DS #: 5111-5

APN: 137-26-101-001

PROJECT: Summerlin West V21 - Kimlo Corner Ave & Kettle Ridge Dr (Sky Vista Drive to Desert Foothills Boulevard) Update #4

SUBMITTAL: Cath

SCANNED BY/DATE:

CHECKED BY/DATE:

CITY OF LAS VEGAS NEVADA

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: September 16, 2020
TO: **Land Development Services** Department of Building & Safety				FROM: Jennifer Shinn, P.E. Flood Control, Engr. Associate Department of Public Works
SUBJECT:	Drainage Study for: **Summerlin West V21 – Kindle Corner Ave & Kettle Ridge Dr (Sky Vista Drive to Desert Foothills Boulevard) – Update #4**			**COPIES TO:** VTN Nevada
Cross Streets:	SWQ Desert Foothill Blvd & Summerlin Pkwy			Howard Hughes Company, LLC
File Number:	F:\Depot\DSMemos\DS5111G.doc			Bart Anderson, P.E., DevCo
Parcel Number:	137-26-101-001			
Zoning Action:				
FEMA Flood Zone	YES	NO X		
Proposed Storm Drain	YES X	NO		

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal	3/14/2019	4/9/2019	Not Approved	$400.00	503995: $400
2nd Submittal	4/17/2019	5/7/2019	Conditional Approval	$400.00	3096217: $400
3rd Submittal	5/23/2019	6/5/2019	Conditional Approval	$100.00	3144682: $100
CCRFCD	6/11/2019	6/21/2019	Concurrence Recv'd	N/C	N/C
4th Submittal	6/18/2019	6/25/2019	Approved	$100.00	3457452: $100
5th Submittal	1/2/2020	1/16/2020	Approved	$100.00	3694032: $100
6th Submittal	9/2/2020	9/16/2020	See Comments Below	$100.00	3977322: $100
			TOTAL FEES (LDDRS):	**$1,200.00**	----

REMARKS:

6th Submittal: Update #4 for minor curb revision in Kettle Ridge Drive

5th Submittal: Upate #3 to remove 2 drop inlets due to removal of parcel entries

4th Submittal: Update #2 to relocate the main line storm drain from directly under the curb to approximately 9' away from the curb

3rd Submittal: Update #1 for Grading Revision to provide a 16'-wide paved waterline access road across an interim channel west of the intersection of Kindel Corner Avenue & Kettle Ridge Drive

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.

The following comments are repeated until they are complete:

1. The subject improvement is premised on the fully improved *Desert Foothills Drive* (from *Far Hills Boulevard* to *Summerlin Parkway East Bound*) in order for the proposed storm drain in *Kindle Corner Avenue* to tie to the regional facility in *Desert Foothills Drive*. The subject improvement plans will not be approved prior to the execution of the construction bonds of *Desert Foothills Drive* (*Far Hills* to *Summerlin Parkway*) and the associated facilities.

2. The project proposed to construct temporary drainage facilities including drainage berms/swales for the interim protection of the proposed segment of *Kindle Corner Avenue & Kettle Ridge Drive*. Prior to the final plans approval, the developer must complete a ***Maintenance & 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 facilities and an exhibit that adequately shows the location and limits of the drainage facilities to *City Flood Control* for approval. Once the drainage study is conditionally approved, the engineer/developer should contact the *City's Land Development Section* (702-229-6371) 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 berm/swale are no longer necessary and can be removed.

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 #4 to the Technical Drainage Study for

Summerlin West Village 21

Kindle Corner Ave & Kettle Ridge Drive (Sky Vista to Desert Foothills)

Las Vegas, Nevada

W.O. # 7851

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 Kindle Corner Ave & Kettle Ridge Drive Date: August 31, 2020

Location of Development: a) Descriptive (Cross Streets) North/South: Desert Foothills Drive

East/West: Summerlin Parkway

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

c) APN : 137-27-599-001, 137-22-899-001

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

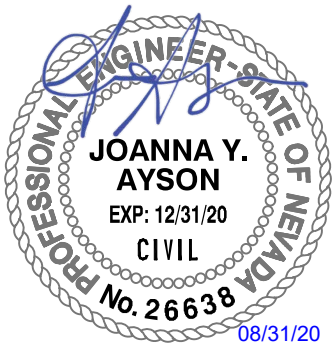
Firm: VTN Nevada

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	Storm Drain	

1. Total Owned Land Area: At Site: +/-4 Acres Being Developed/Disturbed: +/-4 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: +/- 615 acres
6. Has the site drainage been evaluated in the past? ☒ **YES** ☐ **NO** If yes, please identify documentation: SWPA MPU (DS4926) Summerlin V21 Desert Foothills Drive (Street A to Summerlin Parkway)
7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Runoff will discharge through the existing 30" RCP in Red Pass Drive. In addition, runoff will discharge through an existing 30" RCP into Desert Foothills Drive.
8. Briefly describe your proposed schedule for the subject project: As soon as possible



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 31, 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 #4 to the Technical Drainage Study for Summerlin West Village 21 Kindle Corner Avenue & Kettle Ridge Drive**

Mr. Sung:

This letter certifies that all items on the **Update #4 to the Technical Drainage Study for Summerlin West Village 21 Kindle Corner Avenue & Kettle Ridge Drive** electronic submittal matches the paper version bound into the study.

Respectfully submitted,

Joanna Ayson, P.E.

PROVIDING QUALITY PROFESSIONAL SERVICE SINCE 1960

August 31, 2020
W.O. #7851-MISC-95

City of Las Vegas
Land Development Services
Department of Building Safety

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

SUBJECT: UPDATE #4 TO THE TECHNICAL DRAINAGE STUDY FOR SUMMERLIN WEST VILLAGE 21 KINDLE CORNER & KETTLE RIDGE – DESERT FOOTHILLS TO SKY VISTA (DS5111)

Dear Mr. Sung,

This update letter is being submitted to address revisions to the improvement plans since the approval of Update #3 of the subject drainage study. The plans have been revised to adjust the street curb, gutter, & edge of pavement, and remove parking stalls between Station 16+66 and 18+77 (refer to Sheet GR1). Flow will still be conveyed southerly towards the drop inlets near Station 16+15 as it did in the approved study, and flows will not be obstructed. In addition, flow magnitudes are not expected to increase. Therefore, calculated depths and velocities within the street will not be impacted and revised street hydraulic calculations are not required.

The improvement plan revisions submitted with this drainage study update will not alter drainage patterns and will not adversely impact upstream or downstream facilities or properties. Sheet GR1 of the approved plans has been clouded to indicate the location of the revision for your reference and included with this letter.

If you have any questions concerning this letter or if additional information is needed, please do not hesitate to contact this office.

Respectfully Submitted,

Joanna Y. Ayson, P.E.

APPENDIX
(Previously Approved Plans Redlined to Indicate Revisions)

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: January 16, 2020
TO: **Land Development Services** Department of Building & Safety				FROM: Jennifer Shinn, P.E. Flood Control, Engr. Associate Department of Public Works
SUBJECT:	Drainage Study for: **Summerlin West V21 – Kindle Corner Ave & Kettle Ridge Dr (Sky Vista Drive to Desert Foothills Boulevard) – Update #2**			**COPIES TO:** VTN Nevada
Cross Streets:	SWQ Desert Foothill Blvd & Summerlin Pkwy			Howard Hughes Company, LLC
File Number:	F:\Depot\DSMemos\DS5111F.doc			Bart Anderson, P.E., DevCo
Parcel Number:	137-26-101-001			CCRFCD
Zoning Action:				
FEMA Flood Zone	YES	NO **X**		
Proposed Storm Drain	YES **X**	NO		

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
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In an effort to increase administrative efficiency, for all original and re-submittal packages including updates and the addenda, the City of Las Vegas Public Works Department requires both a hardcopy and a digital copy (PDF) on CD for the drainage study.

A letter sealed and signed by a Nevada registered civil engineer must be included in every submittal certifying documents on the electronic CD matches 100% of the hardcopy submittal. The new submittal requirement is effective on May 1, 2019. If there are any questions regarding these new requirements, please contact Albert Sung in the City Flood Control Section at (702) 229-6541.

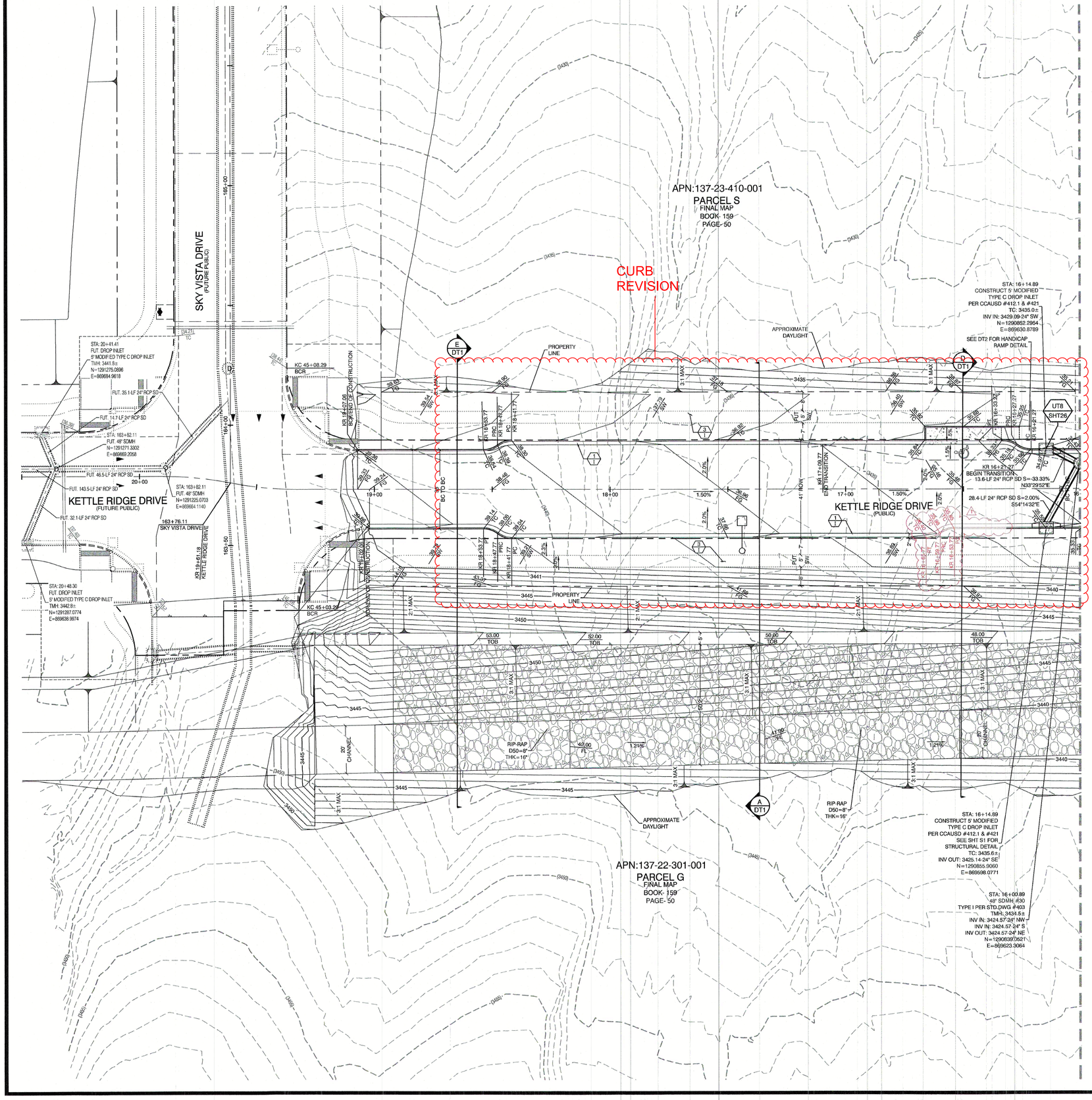
Sample Letter to certify CD.pdf

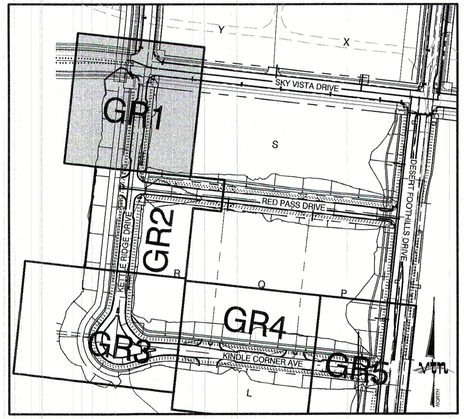
NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Update and accepted by the *City of Las Vegas Flood Control Section.* Additionally, conditional 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





KEY MAP
NTS

NORTH

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

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. CONSTRUCT TYPE "A" CURB PER STD. DWG. 219
3. FUTURE 5' SIDEWALK
4. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
5. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
6. 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 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.

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 32003C2215G, 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.

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 DO OVERHEAD
1-702-227-2929

AVOID CUTTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEM CABLES!!!
Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS8111A

WILLIAM J MEYER, P.E. No. 15745 DATE 11/25/19

PROFESSIONAL ENGINEER STATE OF NEVADA
No. 15745
WILLIAM J MEYER
EXP: 12/31/19
CIVIL
11/25/19

REV	DATE	BY	REVISION
1	10/10/2019	JDH	ADJUST CURB & LABELS

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) 362-2897 WEB WWW.VTNNW.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

GRADING PLAN 1

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH
DESIGNED BY: DEH
CHECKED BY: WJM
PROJECT NO: 7351
09/18/2018
09/10/2018
09/24/2019
SCALE: 1" = 20' HORIZ. N/A VERT.

SHEET
GR1
11 OF 37 SHEETS

DRAWING NO.
L19-01029
10TV7773

H:\7351\Sheet B-Desert Foothills to Summerlin Pkwy\Sheet Set-CIP\72761-GR.dwg:11/18/2019 4:57 PM:kcampbell

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
(STREETS B AND J)
DESERT FOOTHILLS TO SKY VISTA DRIVE
APN: 137-27-599-001 & 137-22-899-001
CITY OF LAS VEGAS
STATE OF NEVADA

DEVELOPED BY:

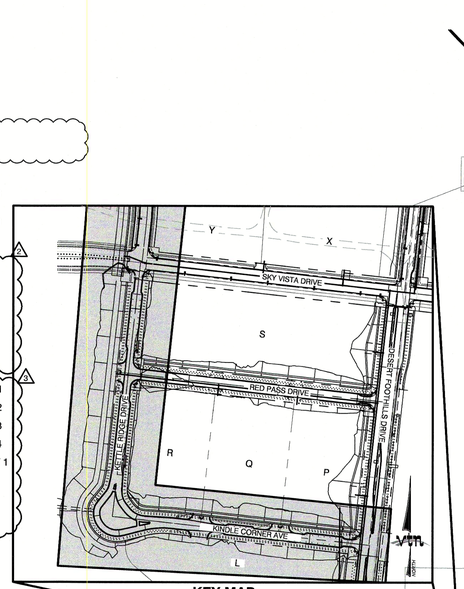
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

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

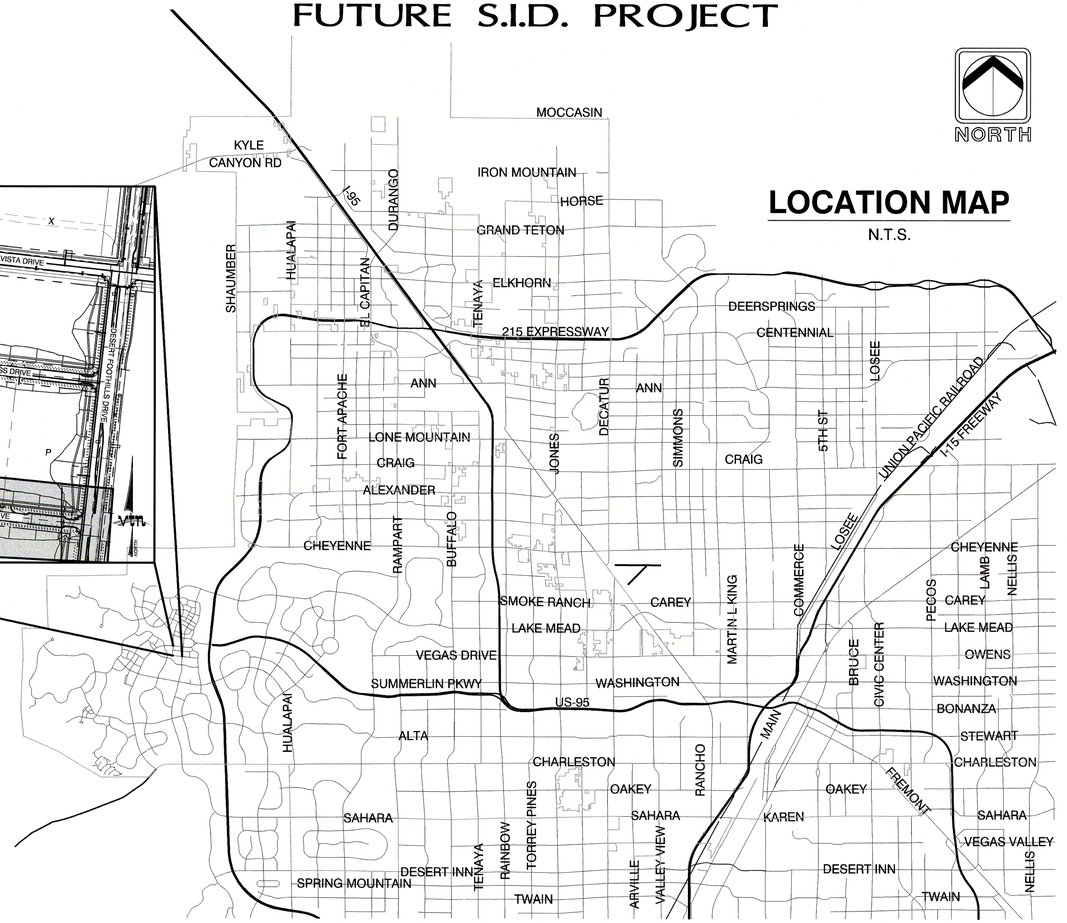
FUTURE S.I.D. PROJECT

SHEET INDEX

SHEET #	SHEET	DESCRIPTION	STATION RANGE
CV	1	COVER SHEET	
NT	2	NOTE SHEET	
HC1	3	HORIZONTAL CONTROL 1	
HC2	4	HORIZONTAL CONTROL 2	
HC3	5	HORIZONTAL CONTROL 3	
HC4	6	HORIZONTAL CONTROL 4	
HC5	7	HORIZONTAL CONTROL 5	
MUTSD	8	MASTER UTILITY STORM DRAIN	
MUTW	9	MASTER UTILITY WATER	
MGRD	10	MASTER GRADING SHEET	
GR1	11	GRADING PLAN 1	
GR2	12	GRADING PLAN 2	
GR3	13	GRADING PLAN 3	
GR4	14	GRADING PLAN 4	
GR5	15	GRADING PLAN 5	
DT1	16	DETAIL SHEET 1	
DT2	17	DETAIL SHEET 2	
DT3	18	DETAIL SHEET 3	
UT1	19	UTILITY PLAN & PROFILE 1	20+00 TO 16+00
UT2	20	UTILITY PLAN & PROFILE 2	16+00 TO 12+00
UT3	21	UTILITY PLAN & PROFILE 3	38+62.04 TO 36+04
UT4	22	UTILITY PLAN & PROFILE 4	36+04 TO 33+88.73
UT5	23	UTILITY PLAN & PROFILE 5	33+88.73 TO 37+23.51
UT6	24	UTILITY PLAN & PROFILE 6	33+88.73 TO 29+50
UT7	25	UTILITY PLAN & PROFILE 7	29+50 TO 25+50
UT8	26	UTILITY PLAN & PROFILE 8 STORM DRAIN LATERAL	
UT9	27	UTILITY PLAN & PROFILE 9 WATER LATERAL	
UT10	28	UTILITY PLAN & PROFILE 10 SEWER LATERAL	
UT11	29	UTILITY PLAN & PROFILE 11 STORM DRAIN LATERAL	
UT12	30	UTILITY PLAN & PROFILE 12 WATER LATERAL	
UT13	31	UTILITY PLAN & PROFILE 13 WATER LATERAL	
UT14	32	UTILITY PLAN & PROFILE 14 WATER LATERAL	
~~UT15~~	~~33~~	~~UTILITY PLAN & PROFILE 15 WATER LATERAL~~	
UT16	34	UTILITY PLAN & PROFILE 16 WATER LATERAL	
TR1	35	TRAFFIC & STREETLIGHTING PLAN - 1	
TR2	36	TRAFFIC & STREETLIGHTING PLAN - 2	
S1	37	STRUCTURAL DETAIL	
SWG1	37A	SW GAS DESIGN SHEET 1	
SWG2	37B	SW GAS DESIGN SHEET 2	
SWG3	37C	SW GAS DESIGN SHEET 3	
SWG4	37D	SW GAS DESIGN SHEET 4	
SWG5	37E	SW GAS DESIGN SHEET 5	
SWG6	37F	SW GAS DESIGN SHEET 6	
NVE1	37G	NV ENERGY DESIGN SHEET 1	
NVE2	37H	NV ENERGY DESIGN SHEET 2	
NVE3	37I	NV ENERGY DESIGN SHEET 3	
NVE4	37J	NV ENERGY DESIGN SHEET 4	
CL1	37K	CENTURYLINK DESIGN SHEET 1	
COX1	37L	COX DESIGN SHEET 1	
COX2	37M	COX DESIGN SHEET 2	
COX3	37N	COX DESIGN SHEET 3	



KEY MAP
NTS



LOCATION MAP
N.T.S.

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

DEVELOPER
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY 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 STREETLIGHT SYSTEM 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

NOTE
THIS PROJECT PLAN APPROVAL IS CONTINGENT ON #136301 PLAN APPROVAL

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 ALAN 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 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."

CITY OF LAS VEGAS DEPARTMENT OF PLANNING DATE

THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING AND DEVELOPMENT DEPARTMENT

NV ENERGY 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. DATE

SOUTHWEST GAS CORPORATION DATE

LAS VEGAS FIRE & RESCUE DATE

LAS VEGAS VALLEY WATER DISTRICT

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 FIRST APPROVED DATE:

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

SHEETS: CV, NT, MUTSD, MUTW, UT1 THRU UT-14, UT-16, & UT-17 (4)

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

FIRE DEPARTMENT APPROVAL

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

KEVIN T. ORROCK, VICE PRESIDENT DATE

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

REV	DATE	BY	REVISION
4	06/25/2020	TJR	REVISE EOP, PULLBOXES, CONDUIT AND STLT LOCATIONS, UPDATE WIP
3	02/13/2020	TJR	ADD NV ENERGY, CENTURYLINK, & COX DESIGN SHEETS
2	12/18/2019	TJR	ADD SWG DESIGN SHEETS
1	11/15/2019	JDH	REVISE SANITARY SEWER

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

VTN
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

COVER SHEET

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY:	DESIGNED BY:	CHECKED BY:	SCALE:	HORIZ. / VERT.
JDH	DEH	WJM	1" = 20'	N/A
09/18/2018	09/10/2018	09/24/2019		

PROJECT NO. 7851

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
6/5/20

SHEET
CV
1 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7851-CV.dwg,8/25/2020 8:08 PM,chrisp

CITY OF LAS VEGAS GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLICWORKS CONSTRUCTION OFFSITE 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 THERE WITH.
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. 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 PLAN.
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). (4)
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.

REVISED 06/04/2018

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

GENERAL CONSTRUCTION NOTE:

THE FOLLOWING SUMMERLIN VILLAGE 21 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED CONCURRENTLY:
1. KINDLE CORNER AVENUE (DESERT FOOTHILLS TO SUMMERLIN PARKWAY)
2. RED PASS DRIVE (DESERT FOOTHILLS TO KINDLE CORNER AVENUE)
3. DESERT FOOTHILLS (REDPOINT DRIVE TO SUMMERLIN PARKWAY)

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 #136579

(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, AND TO THE **2010** EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). **THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.**
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE **2010** EDITION OF THE UDACS.
9. ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD APPROVED PRODUCT'S LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.
14. THE INSTALLATION OF LVVWD MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

    ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET.
    THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.
15. NO LEAD COMPLIANCE NOTE:

    TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
3. CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACK FILL OF TYPE II AGGREGATE BASE.
5. ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE
6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y"'S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
9. THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
10. INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PVC PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

REVISED 04/05/10

CITY OF LAS VEGAS GRADING NOTES

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
6. CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

	HORIZONTAL	VERTICAL	COMPACTION
A.PAVEMENT AREA SUBGRADE	0.1'+	+0.0'to-0.1'	SEE SOILS REPORT
B.ENGINEERED FILL	0.5'+	+0.1'to-0.1'	SEE SOILS REPORT

   REPORT COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
7. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
8. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
9. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
10. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED 04/15/10

DEVIATION FROM CITY OF LAS VEGAS STANDARDS

- SUPER-ELEVATED ROADWAY SECTION BETWEEN STATIONS 13+00 AT KETTLE RIDGE DRIVE TO STATION 34+50 AT KINDLE CORNER AVENUE

SOUTHWEST GAS CORPORATION GENERAL NOTES

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020
2. MINIMUM HORIZONTAL AND VERTICAL CLEARANCES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND UTILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC SHALL BE AT LEAST 12-INCHES OR GREATER AS DICTATED BY LOCAL CODES AND STANDARDS
   A). ANY DEVIATION FROM SPECIFIED MINIMUM CLEARANCES MUST BE APPROVED BY ALL AFFECTED UTILITIES AND/OR MUNICIPALITIES
3. FOR VALVE ADJUSTMENT CONTACT 702-668-6107 48 HOURS PRIOR TO CONSTRUCTION
4. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND STRUCTURES CONTACT 702-365-2099

SOUTHWEST GAS CORPORATION DATE

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

DESCRIPTION	PROPOSED	EXISTING	FUTURE
CONTOUR (5' INTERVAL)	2450	(2450)	{2450}
CONTOUR (1' INTERVAL)			
EDGE OF PAVEMENT			
SAW CUT			
RIGHT OF WAY			
CENTER LINE			
BACK OF CURB			
LIP OF GUTTER			
FACE OF CURB			
SIDEWALK			
UNIT BOUNDARY LINE			
UNIT BOUNDARY / ROW			
PROPERTY LINE			
SLOPE AND FLOW DIRECTION	1.00%	(1.00%)	[1.00%]
SCARP AREA			
MATCHLINE			
SIDEWALK RAMP			
SIGHT VISIBILITY ZONES			
PAVED ROAD			
PAVEMENT REMOVAL			
STREET LIGHT			
WATER UNDER 18"			
WATER 18" & OVER			
SANITARY SEWER UNDER 18"			
SANITARY SEWER 18" & OVER			
STORM SEWER			
FIRE HYDRANT			
SANITARY SEWER MAN HOLE			
STORM DRAIN MAN HOLE			

ESTIMATE OF QUANTITIES

ESTIMATED WATER QUANTITIES	PUBLIC
FIRE HYDRANT ASSEMBLY	3 EA
12" GATE VALVE	9 EA
12" 5° BEND	1 EA
12" 11° BEND	4 EA
12" 22° BEND	7 EA
~~12"X12" TEE~~	~~1 EA~~
12"X12" CROSS	2 EA
12" CAP AND BLOW OFF	5 EA
1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE W/ 1.5" IRRIGATION METER W/RPPA	1 EA
6" C-900 WTR	46 LF
12" C-900 WTR	2,039 LF
~~12" DIP WTR~~	~~17 LF~~

ESTIMATED SANITARY SEWER QUANTITIES	PUBLIC
STANDARD MANHOLE PER SD-1 & 4	2 EA
8" C-900-16 SANITARY SEWER MAIN	85 LF

ESTIMATED GRADING/SD/ROAD IMP. QUANTITIES	PUBLIC
3" ASPHALT CONCRETE PAVING	7,201 SY
~~2" TEMPORARY ACCESS PAVING~~	~~178 SY~~
TYPE II GRAVEL BASE	800 CY
"A" TYPE CURB	177 LF
"L" TYPE CURB	4,135 LF
HANDICAP RAMP	7 EA
RIP-RAP D50=8"	2,715 CY
EARTHWORKS CUT	47,124 CY
EARTHWORKS FILL	6,722 CY
EARTHWORKS TOTAL (CUT)	40,402 CY
24" RCP STORM DRAIN	563 LF
30" RCP STORM DRAIN	765 LF
48" TYPE I STORM DRAIN MANHOLES	6 EA
48" TYPE III STORM DRAIN MANHOLES	3 EA
5' MODIFIED TYPE "C" DROP INLETS	9 EA

ESTIMATED TRAFFIC QUANTITIES	PUBLIC
PAVEMENT MARKERS (REFLECTIVE)	169 EA
PAVEMENT MARKERS (NON-REFLECTIVE)	487 EA
PAVEMENT STRIPING (COLLECTOR)	1,584 LF
STREET SIGNS	43 EA
STREETLIGHT (STANDARD BASE)	14 EA
1¼" PVC CONDUIT (STREETLIGHT)	2,492 LF
3" PVC CONDUIT (INTERCONNECT)	2,053 LF
PULL BOXES	18 EA
SOLID WHITE TURN ARROW	6 EA
TYPE III BARRICADE	2 EA

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

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 FIRST APPROVED DATE:

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

REV	DATE	BY	REVISION
5	08/20/2020	KTC	UPDATE TRAFFIC QUANTITIES
4	03/10/2020	JDH	UPDATE QUANTITIES AND CLV NOTE

CITY OF LAS VEGAS

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

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

NOTE SHEET

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

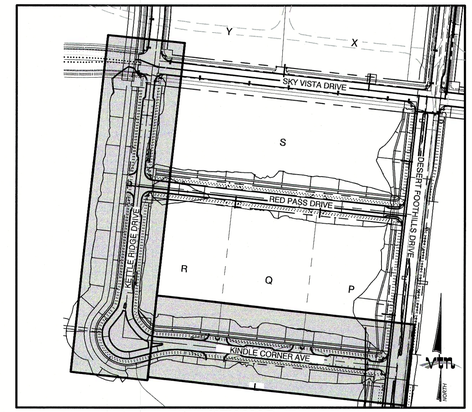
DRAWN BY: JDH 09/18/2018
DESIGNED BY: DEH 09/10/2018
CHECKED BY: WJM 09/24/2019
PROJECT NO: 7851
SCALE: HORIZ. 1" = 20' VERT. N/A

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/31/20

SHEET
NT
2 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7851-NT.dwg;8/26/2020 10:53 AM;kcampbell

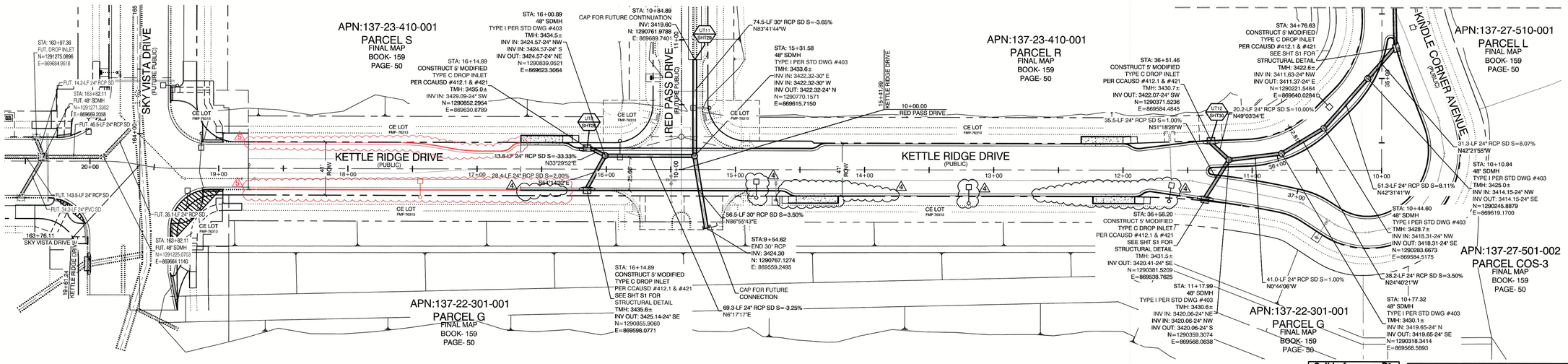


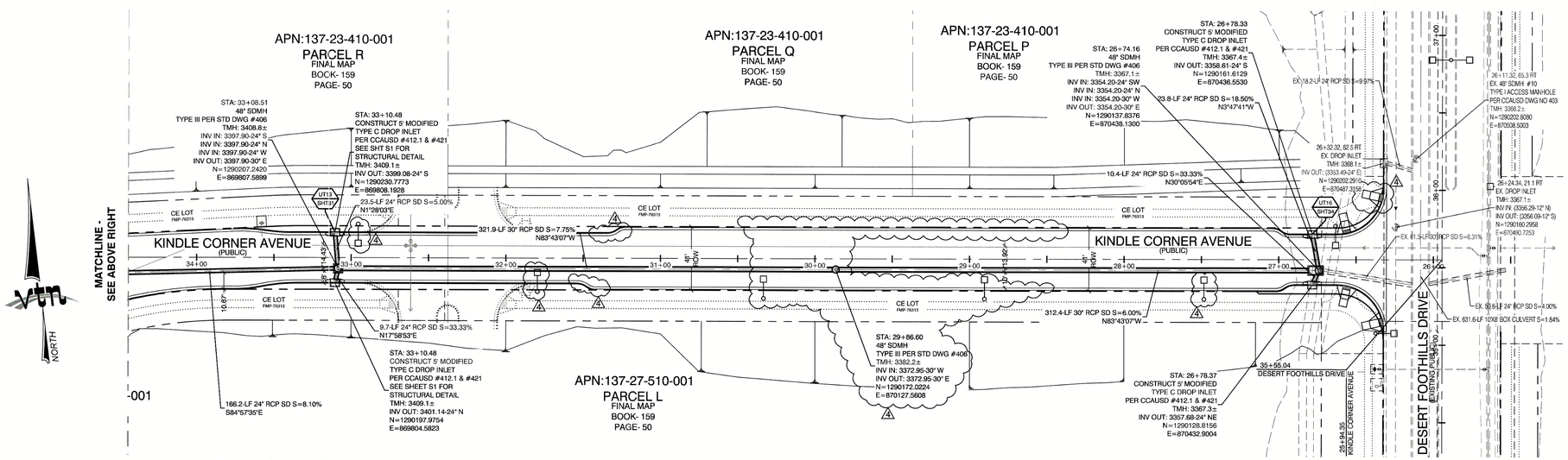
KEY MAP
NTS

MATCHLINE - SEE BOTTOM LEFT

NORTH

GRAPHIC SCALE
-40 0 20 40 80
1" = 40'





MATCHLINE - SEE ABOVE RIGHT

NORTH

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-227-2800
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEM CONDUITS (TYP.)

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 DIG OVERHEAD
1-702-227-2929

CONSTRUCTION NOTES

UT # - SHEET INDEX
SHT# = SHEET NUMBER

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 ON UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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
5	08/20/2020	TJR	REVISE STREET CURB, ADD STLT LOCATION
4	03/10/2020	JDH	ADD & RELOCATE STLTS, REMOVE PARCEL ENTRY, REMOVE DROP INLETS; ADJUST CURB EXTENSIONS, ADD HANDICAP PARKING & SW RAMP

CITY OF LAS VEGAS

HOWARD HUGES 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 89146-5148
PH. (702) 873-7500 FAX (702) 362-2997 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

MASTER UTILITY STORM DRAIN

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY:	JDH
DESIGNED BY:	DEH
CHECKED BY:	WJM
PROJECT NO:	7951
09/18/2018	
09/10/2018	
09/24/2019	
SCALE:	1" = 20' HORZ. N/A VERT.

WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
STATE OF NEVADA
PROFESSIONAL ENGINEER
8/31/20

SHEET
MUTSD
8 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7951\Sheet B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7951-MUTSD.dwg,8/25/2020 12:26 PM,trevor

CONSTRUCTION NOTES

UT # / SHT #

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

Call before you Dig
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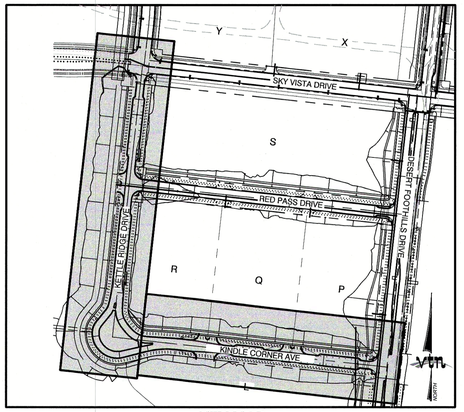
OR
1-800-227-2600
AND
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS

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

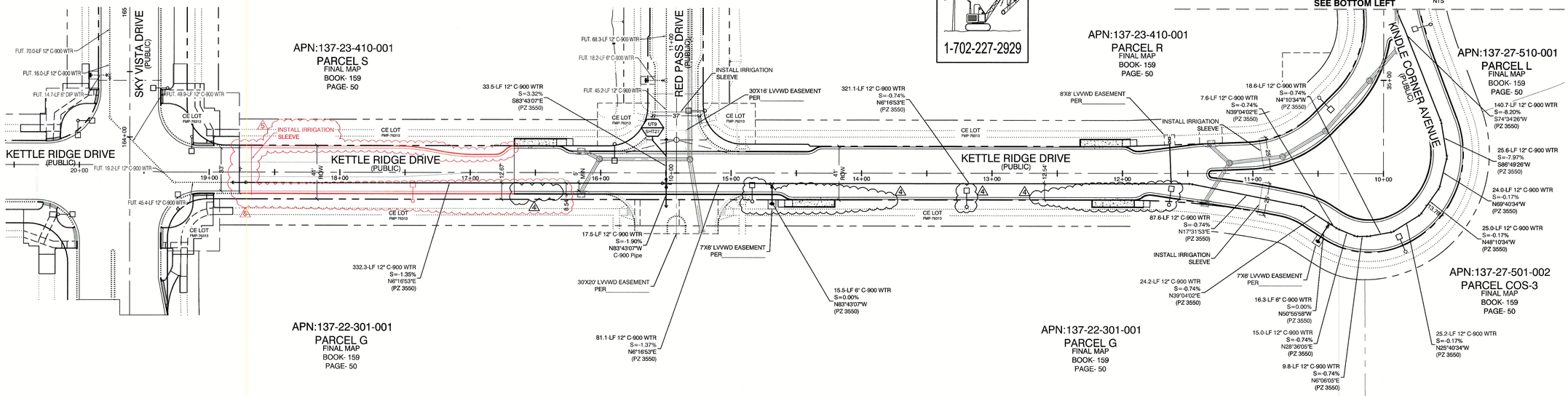
NORTH

GRAPHIC SCALE
-40 0 20 40 80
1" = 40'

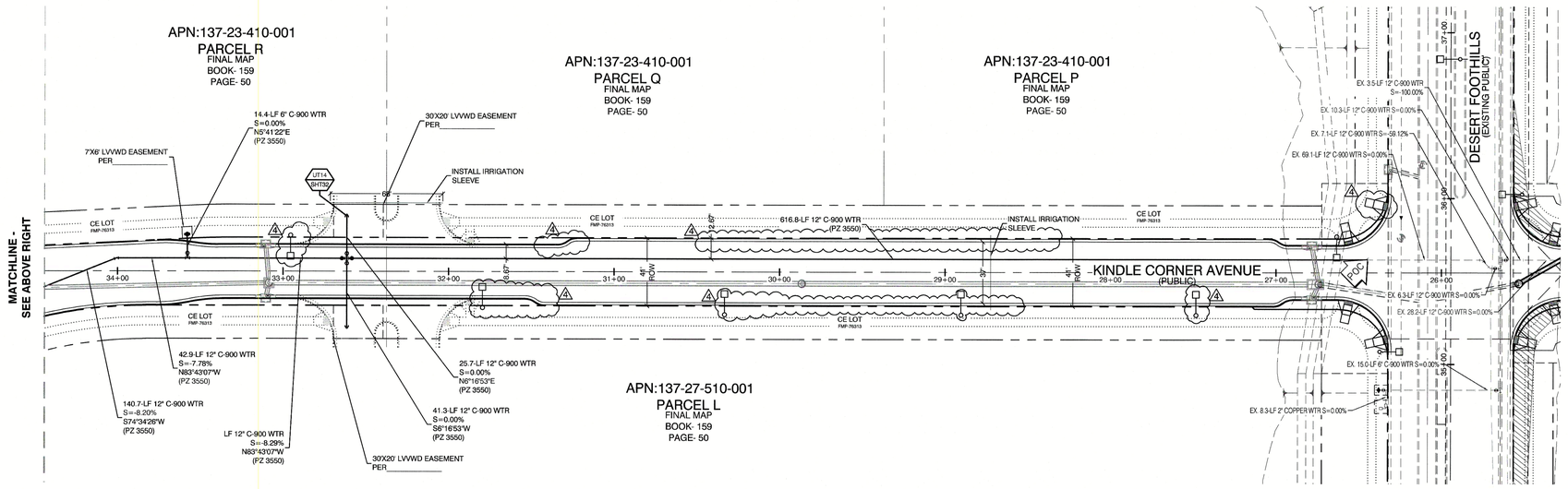


KEY MAP
NTS

MATCHLINE - SEE BOTTOM LEFT



MATCHLINE - SEE ABOVE RIGHT



NORTH

GENERAL CONSTRUCTION NOTE:

THE FOLLOWING SUMMERLIN VILLAGE 21 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED CONCURRENTLY:
1. KINDLE CORNER AVENUE (DESERT FOOTHILLS TO SUMMERLIN PARKWAY)
2. RED PASS DRIVE (DESERT FOOTHILLS TO KINDLE CORNER AVENUE)
3. DESERT FOOTHILLS (REDPOINT DRIVE TO SUMMERLIN PARKWAY)

GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

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

SIGHT VISIBILITY ZONES:

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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
2	08/20/2020	TJR	REDSE STREET CURB, IRR SLEEVES AND STLT LOCATIONS, UPDATE WTR
1	03/10/2020	JDH	REMOVE PARCEL ENTRY; ADJUST CURB EXTENSIONS; ADD PARKING SPACES; ADD & RELOCATE STREETLIGHTS; ADD SW RAMP

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
2300 W. SAHARA AVENUE, SUITE 160
LAS VEGAS, NEVADA 89102
702-791-4000
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2991 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

MASTER UTILITY WATER

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY:	DESIGNED BY:	CHECKED BY:	PROJECT NO:
JDH	DSH	WJM	7851

08/18/2018 — 08/10/2018 — 09/24/2019

SCALE: 1" = 20' HORIZ. / N/A VERT.

WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
PROFESSIONAL ENGINEER - STATE OF NEVADA
No. 15745
8/31/21

SHEET
MUTW
9 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT\27851-MUTW.dwg 8/26/2020 12:01 PM jchrisp

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

GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

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

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.

SIGHT VISIBILITY ZONES:

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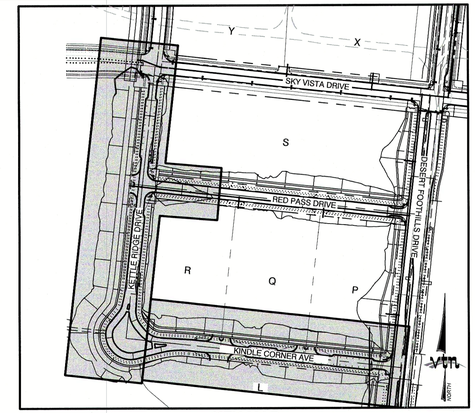
I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS5111A

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

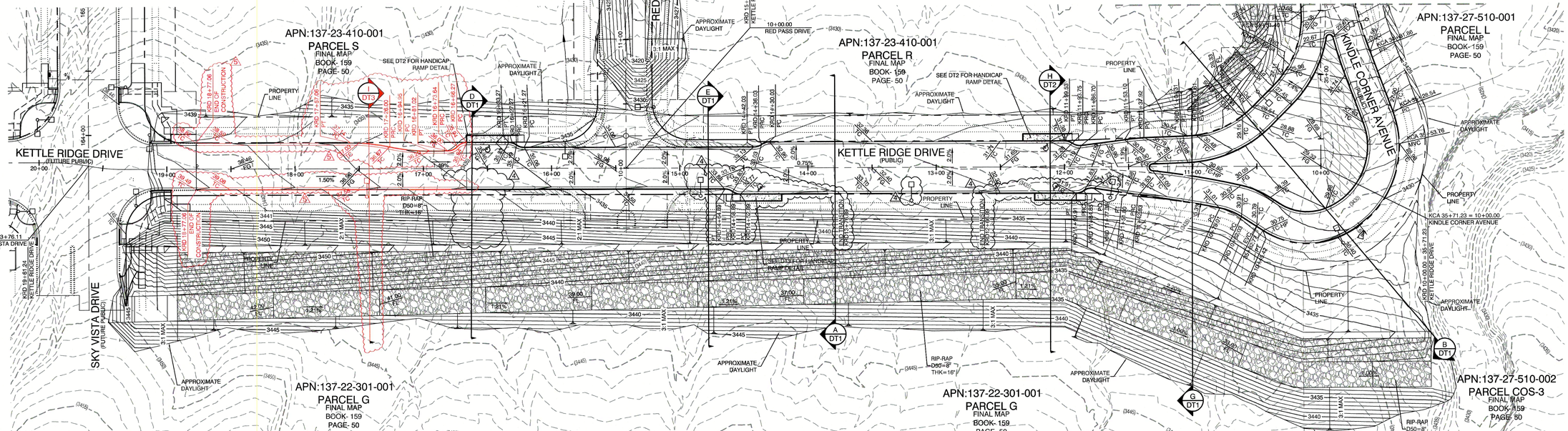
NORTH

GRAPHIC SCALE
-40 0 20 40 80
1" = 40'



KEY MAP
NTS

MATCHLINE - SEE BOTTOM LEFT



MATCHLINE - SEE ABOVE RIGHT

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

REV	DATE	BY	REVISION
1	03/10/2020	JDH	ADD & RELOCATE B/LTS; REMOVE PARCEL ENTRY; ADJUST CURB EXTENSIONS; ADD PARKING
2	08/20/2020	TJR	REVISE STREET CURB; ADD SECTION CALLOUT

MASTER GRADING SHEET

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

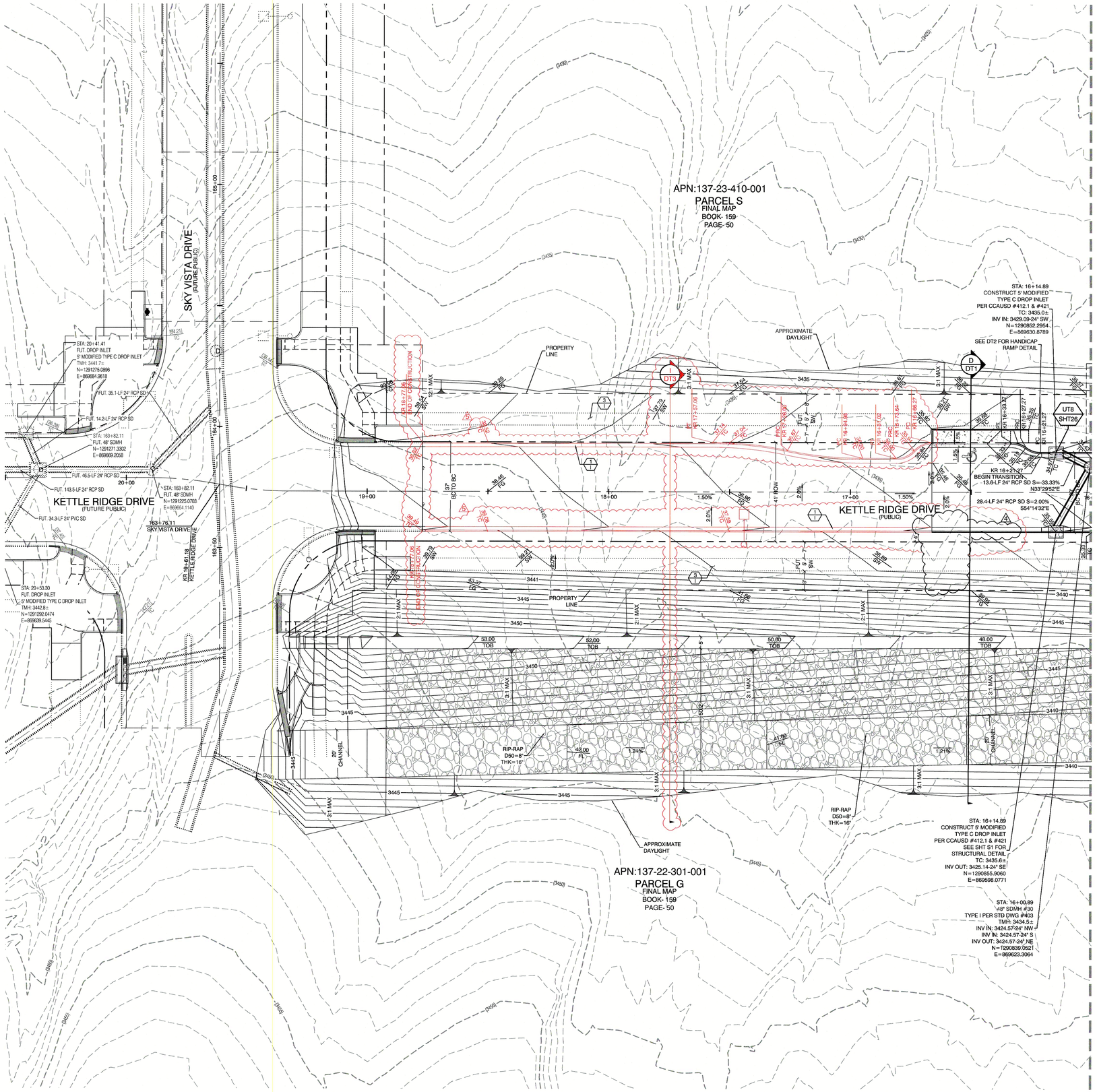
DRAWN BY: JDH — 08/18/2019
DESIGNED BY: DEH — 08/10/2018
CHECKED BY: WJM — 08/24/2019
PROJECT NO: 7861
SCALE: 1" = 20' HORIZ. N/A VERT.

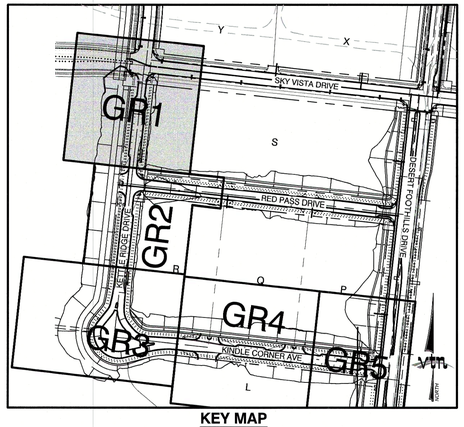
PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/31/20

SHEET
MGRD
10 OF **37** SHEETS

DRAWING NO.
L19-01029
107V7773

K:\7861\Sheet & Desert Foothills to Summerlin Pkwy\Sheet Set\-OPT2\7861-MGRD.dwg,8/28/2020 9:39 AM,chrisp





KEY MAP
NTS

NORTH

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

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. CONSTRUCT TYPE "A" CURB PER STD. DWG. 219
3. FUTURE 5' SIDEWALK
4. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
5. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
6. FIELD VERIFY AND MATCH EXISTING

GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

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

SIGHT VISIBILITY ZONES:

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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.

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 DO OVERHEAD
1-702-227-2929

Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DSS111A

WILLIAM J MEYER , P.E. No. 15745 DATE 8/31/20

REV	DATE	BY	REVISION
2	08/20/2020	TJR	REVISE STREET CURB, EOP, AND STLT LOCATION, ADD SECTION CALLOUT
1	09/10/2019	JDH	ADJUST L-CURB & LABELS

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) 360-3597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

GRADING PLAN 1

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

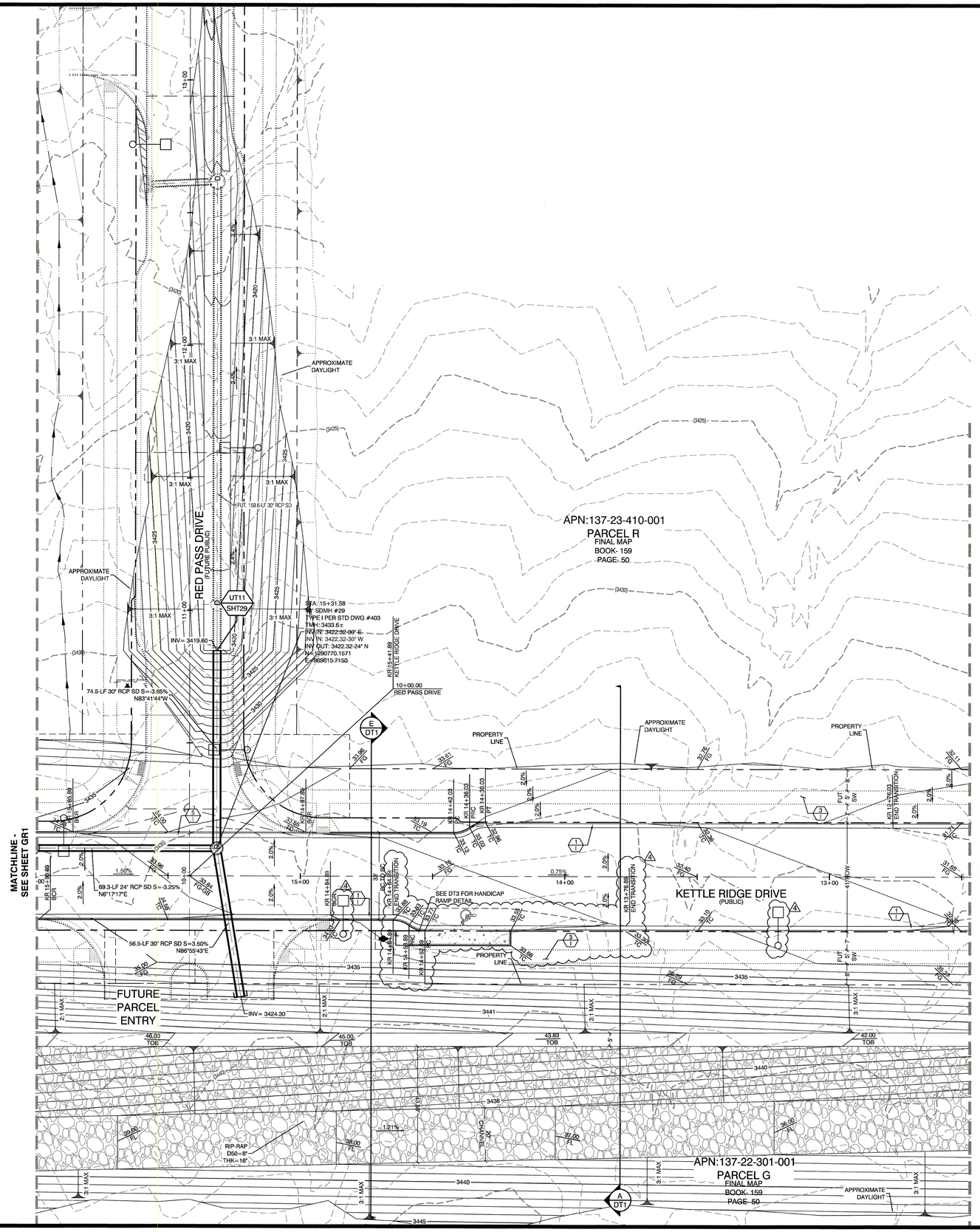
DRAWN BY: JDH	09/18/2018	SCALE:	1" = 20' HORIZ.
DESIGNED BY: DEH	08/10/2018		N/A VERT.
CHECKED BY: WJM	08/24/2019		
PROJECT NO: 7351			

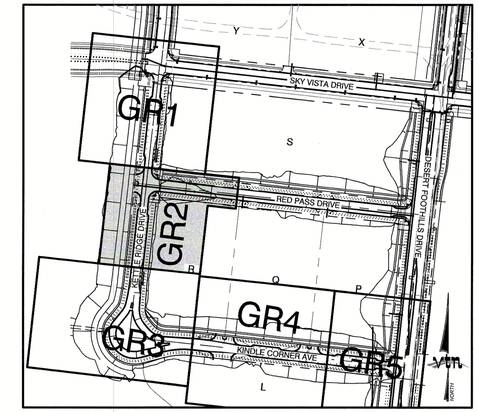
PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/31/20

SHEET
GR1
11 OF **37** SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7351\Sheet Sh Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7351-GR.dwg,8/26/2020 9:28 AM,chrisp





KEY MAP
NTS

NORTH

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

CONSTRUCTION NOTES

1. CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216
2. CONSTRUCT TYPE "A" CURB PER STD. DWG. 219
3. FUTURE 5' SIDEWALK
4. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
5. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
6. FIELD VERIFY AND MATCH EXISTING

CONSTRUCTION NOTES

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

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FLOOD ZONE NOTE

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

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DSS111A

WILLIAM J MEYER , P.E. NO. 15745 — DATE 8/31/20

REV	DATE	BY	REVISION
3	03/10/2020	JDH	ADJUST STLT SETBACK; ADJUST HC PARKING SPACE

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
(SUCCESSOR BY CONVERSION TO HOWARD HUGHES CORPORATION)
10001 PARK RUN DRIVE, SUITE 150
LAS VEGAS, NEVADA 89145
702-791-4000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5146
PH. (702) 873-7540 FAX (702) 362-2991 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

GRADING PLAN 2

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY:	JDH
DESIGNED BY:	DEH
CHECKED BY:	WJM
PROJECT NO:	7851
SCALE:	1" = 20' HORIZ. N/A VERT.
	09/18/2018
	09/10/2018
	09/24/2019

PROFESSIONAL ENGINEER - STATE OF NEVADA
No. 15745
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
8/31/20

SHEET
GR2
12 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7851-GR.dwg,8/26/2020 9:26 AM,cbriep

CONSTRUCTION NOTES

1. CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216
2. CONSTRUCT TYPE "A" CURB PER STD. DWG. 219
3. FUTURE 5' SIDEWALK
4. CONSTRUCT HANDICAP RAMP SEE SHEET DT2 & DT3
5. SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
6. FIELD VERIFY AND MATCH EXISTING

CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
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GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

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

SIGHT VISIBILITY ZONES:

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NORTH

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

MATCHLINE - SEE SHEET GR2

MATCHLINE - SEE SHEET GR4

KETTLE RIDGE DRIVE

KINDLE CORNER AVENUE (PUBLIC)

APN:137-22-301-001
PARCEL G
FINAL MAP
BOOK- 159
PAGE- 50

APN:137-23-410-001
PARCEL R
FINAL MAP
BOOK- 159
PAGE- 50

APN:137-27-510-002
PARCEL COS-3
FINAL MAP
BOOK- 159
PAGE- 50

APN:137-27-510-001
PARCEL L
FINAL MAP
BOOK- 159
PAGE- 50

PROPERTY LINE

APPROXIMATE DAYLIGHT

RIP-RAP D50=8" THK=16"

SEE DT2 FOR HANDICAP RAMP DETAIL

20' CHANNEL

STA: 11+36.86
CONSTRUCT 5' MODIFIED TYPE C DROP INLET PER CCAUSD #412.1 & #421
SEE SHT S1 FOR STRUCTURAL DETAIL
TC: 3431.5±
INV OUT: 3420.41-24" SE
N=1290381.5209
E=869538.7625

STA: 11+31.93
CONSTRUCT 5' MODIFIED TYPE C DROP INLET PER CCAUSD #412.1 & #421
SEE SHT S1 FOR STRUCTURAL DETAIL
TC: 3430.7±
INV OUT: 3422.07-24" SW
N=1290371.5236
E=869584.4845

STA: 11+17.99
48" SDMH #26
TYPE I PER STD DWG #403
TMH: 3430.6±
INV IN: 3420.06-24" NE
INV IN: 3420.06-24" NW
INV OUT: 3420.06-24" S
N=1290359.3074
E=869568.0838

STA: 10+77.32
48" SDMH #27
TYPE I PER STD DWG #403
TMH: 3430.1±
INV IN: 3419.65-24" N
INV OUT: 3419.65-24" SE
N=1290318.3414
E=869568.5893

STA: 10+44.60
48" SDMH #26
TYPE I PER STD DWG #403
TMH: 3428.7±
INV IN: 3418.31-24" NW
INV OUT: 3418.31-24" SE
N=1290283.6673
E=869584.5175

STA: 35+00.02
48" SDMH #25
TYPE I PER STD DWG #403
TMH: 3425.0±
INV IN: 3414.15-24" NW
INV OUT: 3414.15-24" SE
N=1290245.8879
E=869619.1700

STA: 34+76.63
CONSTRUCT 5' MODIFIED TYPE C DROP INLET PER CCAUSD #412.1 & #421
SEE SHT S1 FOR STRUCTURAL DETAIL
TC: 3422.6±
INV IN: 3411.63-24" NW
INV OUT: 3411.37-24" E
N=1290221.5464
E=869640.0284

20.2-LF 24" RCP SD S=10.00% N49°03'34"E

35.5-LF 24" RCP SD S=1.00% N51°18'28"W

41.0-LF 24" RCP SD S=1.00% N0°44'06"W

38.2-LF 24" RCP SD S=3.50% N24°40'21"W

51.3-LF 24" RCP SD S=8.11% N42°31'41"W

31.3-LF 24" RCP SD S=8.07% N42°21'55"W

166.2-LF 24" RCP SD S=8.10% S84°57'35"E

220.00' V.C. PVI STA=35+60.29 PVI ELEV=3429.89 K=29.32 A.D.=7.50%

105.00' V.C. PVI STA=34+66.42 PVI ELEV=3431.17 K=52.50 A.D.=2.00%

IC 37+54.60
OC 38+70.92
KC 38+86.52
STA EQUATION

IC 37+19.12
KR 11+99.58
PT
IC 37+13.41
KR 11+93.75
PRC
KR 11+86.93
BEGIN TRANSITION
IC 37+06.43
KR 11+86.70
PC

IC 38+57.46
KR 11+37.93
PC

IC 36+23.66
KR 11+04.31
PT

IC 36+15.44
KR 10+91.61
PVC

KC 36+76.73
IC 36+23.82

KC 36+83.76
OC 36+98.76

PT
KR 10+90.00
OC 38+26.52
KR 10+90.83
BEGIN TRANSITION
PRC
KR 11+84.85
OC 38+20.53
PC
KR 11+27.39
OC 38+13.12

PT
KR 70+79.01
OC 37+10.56

PC
KR 10+62.02
OC 36+89.44

PT EVE
KR 10+50.00
OC 36+77.29

PRC
KR 10+39.31
OC 36+79.89

KR 10+00.00 = 35+71.23 KINDLE CORNER AVENUE

KR 10+33.66
IC 35+82.89

PT
KC 35+23.70
IC 35+26.09

KC 35+00.51
OC 35+02.79

PC
KC 35+37.38
OC 35+42.21

IC 34+28.27
OC 34+28.27
KC 34+29.27
STA EQUATION
-8.25%

IC 34+71.20
KC 34+71.08
PC

OC 34+70.86
KC 34+70.86
-PC

OC 34+50.29
KC 34+49.73
BVC/BEGIN TRANSITION

IC 34+31.40
KC 34+31.40
PVC

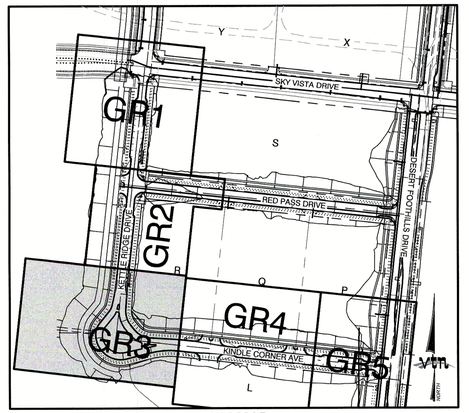
KC 35+83.76
OC 35+98.76

KC

APPROXIMATE DAYLIGHT

KEY MAP

NTS



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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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Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
OR
1-702-229-6611
LAS VEGAS AREA COMPREHENSIVE TRAFFIC SYSTEM

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS5111A

WILLIAM J. MEYER, P.E. No. 15745 — DATE 8/21/20

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/21/20

DRAWN BY: JDH
DESIGNED BY: DEH
CHECKED BY: WJM
PROJECT NO: 7351
SCALE: 1" = 20' HORIZ. N/A VERT.
DATE: 08/18/2018 08/10/2018 09/24/2019

SHEET GR3
13 OF 37 SHEETS
DRAWING NO. L19-01029 107V7773

REV	DATE	BY	REVISION
1	03/12/2020	JDH	ADD HC PARKING; ADJUST L-CURB & LABELS; ADJUST S/LT SETBACKS

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
1980 FESTIVAL PLAZA DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

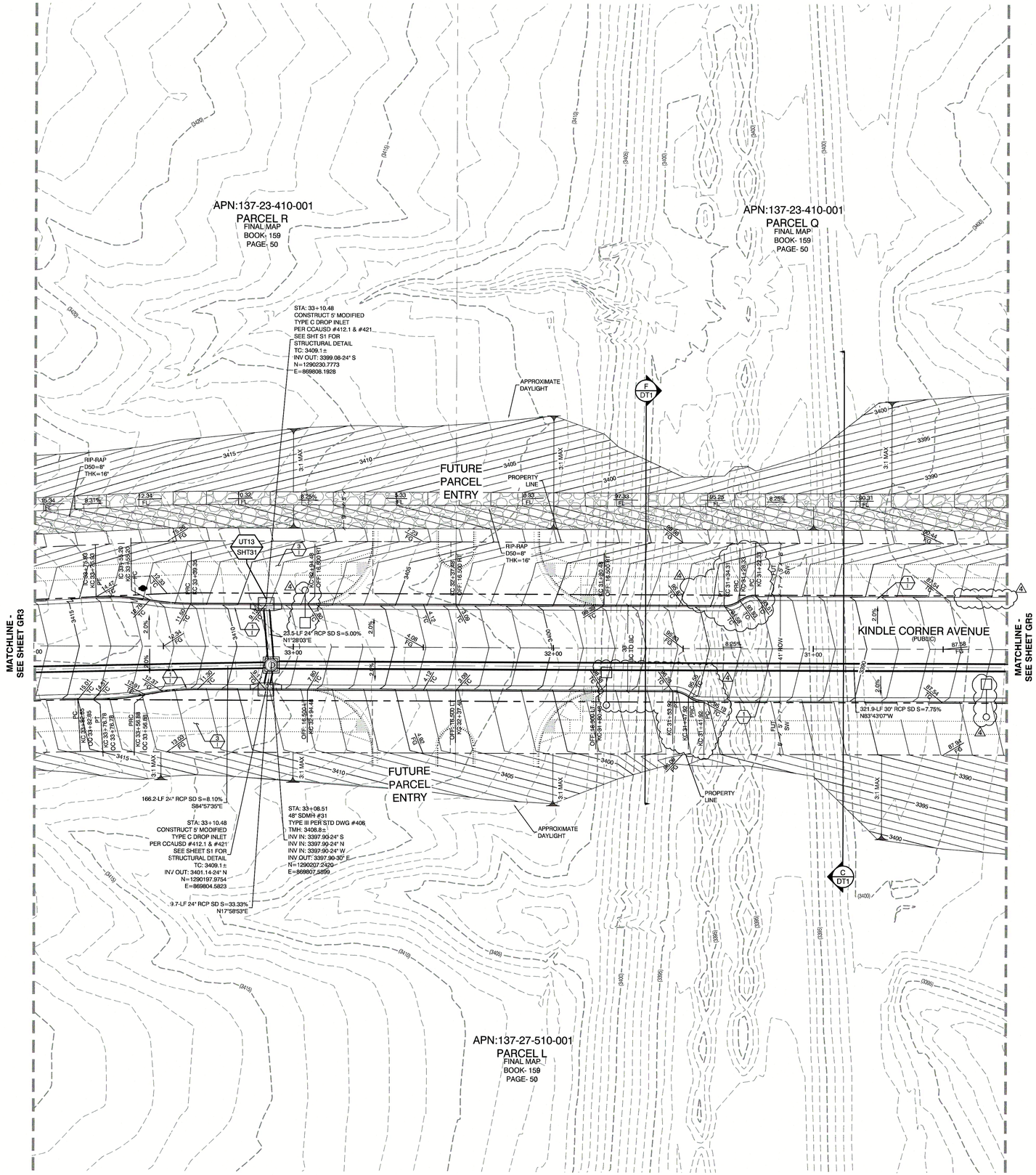
CITY OF LAS VEGAS

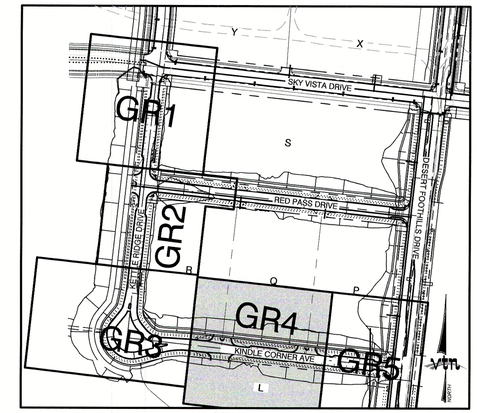
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7555 FAX (702) 362-2897 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

GRADING PLAN 3

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

H:\7351\Sheet B-Desert Foothills to Summerlin Pkwy\Sheet Set-CP\72\7351-GR.dwg,8/26/2020 9:26 AM,cbhlip





KEY MAP
NTS

NORTH

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

CONSTRUCTION NOTES

1. CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216
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CONSTRUCTION NOTES

UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
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GEOTECHNICAL NOTE:

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

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WILLIAM J MEYER, P.E. No. 15745 DATE 6/27/20

REV	DATE	BY	REVISION
1	03/10/2020	JDH	RELOCATE STLTS; REMOVE PARCEL ENTRY; ADJUST L-CURB & LABELS

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

GRADING PLAN 4

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH 09/18/2018
DESIGNED BY: DEH 09/10/2018
CHECKED BY: WJM 09/24/2019
PROJECT NO: 7951
SCALE: 1" = 20' HORIZ. N/A VERT.

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
6/27/20

SHEET
GR4
14 OF **37** SHEETS

DRAWING NO.
L19-01029
107V7773

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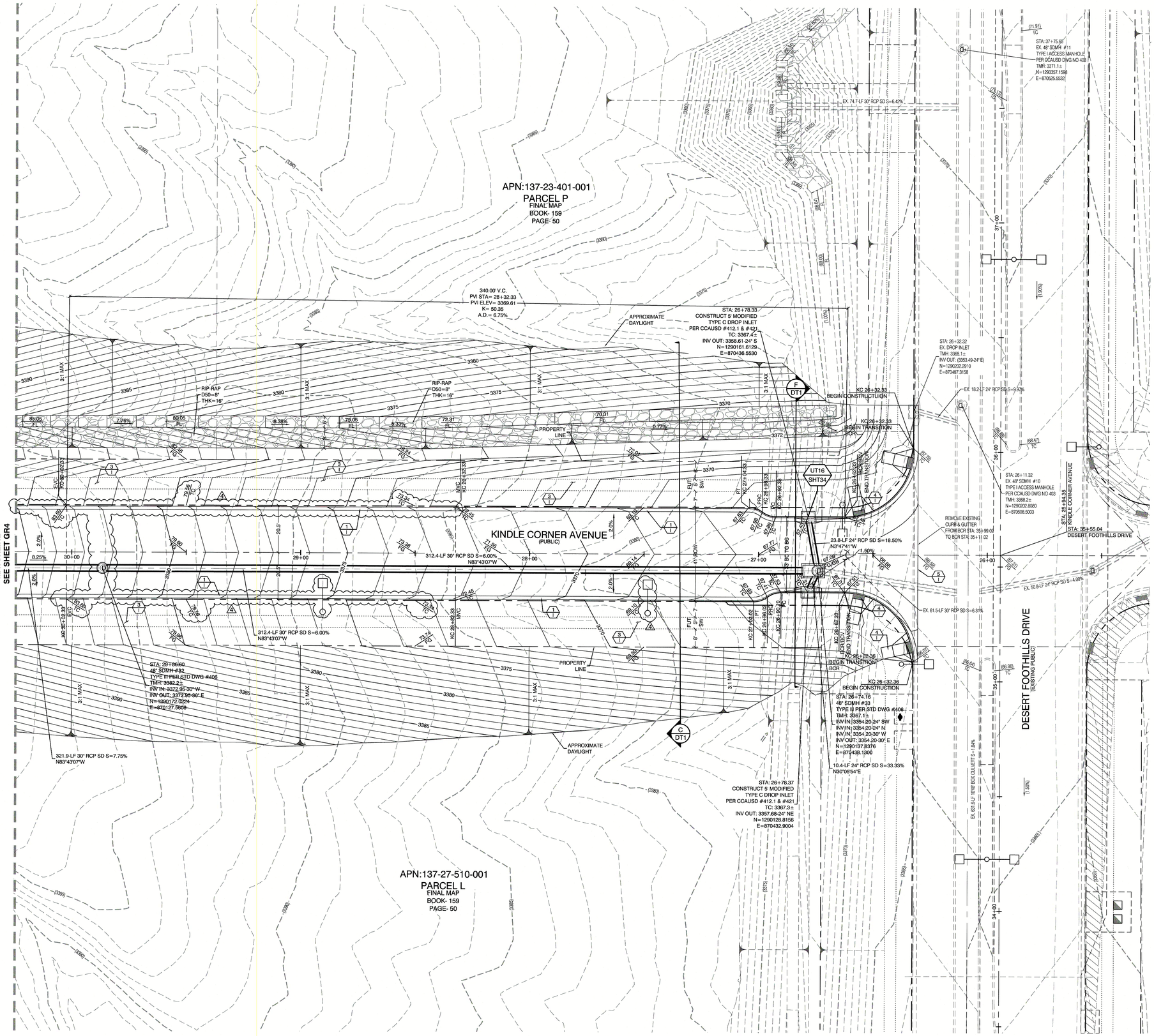

KEY MAP
NTS

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AND
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WILLIAM J MEYER , P.E. No. 15745 / DATE 8/31/20

REV	DATE	BY	REVISION
1	08/10/2020	JDH	ADD & RELOCATE ST.LTS; REMOVE PARCEL ENTRY; ADJUST L-CURB AND LABELS; REMOVE DROP INLETS

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
(FORMERLY THE HOWARD HUGHES CORPORATION)
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

GRADING PLAN 5
SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

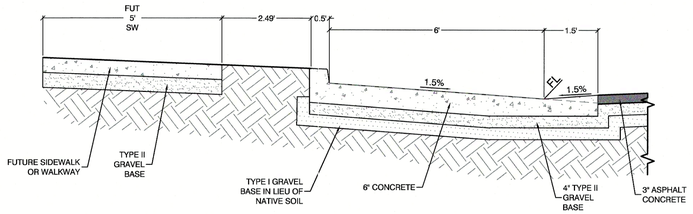
DRAWN BY: JDH	09/18/2018
DESIGNED BY: DEH	09/10/2018
CHECKED BY: WJM	08/24/2019
PROJECT NO: 7851	SCALE: 1" = 20' HORIZ. N/A VERT.

PROFESSIONAL ENGINEER STATE OF NEVADA No. 15745 WILLIAM J. MEYER EXP: 12/31/21 CIVIL
8/31/20

SHEET
GR5
15 OF 37 SHEETS

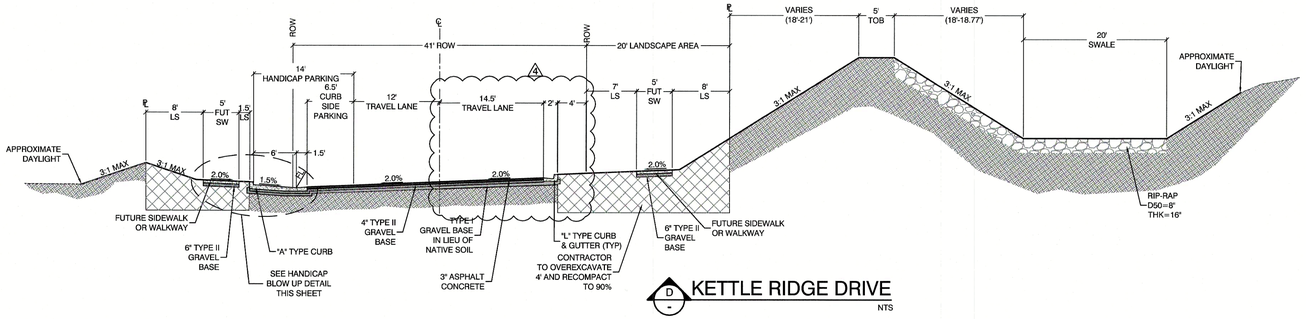
DRAWING NO.
L19-01029
107V7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7851-GR.dwg,8/26/2020 9:29 AM,chrisp



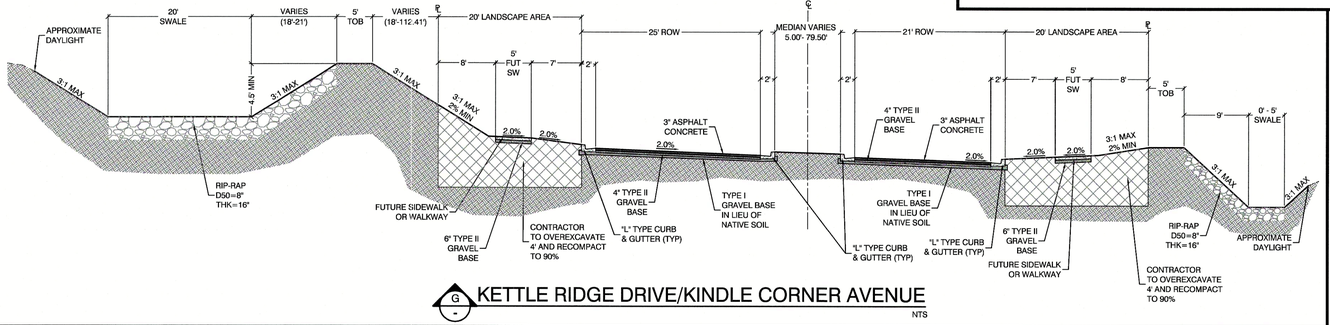
HANDICAP PARKING BLOW-UP

NTS



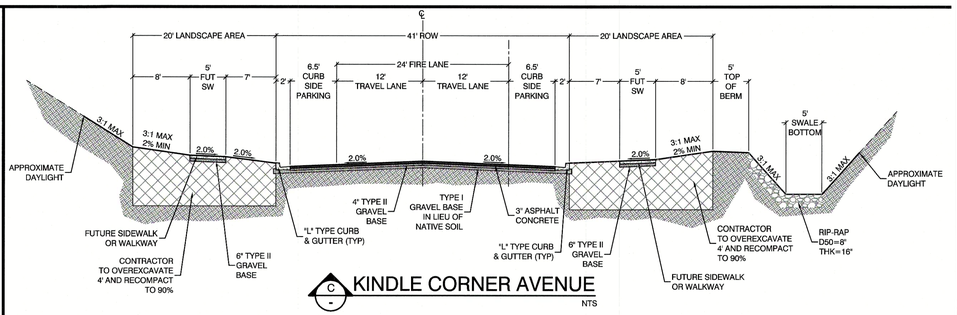
D — KETTLE RIDGE DRIVE

NTS



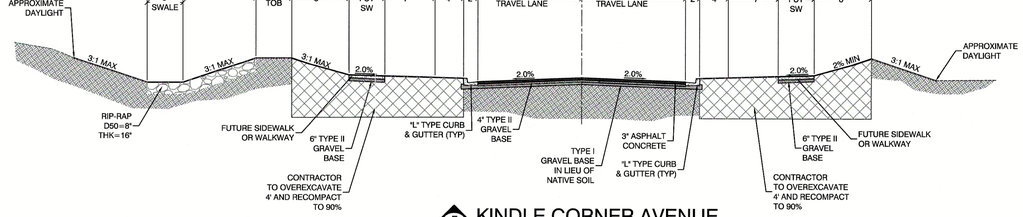
G — KETTLE RIDGE DRIVE/KINDLE CORNER AVENUE

NTS



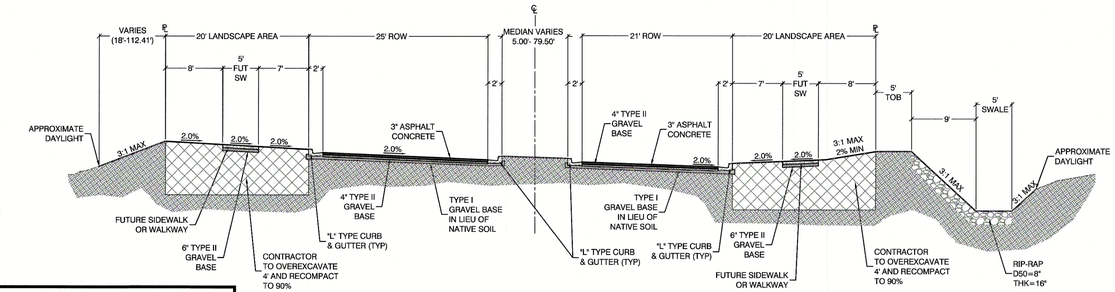
C — KINDLE CORNER AVENUE

NTS



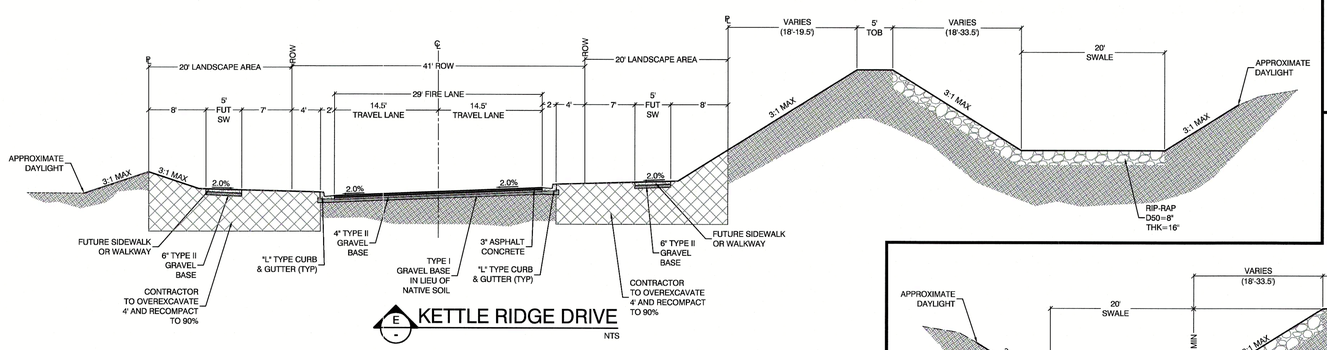
F — KINDLE CORNER AVENUE

NTS



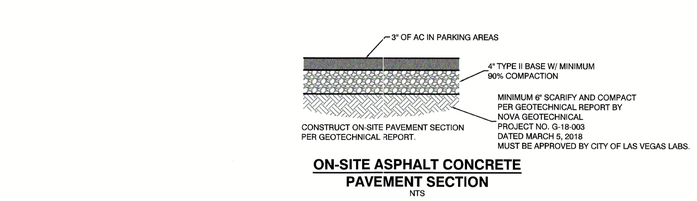
B — KETTLE RIDGE DRIVE/KINDLE CORNER AVENUE

NTS



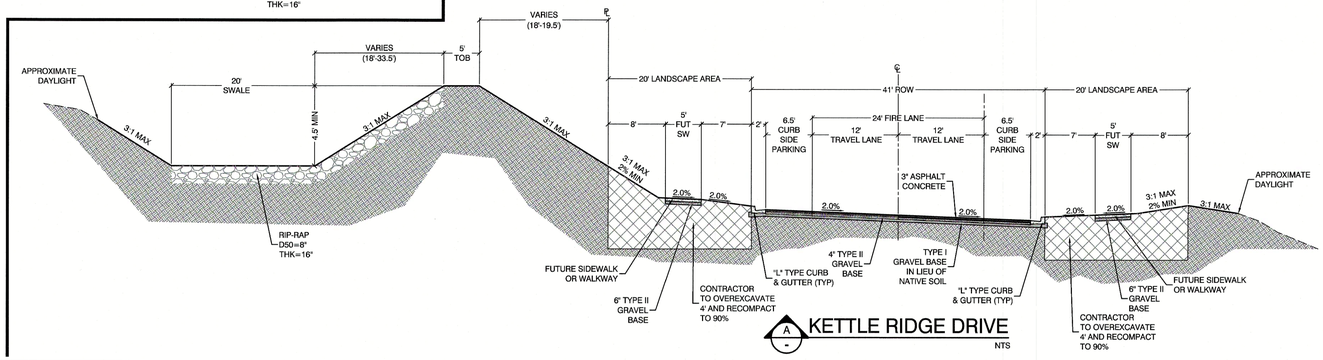
E — KETTLE RIDGE DRIVE

NTS



ON-SITE ASPHALT CONCRETE
PAVEMENT SECTION

NTS



A — KETTLE RIDGE DRIVE

NTS

REV	DATE	BY	REVISION
1	03/10/2020	JDH	REVISED CROSS SECTION

CITY OF LAS VEGAS

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 450
LAS VEGAS, NEVADA 89135
702-791-4000

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7540 FAX (702) 362-2997 WEB WWW.LTMNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

DETAIL SHEET 1

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH 08/18/2018
DESIGNED BY: DSH 08/10/2018
CHECKED BY: WJM 08/24/2019
PROJECT NO: 7851
SCALE: 1" = 20' HORIZ. N/A VERT.

PROFESSIONAL ENGINEER-STATE OF NEVADA
WILLIAM J. MEYER
No. 15745
EXP: 12/31/21
CIVIL
8/31/20

SHEET
DT1
16 OF **37** SHEETS

DRAWING NO.
L19-01029
107V7773

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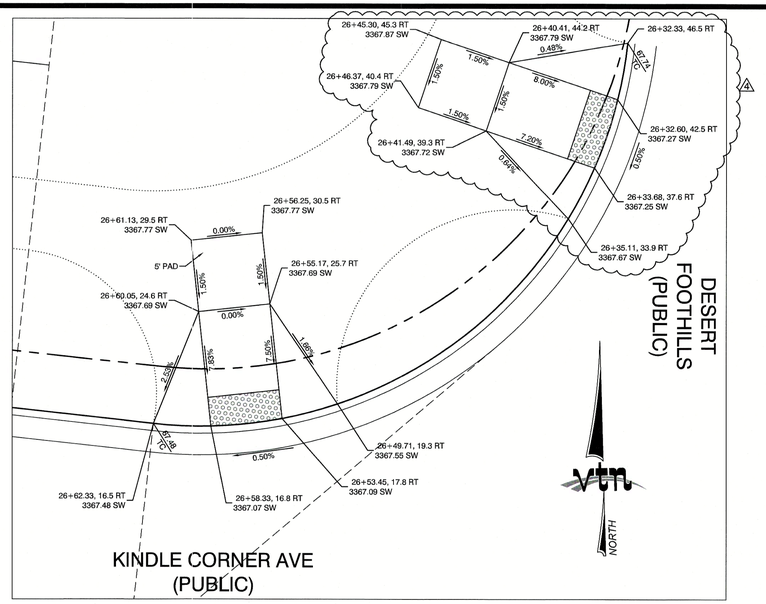


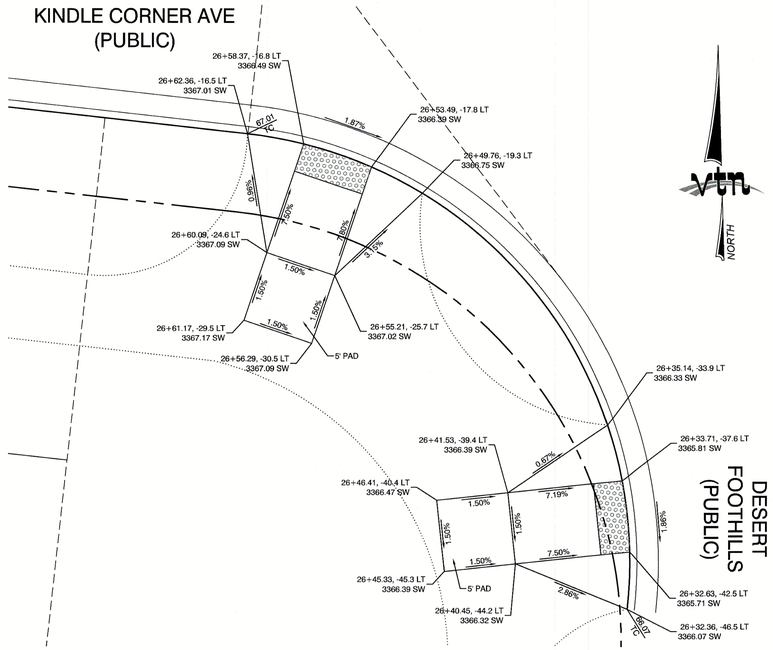
GRAPHIC SCALE

-5 0 2.5 5 10

1" = 5'

NOTE

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.

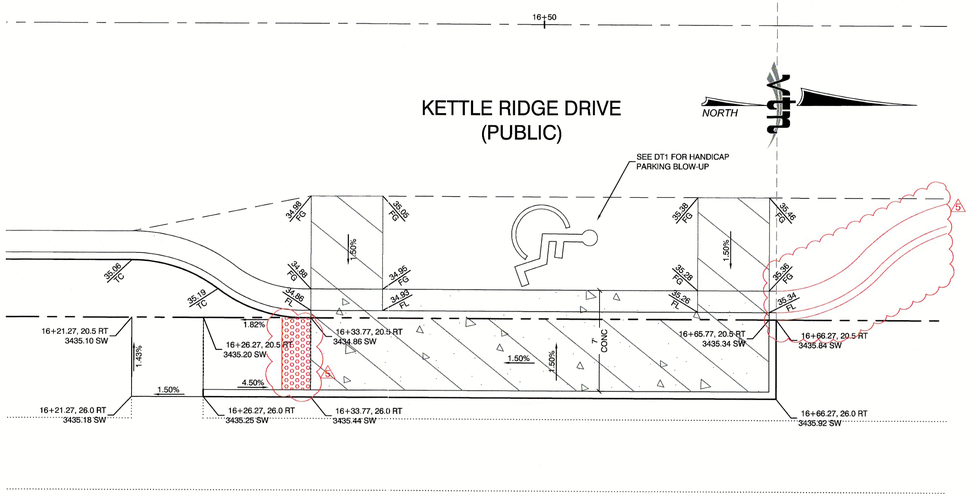


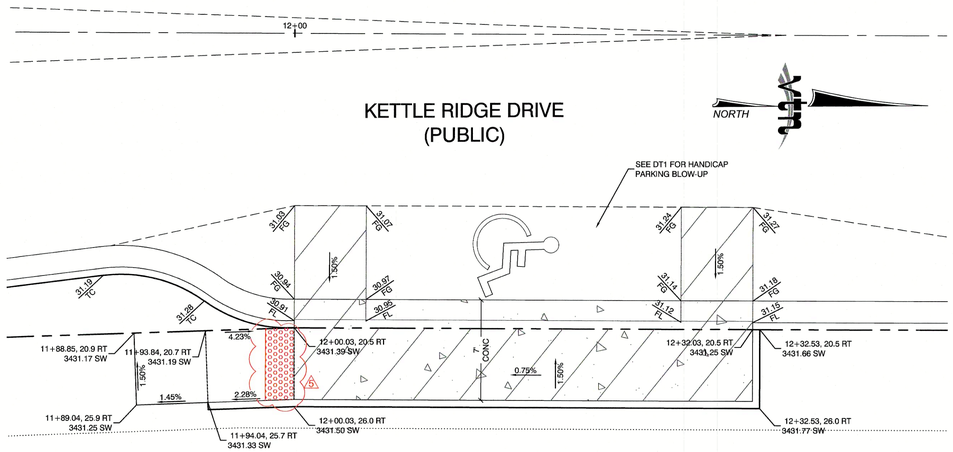
KINDLE CORNER AVENUE AND DESERT FOOTHILLS HANDICAP RAMP NORTHWEST CORNER

NTS

KINDLE CORNER AVENUE AND DESERT FOOTHILLS HANDICAP RAMP SOUTHWEST CORNER

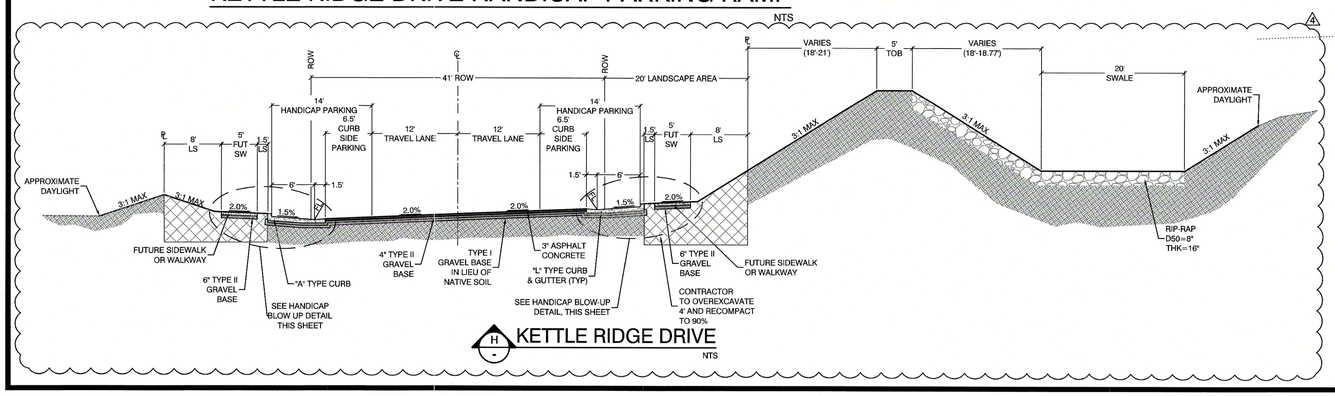
NTS





KETTLE RIDGE DRIVE HANDICAP PARKING RAMP

NTS



H KETTLE RIDGE DRIVE

NTS

KETTLE RIDGE DRIVE HANDICAP PARKING RAMP

NTS

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

REV	DATE	BY	REVISION
2	06/25/2020	CP	ADD TACTILE WARNING TILES TO HANDICAP PARKING SPACE METER
1	03/10/2020	JDH	ADD SECTION DETAIL, REVISE SW RAMP GRADES

vtn
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7540 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

DETAIL SHEET 2

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY:	JDH
DESIGNED BY:	DEH
CHECKED BY:	WJM
PROJECT NO:	7951
09/18/2019	
09/10/2018	
09/24/2019	
SCALE:	1" = 20' HORZ. N/A VERT.

PROFESSIONAL ENGINEER - STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/31/20

SHEET
DT2
17 OF 37 SHEETS

DRAWING NO
L19-01029
107V7773

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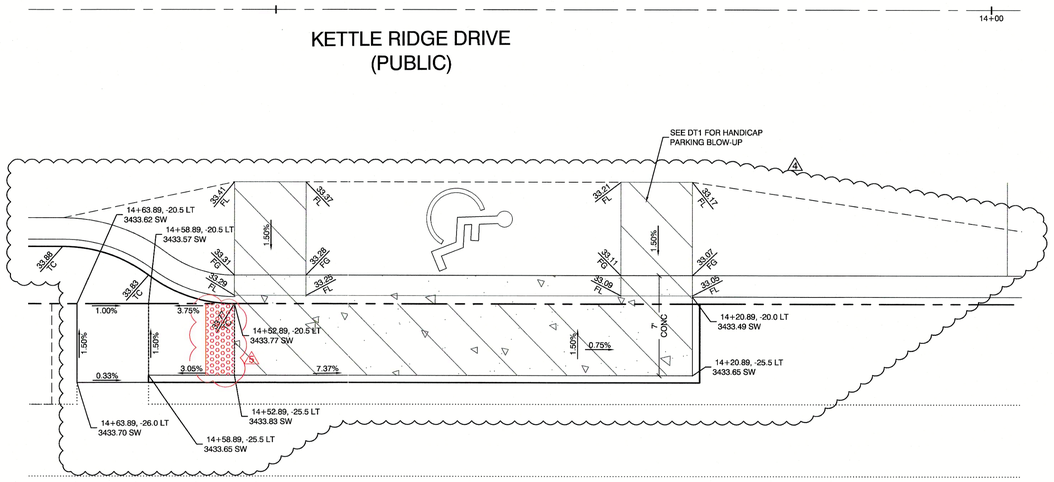
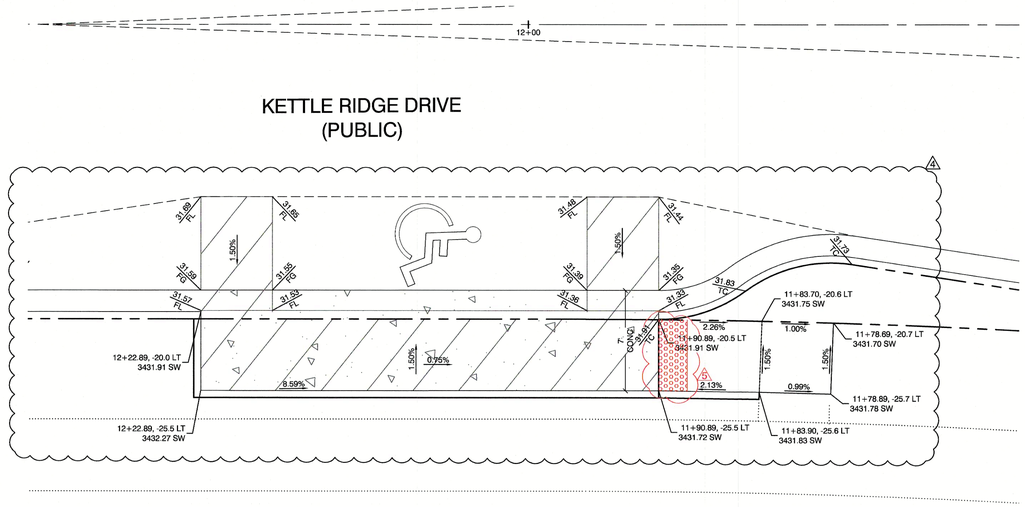


KETTLE RIDGE DRIVE HANDICAP PARKING RAMP

NTS



KETTLE RIDGE DRIVE HANDICAP PARKING RAMP

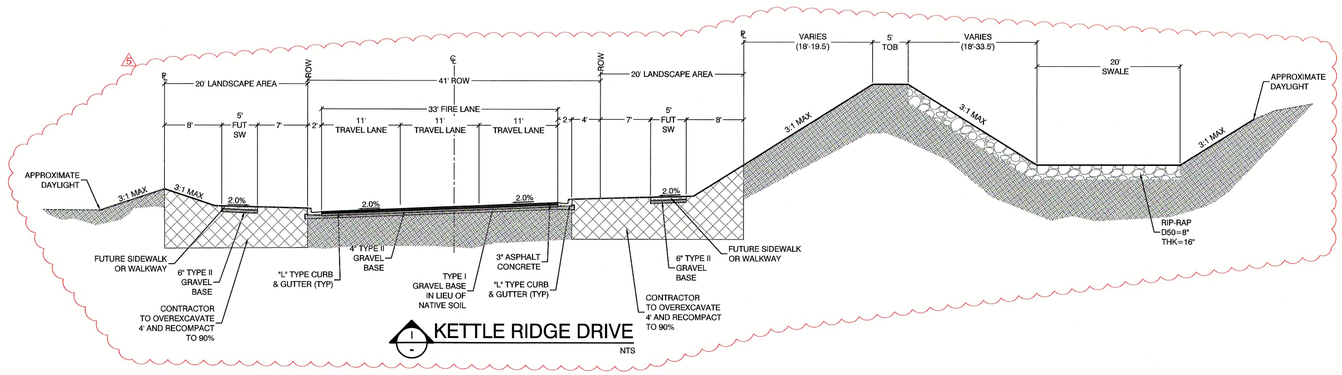
NTS

NORTH

GRAPHIC SCALE

-5 0 2.5 5 10

1" = 5'



KETTLE RIDGE DRIVE

NTS

REV	DATE	BY	REVISION
2	08/20/2020	CP	ADD TACTILE WARNING TILES TO HANDICAP PARKING SPACE; ADD DETAIL
1	03/10/2020	JDH	ADD HC PARKING DETAIL; ADJUST L-CURB

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
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7590 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

DETAIL SHEET 3

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH 09/18/2018
DESIGNED BY: DEH 09/10/2019
CHECKED BY: WJM 09/24/2019
PROJECT NO: 7851
SCALE: 1" = 20' HORZ. N/A VERT.

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

8/21/20

SHEET
DT3
18 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

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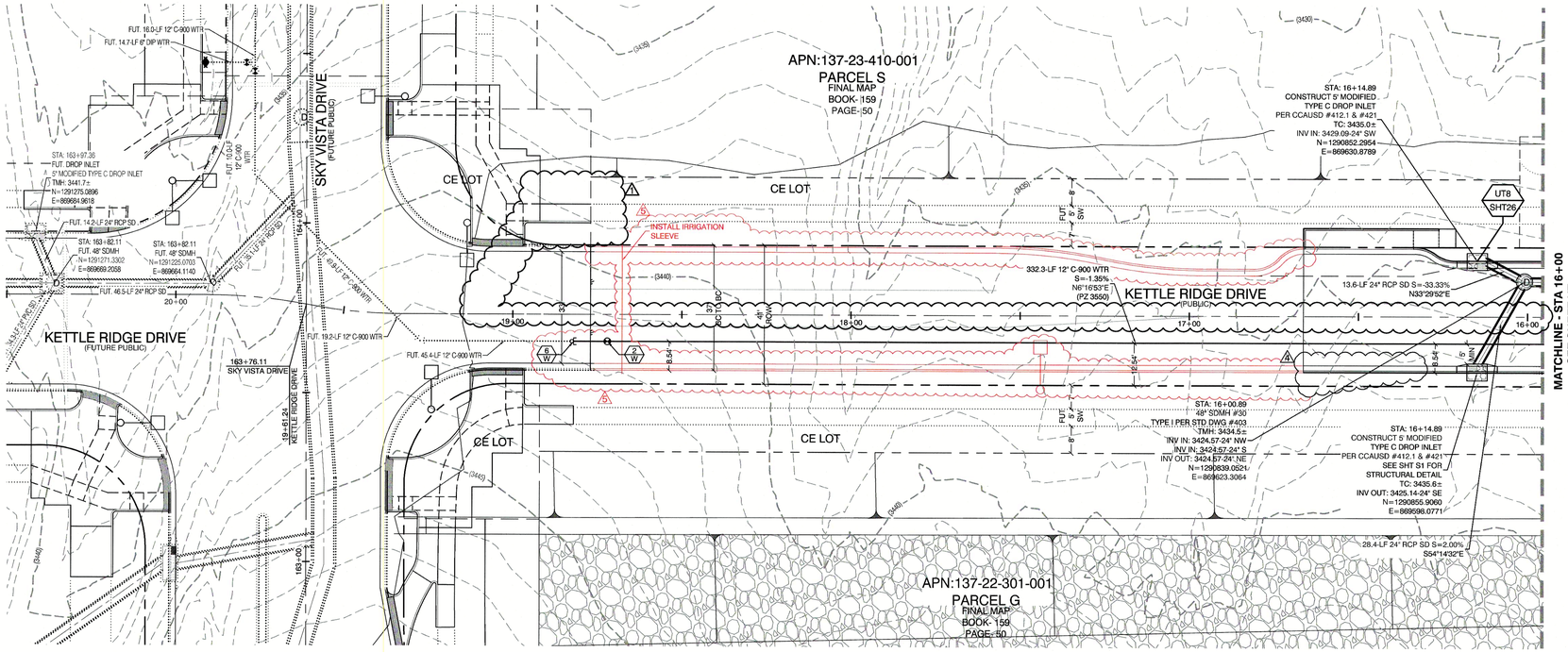
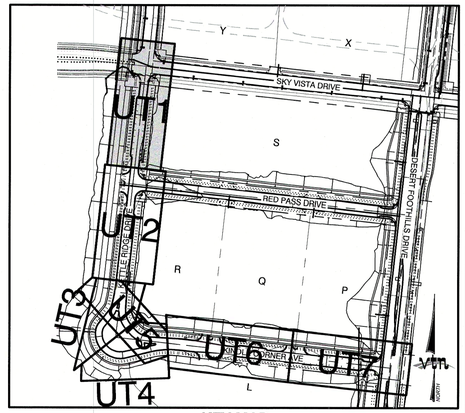




KEY MAP
NTS

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

NORTH

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

CONSTRUCTION NOTES

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

CONSTRUCTION NOTES

		PUBLIC
WATER		
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
W	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
W	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
W	12"X12" CROSS (PER UDACS PLATE 31)	2 EA.
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
POC	WATER POINT OF CONNECTION	
SEWER		**PUBLIC**
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
POC	SEWER POINT OF CONNECTION	

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 DO OVERHEAD
1-702-227-2929

Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

GENERAL CONSTRUCTION NOTE:

THE FOLLOWING SUMMERLIN VILLAGE 21 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED CONCURRENTLY:
1. KINDLE CORNER AVENUE (DESERT FOOTHILLS TO SUMMERLIN PARKWAY)
2. RED PASS DRIVE (DESERT FOOTHILLS TO KINDLE CORNER AVENUE)
3. DESERT FOOTHILLS (REDPOINT DRIVE TO SUMMERLIN PARKWAY)

SEWER/ STORM DRAIN CROSSING NOTE:

ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

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.

DROP INLET SEPARATION NOTE

WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).

NOTE:

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

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.

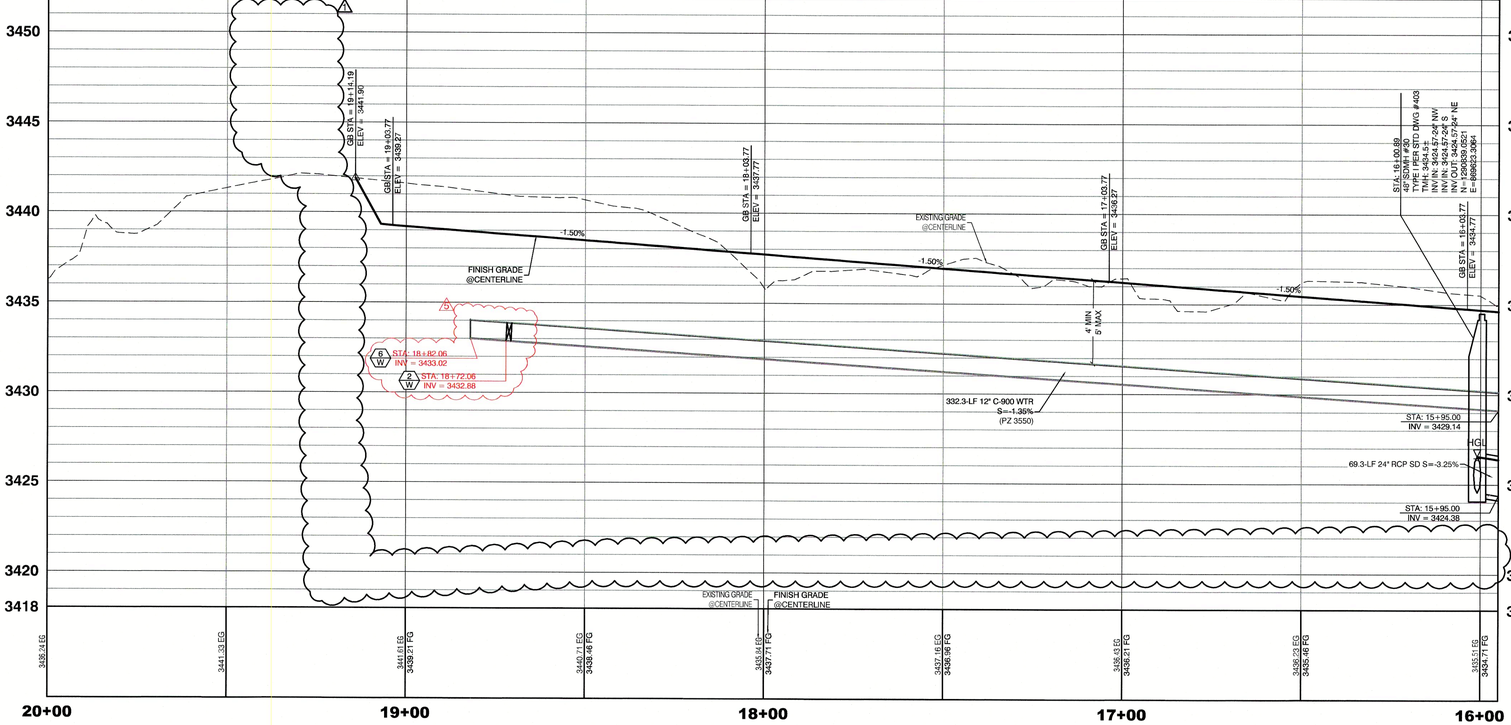
ENGINEER DISCLAIMER NOTE:

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.

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 ---- GPM AT 20 P.S.I. RESIDUAL.



APPROVED FOR CONSTRUCTION

_____
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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
5	08/20/2020	TJR	REVISE STREET CURB, EOP, VTR POC, AND STLT LOCATIONS
4	03/10/2020	JDH	ADJUST L-CURB, UPDATE CONSTRUCTION NOTES
3	11/10/2019	JDH	REMOVE SANITARY SEWER

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) 873-7500 FAX (702) 362-2697 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 1
20+00 TO 16+00

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH
DESIGNED BY: DEH
CHECKED BY: WJM
PROJECT NO: 7951
09/18/2018
09/10/2018
08/24/2019
SCALE: 1" = 20' HORIZ. N/A VERT.

WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
PROFESSIONAL ENGINEER - STATE OF NEVADA
8/31/20

SHEET
UT1
19 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

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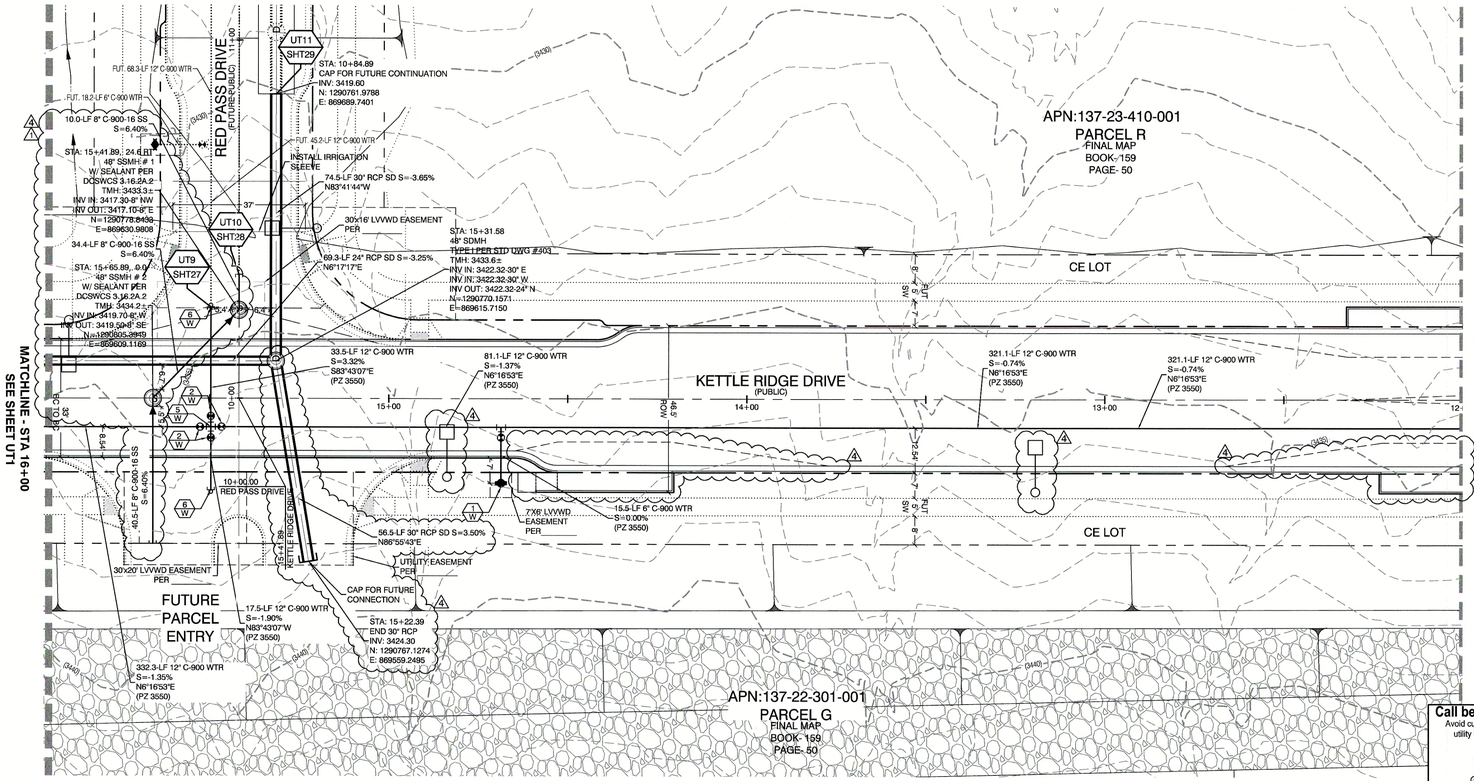

CONSTRUCTION NOTES

UT # / SHT #

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

CONSTRUCTION NOTES

	WATER	PUBLIC
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
W	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
W	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
W	12X12" CROSS (PER UDACS PLATE 31)	2 EA.
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
POC	WATER POINT OF CONNECTION	

	SEWER	PUBLIC
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
POC	SEWER POINT OF CONNECTION	

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

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600 AND 1-702-455-8000
CLARK COUNTY TRAFFIC OPERATIONS

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

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

GENERAL CONSTRUCTION NOTE:

THE FOLLOWING SUMMERLIN VILLAGE 21 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED CONCURRENTLY:
1. KINDLE CORNER AVENUE (DESERT FOOTHILLS TO SUMMERLIN PARKWAY)
2. RED PASS DRIVE (DESERT FOOTHILLS TO KINDLE CORNER AVENUE)
3. DESERT FOOTHILLS (REDPOINT DRIVE TO SUMMERLIN PARKWAY)

DROP INLET SEPARATION NOTE

WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).

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

SEWER CONNECTION NOTE:

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

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 ---- GPM AT 20 P.S.I. RESIDUAL.

GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

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

SIGHT VISIBILITY ZONES:

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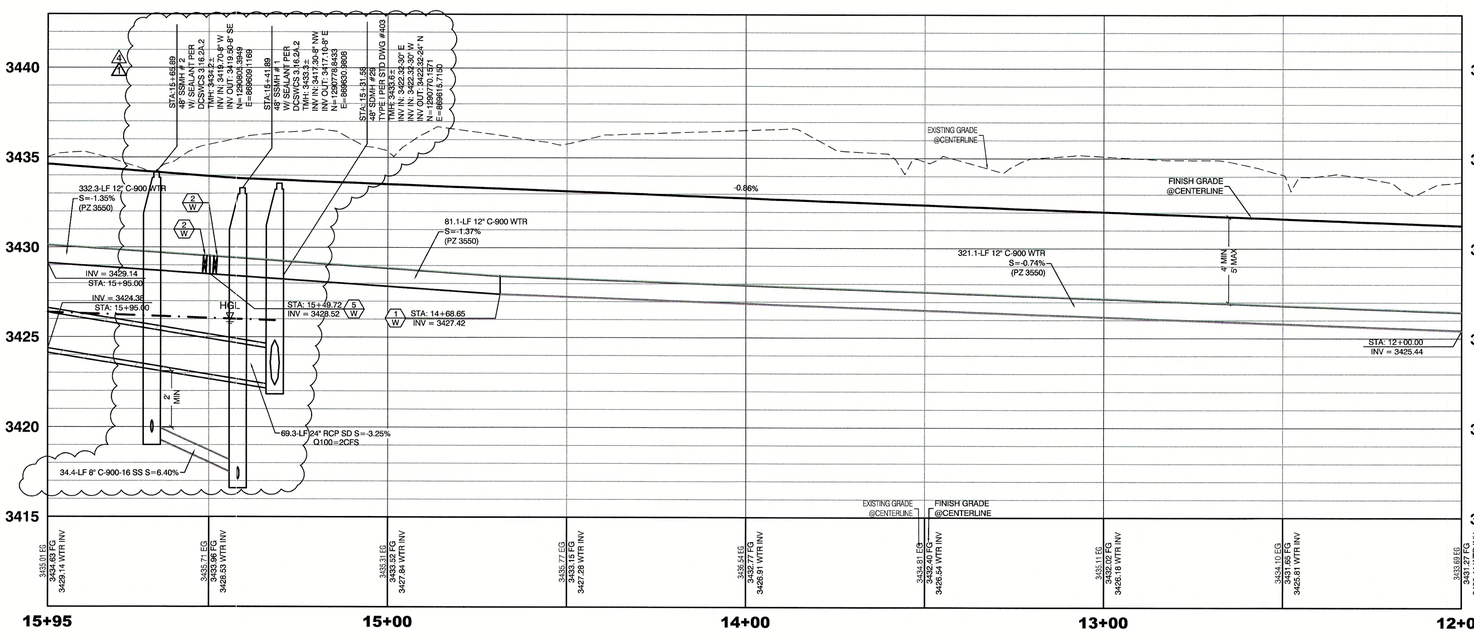
SEWER/ STORM DRAIN CROSSING NOTE:

ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

PROFILE SCALES:

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



KETTLE RIDGE DRIVE
(PUBLIC)

APPROVED FOR CONSTRUCTION

_____
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT: 136579 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
3	03/10/2020	JDH	ADJUST SLT SETBACK, ADJUST HC PARKING SPACE, REVISE SS & SD UPDATE
2	11/15/2019	JDH	REVISE SANITARY SEWER

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
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2997 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 2
16+00 TO 12+00

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH 08/18/2018
DESIGNED BY: DEH 08/10/2018
CHECKED BY: WJM 08/24/2019
PROJECT NO: 7851
SCALE: 1"= 20' HORIZ. N/A VERT.

PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/31/20

SHEET
UT2
20 OF 37 SHEETS

DRAWING NO.
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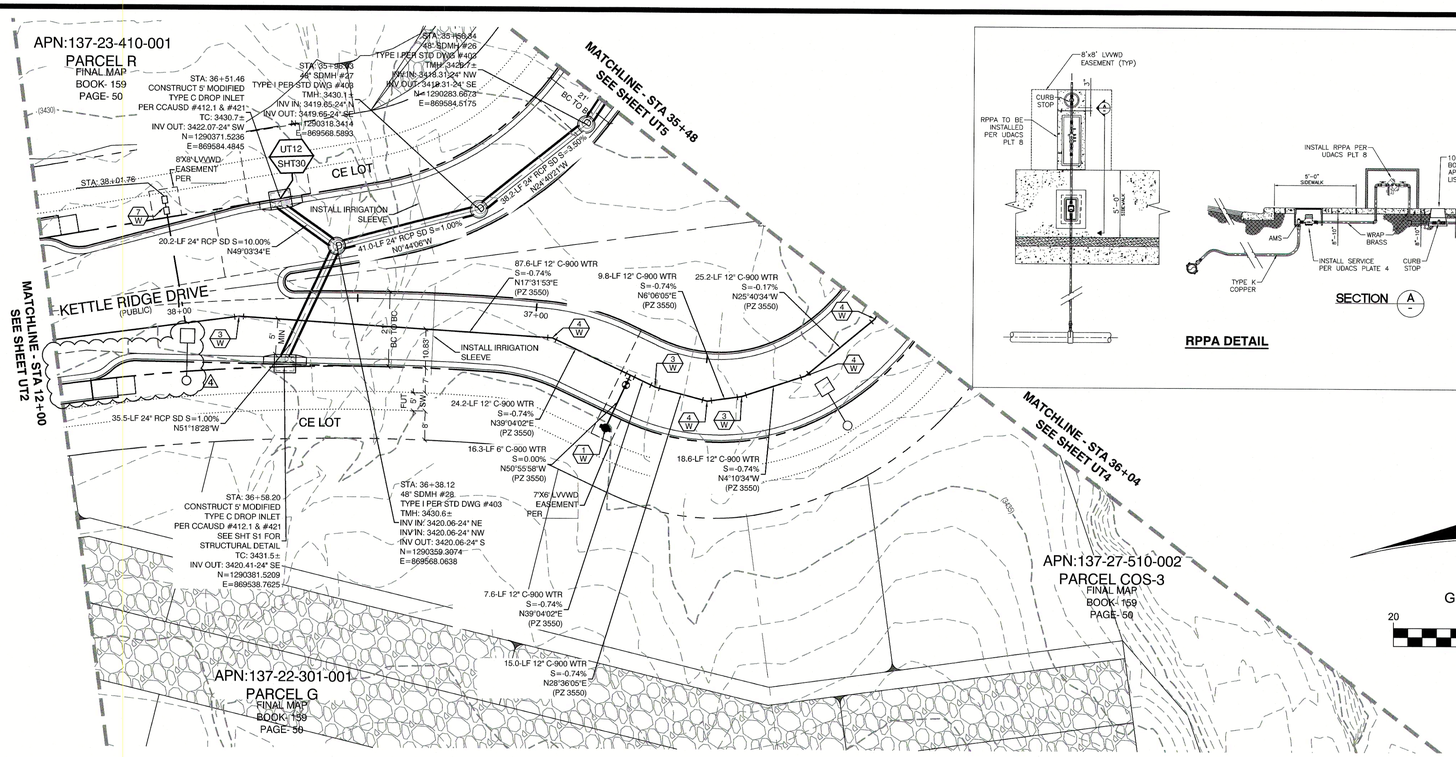
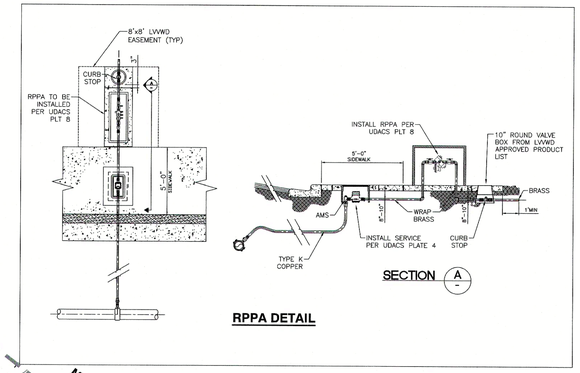
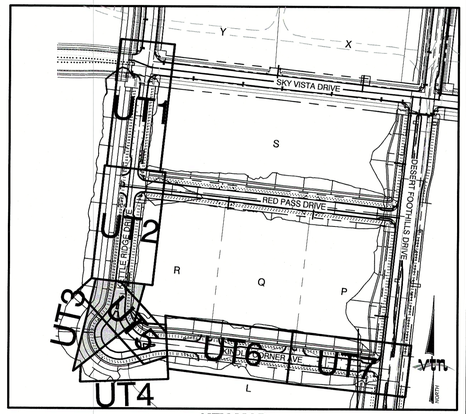






CONSTRUCTION NOTES

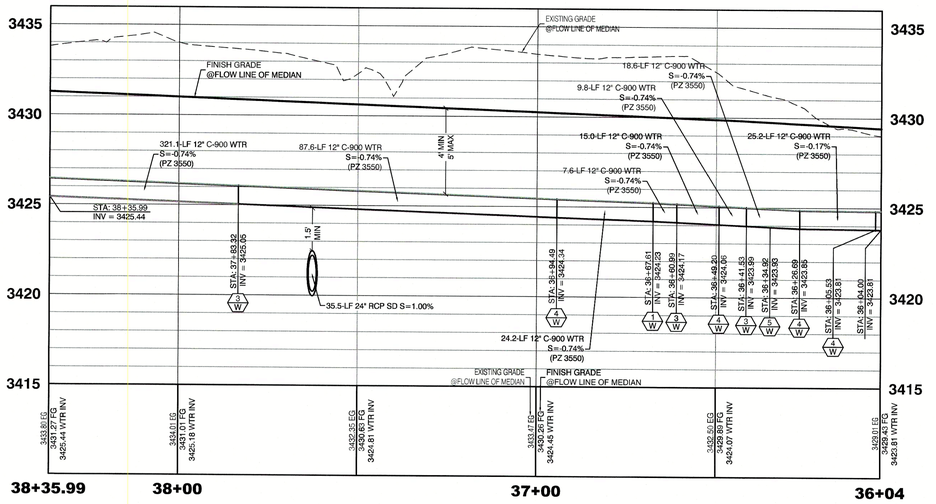
UT # / SHT # — UTILITY PROFILE REFERENCE LABEL
UT #= SHEET INDEX
SHT#= SHEET NUMBER

CONSTRUCTION NOTES

WATER	PUBLIC
FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
12" 11° BEND (PER UDACS PLATE 31)	4 EA.
12" 22° BEND (PER UDACS PLATE 31)	7 EA.
12"X12" CROSS (PER UDACS PLATE 31)	2 EA.
12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
WATER POINT OF CONNECTION	

SEWER	PUBLIC
STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
8" C-900-16 SANITARY SEWER MAIN	85 LF.
SEWER POINT OF CONNECTION	

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



KETTLE RIDGE DRIVE
(PUBLIC)

PROFILE OF STORM DRAIN
SEE UT5 SHEET 23 FOR STORM DRAIN PROFILE.

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.

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:136579 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.

GRADING PERMIT NOTE

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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.

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SEWER/ STORM DRAIN CROSSING NOTE:

ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

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 ___ GPM AT 20 P.S.I. RESIDUAL.

REV	DATE	BY	REVISION
3	03/12/2020	GDH	ADJUST STLT SETBACK, ADJUST HC PARKING SPACE, UPDATE CONSTRUCTION NOTES

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10846 GRIFFITH PEAK DRIVE, SUITE 150
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) 362-2897 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● AND SURVEYORS

UTILITY PLAN & PROFILE 3
38+62.04 TO 36+04

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

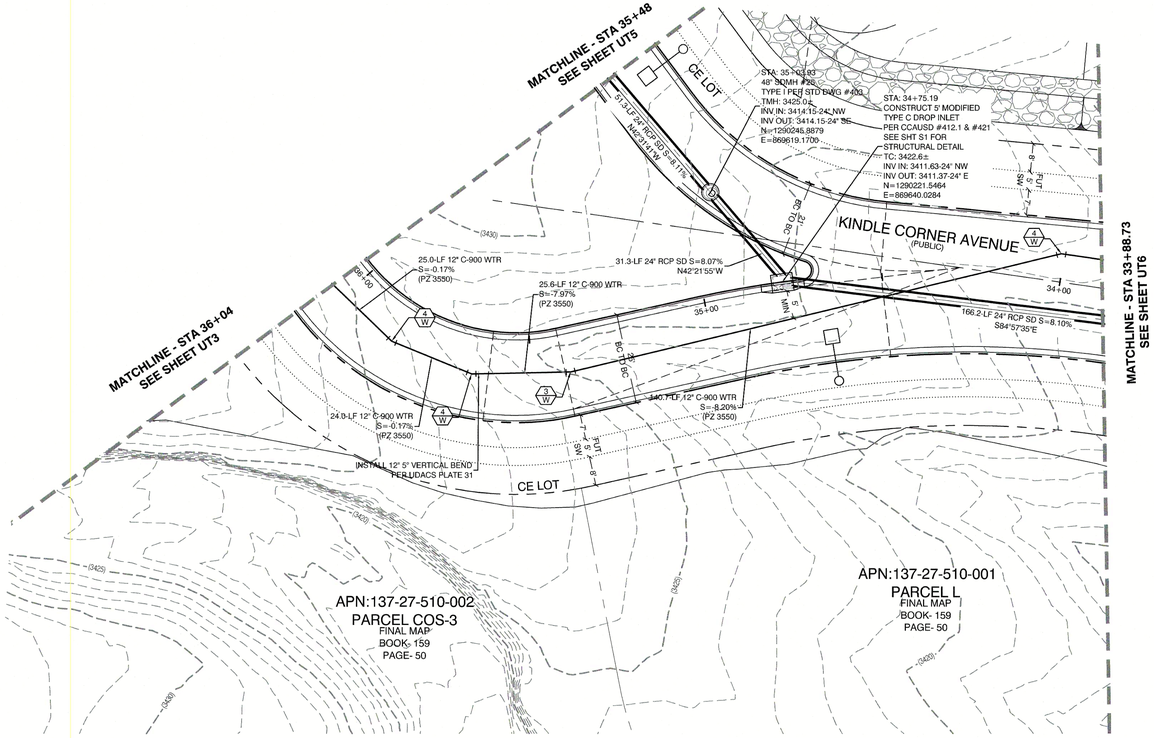
DRAWN BY: JEH — 08/18/2016
DESIGNED BY: DEH — 08/10/2018
CHECKED BY: WJM — 08/24/2019
PROJECT NO: 7851
SCALE: 1" = 20' HORIZ. N/A VERT.

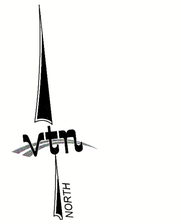
PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/31/20

SHEET
UT3
21 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7851\Sheet B-Desert Foothills to Summerlin Pkwy\Sheet Set-DP\7851-UT.dwg,8/26/2020 10:23 AM,dhnap

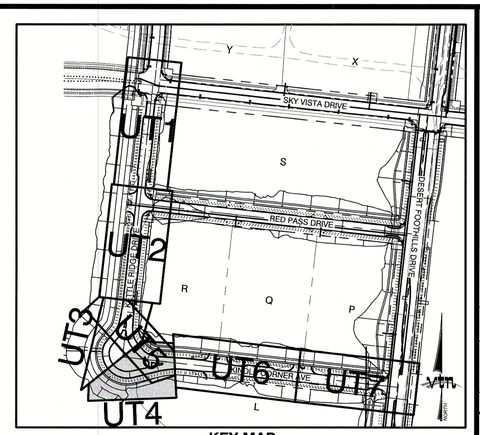




GRAPHIC SCALE

20 0 10 20 40

1" = 20'

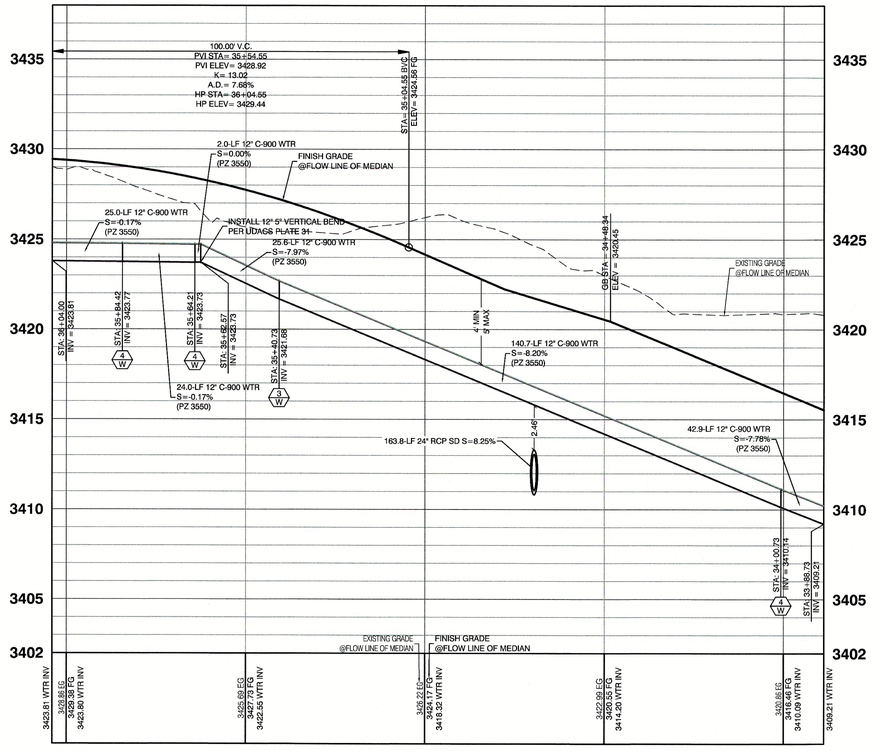


KEY MAP

NTS

PROFILE SCALES:

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



KINDLE CORNER AVENUE
(PUBLIC)

PROFILE OF STORM DRAIN

SEE UT5 SHEET 23 FOR STORM DRAIN PROFILE.

CONSTRUCTION NOTES

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

CONSTRUCTION NOTES

	WATER	PUBLIC
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
W	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
W	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
W	12"X12" CROSS (PER UDACS PLATE 31)	2 EA
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
POC	WATER POINT OF CONNECTION	

	SEWER	PUBLIC
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
POC	SEWER POINT OF CONNECTION	

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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 DO OVERHEAD
1-702-227-2929

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

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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NOTE:

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

GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

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

SIGHT VISIBILITY ZONES:

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 FIRST APPROVED DATE:_____

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

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SEWER/ STORM DRAIN CROSSING NOTE:

ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

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REV	DATE	BY	REVISION
1	03/10/2020	JDH	UPDATE CONSTRUCTION NOTES

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) 873-7590 FAX (702) 362-2897 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 4
36+04 TO 33+88.73

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH
DESIGNED BY: DSH
CHECKED BY: WJM
PROJECT NO: 7951
09/18/2018
09/13/2018
09/24/2019
SCALE: 1" = 20' HORIZ. N/A VERT.

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

SHEET
UT4
22 OF 37 SHEETS

DRAWING NO.
L19-01029
10/V7773

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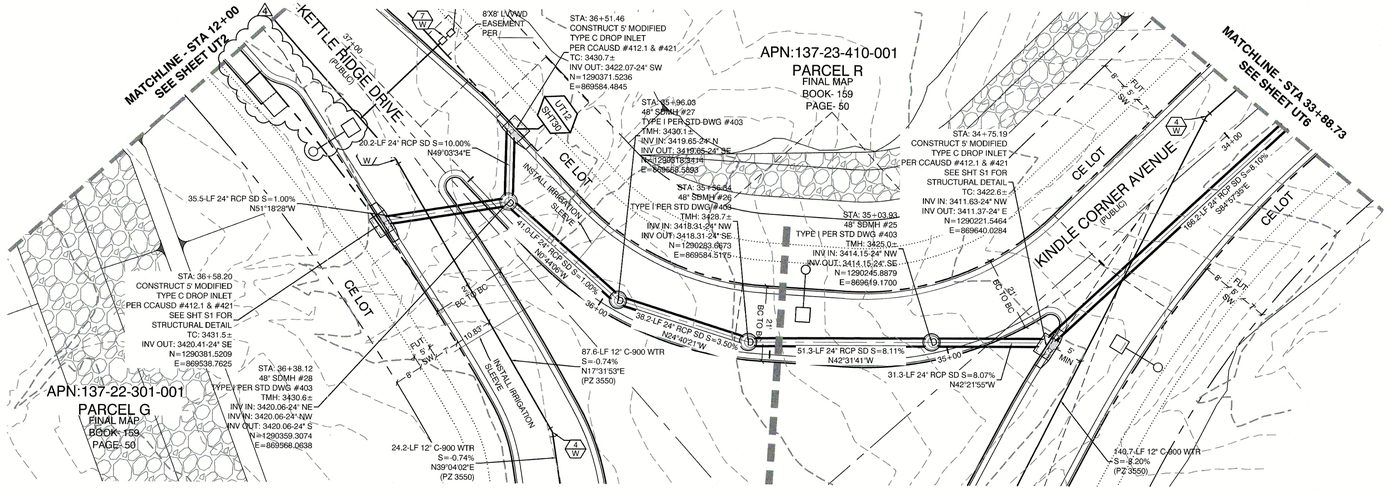
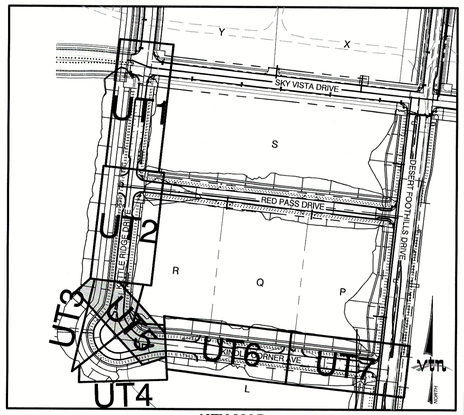
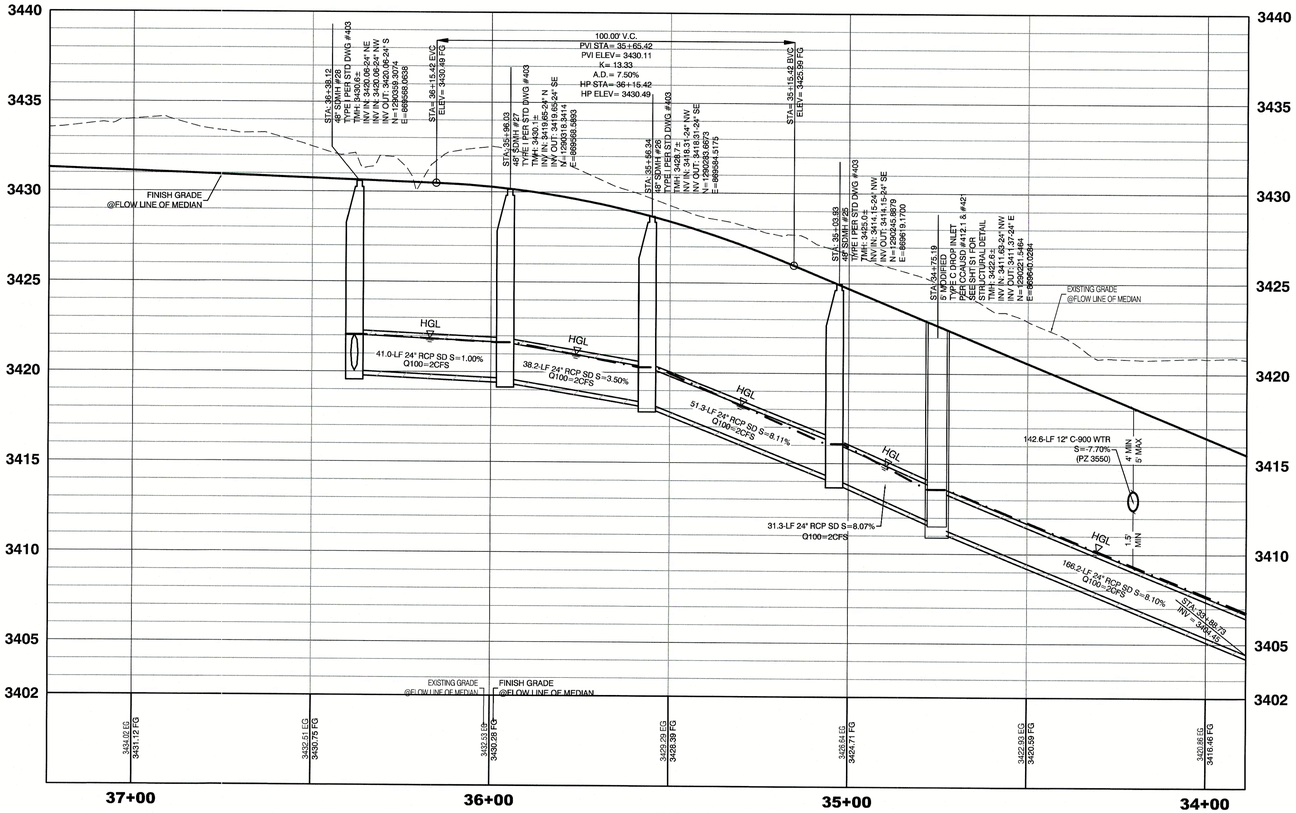




KEY MAP
NTS

PROFILE SCALES:

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



KINDLE CORNER AVENUE
(PUBLIC)

CONSTRUCTION NOTES

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

CONSTRUCTION NOTES

	WATER	PUBLIC
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	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
	12"X12" CROSS (PER UDACS PLATE 31)	2 EA.
	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
	WATER POINT OF CONNECTION	

	SEWER	PUBLIC
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1-702-229-6611
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GEOTECHNICAL NOTE:

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

DROP INLET SEPARATION NOTE

WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).

WATER MAIN JOINT DEFLECTION

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 FIRST APPROVED DATE:_____

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LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

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REV	DATE	BY	REVISION
3	03/10/2020	JDH	ADJUST STUT SETBACK, ADJUST HC PARKING SPACE, UPDATE CONSTRUCTION NOTES

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4500

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2897 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 5
33+88.73 TO 37+23.51

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JHH	09/18/2018
DESIGNED BY: DEH	09/10/2018
CHECKED BY: WJM	09/24/2019
PROJECT NO: 7651	SCALE: 1" = 20' HORIZ. N/A VERT.

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

SHEET
UT5
23 OF **37** SHEETS

DRAWING NO.
L19-01029
107V7773

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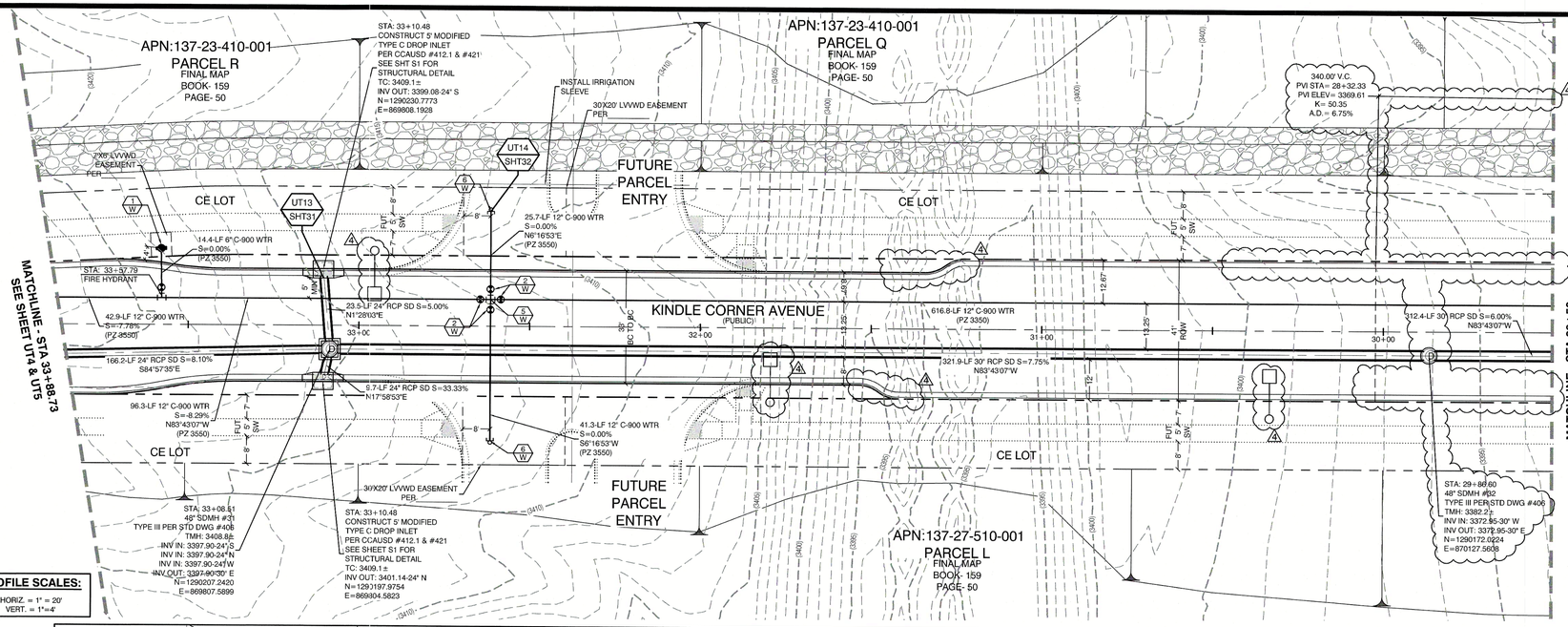
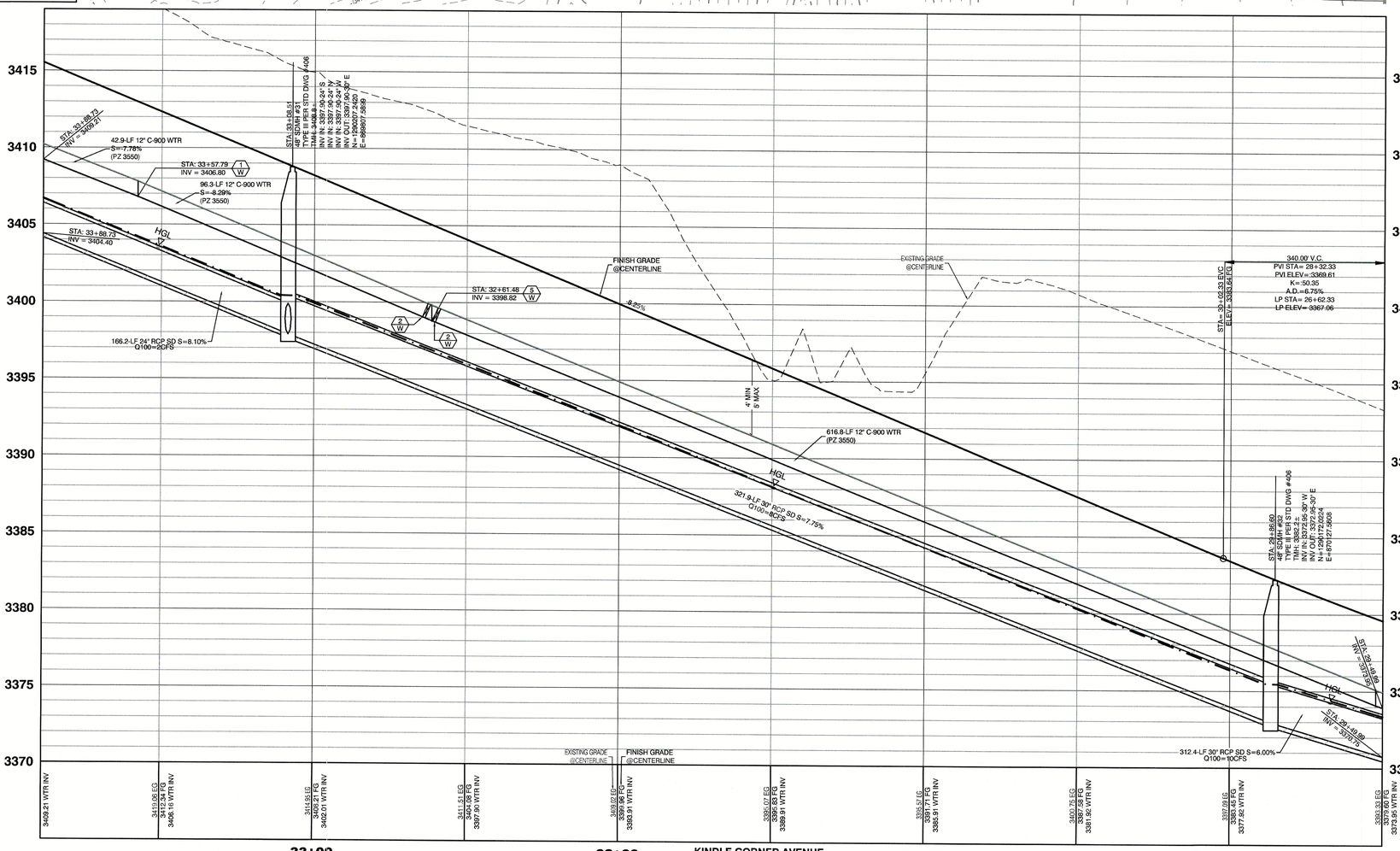
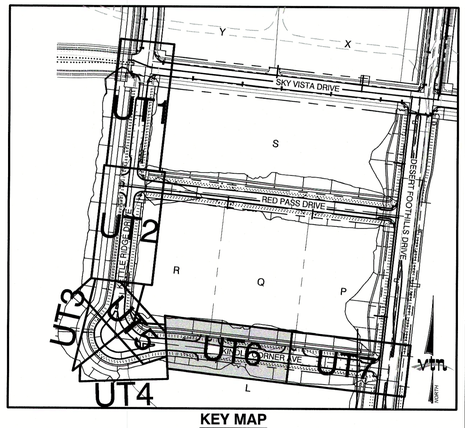


PROFILE SCALES:

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





KEY MAP
NTS

CONSTRUCTION NOTES

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

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

NORTH

CONSTRUCTION NOTES

		PUBLIC
WATER		
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
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POC	WATER POINT OF CONNECTION	
SEWER		**PUBLIC**
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
POC	SEWER POINT OF CONNECTION	

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 DO OVERHEAD
1-702-227-2929

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEM CABLES! 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

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

DROP INLET SEPARATION NOTE

WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS, BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).

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.

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.

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.

SEWER/ STORM DRAIN CROSSING NOTE:

ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

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 ---- 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

APPROVED FOR CONSTRUCTION

_____
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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
1	03/13/2020	JDH

RELOCATE SITE'S; ADJUST HC PARKING SPACE; DIMENSION MOVED, REMOVE DROP INLETS; REV CURB EXTENSIONS AND CONSTRUCTION NOTES
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) 873-7350 FAX (702) 362-2397 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 6
33+88.73 TO 29+50

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

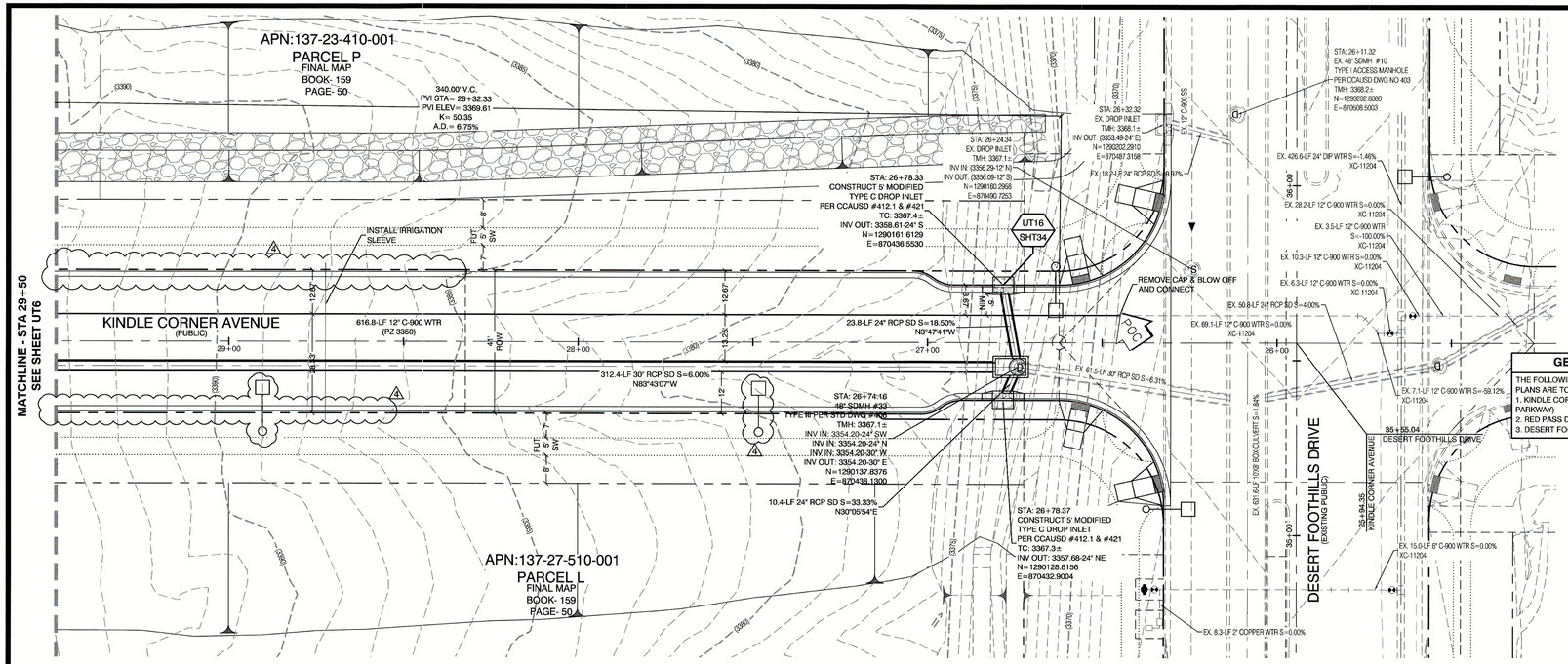
DRAWN BY: JDH — 09/18/2018
DESIGNED BY: DEH — 09/10/2018
CHECKED BY: WJM — 09/24/2019
PROJECT NO: 7851 — SCALE: 1" = 20' HORIZ. N/A VERT.

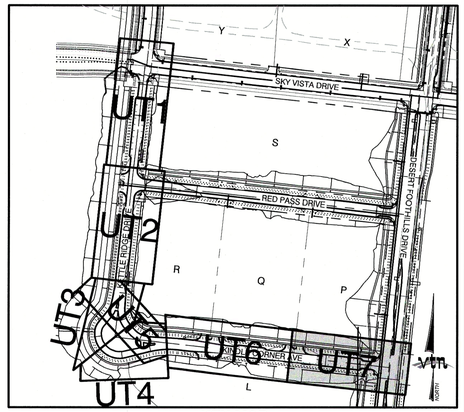
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
PROFESSIONAL ENGINEER STATE OF NEVADA No. 15745
9/18/20

SHEET
UT6
24 OF 37 SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPTD\7851-UT.dwg,8/28/2020 10:23 AM,chrisp





KEY MAP
NTS

GENERAL CONSTRUCTION NOTE:

THE FOLLOWING SUMMERLIN VILLAGE 21 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED CONCURRENTLY:
1. KINDLE CORNER AVENUE (DESERT FOOTHILLS TO SUMMERLIN PARKWAY)
2. RED PASS DRIVE (DESERT FOOTHILLS TO KINDLE CORNER AVENUE)
3. DESERT FOOTHILLS (REDPOINT DRIVE TO SUMMERLIN PARKWAY)

CONSTRUCTION NOTES

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

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

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SEWER/ STORM DRAIN CROSSING NOTE:

ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

NOTE:

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

CONSTRUCTION NOTES

	WATER	PUBLIC
W1	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
W2	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
W3	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
W4	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
W5	12"X12" CROSS (PER UDACS PLATE 31)	2 EA
W6	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 EA.
W7	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 RPPA DETAIL ON SHEET UT3	1 EA.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
POC	WATER POINT OF CONNECTION	

	SEWER	PUBLIC
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
POC	SEWER POINT OF CONNECTION	

GRADING PERMIT NOTE

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SIGHT VISIBILITY ZONES:

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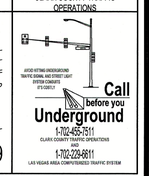
CALL 811 OR 1-800-227-2600 AND 1-702-455-8000
CLARK COUNTY TRAFFIC OPERATIONS

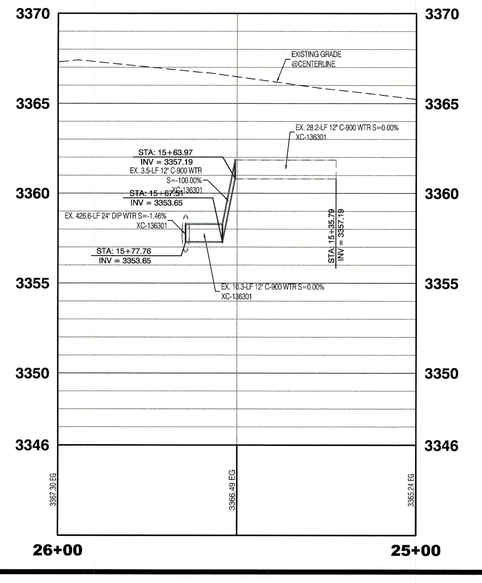


LAS VEGAS FIRE & RESCUE APPROVAL

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 ___ GPM AT 20 P.S.I. RESIDUAL.

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



REV	DATE	BY	
4	03/10/2020	JDH	ADD & RELOCATE ST'LTS, ADJUST HC PARKING, & PARKING EXTENSIONS; REMOVE PARCEL ENTRY, UPDATE CONSTRUCTION NOTES

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
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2997 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 7
29+50 TO 25+50

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

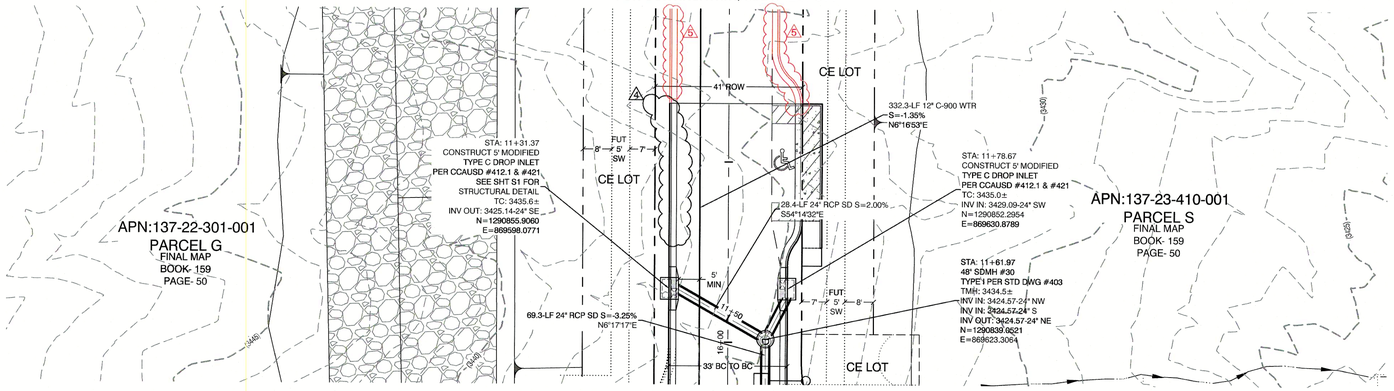
DRAWN BY: JDH
DESIGNED BY: DEH
CHECKED BY: WJM
PROJECT NO: 7851
09/18/2018
09/10/2018
09/24/2019
SCALE: 1" = 20' HORIZ. N/A VERT.

SHEET
UT7
25 OF **37** SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set\OPT2\7851-UT.dwg,8/26/2020 10:03 AM,chrisp

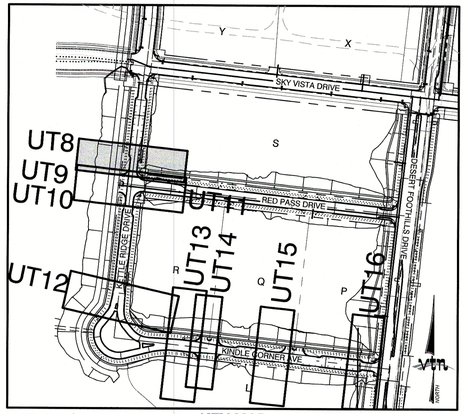
FOR CONTINUATION, SEE SHEET UT1



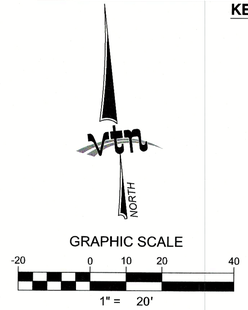
FOR CONTINUATION, SEE SHEET UT2

KETTLE RIDGE DRIVE
(PUBLIC)

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



KEY MAP
NTS



CONSTRUCTION NOTES

WATER		PUBLIC
	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
	12"X12" CROSS (PER UDACS PLATE 31)	2 EA.
	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
	WATER POINT OF CONNECTION	

SEWER		PUBLIC
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
	SEWER POINT OF CONNECTION	

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

SEWER/ STORM DRAIN CROSSING NOTE:
ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

DROP INLET SEPARATION NOTE
WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).

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

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:
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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.

LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

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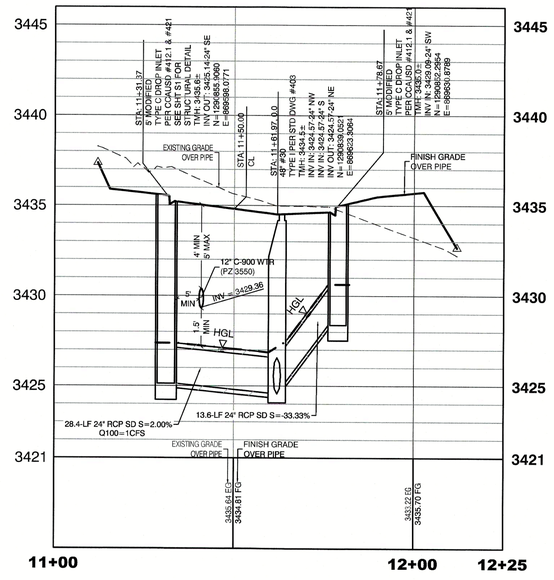


KETTLE RIDGE DRIVE
(PUBLIC)

REV	DATE	BY	REVISION
A	08/20/2020	TJR	REVISE STREET CURB
A	03/10/2020	JDH	ADJUST L-CURB, UPDATE CONSTRUCTION NOTES

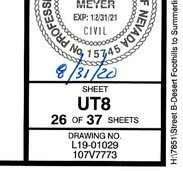
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
(702) 791-4000

CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX: (702) 382-2897 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 8
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

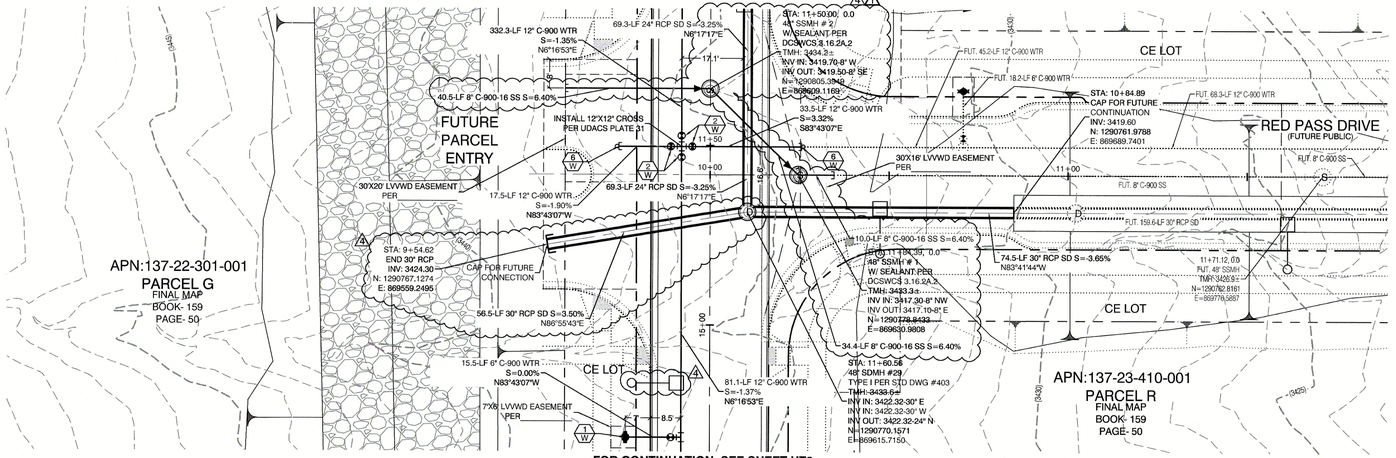
DRAWN BY: JDH — 09/18/2018
DESIGNED BY: DBH — 09/10/2018
CHECKED BY: WJM — 08/24/2019
PROJECT NO: 7881
SCALE: 1" = 20' HORIZ. / N/A VERT.



SHEET
UT8
26 OF **37** SHEETS

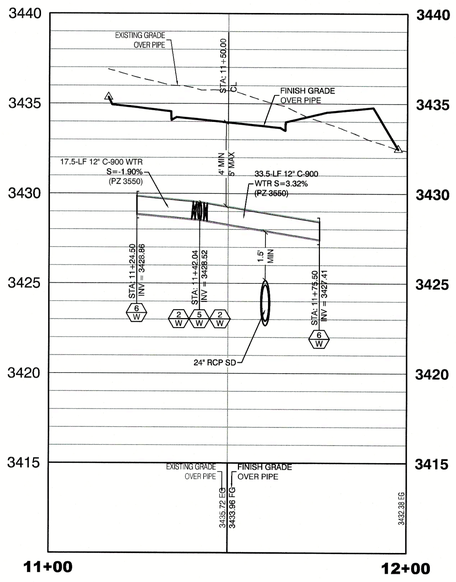
DRAWING NO.
L19-01029
107V7773

H:\7881\Sheet B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPTS\7881-UTLAT.dwg 8/31/2020 10:18 AM trevor

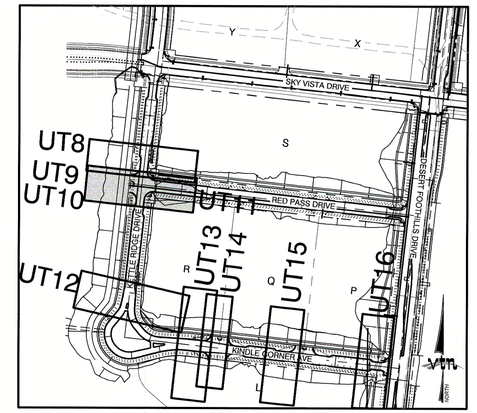


PROFILE SCALES:

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



KETTLE RIDGE DRIVE
(PUBLIC)



KEY MAP
NTS

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)	3 EA.
12 W		12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
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POC		WATER POINT OF CONNECTION	
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POC		SEWER POINT OF CONNECTION	

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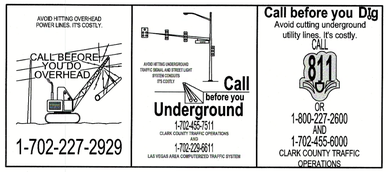


APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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.

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 — GPM AT 20 P.S.I. RESIDUAL.

REV	DATE	BY	REVISION
2	03/10/2020	JDH	ADJUST STLT SETBACK, REVISE SD, UPDATE CONSTRUCTION NOTES
1	11/13/2019	JDH	REVISE SANITARY SEWER

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 9 WATER LATERAL

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

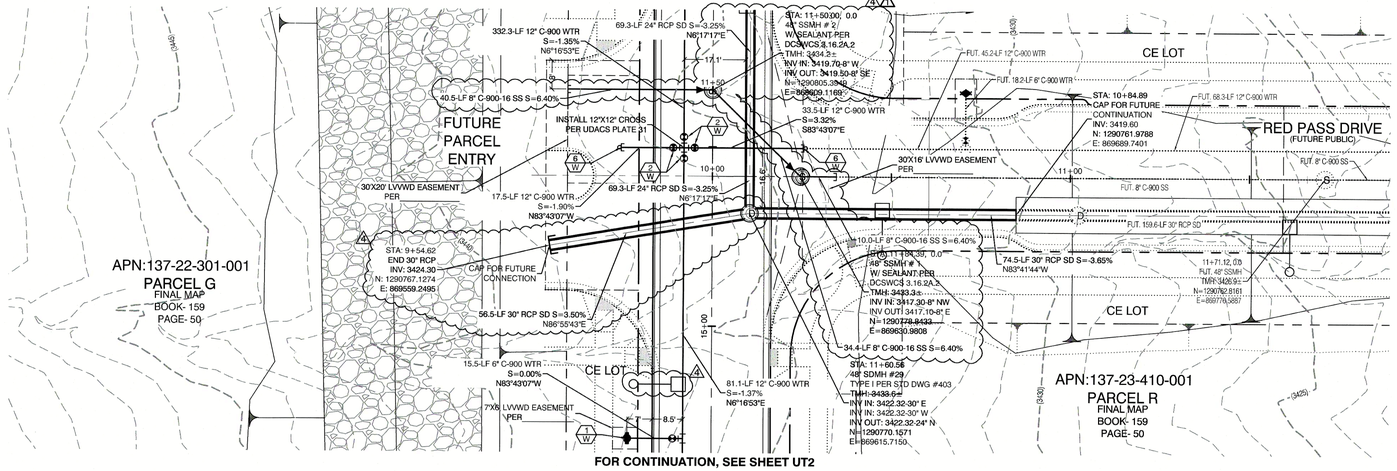
DRAWN BY: JDH — 09/18/2018
DESIGNED BY: DEH — 08/10/2018
CHECKED BY: WJM — 09/24/2019
SCALE: 1" = 20' HORIZ. N/A VERT.
PROJECT NO: 7851

PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/31/20

SHEET
UT9
27 OF 37 SHEETS

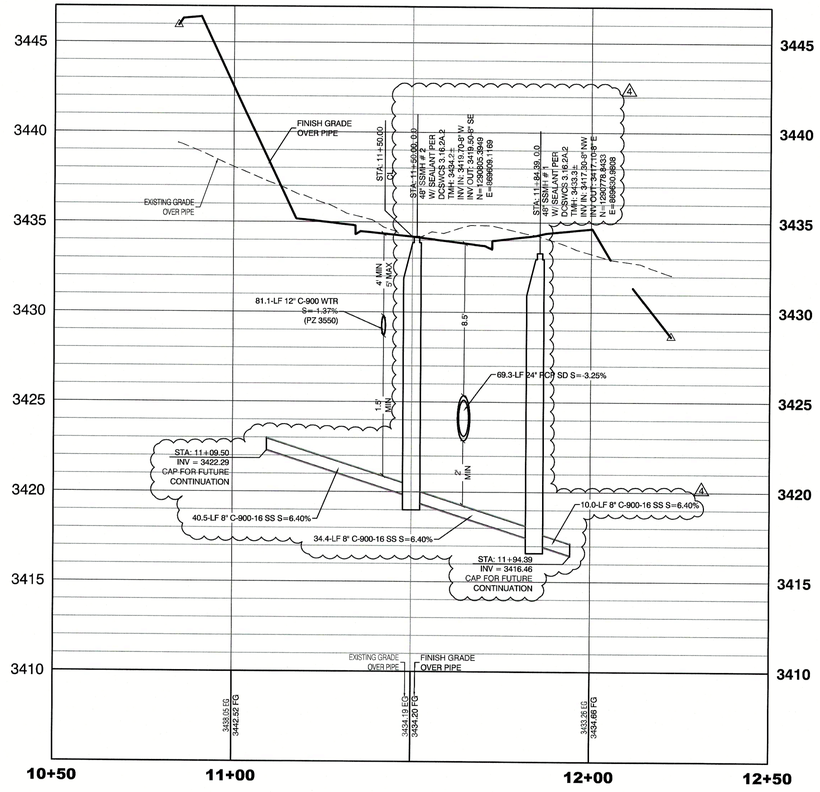
DRAWING NO.
L19-01029
107V7773

H:\7851\Sheet B-Desert Foothills to Summerlin Pkwy\Sheet Set-CPT\7851-UT-LAT.dwg,8/21/2020 10:16 AM,trevorr

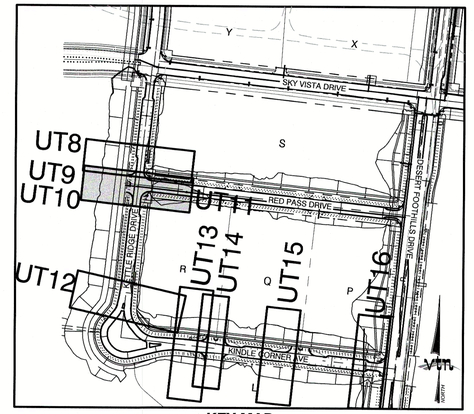


PROFILE SCALES:

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



KETTLE RIDGE DRIVE
(PUBLIC)



KEY MAP
NTS

CONSTRUCTION NOTES

		PUBLIC
WATER		
W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
W	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
W	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
W	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
W	12"X12" CROSS (PER UDACS PLATE 31)	2 EA
W	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
	WATER POINT OF CONNECTION	

		PUBLIC
SEWER		
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
	SEWER POINT OF CONNECTION	

GRAPHIC SCALE

-20 0 10 20 40

1" = 20'

GENERAL CONSTRUCTION NOTE:

THE FOLLOWING SUMMERLIN VILLAGE 21 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED CONCURRENTLY:
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3. DESERT FOOTHILLS (REDPOINT DRIVE TO SUMMERLIN PARKWAY)

SEWER/ STORM DRAIN CROSSING NOTE:

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WATER MAIN JOINT DEFLECTION

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

SEWER CONNECTION NOTE:

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

GRADING PERMIT NOTE

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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.

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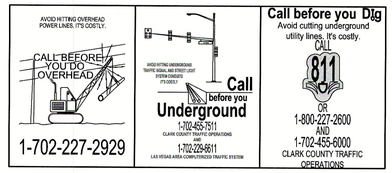

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 FIRST APPROVED DATE:_____.

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

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LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____.

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UTILITY PLAN & PROFILE 10 SEWER LATERAL

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH — 09/18/2018
DESIGNED BY: DEH — 09/10/2018
CHECKED BY: WJM — 09/24/2019
PROJECT NO: 7951
SCALE: HORIZ. 1" = 20' VERT. N/A

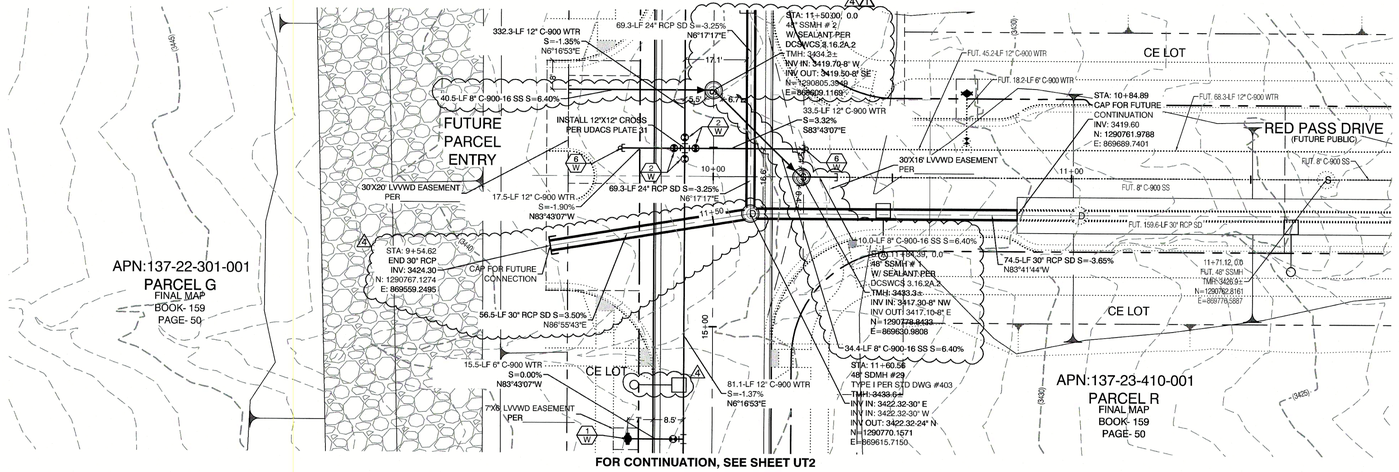
PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
NO. 15745

8/31/20

SHEET
UT10
28 OF **37** SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7951\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set\OPT\27951-UTLAT.dwg 8/21/2020 10:16 AM steveyr



PROFILE SCALES:

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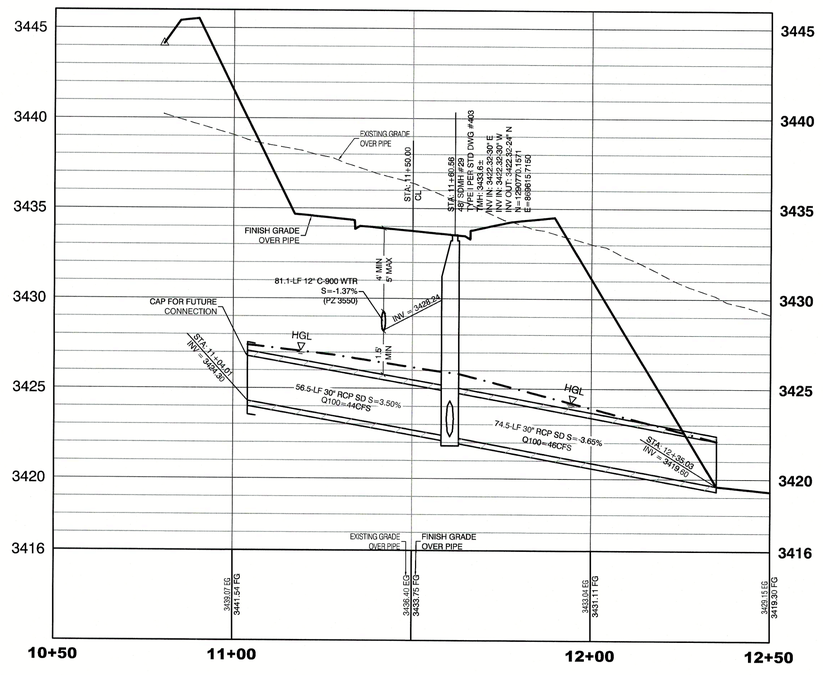
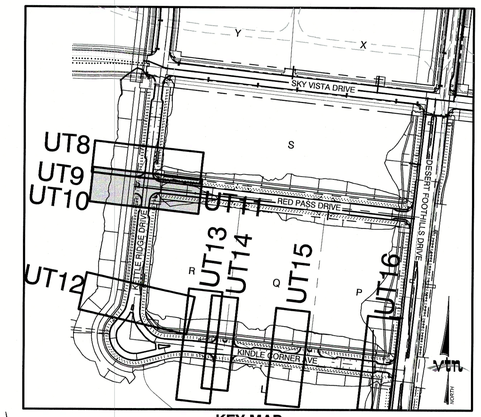


KETTLE RIDGE DRIVE
(PUBLIC)



KEY MAP
NTS

GRAPHIC SCALE
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POC	WATER POINT OF CONNECTION	
SEWER		PUBLIC
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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
1-702-229-9811
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM
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

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

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APPROVED FOR CONSTRUCTION

_____
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 FIRST APPROVED DATE:_____

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1	11/10/2019	JDH	REVISE SANITARY SEWER

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UTILITY PLAN & PROFILE 11
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH — 08/18/2018
DESIGNED BY: DEH — 08/18/2018
CHECKED BY: WJM — 09/24/2019
PROJECT NO: 7851
SCALE: 1" = 20' HORIZ. N/A VERT.

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SHEET
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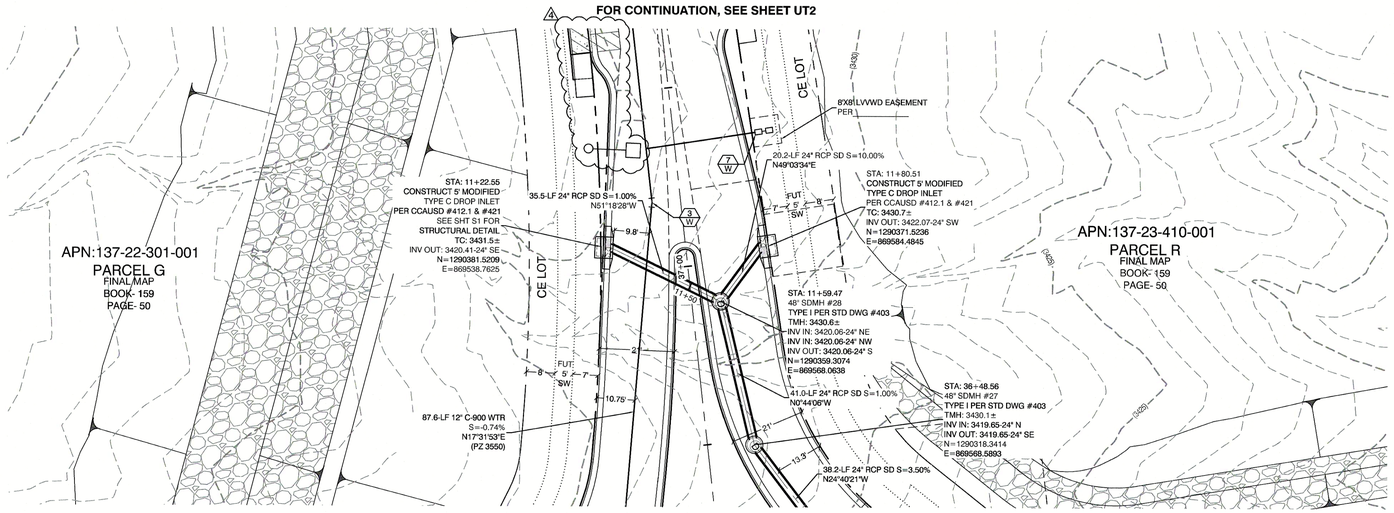
H:\7851\Sheet Ø Desert Foothills to Summerlin Pkwy\Sheet Set-CP\7851-UT-LAT.dwg,8/27/2020 10:16 AM,trevorr



PROFILE SCALES:

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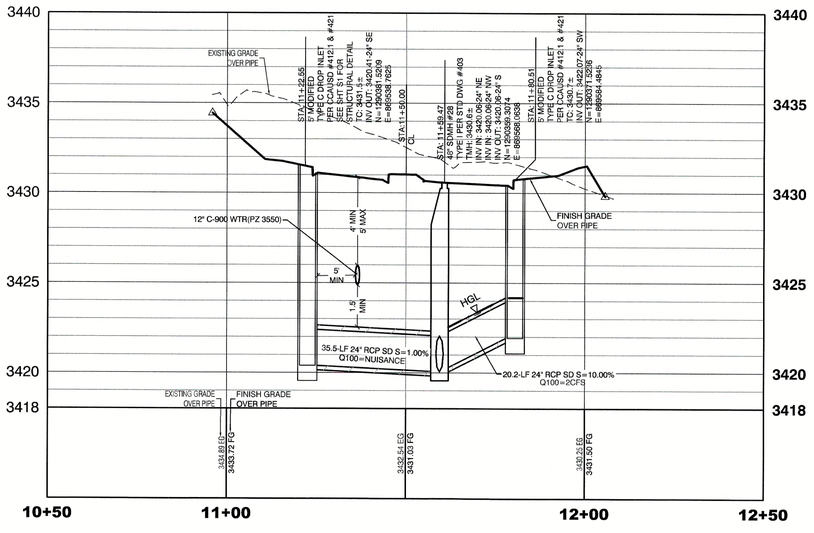
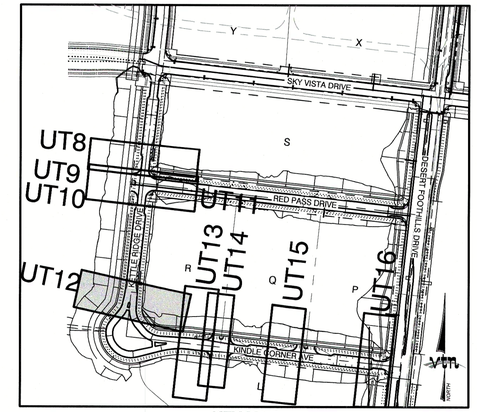


KETTLE RIDGE DRIVE
(PUBLIC)



KEY MAP
NTS

NORTH

GRAPHIC SCALE
-20 0 10 20 40
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CONSTRUCTION NOTES

WATER — PUBLIC

W	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
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POC	WATER POINT OF CONNECTION	

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GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

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

NOTE:

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

SEWER/ STORM DRAIN CROSSING NOTE:

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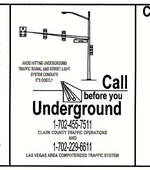

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AND
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CLARK COUNTY TRAFFIC OPERATIONS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 FIRST APPROVED DATE:_____

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

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LAS VEGAS FIRE & RESCUE APPROVAL

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REV	DATE	BY	REVISION
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CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 12 WATER LATERAL

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

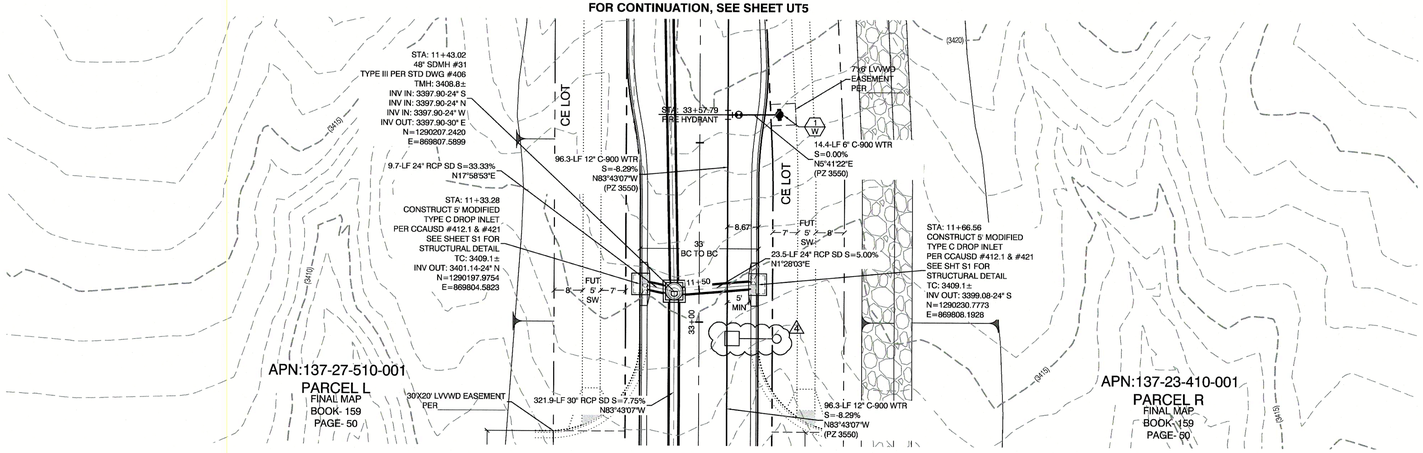
DRAWN BY: JDH 09/18/2019
DESIGNED BY: DEH 09/10/2019
CHECKED BY: WJM 09/24/2019
PROJECT NO: 7851
SCALE: HORZ. 1" = 20' VERT. N/A

PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
8/31/20

SHEET
UT12
30 OF 37 SHEETS

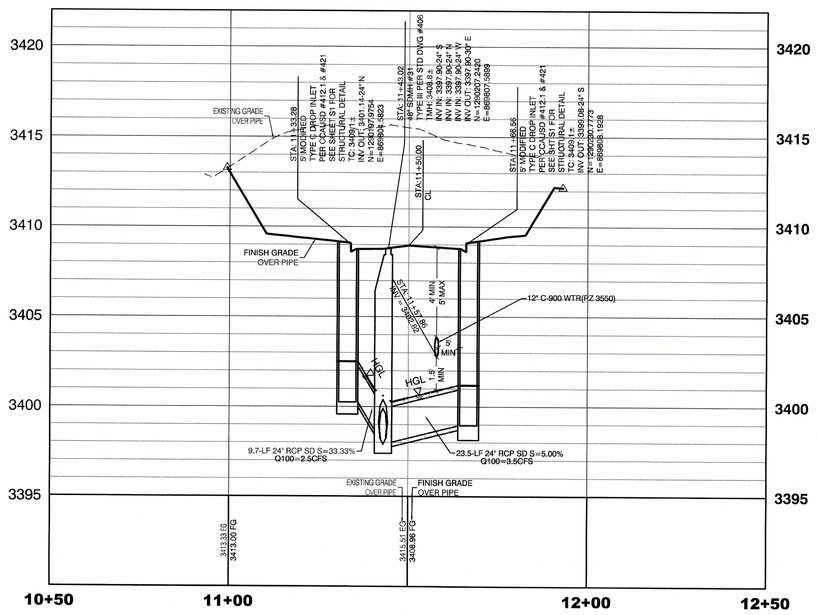
DRAWING NO.
L19-01029
107V7773

H:\7851\Sheet B-Desert Foothills to Summerlin Pkwy\Sheet Set-CP\7851-UT-LAT 2.dwg-3/11/2020 4:22 PM-cshipp

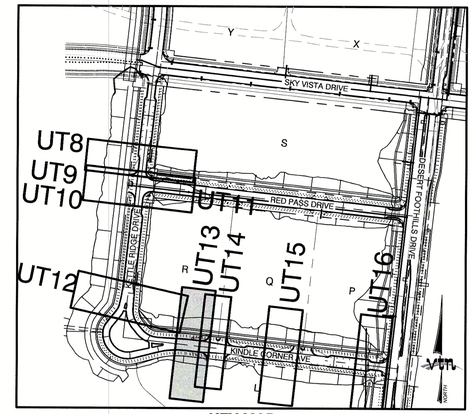


KINDLE CORNER AVENUE
(PUBLIC)

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



KINDLE CORNER AVENUE
(PUBLIC)



KEY MAP
NTS

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)	3 EA.
W	⬢	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
W	⌐	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
W	⌐	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
W	▢	12"X12" CROSS (PER UDACS PLATE 31)	2 EA.
W	⊂	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
		12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
		6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
	WPOC	WATER POINT OF CONNECTION	
	SEWER		**PUBLIC**
	Ⓢ	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
		8" C-900-16 SANITARY SEWER MAIN	85 LF.
	SPOC	SEWER POINT OF CONNECTION	

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

SEWER/ STORM DRAIN CROSSING NOTE:
ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

DROP INLET SEPARATION NOTE
WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS, BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).

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.

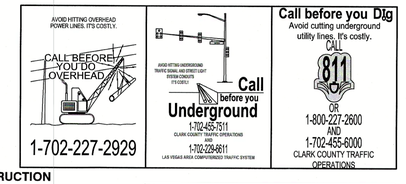
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

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.



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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.

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 ---- GPM AT 20 P.S.I. RESIDUAL.

REV	DATE	BY	REVISION
1	03/10/2020	JDH	ADJUST STL1 SETBACK; UPDATE CONSTRUCTION NOTES

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 89146-6148
PH. (702) 873-7560 FAX (702) 382-2997 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 13
WATER LATERAL

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

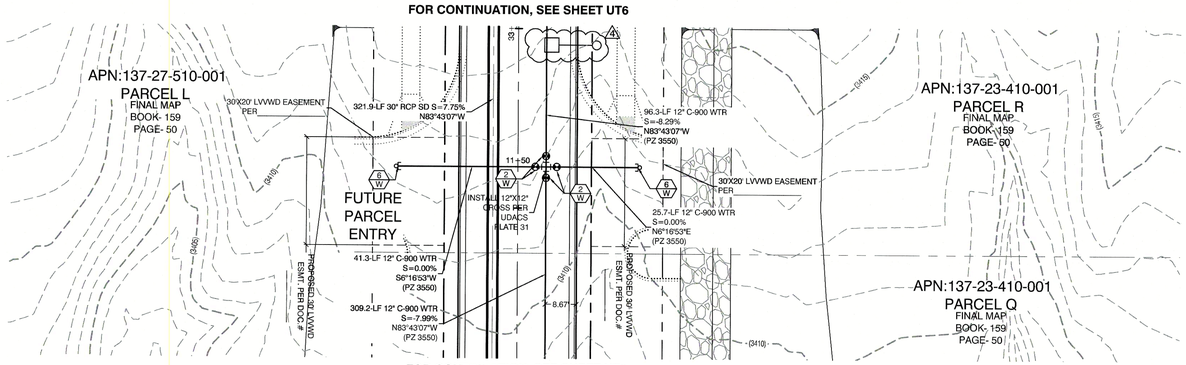
DRAWN BY: JDH — 09/18/2018
DESIGNED BY: DEH — 09/10/2018
CHECKED BY: WJM — 08/24/2019
PROJECT NO: 7851
SCALE: 1" = 20' HORIZ. / N/A VERT.

PROFESSIONAL ENGINEER · STATE OF NEVADA
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
15745
8/31/20

SHEET
UT13
31 OF 37 SHEETS

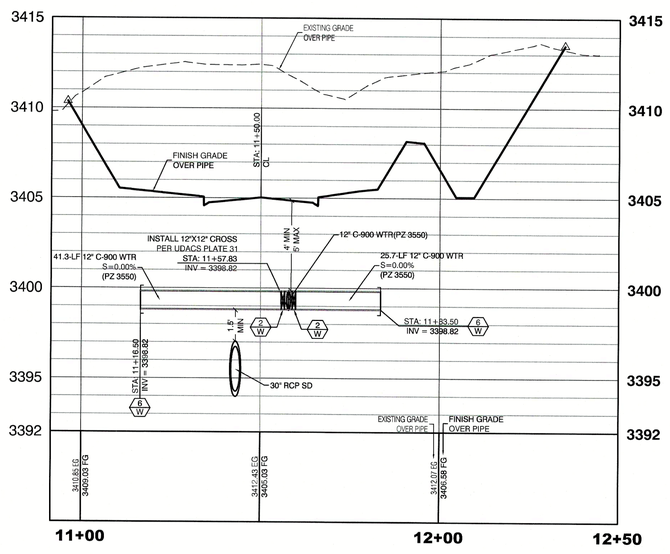
DRAWING NO.
L19-01029
107V7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7851-UT-LAT 2.dwg,3/11/2020 4:22 PM,chrisp

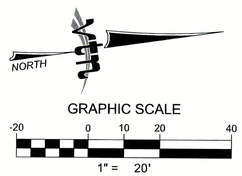


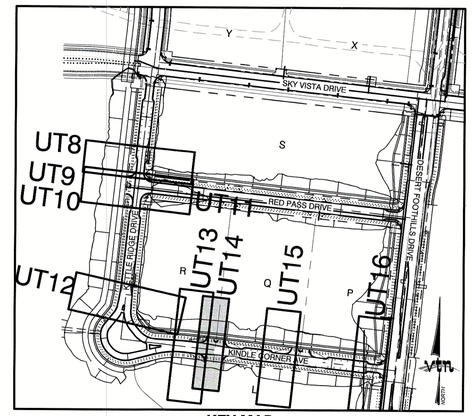
PROFILE SCALES:

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



KINDLE CORNER AVENUE
(PUBLIC)





KEY MAP
NTS

CONSTRUCTION NOTES

	WATER		**PUBLIC**
W	⬢	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
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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 RPPA DETAIL ON SHEET UT3	1 EA.
	——	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
	——	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
	POC	WATER POINT OF CONNECTION	
	SEWER		**PUBLIC**
	Ⓢ	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	——	8" C-900-16 SANITARY SEWER MAIN	85 LF.
	POC	SEWER POINT OF CONNECTION	

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.

SEWER/ STORM DRAIN CROSSING NOTE:

ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

ENGINEER DISCLAIMER NOTE:

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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.

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 DO OVERHEAD
1-702-227-2929

Call before you Dig Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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.

LAS VEGAS FIRE & RESCUE APPROVAL

BY: _____ DATE: _____

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REV	DATE	BY	REVISION
4	03/10/2020	JEH	ADJUST STLT SETBACK, UPDATE CONSTRUCTION NOTES

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

UTILITY PLAN & PROFILE 14
WATER LATERAL

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JEH 09/18/2018
DESIGNED BY: DEH 08/10/2018
CHECKED BY: WJM 09/24/2019
SCALE: 1" = 20' HORIZ. N/A VERT.
PROJECT NO: 7951

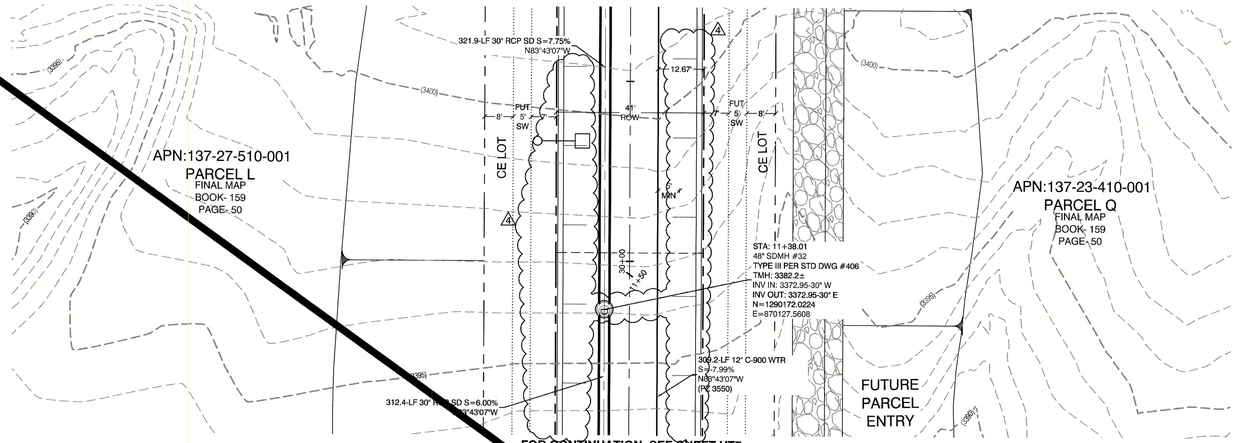
PROFESSIONAL ENGINEER STATE OF NEVADA No. 15745 WILLIAM J. MEYER EXP: 12/31/21 CIVIL
8/21/20

SHEET
UT14
32 OF **37** SHEETS

DRAWING NO.
L19-01029
107V7773

H:\7951\Sheet & Detail Foothills to Summerlin Pkwy\Sheet Set-OFF\7951-UT-LAT 2.dwg|3/11/2020 4:22 PM|chrisp

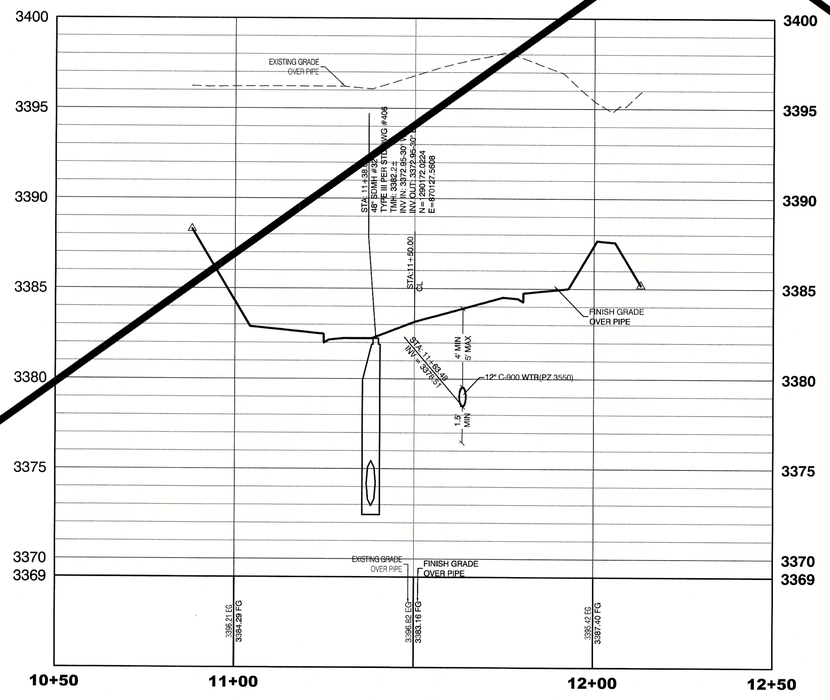
FOR CONTINUATION, SEE SHEET UT6



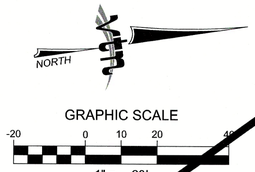
FOR CONTINUATION, SEE SHEET UT7

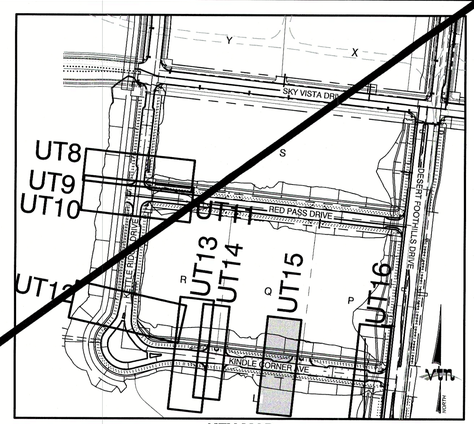
KINDLE CORNER AVENUE
(PUBLIC)

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



KINDLE CORNER AVENUE
(PUBLIC)





KEY MAP
NTS

CONSTRUCTION NOTES

WATER		PUBLIC
	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
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	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 RPPA DETAIL ON SHEET UT3	1 EA.
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	WATER POINT OF CONNECTION	

SEWER		PUBLIC
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
POC	SEWER POINT OF CONNECTION	

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

SEWER/ STORM DRAIN CROSSING NOTE:
ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

DROP INLET SEPARATION NOTE
WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).

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

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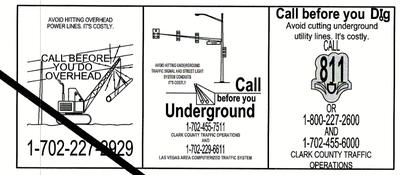

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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.

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

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REV	DATE	BY	REVISION
1	03/10/2020	JDH	REMOVE DROP INLETS - SHEET NO LONGER NEEDED

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10440 DEMOCRACY PKWY, 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

UTILITY PLAN & PROFILE 15 WATER LATERAL

SUMMERLIN WEST VILLAGE 21 KINDLE CORNER AVE & KETTLE RIDGE DRIVE DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH — 09/18/2018
DESIGNED BY: DEI — 09/10/2018
CHECKED BY: WJM — 09/24/2019
PROJECT NO: 7851
SCALE: HORIZ. 1" = 20' VERT. N/A

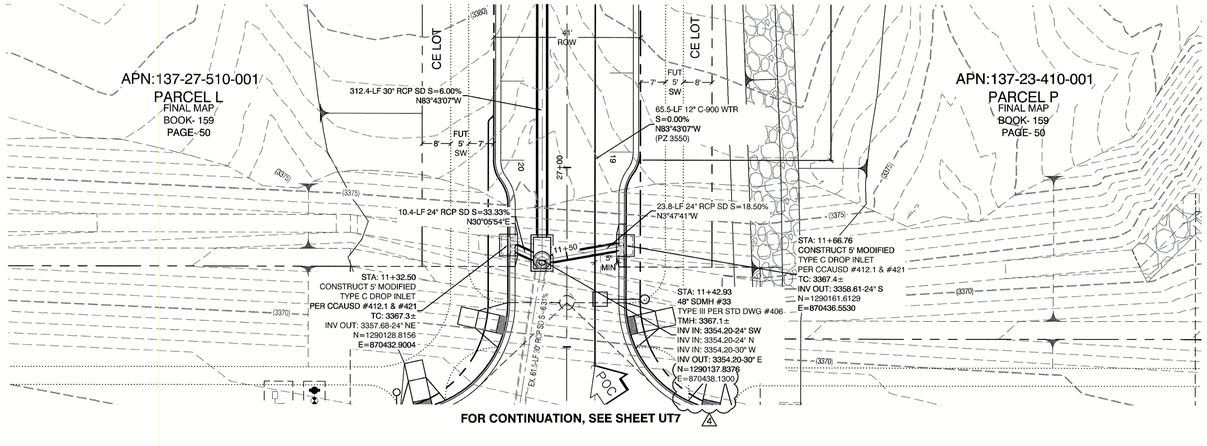
PROFESSIONAL ENGINEER STATE OF NEVADA
WILLIAM J. MEYER
No. 15745
EXP: 12/31/21
CIVIL

SHEET
UT15
33 OF 37 SHEETS

DRAWING NO.
L19-01029
10/7/7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7851-UT-LAT 2.dwg-3/11/2020 4:22 PM-chrisp

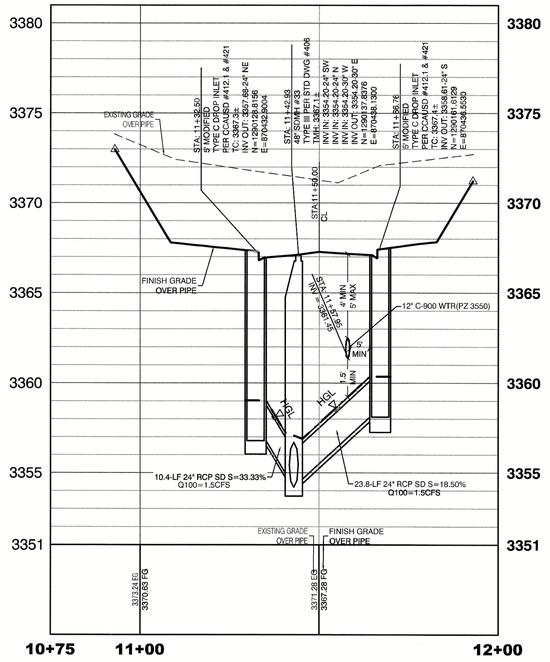
FOR CONTINUATION, SEE SHEET UT7



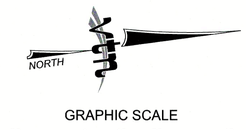
FOR CONTINUATION, SEE SHEET UT7

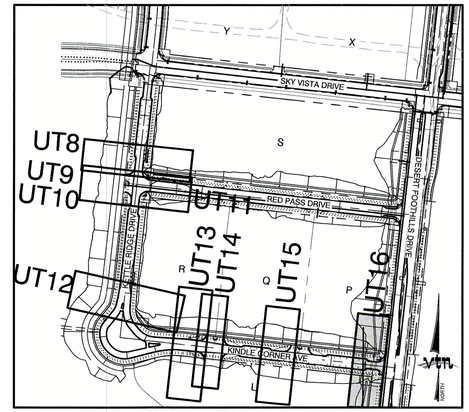
KINDLE CORNER AVENUE
(PUBLIC)

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



KINDLE CORNER AVENUE
(PUBLIC)





KEY MAP
NTS

CONSTRUCTION NOTES

	WATER	PUBLIC
	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" TEE WITH 6" G.V. (PER UDACS PLATE 39 & 40)	3 EA.
	12" GATE VALVE (PER UDACS PLATE 30 & 39)	9 EA.
	12" 11° BEND (PER UDACS PLATE 31)	4 EA.
	12" 22° BEND (PER UDACS PLATE 31)	7 EA.
	12"X12" CROSS (PER UDACS PLATE 31)	2 EA.
	12" CAP & BLOW OFF (PER UDACS PLATE 36)	5 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 RPPA DETAIL ON SHEET UT3	1 EA.
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	2,039 LF.
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	46 LF.
POC	WATER POINT OF CONNECTION	

	SEWER	PUBLIC
S	STANDARD MANHOLE PER SD-1 & SD-4 W/ SINGLE 24" DIAMETER MANHOLE COVER (UNLESS NOTED OTHERWISE)	2 EA.
	8" C-900-16 SANITARY SEWER MAIN	85 LF.
POC	SEWER POINT OF CONNECTION	

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

SEWER/ STORM DRAIN CROSSING NOTE:
ALL SEWER / STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22.

DROP INLET SEPARATION NOTE
WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).

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.

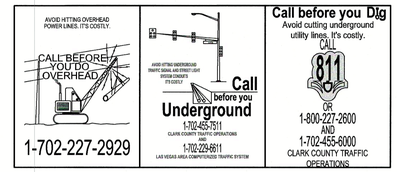
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

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.



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT:136579 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.

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 ---- GPM AT 20 P.S.I. RESIDUAL.

REV	DATE	BY	REVISION
1	03/10/2020	JDH	UPDATE CONSTRUCTION NOTES, ADD SW RAMP

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

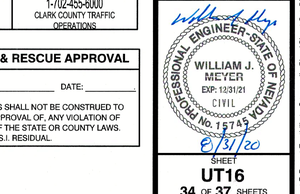
CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7590 FAX (702) 362-2597 WEB WWW.VTNNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

UTILITY PLAN & PROFILE 16 WATER LATERAL

SUMMERLIN WEST VILLAGE 21
KINDLE CORNER AVE & KETTLE RIDGE DRIVE
DESERT FOOTHILLS TO SKY VISTA DRIVE

DRAWN BY: JDH — 09/18/2018
DESIGNED BY: DEH — 08/10/2018
CHECKED BY: WJM — 09/24/2019
PROJECT NO: 7851
SCALE: 1" = 20' HORIZ. N/A VERT.



SHEET
UT16
34 OF 37 SHEETS

DRAWING NO.
L19-01029
10TV7773

H:\7851\Street B-Desert Foothills to Summerlin Pkwy\Sheet Set-OPT2\7851-UT-LAT 2.dwg,3/11/2020 4:22 PM,chrisp