Map	☐	Clearing and Grading Only
☐	Parcel Map	☐	Planned Unit Development	☒	Other (Please specify below)
☐	Large Parcel Map	☐	Building Permit	Roadway, Storm Drain, Grading	

1. Total Owned Land Area: At Site: +/-1.5 Acres Being Developed/Disturbed: +/-1.5 Acres
2. Is a portion or all of the subject property located in a designated FEMA Flood Hazard Area? ☐ **Yes**** ☒ **No**
3. Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? ☐ **Yes**** ☒ **No**
4. Proposed type of development (Residential, Commercial, Etc.): Roadway
5. Approximate upstream land area which drains to the subject site: +/- 3 acres
6. Has the site drainage been evaluated in the past? ☒ **YES** ☐ **NO** If yes, please identify documentation: SWPA MPU (DS4926) Summerlin V21 Carriage Hill (Redpoint to Summerlin Pkwy), Summerlin Village 21 Desert Foothills Dr (Redpoint to Summerlin Pkwy)
7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Existing 36" RCP east of the project in Desert Foothills Drive
8. Briefly describe your proposed schedule for the subject project: As soon as possible



08/26/20

Engineer's Seal

Submit this form as part of the required drainage study to the local entity which has jurisdiction over the subject property. This form may provide sufficient information to serve as the Conceptual Drainage Study.

***New Required Field**

****Review and concurrence of the Clark County Regional Flood Control District is required.**

Revision	Date

Local Entity File No.

REFERENCE:

STANDARD FORM 1

Updated 05/01/2008

PROVIDING QUALITY PROFESSIONAL
SERVICE SINCE 1960

August 26, 2020

Albert Sung, P.E.
Flood Control Division
Department of Public Works
City of Las Vegas
333 N. Rancho Blvd, 7th Floor
Las Vegas, NV 89106

Subject: Update #1 to the Technical Drainage Study for Summerlin West Village 21 – Red Pass Drive (Desert Foothills Dr to Kettle Ridge Dr)

Mr. Sung:

This letter certifies that all items on the **Update #1 to the Technical Drainage Study for Summerlin West Village 21 – Red Pass Drive (Desert Foothills Dr to Kettle Ridge Dr)** electronic submittal matches the paper version bound into the study.

Respectfully submitted,

Joanna Ayson, P.E.

UPDATE #1

TO THE TECHNICAL DRAINAGE STUDY

FOR

SUMMERLIN WEST VILLAGE 21

RED PASS DRIVE

DESERT FOOTHILLS TO KETTLE RIDGE

CLARK COUNTY, NEVADA

W.O. # 7851

Prepared for:
HOWARD HUGHES COMPANY

Submitted to:
CITY OF LAS VEGAS
PUBLIC WORKS

PROVIDING QUALITY PROFESSIONAL SERVICE SINCE 1960

August 26, 2020
W.O. #7851

City of Las Vegas
500 S Grand Central Parkway
Box 55400
Las Vegas, NV 89155-4000

Attention: Albert Sung, P.E.
Flood Control Project Engineer

SUBJECT: UPDATE #1 TO THE TECHNICAL DRAINAGE STUDY FOR SUMMERLIN WEST VILLAGE 21 – RED PASS DRIVE (DESERT FOOTHILLS DR TO KETTLE RIDGE DR) – DS5115

Mr. Sung:

This *Update #1 to the Technical Drainage Study for Red Pass Drive (Desert Foothills Drive to Kettle Ridge Drive)* is being submitted to the City of Las Vegas to address revisions to the improvement plans.

In the approved drainage study, Village 21 Parcels P, Q, and R were expected to drain to three separate stubs:

- Parcel P was expected to drain east to a 30-inch RCP stub in Desert Foothills.
- Parcel Q was expected to drain north to a 30-inch RCP stub in Red Pass Drive (Station 16+45.33)
- Parcel R was expected to drain north to a 30-inch RCP stub in Red Pass Drive (Station 13+44.83)

This update addresses the removal of the stubs to Parcels Q and R in Red Pass Drive, and the total flow generated by Parcels P, Q, and R will now drain into the proposed 30-inch RCP in Desert Foothills Drive. The improvement plans approved by the City of Las Vegas for the subject project reflecting the two stub removals are being submitted with this letter. In addition, *Update #2 to the Technical Drainage Study for Desert Foothills Drive (Redpoint Drive to Summerlin Parkway)* is being submitted concurrently with this update to address the increase in flow to the 30-inch RCP in Desert Foothills Drive.

The previously approved plans have been included in the Appendix and redlined to show the revisions for your reference.

If you have any questions or any additional information is required, please contact this office.

Respectfully Submitted,

VTN Consulting

Joanna Ayson, P.E

APPENDIX

(PREVIOUSLY APPROVED PLANS REDLINED TO SHOW REVISIONS)

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: October 28, 2019
TO: **Land Development Services** Department of Building & Safety				**FROM:** Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: **Summerlin West Village 21 – Red Pass Drive** **(Desert Foothills Dr. to Kettle Ridge Dr.)**			**COPIES TO:** VTN Nevada, Inc.
Cross Streets:	Red Pass Drive & Desert Foothills Drive			Howard Hughes Company
File Number:	F:\Depot\DSMemos\DS5115C.doc			Bart Anderson, P.E., DevCo
Parcel Number:	137-26-101-001			CCRFCD
Zoning Action:	N/A			
FEMA Flood Zone	YES	NO	**X**	
Proposed Storm Drain	YES	NO	**X**	

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			TOTAL FEES (LDDRS):	**$800.00**	**----**

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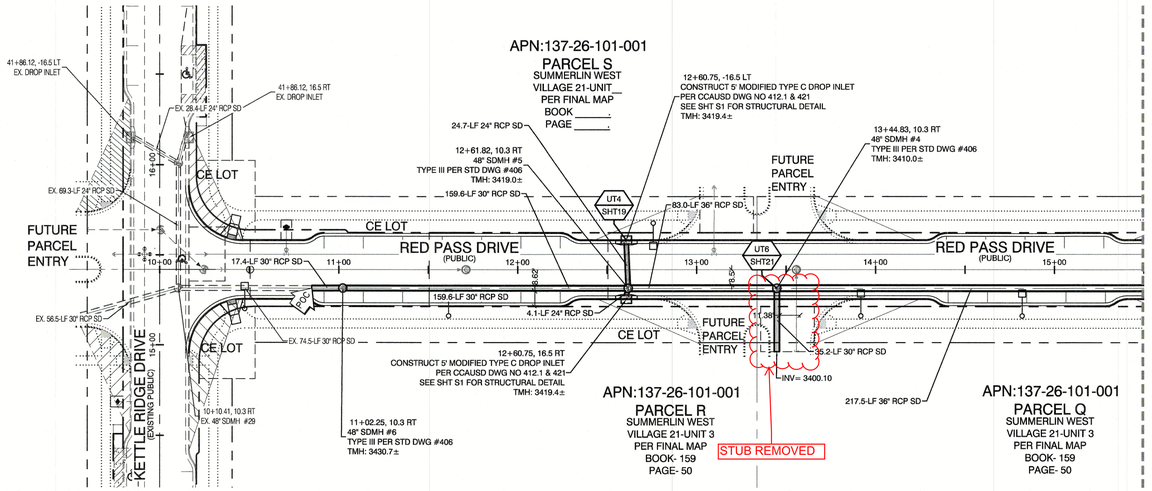
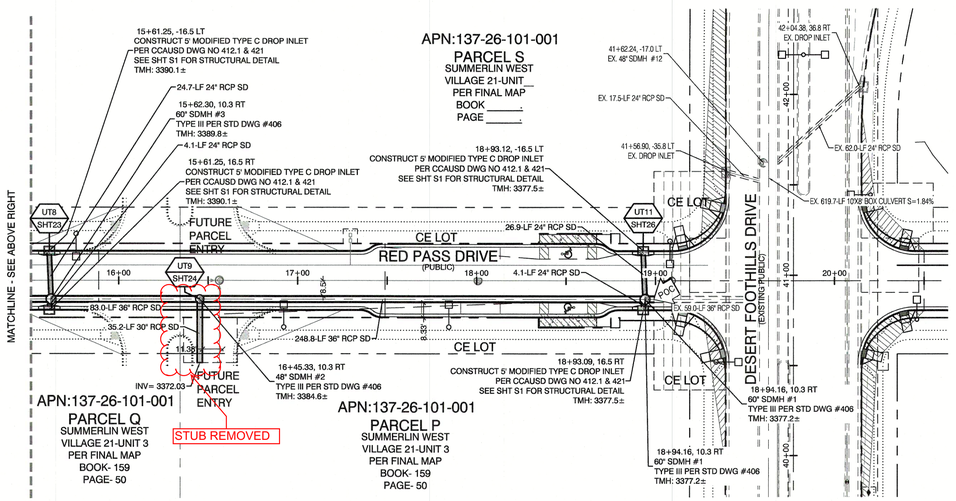
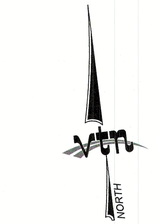
END OF REMARKS

ays

T/R/S: T20S/R59E/26
AREA K-26







GRAPHIC SCALE

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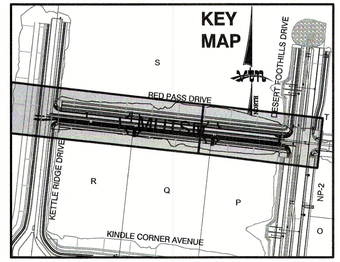
1" = 40'



CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

ENGINEER DISCLAIMER NOTE:

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

UTILITY CROSSING NOTE:

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ENGINEER DISCLAIMER NOTE:

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Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6811
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-227-2600
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

REV	DATE	BY	REVISION

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10801 W CHARLESTON BLVD SUITE 300
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

MASTER UTILITY STORM DRAIN

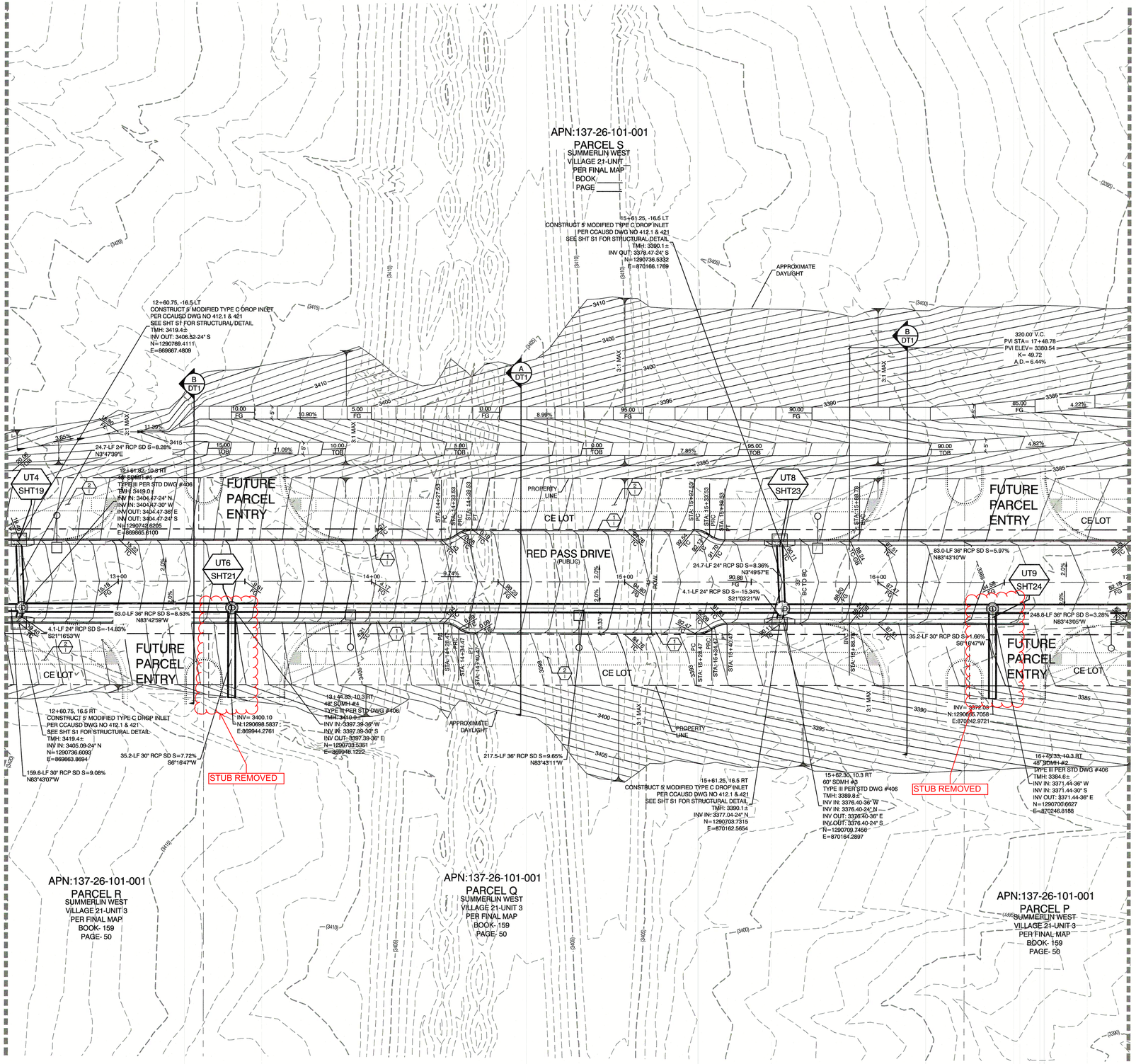
SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

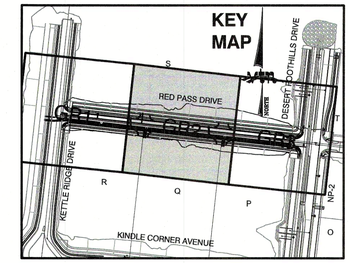
DRAWN BY: KOH 11/07/2018
DESIGNED BY: DEH 11/07/2018
CHECKED BY: WJM 06/28/2019
SCALE: N/A HORIZ. N/A VERT.
PROJECT NO: 7951

PROFESSIONAL ENGINEER — STATE OF NEVADA — WILLIAM J. MEYER — EXP: 12/31/19 — CIVIL — No. 15715
7/22/19

SHEET
MUTSD
8 OF 29 SHEETS

DRAWING NO.





NORTH

GRAPHIC SCALE

-20 0 10 20 40

1" = 20'

OFFSITE FLOOD CONTROL NOTE:

ALL OFFSITE INTERIM FLOOD CONTROL FACILITIES SUCH AS BUT NOT LIMITED TO BERMS/DITCHES AND TEMPORARY SUMPS ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOWARD HUGHES COMPANY.

FLOOD ZONE NOTE

SITE IS LOCATED IN A SHADED ZONE X AS SHOWN IN FIRM MAP 32003C2215OE, DATED SEPTEMBER 27, 2002, A SHADED ZONE X IS DETERMINED TO BE OUTSIDE THE 2.0% ANNUAL CHANCE FLOODPLAIN, ENTIRE SITE BOUNDARY IS WITHIN ZONE X.

CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

CONSTRUCTION NOTES

1. CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
2. FUTURE SIDEWALK
3. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
4. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
5. FIELD VERIFY AND MATCH EXISTING

GRADING PERMIT NOTE

THIS GRADING PERMIT DOES NOT INCLUDE THE CONSTRUCTION OF RETAINING WALLS AND OTHERS STRUCTURES. SEPARATE PERMITS AND APPLICATIONS ARE REQUIRED FOR THESE.

GEOTECHNICAL NOTE:

REFER TO SOILS REPORT: NOVA GEOTECHNICAL
PROJECT #G-18-003, DATED MARCH 5, 2018

SIGHT VISIBILITY ZONES:

NO STRUCTURE, WALLS, VEGETATION, OR OBJECT OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

ENGINEER DISCLAIMER NOTE:

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

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #----

WILLIAM J MEYER , P.E. No. 15745 DATE

Call before you Dig
Avoid cutting underground utility lines. It's costly.
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OR
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AND
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REV	DATE	BY	REVISION

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CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
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PH. (702) 873-7550 FAX (702) 362-2997 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

GRADING PLAN 2

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	DEH	11/07/2018	
DESIGNED BY:	DEH	11/07/2018	
CHECKED BY:	WJM	06/26/2019	
PROJECT NO:	7851	SCALE:	HORIZ. N/A / VERT. N/A

PROFESSIONAL ENGINEER - STATE OF NEVADA - No. 15745 - WILLIAM J. MEYER - EXP: 12/31/19 - CIVIL

7/31/19

SHEET
GR2
11 OF **29** SHEETS

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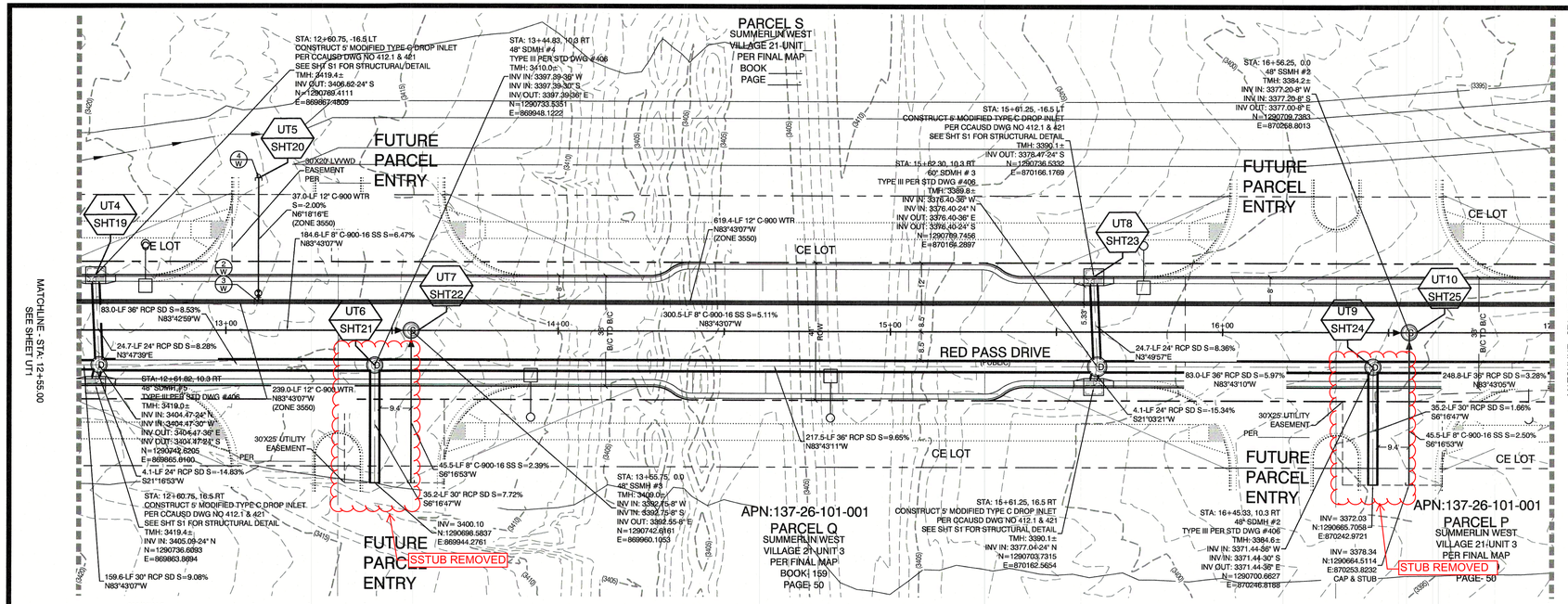
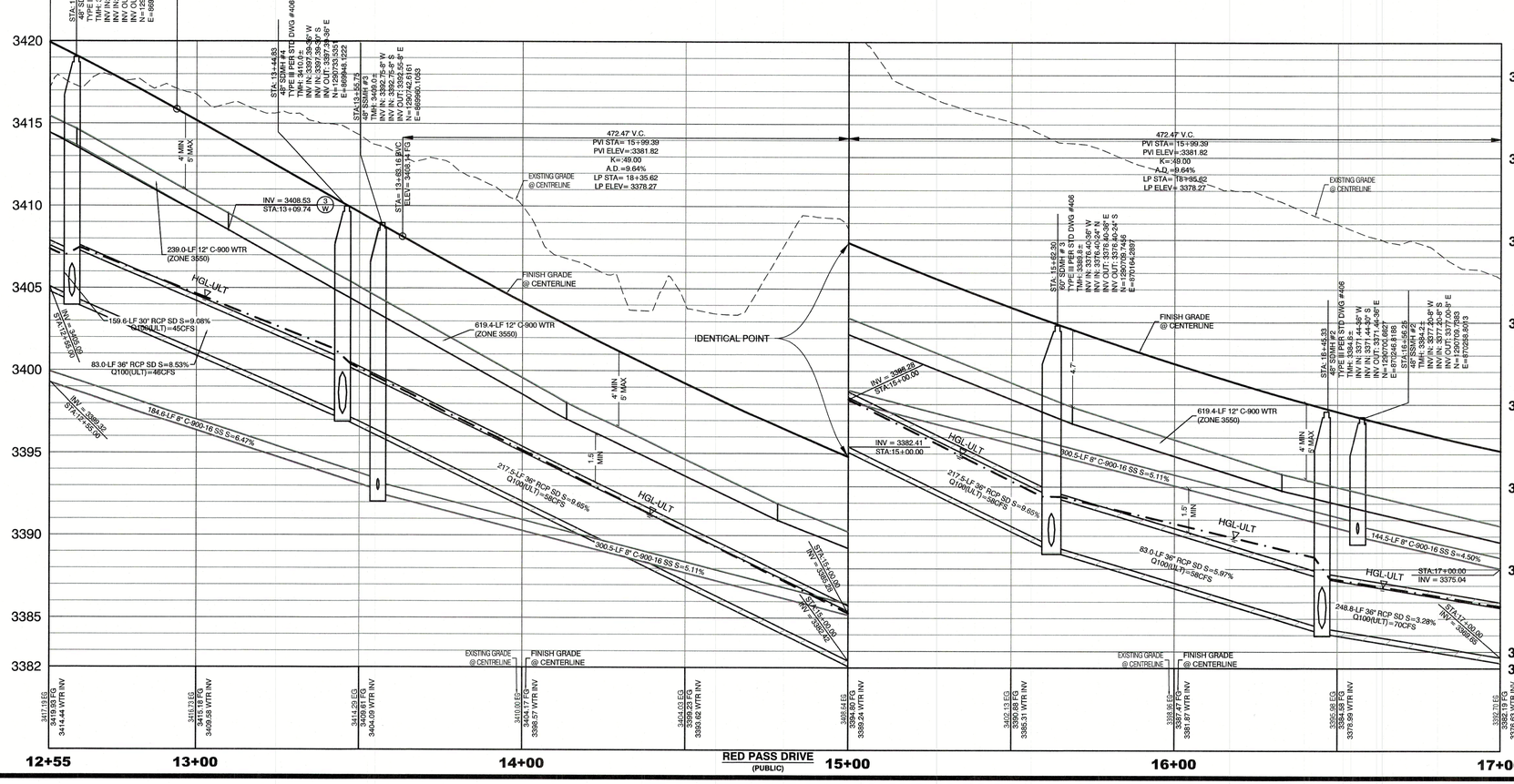
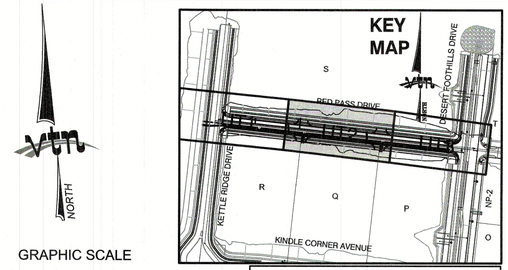




PROFILE SCALES:
HORIZ. = 1"=20'
VERT. = 1"=4'



GRAPHIC SCALE
-20 0 10 20 40
1" = 20'

CONSTRUCTION NOTES

WATER

		PUBLIC
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	1 EA.
W	12"X12" TEE (PER UDACS PLATE 31)	1 EA
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
W	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #6	1 EA.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	17 LF.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	941 LF.
WPC	WATER POINT OF CONNECTION	

SEWER

S	STANDARD MANHOLE PER SD-1A & 1B W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	3 EA.
	8" C-900-16 SANITARY SEWER MAIN	947 LF.
[	8" C-900-16 SANITARY SEWER MAIN CAP	2 EA.
SPC	SEWER POINT OF CONNECTION	

CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (RE/ISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:

ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:

CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE

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

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

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.

UTILITY CROSSING NOTE:

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

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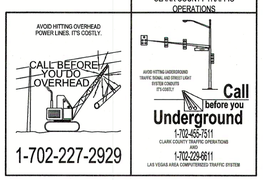
LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-227-2600
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS



BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (RE/ISED 2008)
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FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
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SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
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APPROVED FOR CONSTRUCTION

_____
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:_____ FIRST APPROVED DATE:_____

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

LVVWD APPROVAL IS VALID FOR ONE (1) YEAR FROM SIGNATURE DATE. IF CONSTRUCTION IS NOT STARTED, PLANS **MUST** BE RESUBMITTED FOR REVIEW AND APPROVAL

REVISION | BY | DATE | REV

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10801 W CHARLESTON BLVD SUITE 300
LAS VEGAS, NEVADA 89135
(702) 791-4500

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2697 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 2

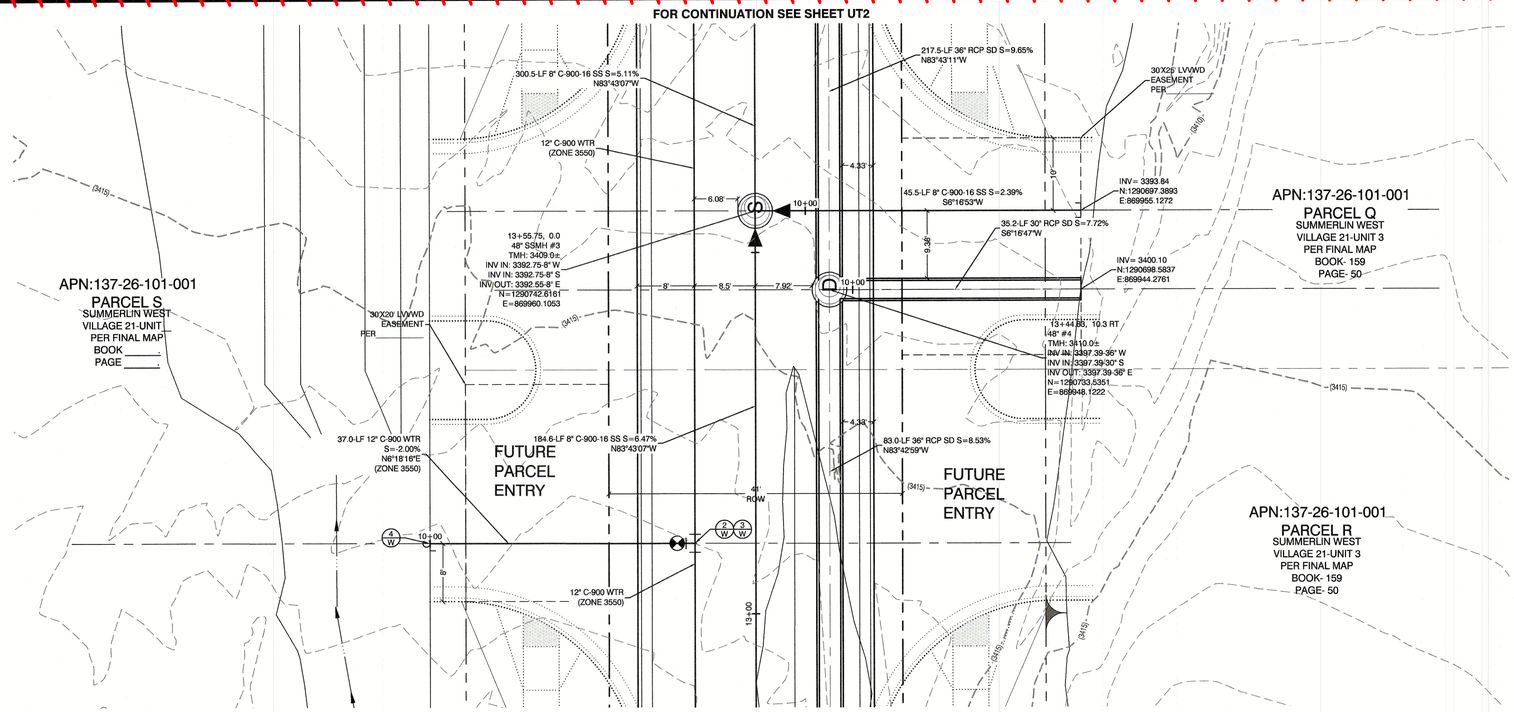
12+55.00 TO 17+00.00

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: DEH — 11/07/2018
DESIGNED BY: DEH — 11/07/2018
CHECKED BY: WJM — 06/26/2019
PROJECT NO: 7851
SCALE: HORIZ. 1"=20' VERT. 1"=4'

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/19
CIVIL
No. 15715
7/22/19

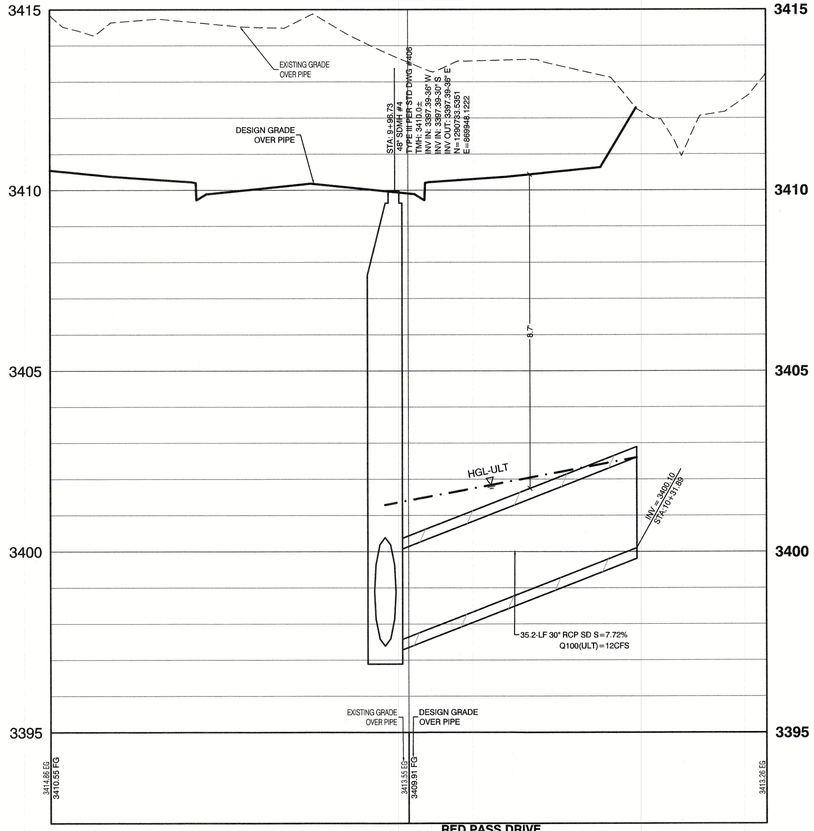
SHEET
UT2
17 OF 29 SHEETS
DRAWING NO.



FOR CONTINUATION SEE SHEET UT2

RED PASS DRIVE
(PUBLIC)

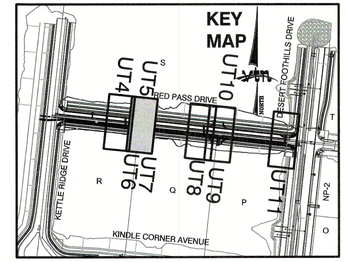
PROFILE SCALES:
HORIZ. = 1"=10'
VERT. = 1"=4'



THIS STUB FOR PARCEL R HAS BEEN REMOVED.

THIS PROFILE SHEET NO LONGER REQUIRED





CONSTRUCTION NOTES

		WATER	PUBLIC
W		FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
W		12" GATE VALVE (PER UDACS PLATE 30 & 39)	1 EA.
W		12"X12" TEE (PER UDACS PLATE 31)	1 EA
W		12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
W		1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8	1 EA.
		6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	17 LF.
		12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	941 LF.
POC		WATER POINT OF CONNECTION	

		SEWER	
S		STANDARD MANHOLE PER SD-1A & 1B W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	3 EA.
		8" C-900-16 SANITARY SEWER MAIN	947 LF.
[		8" C-900-16 SANITARY SEWER MAIN CAP	2 EA.
POC		SEWER POINT OF CONNECTION	

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
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2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 15

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE: LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
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.

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UTILITY CROSSING NOTE:
ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

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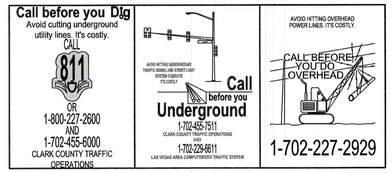
LAS VEGAS FIRE & RESCUE APPROVAL
BY: _____ DATE: _____

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.



APPROVED FOR CONSTRUCTION

_____
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:_____ FIRST APPROVED DATE:_____

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

LVVWD APPROVAL IS VALID FOR ONE (1) YEAR FROM SIGNATURE DATE. IF CONSTRUCTION IS NOT STARTED, PLANS **MUST** BE RESUBMITTED FOR REVIEW AND APPROVAL

REVISION | BY | DATE | REV.

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10801 W CHARLESTON BLVD SUITE 300
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 6 STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

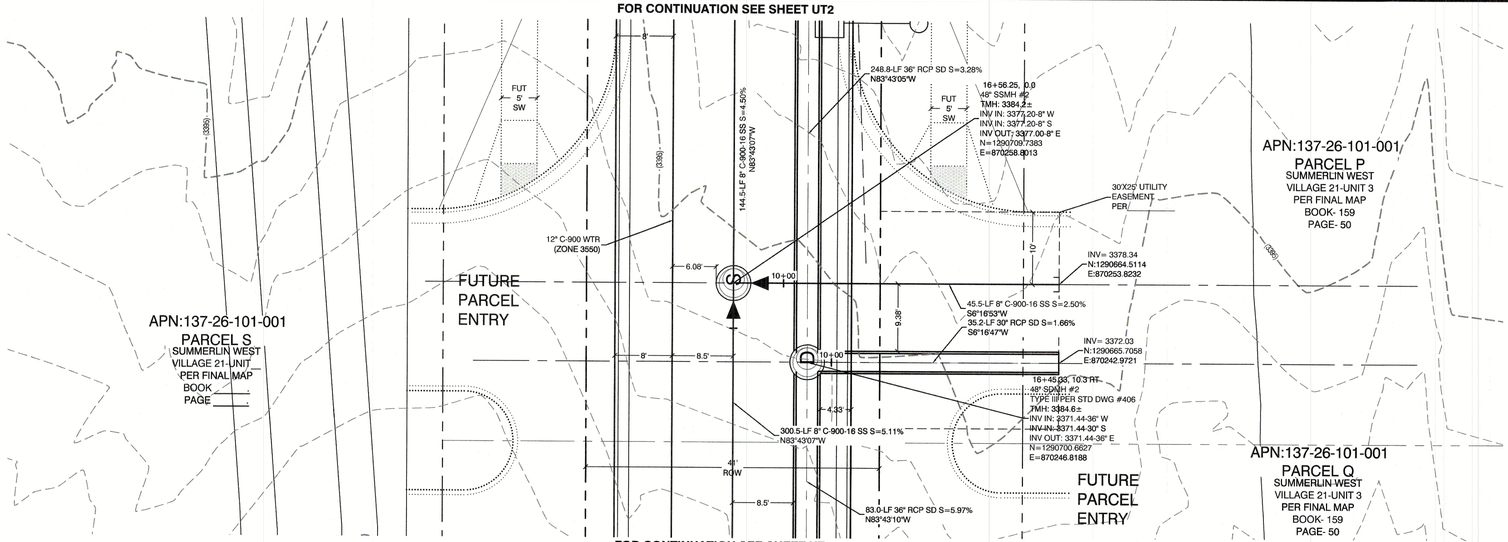
DRAWN BY: KDH — 11/07/2018
DESIGNED BY: DEH — 11/07/2018
CHECKED BY: WJM — 06/26/2019
PROJECT NO: 7851
SCALE: HORIZ. 1"=10' VERT. 1"=4'

SHEET
UT6
21 OF **29** SHEETS

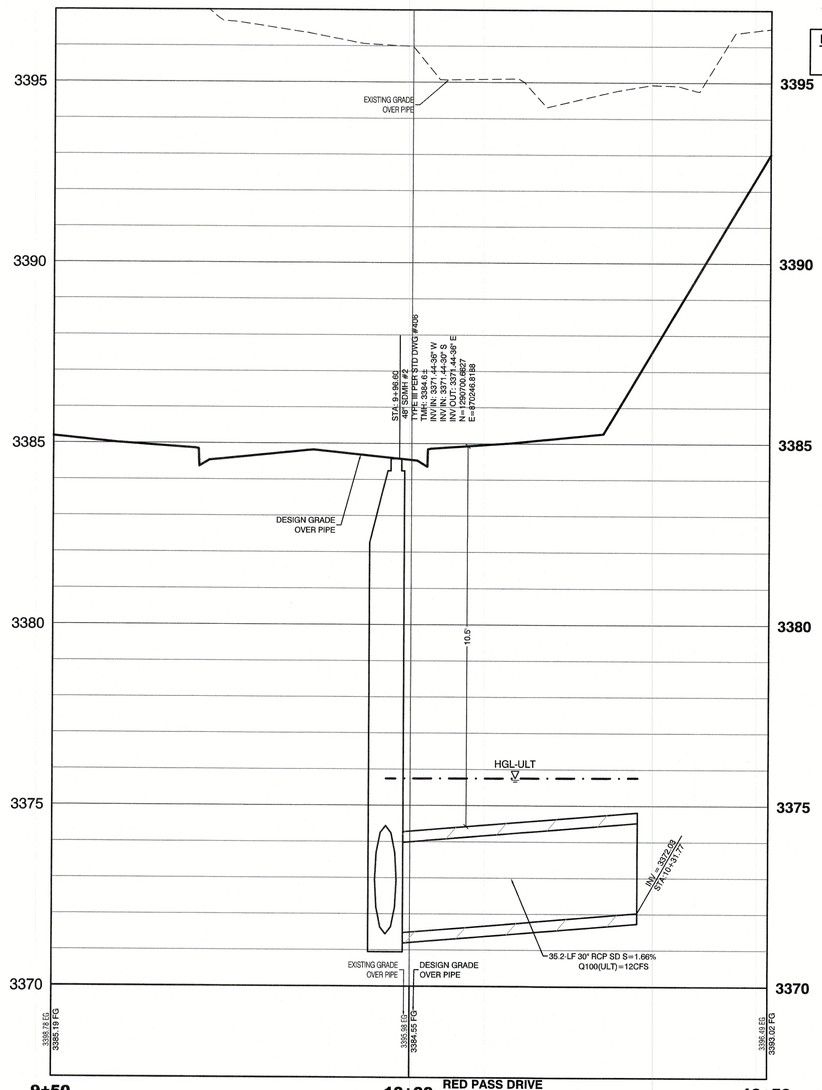
DRAWING NO.
—

H:\7851\Street C-Desert Foothills to Street B\Sheet Set\7851-UT-LAT.dwg 7/15/2019 1:30 PM kcampbell

FOR CONTINUATION SEE SHEET UT2

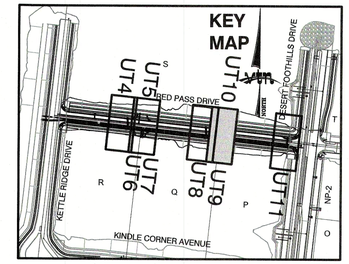


FOR CONTINUATION SEE SHEET UT3



THIS STUB TO PARCEL Q HAS BEEN REMOVED.

PROFILE SHEET IS NO LONGER REQUIRED.





GRAPHIC SCALE

-10 0 5 10 20

1" = 10'

CONSTRUCTION NOTES

WATER		PUBLIC
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
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BENCHMARK

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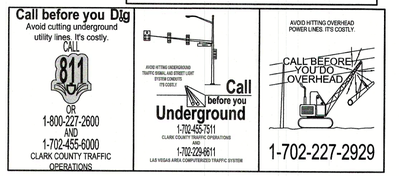

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:
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LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

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APPROVED FOR CONSTRUCTION

_____
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:_____ FIRST APPROVED DATE:_____

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

LVVWD APPROVAL IS VALID FOR ONE (1) YEAR FROM SIGNATURE DATE. IF CONSTRUCTION IS NOT STARTED, PLANS **MUST** BE RESUBMITTED FOR REVIEW AND APPROVAL

REV	DATE	BY	REVISION

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
2730 PASEO VERDE PARKWAY, SUITE 300
LAS VEGAS, NEVADA 89145
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 382-2397 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 9 STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21 RED PASS DRIVE DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH — 11/07/2018
DESIGNED BY: DEH — 11/07/2018
CHECKED BY: WJM — 06/26/2019
SCALE: HORIZ: 1"=10' VERT: 1"=4'
PROJECT NO: 7551

PROFESSIONAL ENGINEER, STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/19
CIVIL
No. 15745
7/22/19

SHEET
UT9
24 OF 29 SHEETS

DRAWING NO.
—

H:\civil\Street & Desert Foothills to Street B\Sheet Sets\7551-UT-SHT.dwg, 7/19/2019 3:30 PM, AJamsbell

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
(STREET C)
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE
APN: 137-23-410-001
CITY OF LAS VEGAS
STATE OF NEVADA

DEVELOPED BY:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILTY COMPANY

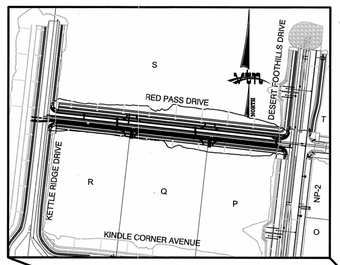
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

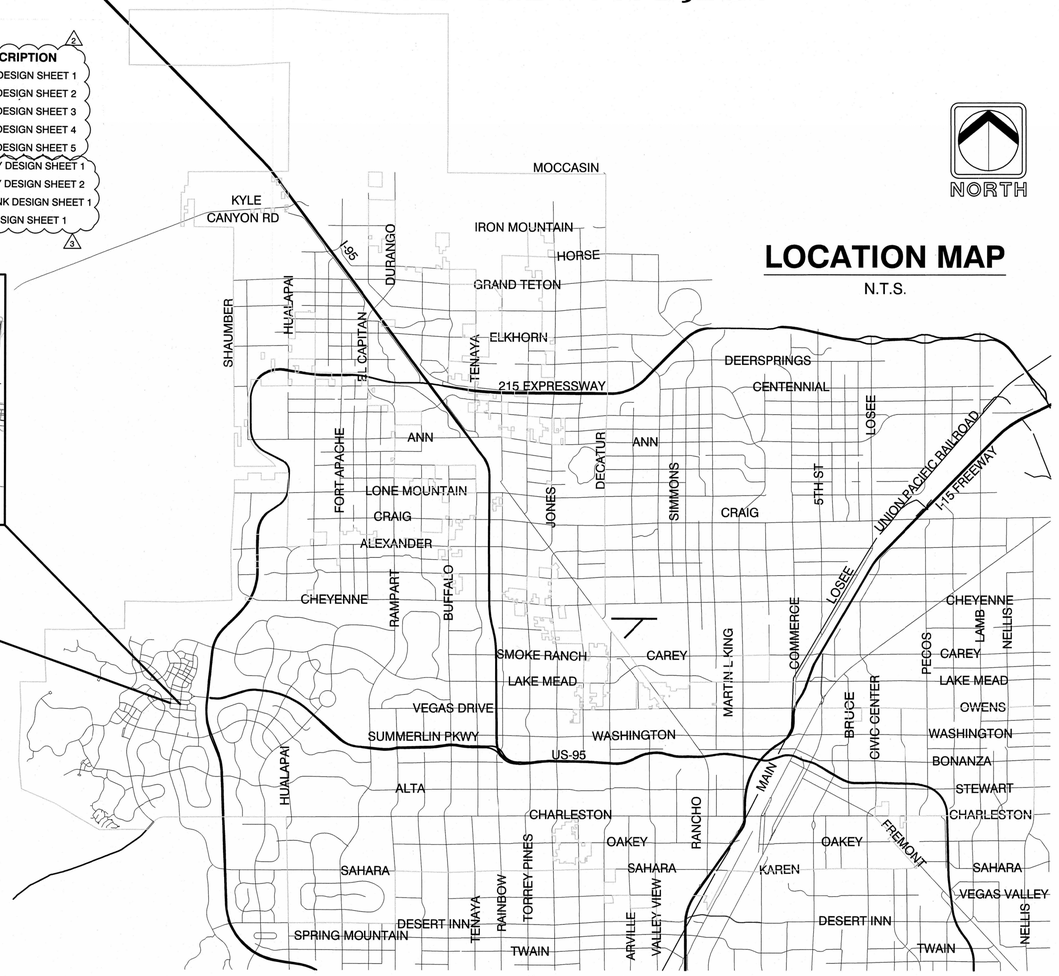
FUTURE S.I.D. PROJECT

SHEET INDEX

SHEET #	SHEET	DESCRIPTION	STATION RANGE
1	CV	COVER SHEET	
2	NT	NOTE SHEET	
3	HC1	HORIZONTAL CONTROL 1	
4	HC2	HORIZONTAL CONTROL 2	
5	HC3	HORIZONTAL CONTROL 3	
6	MGRD	MASTER UTILITY GRADING	
7	MUTSS	MASTER UTILITY SEWER	
8	MUTSD	MASTER UTILITY STORM DRAIN	
9	MUTW	MASTER UTILITY WATER	
10	GR1	GRADING PLAN 1	
11	GR2	GRADING PLAN 2	
12	GR3	GRADING PLAN 3	
13	DT1	DETAIL SHEET 1	
14	DT2	DETAIL SHEET 2	
15	DT3	DETAIL SHEET 3	
16	UT1	UTILITY PLAN & PROFILE 1	9+00.00 TO 12+55.00
17	UT2	UTILITY PLAN & PROFILE 2	12+55.00 TO 17+00.00
18	UT3	UTILITY PLAN & PROFILE 3	17+00.00 TO 20+50.00
19	UT4	UTILITY PLAN & PROFILE 4 STORM DRAIN LATERAL	
20	UT5	UTILITY PLAN & PROFILE 5 WATER LATERAL	
21	UT6	UTILITY PLAN & PROFILE 6 STORM DRAIN LATERAL	
~~22~~	~~UT7~~	~~UTILITY PLAN & PROFILE 7 SANITARY SEWER LATERAL~~	
23	UT8	UTILITY PLAN & PROFILE 8 STORM DRAIN LATERAL	
~~24~~	~~UT9~~	~~UTILITY PLAN & PROFILE 9 STORM DRAIN LATERAL~~	
~~25~~	~~UT10~~	~~UTILITY PLAN & PROFILE 10 SANITARY SEWER LATERAL~~	
26	UT11	UTILITY PLAN & PROFILE 11 STORM DRAIN LATERAL	
27	TR1	TRAFFIC PLAN 1	
28	TR2	TRAFFIC PLAN 2	
29	S1	STRUCTURAL DETAIL	

SHEET #	SHEET	DESCRIPTION
29A	SWG1	SW GAS DESIGN SHEET 1
29B	SWG2	SW GAS DESIGN SHEET 2
29C	SWG3	SW GAS DESIGN SHEET 3
29D	SWG4	SW GAS DESIGN SHEET 4
29E	SWG5	SW GAS DESIGN SHEET 5
29F	NVE1	NV ENERGY DESIGN SHEET 1
29G	NVE2	NV ENERGY DESIGN SHEET 2
29H	CL1	CENTURY LINK DESIGN SHEET 1
29I	COX1	COX DESIGN SHEET 1





LOCATION MAP
N.T.S.

NORTH

OWNER
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILTY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

DEVELOPER
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILTY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

ENGINEERING FIRM
VTN
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550
FAX (702) 362-2597

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

Call before you dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600 AND 1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEM CONDUITS IT'S COSTLY
Call before you Underground
1-702-455-7511 CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6611 LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

BENCHMARK
PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

BASIS OF BEARING
GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

THESE PLANS AND THE DESIGN CRITERIA CONTAINED WITHIN THESE PLANS ARE BASED UPON THE INFORMATION PRESENTLY KNOWN BY THE ENGINEER. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL STATUTES, LAWS, CODES, REGULATIONS AND ORDINANCES, INCLUDING BUT NOT LIMITED TO THE FEDERAL FAIR HOUSING AMENDMENTS ACT, AMERICANS WITH DISABILITIES ACT, THE ARCHITECTURAL BARRIERS ACT AND ANY APPLICABLE UNIFORM STANDARDS, SPECIFICATIONS OR DRAWINGS. THE PERSON OR ENTITY PERFORMING THE CONSTRUCTION SHALL BE SOLELY RESPONSIBLE TO MAKE SURE CONSTRUCTION IS IN CONFORMANCE WITH ALL LOCAL, STATE AND FEDERAL STATUES, LAWS, CODES, REGULATIONS, STANDARDS, GUIDELINES AND ORDINANCES AND FURTHER, IS IN CONFORMANCE WITH ANY APPLICABLE DESIGN CRITERIA, INCLUDING BUT NOT LIMITED TO SOILS REPORTS, TRAFFIC STUDIES, GEOTECHNICAL REPORTS, ARCHITECTURAL PLANS AND SPECIFICATIONS, DRAINAGE PLANS OR STUDIES AND ANY OTHER CRITERIA, STANDARDS OR REQUIREMENTS LISTED IN THE PLANS OR THE GENERAL NOTES RELATED TO THESE PLANS OR PROVIDED BY ANYONE IN REFERENCE TO THIS PROJECT.

APPROVALS

CITY ENGINEER — ROSA CORTES — 10-10-19
ALLEN PAVELKA, P.E. # 9029

APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHT-OF-WAY AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIFICALLY LISTED UNDER DEVIATIONS FROM STANDARD THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS CLARK COUNTY AREA NEVADA.

CENTRAL TELEPHONE COMPANY d/b/a CENTURYLINK — 9-19-19 DATE

"THE AFFIXED CENTURY LINK NEVADA APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS."

NV ENERGY — 9.19.19 DATE

NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NVENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.

COX COMMUNICATIONS LAS VEGAS, INC. — 9/19/19 DATE

SOUTHWEST GAS CORPORATION — Jamie Harsh 9/19/19 DATE

LAS VEGAS FIRE & RESCUE — 10/10/19 DATE

KEVIN T. ORROCK, VICE PRESIDENT — 9/25/19 DATE
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

LAS VEGAS VALLEY WATER DISTRICT
APPROVED FOR CONSTRUCTION

Digitally signed by William J.Meyer DN: C=US, E=wmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer Reason: I attest to the accuracy and integrity of this document Date: 2020.06.09 10:37:40-07'00'

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT: 136795 FIRST APPROVED DATE: 11/14/19
LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM
SHEETS: CV, NT, MUTSS, [illegible], MUTW, UT1-UT11

PROFESSIONAL ENGINEER STATE OF NEVADA — WILLIAM J. MEYER — EXP: 12/31/19 — CIVIL — No. 15745 — 9/19/19

PROFESSIONAL ENGINEER STATE OF NEVADA — WILLIAM J. MEYER — Exp: 12/31/21 — CIVIL — No. 15745 — 2/6/20

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

REV	DATE	BY	REVISION
2	01/22/2020	KTC	ADD NV ENERGY, CENTURY LINK, & COX DESIGNS
1	12/16/2019	LLH	ADD SW GAS DESIGN SHEETS
1	11/15/2019	JDH	ADD SW GAS DESIGN SHEETS & REVISIONS PER LVVWD COMMENTS (1) SHEET ADDED: SSMH, RELOCATE SSMH, REMOVE SSMH, ADJUST CORE EXTENSIONS & PARKING STRIPING, REDUCED SD DIAMETER, UPDATE SSMH INVERT (2) SHEET ADDED: SSMH, RELOCATE SSMH, ADJUST CORE EXTENSIONS & SSMH INVERT (3) UPDATED STL TITLE & LABEL, ADDED SSMH# AND SHEETS

PLANS APPROVED LAND DEVELOPMENT BUILDING AND SAFETY DEPARTMENT LAS VEGAS, NEVADA dguerra Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

VTN

COVER SHEET

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	DESIGNED BY:	CHECKED BY:	PROJECT NO:
KDH	DEH	WJM	7951
11/07/2018	11/07/2018	09/18/2019	

SCALE: HORIZ. N/A VERT. N/A

SHEET
CV
1 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

H:\7951\Sheet C Desert Foothills to Sheet B\Sheet Set\7951 CV.dwg 9/16/2019 8:33 AM brandonc

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 CONTRACTOR'S 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: NOVA GEOTECHNICAL, PROJECT NO. G-18-003, DATED MARCH 5, 2018.
    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 ± 0.09 METERS (± 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED 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.
24. REVISED 06/04/18

CITY OF LAS VEGAS STREETLIGHT NOTES:

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION (USS), AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" (USD), LATEST REVISION.
2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS, ETC., LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC AND CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623 OF THE USS.
3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 623 G.03.01 OF THE USS.
4. ALL EMPTY CONDUIT SHALL HAVE AT LEAST ONE GREEN NO. #8 AWG WIRE INSTALLED AS TRACER WIRE IN ACCORDANCE WITH SECTION 623 G.02.01 OF THE USS PRIOR TO BACKFILLING AND FINAL INSPECTION.
5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN COMPLIANCE WITH USD NO. 320A WHEN POLE IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.
6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TRAFFIC ENGINEERING DIVISION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
7. SERVICE POINTS SHALL BE COORDINATED WITH NV ENERGY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICEPOINTS SHALL BE SHOWN ON THE PLANS.
8. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREETLIGHTING 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.
9. THE CONTRACTOR SHALL FURNISH COMPLETE CONDUIT, WIRE, ETC. FROM SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON THE PLANS.

REVISED JUNE 28, 2016 (LD VERSION)

ABBREVIATIONS

FF	FINISH FLOOR	PT	POINT OF TANGENCY	O/C	OFFSET CROWN
FG	FINISH GRADE	PRC	POINT OF REVERSE CURVATURE	BC	BACK OF CURB
FL	FLOW LINE	PCC	POINT OF COMPOUND CURVATURE	BCR	BEGIN CURB RETURN
TC	TOP OF CURB	BVC	BEGIN VERTICAL CURVE	BCL	BACK OF CURB LENGTH
TRC	TOP OF ROLL CURB	MVC	MID-POINT OF VERTICAL CURVE	TF	TOP OF FOOTING
EOP	EDGE OF ASPHALT PAVEMENT	EVC	END VERTICAL CURVE	GB	GRADE BREAK
FUT.	FUTURE	PRVC	POINT OF REVERSE VERTICAL CURVE	PC	POINT OF CURVATURE
EX.	EXISTING	R/W	RIGHT-OF-WAY	TPW	TOP OF PLANTER WALL
VG	VALLEY GUTTER	DI	DROP INLET	TRW	TOP OF RETAINMENT WALL
NG	NATURAL GROUND	BFE	BASE FLOOD ELEVATION	TOP	TOP OF CHANNEL/SCARP
H.P.	HIGH POINT	CCUSD	CLARK COUNTY UNIFORM STANDARD DRAWINGS	TOE	TOE OF CHANNEL/SCARP
L.P.	LOW POINT	SW	SIDEWALK	TOB	TOP OF BOX
SSMH	SEWER MANHOLE	TSW	TOP OF SIDEWALK	PP	POWER POLE
WTR	WATER LINE	INT.	INTERSECTION	TRANS.	TRANSITION
SD	STORM DRAIN	D.G.	DESIGN GRADE	RET.	RETAINMENT
RCP	REINFORCED CONCRETE PIPE	C/L	CENTER LINE		

LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES 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 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.

CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE #6631 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALEY 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 § 105.6.15]
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 CENTERLINE 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 1000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. [IFC § C102.8]
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 § C102.10]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC § C102.4]
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. [IFC § C102.7]
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. FOR SYSTEMS REQUIRED TO HAVE TWO (2) SOURCES OF WATER SUPPLY, SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD-INS CAN BE OUT OF SERVICE DUE TO A SERVICE INTERRUPTION. FOR SYSTEMS PERMITTED TO HAVE ONE SOURCE OF WATER SUPPLY, SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 3 FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD-INS CAN BE OUT OF SERVICE DUE TO A SERVICE INTERRUPTION. [IFC § C104]
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% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. [IFC § 503.2.7, § 503.2.8]
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [IFC § 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13FT 6 INS. [IFC § 503.2.1]
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 33 FT WITH PARKING ON BOTH SIDES MEASURED TO FACE OF CURB. NOT LESS THAN 28 FT WIDE WITH PARKING RESTRICTED TO ONE SIDE MEASURED TO FACE OF CURB. NOT LESS THAN 24 FT WIDE WITH NO PARKING ON EITHER SIDE MEASURED TO FACE OF CURB. FIRE LANES THROUGH PARKING LOTS SHALL BE NOT LESS THAN 24 FT. [IFC § 503.2.1.1]
24. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. [IFC § 503.1.1]
25. APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 200 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT. CLV REGULATION AND MOU
26. ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. CLV REGULATION
27. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FT ALONG THE DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [IFC § 503.3]
28. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. IFC § 503.6
29. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS, OR HAVING FOUR OR MORE TRAVEL LANES AND A TRAFFIC COUNT OF MORE THAN 30,000 VEHICLES PER DAY, ALL HYDRANTS BEING UTILIZED TO DELIVER FIRE FLOW TO THE PROPOSED LOCATION SHALL BE LOCATED ON THE SAME SIDE OF THE STREET AS THE PROPOSED DEVELOPMENT. CLV REGULATION

    EFFECTIVE DATE: FEBRUARY 4th, 2019

CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
4. WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
5. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL UTILIZE TYPE XI RETROREFLECTIVE SHEETING IN ACCORDANCE WITH CCAUSS 627 AND 716 AND SHALL HAVE AN ANTI-GRAFFITI PROTECTIVE OVERLAY FILM THAT IS A MATCHING COMPONENT TO, AND OF THE SAME MANUFACTURER AS THE RETROREFLECTIVE SHEETING TO WHICH IT IS APPLIED. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
7. WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5) FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
9. STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR IMSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
13. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
14. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKINGS AND SIGNING THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

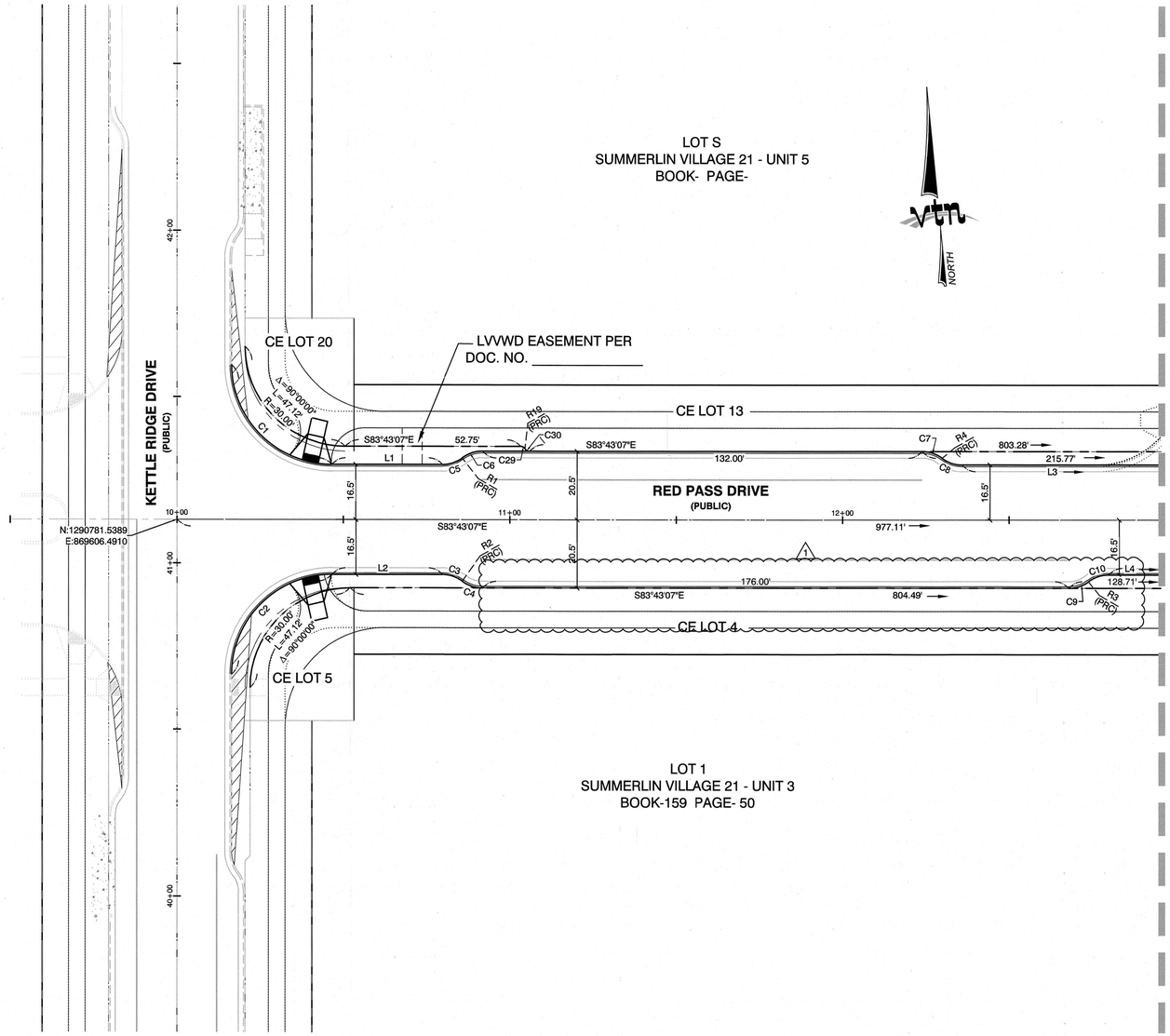
REVISED 7/3/13

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

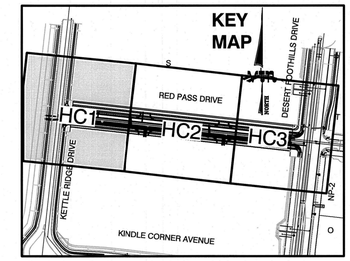
LVVWD PROJECT #_____

(REVISED 08/01/2017)

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. **WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.**
2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS



HORIZONTAL CONTROL PLAN



GRAPHIC SCALE

-20 0 10 20 40

1" = 20'

LEGEND

- ROAD CENTER LINE
- FUTURE
- RIGHT-OF-WAY
- PROPERTY LINE
- BACK OF CURB LINE
- MATCHLINE

NOTE:

SEE SHEET HC3 FOR LINE, CURVE AND RADIAL TABLES.

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

Raymond A. Johnson

Digitally signed by Raymond A. Johnson
DN: C=US, E=tonyj@vtnnv.com, O=VTN, OU=Survey, CN=Raymond A. Johnson
Reason: I am the author of this doc.
Date: 2020.06.09 10:07:38-07'00'

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Avoid cutting underground utility lines. It's costly.
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1-702-455-6000
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LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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CALL BEFORE YOU DIG OVERHEAD
1-702-227-2929

REV	DATE	BY	REVISION
1	11-2019	WLB	REVISIONS TO CURB, ADDING ADA RAMPS AND PARKING

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 180
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 873-7550 FAX (702) 382-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

HORIZONTAL CONTROL 1

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

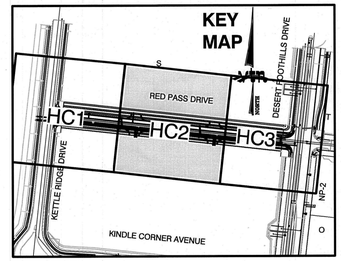
DRAWN BY: KDH	11/07/2018	SCALE:	HORIZ. N/A
DESIGNED BY: DEH	11/07/2018		VERT. N/A
CHECKED BY: RAM	10/01/2019		
PROJECT NO: 7851			

PROFESSIONAL LAND SURVEYOR
RAYMOND A. JOHNSON
EXP. 09-30-21
18983
STATE OF NEVADA
04/06/2020

SHEET
HC1
3 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

H:\7851\Street C-Desert Foothills to Street B\Sheet Set\7851-HC.dwg4/3/2020 10:08 AMchrisp



LOT S
SUMMERLIN VILLAGE 21 - UNIT 5
BOOK- PAGE-

LVVWD EASEMENT PER
DOC. NO. _____

CE LOT 13

S83°43'07"E 215.77'
191.77'
16.5'
88.00'
C13
C14
R8 (PRG)
20.5'
C15
R7 (PRG)
803.28'
S83°43'07"E
219.59'
195.59'
C16
16.5'

RED PASS DRIVE
(PUBLIC)

13+00
14+00
15+00
16+00
977.11'

MATCHLINE - SEE SHEET HC1

S83°43'07"E 104.71'
128.71'
S83°43'07"E
C11
C12
R8 (PRG)
176.00'
20.5'
16.5'
N83°43'07"W
106.95'
130.95'
804.49'
C18
C17
R8 (PRG)

MATCHLINE - SEE SHEET HC3

CE LOT 4

LOT 1
SUMMERLIN VILLAGE 21 - UNIT 4
BOOK-
PAGE-

HORIZONTAL CONTROL PLAN

GRAPHIC SCALE
-20 0 10 20 40
1" = 20'

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- FUTURE
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LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2897 WEB WWW.VTNNV.COM
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HORIZONTAL CONTROL 2

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: ADH	11/07/2018	10/01/2019	HORIZ. N/A
DESIGNED BY: DBT	11/07/2018		VERT: N/A
CHECKED BY: WJM			SCALE:
PROJECT NO: 7851			

RAYMOND A JOHNSON
EXP. 06-30-21
No. 18983
STATE OF NEVADA
PROFESSIONAL LAND SURVEYOR
04/08/2020

SHEET
HC2
4 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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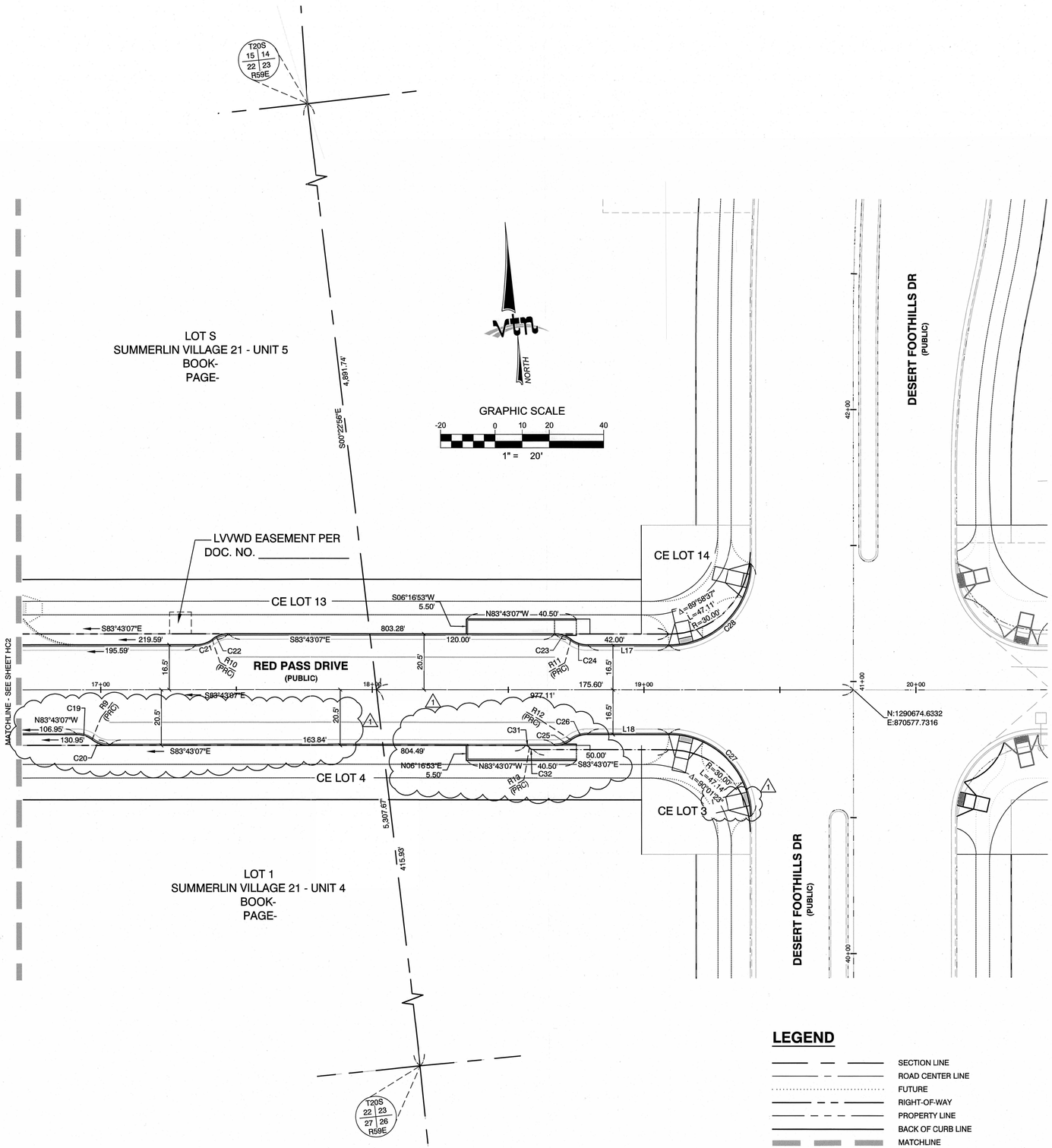

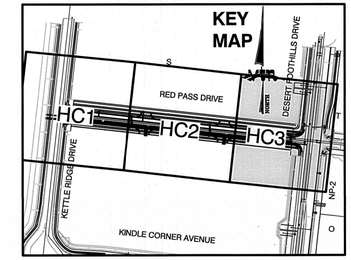

CURVE TABLE

CURVE	RADIUS	DELTA	LENGTH	TANGENT
C1	30.00'	90°00'00"	47.12'	30.00'
C2	30.00'	90°00'00"	47.12'	30.00'
C3	10.00'	36°52'12"	6.44'	3.33'
C4	10.00'	36°52'12"	6.44'	3.33'
C5	10.00'	36°52'12"	6.44'	3.33'
C6	10.00'	36°52'12"	6.44'	3.33'
C7	10.00'	36°52'12"	6.44'	3.33'
C8	10.00'	36°52'12"	6.44'	3.33'
C9	10.00'	36°52'13"	6.44'	3.33'
C10	10.00'	36°52'12"	6.44'	3.33'
C11	10.00'	36°52'11"	6.43'	3.33'
C12	10.00'	36°52'05"	6.43'	3.33'
C13	10.00'	36°52'11"	6.43'	3.33'
C14	10.00'	36°52'06"	6.43'	3.33'
C15	10.00'	36°52'05"	6.43'	3.33'
C16	10.00'	36°52'11"	6.43'	3.33'
C17	10.01'	38°16'13"	6.69'	3.47'
C18	9.50'	37°21'25"	6.19'	3.21'
C19	9.00'	37°51'53"	5.95'	3.09'
C20	10.05'	39°37'08"	6.95'	3.62'
C21	10.00'	36°52'10"	6.43'	3.33'
C22	10.00'	36°52'12"	6.44'	3.33'
C23	10.00'	36°52'12"	6.44'	3.33'
C24	10.00'	36°52'12"	6.44'	3.33'
C25	10.00'	36°52'12"	6.44'	3.33'
C26	10.00'	36°52'12"	6.44'	3.33'
C27	29.93'	90°16'29"	47.16'	30.08'
C28	30.00'	89°58'37"	47.11'	29.99'
C29	1.50'	60°00'00"	1.57'	0.87'
C30	1.50'	59°59'56"	1.57'	0.87'
C31	1.50'	60°00'00"	1.57'	0.87'
C32	1.50'	60°00'00"	1.57'	0.87'

COURSE TABLE

NO.	BEARING	LENGTH
L1	N83°43'07"W	33.26'
L2	S83°43'07"E	33.26'
L3	S83°43'07"E	191.77'
L4	S83°43'07"E	104.71'
L17	S83°43'07"E	30.00'
L18	S83°43'07"E	30.00'

RADIAL LINE TABLE

NO.	BEARING
R1	S53°43'07"E
R2	N66°16'53"E
R3	S53°43'07"E
R4	N66°16'53"E
R5	N43°09'04"E
R6	S53°43'07"E
R7	N66°16'53"E
R8	S31°04'32"E
R9	N44°08'45"E
R10	S53°43'07"E
R11	N66°35'13"E
R12	S53°43'07"E
R13	N66°13'10"E

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

LEGEND

- SECTION LINE
- ROAD CENTER LINE
- FUTURE
- RIGHT-OF-WAY
- PROPERTY LINE
- BACK OF CURB LINE
- MATCHLINE

HORIZONTAL CONTROL PLAN

Digitally signed by Raymond A. Johnson
DN: C=US, E=rjohnson@vtnnv.com, O=VTN, OU=Survey, CN=Raymond A. Johnson
Reason: I am the author of this doc.
Date: 2020.06.09 10:08:39-07'00'
Raymond A. Johnson

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OR
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AND
1-702-455-6000
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1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6811
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

REV	DATE	BY	REVISION
1	11-2019	WLB	REVISIONS TO CURB, ADDING ADA RAMPS AND PARKING

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10846 GRIFFITH PEAK DRIVE, SUITE 180
LAS VEGAS, NEVADA 89135
(702)791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
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HORIZONTAL CONTROL 3

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH	11/07/2018
DESIGNED BY: DEH	11/07/2018
CHECKED BY: WJM	10/01/2019
PROJECT NO: 7851	SCALE: HORIZ. N/A VERT. N/A

PROFESSIONAL LAND SURVEYOR
RAYMOND A. JOHNSON
EXP. 06-30-21
No. 18983
STATE OF NEVADA
04/08/2020

SHEET
HC3
5 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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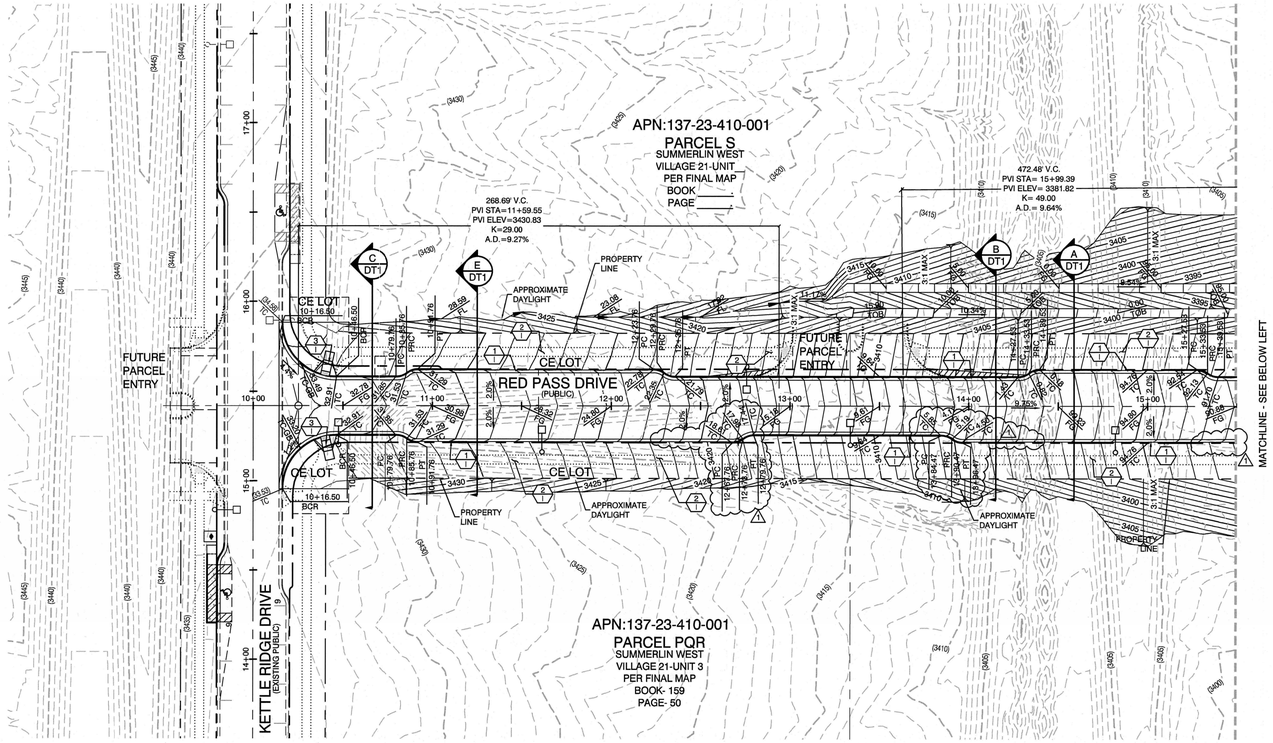

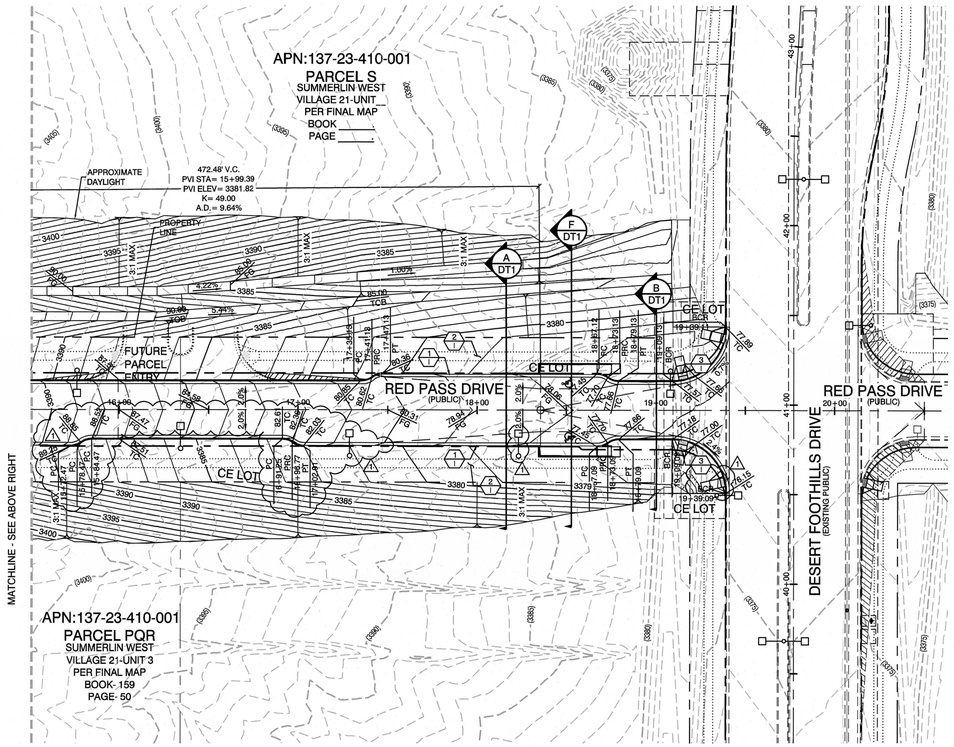

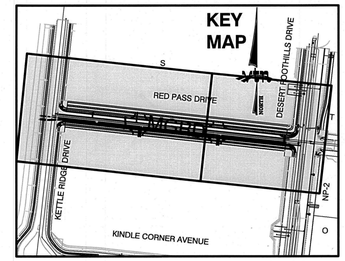

NORTH

GRAPHIC SCALE

-40 0 20 40 80

1" = 40'

CONSTRUCTION NOTES

1. CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
2. FUTURE SIDEWALK
3. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
4. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
5. FIELD VERIFY AND MATCH EXISTING

GRADING PERMIT NOTE

THIS GRADING PERMIT DOES NOT INCLUDE THE CONSTRUCTION OF RETAINING WALLS AND OTHERS STRUCTURES. SEPARATE PERMITS AND APPLICATIONS ARE REQUIRED FOR THESE.

GEOTECHNICAL NOTE:

REFER TO SOILS REPORT: NOVA GEOTECHNICAL
PROJECT #G-18-003, DATED MARCH 5, 2018
HTE #L19-01564

SIGHT VISIBILITY ZONES:

NO STRUCTURE, WALLS, VEGETATION, OR OBJECT OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

ENGINEER DISCLAIMER NOTE:

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

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS5115

WILLIAM J MEYER , P.E. No. 15745 DATE 9/9/20

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:36:12-07'00'

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Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600 AND 1-702-455-6000 CLARK COUNTY TRAFFIC OPERATIONS

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1-702-455-7511 CLARK COUNTY TRAFFIC OPERATIONS
1-702-229-9811 LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM
CALL BEFORE YOU DIG OVERHEAD
1-702-227-2929

REV	DATE	BY	REVISION
1	11/15/2019	JDH	REMOVE PARCEL ENTRY; ADJUST CURB EXTENSIONS; ADD & RELOCATE STREETLIGHTS; ADD SW RAMP

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jan 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 150
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
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MASTER UTILITY GRADING

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH	11/07/2018	SCALE:	HORIZ: N/A
DESIGNED BY: DEH	11/07/2018		VERT: N/A
CHECKED BY: WJM	10/01/2019		
PROJECT NO: 7851			

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
9/9/20

SHEET
MGRD
6 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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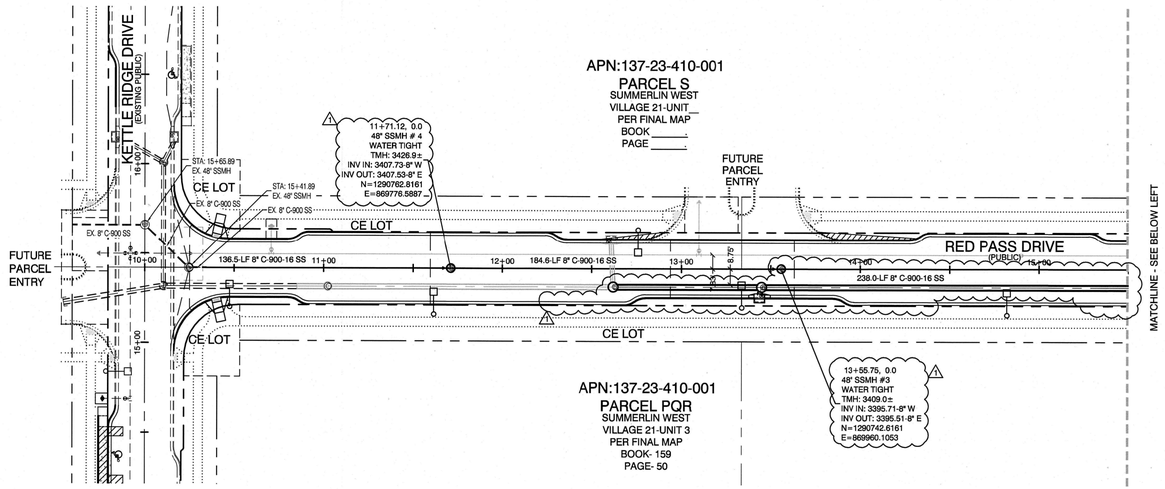
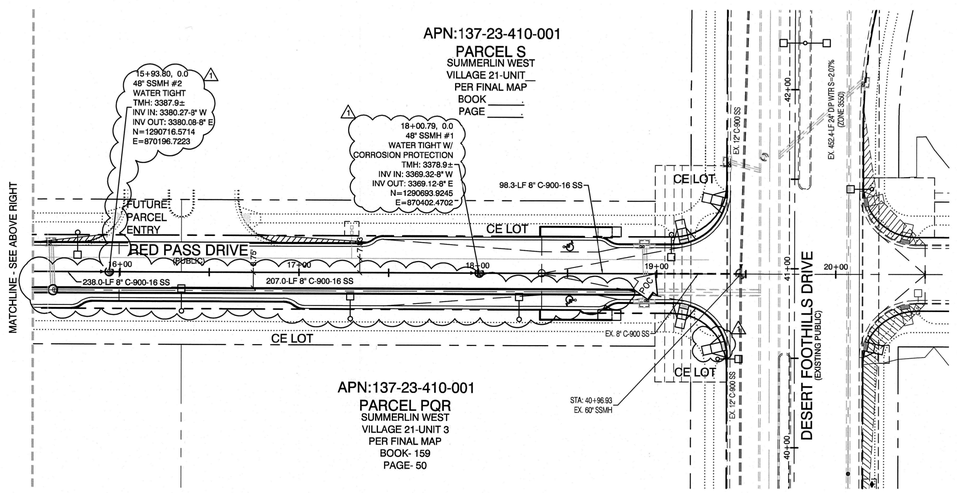
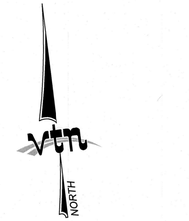


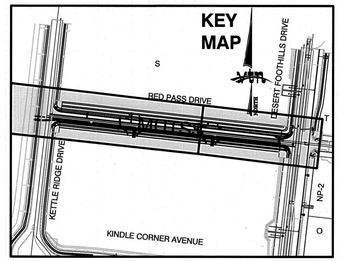




GRAPHIC SCALE

-40 0 20 40 80

1" = 40'



CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

UTILITY CROSSING NOTE:

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

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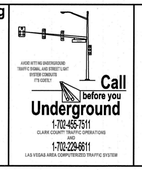
LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
DIAL 811 OR 1-800-227-2600 AND 1-702-455-6000 CLARK COUNTY TRAFFIC OPERATIONS





Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:35:47-07'00'

APPROVED FOR CONSTRUCTION

5/27/2020
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT: 136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

LVVWD APPROVAL IS VALID FOR ONE (1) YEAR FROM SIGNATURE DATE. IF CONSTRUCTION IS NOT STARTED, PLANS **MUST** BE RESUBMITTED FOR REVIEW AND APPROVAL

REV	DATE	BY	REVISION
1	11/15/2019	JDH	REMOVE PARCEL ENTRY; ADJUST CURB EXTENSIONS; REMOVE (3) SSI STUBS; REVISE (1) SSMH; ADD (1) SSMH; ADD (1) SSI STUB; ADD (1) SSI MH; UPDATE SSMHS; ADD AND RELOCATE STREETLIGHTS; ADD SW RAMP

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
djguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS V

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PH. (702) 873-7500 FAX (702) 362-2597 WEB WWW.VTNNV.COM
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MASTER UTILITY SEWER

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH	11/07/2018	SCALE:	N/A
DESIGNED BY: DEH	11/07/2018		HORZ. N/A
CHECKED BY: WJM	10/01/2019		VERT.
PROJECT NO: 7851			

PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
4/9/20

SHEET
MUTSS
7 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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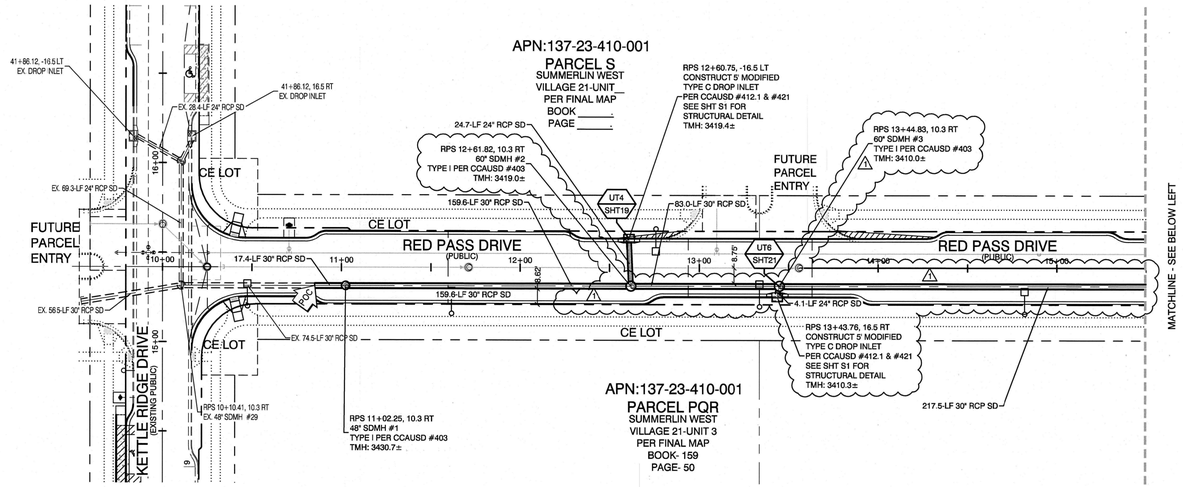
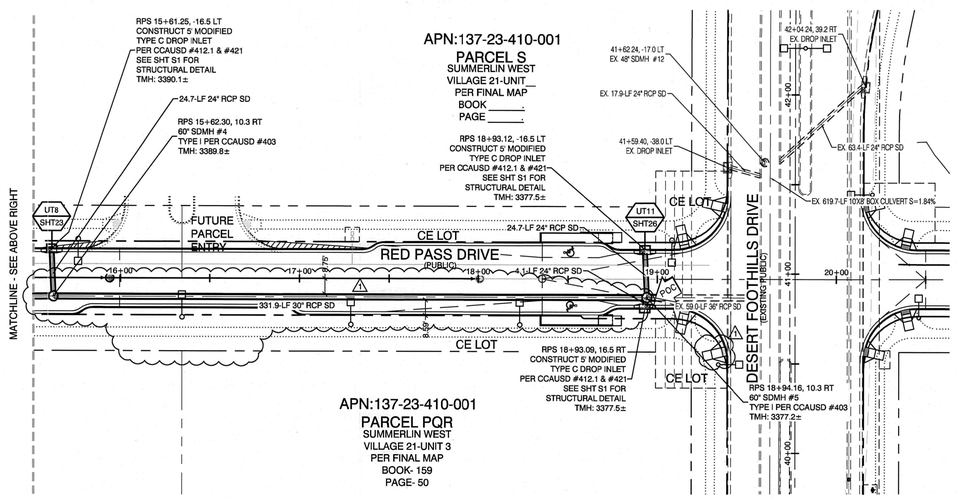


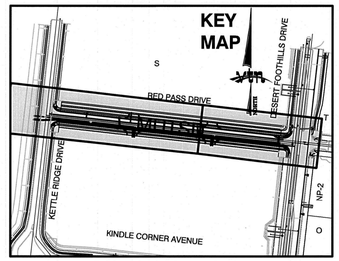




GRAPHIC SCALE

-40 0 20 40 80

1" = 40'



CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
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Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:35:20-07'00'

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AND
1-702-229-6611
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1-800-227-2600 AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

REV	DATE	BY	REVISION
1	11/15/2019	JDH	REMOVE PARCEL ENTRY; ADJUST CURB EXTENSIONS; REMOVE (2) SS STUBS; REMOVE (2) SD STUBS; ADD 1 SD MH; ADD 1 SS MH; ADD (2) SD STUBS; REDUCED SD DIAMETER; ADD AND RELOCATE STREETLIGHTS; ADD SW RAMP

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

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PH. (702) 873-7500 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

MASTER UTILITY STORM DRAIN

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

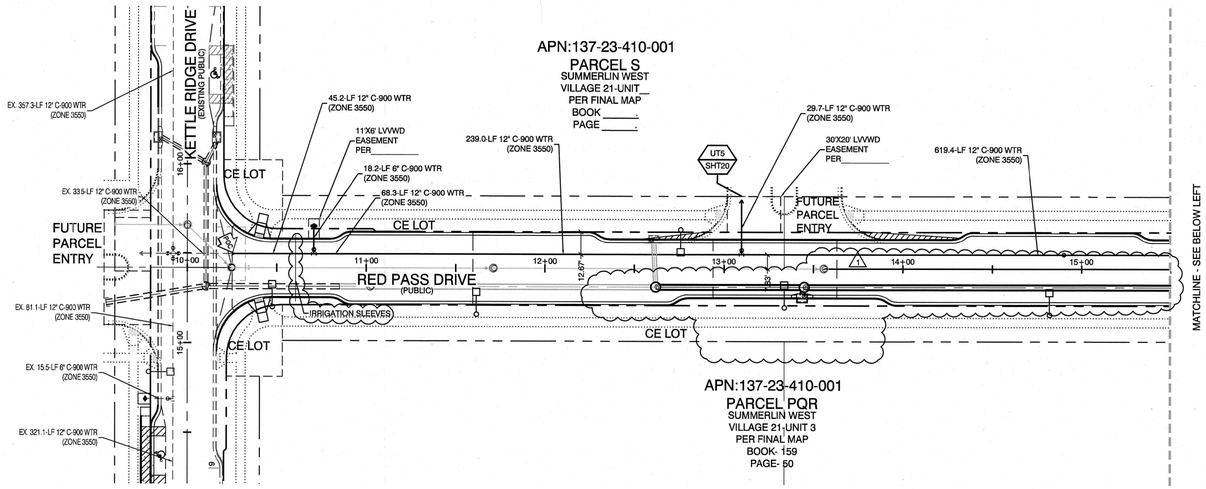
DRAWN BY: KDH	11/07/2018	SCALE:	HORZ: N/A
DESIGNED BY: DEH	11/07/2018		VERT: N/A
CHECKED BY: WJM	10/01/2019		
PROJECT NO: 7851			

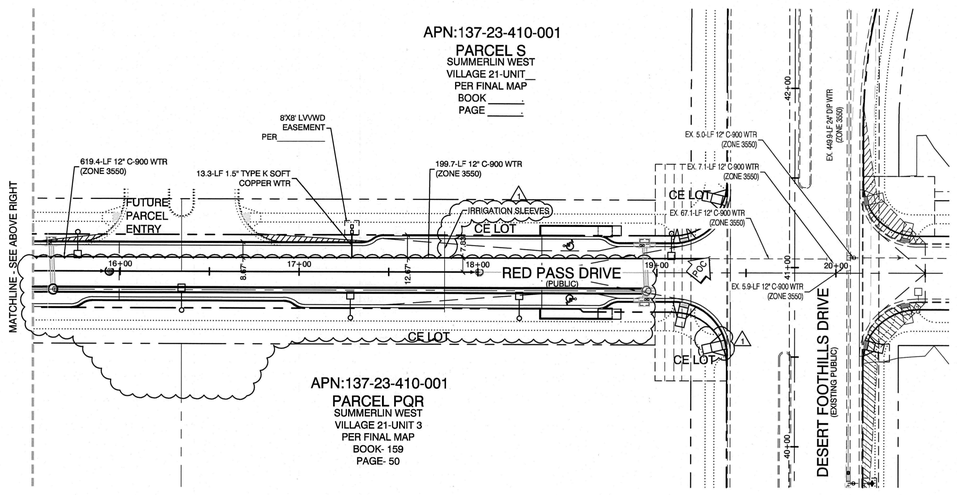
PROFESSIONAL ENGINEER-STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 16745
4/9/20

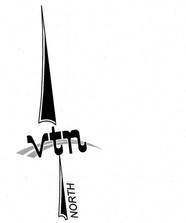
SHEET
MUTSD
8 OF **29** SHEETS

DRAWING NO.
L19-01564
107V7958

H:\7851\Street C-Desert Foothills to Street B\Sheet Set\7851-MUTSD.dwg,4/3/2020 10:17 AM,chrisp



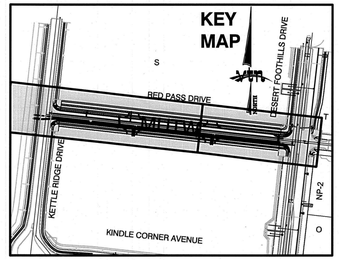




GRAPHIC SCALE

-40 0 20 40 80

1" = 40'



CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 15

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
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.

UTILITY CROSSING NOTE:
ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ENGINEER DISCLAIMER NOTE:
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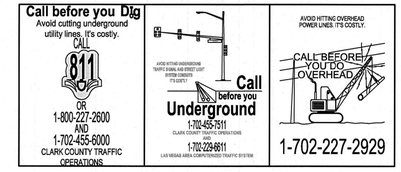
LAS VEGAS FIRE & RESCUE APPROVAL
BY: _____ DATE: _____

APPROVAL OF THESE PLANS 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.
FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.



Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:34:57-07'00'

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES 5/27/2020

PROJECT: ~~136795~~ FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

REV	DATE	BY	REVISION
1	11/15/2019	JDH	ADJUST CURB EXTENSIONS, REMOVE SDMH & PARCEL ENTRIES, RELOCATE SDDI & SDMH; ADD & RELOCATE STLTS; ADD SW RAMP & IRR SLEEVES

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 382-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

MASTER UTILITY WATER

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

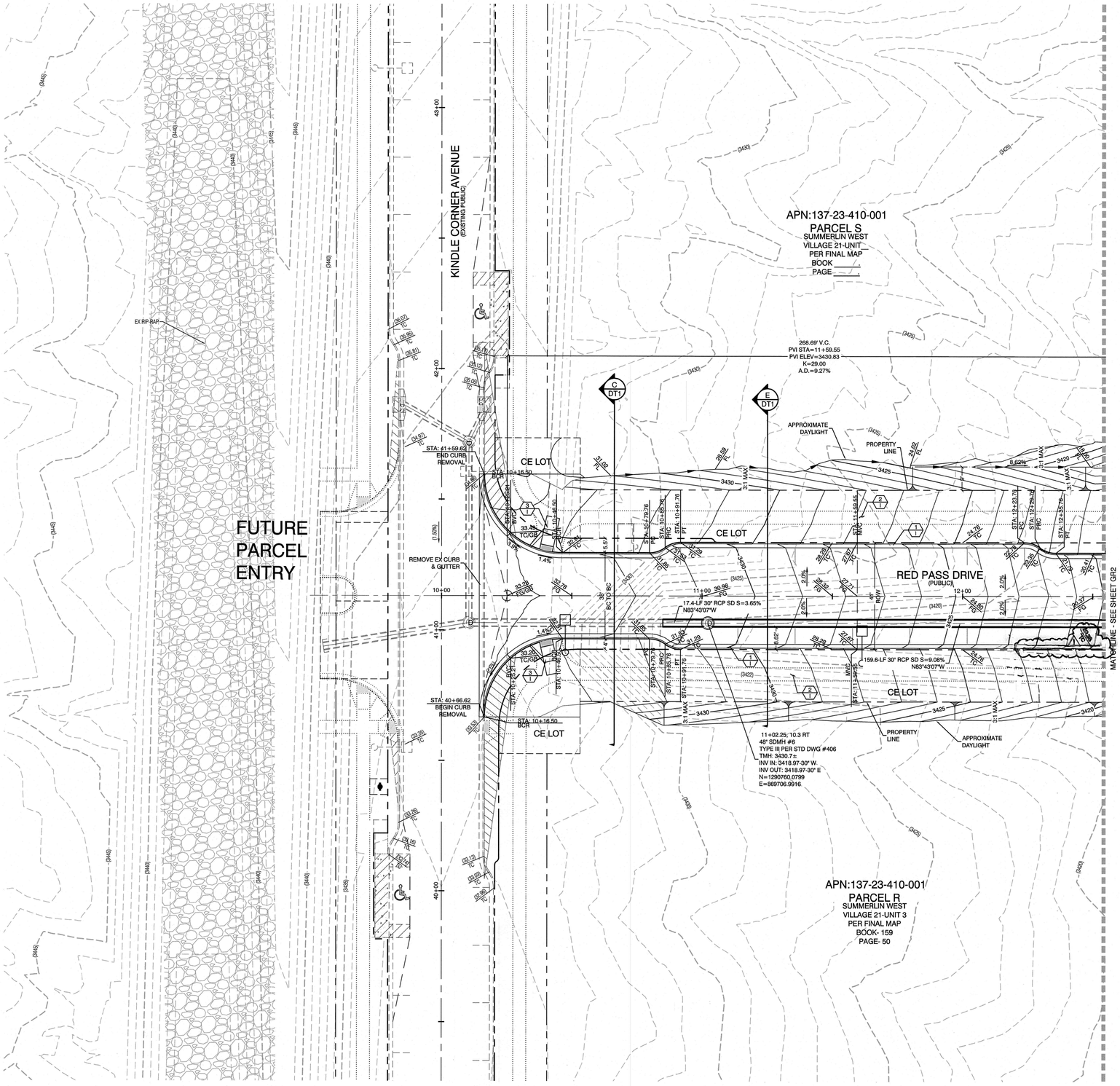
DRAWN BY: KDH	11/07/2018
DESIGNED BY: DBH	11/07/2018
CHECKED BY: WJM	10/01/2019
PROJECT NO: 7851	SCALE: N/A HORIZ. N/A VERT.

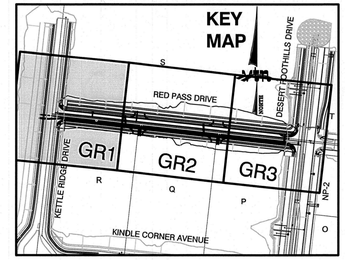
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
PROFESSIONAL ENGINEER STATE OF NEVADA
No. 15745
9/9/20

SHEET
MUTW
9 OF 29 SHEETS

DRAWING NO.
L19-01564
10747958

H:\7851\Street C-Desert Foothills to Street B\Sheet Set\7851-MUTW.dwg 4/3/2020 10:20 AM chrisp





GRAPHIC SCALE

-20 0 10 20 40

1" = 20'

OFFSITE FLOOD CONTROL NOTE:

ALL OFFSITE INTERIM FLOOD CONTROL FACILITIES SUCH AS BUT NOT LIMITED TO BERMS/DITCHES AND TEMPORARY SUMPS ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOWARD HUGHES COMPANY.

FLOOD ZONE NOTE

SITE IS LOCATED IN A SHADED ZONE X AS SHOWN IN FIRM MAP 32003C2215OE, DATED SEPTEMBER 27, 2002, A SHADED ZONE X IS DETERMINED TO BE OUTSIDE THE 2.0% ANNUAL CHANCE FLOODPLAIN, ENTIRE SITE BOUNDARY IS WITHIN ZONE X.

CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

CONSTRUCTION NOTES

1. CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
2. FUTURE SIDEWALK
3. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
4. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
5. FIELD VERIFY AND MATCH EXISTING

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

GRADING PERMIT NOTE

THIS GRADING PERMIT DOES NOT INCLUDE THE CONSTRUCTION OF RETAINING WALLS AND OTHERS STRUCTURES. SEPARATE PERMITS AND APPLICATIONS ARE REQUIRED FOR THESE.

GEOTECHNICAL NOTE:

REFER TO SOILS REPORT: NOVA GEOTECHNICAL PROJECT #G-18-003, DATED MARCH 5, 2018

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

SIGHT VISIBILITY ZONES:

NO STRUCTURE, WALLS, VEGETATION, OR OBJECT OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

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I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS5115

WILLIAM J MEYER, P.E. No. 15745 DATE 10/8/19

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:34:35-07'00'

PROFESSIONAL ENGINEER - STATE OF NEVADA - WILLIAM J. MEYER - Exp: 12/31/21 - CIVIL - 4/9/20

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR
1-800-227-2600 AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT CONDUITS. IT'S COSTLY.
Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
1-702-229-6811
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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

REV	DATE	BY	REVISION
1	11/25/19	JDH	ADJUST CURB EXTENSIONS

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
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CITY OF LAS VEGAS

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CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

GRADING PLAN 1

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	DESIGNED BY:	CHECKED BY:	PROJECT NO:	SCALE:	HORIZ:	VERT:
KDH	DEH	WJM	7951	N/A	N/A	
11/07/2018	11/07/2018	10/01/2019				

WILLIAM J. MEYER — EXP: 12/31/19 — CIVIL — STATE OF NEVADA — No. 15745
10/8/19

SHEET
GR1
10 OF **29** SHEETS

DRAWING NO.
L19-01564
107V7958

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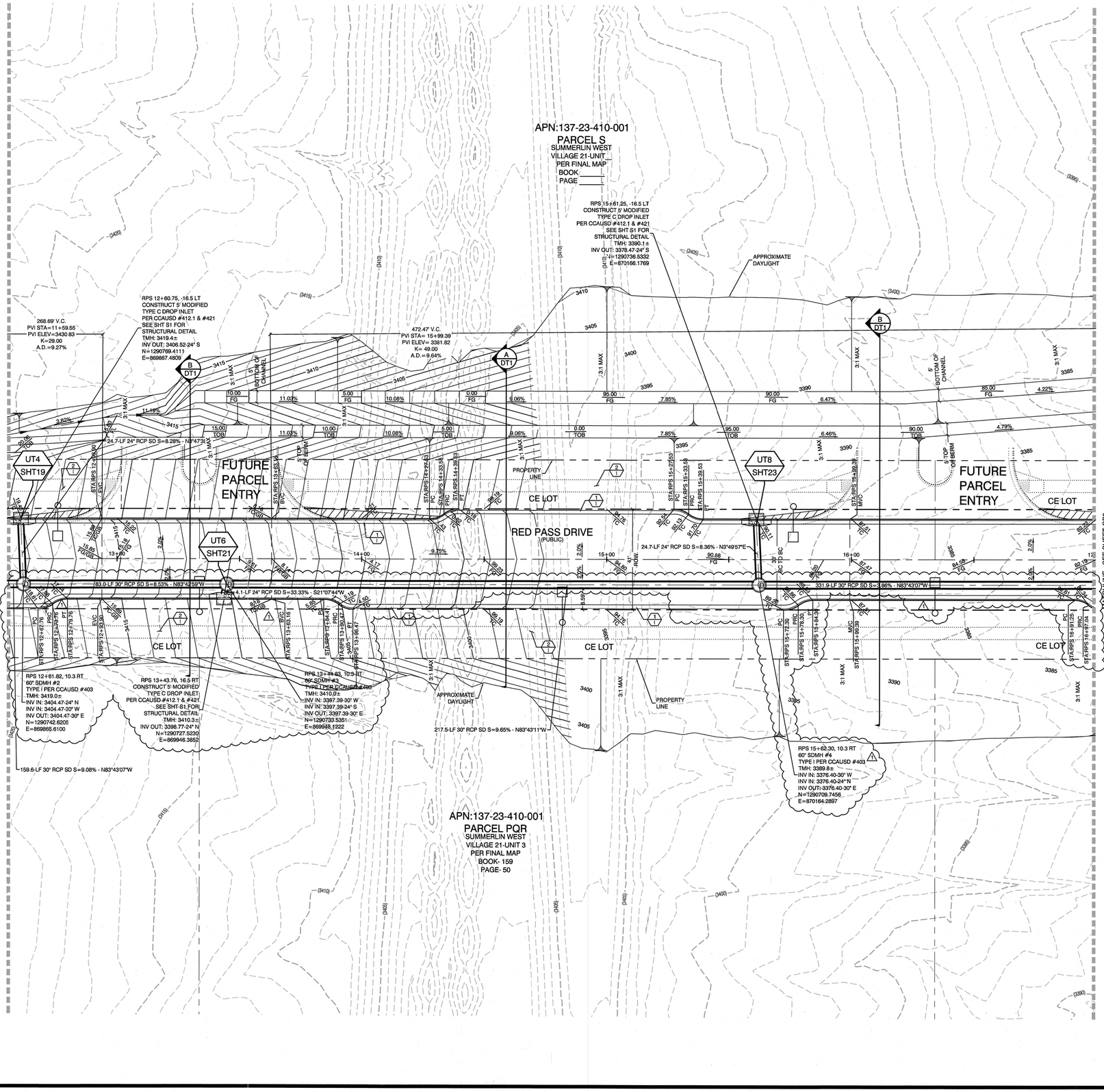

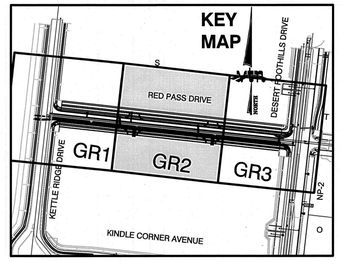

GRAPHIC SCALE

-20 0 10 20 40

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CONSTRUCTION NOTES

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2. FUTURE SIDEWALK
3. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
4. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
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BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
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FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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PROJECT #G-18-003, DATED MARCH 5, 2018

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BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

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STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

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WILLIAM J MEYER, P.E. No. 15745 DATE 9/9/20

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
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LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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1-702-227-2929

REV	DATE	BY	
1	11/15/2019	JDH	REMOVE PARCEL ENTRY; ADJUST CURB EXTENSIONS; RELOCATE SSDI; REMOVE SDMH; REDUCED 30" DIAMETER

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
djaerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10440 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

VTN
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2267 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

GRADING PLAN 2

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH	11/07/2018	SCALE:	N/A
DESIGNED BY: DEH	11/07/2018	HORIZ:	N/A
CHECKED BY: WJM	10/01/2019	VERT:	
PROJECT NO: 7851			

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
9/9/20

SHEET
GR2
11 OF 29 SHEETS

DRAWING NO.
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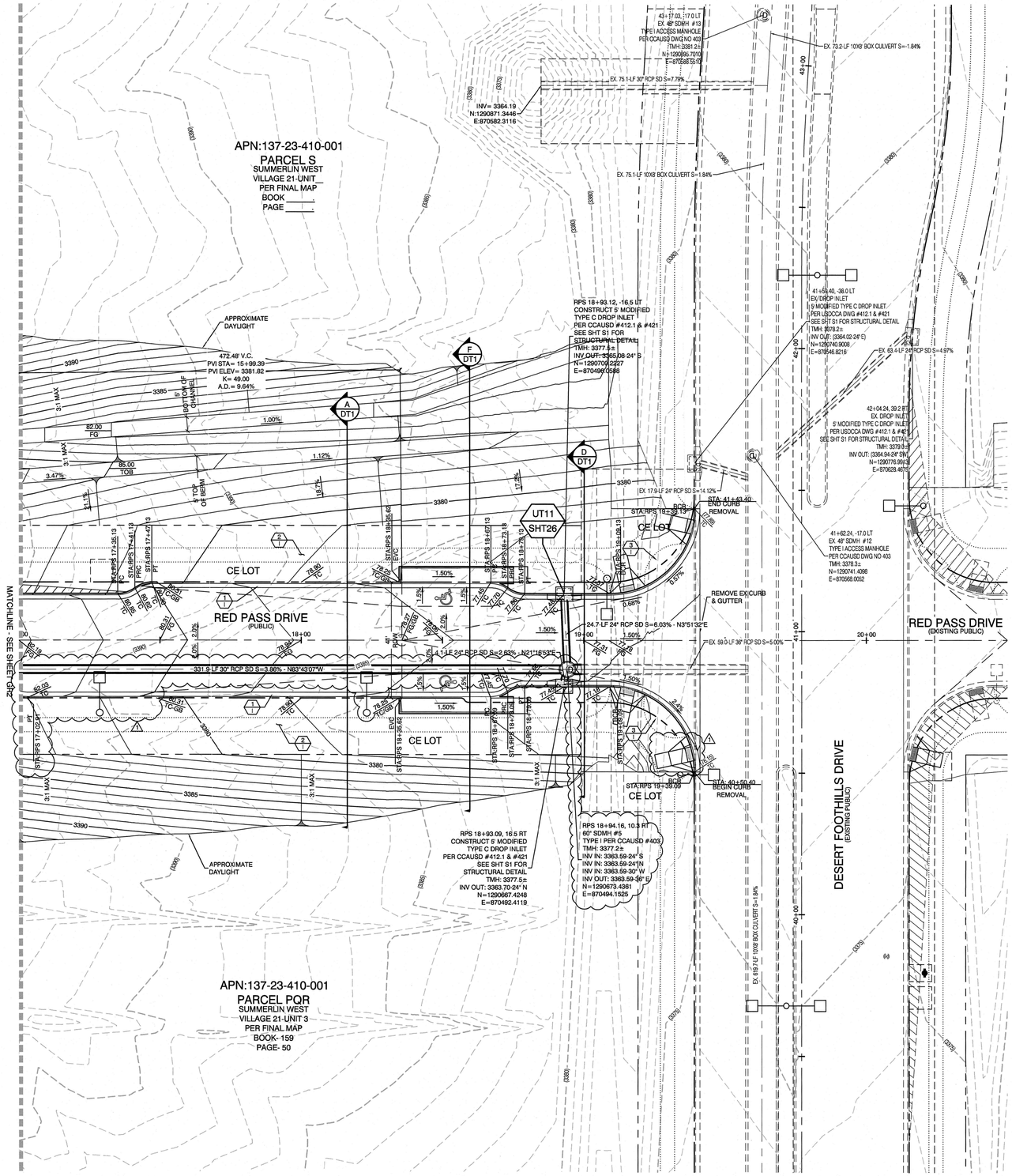

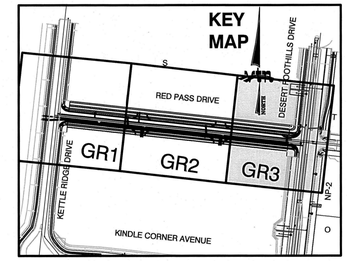



GRAPHIC SCALE

-20 0 10 20 40

1" = 20'

CONSTRUCTION NOTES

UT # / SHT #: UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
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CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

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2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:33:51-07'00'

OFFSITE FLOOD CONTROL NOTE:

ALL OFFSITE INTERIM FLOOD CONTROL FACILITIES SUCH AS BUT NOT LIMITED TO BERMS/DITCHES AND TEMPORARY SUMPS ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOWARD HUGHES COMPANY.

FLOOD ZONE NOTE

SITE IS LOCATED IN A SHADED ZONE X AS SHOWN IN FIRM MAP 32003C2215OE, DATED SEPTEMBER 27, 2002, A SHADED ZONE X IS DETERMINED TO BE OUTSIDE THE 2.0% ANNUAL CHANCE FLOODPLAIN, ENTIRE SITE BOUNDARY IS WITHIN ZONE X.

CONSTRUCTION NOTES

1. CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
2. FUTURE SIDEWALK
3. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
4. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER COASUD #500.5 & #503.
5. FIELD VERIFY AND MATCH EXISTING

GRADING PERMIT NOTE

THIS GRADING PERMIT DOES NOT INCLUDE THE CONSTRUCTION OF RETAINING WALLS AND OTHERS STRUCTURES. SEPARATE PERMITS AND APPLICATIONS ARE REQUIRED FOR THESE.

GEOTECHNICAL NOTE:

REFER TO SOILS REPORT: NOVA GEOTECHNICAL
PROJECT #G-18-003, DATED MARCH 5, 2018

SIGHT VISIBILITY ZONES:

NO STRUCTURE, WALLS, VEGETATION, OR OBJECT OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

ENGINEER DISCLAIMER NOTE:

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

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS5115

WILLIAM J MEYER, P.E. No. 15745 DATE 6/9/20

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600 AND 1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
Call before you Dig Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

REV	DATE	BY	REVISION
1	11/15/2019	JDH	ADJUST CURB EXPENSIONS; REVISE SDMH; REDUCED SD SIZE; ADD AND RELOCATE STREETLIGHTS; ADD SW RAMP

PLANS APPROVED LAND DEVELOPMENT BUILDING AND SAFETY DEPARTMENT LAS VEGAS, NEVADA dguerra Jan 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 382-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

GRADING PLAN 3

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KBH	11/07/2018	SCALE:	N/A HORIZ. N/A VERT.
DESIGNED BY: DBH	11/07/2018		
CHECKED BY: WJM	10/01/2019	PROJECT NO:	7851

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J MEYER
EXP: 12/31/21
CIVIL
No. 15745
6/9/20

SHEET
GR3
12 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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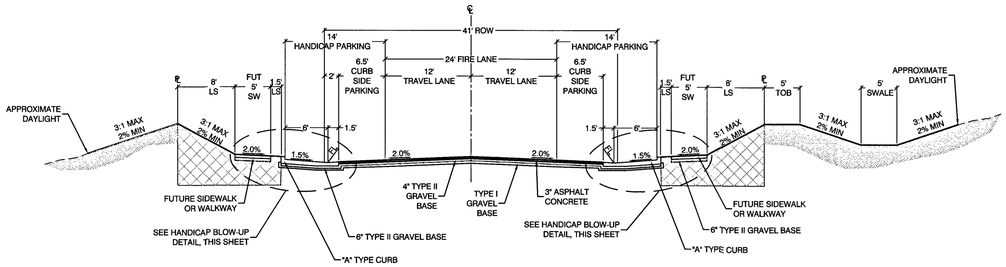
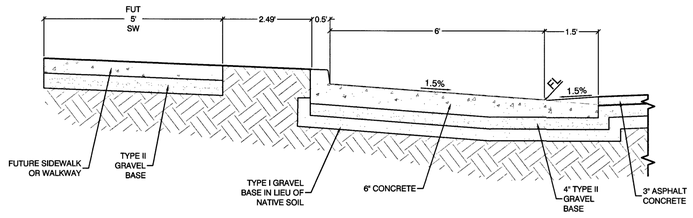
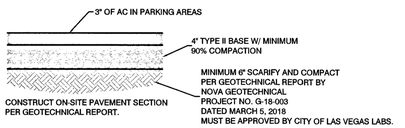


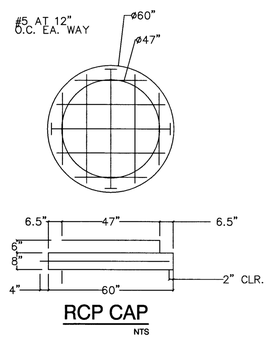
F RED PASS DRIVE
NTS



HANDICAP PARKING BLOW-UP
NTS



ON-SITE ASPHALT CONCRETE PAVEMENT SECTION
NTS



RCP CAP
NTS

Call before you Dig
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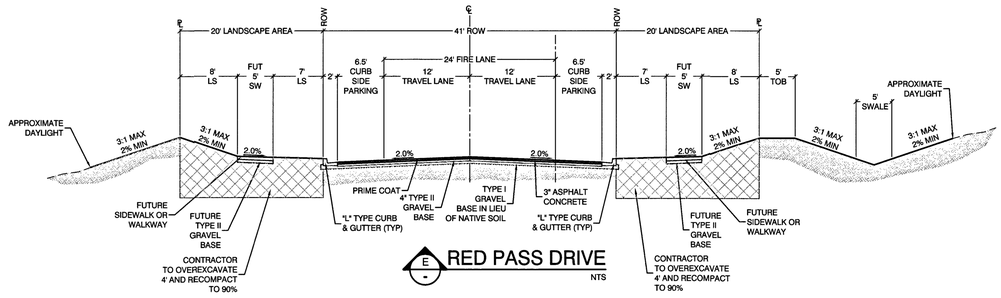
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS



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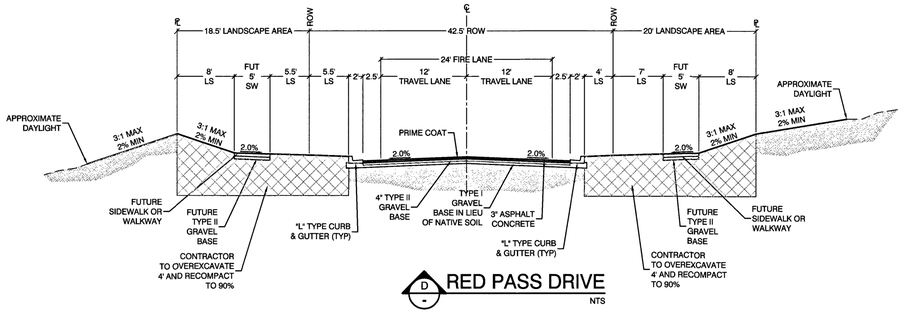
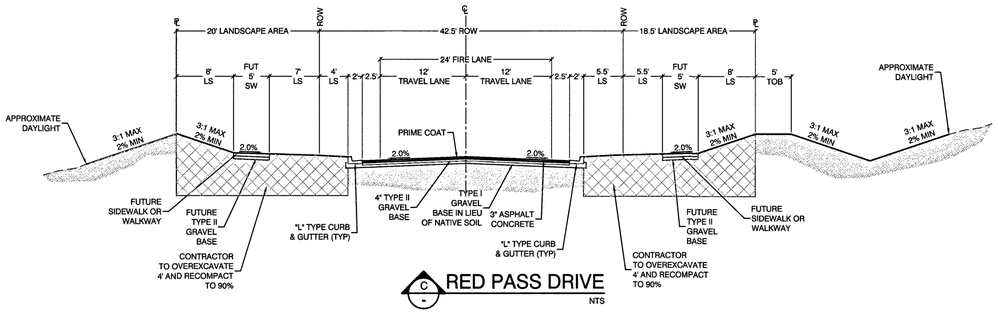
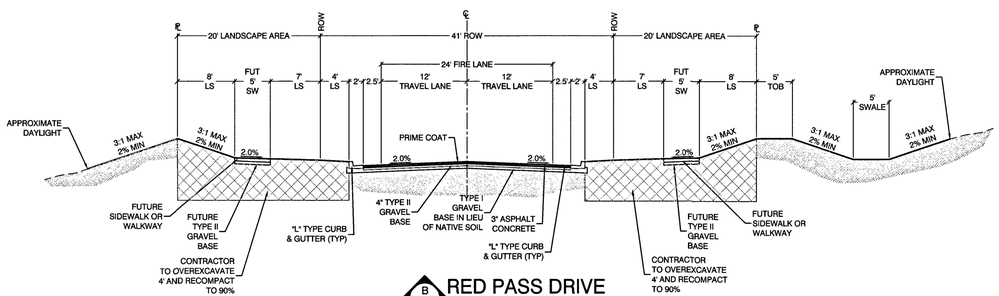
NTS



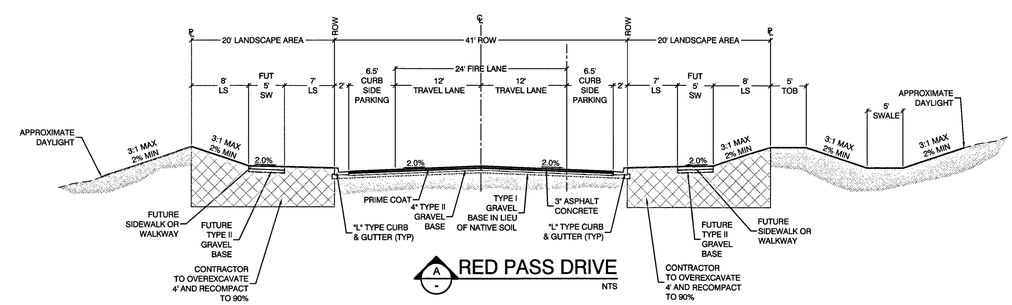
D RED PASS DRIVE
NTS



C RED PASS DRIVE
NTS



B RED PASS DRIVE
NTS



A RED PASS DRIVE
NTS

REV	DATE	BY	REVISION

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2697 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

DETAIL SHEET 1

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	DESIGNED BY:	CHECKED BY:	PROJECT NO:	SCALE:	
KDH	DEH	KMM	7851	N/A	HORIZ.
11/07/2018	11/07/2018	10/01/2019		N/A	VERT.

WILLIAM J. MEYER
EXP: 12/31/19
CIVIL
No. 15745
PROFESSIONAL ENGINEER STATE OF NEVADA
10/8/19

SHEET
DT1
13 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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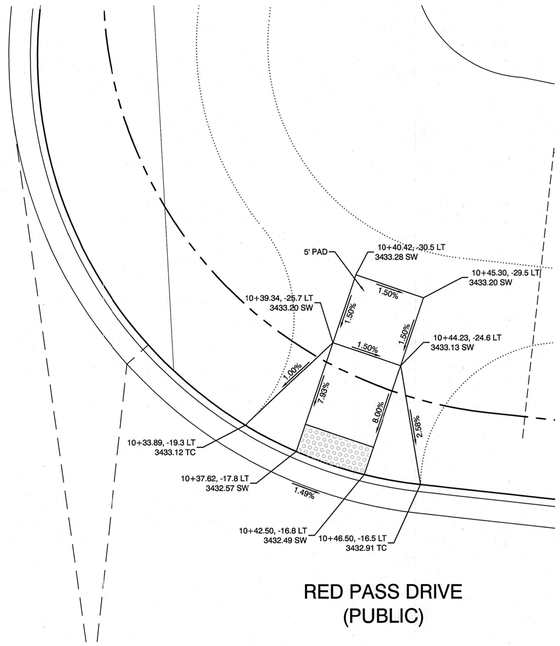
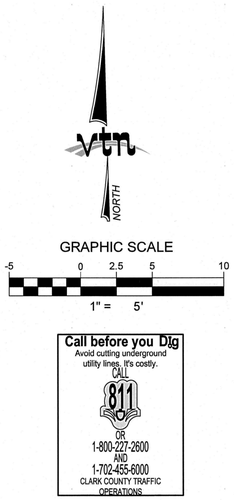
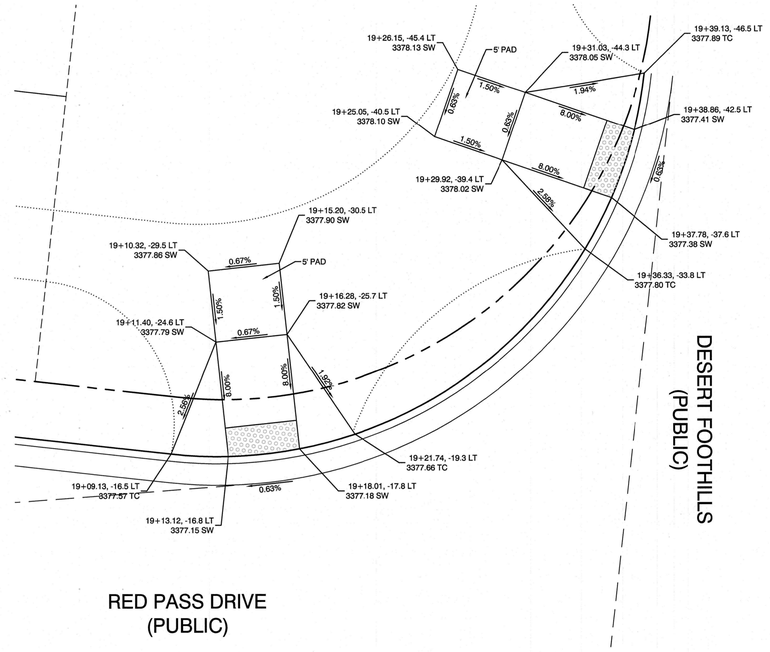


RED PASS DRIVE AND KETTLE RIDGE DRIVE HANDICAP RAMP NORTHEAST CORNER

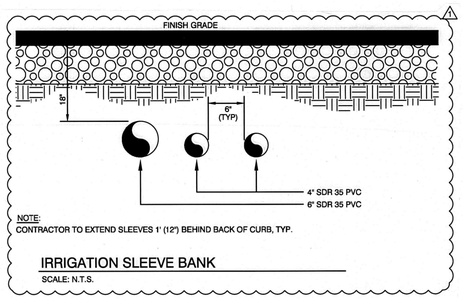
NTS

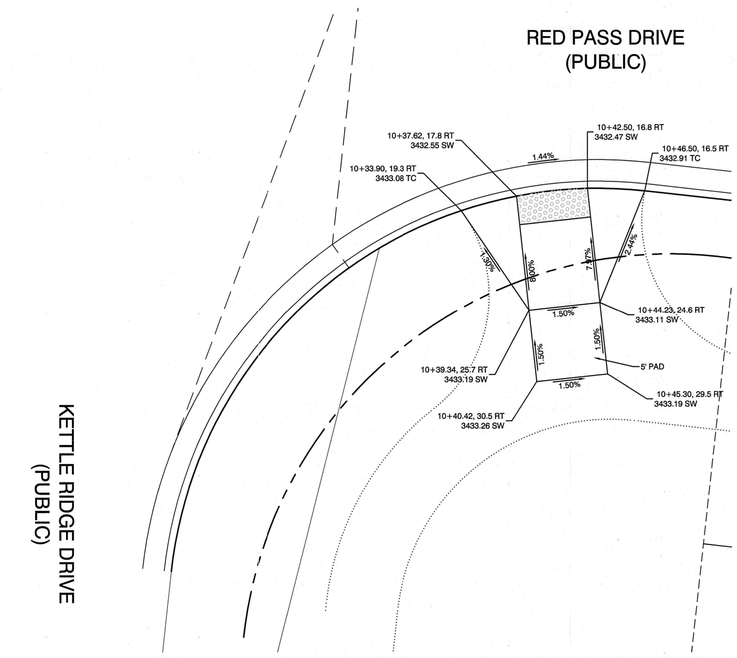




RED PASS DRIVE AND DESERT FOOTHILLS HANDICAP RAMP NORTHWEST CORNER

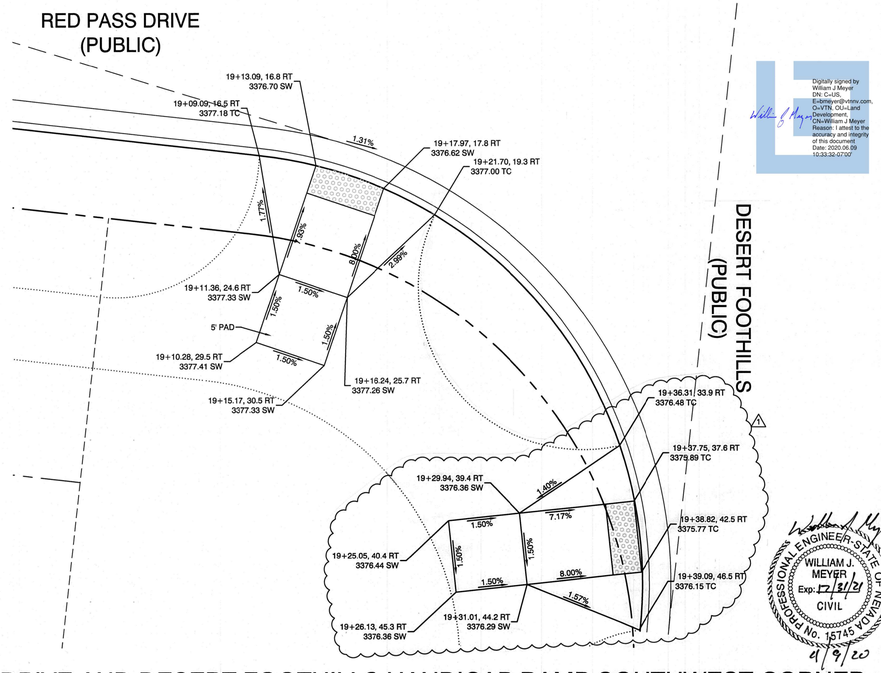
NTS





RED PASS DRIVE AND KETTLE RIDGE DRIVE HANDICAP RAMP SOUTHEAST CORNER

NTS



Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:33:32 -07'00'

RED PASS DRIVE AND DESERT FOOTHILLS HANDICAP RAMP SOUTHWEST CORNER

NTS

REV	DATE	BY	
1	10/10/2019	JDH	ADD SW RAMP AND IRRIGATION SLEEVE BANK DETAIL

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
9950 WEST CHEYENNE AVENUE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2697 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

DETAIL SHEET 2

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH	11/07/2018	SCALE:	1"=5'
DESIGNED BY: DSH	11/07/2018		N/A
CHECKED BY: WJM	10/01/2019		HORIZ. VERT.
PROJECT NO: 7951			

PROFESSIONAL ENGINEER-STATE OF NEVADA
WILLIAM J. MEYER
Exp: 12/31/19
CIVIL
No. 15745
10/8/19

PROFESSIONAL ENGINEER-STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/19
CIVIL
No. 15745
4/9/20

SHEET
DT2
14 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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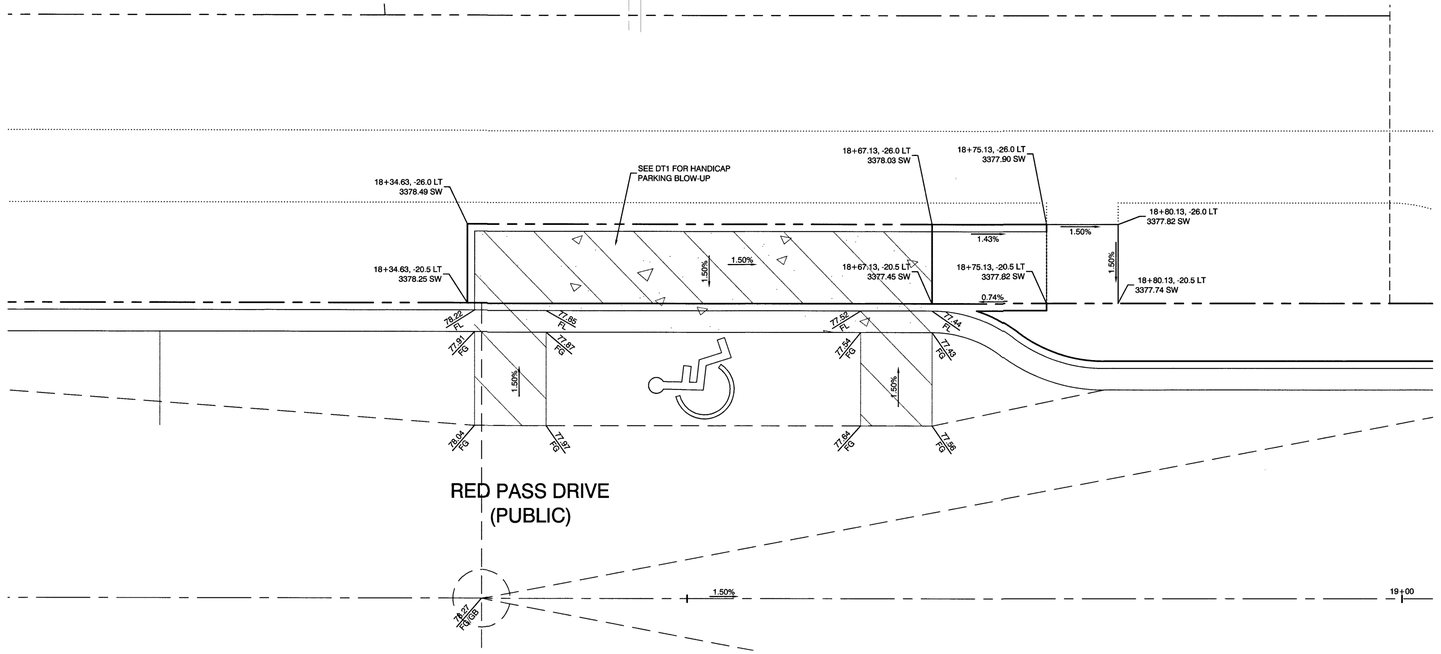
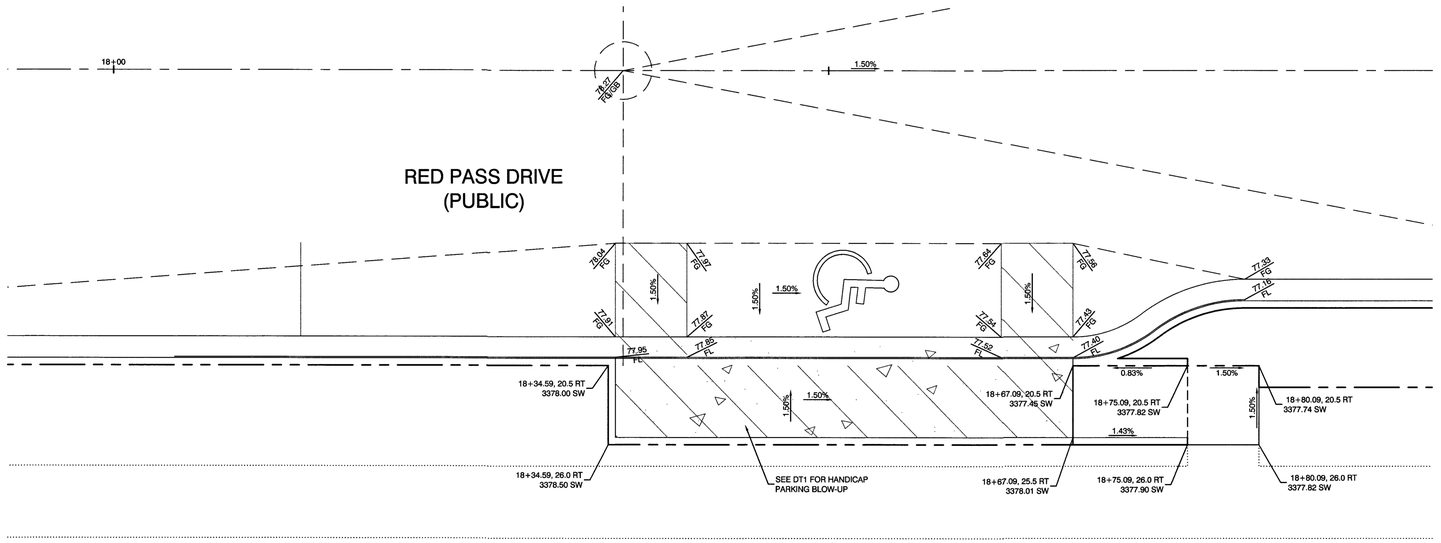


RED PASS DRIVE HANDICAP PARKING RAMP

NTS



RED PASS DRIVE HANDICAP PARKING RAMP

NTS

GRAPHIC SCALE

-5 0 2.5 5 10

1" = 5'

SIDEWALK RAMPS TABLE

(PER CCAUSD No. 235, CASE II)

NO.	DIM "A"	DIM "B"	CASE
1	4.5'	12'	II
2	4.5'	9.5'	II
3	8'	8'	II
4	9.5'	4.5'	II
5	12'	4.5'	II

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Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600 AND 1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

REV	DATE	BY	REVISION

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
(702) 207-4400

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2597 WEB WWW.VTNNV.COM
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DETAIL SHEET 3

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	DESIGNED BY:	CHECKED BY:	PROJECT NO:	SCALE:	HORIZ.
KDH 11/07/2018	DEH 11/07/2018	WJM 10/01/2019	7851	1"=5'	VERT. N/A

PROFESSIONAL ENGINEER · STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/19
CIVIL
No. 17745
10/8/19

SHEET
DT3
15 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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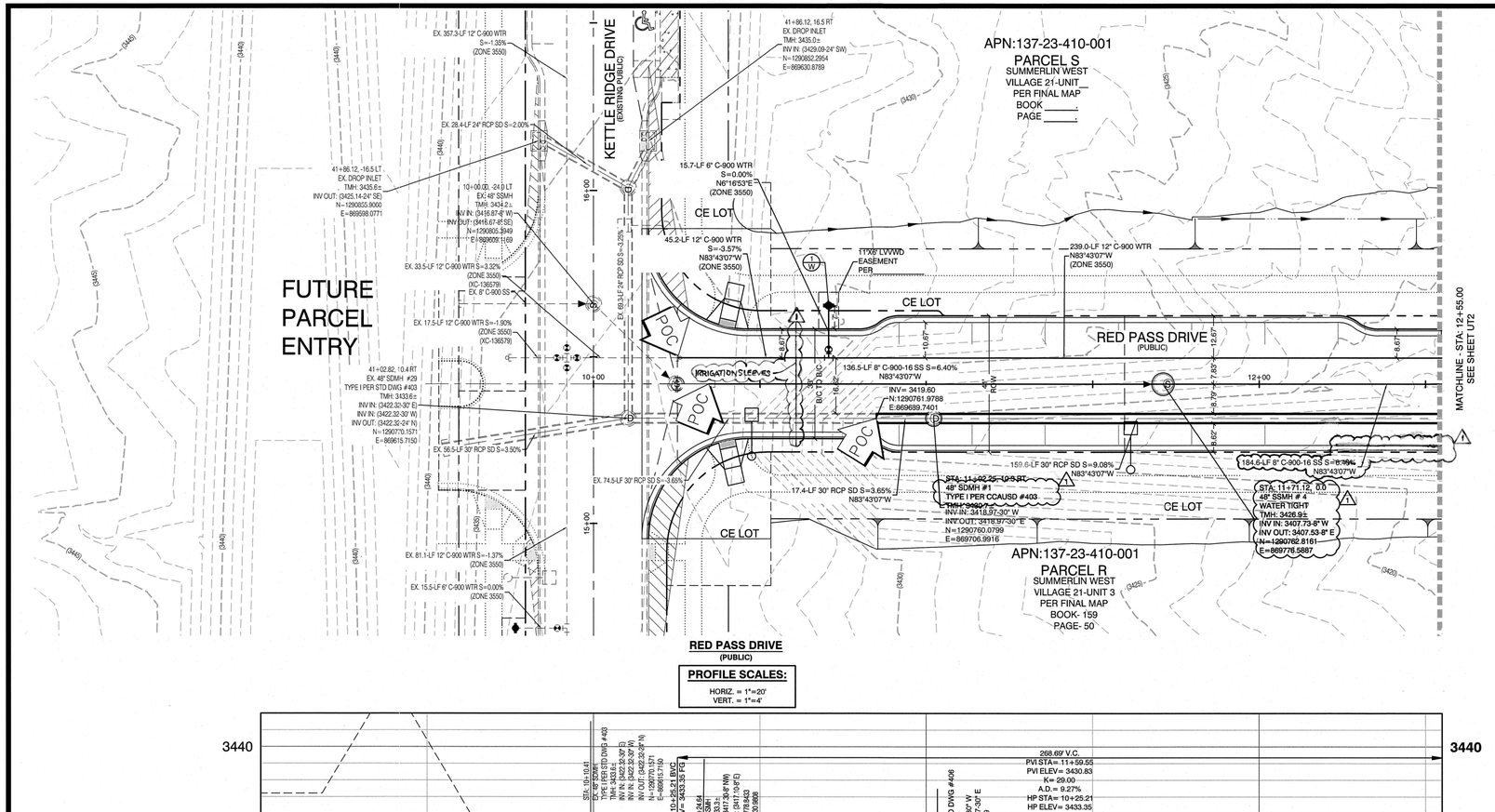


PROFILE SCALES:

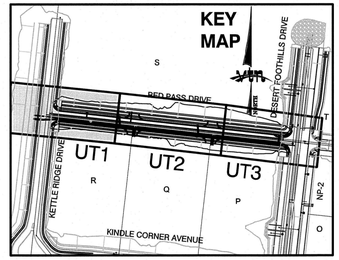
HORIZ. = 1"=20'
VERT. = 1"=4'



GRAPHIC SCALE

-20 0 10 20 40

1" = 20'



CONSTRUCTION NOTES

WATER		**PUBLIC**
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
2 W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	2 EA.
3 W	12"X12" TEE (PER UDACS PLATE 31)	1 EA
4 W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
W	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8	1 EA.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	16 LF.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	933 LF.
POC	WATER POINT OF CONNECTION	
SEWER		
S	STANDARD MANHOLE PER SD-1 & SD-3 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	4 EA.
	8" C-900-16 SANITARY SEWER MAIN	864 LF.
[	8" C-900-16 SANITARY SEWER MAIN CAP	0 EA.
POC	SEWER POINT OF CONNECTION	

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

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CLARK COUNTY TRAFFIC OPERATIONS

Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS AND
1-702-229-8611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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1-702-227-2929

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, OU=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:33:09-07'00'

PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
Exp: 12/31/20
CIVIL
No. 15745
4/8/20

CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:

ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:

CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE

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

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

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.

UTILITY CROSSING NOTE:

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ENGINEER DISCLAIMER NOTE:

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

LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: 10/10/19

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

GENERAL CONSTRUCTION NOTE:

THE FOLLOWING SEPARATE VILLAGE 21 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED GENERALLY ALL TOGETHER.
1. KINDLE CORNER (DESERT FOOTHILLS TO SUMMERLIN PARKWAY)
2. RED PASS (DESERT FOOTHILLS TO KINDLE CORNER)
3. DESERT FOOTHILLS (REDPOINT DRIVE TO SUMMERLIN PARKWAY)

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT: 136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

REV	DATE	BY
1	11/15/2019	JDH

ADJUST CURB EXTENSIONS, REVISE SDMH & SSMH; ADD IRR SLEEVES

REVISION

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2697 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 1
9+00.00 TO 12+55.00

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH	11/07/2018	CHECKED BY: WJM	10/01/2019
DESIGNED BY: DEH	11/07/2018	PROJECT NO: 7951	SCALE: 1"=20' HORIZ. 1"=4' VERT.

SHEET
UT1
16 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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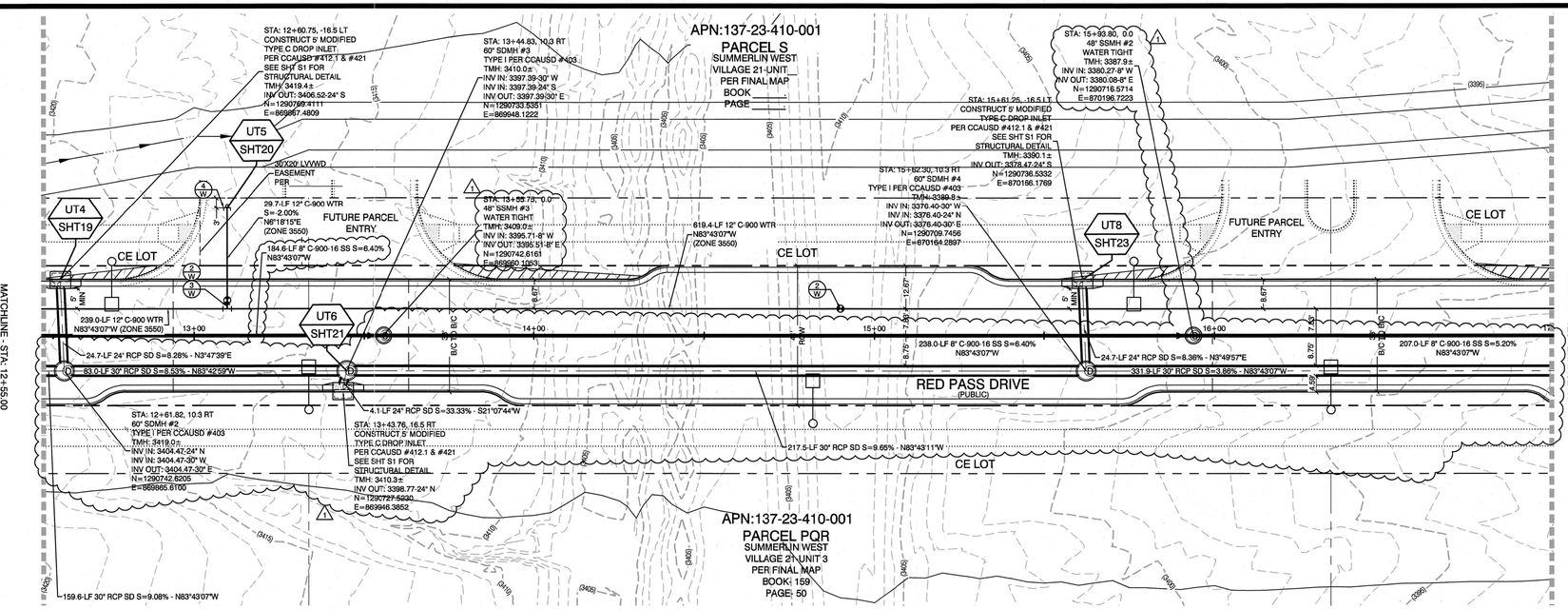
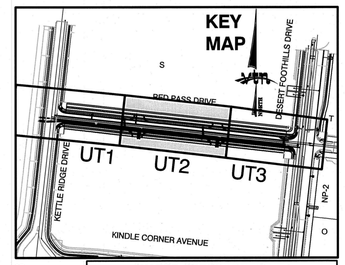




NORTH

GRAPHIC SCALE

-20 0 10 20 40

1" = 20'

CONSTRUCTION NOTES

WATER

		PUBLIC
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	2 EA.
W	12"X12" TEE (PER UDACS PLATE 31)	1 EA.
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
W	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8	1 EA.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	16 LF.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	933 LF.
POC	WATER POINT OF CONNECTION	

SEWER

S	STANDARD MANHOLE PER SD-1 & SD-3 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	4 EA.
	8" C-900-16 SANITARY SEWER MAIN	864 LF.
[	8" C-900-16 SANITARY SEWER MAIN CAP	0 EA.
POC	SEWER POINT OF CONNECTION	

CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
CENTRAL PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:

ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:

CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE

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

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

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.

UTILITY CROSSING NOTE:

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL. WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ENGINEER DISCLAIMER NOTE:

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

LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-227-2600
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

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

Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
1-702-229-6811
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

NOTE:
5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:32:48-07'00'

APPROVED FOR CONSTRUCTION

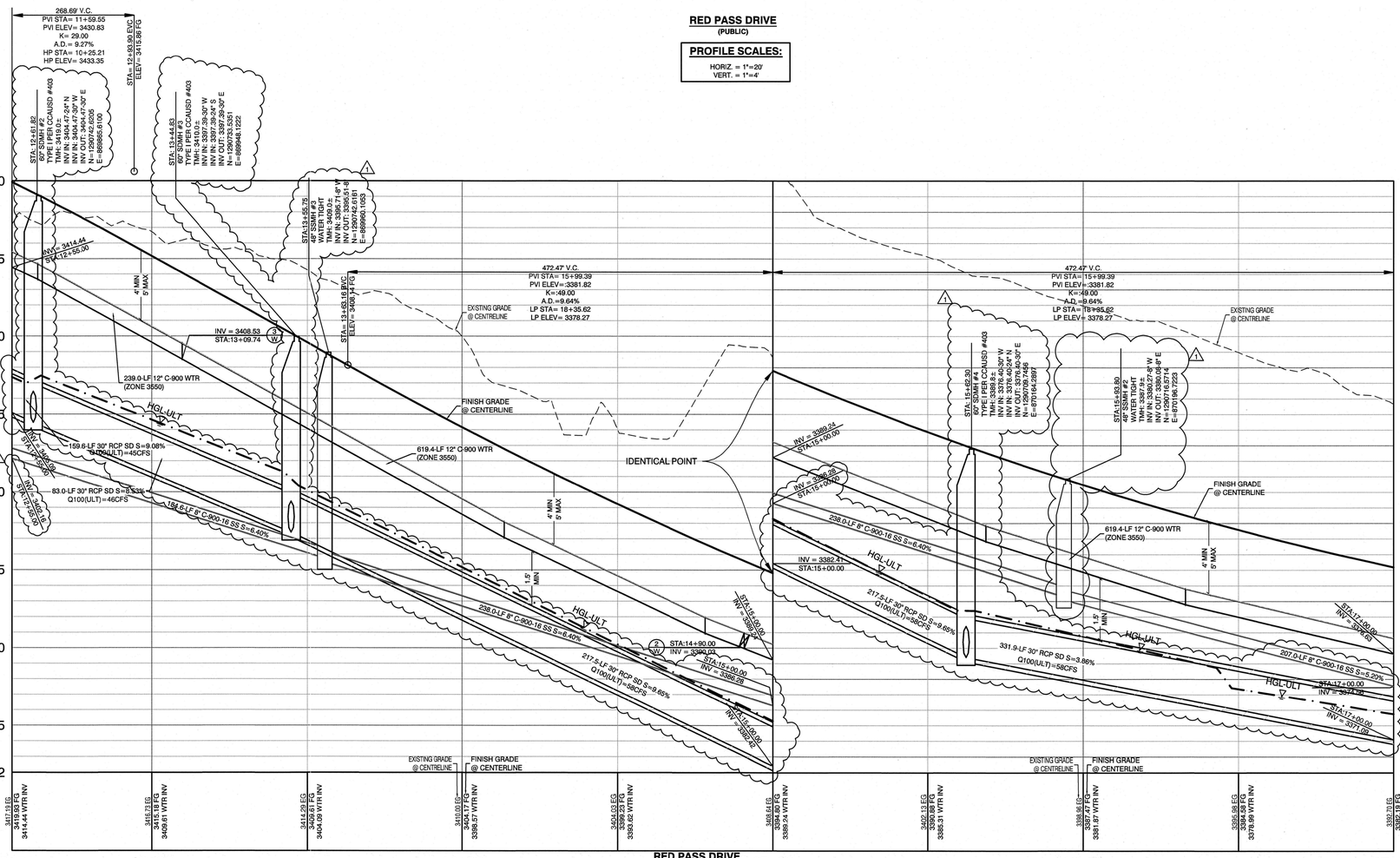
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

RED PASS DRIVE
(PUBLIC)

PROFILE SCALES:
HORIZ. = 1"=20'
VERT. = 1"=4'



REV	DATE	BY
1	11/15/2019	JDH

REMOVE PARCEL ENTRY & SDMH, RELOCATE & REV SSMHS; ADJUST CURB EXTENSIONS & ST L1 LOCATIONS; REDUCE SD DIAMETER; ADD SSDI

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
10845 GRIFFITH PEAK DRIVE, SUITE 150
LAS VEGAS, NEVADA 89135
702-791-4000

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CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 2
12+55.00 TO 17+00.00

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	KOH
DESIGNED BY:	DSH
CHECKED BY:	WJM
PROJECT NO:	7951
11/07/2018	
11/07/2018	
10/01/2019	
SCALE:	1"=20' HORIZ. 1"=4' VERT.

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15145
9/9/20

SHEET
UT2
17 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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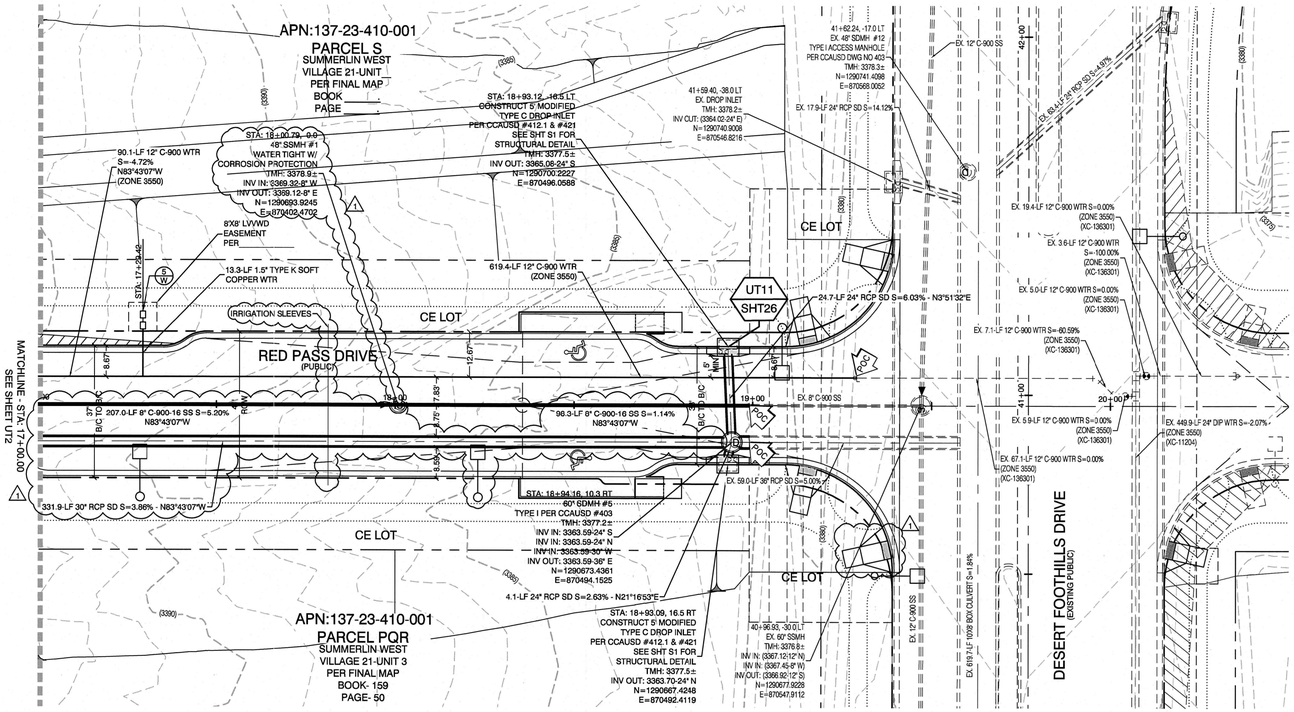
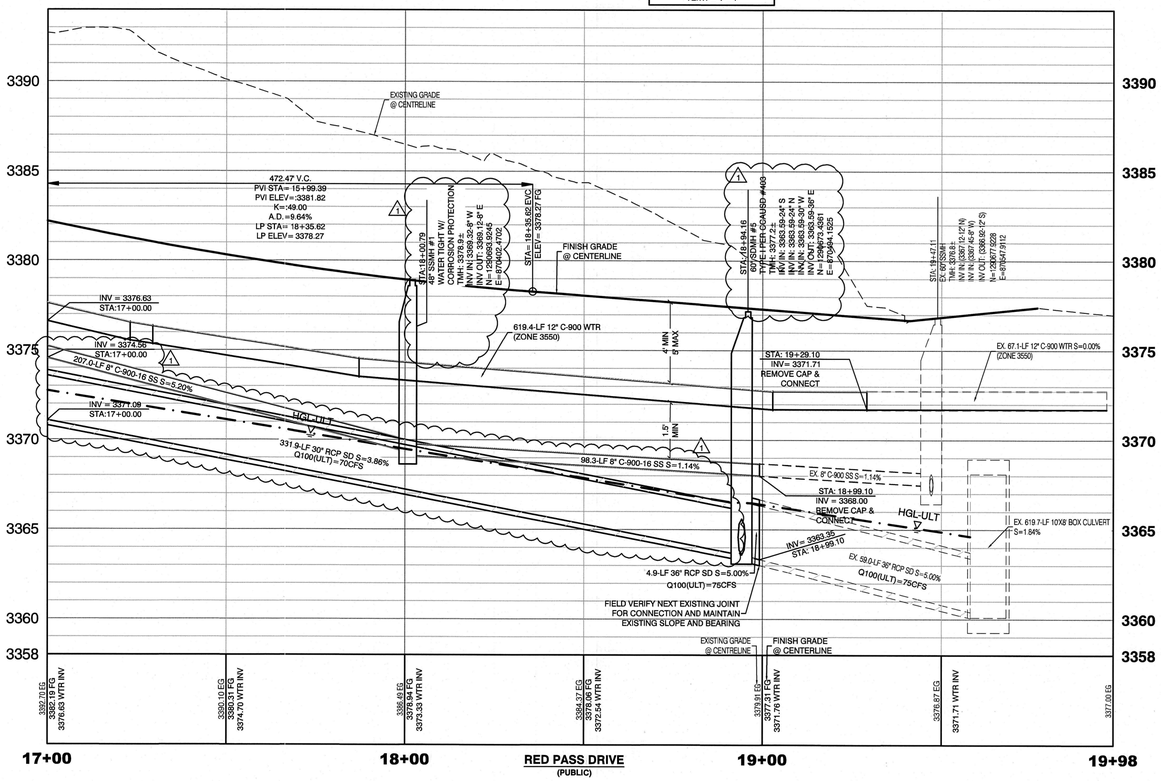
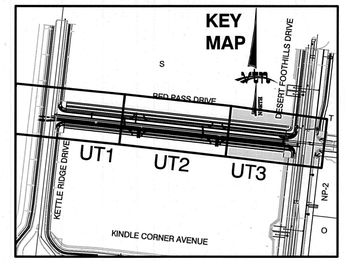


RED PASS DRIVE
(PUBLIC)

PROFILE SCALES:

HORIZ. = 1"=20'
VERT. = 1"=4'







GRAPHIC SCALE

-20 0 10 20 40

1" = 20'

CONSTRUCTION NOTES

	WATER	PUBLIC
	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
	12" GATE VALVE (PER UDACS PLATE 30 & 39)	2 EA.
	12"X12" TEE (PER UDACS PLATE 31)	1 EA
	12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #9	1 EA.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	16 LF.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	933 LF.
	WATER POINT OF CONNECTION	1

	SEWER	
	STANDARD MANHOLE PER SD-1 & SD-3 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	4 EA.
	8" C-900-16 SANITARY SEWER MAIN	864 LF.
	8" C-900-16 SANITARY SEWER MAIN CAP	0 EA.
	SEWER POINT OF CONNECTION	1

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

CONSTRUCTION NOTES

UT #
SHT #

UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:

ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:

CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE

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

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

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.

UTILITY CROSSING NOTE:

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ENGINEER DISCLAIMER NOTE:

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LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

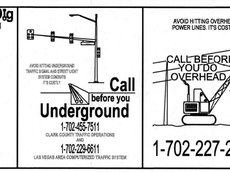
NOTE:

5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET

GENERAL CONSTRUCTION NOTE:

THE FOLLOWING SEPARATE VILLAGE 21 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED GENERALLY ALL TOGETHER.
1. KINDLE CORNER (DESERT FOOTHILLS TO SUMMERLIN PARKWAY)
2. RED PASS (DESERT FOOTHILLS TO KINDLE CORNER)
3. DESERT FOOTHILLS (REDPOINT DRIVE TO SUMMERLIN PARKWAY)

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600 AND 1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES — 5/27/2020

PROJECT 186795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:30:27-07'00'

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

REV	DATE	BY	
1	11/15/2019	JDH	ADJUST CURB EXTENSIONS; REDUCE SD SIZE, UPDATE SSMHS; ADD AND RELOCATE STREETLIGHTS; ADD SW RAMP & IRRIGATION SLEEVES

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 3
17+00.00 TO 20+50.00

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	KDH
DESIGNED BY:	DEH
CHECKED BY:	WJM
PROJECT NO:	7851
DATE	11/07/2018
DATE	11/07/2018
DATE	10/01/2019
SCALE:	1"=20' HORIZ. 1"=4' VERT.

WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
STATE OF NEVADA
PROFESSIONAL ENGINEER
1/9/20

SHEET
UT3
18 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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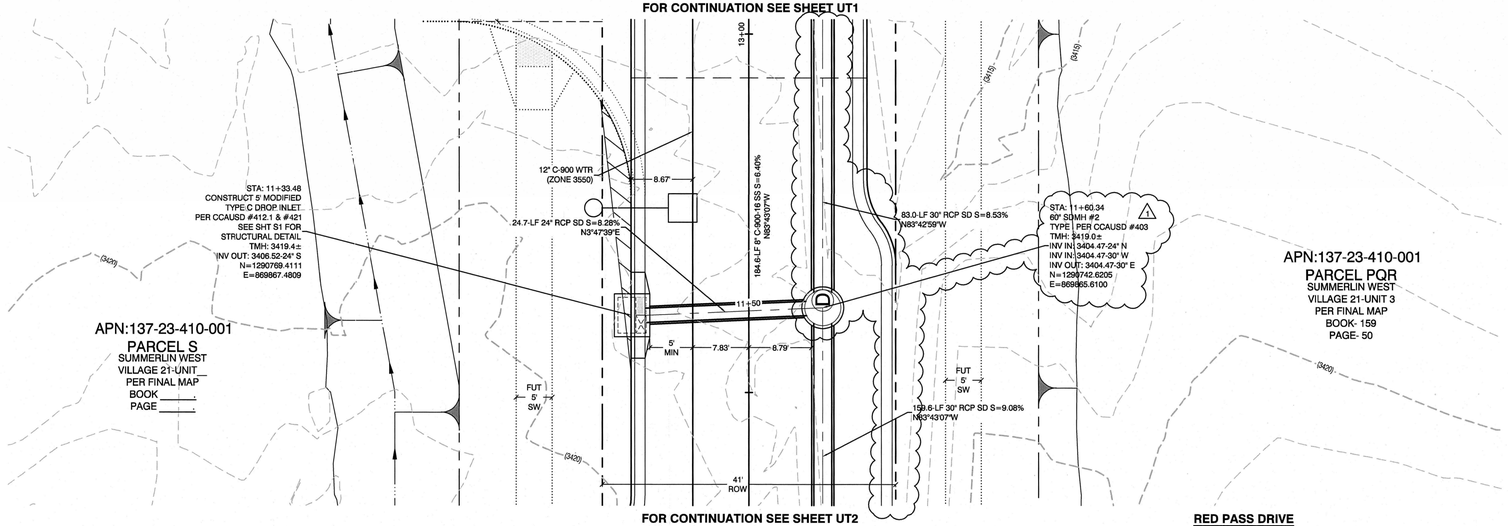
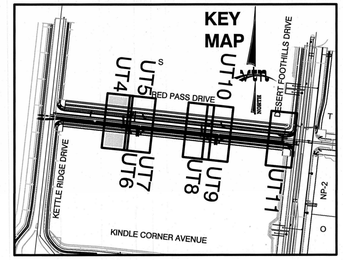


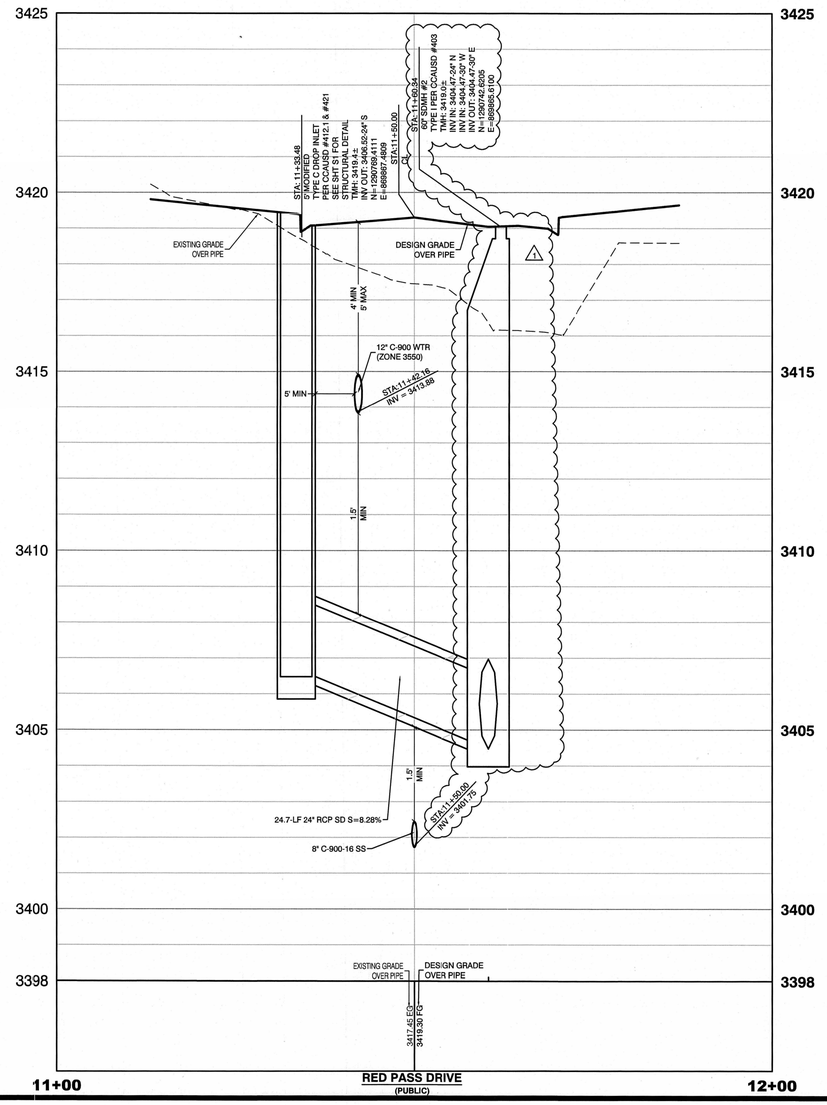




GRAPHIC SCALE

-10 0 5 10 20

1" = 10'



RED PASS DRIVE
(PUBLIC)

PROFILE SCALES:
HORIZ. = 1"=10'
VERT. = 1"=4'

CONSTRUCTION NOTES

	WATER	PUBLIC
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	2 EA.
W	12"X12" TEE (PER UDACS PLATE 31)	1 EA
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
W	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8	1 EA.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	16 LF. (1)
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	933 LF.
POC	WATER POINT OF CONNECTION	

	SEWER	
S	STANDARD MANHOLE PER SD-1 & SD-3 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	4 EA. (1)
	8" C-900-16 SANITARY SEWER MAIN	864 LF.
	8" C-900-16 SANITARY SEWER MAIN CAP	6 EA.
POC	SEWER POINT OF CONNECTION	

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,SC3

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR
1-800-227-2600
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS



WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 15

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
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.

UTILITY CROSSING NOTE:
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LAS VEGAS FIRE & RESCUE APPROVAL
BY: _____ DATE: _____

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

NOTE:
5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:32:00-07'00'

APPROVED FOR CONSTRUCTION 1

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES 5/27/2020

PROJECT: 136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

REV	DATE	BY	REVISION
1	11/15/2019	JDH	REMOVE SSDI, ADJUST CURB EXTENSIONS, REDUCED SD DIAMETER

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2757 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX: (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 4
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: DEH
DESIGNED BY: DEH
CHECKED BY: WJM
PROJECT NO: 7951
SCALE: 1"=10' HORIZ. 1"=4' VERT.
11/07/2018
11/07/2018
10/01/2019

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
9/9/20

SHEET
UT4
19 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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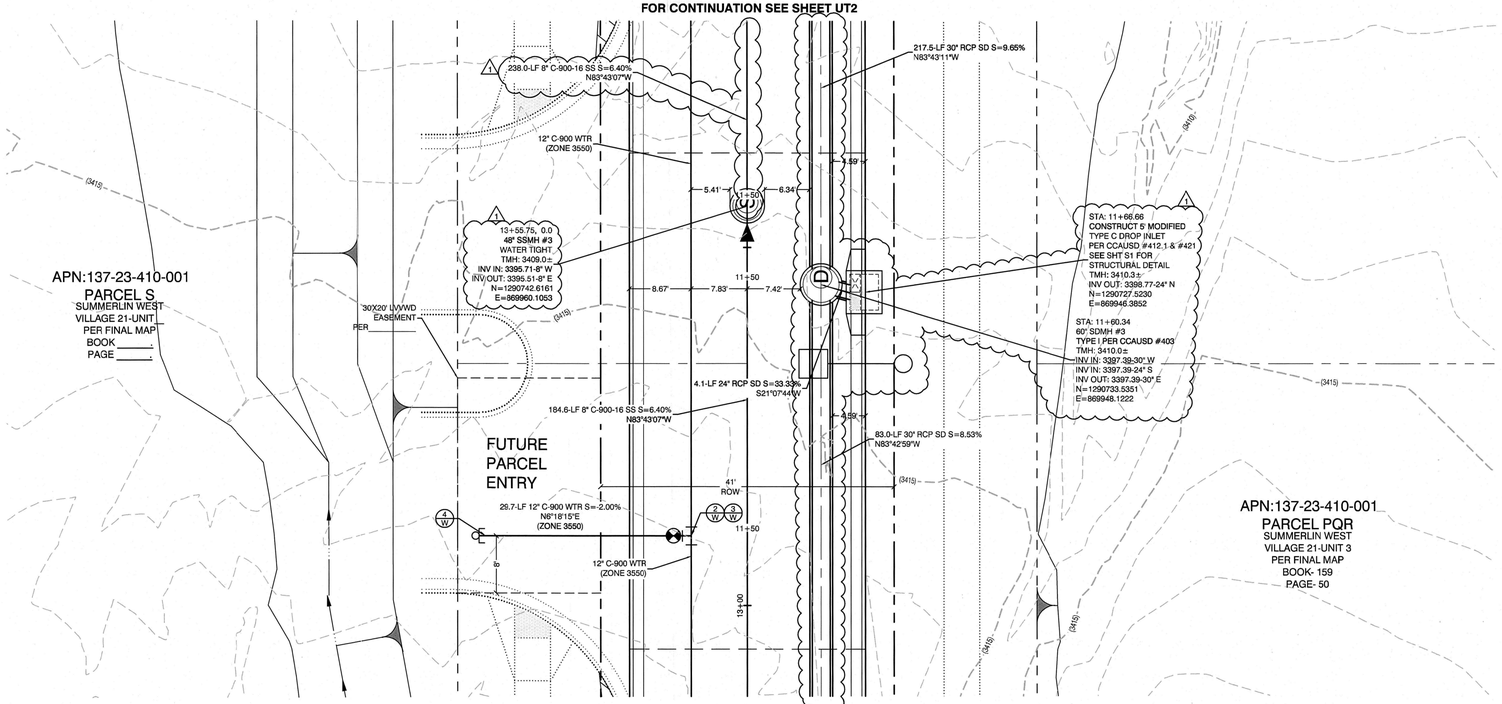
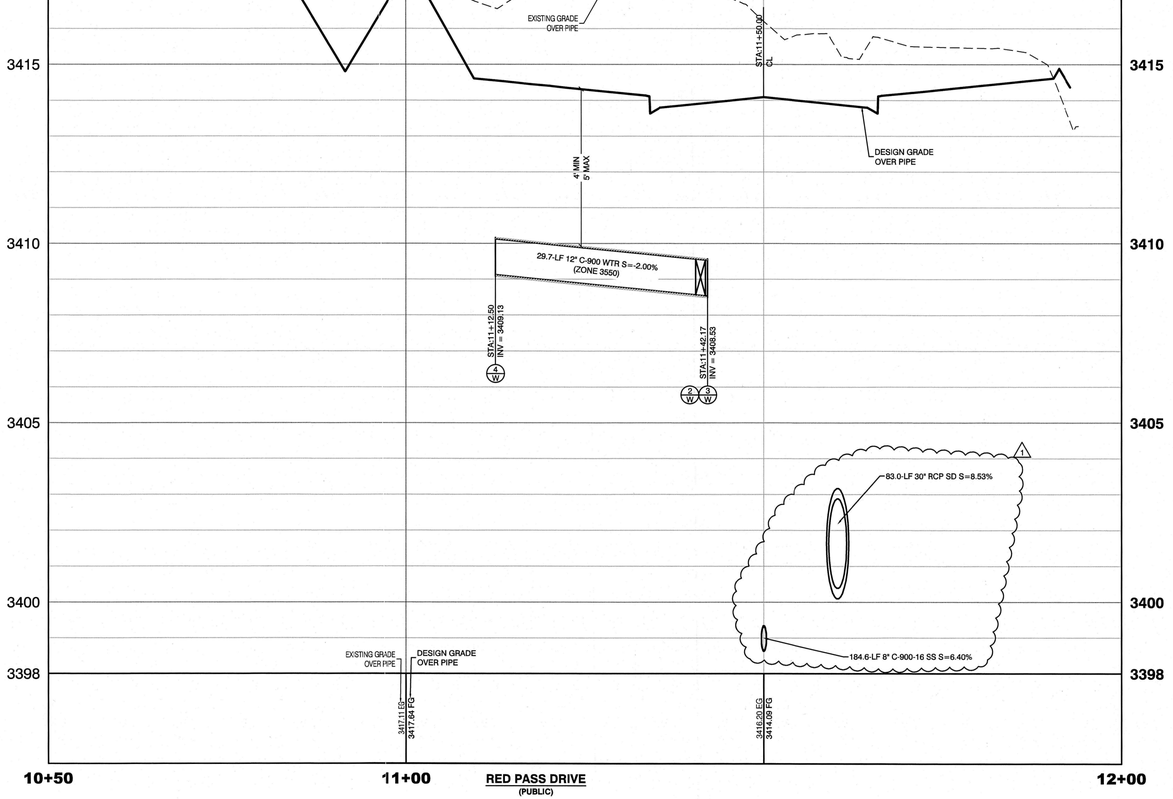
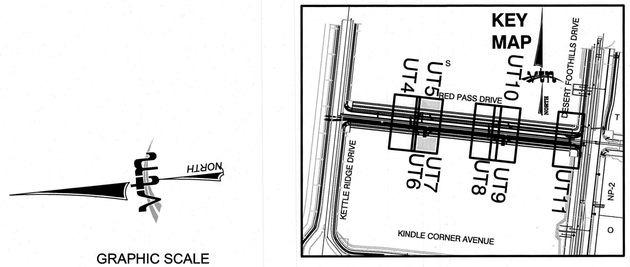


FOR CONTINUATION SEE SHEET UT2

RED PASS DRIVE
(PUBLIC)

PROFILE SCALES:
HORIZ. = 1"=10'
VERT. = 1"=4'





GRAPHIC SCALE

-10 0 5 10 20

1" = 10'

CONSTRUCTION NOTES

	WATER	PUBLIC
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	2 EA.
W	12"X12" TEE (PER UDACS PLATE 31)	1 EA
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
W	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8	1 EA.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	16 LF.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	933 LF.
POC	WATER POINT OF CONNECTION	

	SEWER	
S	STANDARD MANHOLE PER SD-1 & SD-3 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	4 EA.
	8" C-900-16 SANITARY SEWER MAIN	864 LF.
	8" C-900-16 SANITARY SEWER MAIN CAP	0 EA.
POC	SEWER POINT OF CONNECTION	

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
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SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

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Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-227-2600
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT CONDUIT WITH AUGERS
Call before you Dig Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
1-702-229-6811
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 15

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BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
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LAS VEGAS FIRE & RESCUE APPROVAL
BY: _____ DATE: _____.
APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:31:35-07'00'

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136795 FIRST APPROVED DATE: 11/14/19.

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

REV	DATE	BY	REVISION
1	11/15/2019	JDH	REMOVE PADS, ENTRY, ADDED SSDO, ADJUST SIL'T, REDUCED SD DIAMETER, REVISE SSMH

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
(702) 791-4000

CITY OF LAS VEGAS

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CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 5 WATER LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH	11/07/2018	SCALE: 1"=10' HORZ. 1"=4' VERT.
DESIGNED BY: DEH	11/07/2018	
CHECKED BY: WJM	10/01/2019	
PROJECT NO: 7851		

PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
4/2/20

SHEET
UT5
20 OF **29** SHEETS

DRAWING NO.
L19-01564
107V7958

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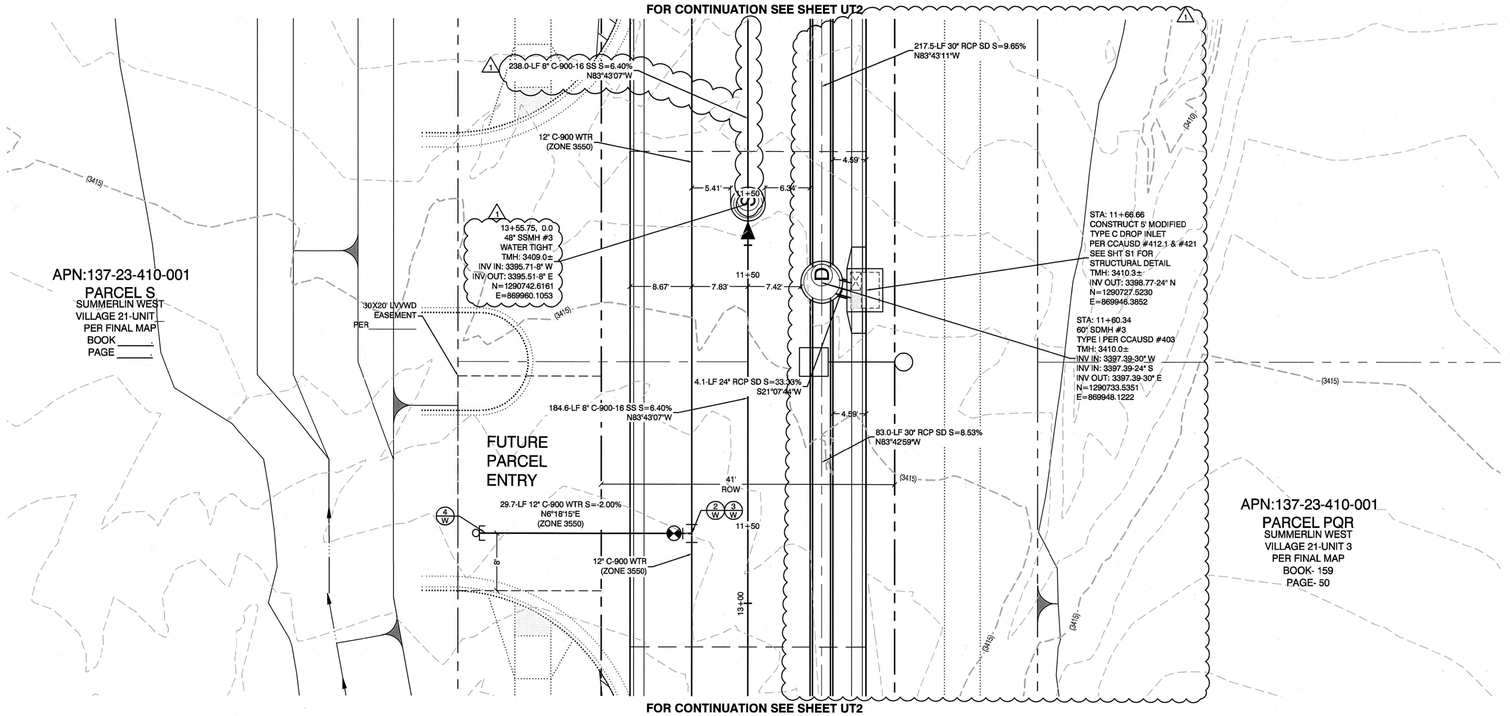

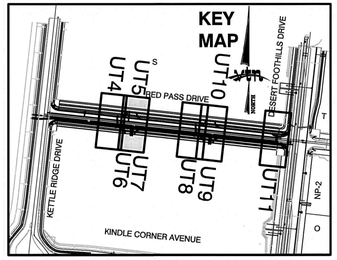

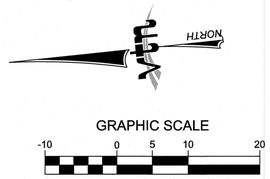

CONSTRUCTION NOTES

	WATER	PUBLIC
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CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

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LAS VEGAS FIRE & RESCUE APPROVAL
BY: _____ DATE: _____
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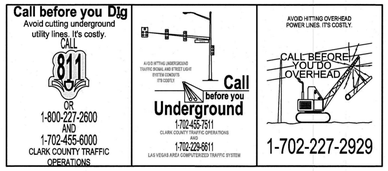


APPROVED FOR CONSTRUCTION

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, OU=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:31:07-07'00'

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES — 5/27/2020

PROJECT: 136795 FIRST APPROVED DATE: 11/19/2019

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

REV	DATE	BY	
1	11/15/2019	JDH	REMOVE PARCEL ENTRY, ADDED SSDO, ADJUST SITLT, REDUCED SD DIAMETER, REVISE SSMH

PLANS APPROVED LAND DEVELOPMENT BUILDING AND SAFETY DEPARTMENT LAS VEGAS, NEVADA jtguerra Jan 10 2020

CITY OF LAS VEGAS

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 150
LAS VEGAS, NEVADA 89135
702-791-4000

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5149
PH. (702) 873-7550 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 6
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	KDH
DESIGNED BY:	DEH
CHECKED BY:	WJM
PROJECT NO:	7951
11/07/2018	
11/07/2018	
10/01/2019	
SCALE:	1"=10' HORIZ. 1"=4' VERT.

WILLIAM J. MEYER — PROFESSIONAL ENGINEER — STATE OF NEVADA — No. 15795 — EXP: 12/31/21 — CIVIL

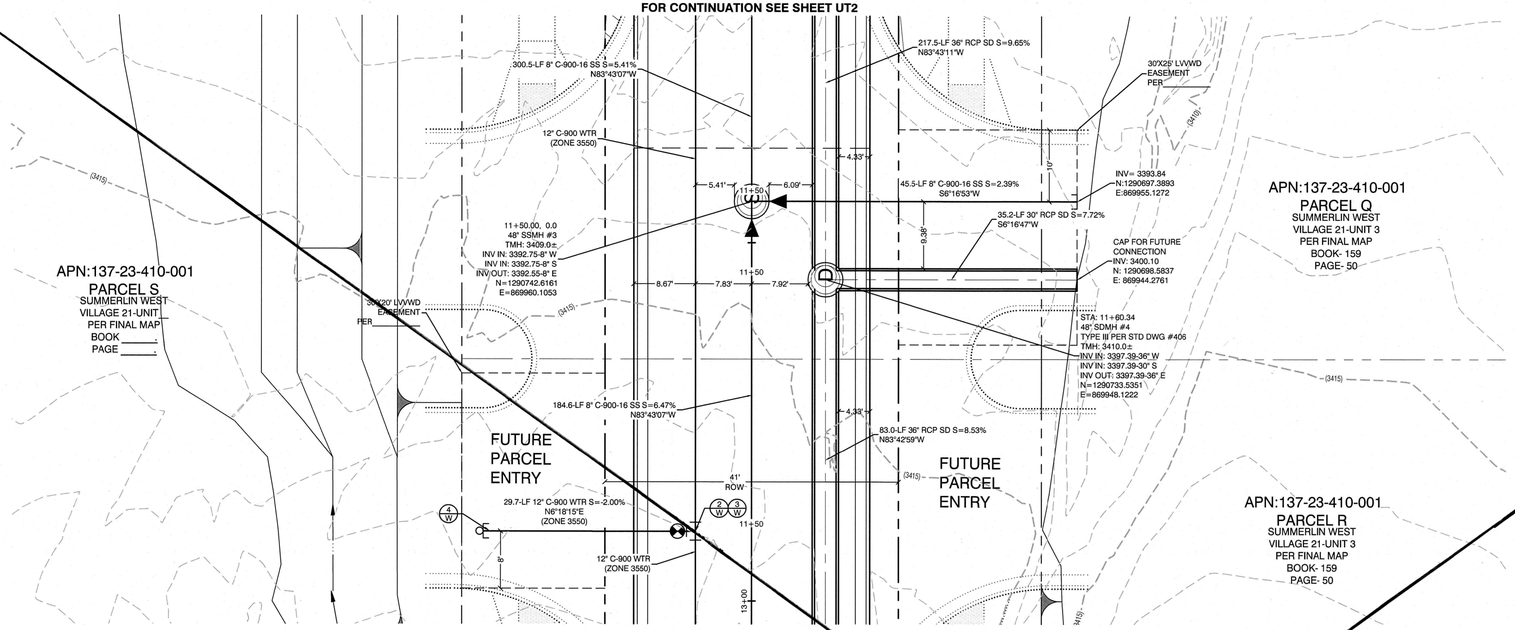
1/9/20

SHEET
UT6
21 OF 29 SHEETS

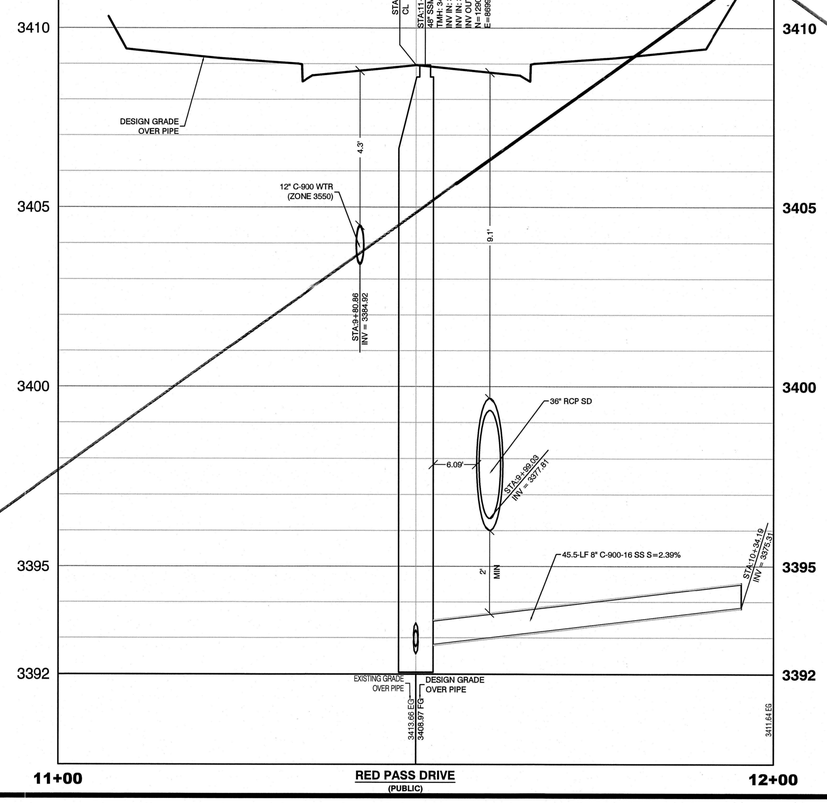
DRAWING NO.
L19-01564
107V7958

H:\7951\Street C-Desert Foothills to Street B\Sheet Set\7951-UT-LAT.dwg-4/7/2020 10:31 AM\campbell

FOR CONTINUATION SEE SHEET UT2



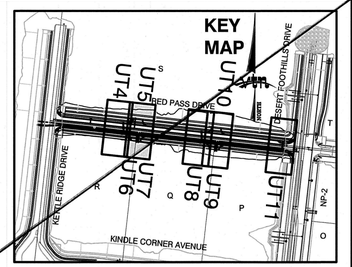
FOR CONTINUATION SEE SHEET UT2



PROFILE SCALES:

HORIZ. = 1"=10'
VERT. = 1"=4'





CONSTRUCTION NOTES

	WATER	PUBLIC
1W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
2W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	2 EA.
3W	12"X12" TEE (PER UDACS PLATE 31)	1 EA
4W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
5W	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8	1 EA.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	17 LF.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	941 LF.
POC	WATER POINT OF CONNECTION	

	SEWER	
S	STANDARD MANHOLE PER SD-1 & SD-3 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	3 EA.
	8" C-900-16 SANITARY SEWER MAIN	947 LF.
[	8" C-900-16 SANITARY SEWER MAIN CAP	2 EA.
POC	SEWER POINT OF CONNECTION	

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:

ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:

CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE

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

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

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.

UTILITY CROSSING NOTE:

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ENGINEER DISCLAIMER NOTE:

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LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: 10/10/19

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-227-2600
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEM CONDUITS IT'S COSTLY

Call before you Underground
1-702-455-1511
CLARK COUNTY TRAFFIC OPERATIONS
1-702-229-6811
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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

PROFESSIONAL ENGINEER-STATE OF NEVADA
WILLIAM J. MEYER
Exp:
CIVIL
No. 15745

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT: 136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

REV	DATE	BY	REVISION

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 600
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2697 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 7
SANITARY SEWER LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	DESIGNED BY:	CHECKED BY:	PROJECT NO:
KDH	DEH	WJM	7951
11/07/2018	11/07/2018	10/01/2019	SCALE: HORIZ. 1"=10' VERT. 1"=4'

PROFESSIONAL ENGINEER-STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/19
CIVIL
No. 15745
10/8/19

SHEET
UT7
22 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

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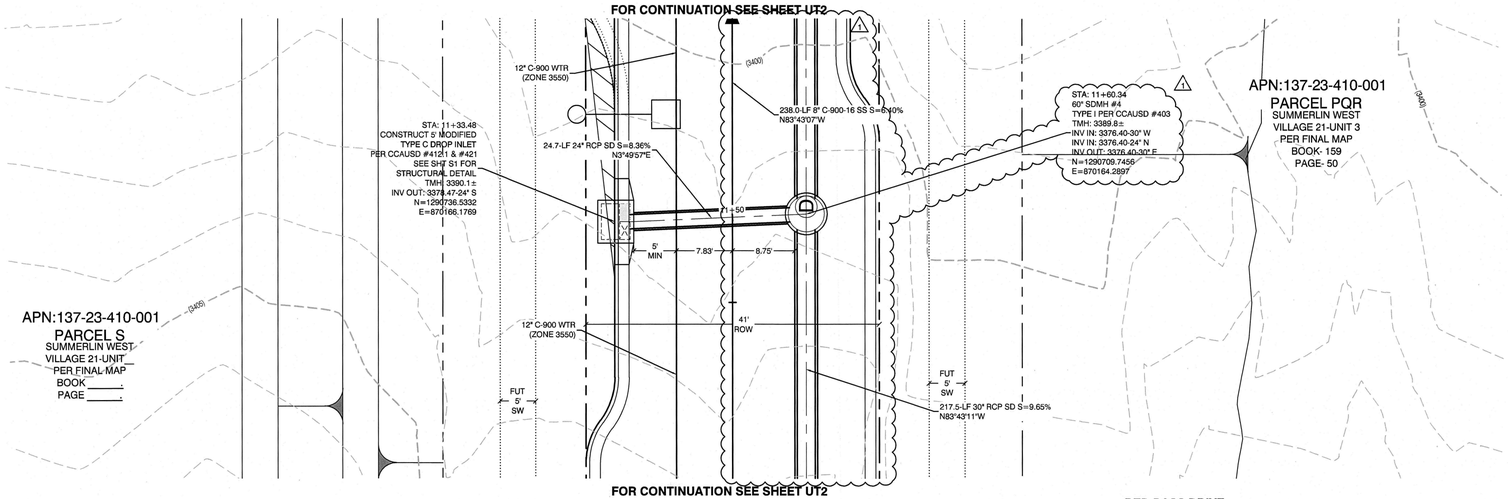

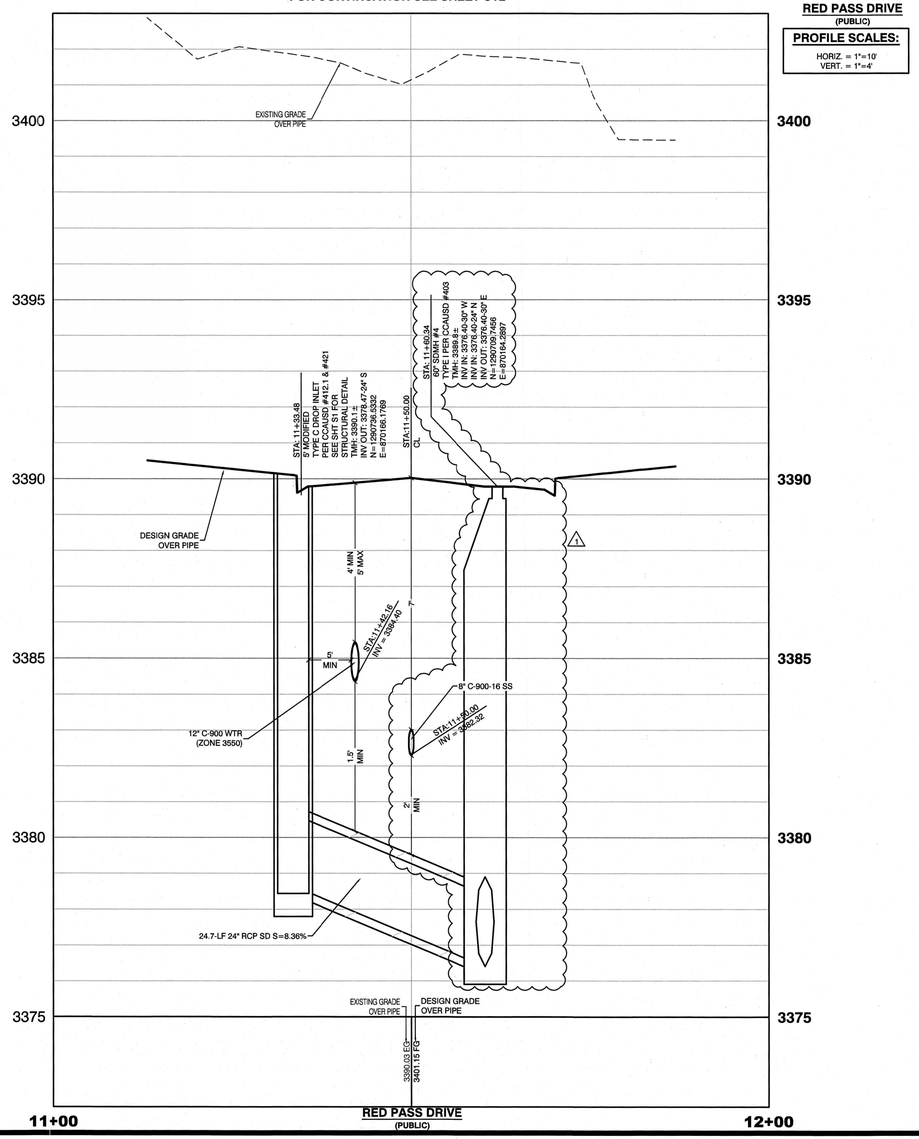

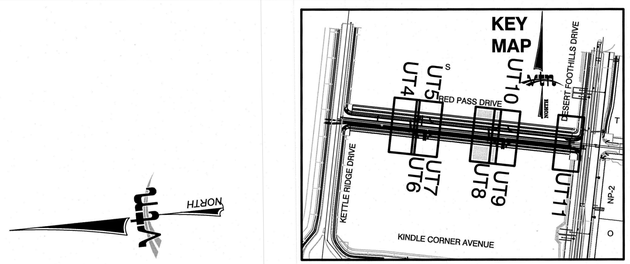

CONSTRUCTION NOTES

		PUBLIC
WATER		
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	2 EA.
W	12"X12" TEE (PER UDACS PLATE 31)	1 EA
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
W	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8	1 EA.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	16 LF.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	933 LF.
100	WATER POINT OF CONNECTION	
SEWER		
S	STANDARD MANHOLE PER SD-1 & SD-3 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	4 EA.
	8" C-900-16 SANITARY SEWER MAIN	864 LF.
[	8" C-900-16 SANITARY SEWER MAIN CAP	0 EA
200	SEWER POINT OF CONNECTION	

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
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CLARK COUNTY TRAFFIC OPERATIONS

Call before you Underground
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CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-9811
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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CALL BEFORE YOU DIG OVERHEAD
1-702-227-2929

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 15

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
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.

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LAS VEGAS FIRE & RESCUE APPROVAL
BY: _____ DATE: _____.

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

NOTE:
5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:30:09-07'00'

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES 5/27/2020

PROJECT 136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

REV	DATE	BY	REVISION
1	11/15/2019	JDH	REMOVE SDDI, ADJUST CURB EXTENSIONS, REDUCED SD DIAMETER

PLANS APPROVED
LAND DEVELOPMENT
& BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jan 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX: (702) 382-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 8
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY:	11/07/2018	SCALE:	HORIZ. 1"=10'
DEH			VERT. 1"=4'
DESIGNED BY:	11/07/2018		
DEH			
CHECKED BY:	10/01/2019		
WJM			
PROJECT NO:			
7851			

PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15795
4/9/20

SHEET
UT8
23 OF **29** SHEETS

DRAWING NO.
L19-01564
107V7958

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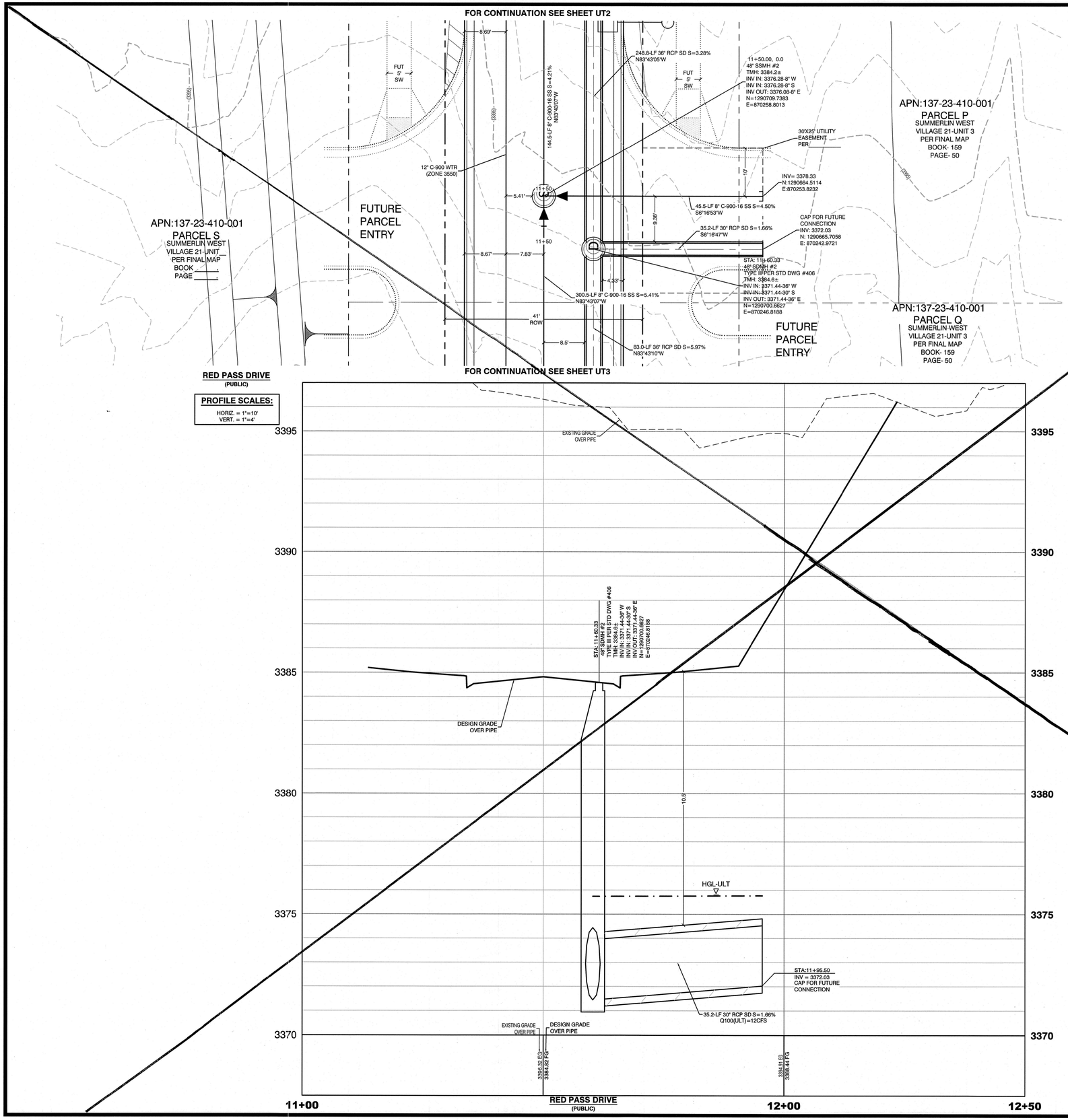

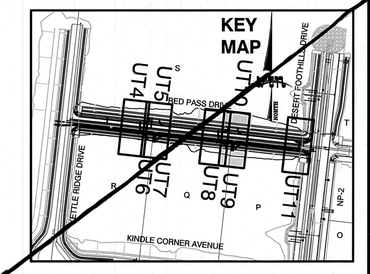

CONSTRUCTION NOTES

WATER

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BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
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T21S,R59E,S03

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LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

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LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: 10/10/19

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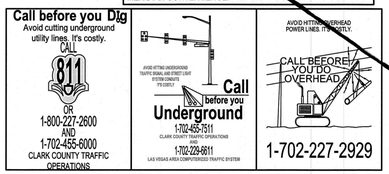


APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT: 136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

PLANS APPROVED LAND DEVELOPMENT / BUILDING AND SAFETY DEPARTMENT LAS VEGAS, NEVADA dguerra Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
70 SOUTH POINTE DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

VTN
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2697 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

REV	DATE	BY	REVISION

UTILITY PLAN & PROFILE 9
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH 11/07/2018
DESIGNED BY: DEH 11/07/2018
CHECKED BY: WJM 10/01/2019
PROJECT NO: 7951
SCALE: HORIZ. 1"=10' VERT. 1"=4'

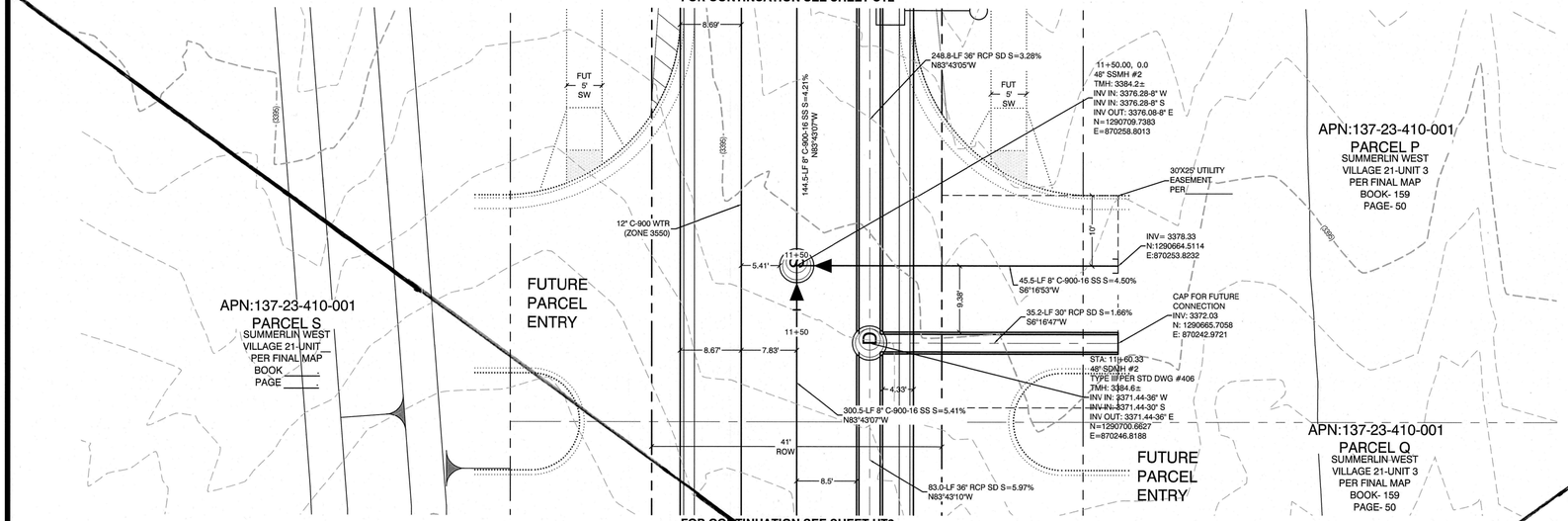
PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/19
CIVIL
No. 19745
10/8/19

SHEET
UT9
24 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

H:\7951\Street C-Desert Foothills to Street B\Sheet Set\7951-UT-LAT.dwg:10/8/2019 1:50 PM:jjimmyp

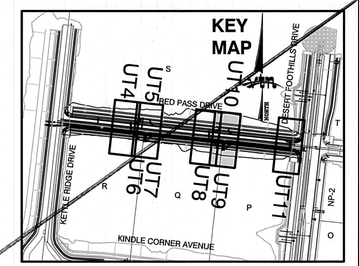
FOR CONTINUATION SEE SHEET UT2



FOR CONTINUATION SEE SHEET UT3

RED PASS DRIVE
(PUBLIC)

PROFILE SCALES:
HORIZ. = 1"=10'
VERT. = 1"=4'





GRAPHIC SCALE
-10 0 5 10 20
1" = 10'

CONSTRUCTION NOTES

			PUBLIC
		WATER	
W		FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	1 EA.
W		12" GATE VALVE (PER UDACS PLATE 30 & 39)	2 EA.
W		12"X12" TEE (PER UDACS PLATE 31)	1 EA
W		12" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
W		1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" SUMMERLIN COUNCIL METER PER IRRIGATION MASTER PLAN AND UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8	1 EA.
		6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	17 LF.
		12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	941 LF.
W		WATER POINT OF CONNECTION	
		SEWER	
S		STANDARD MANHOLE PER SD-1 & SD-3 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	3 EA.
		8" C-900-16 SANITARY SEWER MAIN	947 LF.
		8" C-900-16 SANITARY SEWER MAIN CAP	2 EA.
S		SEWER POINT OF CONNECTION	

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-227-2600
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

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

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY.
Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 15

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
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WATER MAIN JOINT DEFLECTION
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.

UTILITY CROSSING NOTE:
ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABL WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ENGINEER DISCLAIMER NOTE:
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LAS VEGAS FIRE & RESCUE APPROVAL
BY: _____ DATE: 10/10/19

APPROVAL OF THESE PLANS 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. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT: 136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM ONSITE N/A GPM

REV	DATE	BY	REVISION

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
Signerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
70 MARCUS DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
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CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 10
SANITARY SEWER LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

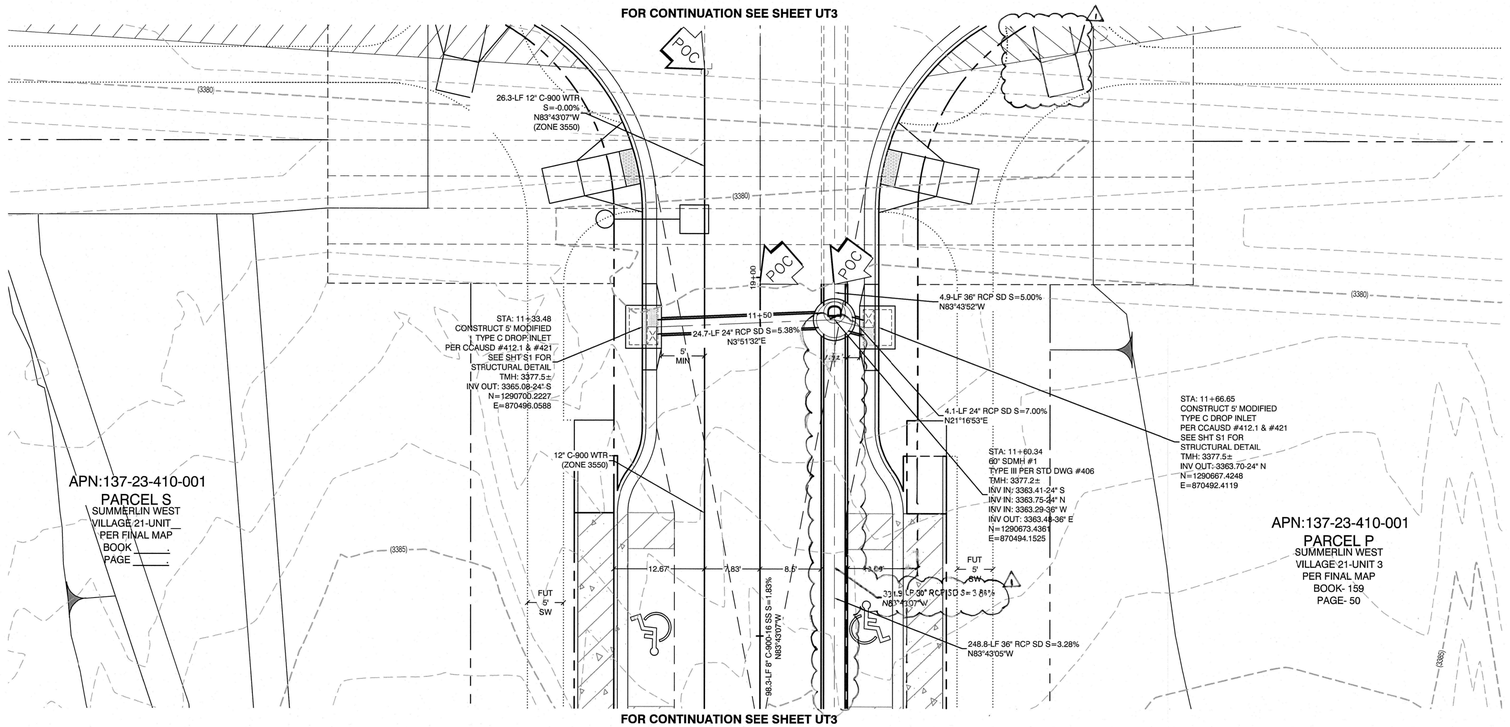
DRAWN BY:	DESIGNED BY:	CHECKED BY:	PROJECT NO:
KDH	DEH	WJM	7951
11/07/2018	11/07/2018	10/01/2019	SCALE: 1"=10' HORIZ. 1"=4' VERT.

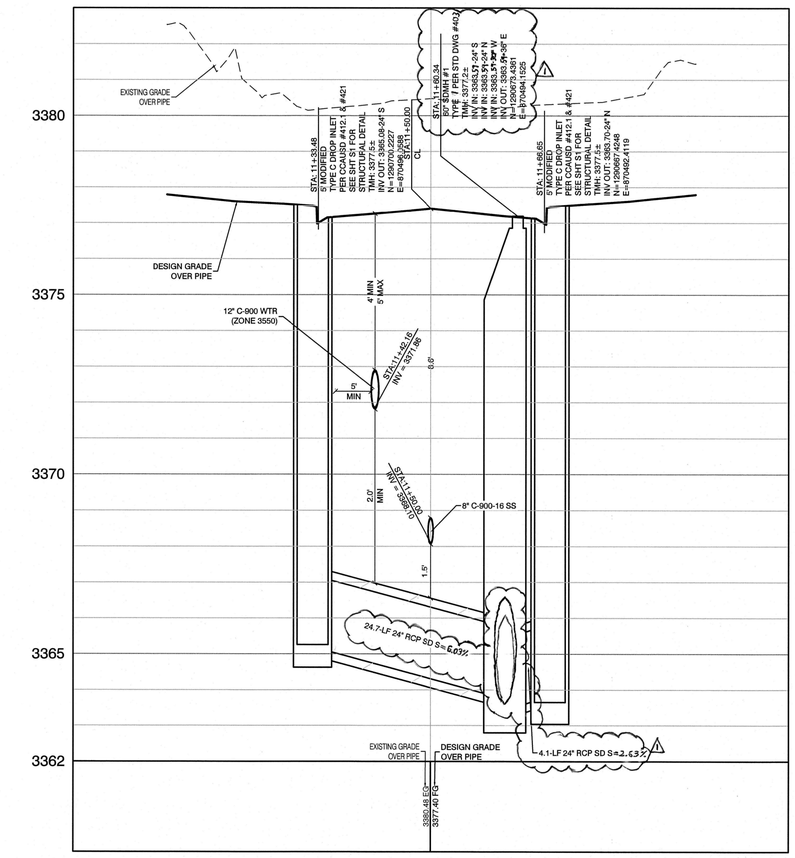
WILLIAM J. MEYER
EXP: 12/31/19
CIVIL
No. 7579
STATE OF NEVADA
PROFESSIONAL ENGINEER
10/8/19

SHEET
UT10
25 OF 29 SHEETS

DRAWING NO.
L-19-01564
107V7958

H:\7951\Street C-Desert Foothills to Street B\Sheet Set\7951-UT-LAT.dwg:10/8/2019 1:50 PM:jimmyp





RED PASS DRIVE
(PUBLIC)

PROFILE SCALES:
HORIZ. = 1"=10'
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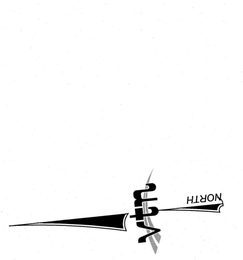

GRAPHIC SCALE
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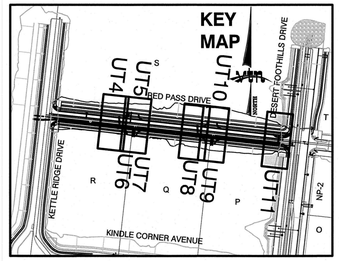

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

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LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

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ZONE: LAS VEGAS HIGH ELEVATION ZONE

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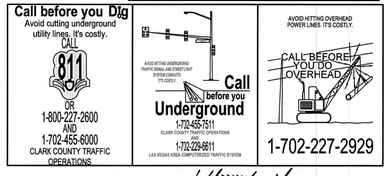

Digitally signed by William J Meyer
DN: C=US, E=bmeyer@vtnnv.com, O=VTN, OU=Land Development, CN=William J Meyer
Reason: I attest to the accuracy and integrity of this document
Date: 2020.06.09 10:29:29-07'00'

WILLIAM J. MEYER
Exp: 12/31/20
CIVIL
PROFESSIONAL ENGINEER - STATE OF NEVADA
No. 15745
4/8/20

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3550 PRESSURE ZONE.

WATER MAIN COVER NOTE:
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08

WATERLINE TRENCH NOTE:
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LAS VEGAS FIRE & RESCUE APPROVAL
BY: _____ DATE: 10/6/19

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NOTE:
5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT: 136795 FIRST APPROVED DATE: 11/14/19

LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE N/A GPM

REV	DATE	BY	REVISION
1	10/31/19	HDC	REMOVE SPHERICAL ED DIAMETER; ADD LW RAMP LAY
2	5/11/20		

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
70 SOUTH VALLEY VIEW BLVD. SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

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UTILITY PLAN & PROFILE 11
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

DRAWN BY: KDH	11/07/2018
DESIGNED BY: DEH	11/07/2018
CHECKED BY: WJM	10/01/2019
PROJECT NO: 7851	SCALE: HORIZ: 1"=10' VERT: 1"=4'

SHEET
UT11
26 OF 29 SHEETS

DRAWING NO.
L19-01564
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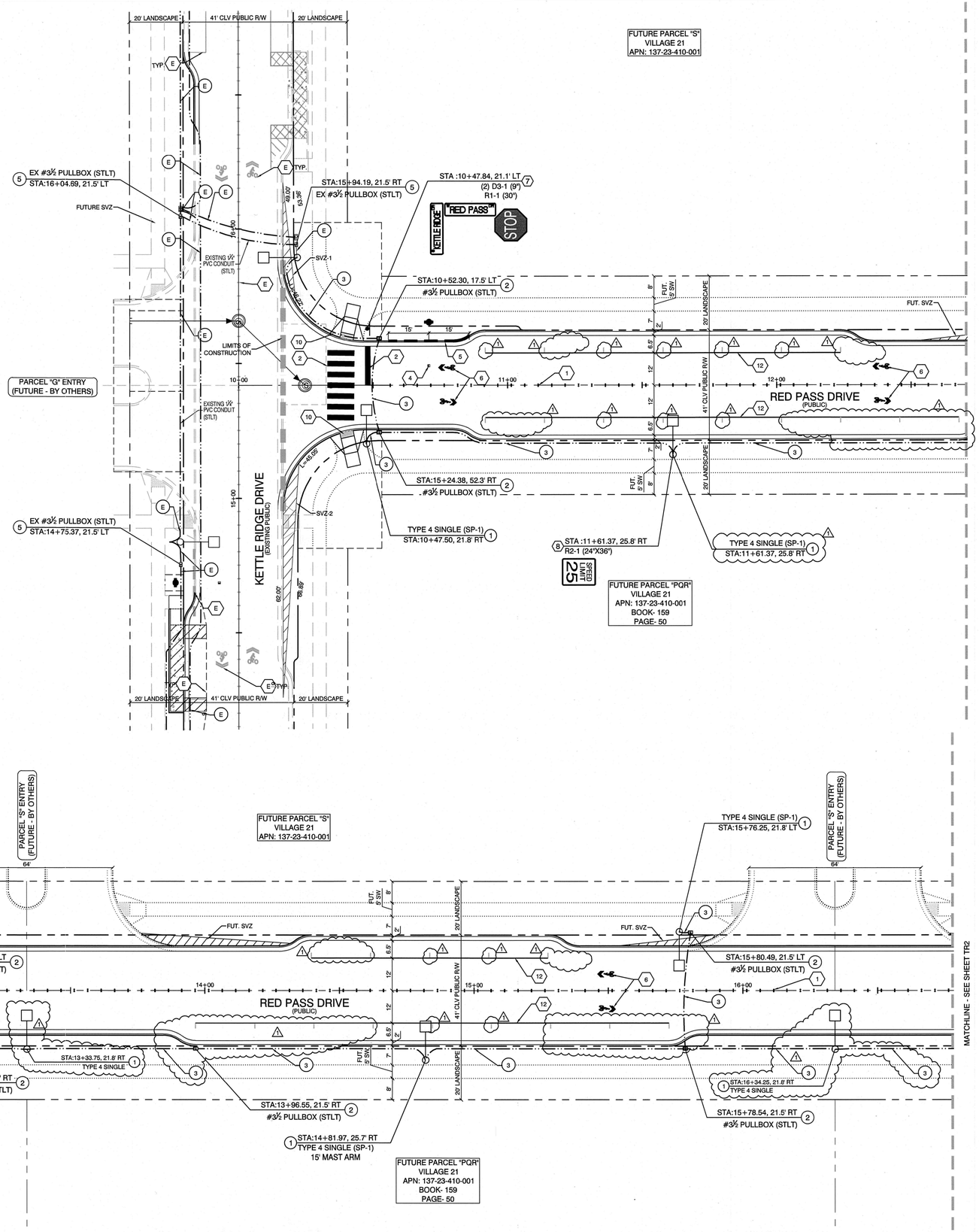
H:\7851\Street C-Desert Foothills to Street B\Sheet Set\7851-UT-LAT.dwg;10/8/2019 1:50 PM;jimmyp

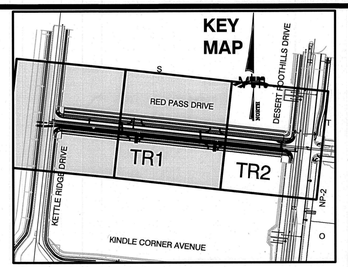




GRAPHIC SCALE

-20 0 10 20 40

1" = 20'



STREETLIGHT & TRAFFIC SIGNAL NOTES

(E)	EXISTING, PROTECT IN PLACE
(1)	INSTALL LED SINGLE STREETLIGHT W/ 8' MAST ARM (UNLESS OTHERWISE NOTED) AND LSI LUMINAIRE FIXTURE PER SUMMERLIN WEST LED LIGHTING ANALYSIS (SEE SHEET TR-2). REFER TO SUMMERLIN STD DWG E-1 & CCAUSD #311.1, #316 & #320
(2)	INSTALL #3½ PULLBOX WITH "STREETLIGHT" INSCRIBED ON COVER PER CCAUSD #327 & #328
(3)	INSTALL 1-1/4" PVC CONDUIT WITH (2) #4 & (1) #8 THW COPPER CONDUCTORS PER CCAUSD #732 & 733
(4)	INSTALL 200 AMP STREETLIGHT SERVICE PEDESTAL "SP-1" PER CCAUSD #319
(5)	CONNECT PROPOSED 2" PVC CONDUIT (STLT) TO EXISTING STREETLIGHT CONDUIT. INSTALL #3½ PULLBOX AT JUNCTION & CONNECT PROPOSED #8 AWG THW-2 COPPER CONDUCTOR TO EXISTING. IF THERE IS NO EXISTING CONDUIT, STUB 2" PVC CONDUIT (STLT) 5' PAST PROPOSED IMPROVEMENTS. W/ #8 AWG THW-2 COPPER CONDUCTOR. REFER TO CCAUSD #889

SIGNAGE & STRIPING NOTES

(E)	EXISTING, PROTECT IN PLACE
(1)	INSTALL TYPE 1 CENTERLINE USING RAISED PAVEMENT MARKERS PER CCAUSD #244
(2)	INSTALL 24"-WIDE SOLID WHITE CROSSWALK/STOP BAR LINES USING TYPE I PAVEMENT MARKING FILM PER CCAUSD #254.1.S1
(3)	INSTALL 4"-WIDE SOLID WHITE PARKING SPACE LINES USING TYPE II PAVEMENT MARKING FILM
(4)	INSTALL REFLECTIVE BLUE TYPE C RAISED PAVEMENT MARKER PER CLV FC #507.5.7.3
(5)	PAINT CURB RED WITHIN 15' OF FIRE HYDRANT PER CLV FC #507.5.7.2
(6)	INSTALL SOLID WHITE "SHARROW" SYMBOL USING TYPE II PAVEMENT MARKING FILM
(7)	INSTALL STREET SIGN ON PERMANENT POST PER CCAUSD #249.1
(8)	INSTALL STREET SIGN ON STREET LIGHT POLE IN LIEU OF PERMANENT POST
(9)	INSTALL HANDICAPPED SYMBOL USING TYPE II PAVEMENT MARKING FILM
(10)	CONSTRUCT SIDEWALK RAMP PER SUMMERLIN STD. DWG. #S-75. REFER TO HANDICAP RAMP DETAIL, SHEET DT2
(11)	INSTALL BIKE LANE SKIP LINE (6"X24" @ 8' O.C.) PER CCAUSD #246.7
(12)	INSTALL 6"-WIDE WHITE LANE EDGE LINE USING TYPE II PAVEMENT MARKING FILM PER CCAUSD #244.5
(13)	INSTALL HANDICAPPED SYMBOL USING TYPE II PAVEMENT MARKING FILM PER MUTCD SECTION 3B.20

LEGEND

SPEED LIMIT 25 — R2-1 (24"x36")

STOP — R1-1 (30")

RESERVED PARKING — R7-8 (12"X18")

"RED PASS" D3-1 (9")

VAN ACCESSIBLE — R7-8P (18"X9")

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
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SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

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2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

Michael Markvan
Digitally signed by Michael Markvan
DN: C=US, E=mmarkvan@vtnnv.com, O=VTN Nevada, CN=Michael Markvan
Reason: I agree to the terms defined by the placement of my signature on this document
Date: 2020.06.09 10:25:36-07'00'

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CALL 811 OR 1-800-227-2600 AND 1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

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LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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1-702-227-2929

REV	DATE	BY	REVISION
1	11/15/2019	JDH	REMOVE PARCEL ENTRY; ADJUST CURB EXTENSIONS; ADD PARKING MODIFICATIONS; ADD STREETLIGHTS; ADD SIGNAGE & STRIPING; PROPOSED PARKING TICK MARKS TO NON-PROPOSED FOR FUTURE DEVELOPMENT

PLANS APPROVED
LAND DEVELOPMENT
BUILDING AND
SAFETY DEPARTMENT
LAS VEGAS, NEVADA
dguerra
Jun 12 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2697 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

TRAFFIC PLAN 1

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

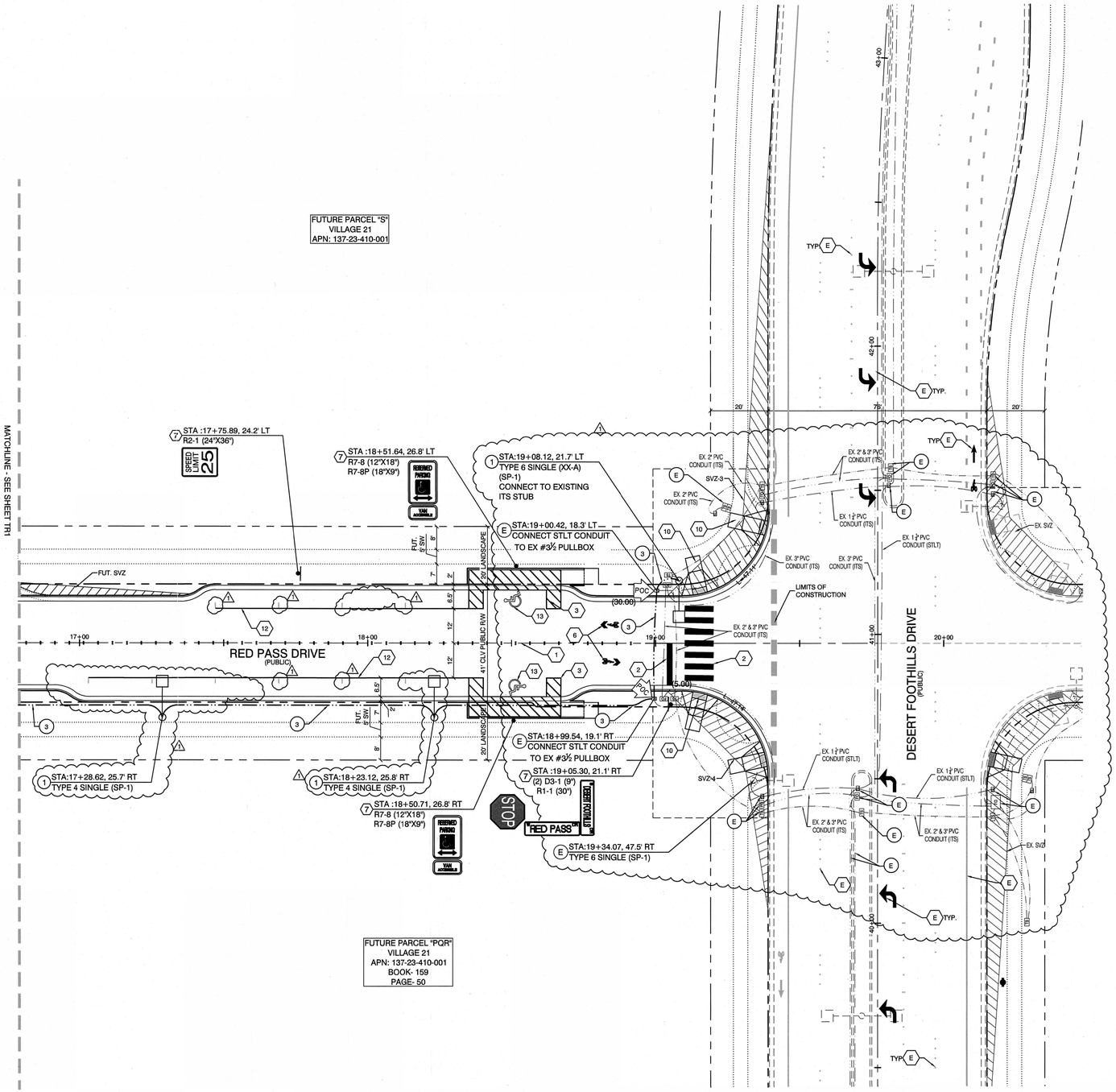
DRAWN BY: KTC	02/08/2019
DESIGNED BY: JDH	02/08/2019
CHECKED BY: MJM	07/15/2019
PROJECT NO: 7851	SCALE: 1"=20' HORIZ. N/A VERT.

PROFESSIONAL ENGINEER
MICHAEL J. MARKVAN
EXP: 12/31/21
CIVIL
No. 19874
STATE OF NEVADA
4-3-2020

SHEET
TR1
27 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

H:\7851\Street C-Desert Foothills to Street B\Sheet Set\7851-TR.dwg,4/7/2020 10:49 AM,kcampbell

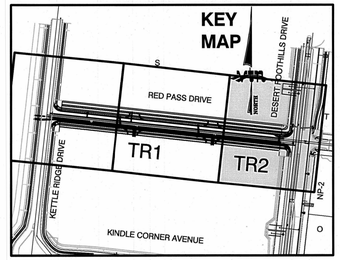




GRAPHIC SCALE

-20 0 10 20 40

1" = 20'



STREETLIGHT & TRAFFIC SIGNAL NOTES

(E)	EXISTING, PROTECT IN PLACE
(1)	INSTALL LED SINGLE STREETLIGHT W/ 8' MAST ARM (UNLESS OTHERWISE NOTED) AND LSI LUMINAIRE FIXTURE PER SUMMERLIN WEST LED LIGHTING ANALYSIS (SEE SHEET TR-2). REFER TO SUMMERLIN STD DWG E-1 & CCAUSD #311.1, #316 & #320
(2)	INSTALL #3½ PULLBOX WITH "STREETLIGHT" INSCRIBED ON COVER PER CCAUSD #327 & #328
(3)	INSTALL 1-1/4" PVC CONDUIT WITH (2) #4 & (1) #8 THW COPPER CONDUCTORS PER CCAUSD #732 & 733
(4)	INSTALL 200 AMP STREETLIGHT SERVICE PEDESTAL "SP-1" PER CCAUSD #319
(5)	CONNECT PROPOSED 2" PVC CONDUIT (STLT) TO EXISTING STREETLIGHT CONDUIT. INSTALL #3½ PULLBOX AT JUNCTION & CONNECT PROPOSED #8 AWG THW-2 COPPER CONDUCTOR TO EXISTING. IF THERE IS NO EXISTING CONDUIT, STUB 2" PVC CONDUIT (STLT) 5' PAST PROPOSED IMPROVEMENTS. W/ #8 AWG THW-2 COPPER CONDUCTOR. REFER TO CCAUSD #889

SIGNAGE & STRIPING NOTES

(E)	EXISTING, PROTECT IN PLACE
(1)	INSTALL TYPE 1 CENTERLINE USING RAISED PAVEMENT MARKERS PER CCAUSD #244
(2)	INSTALL 24"-WIDE SOLID WHITE CROSSWALK/STOP BAR LINES USING TYPE I PAVEMENT MARKING FILM PER CCAUSD #254.1.S1
(3)	INSTALL 4"-WIDE SOLID WHITE PARKING SPACE LINES USING TYPE II PAVEMENT MARKING FILM
(4)	INSTALL REFLECTIVE BLUE TYPE C RAISED PAVEMENT MARKER PER CLV FC #507.5.7.3
(5)	PAINT CURB RED WITHIN 15' OF FIRE HYDRANT PER CLV FC #507.5.7.2
(6)	INSTALL SOLID WHITE "SHARROW" SYMBOL USING TYPE II PAVEMENT MARKING FILM
(7)	INSTALL STREET SIGN ON PERMANENT POST PER CCAUSD #249.1
(8)	INSTALL STREET SIGN ON STREET LIGHT POLE IN LIEU OF PERMANENT POST
(9)	INSTALL HANDICAPPED SYMBOL USING TYPE II PAVEMENT MARKING FILM
(10)	CONSTRUCT SIDEWALK RAMP PER SUMMERLIN STD. DWG. #S-75. REFER TO HANDICAP RAMP DETAIL, SHEET DT2
(11)	INSTALL BIKE LANE SKIP LINE (6"X24" @ 8' O.C.) PER CCAUSD #246.7
(12)	INSTALL 6"-WIDE WHITE LANE EDGE LINE USING TYPE II PAVEMENT MARKING FILM PER CCAUSD #244.5
(19)	INSTALL HANDICAPPED SYMBOL USING TYPE II PAVEMENT MARKING FILM PER MUTCD SECTION 3B.20

LEGEND

SPEED LIMIT 25 R2-1 (24"X36") | STOP R1-1 (30") | RESERVED PARKING R7-8 (12"X18") | "RED PASS DR" D3-1 (9") VAN ACCESSIBLE R7-8P (18"X9")

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R59E,S03

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING CO-INCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN):36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN:114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

LED LUMINAIRE SCHEDULE

TYPE	LUMINAIRE MODEL	BASE LUMENS	LLF	CCT	MAST ARM LENGTH	LUMENAIRE MOUNTING HEIGHT	SPECIAL REQUIREMENTS
1	SUM-XGBM-LED-26L-SIL-2-UE-DIM-27-70CRI-BRZ-NR-4397-SMBRKT	26000	0.92	2700K	8'	41'-9"	SUMMERLIN TYPE 1 FOUNDATION
2	SUM-XGBM-LED-26L-SIL-2-UE-DIM-27-70CRI-BRZ-NR-4397-SMBRKT	26000	0.92	2700K	8'	31'-2"	SUMMERLIN TYPE 2 FOUNDATION
3	SUM-XGBM-LED-18L-SIL-5W-IL-UE-DIM-27-70CRI-BRZ-NR-4397-SMBRKT	18000	0.92	2700K	8'	31'-2"	SUMMERLIN TYPE 2 FOUNDATION
4	SUM-XGBM-LED-10L-SIL-5W-IL-UE-DIM-27-70CRI-BRZ-NR-4397-SMBRKT	10000	0.92	2700K	8'	31'-2"	SUMMERLIN TYPE 2 FOUNDATION
5	SUM-XGBM-LED-8L-SIL-2-UE-DIM-27-70CRI-BRZ-NR-4397-SMBRKT	8000	0.92	2700K	5'	26'-4"	SUMMERLIN TYPE 3 FOUNDATION
6	SUM-XGBM-LED-26L-SIL-2-UE-DIM-27-70CRI-BRZ-NR-4397-SMBRKT-CR7P	26000	0.92	4000K	10'	29'-7"	TYPE XX-A POLE (CCAUSD #808)
7	SUM-XGBM-LED-16L-SIL-2-UE-DIM-27-70CRI-BRZ-NR-4397-SMBRKT-CR7P	16000	0.92	4000K	10'	29'-7"	TYPE XX-A POLE (CCAUSD #808)

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600 AND 1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-9511
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

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

Digitally signed by Michael Markvan
DN: C=US, E=mmarkvan@vtnnv.com, O=VTN Nevada, CN=Michael Markvan
Reason: I agree to the terms of my placement of my signature on this document
Date: 2020.06.09 16:25:55-07'00'

REV	DATE	BY	REVISION
1	11/15/2019	JDH	REMOVE PARCEL ENTRY; ADJUST CURB EXTENSIONS; ADD PARKING SPACES & RAMP; ADD, UPDATE STLT TYPES & LOCATIONS & EX CONDUITS; CHANGE PROPOSED PARKING TICK MARKS TO NON-PROPOSED FOR FUTURE DEVELOPMENT

PLANS APPROVED LAND DEVELOPMENT / BUILDING AND SAFETY DEPARTMENT LAS VEGAS, NEVADA
1 dguerra Jun. 10 2020

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 382-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

TRAFFIC PLAN 2

SUMMERLIN WEST VILLAGE 21
RED PASS DRIVE
DESERT FOOTHILLS TO KETTLE RIDGE DRIVE

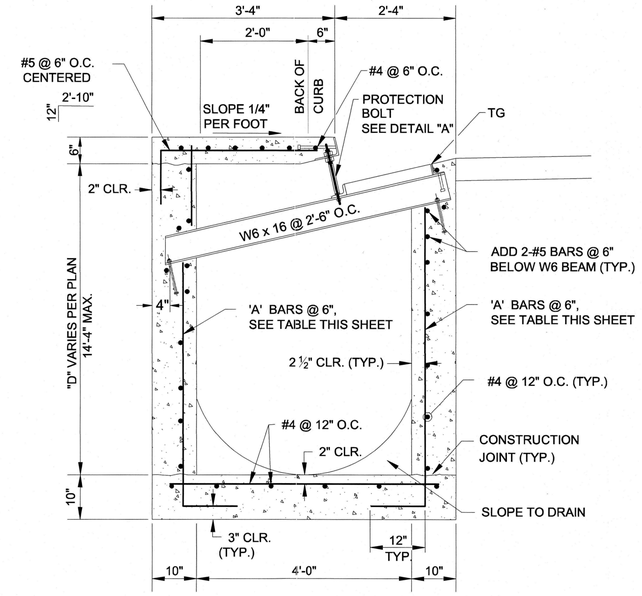
DRAWN BY: KTC	02/08/2019	SCALE:	1"=20'
DESIGNED BY: JDH	02/08/2019		HORIZ.
CHECKED BY: MJM	07/15/2019		N/A
PROJECT NO: 7851			VERT.

PROFESSIONAL ENGINEER STATE OF NEVADA
MICHAEL J. MARKVAN
EXP: 12/31/21
CIVIL
No. 19874
4-9-2020

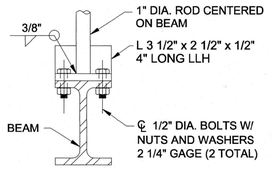
SHEET
TR2
28 OF 29 SHEETS

DRAWING NO.
L19-01564
107V7958

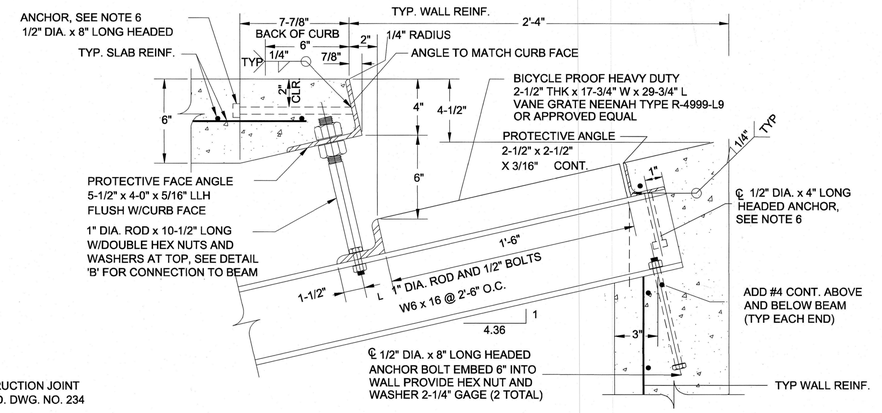
H:\7851\Street C-Desert Foothills to Street B\Sheet Set\7851-TR.dwg,4/7/2020 10:48 AM,kcampbell



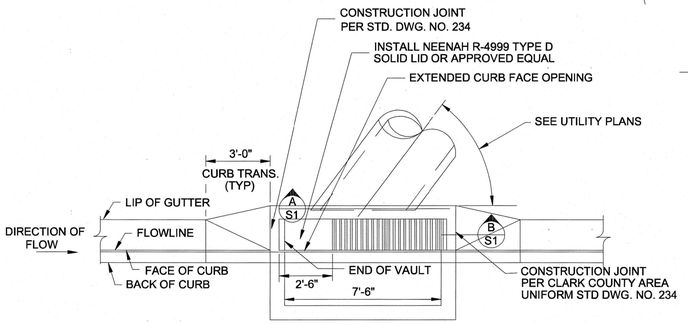
TYPE C MODIFIED DROP INLET SECTION



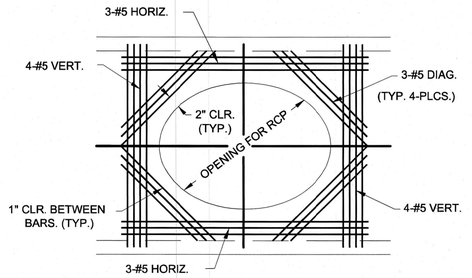
DETAIL "B"



PROTECTIVE FACE & ROD - DETAIL "A"



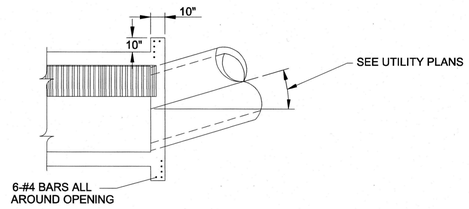
DROP INLET LAYOUT PLAN



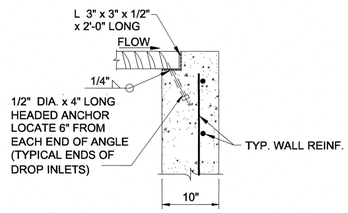
SECTION "A"

1

STATION OF DROP INLET	TG ±	INV. ELEV.	D ±	'A' BARS
12+60.75 LEFT	3419.4	3406.52	12'-10½"	# 6
13+43.76 LEFT	3410.3	3398.77	11'-6½"	# 5
15+61.25 LEFT	3390.1	3378.47	11'-7½"	# 5
18+93.09 RIGHT	3377.5	3363.70	13'-9½"	# 6
18+93.12 LEFT	3377.5	3365.08	12'-5"	# 5



ALTERNATE CONNECTION DETAIL



SECTION "B"

NOTES:

1. ALL EXPOSED METALS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. PROVIDE 1/2" (MIN.) CLEARANCE ALL AROUND THE STEEL BEAM, DRY PACK AFTER INSTALLATION.
3. WHEN REQUIRED BY LENGTH OF OPENING, PLATE ANGLE MAY BE DELIVERED IN SECTIONS AND BUTT WELDED IN PLACE.
4. ALL GALVANIZED DAMAGED BY WELDING SHALL RECEIVE TWO COATS OF GALVALLOY OR EQUAL.
5. CONCRETE SHALL BE MODIFIED CLASS DA 4000 PSI
6. ANGLE ANCHORS SHALL BE EMBEDDED MIDPOINT IN EACH ENDWALL AND EVENLY SPACED, (MAXIMUM SPACING OF 2').

Dana A. Ames

Digitally signed by Dana A. Ames
DN: C=US, E=danaa@horrocks.com, O=Structural Engineering, OU="Horrocks Engineers ", CN=Dana A. Ames
Date: 2020.06.09 07:10:16-07'00'

NO.	DATE	BY	REVISION
1	03/26/2020	PLK	REMOVED TWO DROP INLETS FROM TABLE, ADDED NEW DROP INLET

PLANS APPROVED LAND DEVELOPMENT BUILDING AND SAFETY DEPARTMENT LAS VEGAS, NEVADA
Approved
Jun 10 2020

CITY OF LAS

HOWARD HUGES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
PREPARED BY:
HORROCKS ENGINEERS
1401 N. GREEN VALLEY PARKWAY, STE. 180
HENDERSON, NV 89074
PH: (702) 966-4063 WEB WWW.HORROCKSENGINEERS.COM

SPECIAL TYPE C MODIFIED DROP INLETS

SUMMERLIN WEST VILLAGE 21
RED PASS - DESERT FOOTHILLS DR TO KETTLE RIDGE

DRAWN BY: AF	06/05/19	
DESIGNED BY: PLK	06/05/19	
CHECKED BY: NJW	06/05/19	
PROJECT NO: NV-1317-1868	SCALE:	1"=1'-0" HORIZ. 1"=1'-0" VERT.

PROFESSIONAL ENGINEER DANA A. AMES EXP. 12/31/20 CIVIL/STRUCTURAL No. 10712 STATE OF NEVADA
4-8-20

SHEET S1
29 OF 29 SHEETS

DRAWING NO. L19.01564 10717956

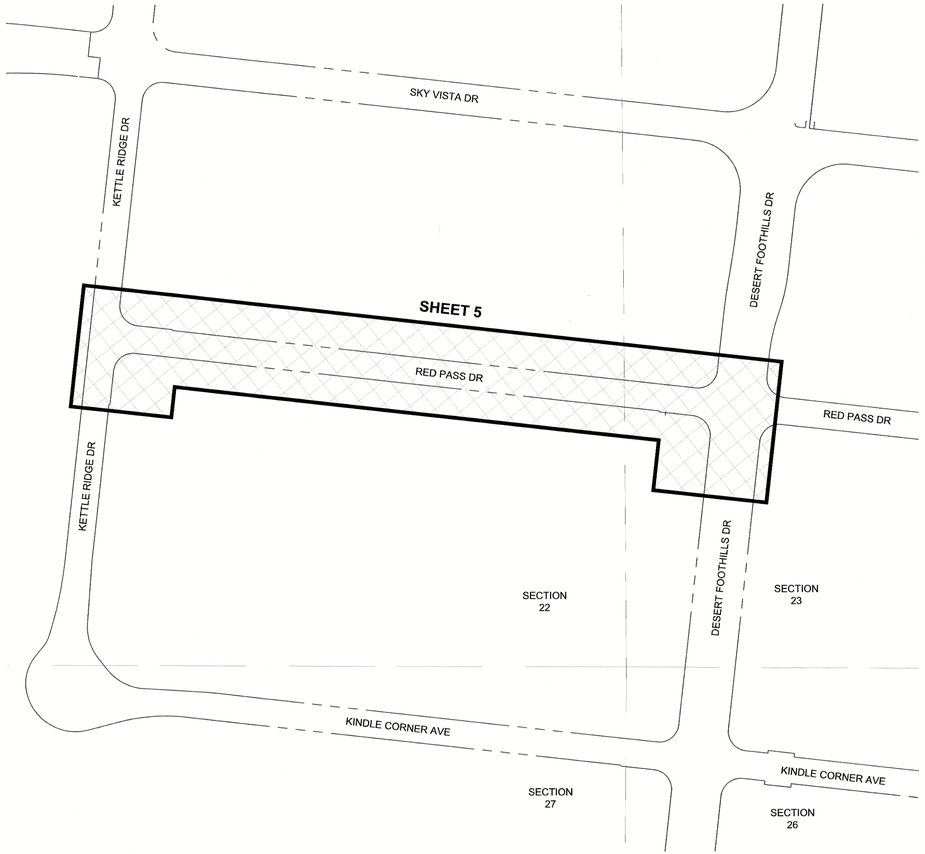
DRAWINGNAME

LEGEND

- EXISTING GAS MAIN
- EXISTING GAS SERVICE
- GAS LINE TO BE ABANDONED
- STEEL RISER
- ANODELESS RISER
- GASLIGHT
- GAS VALVE
- EXCESS FLOW VALVE
- RELIEF VALVE
- COUPLINGS (C—C, E—F)
- BOND OVER (B—O)
- TEST POINT (T—P)
- INSULATOR
- REGULATOR STATION (R, R)
- RECTIFIER
- ANODE
- SCADA
- METER SET ASSEMBLY (M, M)
- PURGE POINT
- BRANCH,CVT,LINE STOPPER (B, CVT, S)
- PROPOSED GAS MAIN
- PROPOSED GAS SERVICE
- EXISTING EASEMENT
- ROW LINE
- PROPERTY LINE
- STREET CENTERLINE
- EDGE OF PAVEMENT
- CABLE LINE - UNDERGROUND — CATV
- ELECTRIC - OVERHEAD — OHE
- ELECTRIC - UNDERGROUND — UGE
- FIBER OPTIC - UNDERGROUND — FO
- PHONE - OVERHEAD — OHT
- PHONE - UNDERGROUND — UGT
- RECLAIMED WATER — RW
- SEWER — S
- STORMWATER — SD
- WATER — W
- UTILITY PEDESTALS (C, E, W, T)
- FIRE HYDRANT
- MANHOLE
- WATER VALVE
- SURVEY MONUMENT
- POWER POLE
- GAS FLOW ARROW (FLOW)

N

N.T.S.



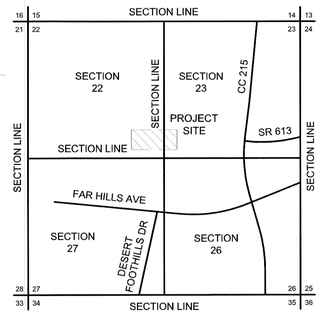
SHEET INDEX MAP

SHEET INDEX

1	COVERSHEET
2	SIGNATURE SHEET
3	NOTES AND STANDARD DETAILS
4	NOTES AND STANDARD DETAILS
5	PLAN SHEET

N

N.T.S.



LOCATION MAP

T20S R59E S22
T20S R59E S23

City of Las Vegas

Total footage located in Public ROW 889'

APPROVED FOR CONSTRUCTION
THIS APPROVAL IS FOR WORK IN CLV R/W OR CLV EASEMENTS ONLY. OBTAINING PERMISSION OR EASEMENTS FOR WORK SHOWN ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE UTILITY.

See Cover of Civil Plan
Approval Date

CUSTOMERS: 0

811 Know what's **below.** **Call** before you dig.

SOUTHWEST GAS CORPORATION

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REVISIONS

NO.	DESCRIPTION	BY	DATE	APPVD.

PERMIT INFORMATION	ISOLATION AREA	LOCATION	ATLAS OR TILE
CITY OF LAS VEGAS TAX CODE: 02-0200	ISO_21_DIST_538	T20S R59E S22 T20S R59E S23	X567Y524 X567Y522

D_W_VALLEY		N/A	
SYSTEM MAOP:	60	SYSTEM MAOP:	N/A
SYSTEM MOP:	55	SYSTEM MOP:	N/A

JOB TYPE
- HP SERVICE ☐
- DISTRIBUTION ☒
- FEEDER ☐
- TRANS. BY DEF ☐
- TRANS > 20% ☐

WR NO. 3937973

RELATED WR NO.S 3937974 (DIST) 3824888 (DIST)

ENGINEER/TECHNICIAN	JAMES FRAME		PHONE: (702)365-2063
ACCOUNT REP.	ANDREW CARLSON		PHONE: (702)370-5067
PROJECT CONTACT	VICTORIA HACKER		PHONE: (702)596-4842
SHEET NO. 1 OF 5		SCALE N.T.S.	DATE 11/13/2019
DWN. BY HBK ENG.		CHKD. BY	APPVD. BY

V21 - RED PASS - DESERT FOOTHILLS TO KETTLE RIDGE

L19-01564 107V7958

PRESSURE TEST PERFORMED BY AND VERIFIED BY SIGNATURES

I HAVE **PERFORMED** THE PRESSURE TESTS AS SHOWN ON THE AS-BUILT AND IN ACCORDANCE WITH THE OPERATIONS MANUAL.

I HAVE **VERIFIED** THE PRESSURE TESTS AS SHOWN ON THE AS-BUILT AND IN ACCORDANCE WITH THE OPERATIONS MANUAL.

PRESSURE TEST #____ PERFORMED BY_____ DATE _____

SWG VERIFIED BY_____ DATE _____

PURGE PLAN PERFORMED BY SIGNATURES

PURGE PLAN WAS COMPLETED IN ACCORDANCE WITH THE OPERATIONS MANUAL GUIDELINES:

PERFORMED BY_____ DATE _____ SHEET#_____

LOCATION _____

PIPE JOINER VISUAL INSPECTION CERTIFICATION

I HAVE VISUALLY INSPECTED ALL HEATED FUSIONS, SOLVENT, CEMENT, MECHANICAL JOINTS, AND WELDS THAT I HAVE PERFORMED

NAME _____ PJQ# _____

2ND VISUAL INSPECTION CERTIFICATION

I HAVE VISUALLY INSPECTED ALL HEATED FUSIONS, SOLVENT, CEMENT AND MECHANICAL JOINTS THAT HAVE BEEN PERFORMED (INSPECTION OF FINAL JOINT ON PLASTIC PIPE ONLY)

NAME _____ PJQ# _____

CONSTRUCTION

INSPECTOR _____ PJQ#_____

FOREMAN _____ PJQ#_____

REVIEWED BY _____ PJQ#_____

Know what's **below.** **Call** before you dig.

SOUTHWEST GAS CORPORATION

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REVISIONS				
NO.	DESCRIPTION	BY	DATE	APPVD.

PERMIT INFORMATION	ISOLATION AREA	LOCATION	ATLAS OR TILE
CITY OF LAS VEGAS TAX CODE: 02-0200	ISO_21_DIST_538	T20S R59E S22 T20S R59E S23	X567Y524 X567Y522

D_W_VALLEY	
SYSTEM MAOP:	60
SYSTEM MOP:	55
N/A	
SYSTEM MAOP:	N/A
SYSTEM MOP:	N/A

JOB TYPE	
HP SERVICE	☐
DISTRIBUTION	☒
FEEDER	☐
TRANS. BY DEF	☐
TRANS > 20%	☐

WR NO.
3937973
RELATED WR NO.S
3937974 (DIST) 3824888 (DIST)

ENGINEER/TECHNICIAN	JAMES FRAME		PHONE: (702)365-2063
ACCOUNT REP.	ANDREW CARLSON		PHONE: (702)370-5067
PROJECT CONTACT	VICTORIA HACKER		PHONE: (702)596-4842
SHEET NO. 2 OF 5		SCALE N.T.S.	DATE 11/13/2019
DWN. BY HBK	ENG.	CHKD. BY	APPVD. BY

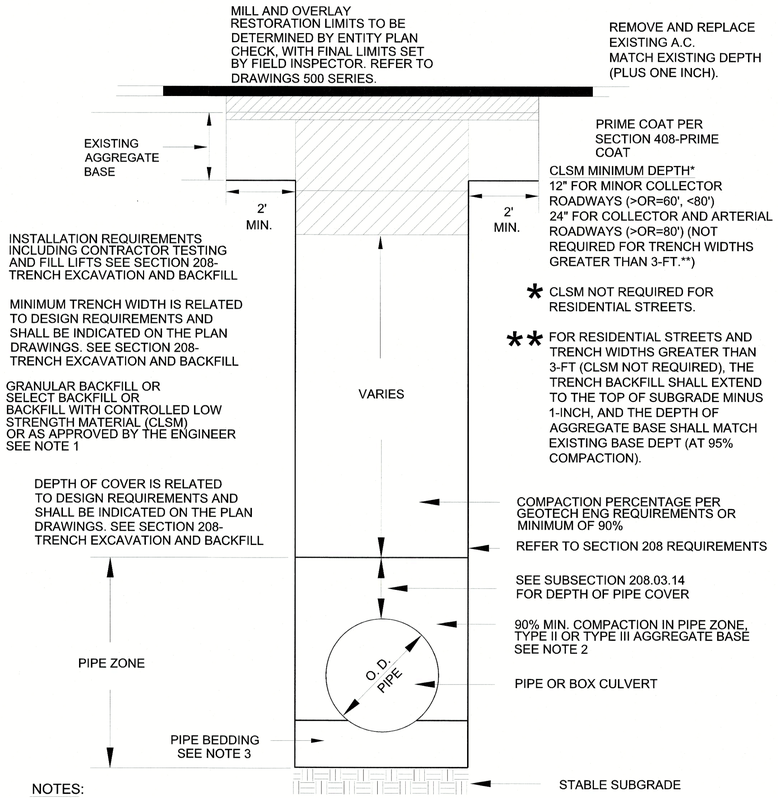
V21 - RED PASS - DESERT FOOTHILLS TO KETTLE RIDGE

L19-01564

107V7958

GENERAL NOTES:

1. SUGGESTED GAS LOCATIONS ARE TO CLEAR SUBSTRUCTURES LOCATED IN THE FIELD.
2. ALL PIPELINE CONSTRUCTION SHALL CONFORM TO APPLICABLE JURISDICTION SPECIFICATIONS.
3. DO NOT SCALE THIS DRAWING.
4. CHANGE IN PROPOSED MAIN LOCATION MUST BE AUTHORIZED BY SWG ENGINEER PRIOR TO INSTALLATION.
5. GAS MAINS SHALL BE PURGED PER OPERATIONS MANUAL.
6. ALL EXISTING UTILITY LOCATIONS TO BE VERIFIED PRIOR TO START OF CONSTRUCTION.
7. CONTACT ENGINEERING FOR BYPASS INFORMATION.
8. ALL MAIN TIE-INS REQUIRING TEES ARE TO BE FULL-FLOW TEES UNLESS OTHERWISE STATED.
9. ALL SHORING REQUIREMENTS SHALL CONFORM TO APPLICABLE PORTIONS OF THE OPERATIONS MANUAL.
10. REQUESTS FOR SURVEYING AND/OR STAKING WILL BE SUBMITTED TO ENGINEERING 72 HOURS IN ADVANCE, MINIMUM.
11. TRENCHING AND BACKFILL TO CONFORM WITH RTC STANDARD(S) 503, 500.3, 500.4 AND 500.5.
12. MINIMUM TEST DURATION REQUIREMENTS AND GUIDELINES FOR MAIN INSTALLATION SYSTEMS <60 PSIG ARE:
    A. MINIMUM TEST DURATION IS 8 HOURS FOR PIPES 1-1/4-INCHES OR GREATER, WITH FOOTAGES BETWEEN 3,001 FEET AND 10,000 FEET.
    B. ALL FOOTAGES GREATER THAN 3,000 FEET REQUIRE A CHART.
    C. CONSTRUCTION SHALL CONTACT ENGINEERING FOR MINIMUM TEST DURATIONS IF THE FOOTAGE TO BE TESTED EXCEEDS 10,000 FEET.
14. MAINTAIN A MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING.
15. THIS PROJECT IS NOT INSTALLING, ABANDONING, OR TYING INTO ANY STEEL GAS FACILITIES.



NOTES:

1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
2. TRENCH WIDTH, BEDDING, SUBGRADE AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE ENTITY REQUIREMENTS.
3. CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY. SEE STANDARD DRAWING NO. 505 FOR PIPE BEDDING METHODS.
4. LAS VEGAS VALLEY WATER DISTRICT REQUIRES PIPE BEDDING AND BACKFILL WITHIN THE PIPE ZONE TO BE OF THE SAME MATERIAL.

RTC STD DWG 503

DESIGN PIPE SUMMARY	
DESIGN QTY.	DESCRIPTION
939'	TOTAL MAIN
873'	6" PE8100 - MAIN
66'	4" PE8100 - MAIN

ABBREVIATIONS:

AA	ALDYL-A PIPE
ABND	ABANDONED
AC	ASPHALTIC CONCRETE
AC#	ACCELERATED CONSTRUCTION
ACP	ASBESTOS CEMENT PIPE
APN	ASSESSOR PARCEL NUMBER
BLVD	BOULEVARD
BM	BENCHMARK
BO	BLOW OFF
BTU	BRITISH THERMAL UNIT
CIP	CAST IRON PIPE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CP	CATHODIC PROTECTION
D	INSIDE DIAMETER
DDCA	DESIGN DATA COLLECTION APPLICATION
DET	DETAIL
DIP	DUCTICLE IRON PIPE
DIA	DIAMETER
DIMP	DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM
DP	DESIGN PRESSURE
DWG	DRAWING
EFV	EXCESS FLOW VALVE
EG	EXISTING GRADE
ELEC	ELECTRICAL
ELEV	ELEVATION
EMS	ELECTRONIC MARKING SYSTEM
E.P	END POINT
EPR	ELECTRONIC PRESSURE RECORDERS
ESMT	EASEMENT
EX	EXISTING
FERC	FEDERAL ENERGY REGULATORY COMMISSION
FH	FIRE HYDRANT
GIR	GAS INFRASTRUCTURE REPLACEMENT
GPR	GAS PRESSURE REGULATOR
HCA	HIGH CONSEQUENCE AREA
HDD	HEATING DEGREE DAY
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH PRESSURE
HOP	HISTORIC OPERATING PRESSURE
HVTT	HIGH VOLUME TAPPING TEE
IN	INCH(ES)
IPS	IRON PIPE SIZE
JT	JOINT TRENCH
MAOP	MAXIMUM ALLOWABLE OPERATING PRESSURE
M&C	MEASUREMENTS & CONTROL
MCFH	THOUSAND CUBIC FEET PER HOUR
MH	MANHOLE
MOP	MAXIMUM OPERATING PRESSURE
MP	MANUFACTURER'S PRESSURE RATING
MSA	METER SET ASSEMBLY
MVP	MAPPING VERIFICATION PROCEDURE
NAP	NOT A PART
NTSB	NATIONAL TRANSPORTATION SAFETY BOARD
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OHE	OVERHEAD ELECTRIC
P	POWER
PAOP	POTENTIONAL ALLOWABLE OPERATING PRESSURE
PCC	PORTLAND CEMENT CONCRETE
PE	POLYETHYLENE PIPE
PH	POT HOLE
PHMSA	PIPELINE & HAZARDOUS MATERIALS SAFETY ADMINISTRATION
PL	PROPERTY LINE
PIC	POTENTIAL IMPACT CIRCLE
PLS	PRESSURE LIMITING STATION
P.O.B	POINT OF BEGINNING
PP	POWER POLE
PROP	PROPOSED
PQF	PREQUALIFIED FITTING
PSIG	POUNDS PER SQUARE INCH (GAUGE)
PVC	POLYVINYL CHLORIDE
PUE	PUBLIC UTILITY EASEMENT
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDR	STANDARD DIMENSION RATIO
SF	SQUARE FOOT
SHT	SHEET
SLSV	SERVICE LINE SHUT-OFF VALVE
SMYS	SPECIFIED MAXIMUM YIELD STRENGTH
SS	SANITARY SEWER
SST	STAINLESS STEEL
ST	STREET
STA	STATION
STL	STEEL
SWG	SOUTHWEST GAS
TDS	TEST DATA SHEET
TEL	TELEPHONE
TB	THRUST BLOCK
TOP	TOP OF PIPE
TP	TEST POINT
TS	TECHNICAL SERVICE NOTE
TRIMP	TRANSMISSION INTEGRITY MANAGAMENT PROGRAM
TYP	TYPICAL
U.E.	UTILITY EASEMENT
UGE	UNDERGROUND ELECTRIC
UOC	UNUSUAL OPERATING CONDITION
USD	UNIFORM STANDARD DRAWING
UGT	UNDERGROUND TELEPHONE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VG	VALLEY GUTTER
VSP	VINTAGE STEEL PIPE
W	WATER
WMS	WORK MANAGEMENT SYSTEM
WR	WORK REQUEST
WT	WALL THICKNESS
WV	WATER VALVE
YD	YARD(S)

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REVISIONS				
NO.	DESCRIPTION	BY	DATE	APPVD.

PERMIT INFORMATION	ISOLATION AREA	LOCATION	ATLAS OR TILE
CITY OF LAS VEGAS TAX CODE: 02-0200	ISO_21_DIST_538	T20S R59E S22 T20S R59E S23	X567Y524 X567Y522

D_W_VALLEY	
SYSTEM MAOP:	60
SYSTEM MOP:	55
N/A	
SYSTEM MAOP:	N/A
SYSTEM MOP:	N/A

JOB TYPE

HP SERVICE	☐
DISTRIBUTION	☒
FEEDER	☐
TRANS. BY DEF	☐
TRANS > 20%	☐

WR NO.: 3937973

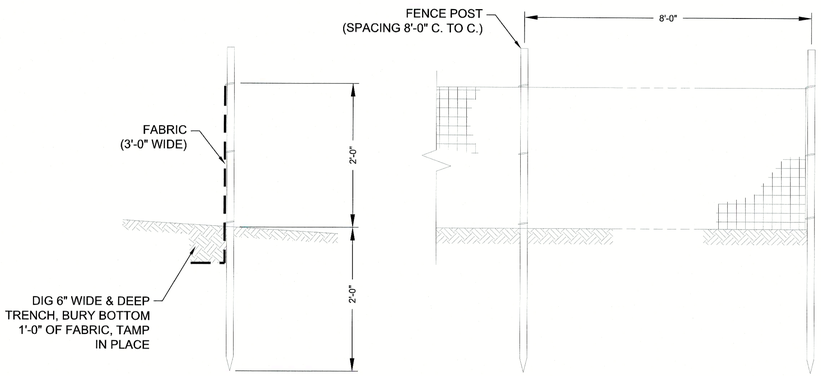
RELATED WR NO.S: 3937974 (DIST) 3824888 (DIST)

ENGINEER/TECHNICIAN	JAMES FRAME		PHONE: (702)365-2063
ACCOUNT REP.	ANDREW CARLSON		PHONE: (702)370-5067
PROJECT CONTACT	VICTORIA HACKER		PHONE: (702)596-4842
SHEET NO. 3 OF 5		SCALE N.T.S.	DATE 11/13/2019
DWN. BY HBK	ENG.	CHKD. BY	APPVD. BY

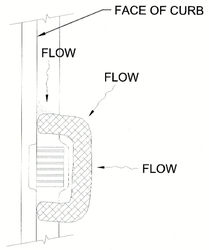
V21 - RED PASS - DESERT FOUNDATIONS TO KETTLE RIDGE

L19-01564 107V7958

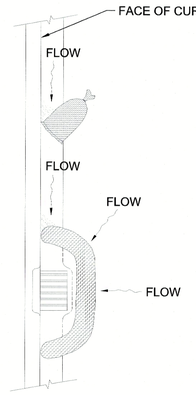
TYPICAL SWPPP BMP DETAILS



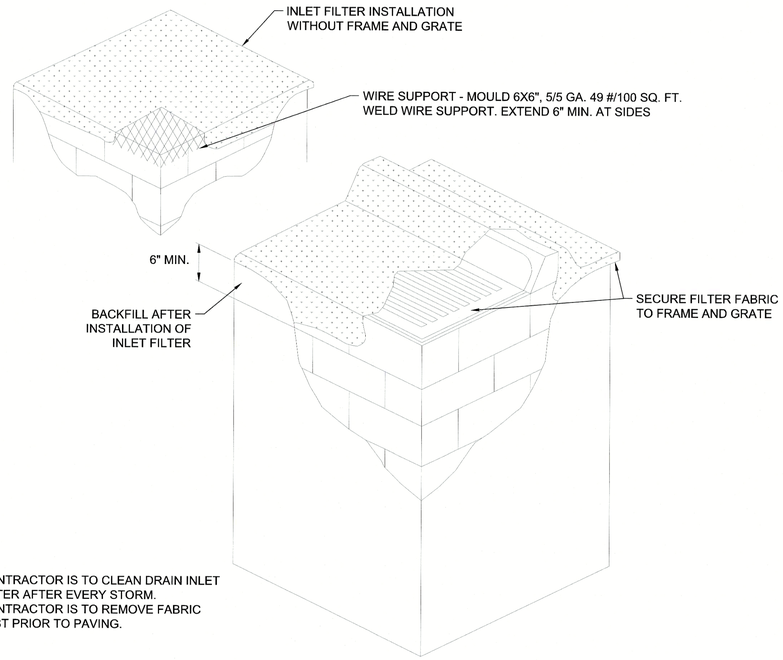
1/4 SILT FENCE N.T.S.



2/4 FIBER ROLL N.T.S.



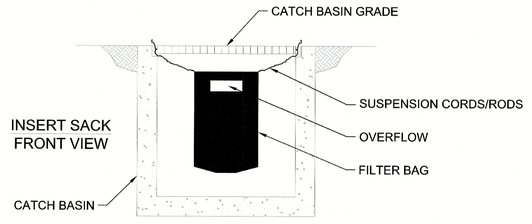
3/4 SAND BAG/ ROLL N.T.S.

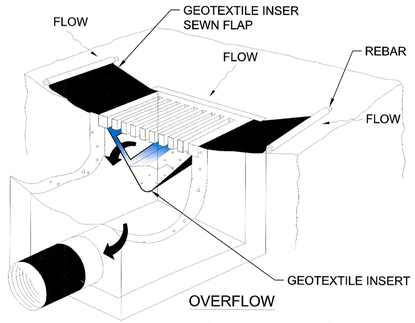


NOTE:
1. CONTRACTOR IS TO CLEAN DRAIN INLET FILTER AFTER EVERY STORM.
2. CONTRACTOR IS TO REMOVE FABRIC JUST PRIOR TO PAVING.

4/4 DRAIN INLET FILTER N.T.S.

5/4 GRAVEL BAG/ ROLL N.T.S.





NOTE:
RECESSED CURB INLET MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS.
SIZE OF FILTER FABRIC INLET SACK TO BE DETERMINED BY MANUFACTURER.

6/4 SEDIMENT FILTER BAG N.T.S.

STORMWATER NOTES:

1. SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL INSTALL ONE OF THE APPROPRIATE BMPs FOR THE PROTECTION OF EXISTING STORM DRAIN INLETS, WITHIN OR SIGNIFICANTLY NEAR ANY IMPROVED RIGHT-OF-WAY, FROM DEBRIS AND SEDIMENT RESULTING FROM CONSTRUCTION OF NATURAL GAS FACILITIES.
2. SOUTHWEST GAS CORPORATION, IT'S 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 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, USING BEST MANAGEMENT PRACTICES DETAILED ON THIS SHEET.
3. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE LISTED BMPs ON THIS SHEET DO NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CLARK COUNTY CODE - CHAPTER/STORM SEWER DISCHARGE AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
4. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVEN, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY PERCENT OR MORE.

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CITY OF LAS VEGAS TAX CODE: 02-0200	ISO_21_DIST_538	T20S R59E S22 T20S R59E S23	X567Y524 X567Y522

D_W_VALLEY	
SYSTEM MAOP:	60
SYSTEM MOP:	55
N/A	
SYSTEM MAOP:	N/A
SYSTEM MOP:	N/A

JOB TYPE	
HP SERVICE	☐
DISTRIBUTION	☒
FEEDER	☐
TRANS. BY DEF	☐
TRANS > 20%	☐

WR NO.
3937973
RELATED WR NO.S
3937974 (DIST) 3824888 (DIST)

ENGINEER/TECHNICIAN	JAMES FRAME	PHONE: (702)365-2063
ACCOUNT REP.	ANDREW CARLSON	PHONE: (702)370-5067
PROJECT CONTACT	VICTORIA HACKER	PHONE: (702)596-4842
SHEET NO. 4 OF 5	SCALE N.T.S.	DATE 11/13/2019
DWN. BY HBK ENG.	CHKD. BY	APPVD. BY

V21 - RED PASS - DESERT FOOTHILLS TO KETTLE RIDGE

L19-01564 1074795 8

N

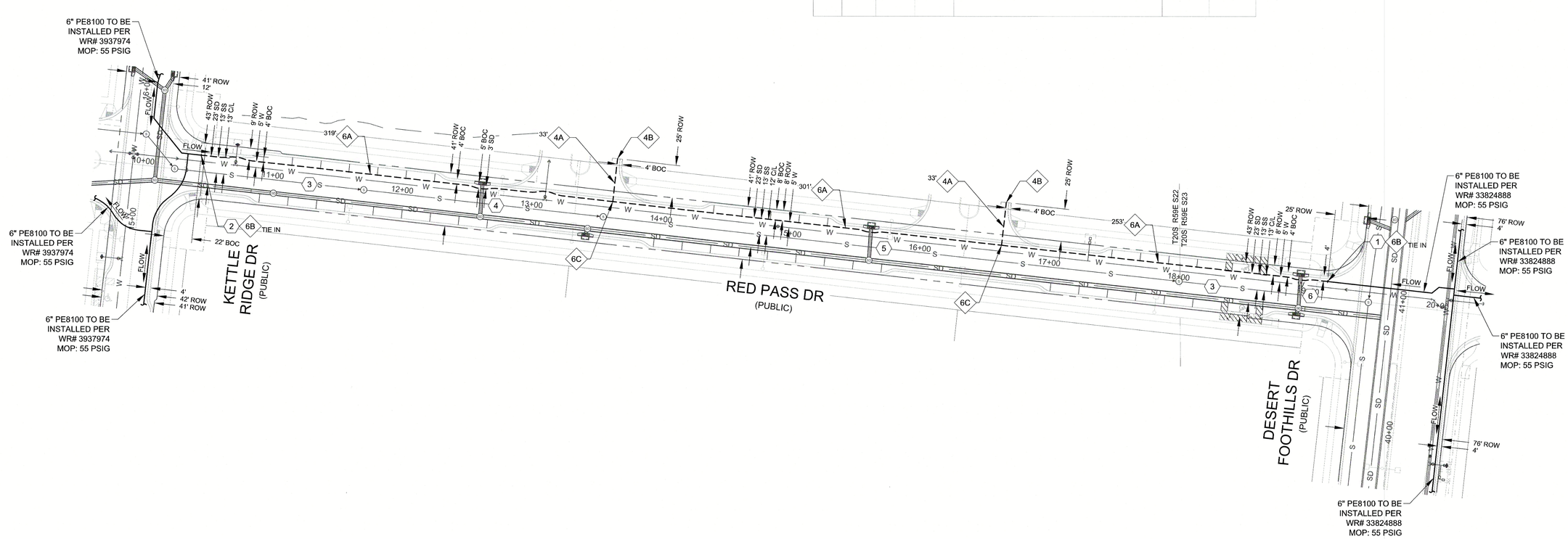
0 40

1" = 40'

6" DISTRIBUTION MATERIALS LIST						
CODE	DESIGN QTY.	AS-BUILT QTY.	STOCK ID	DESCRIPTION	SEAM	COATING
6A	873'	0'	100-0033	PIPE 6" PE 8100 40 FT JOINT	N/A	N/A
6B	2	0	140-3445	COUPLING, ELECTROFUSION, 6" PE CPLS	N/A	N/A
6C	2	0	140-3078	TEE, 6" X 6" X 4" PE	N/A	N/A

4" DISTRIBUTION MATERIALS LIST						
CODE	DESIGN QTY.	AS-BUILT QTY.	STOCK ID	DESCRIPTION	SEAM	COATING
4A	66'	0'	100-5201	PIPE 4" PE 8100 40 FT JOINT	N/A	N/A
4B	2	0	140-3062	CAP, 4" PE	N/A	N/A

CONSTRUCTION NOTES	
1	TIE NEW 6" PE8100 TO PROPOSED 6" PE8100 TO BE INSTALLED UNDER WR#3824888
2	TIE NEW 6" PE8100 TO PROPOSED 6" PE8100 TO BE INSTALLED UNDER WR#3937974
3	RTC 503
4	STORM DRAIN UTILITY CROSSING ELEVATIONS APPROXIMATE FINISHED GRADE ELEV: 3419' SD TOP OF PIPE ELEV: 3408.54' SD INV ELEV: 3406.29'
5	STORM DRAIN UTILITY CROSSING ELEVATIONS APPROXIMATE FINISHED GRADE ELEV: 3390' SD TOP OF PIPE ELEV: 3380.51' SD INV ELEV: 3378.26'
6	STORM DRAIN UTILITY CROSSING ELEVATIONS APPROXIMATE FINISHED GRADE ELEV: 3377.5' SD TOP OF PIPE ELEV: 3367.20' SD INV ELEV: 3364.95'



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D_W_VALLEY	
SYSTEM MAOP:	60
SYSTEM MOP:	55
N/A	
SYSTEM MAOP:	N/A
SYSTEM MOP:	N/A

JOB TYPE	
HP SERVICE	☐
DISTRIBUTION	☒
FEEDER	☐
TRANS. BY DEF	☐
TRANS > 20%	☐

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3937973
RELATED WR NO.S
3937974 (DIST) 3824888 (DIST)

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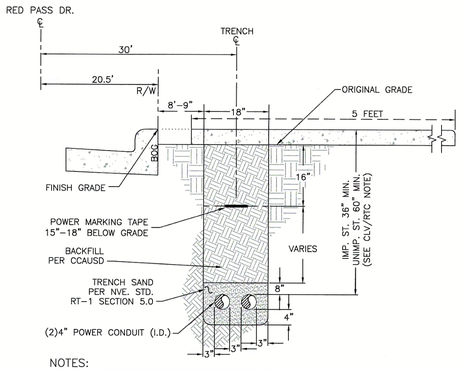
PROJECT CONTACT	VICTORIA HACKER		PHONE: (702)596-4842
SHEET NO. 5 OF 5		SCALE 1" = 40'	DATE 11/13/2019
DWN. BY HBK ENG.		CHKD. BY	APPVD. BY

V21 - RED PASS - DESERT FOOTHILLS TO KETTLE RIDGE

LIG-01564 1071U7958



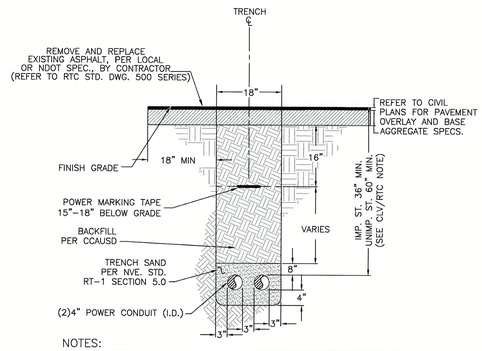
NOTES:

CLV REQUIREMENTS (APPLICABLE WITHIN CITY OF LAS VEGAS LIMITS ONLY):
IMPROVED AREA (IMP. ST.): (LOCATION OF TRENCH)
AREA WILL BE CONSIDERED IMPROVED IF IT MEETS ONE OR MORE OF THE FOLLOWING CRITERIA(S).
- EXISTING PERMANENT PAVEMENT WITH CURB & GUTTER AND/OR ADJACENT PERMANENT SIDEWALK.
- WITHIN AN IMPROVED TRAIL AREA.
- LIMITS OF CONSTRUCTION INSTALLED CONCURRENT WITH A PRIVATE OR PUBLIC PROJECT.

UNIMPROVED AREA (UNIMP. ST.): (LOCATION OF TRENCH)
ANY OTHER SCENARIO THAT FAILS TO MEET THE IMPROVED AREA CRITERIA(S) WILL BE CONSIDERED AN UNIMPROVED AREA.

NVE REQUIREMENTS:
FOR ALL OTHER JURISDICTIONS REFER TO NVE STANDARDS.
BACKFILL REQUIREMENTS NVE. STD. RT-1.
TRENCH DEPTH REQUIREMENTS NVE. STD. RT-5.

TRENCH DETAIL
2-4" CONDUITS
SECTION "AA"



NOTES:

CLV REQUIREMENTS (APPLICABLE WITHIN CITY OF LAS VEGAS LIMITS ONLY):
IMPROVED AREA (IMP. ST.): (LOCATION OF TRENCH)
AREA WILL BE CONSIDERED IMPROVED IF IT MEETS ONE OR MORE OF THE FOLLOWING CRITERIA(S).
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BACKFILL REQUIREMENTS NVE. STD. RT-1.
TRENCH DEPTH REQUIREMENTS NVE. STD. RT-5.

TRENCH DETAIL
2-4" CONDUITS
SECTION "BB"

CENTERLINE STATION TABLE

#	STREET INTERSECTION	STA	HEADED
(A)	RED PASS DR.	10+00.00	EAST
	KETTLE RIDGE DR.	41+13.11	NORTH
(B)	RED PASS DR.	19+77.11	EAST
	DESERT FOOTHILLS DR.	40+96.92	NORTH

STATION TABLE

MAXIMO STATION	CORNER	CENTER LINE STATION	SIDE	OFFSET CL TO BOC	OFFSET CL TO ROW	OFFSET CL TO CLOSEST FACE OF SUBSTRUCTURE	SUBSTRUCTURE INFORMATION
(0004)	WEST	17+50.00	LT	20.50'	20.50'	28.17'	RS-82 - 7'-8" X 3'-8"
		FIELD NOTES:					OPERATING NUMBER: UGM50670
							PAGE NUMBER: 2
	EAST	17+57.67	LT	20.50'	20.50'	28.17'	EASEMENT NUMBER: FUTURE
		FIELD NOTES:					TYPICAL EASEMENT LAYOUT: FUTURE
(0003)	WEST	17+92.33	LT	20.50'	20.50'	28.17'	RS-82 - 7'-8" X 3'-8"
		FIELD NOTES:					OPERATING NUMBER: UGM79072
							PAGE NUMBER: 2
	EAST	18+00.00	LT	20.50'	20.50'	28.17'	EASEMENT NUMBER: FUTURE
		FIELD NOTES:					TYPICAL EASEMENT LAYOUT: FUTURE

RTC NOTES:

BACKFILL AND RIGHT OF WAY RESTORATION SHALL CONFORM TO CLARK COUNTY UNIFORM STANDARD DRAWINGS

(1)	500.1	0 TO 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT
(2)	500.2	0 TO 5 YEARS PAVEMENT RESTORATION TRANSVERSE CUT
(3)	500.3	OVER 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT. GREATER THAN 60' R.O.W
(4)	500.4	OVER 5 YRS PAVEMENT RESTORATION LONGITUDINAL CUT. 60' R.O.W OR LESS
(5)	500.5	OVER 5 YRS PAVEMENT RESTORATION TRANSVERSE ALL R.O.W WIDTHS
(6)	501	TYPICAL UNDERGROUND UTILITY LOCATIONS IN RESIDENTIAL STREETS 60' OR LESS R.O.W.
(7)	501.1	TYPICAL UTILITY UNDERGROUND LOCATIONS IN STREETS WITH GREATER THAN 60' R.O.W.
(8)	503	METHOD B FOR RIGID AND FLEXIBLE PIPE TRENCH BACKFILL - PAVED AREAS
(9)	503.1	METHOD A FOR FLEXIBLE PIPE TRENCH BACKFILL - PAVED AREAS
(11)		BACKFILL IN UNPAVED AREA AS REQUIRED BY LOCAL CODE OR AS APPROVED BY AGENCY.
(12)	234	SIDEWALK
(13)	506	UTILITY POTHOLE REPAIR
(14)	216	"L" TYPE CURB AND GUTTER

CONSTRUCTION / INSPECTION REQUIREMENTS

WORK MUST CONFORM TO NVE ELECTRIC SERVICE STANDARDS, AVAILABLE AT:
www.nvenergy.com/business/newconstruction/newconstructionS/servicestandards.cfm

NVE INSPECTOR MUST BE PRESENT TO INSPECT TRENCHING (SCHEDULE AT LEAST 72 HOURS IN ADVANCE) AT EACH OF THE FOLLOWING STAGES:
1. BOTTOM SAND AND CONDUIT INSTALLED
2. TOP SAND INSTALLED
3. BACKFILL INSTALLED

CONDUIT MUST BE MANDRILLED PRIOR TO RELEASE (COORDINATE WITH INSPECTOR).

NVE STAND BY CREW IS REQUIRED WHEN WORKING AT AN ENERGIZED VAULT OR TRANSFORMER. CALL STAND BY NUMBER (SEE TITLE BLOCK) TO SCHEDULE.

NVE ELECTRICAL INSTALLATION WILL NOT BE SCHEDULED UNTIL AFTER THE NVE INSPECTOR HAS COMPLETED THE OFFICIAL RELEASE.

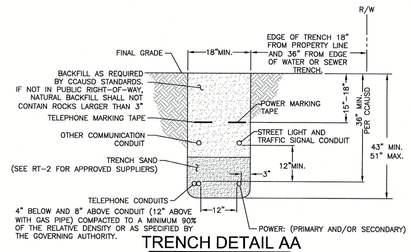
METER(S) WILL NOT BE SET UNTIL ALL OF THE FOLLOWING ARE COMPLETE:
- [INSTRUMENT-RATED ONLY] METERING EQUIPMENT HAS BEEN SUBMITTED TO NVE METERING ENGINEER AND APPROVED. (submittals_southern@nvenergy.com)
- APPLICATION FOR METER SET HAS BEEN SUBMITTED TO NVE'S NEW DEVELOPMENT CENTER. FORM AVAILABLE AT: www.nvenergy.com/brochures_orch/new_construction/meter_set.pdf
- THE LOCAL BUILDING AUTHORITY HAS INSPECTED AND APPROVED THE METERING EQUIPMENT.
- METERING EQUIPMENT IS ACCESSIBLE AND CLEARLY IDENTIFIED WITH PERMANENT MARKINGS, ADDRESSES, SUITE NUMBERS, AND STREET SIGNS ARE POSTED IN PERMANENT LOCATIONS (SEE RPI-G).

TRACK PROJECT STATUS ONLINE WITH NVE'S DEVELOPER DASHBOARD:
www.nvenergy.com/business/newconstruction/newconstructionS/developerdashboard.cfm

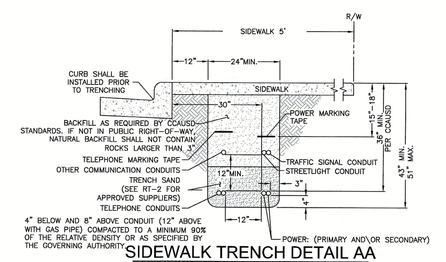
THIS PROJECT IS PART OF MASTER PLAN UMBRELLA ID# 3001894996 AND IS CONTINGENT UPON THE COMPLETION OF ADDENDUM(S) 3002805966

NVEnergy REQUIRES
24 HOUR
ACCESS TO EQUIPMENT

!!!! CAUTION !!!!
ENERGIZED CABLES...
CALL BEFORE YOU DIG



TRENCH DETAIL AA
NVE U.G. STD. RT-12 (REV. 10/27/2014)
(RESIDENTIAL AND COMMERCIAL)



SIDEWALK TRENCH DETAIL AA
NVE U.G. STD. RT-7 (REV. 10/27/2014)
(RESIDENTIAL OR COMMERCIAL)

NOTE:
NPC FACILITIES (SUBSTRUCTURES) ARE NOT TO BE WITHIN 5' OF STREET LIGHT BASES, AND NPC CONDUITS ARE NOT TO CONFLICT WITH STREET LIGHT BASES

NVE WILL NOT VERIFY THE EXISTING CONDUIT. CUSTOMER TO ENSURE ITS INTEGRITY AND REPAIR IF NECESSARY.

NV ENERGY SCHEDULING NOTE: DAY (LANE BLOCKS)
THIS PROJECT WAS ESTIMATED WITH THE ASSUMPTION THAT ALL THE WORK BEING PERFORMED ON THIS PROJECT BY NV ENERGY CREWS CAN BE DONE DURING THE DAYTIME AND WILL REQUIRE TRAFFIC CONTROL.

GOVERNMENT APPROVAL OF THESE DRAWINGS DOES NOT INDICATE APPROVAL OF TRAFFIC CONTROL. PLEASE REFER TO THE BARRICADE PLAN FOR APPROVED TRAFFIC CONTROL REQUIREMENTS.

FIRE HYDRANT CLEARANCE:
6' RADIUS FROM CENTER OF HYDRANT TO ALL ABOVE GROUND PADS AND/OR EQUIPMENT AND ALL MANHOLES AND SWITCHBOXES.
6' RADIUS FROM CENTER OF HYDRANT TO ALL UNDERGROUND HANDHOLES, PULLBOXES AND SPLICEBOXES. ALL PER NVEnergy STD. RS-5

NOTE: ALL THE ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF CLV UNIFIED DEVELOPMENT CODE TITLE 19.06 AND 19.08

APPROVED FOR CONSTRUCTION
THIS APPROVAL IS FOR WORK IN CLV R/W & EASEMENT ONLY. OBTAINING PERMISSIONS OR EASEMENTS FOR WORK SHOWN ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE UTILITY.

SEE COVER OF Civil Plan
APPROVAL BY: DATE

NVE STANDARDS

T,R,S: 20-59-23
APN: 137-23-410-001

GENERAL NOTES:

ANY NOTES LOCATED IN DRAWING AREA TAKE PRECEDENCE OVER STANDARD NOTES.

REFER TO A CURRENT NVEnergy ELECTRIC SERVICE REQUIREMENTS HANDBOOK FOR FURTHER CLARIFICATION OF NVEnergy STANDARDS.

THE APPLICANT SHALL INFORM THE INSPECTOR AT LEAST 48 HOURS BEFORE COMMENCING ANY ITEM OF CONSTRUCTION OR INSTALLATION OF MATERIAL TO ENABLE PROPER INSPECTION OF MATERIALS AND WORKMANSHIP. MAIN TRENCH WIRE PULLS TO BE SCHEDULED 72 HOURS IN ADVANCE OF INSTALLATION. APPLICANT'S PROJECT WILL NOT BE SCHEDULED UNTIL FINAL APPROVAL FROM NVEnergy UNDERGROUND & ELECTRICAL INSPECTORS.

ALL WORK SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN THE ELECTRIC SERVICE REQUIREMENTS HANDBOOK, AS CURRENTLY ADOPTED BY NVEnergy. THE CONTRACTOR SHALL SECURE COPIES OF THE AFOREMENTIONED CONSTRUCTION SPECIFICATIONS ON HIS OR HER OWN BEHALF.

SYMBOLS ARE NOT TO SCALE AND DO NOT NECESSARILY REPRESENT ACTUAL LOCATIONS OF FACILITIES.

THIS DRAWING ILLUSTRATES DATA COLLECTED FROM VARIOUS SOURCES AND MAY NOT REPRESENT A SURVEY OF THE PREMISES.

APPLICANT SHALL FIELD DETERMINE POSITION AND DEPTH OF EXISTING UTILITY EQUIPMENT PRIOR TO COMMENCING CONSTRUCTION.

USE CAUTION PRIOR TO EXCAVATION. CHECK TO ENSURE ADDITIONAL DEPTH IS NOT REQUIRED TO ACCOMMODATE GAS AND/OR WATER FACILITIES AND DRAINAGE CHANNELS.

CALL NVEnergy UNDERGROUND INSPECTORS 48 HOURS PRIOR TO START OF CONSTRUCTION FOR TRENCH INSPECTION BEFORE COVERING TRENCH.

ALL NVEnergy CABLE TO BE INSTALLED BEHIND CURB, UNLESS OTHERWISE STATED.

APPLICANT IS RESPONSIBLE FOR STAKING OF PROPERTY CORNERS & ELEVATIONS.

ALL HANDHOLES AND PULLBOXES SHALL BE INSTALLED TO FINISHED GRADE OR 6" ABOVE IF GRADE IS NOT ESTABLISHED.

ANY SUBSTRUCTURE VAULT INSTALLED IN GRAVEL, GRASS, OR BARE GROUND WILL REQUIRE A CONCRETED 8" WIDE AND 6" DEEP COLLAR AROUND BOX IN ACCORDANCE TO RS-G6.

2" PLASTIC CONDUIT BENDS (90°, 45°) WITH 36" MIN. RADIUS. (USE FIBERGLASS IF CONDUIT LENGTH IS OVER 500')

3" & 4" PLASTIC CONDUIT BENDS (90°, 45°) WITH 36" MIN. RADIUS.
(USE RGS IF CONDUIT LENGTH IS OVER 100')

6" PLASTIC CONDUIT BENDS (90°, 45°) WITH 48" MIN. RADIUS.
(USE RGS IF CONDUIT LENGTH IS OVER 100')

WHEN INSTALLING CONDUIT IN FIELD, USE APPROPRIATE BENDS TO COMPLETE THE INSTALLATION.

DEFLECTION OF CONDUIT BENDS AND CONDUIT NOT TO EXCEED NVEnergy STANDARDS.

EXISTING STUB-OUT/CONDUIT INSTALLED BY PREVIOUS CONTRACTOR / DEVELOPER. NVEnergy DOES NOT GUARANTEE LOCATION, LENGTH, OR ACCESSIBILITY OF EXISTING STUB-OUT/CONDUIT. IF UTILIZING ANY PORTION OF EXISTING CONDUIT, IT MUST BE MANDRELED PRIOR TO FINAL RELEASE.

PREVIOUSLY MANDRELED CONDUIT WHICH HAS BEEN IN THE GROUND FOR OVER 6 MONTHS MUST BE RE-MANDRILLED PRIOR TO FINAL RELEASE.

WHEN NVEnergy FACILITIES ARE TO BE REMOVED, NVEnergy WILL REMOVE ALL WIRES AND EQUIPMENT. NVEnergy IS NOT RESPONSIBLE FOR THE REMOVAL OF CONDUIT RUNS OR SUBSTRUCTURES FROM THE PROPERTY.

NO COVERED PARKING IN FRONT OF EQUIPMENT.

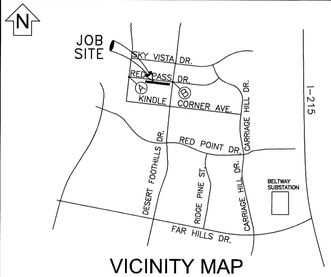
ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST ISSUE; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE.

CIVIL LINETYPE LEGEND

CENTERLINE
PROPERTY LINE/ROW
CURB
EDGE OF PAVEMENT
EDGE OF SIDEWALK
SEWER LINE (S)
WATER LINE (W)
COHW WATER LINE (COHW)
LVVWD WATER LINE (LVVWD)
SNWA WATER LINE (SNWA)
GAS LINE (GAS)
TELEPHONE LINE (TEL)
CABLE TV LINE (CATV)
CABLE TV LINE (FIBER)
STORM DRAIN LINE (SD)
FIRE HYDRANT
SERVICE INDICATOR
SIGNAL LIGHT
STREET LIGHT

CITY OF LAS VEGAS
PERMIT REQUIRED*
CONTACT CLV LAND DEVELOPMENT (229-6372) CLV CONSTRUCTION SERVICES MUST BE NOTIFIED 24 HOURS PRIOR TO COMMENCING CONSTRUCTION (229-6337)
HANSEN #
DATE #
*NVE INSPECTOR MUST BE NOTIFIED BY FAX 48 HOURS PRIOR TO COMMENCING CONSTRUCTION & WILL VERIFY CITY PERMIT FOR WORK DONE IN STREETS OR SIDEWALK.
FAX PERMIT TO:
LAS VEGAS NORTH (RYAN CENTER): 402-4354
LAS VEGAS SOUTH (BELTWAY CENTER): 402-6864

FOR PERMITTING ONLY



VICINITY MAP
(NOT TO SCALE)

EVERY EFFORT HAS BEEN MADE TO IDENTIFY ALL NVE FACILITIES. THE CUSTOMER SHALL CONFIRM THE EXISTENCE AND LOCATION OF THESE FACILITIES.

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
CALL 1-702-402-2929

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-227-2600
AND CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-6000

REVISIONS

NO.	DESCRIPTION	DATE	REV BY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

NON-STANDARD

PROJECT PURPOSE:
TO PROVIDE FEEDER FOR NEW MASTER PLANNED COMMUNITY

EXHIBIT 'A'

NVEnergy INFORMATION:
COORDINATOR: STATON, STEVEN
PHONE: (702)332-9107 D.F. KL
DESIGNER: DIDIN, ERSIN
DCA: N/A
INSPECTOR: 702-402-3008 OR UGI@NVENERGY.COM
STAND BY: (702) 402-4450, 4150, 4114, 4117, 4118
DISTRICT: LVN

JPA INFORMATION:
JPA ADMIN PHONE: N/A JPA#: N/A

CUSTOMER INFORMATION:
APPLICANT: THE HOWARD HUGHES COMPANY, LLC
ENGINEER: VTN
CONTACT: ANDERSON, CHRISTOPHER ** 702-755-9501
APPROVAL DATE: 01/06/2020

GOVERNMENT INFORMATION:
AGENCY: CLV I
APPROVAL DATE: —

FOR EACH SERVICE POINT (POINT OF DELIVERY), ENERGY FOR EACH TENANT SPACE WILL BE MEASURED THROUGH ONE WATTHOUR METER. ENERGY FOR ALL NON-TENANT SPACE WILL BE MEASURED THROUGH ONE WATTHOUR METER. CONTACT NVE METER OPERATIONS FOR MULTIPLE RATE CLASS INSTALLATIONS.

NVEnergy

SUMMERLIN VILLAGE 21 - ADDENDUM 13 - RED PASS
RED PASS-DESERT FOOTHILL TO KETTLE RIDGE

LG-01564 107V7958

PROJ #3003895277	SCALE: 1"=30'
SHEET # 1 OF 2	DATE:11/15/2019

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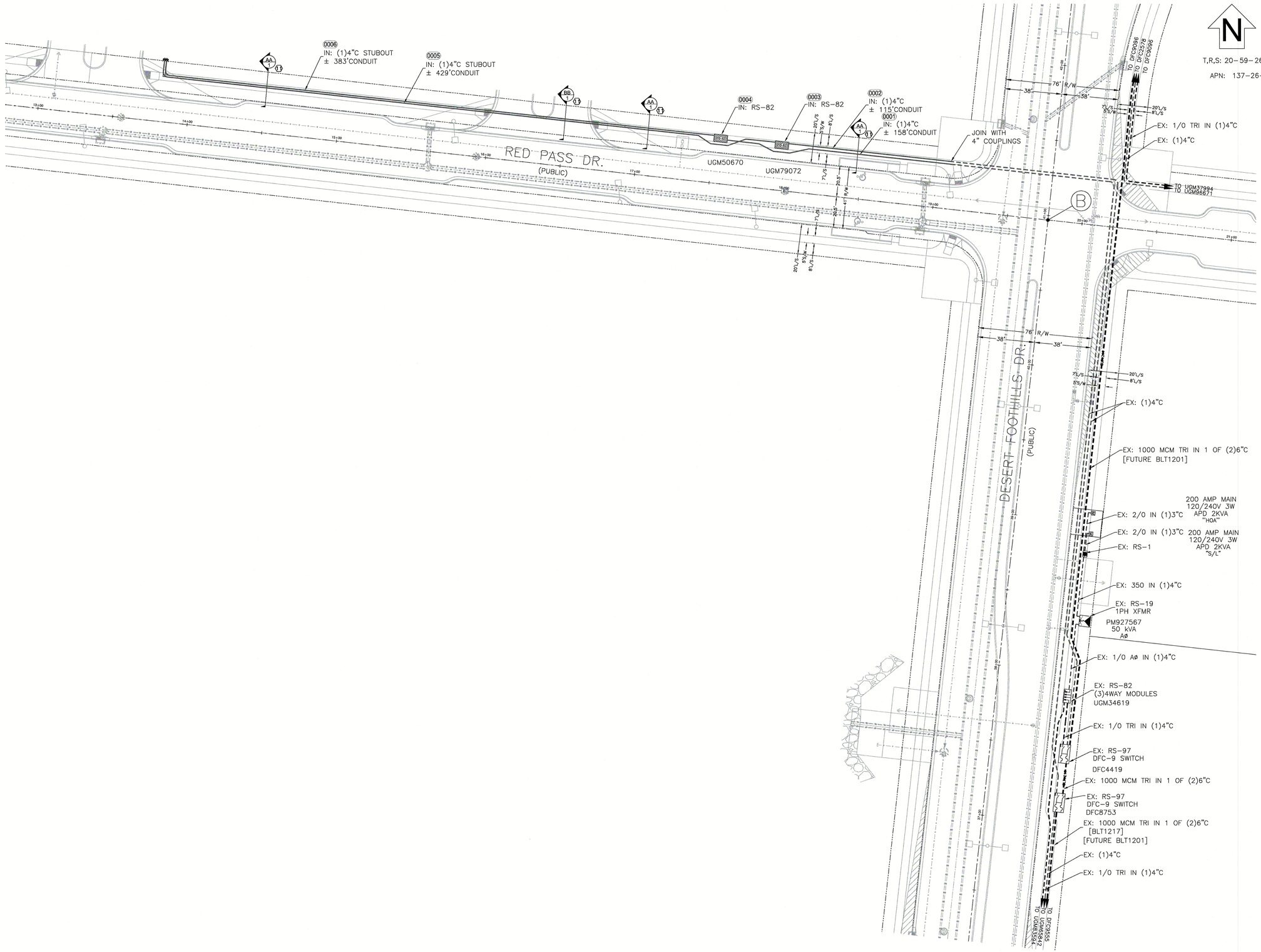
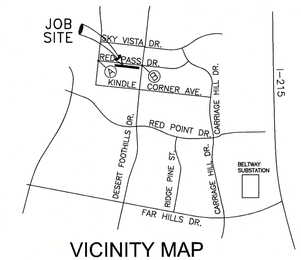
1/7/2020 8:23 AM

Sharing of this drawing and the information contained herein shall be only to individuals/parties who have entered into an agreement with Applicant for the completion of work associated with this specific project. Use for purposes other than this specific project requires the written consent of NV Energy.

0 REVISION(S)





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REVISIONS

NO.	DESCRIPTION	DATE	REV BY

NON-STANDARD

PROJECT PURPOSE:
TO PROVIDE FEEDER FOR
NEW MASTER PLANNED COMMUNITY

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PHONE: (702)332-9107 D.F. KL
DESIGNER: DIDIN, ERSIN
DCA: N/A
INSPECTOR: 702-402-3008 OR UGI@NVENERGY.COM
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DISTRICT: LVN

JPA INFORMATION:
JPA ADMIN PHONE: N/A JPA#: N/A

CUSTOMER INFORMATION:
APPLICANT: THE HOWARD HUGHES COMPANY, LLC
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APPROVAL DATE: 01/06/2020

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FOR PERMITTING ONLY

NVEnergy.

SUMMERLIN VILLAGE 21 - ADDENDUM 13 - RED PASS
RED PASS-DESERT FOOTHILL TO KETTLE RIDGE

L19-01564 107W 7958

PROJ #3003895277	SCALE: 1"=30'
SHEET # 2 OF 2	DATE:11/15/2019

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1/7/2020 9:23 AM

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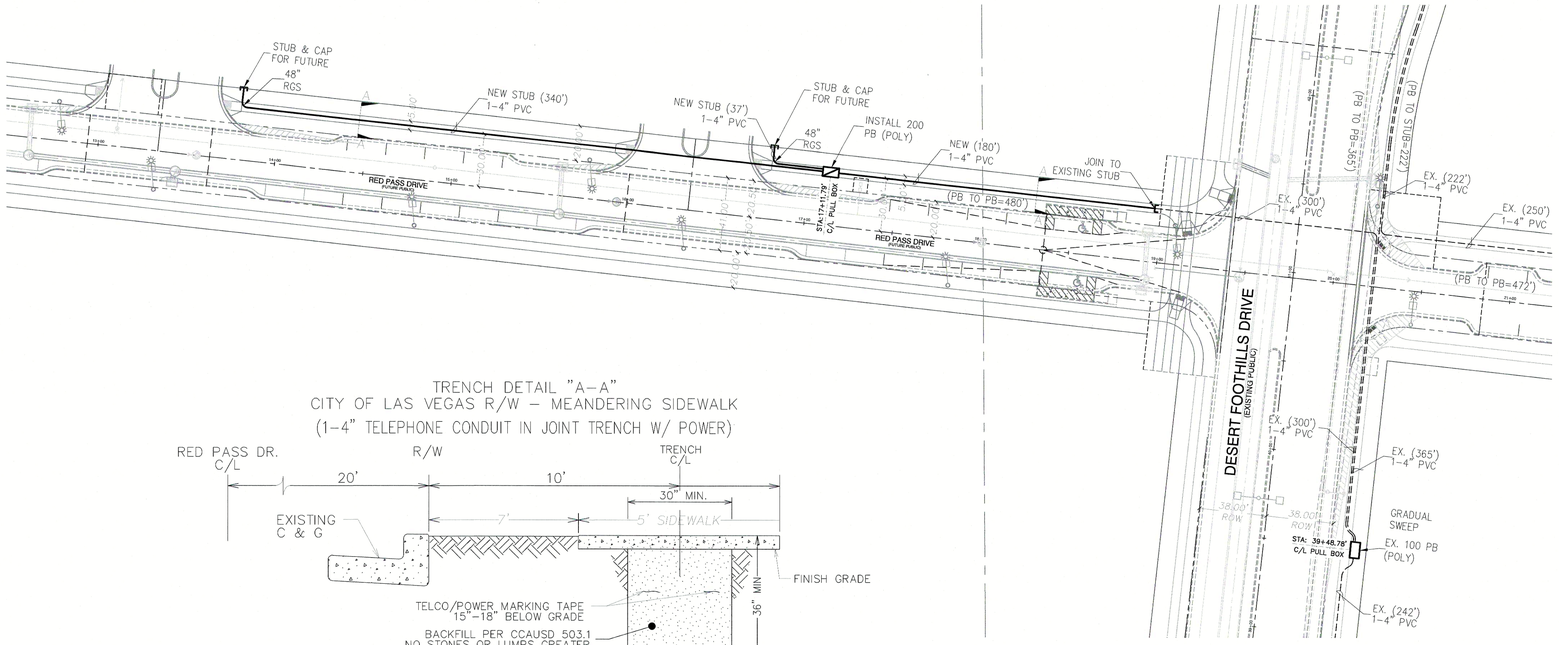
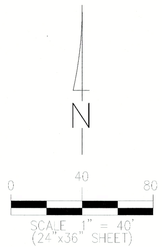


TRENCH DETAIL "A-A"
CITY OF LAS VEGAS R/W - MEANDERING SIDEWALK
(1-4" TELEPHONE CONDUIT IN JOINT TRENCH W/ POWER)



LEGEND

PROPOSED CONDUIT: P.V.C. - D.B. (DIRECT BURIAL) GRADE: D.B. 60 FOR 1", 2", & 3" D.B. 100 FOR 4"

EXISTING CONDUIT

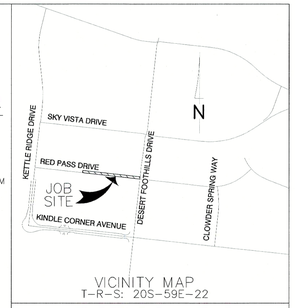
RADIAL BENDS: SCHEDULE 40 PVC (TYPICAL) OR RIGID GALVANIZED STEEL (RGS) WITH DOUBLE WRAPPED 10 MIL CORROSION PROTECTION TAPE (AS SHOWN). 24" RADIUS FOR 1"; 36" RADIUS FOR 2"; 48" RADIUS FOR 3" & 4".

EXISTING	PROPOSED	
○	○	MANHOLE - INCLUDE REQUIRED GRADE RINGS, RACKING, GROUNDING, STEP RUNGS AND LADDER - REFER TO DRAWING FOR SIZE/TYPE.
▭	▭	400 PULL BOX (3'0" x 5'0" x 4'0" I.D.) - WITH TWO (2) HINGED ALUMINUM TORSION-ASSISTED TRAFFIC RATED LIDS MARKED "TELCO", GALVANIZED STEEL ADJUSTING FRAME, AND FOUR (4) 18 HOLE CABLE RACKS (2 EA. SIDE).
▨	▨	200 PULL BOX (30"x48"x36" I.D.) -POLYMER CONCRETE TYPE PULL BOX. 200 PULL BOXES TO BE PROVIDED BY AND DELIVER TO THE JOB SITE BY CENTURYLINK.
▭	▭	100 PULL BOX (24"x36"x36" I.D.) -POLYMER CONCRETE TYPE PULL BOX. 100 PULL BOXES TO BE PROVIDED BY AND DELIVER TO THE JOB SITE BY CENTURYLINK.
□	□	30 PULL BOX (17" x 30" x 30" I.D.) - P.C.C. TYPE PULL BOX (ES-30 or T-30CC)
▷	▷	16 HAND HOLE (9" x 15" x 12" I.D.)

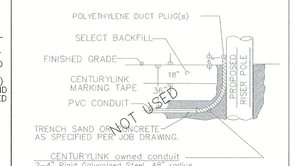
EXISTING	PROPOSED	
⊠	⊠	TERMINAL CABINET 48" x 48" x 6"
▤	▤	TERMINAL CABINET 36" x 36" x 6"

UNDERWRITER LABORATORY APPROVED, RAIN-TIGHT WITH A NON-LOCKING, SIDE-HINGED DOOR QUIPPED INSIDE WITH A ¾" PLYWOOD BACKBOARD (1" SMALLER ON ALL SIDES, CENTERED IN CABINET) SECURED WITH RECESSED MOUNTING HARDWARE AND A # 6 GROUND WIRE CONNECTED TO THE APPROVED COMMUNICATION GROUNDING SOURCE, AND A 120V AT 20AMPS OUTLET WITHIN 6' AS DETERMINED BY THE ELECTRICAL ENGINEER FOR THIS BUILDING OR DEVELOPMENT. MOUNT CABINET AT EYE LEVEL A MINIMUM OF 48" ABOVE FINISH GRADE.

▨ TELEPHONE TERMINAL BACKBOARD (T.T.B.) - SEE PLAN FOR SIZE REQUIREMENTS: 3/4" PLYWOOD BACKBOARD TREATED WITH FIRE RETARDANT PAINT OR SEALER AND A # 6 GROUND WIRE CONNECTED TO THE APPROVED COMMUNICATION GROUNDING SOURCE AND A 120V AT 20AMPS OUTLET WITHIN 6' AS DETERMINED BY THE ELECTRICAL ENGINEER FOR THIS BUILDING OR DEVELOPMENT. BACKBOARDS SMALLER THAN 4'x8' (i.e. 2' x 2' & 4' x 4') SHOULD BE MOUNTED 40" ABOVE THE FLOOR.



VICINITY MAP
T-R-S: 20S-59E-22



RISER DETAIL
(TYPICAL)

CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST ISSUE OF THE CENTURYLINK UNDERGROUND SPECIFICATIONS.
2. ALL CONDUIT, TRENCHING AND SUBSTRUCTURES ARE TO BE PROVIDED BY THE DEVELOPER AND CONFORM WITH CENTURYLINK STANDARDS. ALL BACKFILLING AND RESTORATION WORK SHALL CONFORM TO THE REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA (RTC) UNIFORM STANDARD DRAWINGS.
3. WHEN EXISTING TELEPHONE FACILITIES (i.e. POLES, MANHOLES, PULL BOXES, CONDUIT, TERMINALS, etc.) ARE AFFECTED BY IMPROVEMENTS AS REQUIRED BY LOCAL ORDINANCE (i.e. STREETS, SIDEWALKS, GUTTERS, SEWERS, STORM DRAINS etc.), THE DEVELOPER SHALL BE RESPONSIBLE FOR THE ADJUSTMENT OF THESE FACILITIES AS REQUIRED.
4. TELEPHONE BOXES ARE TO BE PLACED BEHIND THE CURB LINE AND/OR IN THE SIDEWALK AREA WHENEVER POSSIBLE AND SITUATED TO AVOID DRIVEWAYS AND HANDICAP RAMPS. ALL TRENCHING WILL BE OF A MINIMUM DEPTH TO MAINTAIN 36" COVER FROM FINAL GRADES TO TOP OF PIPE (EXCEPT WHEN ENTERING TELEPHONE BOXES). MAINTAIN 12" MINIMUM SEPARATION FROM FOREIGN UTILITIES. BOXES WILL BE ESTABLISHED TO FINISH GRADE.
5. ALL PULL BOXES (2'-0" X 3'-0" AND LARGER) AND MANHOLES ARE TO BE GROUNDED WITH A 3/8" x 1/16" TINNED SOFT COPPER BONDING RIBBON PLACED VERTICALLY AROUND THE BOTTOM OF THE BOX WITH 3' ENDS STUBBED INSIDE.
6. ALL TELEPHONE BOXES NOT IN SIDEWALK AREAS WILL BE REQUIRED TO HAVE A PROTECTIVE CONCRETE COLLAR, RE-ENFORCED WITH REBAR, POURED AROUND THE TOP PORTION OF THE BOX PER CENTURYLINK SPECIFICATIONS.
7. USE EXISTING PRECAST TERMINATORS TO JOIN SUBSTRUCTURES WHENEVER POSSIBLE. IF EXISTING TERMINATORS ARE NOT AVAILABLE THEN THE CONTRACTOR SHALL CORE DRILL, PLACE END BELLS AND PROPERLY GROUT THE CONDUIT INTO THE PRE-DETERMINED LOCATION. CONTACT THE CENTURYLINK INSPECTOR AT 244-7811, 24 HOURS IN ADVANCE TO DETERMINE THE EXACT ENTRANCE LOCATION. ENTERING THE SIDE OF A CENTURYLINK MANHOLE OR PULL BOX IS NOT PERMITTED UNLESS APPROVED BY CENTURYLINK.
8. WHEN A PULL BOX OR MANHOLE IS SITUATED WITHIN 50' OF A POWER TRANSFORMER, THE DEVELOPER/ CONTRACTOR SHALL PROVIDE AND INSTALL A #6 AWG STRANDED COPPER WIRE WITH GREEN PVC INSULATION FROM THE PULL BOX OR MANHOLE TO THE POWER TRANSFORMER (EXCLUDING 30 BOXES AND SMALLER). LEAVE A 4 FOOT TAILING END INSIDE THE SUBSTRUCTURE AND INCLUDE ALL CLAMPS NECESSARY TO FASTEN THE GROUNDING WIRE TO THE TRANSFORMER GROUND ROD OR COUNTERPOISE. THE GROUND WIRE SHALL ENTER THE SUBSTRUCTURE THROUGH THE 1" PVC GROUND SLEEVE.
9. WHEN JOINING EXISTING STUB-OUTS, THE LOCATION AND VALIDITY OF THE STUB-OUTS ARE ASSUMED AND BASED OFF RECORDS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF THE EXISTING CONDUIT STUB-OUT. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE, PROVE AND PLACE PULL STRING IN THE EXISTING CONDUIT AS PART OF CONNECTING TO THE STUB FOR EXTENSION TO THIS PROJECT. IF THE CONDUIT CANNOT BE PROVED OR IS IDENTIFIED AS BEING DAMAGED THEN THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR THE DUCTS WHERE DAMAGED OR INSTALL NEW CONDUIT BACK TO THE EXISTING TRUE POINT OF RE-ENFORCABLE SERVICE (i.e. POLE, MANHOLE OR PULL BOX) AT THE DEVELOPERS EXPENSE.
10. THE CONTRACTOR SHALL PROVE AND MANDREL ALL CONDUIT AFTER BACKFILLING WHILE A CENTURYLINK INSPECTOR IS PRESENT. MANDREL SIZE IS TO BE 1/4" SMALLER THAN THE INSIDE DIAMETER OF THE CONDUIT.
11. THE CONTRACTOR SHALL PROVIDE AND INSTALL A MEASURING TAPE CONSISTING OF WATER PROOF, 400 POUND TENSILE STRENGTH, MARKED IN ONE FOOT OR LESS INCREMENTS IN AT LEAST ONE DUCT OF ALL CONDUIT SECTIONS. ALL OTHER DUCTS IN A MULTIPLE DUCT SYSTEM WILL HAVE A 3/32" JET LINE PULL STRING WITH 400 POUND TENSILE STRENGTH.
12. A POLYETHYLENE DUCT PLUG SHALL BE INSTALLED IN ALL CONDUIT WHERE TERMINATED OR STUBBED.
13. CONCRETE ENCASEMENTS SHALL CONSIST OF 3/4" AGGREGATE, TYPE V, PORTLAND CEMENT CONCRETE. THE ENCASEMENT SHALL BE A MINIMUM OF 2" BETWEEN THE CONDUIT AND A MINIMUM OF 3" ON THE TOP, BOTTOM AND SIDES OF THE DUCT BANK.
14. PROTECTIVE POSTS SHALL BE 4" RIGID STEEL PIPE, SIX FEET IN LENGTH, FILLED AND SET IN CONCRETE AT LOCATIONS SHOWN. THE TOP OF THE PROTECTIVE POST SHALL BE 36 INCHES ABOVE THE PROPOSED FINISHED GRADE AND PAINTED WITH YELLOW STREET MARKING PAINT.
15. PLYWOOD BACKBOARDS ARE TO BE TREATED WITH FIRE RETARDANT MATERIAL, PAINT, OR SEALER.
16. ALL TERMINALS, BACKBOARDS, CABINETS, ETC., SHALL BE EQUIPPED WITH A #6 GAUGE GROUND WIRE, RUN TO AN APPROVED GROUND SOURCE.
17. IN ORDER TO INSURE ADEQUATE FACILITIES ARE PROVIDED FOR THIS PROJECT, IT IS IMPERATIVE THAT THIS CONDUIT RECOMMENDATION NOT BE CHANGED WITHOUT CENTURYLINK OUTSIDE PLANT ENGINEERING APPROVAL.
18. CENTURYLINK WILL REQUIRE "AS-BUILT" FOOTAGES PRIOR TO ORDERING CABLE TO SERVE THIS DEVELOPMENT. THESE FOOTAGES MUST BE RECEIVED SIX WEEKS PRIOR TO SERVICE INSTALLATION DUE DATES.
19. CALL 244-7811 TO SCHEDULE INSPECTIONS 24 HOURS IN ADVANCE. REQUESTS RECEIVED AFTER 11:00 AM MAY NOT BE SCHEDULED FOR THE FOLLOWING WORKDAY.

CONTRACTOR / DEVELOPER NOTE

1. THE DEVELOPER/CONTRACTOR SHALL CALL 244-7811 TO SCHEDULE INSPECTIONS 24 HOURS IN ADVANCE. REQUESTS RECEIVED AFTER 11:00 AM MAY NOT BE SCHEDULED FOR THE FOLLOWING WORKDAY.
2. ANY MODIFICATIONS TO THE CENTURYLINK DESIGN MUST BE APPROVED BY THE ENGINEER.
3. THESE PLANS WILL BE VALID FOR SIX MONTHS FROM DATE OF ISSUE.

TOTAL ESTIMATED PROJECT QUANTITIES

MATERIAL ITEMS (ALL TRENCHING BY DEVELOPER)	QUANTITY
200 SERIES PULL BOX (POLYMER TYPE)	1 EACH
4" D.B. 100 GRADE PVC	557' L.F.
4"X48" RGS 90°	2 EACH

CITY OF LAS VEGAS PERMIT REQUIRED *
DEVELOPER/CONTRACTOR SHALL OBTAIN A CITY PERMIT BEFORE ANY EXCAVATION WORK WITHIN CITY OF LAS VEGAS RIGHT-OF-WAY.
* CENTURYLINK INSPECTOR WILL VERIFY CITY PERMIT FOR WORK DONE WITHIN CITY OF LAS VEGAS RIGHT-OF-WAY.
INSPECTOR: DATE:

PROJECT REQUIREMENTS:

NDOT PERMIT:	☐
BLM GRANT:	☐
BOR GRANT:	☐
U.S.F.S.:	☐
U.P.R.R. PERMIT:	☐
SNWA PERMIT:	☐
3rd PARTY EASMT:	☐
OTHER:	☐
NOT REQUIRED:	☒

REMARKS:

OWNER/CONTACT: CHRISTOPHER ANDERSON
TELEPHONE: 702 791-4336

TOWNSHIP: 20S			
RANGE: 59E	CONTRACT ENGINEER: NAME: E. CORREA	COMMUNITY NAME:	
SECTION: 22	COMPANY: OUTSOURCE, INC	WC CLLI:	

RTC SOUTHERN NEVADA NOTES:

- FOR ASPHALT CUT AND RESTORATION REQUIREMENTS, SEE RTC UNIFORM STANDARD DRAWING SERIES 500.1, 500.2, 500.3, 500.4 AND 500.5
- FOR SIDEWALK REMOVAL AND REPLACEMENT REQUIREMENTS SEE RTC UNIFORM STANDARD DRAWING 234
- FOR TYPICAL U.G. UTILITY LOCATIONS UNDER STREETS AND SIDEWALKS, SEE RTC UNIFORM STANDARD DRAWINGS 501 AND 501.1
- FOR BACKFILL REQUIREMENTS SEE RTC UNIFORM STANDARD DRAWING 503.1
- SEE COMPLETE RTC UNIFORM STANDARD DRAWINGS FOR FURTHER AGENCY REQUIREMENTS

THIS DRAWING MAY SHOW APPROXIMATE LOCATIONS OF KNOWN UTILITIES IN THE IMMEDIATE VICINITY OF THE WORK TO BE DONE, BUT CENTURYLINK DOES NOT GUARANTEE OR ASSUME LIABILITY FOR THEIR POSITION OR DEPTH. CONTRACTORS SHALL DETERMINE TO THEIR SATISFACTION THE ACTUAL POSITION AND DEPTH OF EXISTING UTILITIES AS THEY WILL ASSUME THIS LIABILITY DURING THE PERFORMANCE OF THIS WORK.

NOTE: CENTURYLINK WILL SUPPLY AND DELIVER ALL POLYMER (POLY) TYPE BOXES FOR THIS PROJECT. CONTACT CENTURYLINK ENGINEER, LORI JOHNSON AT 702-244-7899 TO COORDINATE DELIVERY.

SERVICE CANNOT BE PROVIDED WITHOUT APPROVED OPEN TRENCH AND FINAL INSPECTION BY A CENTURYLINK INSPECTOR.

THIS APPROVAL IS FOR WORK IN CLV R/W OR CLV EASEMENTS ONLY. OBTAINING PERMISSIONS OR EASEMENTS FOR WORK SHOWN ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE UTILITY.

SEE CONFORMED C.L.V. PLAN
APPROVAL DATE

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 ISSUE; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE.

CENTURYLINK PROPRIETARY

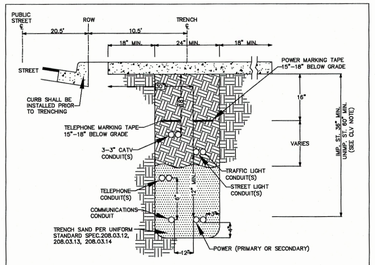
CONSTRUCTION PERMIT REQUIRED BY CONTRACTOR
19-01564
107V 7958

NO.	REVISION	ENGR.	MGR.	DATE
1				
2				
3				

811 Know what's below. Call before you dig.

CenturyLink™

TITLE: UNDERGROUND CONDUIT		ENG. L. JOHNSON	W.O. N.660414
REQUIREMENT for		PHONE 702.244.7899	CLI WW LSVGNVXW
LOC: SUMMERLIN VILLAGE 21 ADDENDUM 15	APVD. BY L. J.	ISSUE DATE 01/15/20	
RED PASS DRIVE DESERT FOOTHILLS TO KETTLE RIDGE	SCALE 1"= 40'	SHT. NO. 1 of 1	



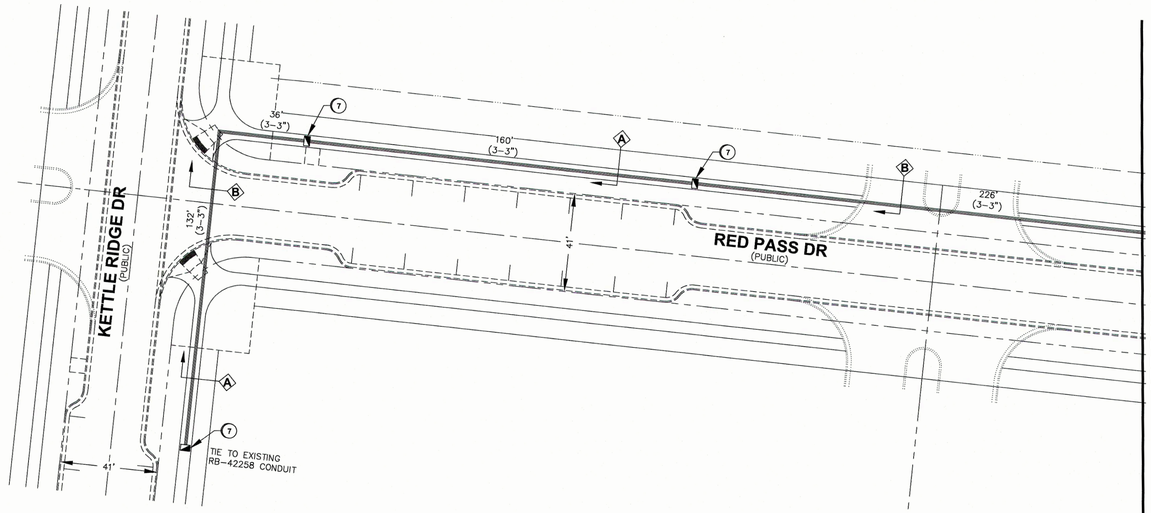
A SIDEWALK TRENCH DETAIL

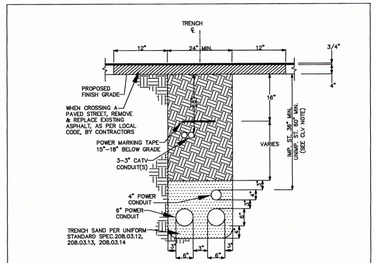
PRIVATE & PROJECT INTERIOR TRENCH
(NOT TO SCALE)

CLV REQUIREMENTS (APPLICABLE WITHIN CITY OF LAS VEGAS LIMITS ONLY):

IMPROVED AREA (IMP. ST.):(LOCATION OF TRENCH)
AREA WILL BE CONSIDERED IMPROVED IF IT MEETS ONE OR MORE OF THE FOLLOWING CRITERIA(e):
- -EXISTING PERMANENT PAVEMENT WITH CURB & GUTTER AND/OR ADJACENT PERMANENT SIDEWALK
- -WITHIN AN IMPROVED TRAIL AREA
- -LIMITS OF CONSTUCTION INSTALL CONCURRENT WITH A PRIVATE OR PUBLIC IMPROVEMENT

UNIMPROVED AREA (UNIMP. ST.):(LOCATION OF TRENCH)
ANY OTHER SCENARIO THAT FAILS TO MEET THE IMPROVED AREA CRITERIA(e) WILL BE CONSIDERED AN UNIMPROVED AREA.





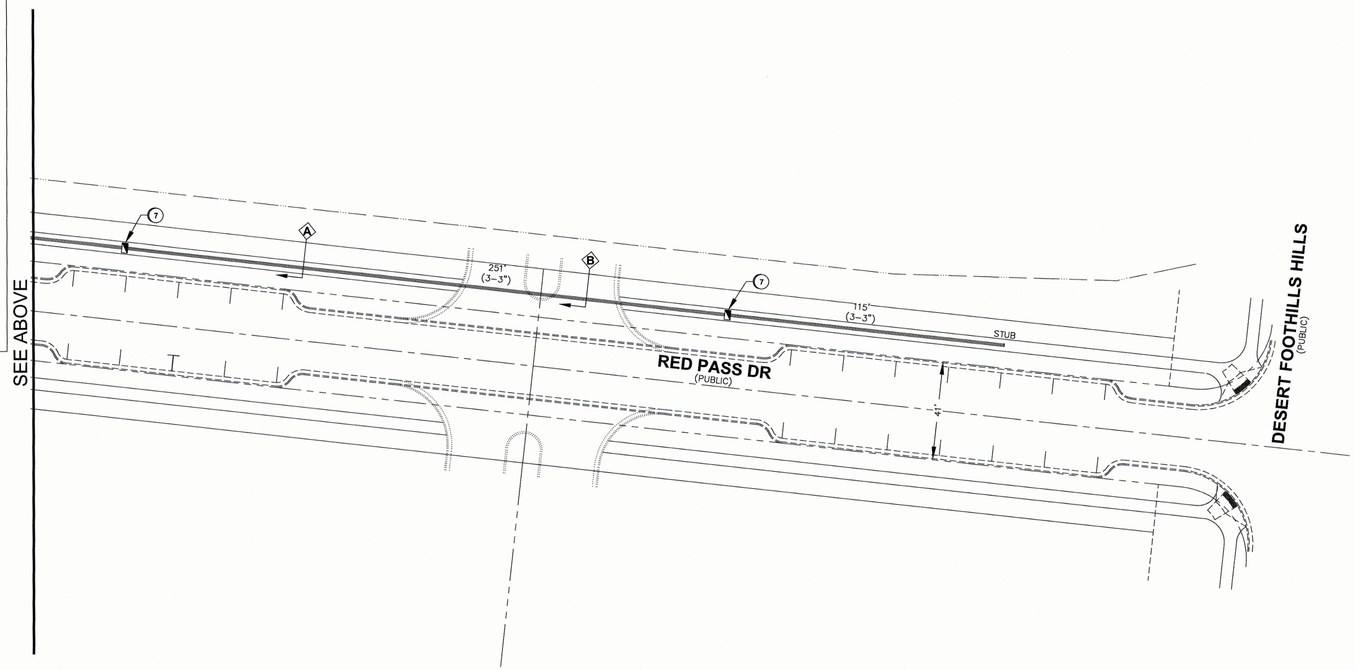
B TRENCH DETAIL

STREET CROSSING
(NOT TO SCALE)

CLV REQUIREMENTS (APPLICABLE WITHIN CITY OF LAS VEGAS LIMITS ONLY):

IMPROVED AREA (IMP. ST.):(LOCATION OF TRENCH)
AREA WILL BE CONSIDERED IMPROVED IF IT MEETS ONE OR MORE OF THE FOLLOWING CRITERIA(e):
- -EXISTING PERMANENT PAVEMENT WITH CURB & GUTTER AND/OR ADJACENT PERMANENT SIDEWALK
- -WITHIN AN IMPROVED TRAIL AREA
- -LIMITS OF CONSTUCTION INSTALL CONCURRENT WITH A PRIVATE OR PUBLIC IMPROVEMENT

UNIMPROVED AREA (UNIMP. ST.):(LOCATION OF TRENCH)
ANY OTHER SCENARIO THAT FAILS TO MEET THE IMPROVED AREA CRITERIA(e) WILL BE CONSIDERED AN UNIMPROVED AREA.



LEGEND

1	■	INSTALL B-36 PULL BOX (24"X36"X24")
2	▨	EXISTING B-36 PULL BOX (24"X36"X24")
3	▬	INSTALL B-50 PULL BOX (13"X24"X24")
4	▤	EXISTING B-50 PULL BOX (13"X24"X24")
5	◪	INSTALL B-100 PULL BOX (24"X36"X24")
6	▩	EXISTING B-100 PULL BOX (24"X36"X24")
7	◢	INSTALL T-200 CATV VAULT (30"X48"X36")
8	◢	EXISTING T-200 CATV VAULT (30"X48"X36")
9	◢	INSTALL T-400 CATV VAULT (36"X60"X36")
10	◢	EXISTING T-400 CATV VAULT (36"X60"X36")
11	▭	INSTALL T-600 CATV VAULT (48"X72"X36")
12	▭	EXISTING T-600 CATV VAULT (48"X72"X36")
13	▲	INSTALL NEW CATV PEDESTAL
14	△	EXISTING CATV PEDESTAL
15	□	R&R S/W SLAB(S)
16	○	POTHOLE
17	—C—	SIDEWALK/DIRT TRENCH INSTALL WITH FIBER/COAX PULL
18	—C—	ASPHALT MITIGATION/STREET TRENCH WITH FIBER/COAX PULL
19	—B—	PROPOSED BORE WITH FIBER/COAX PULL
20	—X—	EXISTING CATV CONDUIT(S)
21	—OHC—	PROPOSED OVERHEAD FIBER OPTIC CABLE OR COAX INSTALL
22	—XOHC—	EXISTING OVERHEAD FIBER OPTIC CABLE OR COAX
23	▬ ▬ ▬	U.G. FIBER/COAX PULL THROUGH EXISTING CONDUIT
24	----------	RIGHT OF WAY LINE
25	-·-·-·-	LOT/PROPERTY LINE
26	————	EDGE OF PAVEMENT/ SIDEWALK/CONCRETE
27	P	EXISTING NVE PULL BOX
28	T	EXISTING TELCO PULL BOX
29	TM	EXISTING COMMUNICATION MANHOLE
30	T	EXISTING TELCO POLE
31	◔	EXISTING NVE POLE
32	NVE	EXISTING NVE TRANSMISSION POLE
33	⊗	EXISTING JOINT POLE
34	⊠	EXISTING JOINT POLE WITH TRANSFORMER
35	⊥	POLE ANCHOR
36	△	EXISTING NVE TRANSFORMER TRANSFORMER PAD
37	TS	SNWA TEST STATION
38	▲	COX POWER SUPPLY (49"X24"X52")
39	CB	CABINET (RHINO,ODN,OLM)
40	⊕	RISER POLE/QUADRANT DETAIL RISER OWNERSHIP NOTED
41	╫╫╫╫╫	RAILROAD
42	MH	EXISTING MANHOLE (SS),(SD)...ECT
43	-- -- --	1in CONDUIT LATERAL
44	▥	STORMWATER ASSETS
45		

DISCLAIMER NOTE

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND 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 LOCATIONS.

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEMS CONDUITS IT'S COSTLY.
CALL BEFORE YOU DO UNDERGROUND... CALL
BEFORE YOU UNDERGROUND
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-432-5300
LAS VEGAS AREA COMPUTERIZED SYSTEM

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL 811
BEFORE YOU DIG OR 1-800-227-2600
UNDERGROUND SERVICE (USA)

AVOID OVERHEAD POWER LINE CONTACT
CALL BEFORE YOU OVERHEAD
1-702-227-2929
NEVADA POWER ENVIROMENT AND SAFETY SERVICE DEPARTMENT

TOTAL BORE	0'
TOTAL DIRT TRENCH	0'
TOTAL ASPHALT TRENCH	0'
TOTAL TRENCH	0'
SIDEWALK REMOVAL/REPAIR	
TOTAL S/W PANELS	0
TOTAL LINEAR FOOTAGE	0'

T20S R59E SEC23

VICINITY MAP

REVISIONS

REV	DESCRIPTION	DATE	BY
△			
△			
△			
△			

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APPROVED FOR CONSTRUCTION

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SEE COVER of CIVIL PLAN
APPROVAL DATE

PERMIT # RB-4230
DRAWN BY: RR
DATE: 10/11/2019
SCALE: 1:30
NODE: NA
PROJECT #: 40505190000RB42300
TECH # N/A
APPROVED BY: JASON COLLINS

COX
BRINGING US CLOSER
1700 VEGAS DRIVE
LAS VEGAS, NEVADA 89106
PHONE: (702) 545-7606
FAX: (702) 545-2606

CITY OF LAS VEGAS
333 N. RANCHO DRIVE
LAS VEGAS, NEVADA 89106
(702) 229-6885

PROJECT LOCATION: SV21 ADD 13 DESERT FOOTHILLS
SUB-CONTRACTOR: DBA: COX COMMUNICATIONS
ENTITY NOTES: 279-05564 10214758

SHEET No: **1**
Sheet 1 of 1

TrueNet# 14733