

DS #: 5204-2

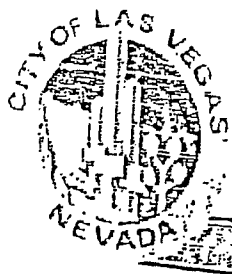
APN: 137-23.101-002

PROJECT: Summerlin West Village 22 - Kettle Brook Road - Update #2
(Sunset Run Drive to Kestrel Creek Road)

SUBMITTAL: 4th

SCANNED BY/DATE:

CHECKED BY/DATE:



CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: October 15, 2020
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: Summerlin West Village 22 - Kettle Bend Road – Update #2 (Sunset Run Drive to Kestrel Creek Road)	
Cross Streets:	Kettle Bend Road & Summerlin Parkway	COPIES TO: VTN Nevada
File Number:	F:\Depot\DSMemos\DS5204F.doc	The Howard Hughes Company, LLC
Parcel Number:	137-23-101-002	Bart Anderson, P.E., DevCo
Zoning Action:	N/A	CCRFC
FEMA Flood Zone	YES _____ NO X	
Proposed Storm Drain	YES X NO _____	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	10/15/2019	11/20/2019	Not Approved	\$400.00	3611329: \$400
2 nd Submittal	1/14/2020	2/5/2020	Not Approved	\$400.00	3705772: \$400
Supplement	2/13/2020	2/20/2020	Conditional Approval	N/C	N/C
CCRFC	8/3/2020	8/17/2020	Concurrence Recv'd	N/C	N/C
3 rd Submittal	9/1/2020	9/17/2020	Approved	\$100.00	3975318: \$100
4 th Submittal	9/29/2020	10/15/2020	See Comments Below	\$100.00	4005384: \$100
			TOTAL FEES (LDDRS):	\$1,000.00	----

REMARKS:

4th Submittal: Update #2 to address minor deviation of the connection point of the 8'x8'-RCB into the existing RCB of the Beltway Channel

3rd Submittal: Update #1 to package the portion of 8'x8' RCB west of I-215 from Summerlin West V21 Summerlin Parkway Extension Project to the subject Kettle Bend Road (Sunset Run Drive to Kestrel Creek Road) Improvement Project

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.

The following comments are repeated until they are complete:

- The project proposes to build temporary drainage facilities including drainage berms/swales along the west side of the proposed *Kettle Bend Road* and a 20'-wide *Interim Berm*. Prior to final plan 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 of Las Vegas Flood Control* for approval. Once the drainage study is conditionally approved, the engineer should contact the *City's Land Development Section* (229-6371) to begin the agreement process.

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

2. Since the portion of 8'x8' RCB is re-packaged from the Summerlin West V21 Summerlin Parkway Extension project to the subject project, the pertinent residual condition related to the regional box in *Sunset Run Drive* is transferred and repeated as below:

Sheet UT1 to Sheet UT5: *The regional facility 8'x8' RCB in Sunset Run Drive is too close to the northern curb. In case of needing repair and maintenance in the future, the staging area will break into the curb area which is costly and problematic. Relocate the RCB to the center of the street as far as possible.*

The response was to maintain the original proposed location for the proposed regional facility 8'x8' RCB in *Sunset Run Drive*.

In the final map, dedicate the amenity zone behind the northern curb of *Sunset Run Drive* and east of *Kettle Bend Road* as a Public Drainage Easement to be Privately Maintained by the *Summerlin Master HOA*.

3. The street and the associated storm drain facilities will eventually be transferred to the *City of Las Vegas*, the engineer/developer must coordinate with *City of Las Vegas Streets & Sanitation Department* for their review and approval prior to the final acceptance of the subject improvement plans.

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
HDR/AYS

T/R/S: T20S/R59E/23
AREA K-23

Update #2 to the Technical Drainage Study for

Summerlin West Village 22 Kettle Bend Road

Las Vegas, Nevada

Prepared for:

Howard Hughes Company, LLC

Submitted to:

City of Las Vegas
Public Works



HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Summerlin West Village 22 Kettle Bend Road Date: September 23, 2020

Location of Development: a) Descriptive (Cross Streets) North/South: Kettle Bend Road
East/West: Summerlin Parkway

b) Section: 23 Township: 20S Range: 59E

c) APN : 137-23-101-002

Name of Owner: The Howard Hughes Company, LLC

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

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

Contact Person-Name: Aaron Yup Telephone No.: (702)-873-7550

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

Firm: VTN Nevada

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

Type of Land Development/Land Disturbance Process:

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

1. Total Owned Land Area: At Site: +/-17 Acres Being Developed/Disturbed: +/-17 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: +/- 376 acres

6. Has the site drainage been evaluated in the past? ☒ YES ☐ NO If yes, please identify documentation: SWPA MPU (DS4926)

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Existing 30" RCP southeast of the project in Carriage Hill Drive, Existing RCB in Desert Foothills Drive South of the project, Existing Western Beltway Channel east of the project

8. Briefly describe your proposed schedule for the subject project: As soon as possible



Engineer's Seal 9/23/2020

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

September 23, 2020

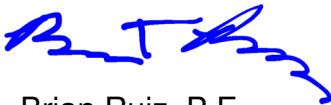
Albert Sung, P.E.
Flood Control Division
Department of Public Works
CITY OF LAS VEGAS
333 N. Rancho Blvd, 7th Floor
Las Vegas, NV 89106

**Subject: Update #2 to the Technical Drainage Study for Summerlin West Village 22
Kettle Bend Road**

Mr. Sung:

This letter certifies that all items on the **Update #2 to the Technical Drainage Study for Summerlin West Village 22 Kettle Bend Road** electronic submittal matches the paper version bound into the study.

Respectfully submitted,



Brian Ruiz, P.E.

UPDATE #2
TO THE TECHNICAL DRAINAGE STUDY
FOR
SUMMERLIN VILLAGE 22
KETTLE BEND ROAD
SUNSET RUN DRIVE TO KESTREL CREEK ROAD
CLARK COUNTY, NEVADA
W.O. # 7861

Prepared for:
HOWARD HUGHES COMPANY LLC

Submitted to:
CITY OF LAS VEGAS
333 N. Rancho Drive
Las Vegas, Nevada 89106



September 23, 2020
W.O. #7861

City of Las Vegas
Department of Public Works
333 N. Rancho Blvd, 7th Floor
Las Vegas, NV 89106

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

**SUBJECT: UPDATE #2 TO THE TECHNICAL DRAINAGE STUDY FOR SUMMERLIN WEST
VILLAGE 22 KETTLE BEND ROAD (SUNSET RUN DRIVE TO KESTREL CREEK
ROAD)**

Mr. Sung:

This Update #2 to the Technical Drainage Study for Village 22 Kettle Bend Road (Sunset Run Drive to Kestrel Creek Road) is being submitted to the City of Las Vegas Department of Public Works to address improvement plan revisions. The alignment of the 8'x8' RCB storm drain west of the I-215 has been revised to match the connection point of the RCB proposed by the Update #2 to the Technical Drainage Study for Summerlin West Village 21 Beltway Channel Improvements (DS#5139) based on field survey of the as-built storm drain which deviated slightly from the design grades. The connection location of the 8'x8' RCB into the existing RCB of the Beltway Channel study has been revised from alignment station 16+01.28 at an invert of 3250.32' to alignment station 16+01.50 at an invert of 3250.23'.

This plan revision does not alter the previously approved drainage patterns. Per correspondence with the City of Las Vegas Department of Public Works, the proposed revisions are not significant enough to warrant providing revised hydraulic models with this update. As the portion of the affected 8'x8' RCB was re-packaged from the Summerlin West V21 Summerlin Parkway Extension project, it is requested that CCPW concurrence not be required as was the case for Update #1. CCPW had indicated previously that the storm drain included in the Summerlin Parkway Extension alignment does not need to be submitted to CCPW for concurrence.

I hope this addresses your concerns regarding this project. If there are any questions or any additional information is required, please contact this office.

Respectfully Submitted,

VTN Consulting



Aaron Yup, E.I.

CITY OF LAS VEGAS		DATE:
INTER-OFFICE MEMORANDUM		September 17, 2020
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
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Parcel Number:	137-23-101-002	CCRFCD
Zoning Action:	N/A	
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES X NO	

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TOTAL FEES (LDDRS):				\$900.00	----

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END OF REMARKS
HDR/AYS

T/R/S: T20S/R59E/23
AREA K-23

SHEET INDEX			STATION		
SHEET #	SHEET	DESCRIPTION			
1	CV	COVER SHEET			
2	NT	NOTE SHEET			
3	HC1	HORIZONTAL CONTROL PLAN 1			
4	HC2	HORIZONTAL CONTROL PLAN 2			
5	HC3	HORIZONTAL CONTROL PLAN 3			
6	HC4	HORIZONTAL CONTROL PLAN 4			
7	HC5	HORIZONTAL CONTROL PLAN 5			
8	HC6	HORIZONTAL CONTROL PLAN 6			
9	HC7	HORIZONTAL CONTROL PLAN 7			
10	HC8	HORIZONTAL CONTROL PLAN 8			
11	HC9	HORIZONTAL CONTROL PLAN 9			
12	HC10	HORIZONTAL CONTROL PLAN 10			
13	HC11	HORIZONTAL CONTROL PLAN 11			
14	MUTW	MASTER UTILITY WATER			
15	MUTSS	MASTER UTILITY SANITARY SEWER			
16	MUTSD	MASTER UTILITY STORM DRAIN			
17	MGR1	MASTER GRADING PLAN 1			
18	MGR2	MASTER GRADING PLAN 2			
19	MGR3	MASTER GRADING PLAN 3			
20	GR1	GRADING PLAN 1			
21	GR2	GRADING PLAN 2			
22	GR3	GRADING PLAN 3			
23	GR4	GRADING PLAN 4			
24	GR5	GRADING PLAN 5			
25	GR6	GRADING PLAN 6			
26	GR7	GRADING PLAN 7			
27	GR8	GRADING PLAN 8			
28	GR9	GRADING PLAN 9			
29	GR10	GRADING PLAN 10			
30	GR11	GRADING PLAN 11			
31	GR12	GRADING PLAN 12			
32	GR13	GRADING PLAN 13			
33	GR14	GRADING PLAN 14			
34	GR15	GRADING PLAN 15			
35	DT1	DETAIL SHEET 1			
36	DT2	DETAIL SHEET 2			
37	DT3	DETAIL SHEET 3			
38	DT4	DETAIL SHEET 4			
39	DT5	DETAIL SHEET 5			
40	DT6	DETAIL SHEET 6			
41	UT1	UTILITY PLAN & PROFILE 1	16+20 TO 13+50		
42	UT2	UTILITY PLAN & PROFILE 2	13+50 TO 9+75		
43	UT3	UTILITY PLAN & PROFILE 3	82+00 TO 86+00		
44	UT4	UTILITY PLAN & PROFILE 4	52+00 TO 82+00		
45	UT5	UTILITY PLAN & PROFILE 5	79+50 TO 54+00		
46	UT6	UTILITY PLAN & PROFILE 6	54+00 TO 59+00		
47	UT7	UTILITY PLAN & PROFILE 7	59+00 TO 64+25		
48	UT8	UTILITY PLAN & PROFILE 8	64+25 TO 68+50		
49	UT9	UTILITY PLAN & PROFILE 9	68+50 TO 72+80		
50	UT10	UTILITY PLAN & PROFILE 10	72+80 TO 77+40		
51	UT11	UTILITY PLAN & PROFILE 11	77+40 TO 81+00		
52	UT12	UTILITY PLAN & PROFILE 12	81+00 TO 84+20		
53	UT13	UTILITY PLAN & PROFILE 13	84+20 TO 87+75		
54	UT14	UTILITY PLAN & PROFILE 14	10+00 TO 14+19		
55	UT15	UTILITY PLAN & PROFILE 15	10+00 TO 12+20		
56	UT16	UTILITY PLAN & PROFILE 16	7+50 TO 4+40.98		
57	UT17	UTILITY PLAN & PROFILE 17	7+50 TO 10+00		
58	UT18	UTILITY PLAN & PROFILE 18 SEWER LATERAL			
59	UT19	UTILITY PLAN & PROFILE 19 SEWER & WATER LATERAL			
60	UT20	UTILITY PLAN & PROFILE 20 SEWER & WATER LATERAL			
61	UT21	UTILITY PLAN & PROFILE 21 SEWER LATERAL			
62	UT22	UTILITY PLAN & PROFILE 22 WATER LATERAL			
63	UT23	UTILITY PLAN & PROFILE 23 SEWER LATERAL			
64	UT24	UTILITY PLAN & PROFILE 24 WATER LATERAL			
65	UT25	UTILITY PLAN & PROFILE 25 SEWER LATERAL			
66	UT26	UTILITY PLAN & PROFILE 26 SEWER LATERAL			
67	UT27	UTILITY PLAN & PROFILE 27 WATER LATERAL			
68	UT28	UTILITY PLAN & PROFILE 28 SEWER & WATER LATERAL			
69	UT29	UTILITY PLAN & PROFILE 29 SEWER & WATER LATERAL			
70	UT30	UTILITY PLAN & PROFILE 30 WATER LATERAL			
71	UT31	UTILITY PLAN & PROFILE 31 WATER LATERAL			

SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE

APN: 137-23-210-001

CITY OF LAS VEGAS

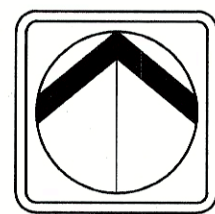
STATE OF NEVADA

DEVELOPED BY:

HOWARD HUGHES COMPANY, LLC

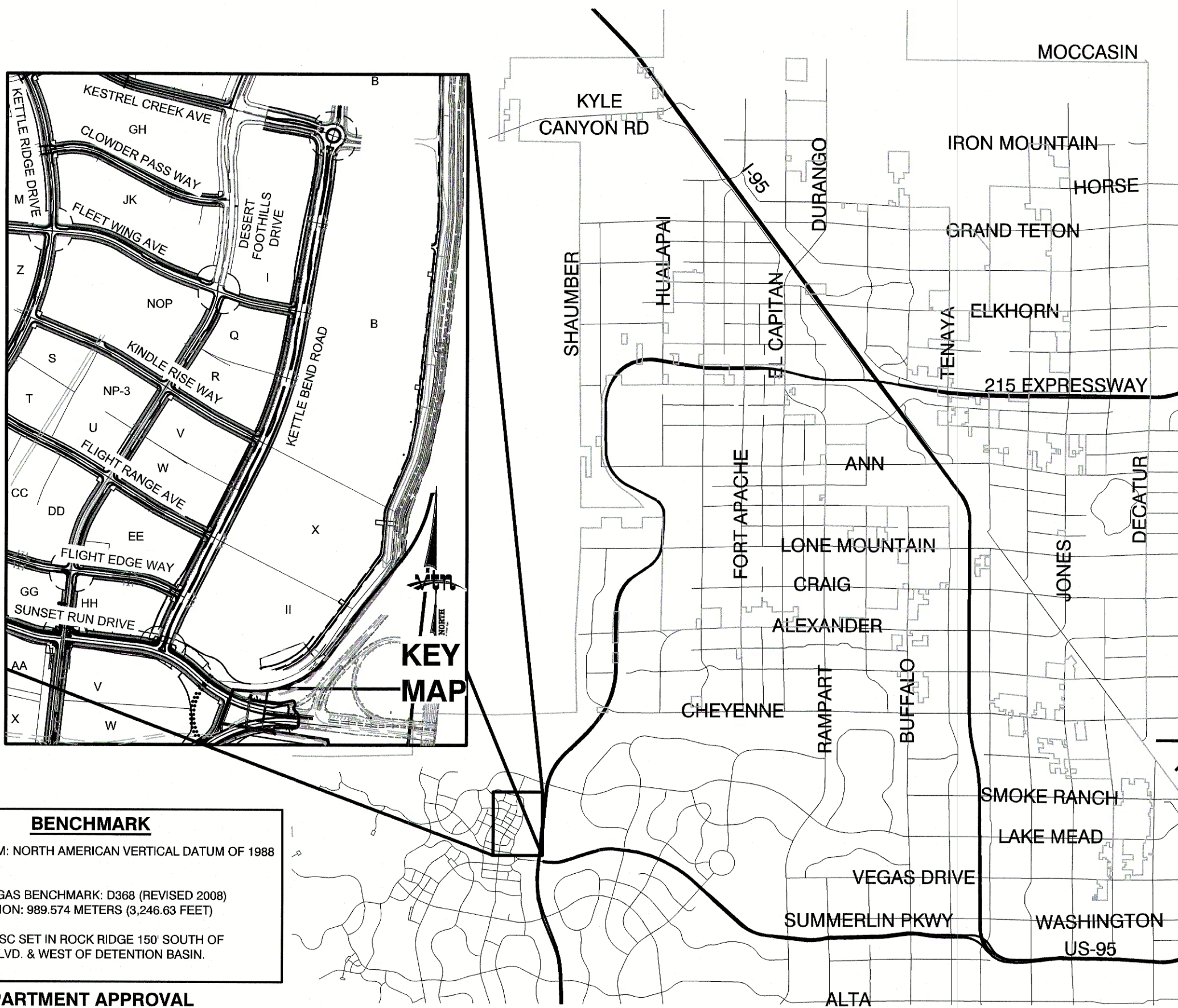
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

FUTURE S.I.D. PROJECT



LOCATION MAP

N.T.S.



BASIS OF BEARING
GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983, SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.
LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE
PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°56'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000.00 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.

BENCHMARK
PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVOD88)
CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVOD88 ELEVATION: 989.574 METERS (3,246.63 FEET)
FND US&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S, R59E, S03

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

Call before you dig
Avoid cutting underground utility lines. It's costly.

1-702-227-2929

Call before you dig
Underground

1-702-455-7544
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

Call before you dig
Underground

1-702-455-7544
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

DEVELOPER
HOWARD HUGHES COMPANY, LLC
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

THESE PLANS AND THE DESIGN CRITERIA CONTAINED WITHIN THESE PLANS ARE BASED UPON THE INFORMATION PRESENTLY KNOWN BY THE ENGINEER AND INTENDED SOLELY AS A GENERAL GUIDELINE FOR CONSTRUCTION. 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 STATUTES, 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

LAS VEGAS FIRE & RESCUE DATE

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.

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 COMMISSIONS RULES AND REGULATIONS.

COX COMMUNICATIONS LAS VEGAS, INC. DATE

SOUTHWEST GAS CORPORATION SWG UID DATE

OWNER:DEVELOPER

KEVIN T. ORROCK, VICE PRESIDENT DATE

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:

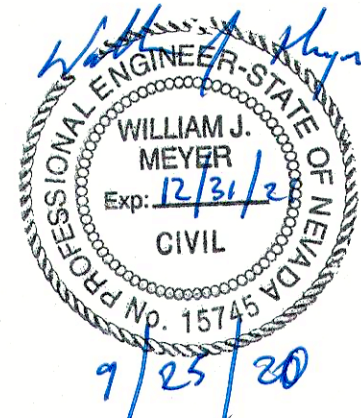
LVVWD APPROVED FIRE FLOW: TOTAL 1,500 GPM / ONSITE N/A GPM
SHEETS: 1, 2, 14, 35, 40-93

NOTE:

THIS PROJECT PLAN APPROVAL CONTINGENT ON CON-1573 PLAN APPROVAL / BEING OPERATIONAL

SUMMERLIN VILLAGE 22 CONSTRUCTION NOTE:
THE FOLLOWING SUMMERLIN VILLAGE 21/VILLAGE 22 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED CONCURRENTLY:
1. SUMMERLIN PARKWAY EXTENSION (LVVWD #137706)
2. KETTLE BEND ROAD (LVVWD #137333)

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



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.VTNV.COM
CONSULTING ENGINEERS & PLANNERS & LAND SURVEYORS

REVISION

DATE

BY

COVER SHEET

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 05/28/2019

DESIGNED BY: BCC 05/28/2019

CHECKED BY: WJM 08/28/2020

PROJECT NO: 7891

SCALE: N/A

HORIZ. VERT.

2020-09-25

SHEET
CV
1 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

CITY OF LAS VEGAS GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE, THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION, THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA, AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY, THE "UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
 - 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 INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
 - 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.
 - ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
 - 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 OR THE PROJECT.
 - PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
 - EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
 - AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
 - CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
 - 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.
 - 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.
 - ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY: NOVA GEOTECHNICAL, PROJECT NO. G-18-176, DATED DECEMBER 30, 2019, APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
 - 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.
 - 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. 625.390 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
 - 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:
- 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.
 - ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
 - 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.
 - 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.
 - 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.
 - AFTER HAUNCHING AND PRIOR TO BACKFILL OPERATIONS WHICH WOULD COVER SANITARY SEWER AND STORM DRAIN FACILITIES, CONTRACTOR IS REQUIRED TO SCHEDULE CLV OPEN-TRENCH UTILITY SURVEY INSPECTION FOR DETERMINATION OF FINAL LOCATION COORDINATES. FACILITIES TO BE LOCATED BY CLV SHALL INCLUDE AT A MINIMUM 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, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS.
 - 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.
 - A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.
 - REVISED 06/04/2018

CITY OF LAS VEGAS STREET LIGHT NOTES:

- 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 (JSS), AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" (USD), LATEST REVISION.
- DESIGN PROFESSIONAL AND CONTRACTOR SHALL VERIFY CITY'S LATEST LED FIXTURE SPECIFICATIONS AND APPROVED FIXTURES PER CLV WEBSITE, UNDER BUILDING AND SAFETY FORMS, PRIOR TO ORDERING MATERIALS.
- 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 UVS.
- ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 623 G.03.01 OF THE UVS.
- 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 UVS PRIOR TO BACKFILLING AND FINAL INSPECTION.
- ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, 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.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL FURNISH COMPLETE CONDUIT, WIRE, ETC. FROM SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON THE PLANS.

REVISED JUNE 4, 2018 (LD VERSION)

LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES NOTES:

- 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.
- 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.
- 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.
- 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.
- 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.

SUMMERLIN VILLAGE 22 CONSTRUCTION NOTE:

THE FOLLOWING SUMMERLIN VILLAGE 21/VILLAGE 22 ROADWAY INFRASTRUCTURE PLANS ARE TO BE CONSTRUCTED CONCURRENTLY:

- SUMMERLIN PARKWAY EXTENSION
- KETTLE BEND ROAD (LVVWD #137333)

NOTE:

THIS PROJECT PLAN APPROVAL CONTINGENT ON CON-1573 PLAN APPROVAL / BEING OPERATIONAL.

CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

- 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.
 - ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALEY WATER DISTRICT'S - APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
 - 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]
 - 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]
 - 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]
 - 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]
 - ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.A. APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. [IFC § 507.2.1, NPA 24]
 - 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]
 - PRIVATE HYDRANTS SHALL BE PAINTED RED. [IFC § 507.5-7.1]
 - 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]
 - FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: [IFC § C102]
 - RESIDENTIAL - 500 FT UNSPRINKLERED; 600 FT SPRINKLERED.
 - COMMERCIAL - 300 FT UNSPRINKLERED; 400 FT SPRINKLERED.
 - 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]
 - 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.
 - NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [IFC § C102.10]
 - 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]
 - 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]
 - THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. [IFC § C102.6]
 - 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 ARE REQUIRED 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]
 - 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]
 - 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]
 - 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]
 - VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13FT 6 INS. [IFC § 503.2.1]
 - 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]
 - 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]
 - 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
 - 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
 - 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]
 - ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. IFC § 503.6
 - WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS, OR HAVING FOUR OR MORE TRAVEL LANES AND A TRAFFIC COUNT OF MORE THAN 30,000 VEHICLES PER DAY, ALL HYDRANTS BEING UTILIZED TO DELIVER FIRE FLOW TO THE PROPOSED LOCATION SHALL BE LOCATED ON THE SAME SIDE OF THE STREET AS THE PROPOSED DEVELOPMENT. CLV REGULATION
- EFFECTIVE DATE: FEBRUARY 4th, 2019

CITY OF LAS VEGAS TRAFFIC NOTES

- ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
 - THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
 - 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.
 - WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCLOSED 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.
 - 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.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL UTILIZE TYPE II RETROREFLECTIVE SHEETING IN ACCORDANCE WITH CALTRANS 807 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.
 - 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.
 - 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 ROADWAY BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAYING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
 - STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
 - 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 TSSA TRAFFIC CONTROL TECHNICIAN OR INSURE WORK ZONE SAFETY SETUP SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
 - 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.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA (RTO), 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.
 - 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.
 - ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
 - THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVEMENT 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 JUNE 4, 2018

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:

DEVIATION FROM CITY OF LAS VEGAS STANDARDS

- NONE

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

LVVWD PROJECT #137333

(REVISED 08/01/2017)

- 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.
- 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.
- 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.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
- ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
- ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
- 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.
- 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.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD APPROVED PRODUCTS LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
- TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.
- THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (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.
- 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

- 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.
- 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.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
- ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT 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.
- 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.
- 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.
- 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.
- 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.
- INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

REVISED 04/15/10

CITY OF LAS VEGAS GRADING NOTES

- 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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" | +0.010-0.1" | SEE SOILS REPORT |
| B.ENGINEERED FILL | 0.5" | +0.110-0.1" | SEE SOILS REPORT |
- REPORT COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
 - 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.
 - 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.
 - 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

SOUTHWEST GAS CORPORATION GENERAL NOTES

- IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-880-6020
 - 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
 - ANY DEVIATION FROM SPECIFIED MINIMUM CLEARANCES MUST BE APPROVED BY ALL AFFECTED UTILITIES AND/OR MUNICIPALITIES
 - FOR VALVE ADJUSTMENT CONTACT 702-528-7881 14 DAYS PRIOR TO CONSTRUCTION
 - IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND STRUCTURES CONTACT 702-365-2099
- CAUTION: HIGH PRESSURE GAS!
- CALL SOUTHWEST GAS AT 702-578-8451 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION
- | SOUTHWEST GAS CORPORATION | SWG UID | DATE |
|---------------------------|---------|------|
| | | |

ESTIMATED TRAFFIC QUANTITIES

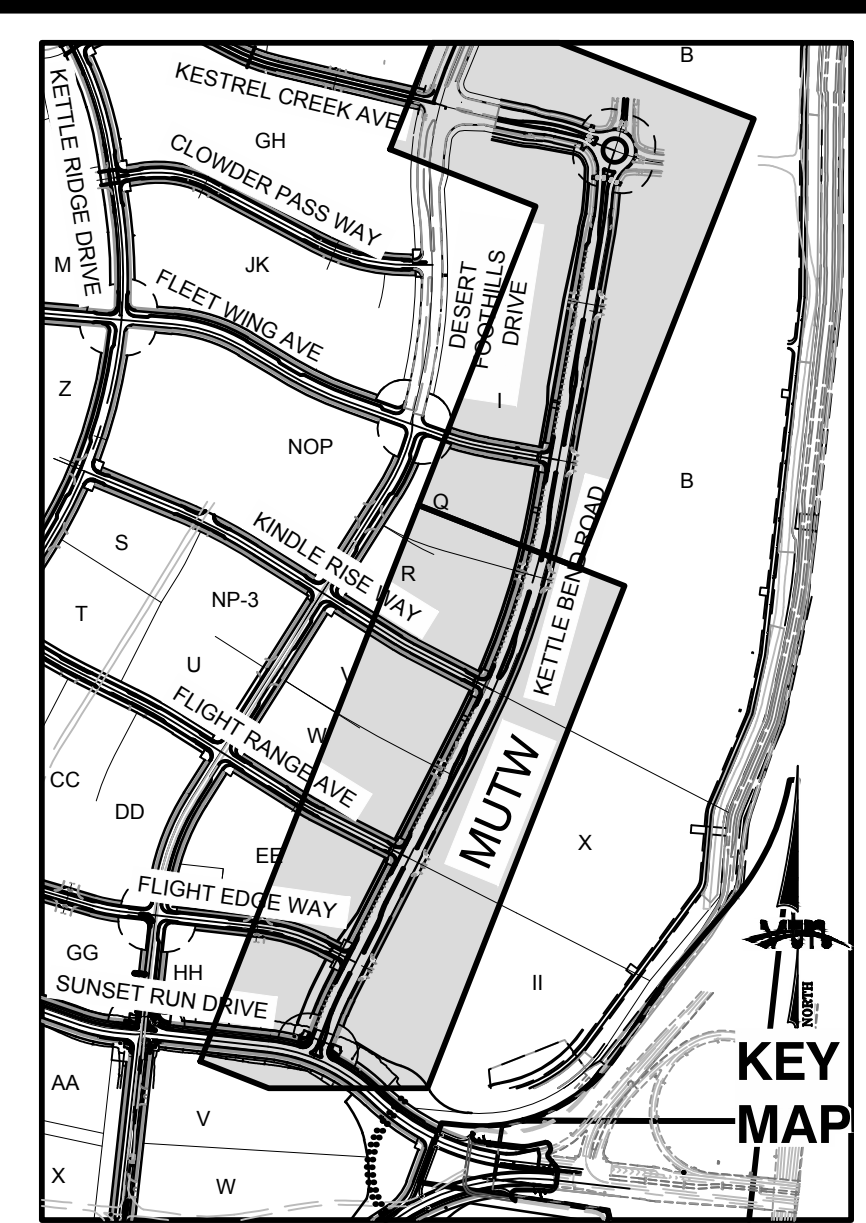
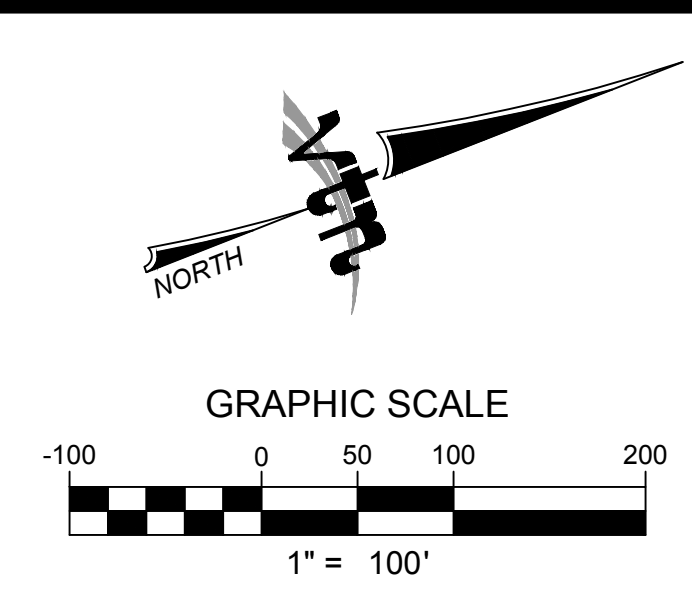
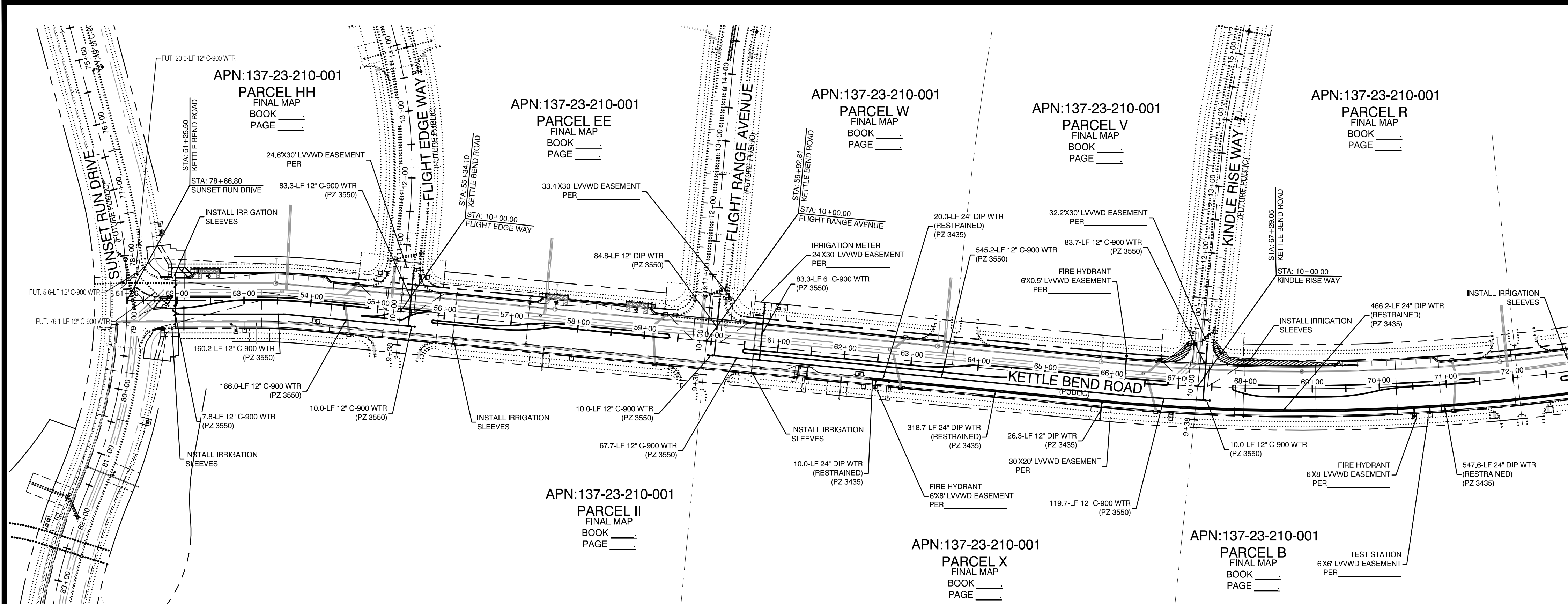
	PUBLIC
2" PVC CONDUIT	824 LF
3" PVC CONDUIT	2,315 LF
4" PVC CONDUIT	4,480 LF
1" PVC CONDUIT	6,577 LF
PAVEMENT MARKERS (REFLECTIVE)	455 EA
PULL BOX	133 EA
T200 VAULT	3 EA
STREET LIGHT SERVICE PEDESTAL (200 AMP)	3 EA
CHUNK STRIPS	360 SF
PIPE LINE STRIPING	213 LF
PAVEMENT MARKERS (NON-REFLECTIVE)	991 EA
STREET LIGHT (SINGLE ARM)	14 EA
STREET LIGHT (DUAL ARM)	22 EA
STREET SIGNS	90 EA
CROSSWALK BAR	30 EA
SOLID WHITE BIKE LANE SYMBOL WITH ARROWS	38 EA
DIRECTION/TURN ARROW	62 EA
4" WHITE STRIPING	823 LF
6" WHITE STRIPING	6,620 LF
HANDICAP SYMBOL	4 EA
RED PAINTED CURB	270 LF
YELLOW PAINT FOR MEDIAN NOSE	225 SF
YELLOW RAISED PAVEMENT MARKER	127 EA
YIELD BAR	4 EA

ABBREVIATIONS

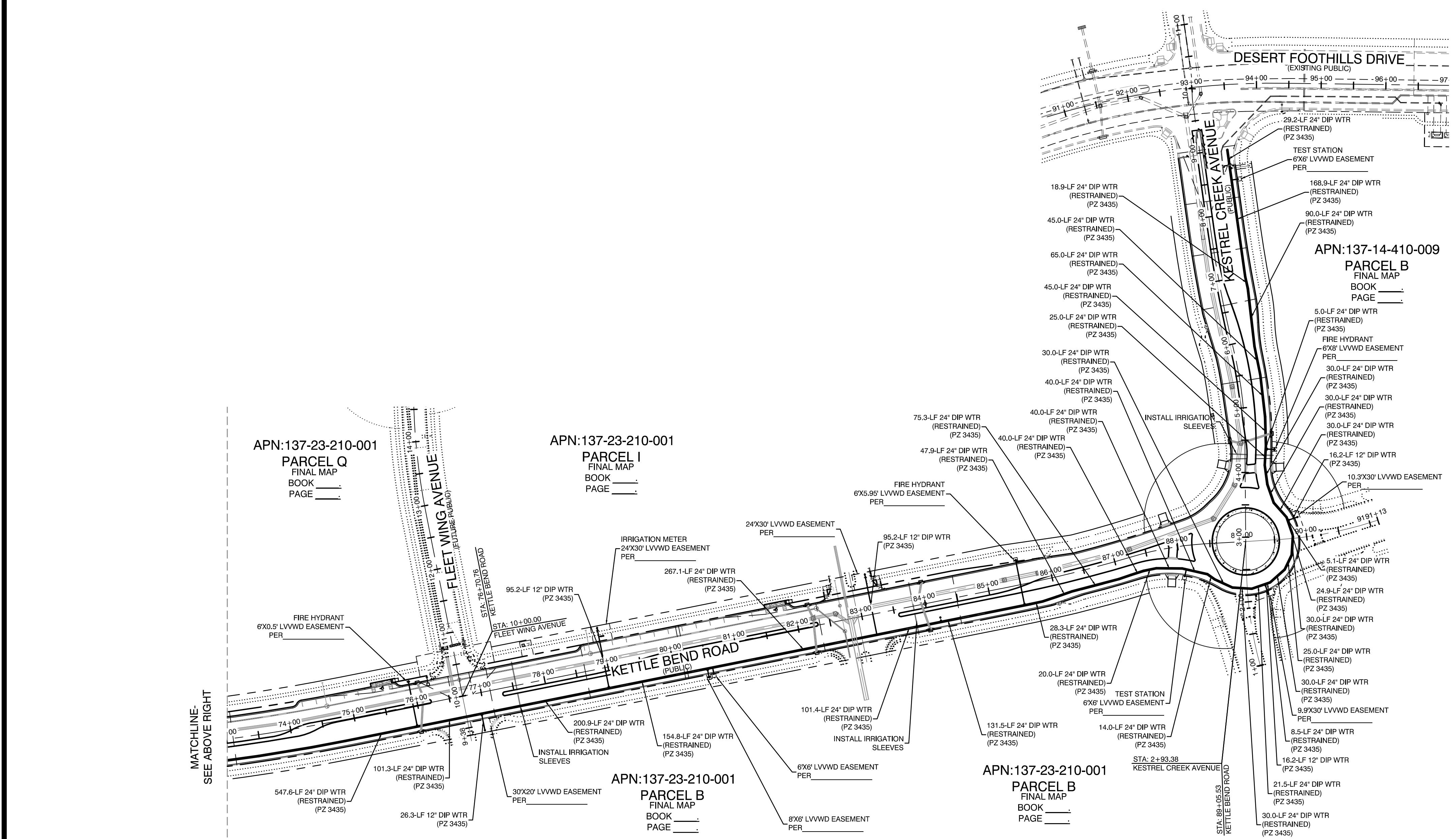
FF	FINISH FLOOR	DI	DROP INLET
FG	FINISH GRADE	BFE	BASE FLOOD ELEVATION
FL	FLOW LINE	CCUSD	CLARK COUNTY UNIFORM STANDARD DRAWINGS
TC	TOP OF CURB	SW	SIDEWALK
TRC	TOP OF ROLL CURB	TSW	TOP OF SIDEWALK
EOP	EDGE OF ASPHALT PAVEMENT	INT.	INTERSECTION
FUT.	FUTURE	D.G.	DESIGN GRADE
EX.	EXISTING	C/L	CENTER LINE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

LEGEND

DESCRIPTION	PROPOSED	EXISTING	FUTURE
CONTOUR (5' INTERVAL)	2450	(2450)	(2450)
CONTOUR (1' INTERVAL)			
EDGE OF PAVEMENT			
SAW CUT			
RETAINING WALL			
SCREEN WALL			
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			
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			



MATCHLINE -
SEE BELOW LEFT



Call before you Dig

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

1-702-432-5300

PREVENT AND MINIMIZE DISRUPTION OF TRANSPORTATION

Call before you Dig

Avoid cutting underground utility lines. It's costly.

811

OR

1-800-642-2444

AND

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig

Avoid hitting overhead power lines. It's costly.

1-702-227-2929

- CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)**

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.
- CONTRACTOR ZONE:**

LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPOINTMENTS ARE AVAILABLE.
- LVVWD EXISTING FACILITIES NOTE:**

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
- DEPTH OF COVER DURING CONSTRUCTION:**

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.
- WATERLINE TRENCH NOTE:**

CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.
- WATER LINE MARKER BALLS NOTE**

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.
- FIRE HYDRANT MARKER NOTES**

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

 - ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE: LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE: LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.
- WATER MAIN JOINT DEFLECTION**

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.
- TO ENSURE LVVWD ACCESS WITHIN EASEMENT**

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.
- UTILITY CROSSING NOTE:**

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

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

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT: 137333 FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 873-7550 FAX: (702) 362-2587 WEB: WWW.VTNV.COM
CONSULTING ENGINEERS & PLANNERS • LAND SURVEYORS

MASTER UTILITY WATER

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 05/30/2019

DESIGNED BY: BCC 05/30/2019

CHECKED BY: WJM 09/28/2020

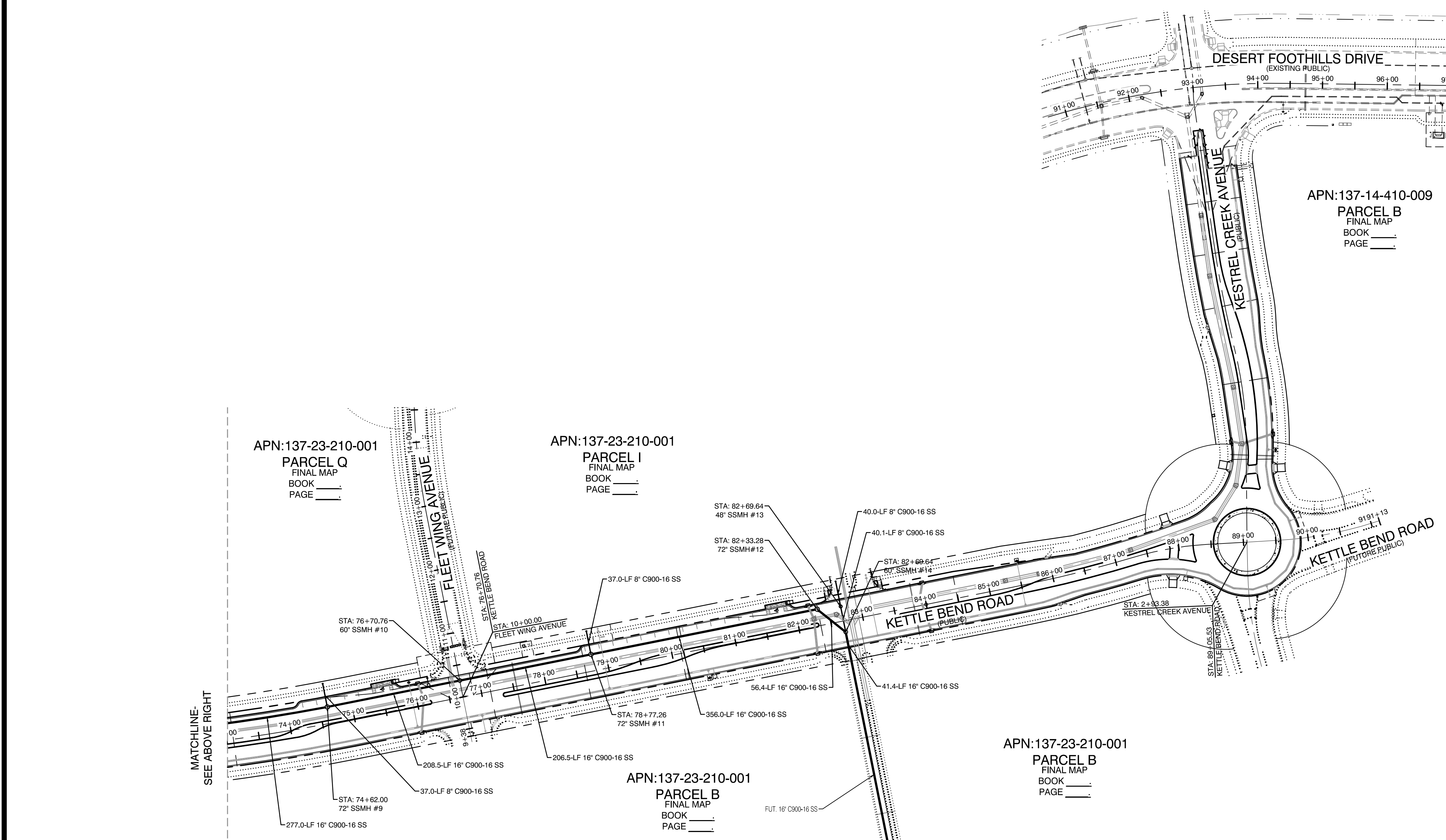
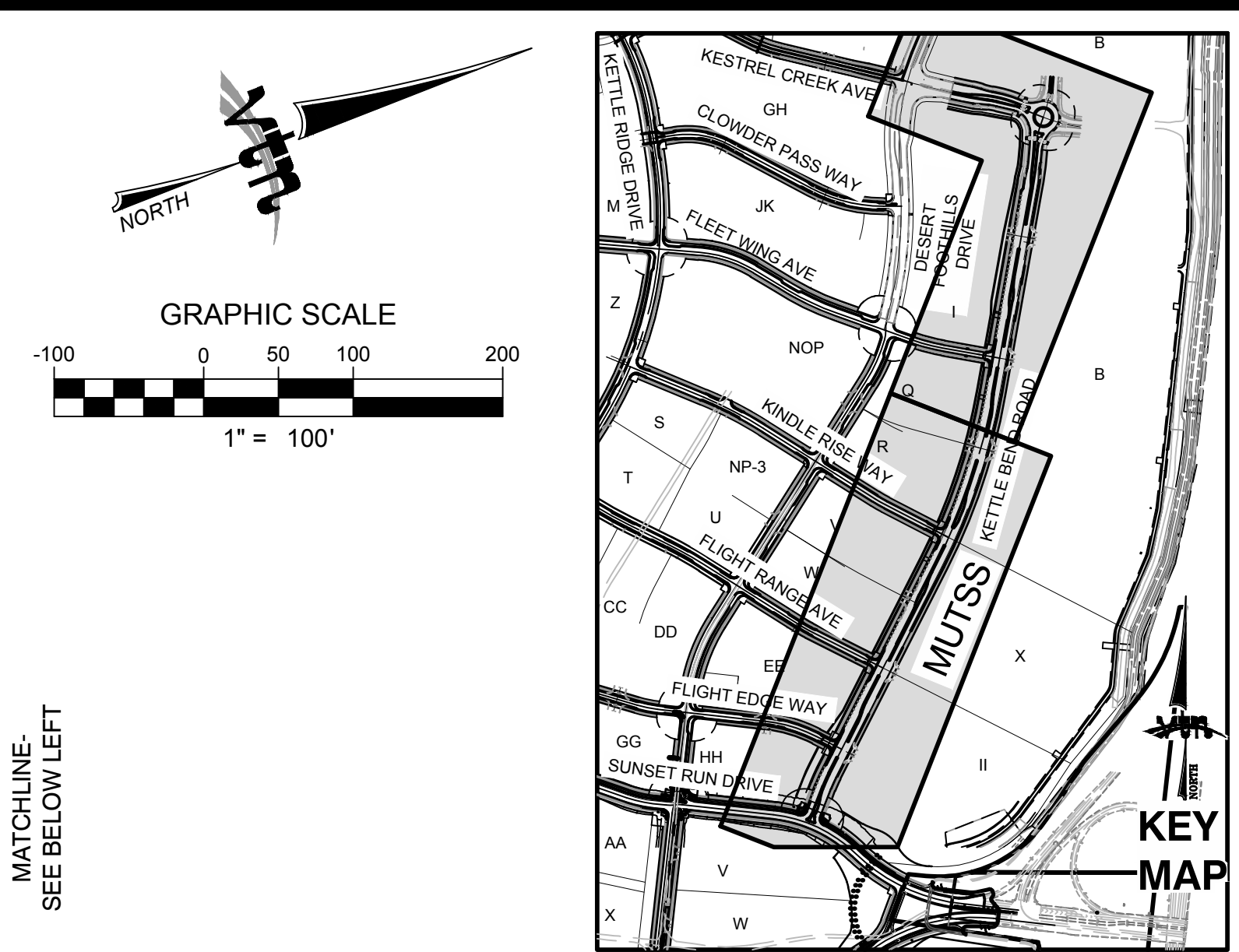
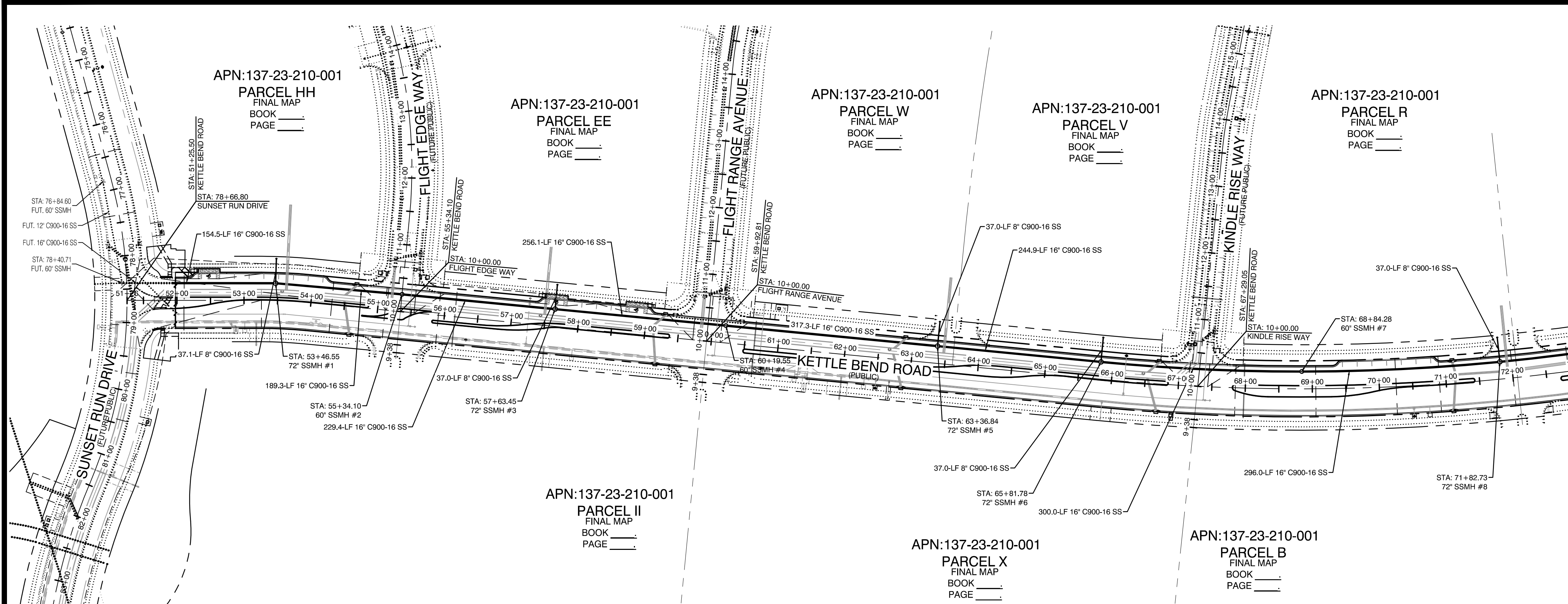
PROJECT NO: 7861

SCALE: 1" = 100' HORIZ. VERT. N/A

2020-09-25

SHEET
MUTW
14 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449



- WATER MAIN COVER NOTE:**
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08
- WATERLINE TRENCH NOTE:**
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.
- WATER LINE MARKER BALLS NOTE**
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE NO. 15
- FIRE HYDRANT MARKER NOTES**
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.
- WATER MAIN JOINT DEFLECTION**
PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02.
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.
- UTILITY CROSSING NOTE:**
ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
- ENGINEER DISCLAIMER NOTE:**
UTILITY LOCATIONS SHOWN HERE ON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HERE ON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
- WATER PRESSURE ZONE:**
WATER SERVICE LOCATED IN THE 3435 PRESSURE ZONE.

Call before you Dig
1-702-455-7544
1-702-432-6300
CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig
1-702-455-7544
1-702-432-6300
CLARK COUNTY TRAFFIC OPERATIONS

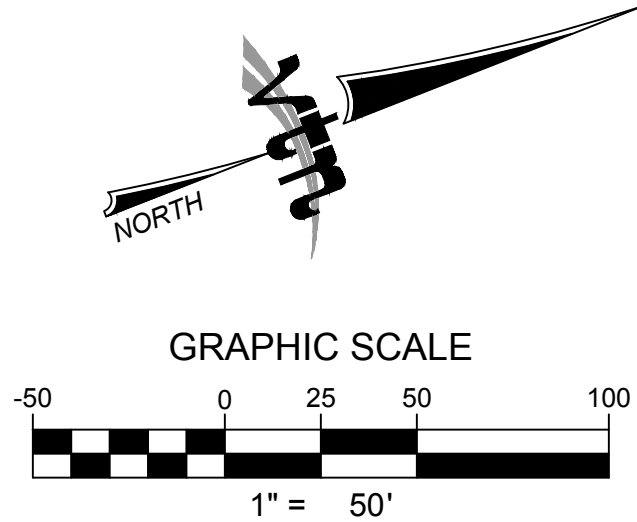
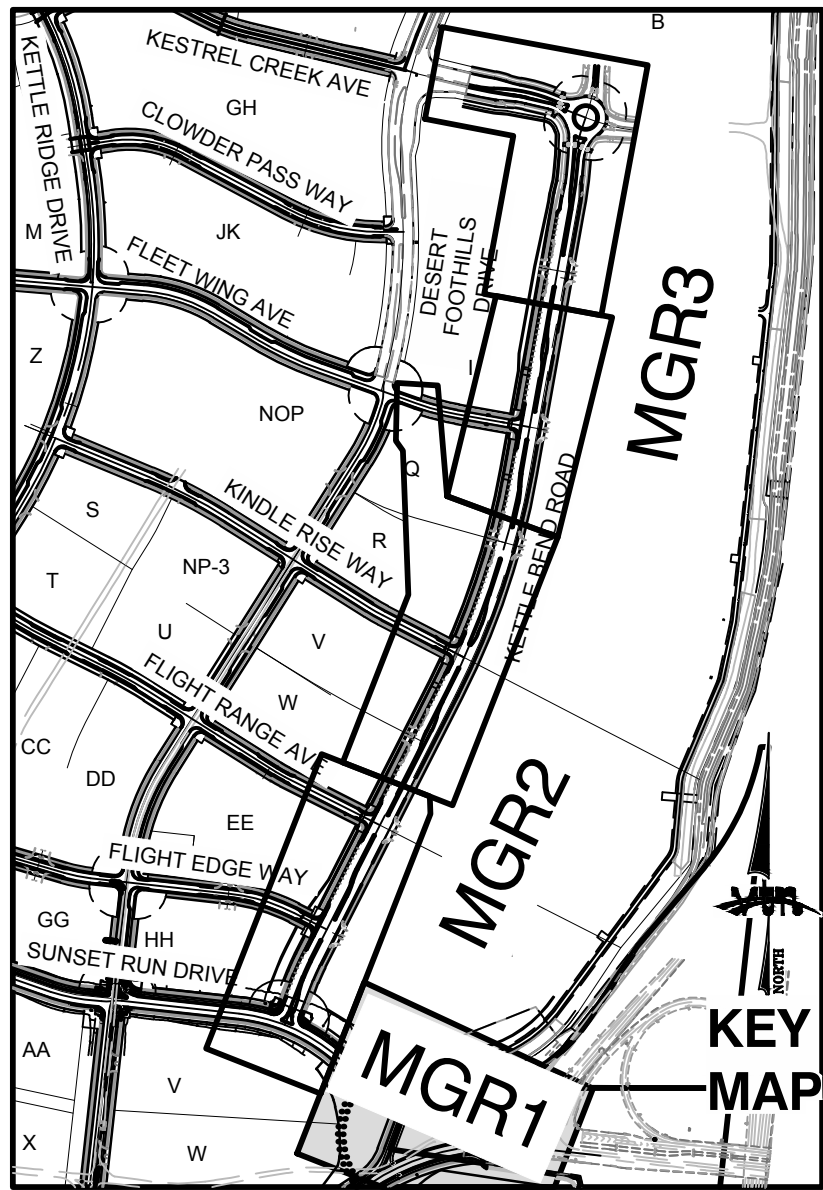
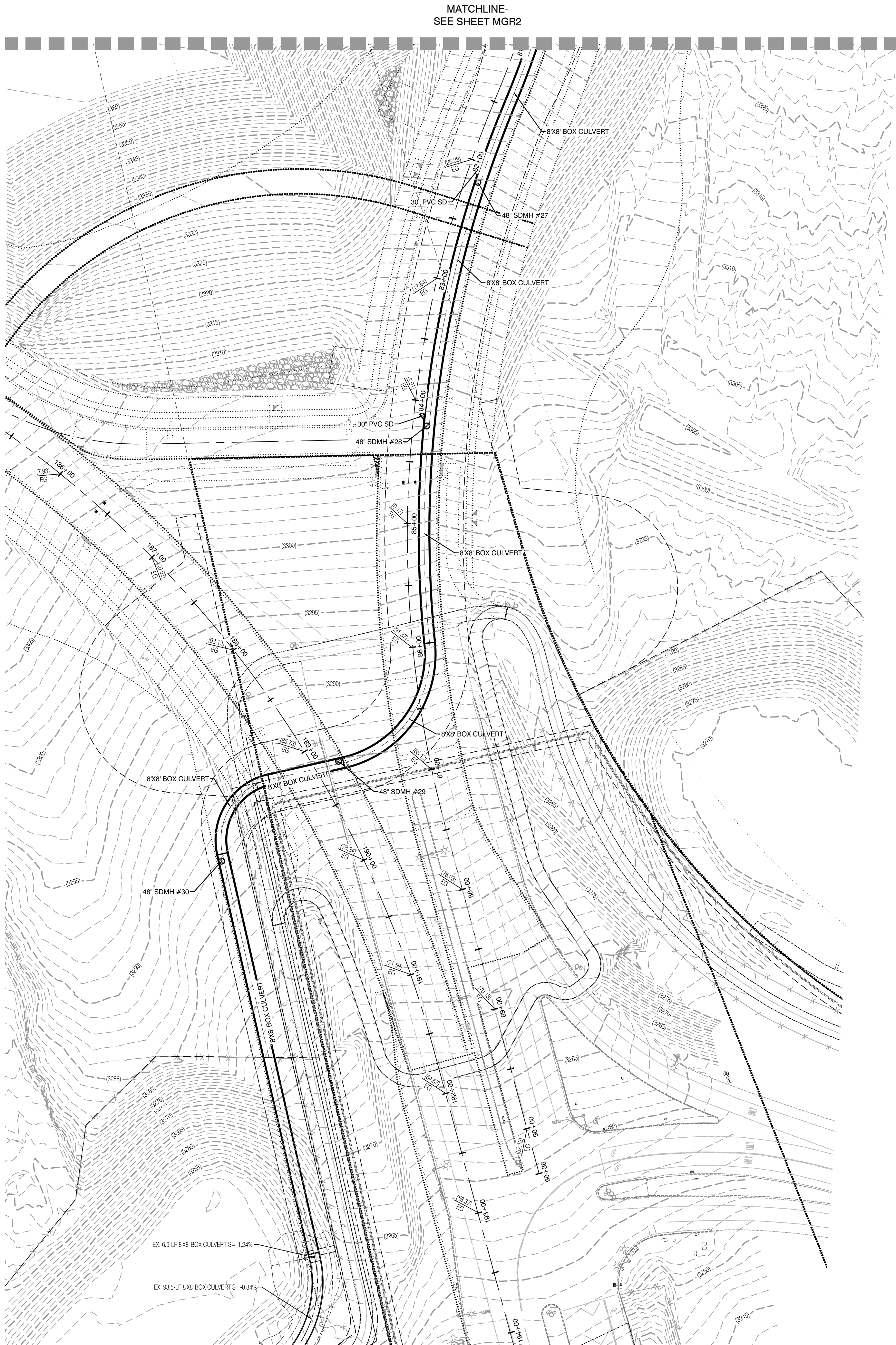
Call before you Dig
1-702-455-7544
1-702-432-6300
CLARK COUNTY TRAFFIC OPERATIONS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10845 GRIFFITH PEAK DRIVE, SUITE 160 LAS VEGAS, NEVADA 89125 702-791-4000		CITY OF LAS VEGAS	
MASTER UTILITY SANITARY SEWER		SUMMERLIN WEST VILLAGE 22	
KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE		KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	
DRAWN BY: BCC	DESIGNED BY: BCC	CHECKED BY: WJM	PROJECT NO: 7861
DATE: 05/30/2019		DATE: 05/30/2019	
DATE: 09/28/2020		DATE: 09/28/2020	
SCALE: 1"= 100'		SCALE: 1"= 100'	
HORIZ. N/A		VERT. N/A	
SHEET MUTSS 15 of 107 SHEETS			
DRAWING NO. L20-01282 107V8449			
F:\17361 Kettle Bend Road\Sheet\15of107 MUTSS.dwg 9/18/2020 2:30 PM mtrout			

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
2020-09-25



STORM DRAIN DROP INLET NOTE:
ALL STORM DRAIN INLETS SHALL INCLUDE A STORM WATER INLET CONCRETE STAMP IN ACCORDANCE WITH CCAUSD DWG NO. 421

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.

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-18-176, DATED DECEMBER 30, 2019

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

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I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS05204

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

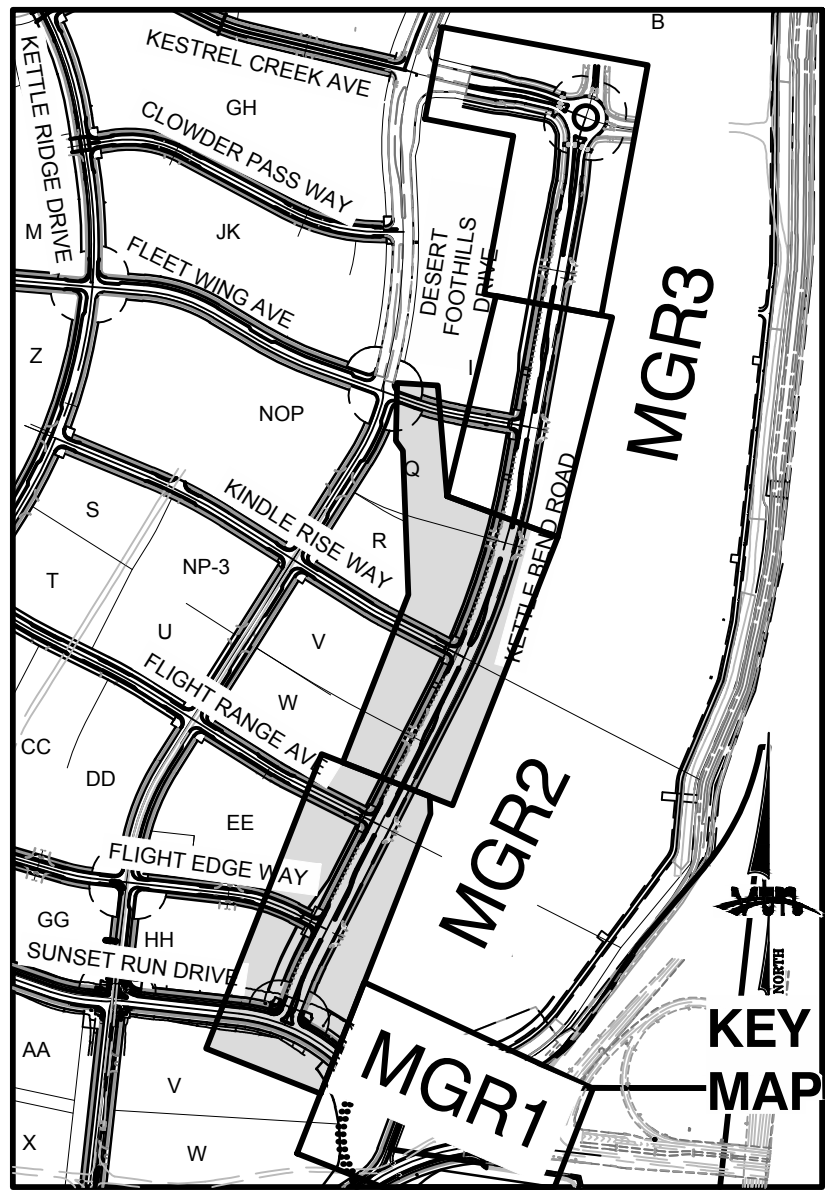
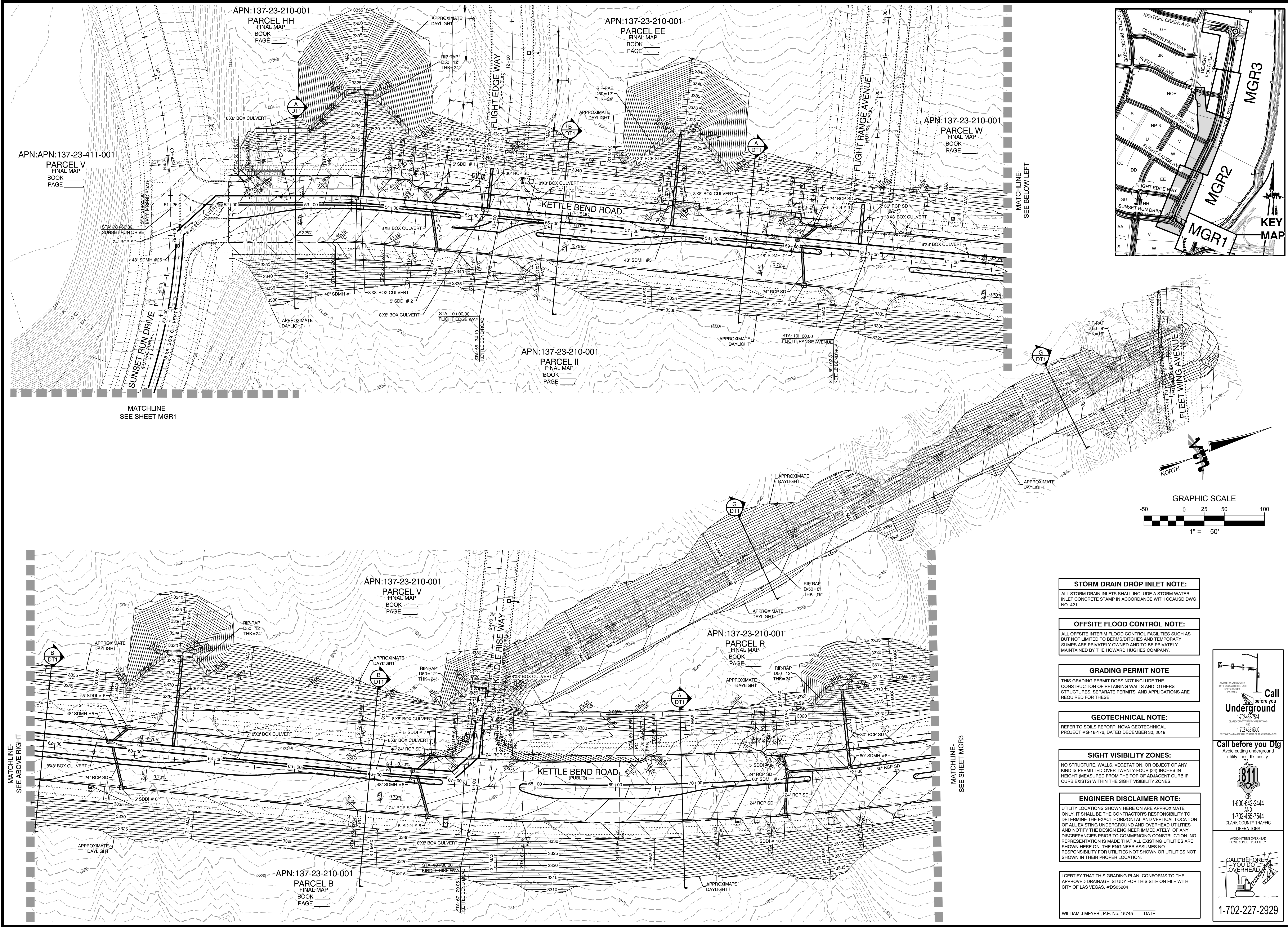
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Avoid hitting overhead power lines. It's costly.

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2020-09-25			
SHEET MGR1 17 OF 107 SHEETS			
DRAWING NO. L20-01282 107V8449			
DESIGNED BY: BCC		DATE: 08/27/2020	
CHECKED BY: WJM		DATE: 08/28/2020	
PROJECT NO: 7861		SCALE: 1"=50' HORIZ. N/A VERT.	
MASTER GRADING PLAN 1		SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	
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) 873-7350 FAX (702) 382-2597 WEB WWW.VTNV.COM CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS CITY OF LAS VEGAS	



STORM DRAIN DROP INLET NOTE:
ALL STORM DRAIN INLETS SHALL INCLUDE A STORM WATER INLET CONCRETE STAMP IN ACCORDANCE WITH CCAUSD DWG NO. 421

OFFSITE FLOOD CONTROL NOTE:
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WILLIAM J MEYER, P.E. No. 15745 DATE

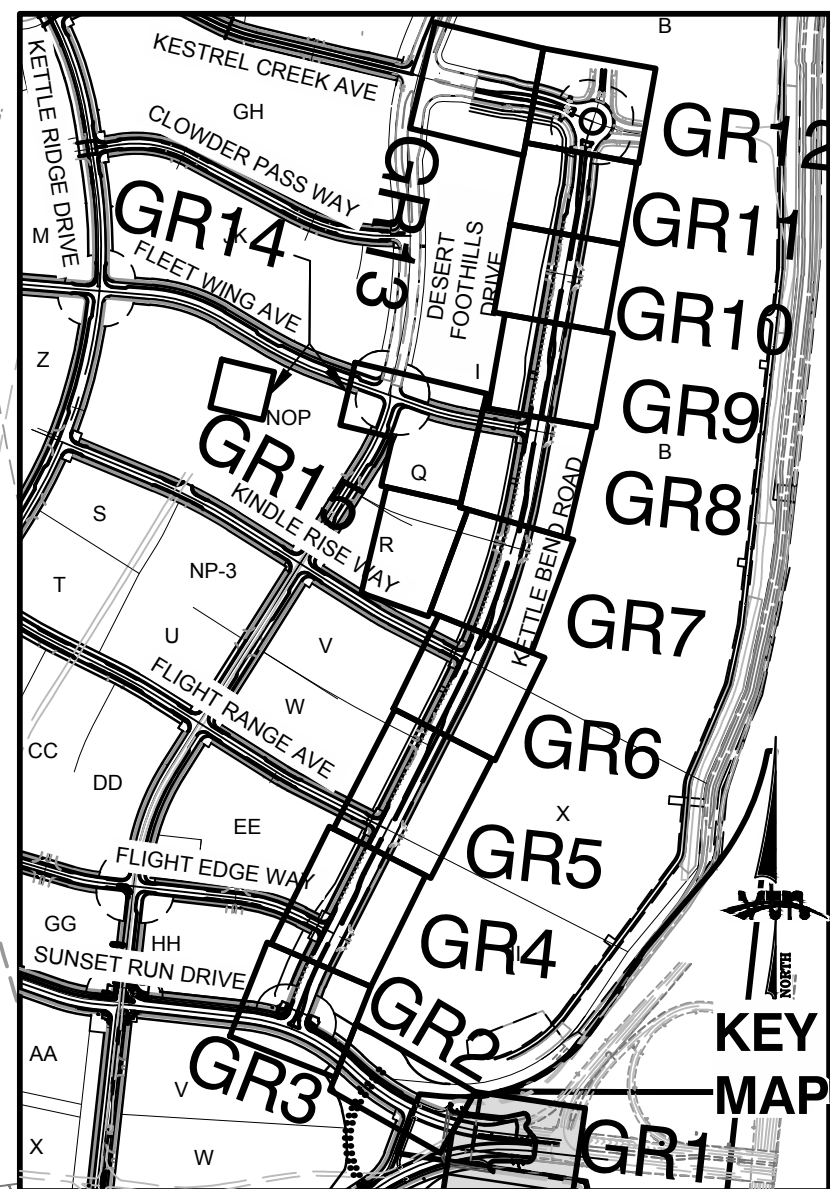
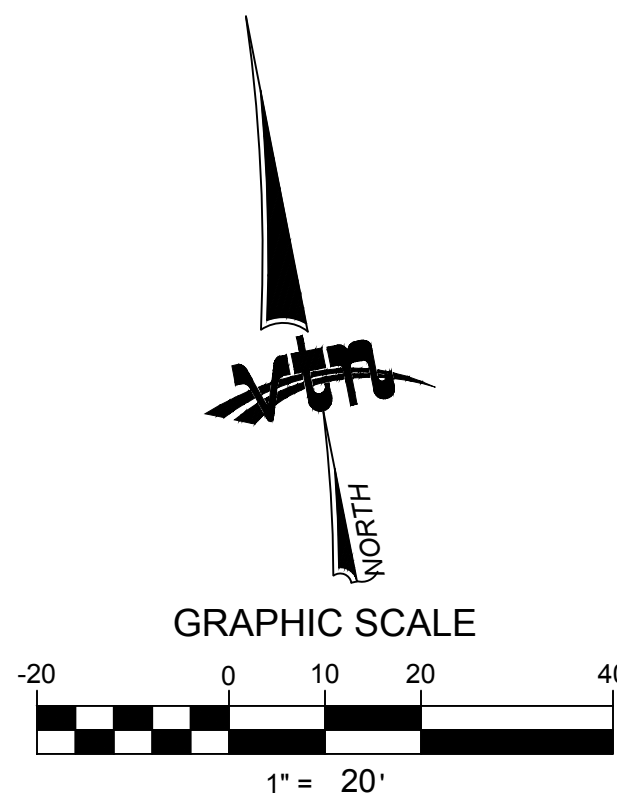
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HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10845 GRIFFITH PEAK DRIVE, SUITE 160 LAS VEGAS, NEVADA 89135 702-791-4000				CITY OF LAS VEGAS			
MASTER GRADING PLAN 2				SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE			
DRAWN BY: BCC	DESIGNED BY: BCC	CHECKED BY: WJM	PROJECT NO: 7861	DATE: 08/27/2020	BY: DATE:	REV:	REVISION:
WILLIAM J MEYER P.E. No. 15745 CIVIL 2020-09-25				SHEET MGR2 18 of 107 SHEETS			
DRAWING NO. L20-01282 107V8449				F:\1760 Kettle Bend Road\Sheet\7861 MGR2-1.dwg 9/18/2020 8:40 AM Brandon			



CONSTRUCTION NOTES

- FUTURE 24" TYPE "L" CURB & GUTTER
- FUTURE TYPE "A" CURB
- FUTURE HANDICAP RAMP
- FUTURE SIDEWALK
- CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
- CONSTRUCT TYPE "A" CURB PER STD. DWG. 219.
- CONSTRUCT HANDICAP RAMP SEE DETAIL ON SHEET DT 2, 3, 4 & 5
- SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
- FIELD VERIFY AND MATCH EXISTING
- CONSTRUCT APRON CURB SEE SHEET DT1

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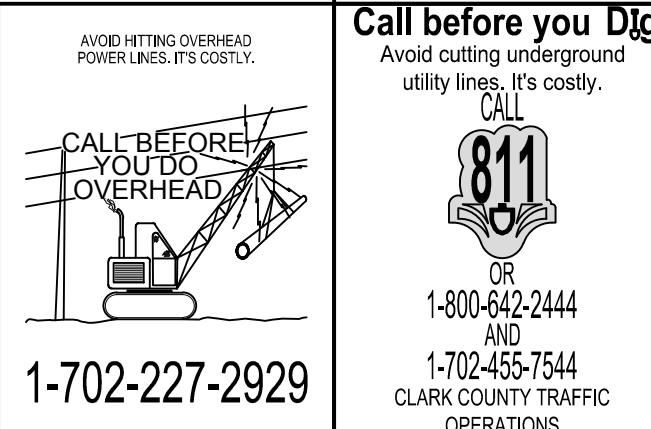
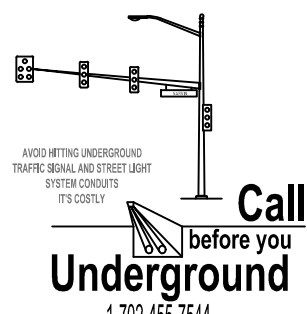
REFER TO SOILS REPORT: NOVA GEOTECHNICAL PROJECT #G-18-176, DATED DECEMBER 30, 2019

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EASEMENT REFERENCE LEGEND

- 10' GAS EASEMENT GRANTED TO SOUTHWEST GAS COMPANY PER OR: 19991103.0002824
- PEDESTRIAN TRAIL EASEMENT GRANTED TO CLARK COUNTY PER OR: 20080527.0005041

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #D505204

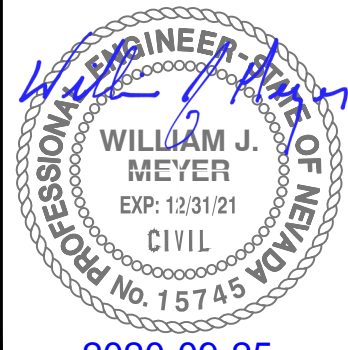
WILLIAM J MEYER, P.E. No. 15745 DATE

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 973-7550 FAX: (702) 382-2587 WEB: WWW.VTNV.COM
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GRADING PLAN 1

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

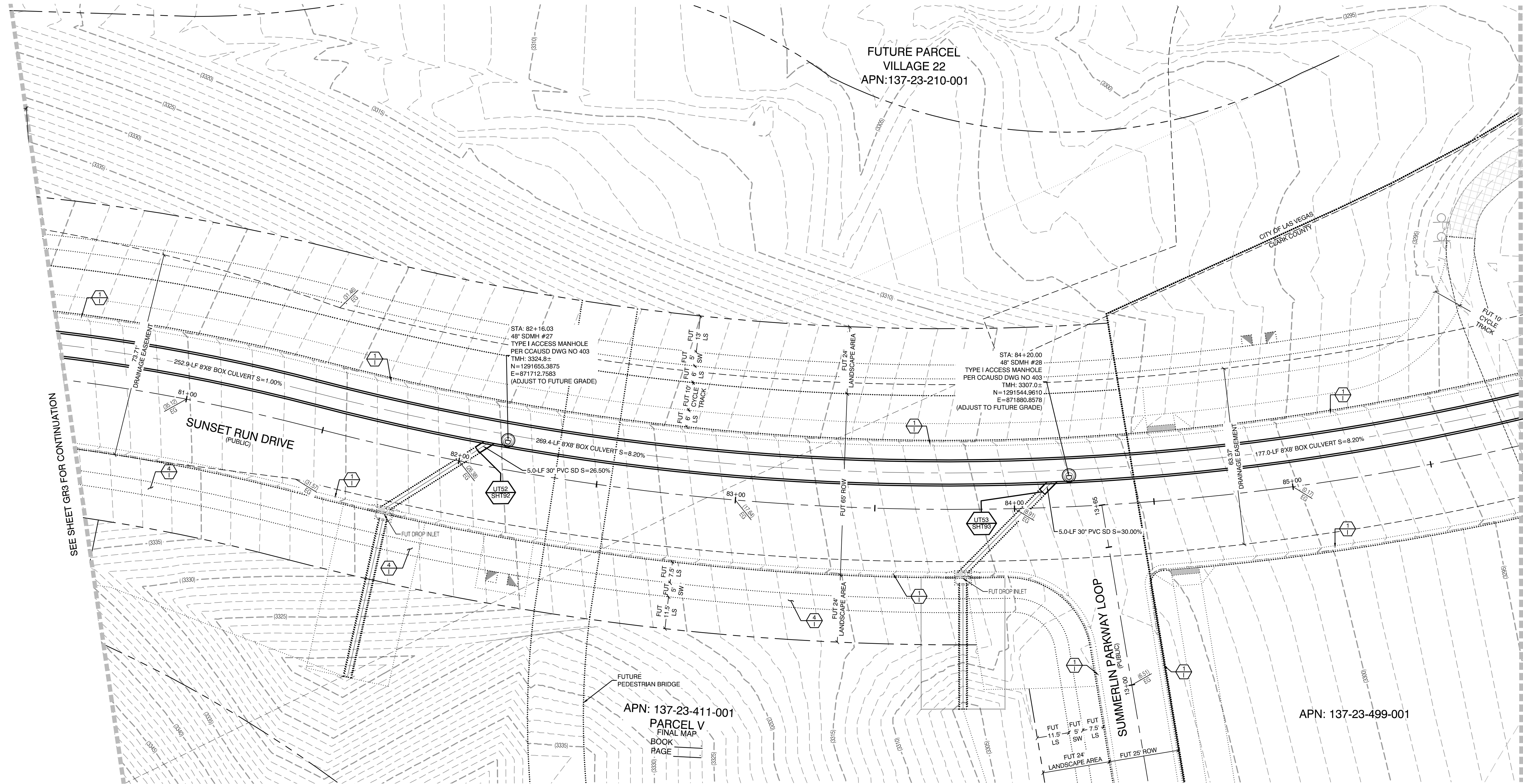
DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20'
HORIZ. VERT. N/A



2020-09-25

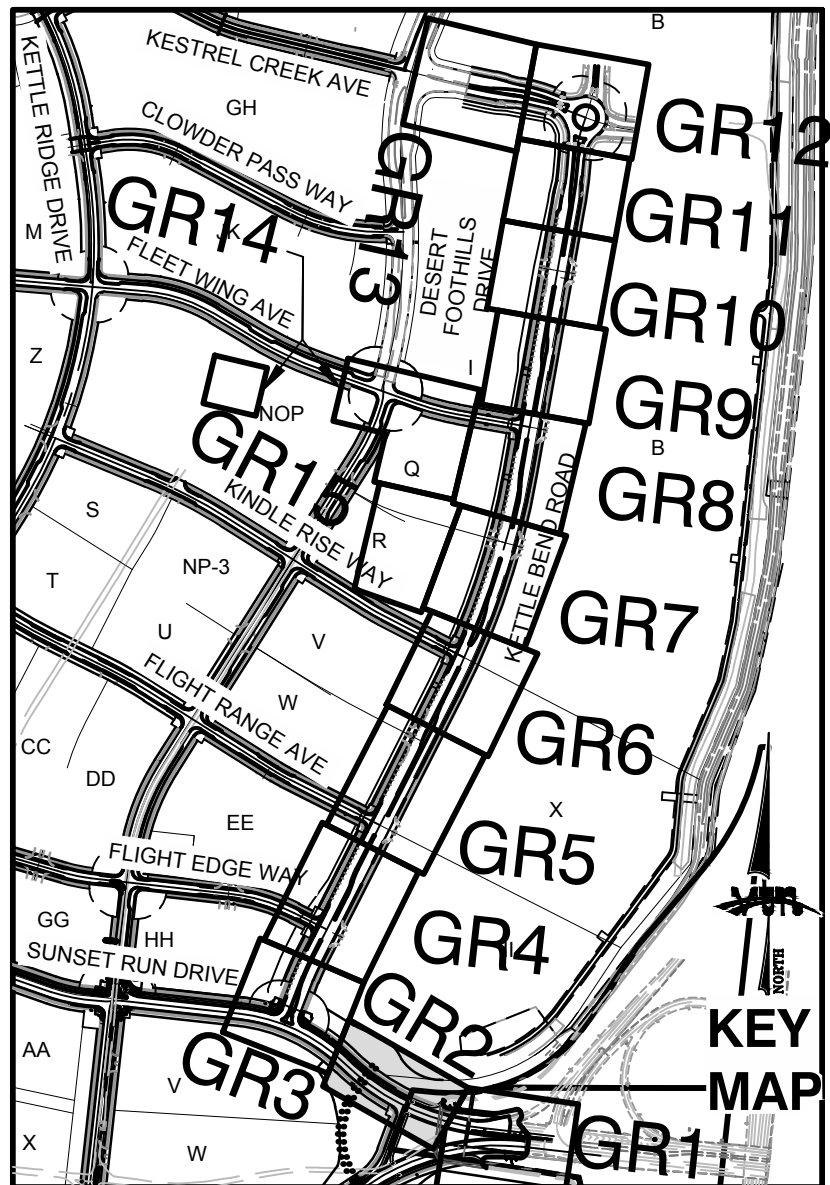
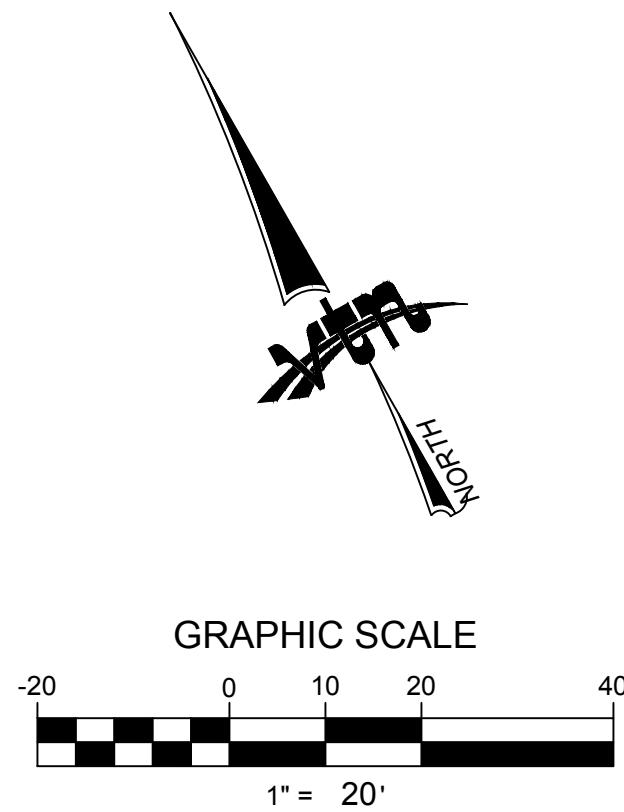
SHEET
GR1
20 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449



SEE SHEET GR3 FOR CONTINUATION

SEE SHEET GR1 FOR CONTINUATION



CONSTRUCTION NOTES

- FUTURE 24" TYPE "L" CURB & GUTTER
- FUTURE TYPE "A" CURB
- FUTURE HANDICAP RAMP
- FUTURE SIDEWALK
- CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
- CONSTRUCT TYPE "A" CURB PER STD. DWG. 219.
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- FIELD VERIFY AND MATCH EXISTING
- CONSTRUCT APRON CURB SEE SHEET DT1

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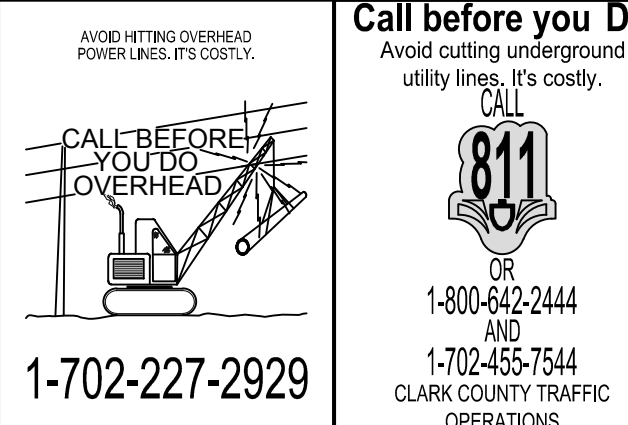
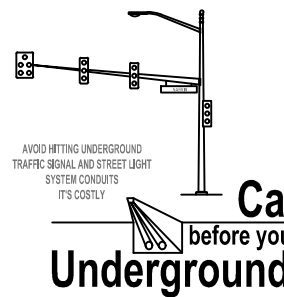
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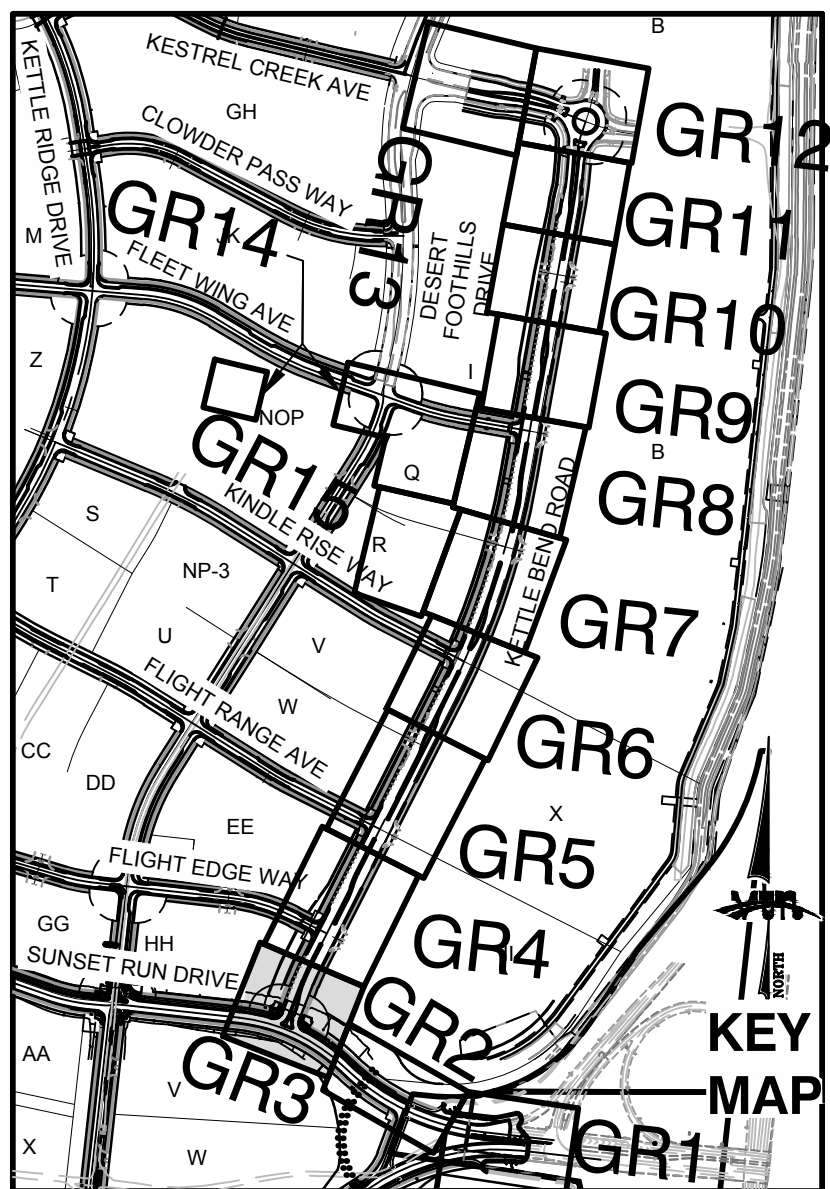
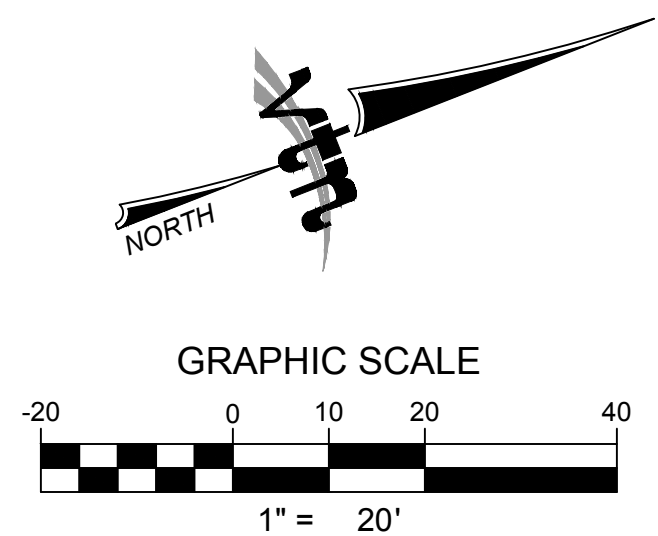
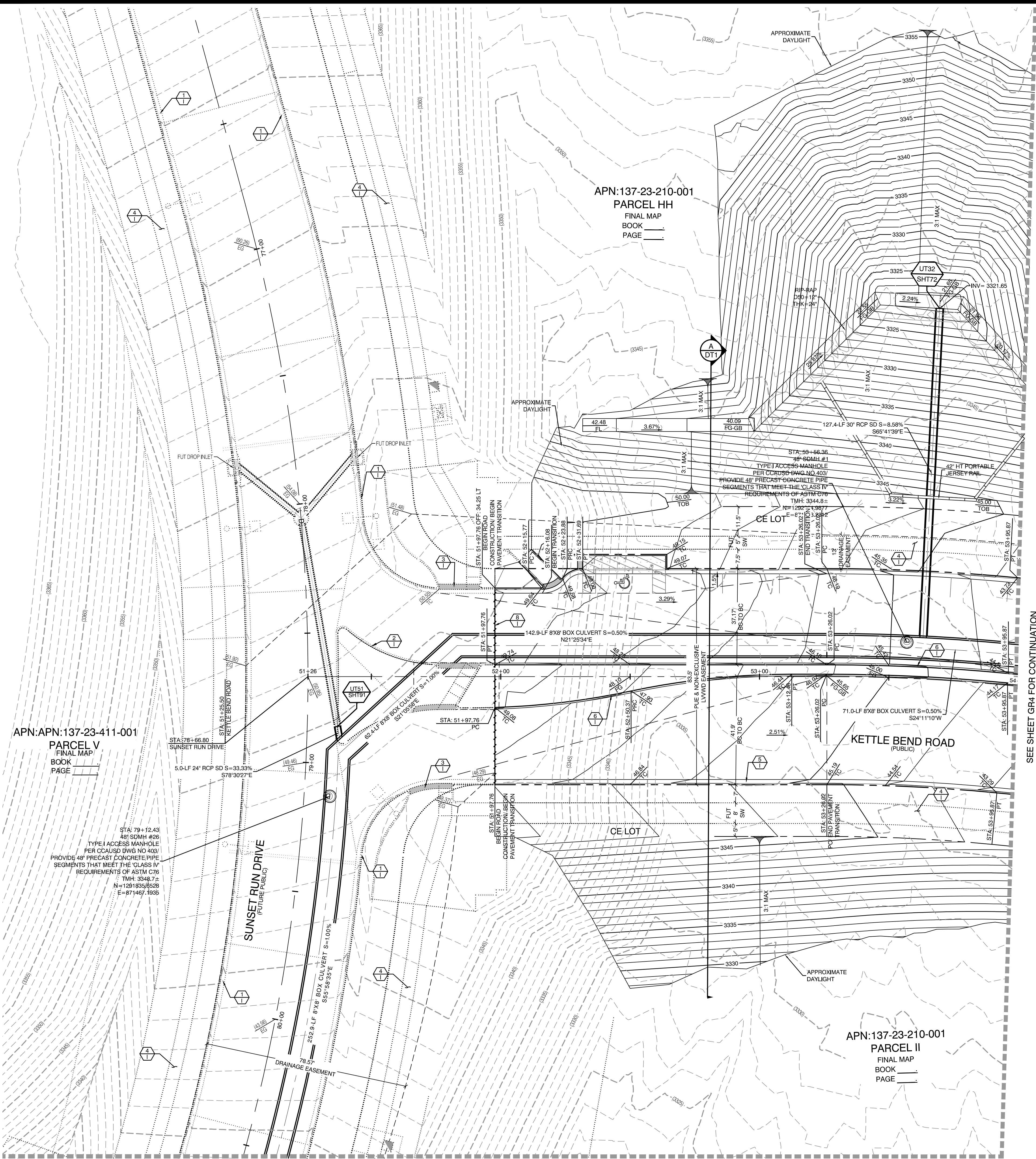
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WILLIAM J MEYER, P.E. No. 15745 DATE

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	
GRADING PLAN 2		SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	
DRAWN BY: BCC	07/15/2020	DESIGNED BY: BCC	07/15/2020
CHECKED BY: WJM	07/15/2020	PROJECT NO: 7861	SCALE: 1"=20'
SHEET GR2		21 OF 107 SHEETS	
DRAWING NO. L20-01282 107V8449		DATE BY REV	



CONSTRUCTION NOTES

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277 SOUTH RAINBOW BOULEVARD
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PH: (702) 973-7550 FAX: (702) 382-2587 WEB: WWW.VTNV.COM
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CITY OF LAS VEGAS

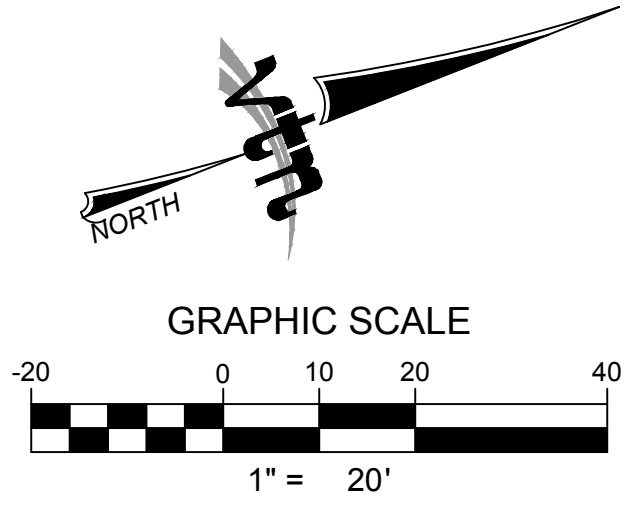
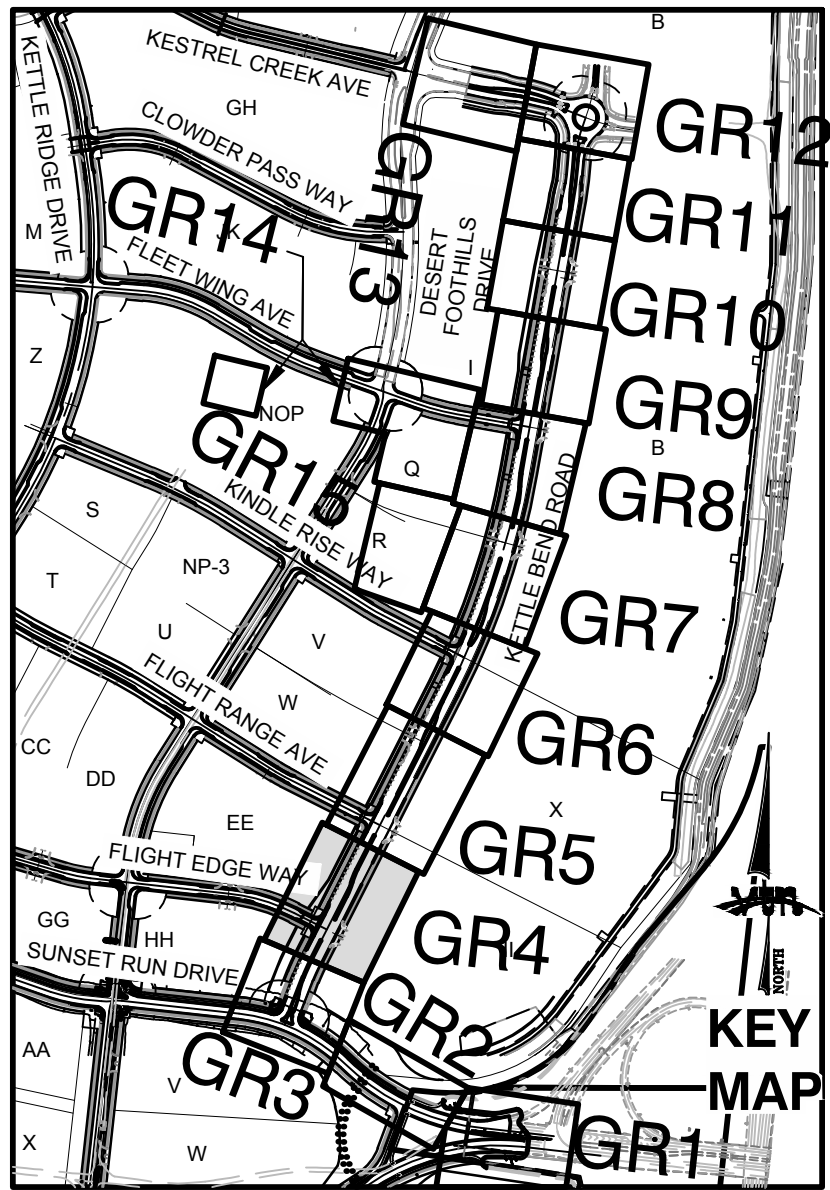
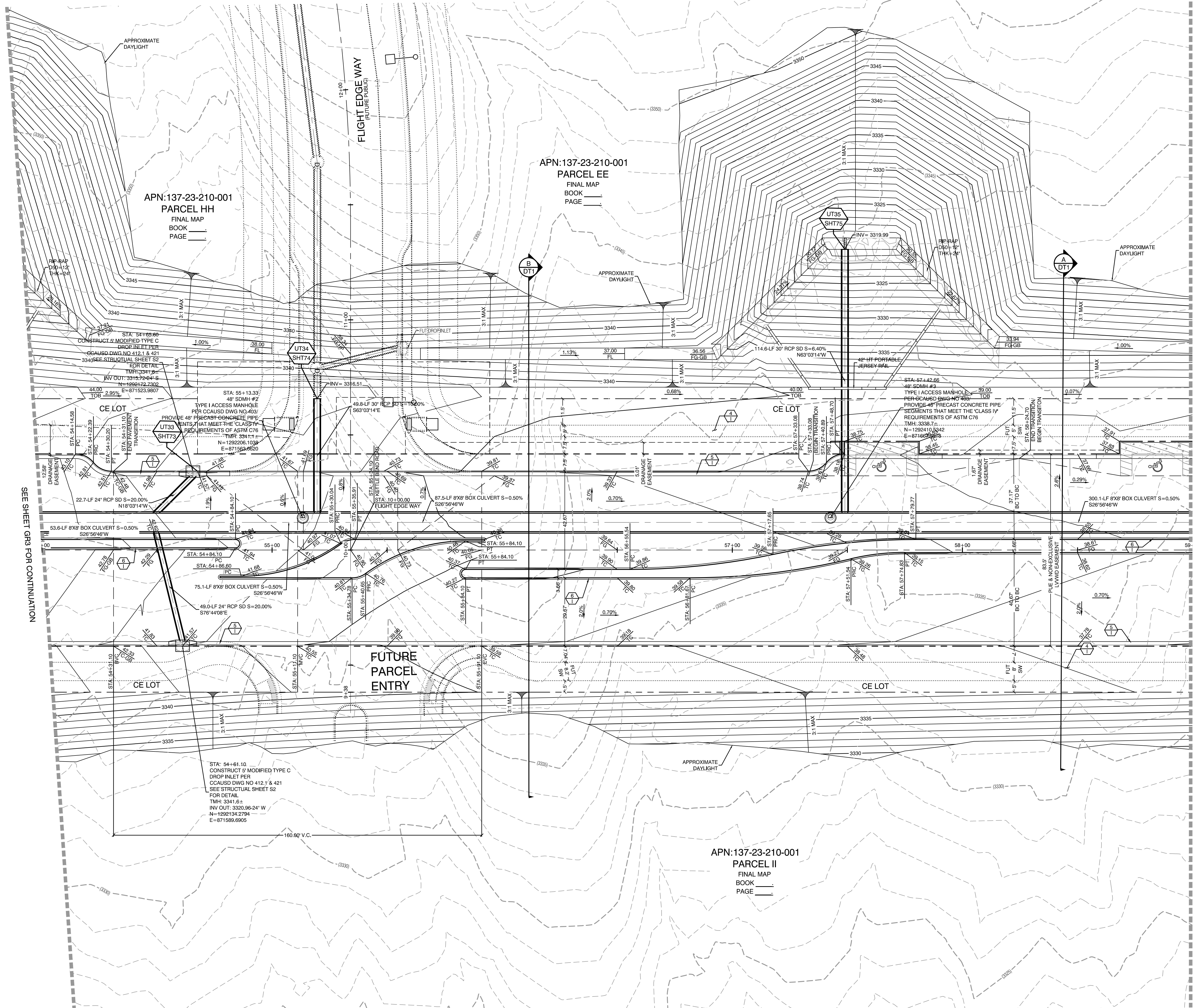
GRADING PLAN 3

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
DATE: 08/22/2020
SCALE: 1"=20'
HORIZ: N/A
VERT: N/A

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

2020-09-25
SHEET
GR3
22 OF 107 SHEETS



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

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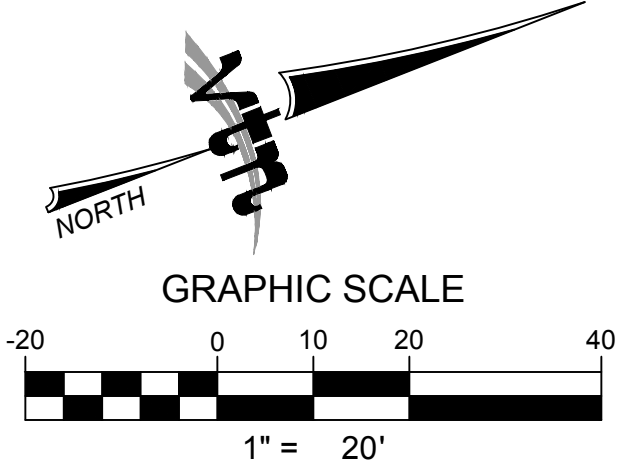
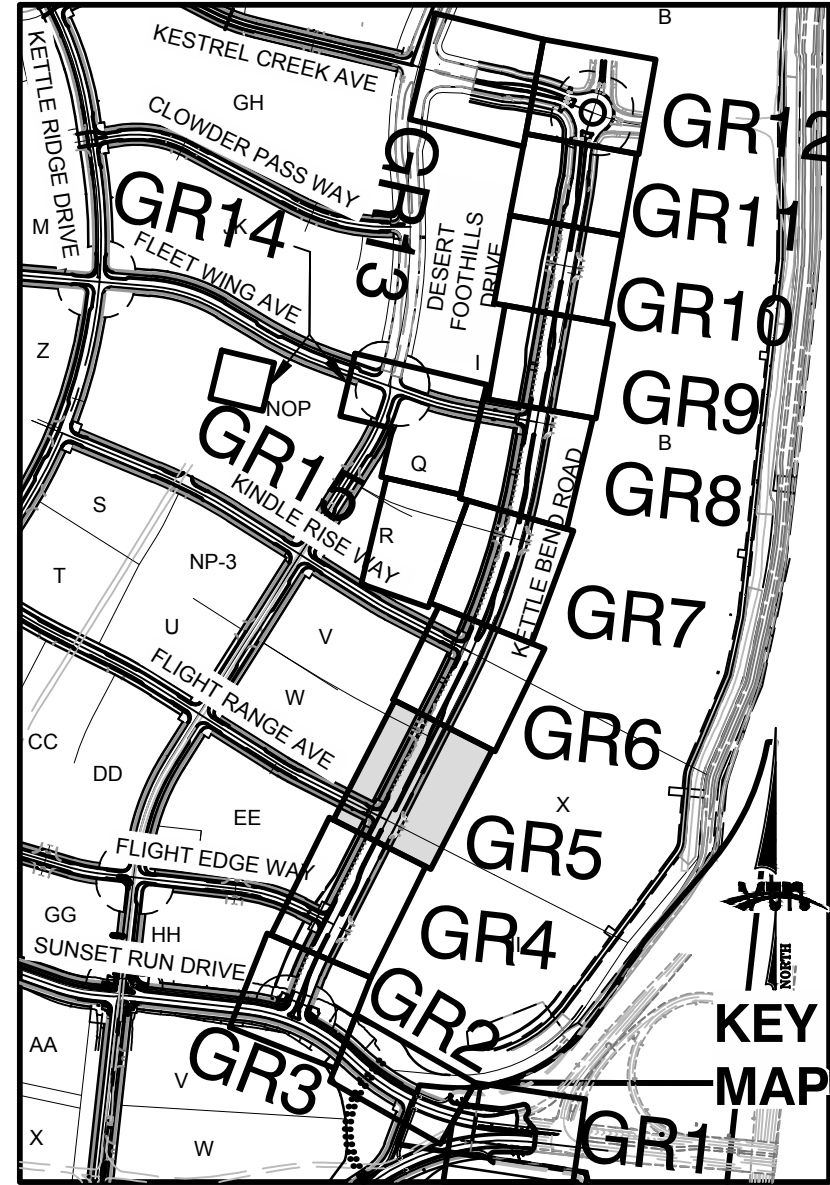
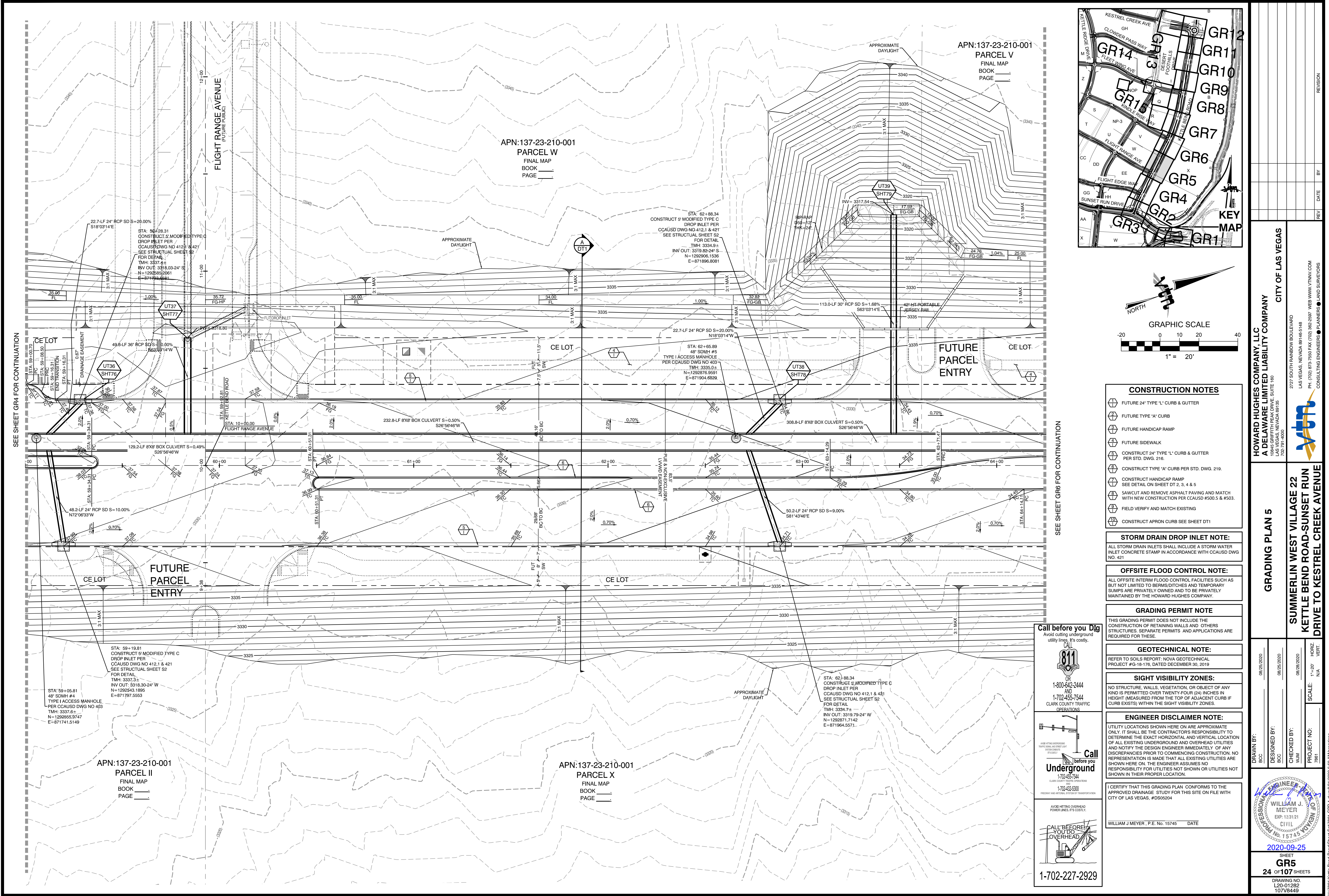
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1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
277 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 973-7550 FAX: (702) 382-2887
WEB: WWW.VTINY.COM
CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS

GRADING PLAN 4
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

PROFESSIONAL ENGINEER
WILLIAM J MEYER
EXP: 12/31/21
CIVIL
2020-09-25
SHEET
GR4
23 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20'
HORIZ. VERT.: N/A



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

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OR

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AND

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig

Underground

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

1-702-432-6300

PREPARE AND MAINTAIN SYSTEM OF TRANSPORTATION

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

Call before you Dig

Overhead

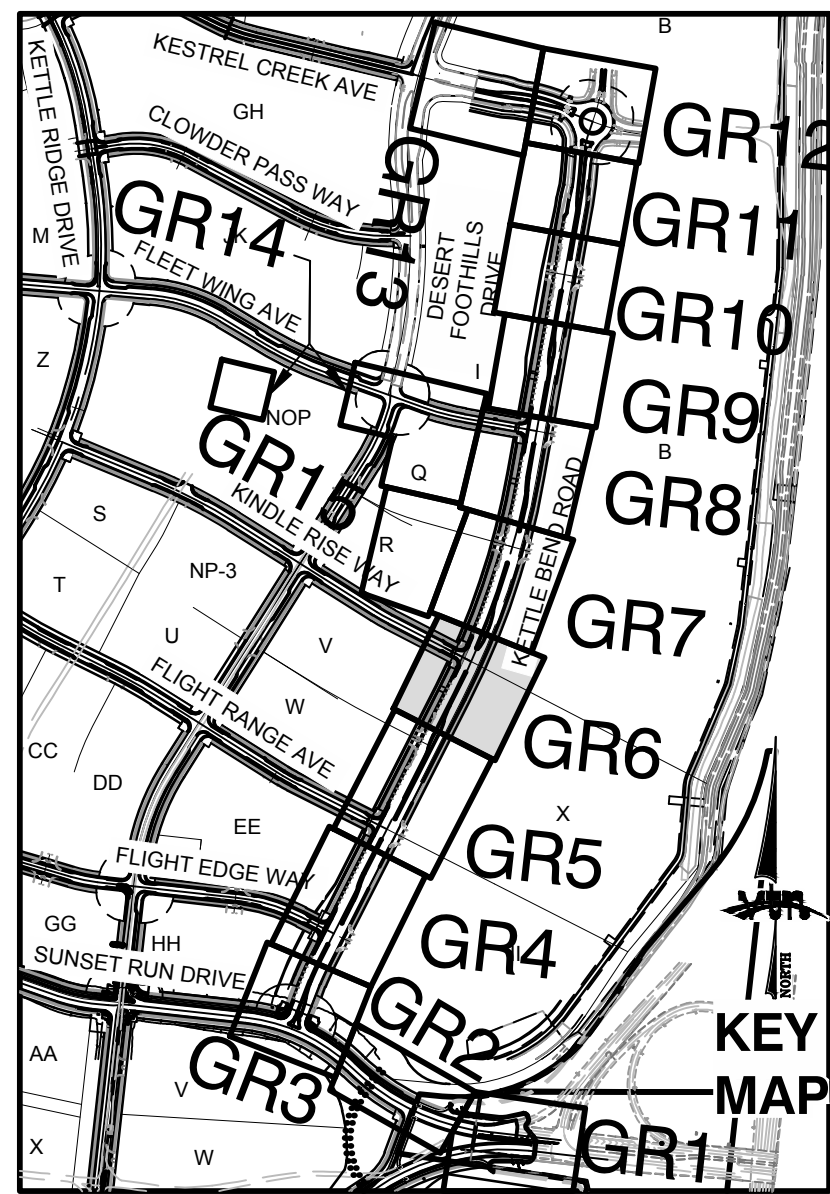
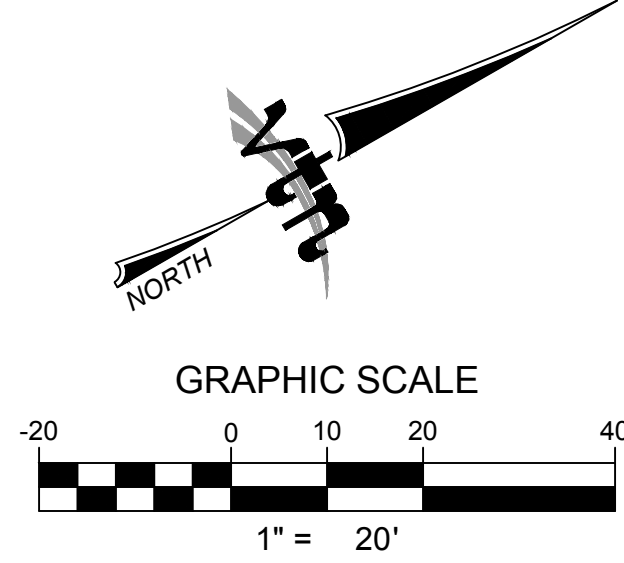
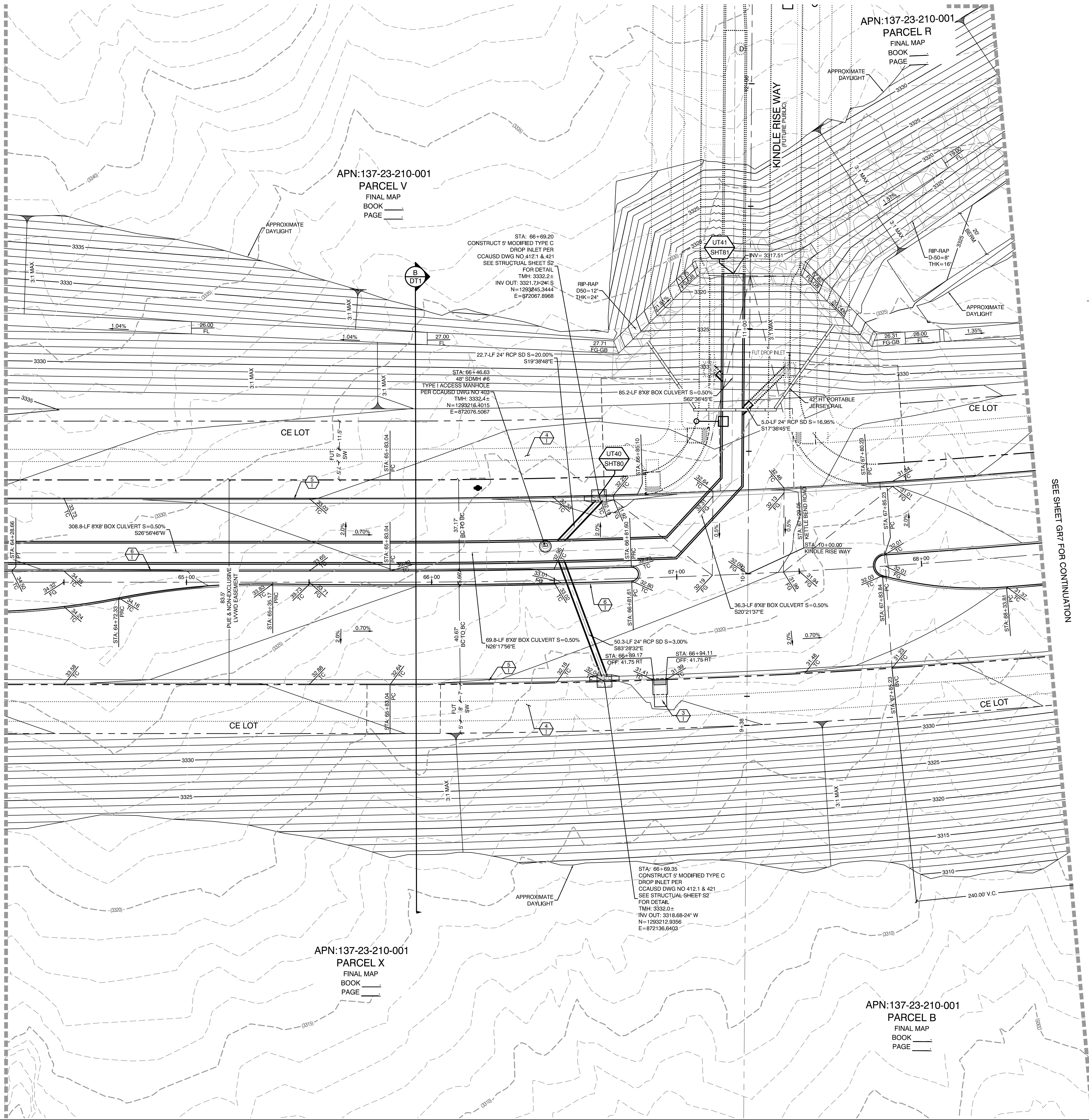
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HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10805 GRIFFITH PEAK DRIVE, SUITE 160 LAS VEGAS, NEVADA 89135 702-791-4000				CITY OF LAS VEGAS			
GRADING PLAN 5				SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE			
DRAWN BY: BCC	DESIGNED BY: BCC	CHECKED BY: WJM	PROJECT NO: 7861	DATE: 08/25/2020	SCALE: 1"=20'	HORIZ. VERT.: N/A	
				2020-09-25			
SHEET GR5 OF 107 SHEETS				DRAWING NO. L20-01282 107V8449			

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SEE SHEET GRS FOR CONTINUATION

SEE SHEET GRT FOR CONTINUATION



CONSTRUCTION NOTES

- FUTURE 24" TYPE 'L' CURB & GUTTER
- FUTURE TYPE 'A' CURB
- FUTURE HANDICAP RAMP
- FUTURE SIDEWALK
- CONSTRUCT 24" TYPE 'L' CURB & GUTTER PER STD. DWG. 216.
- CONSTRUCT TYPE 'A' CURB PER STD. DWG. 219.
- CONSTRUCT HANDICAP RAMP SEE DETAIL ON SHEET DT 2, 3, 4 & 5
- SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
- FIELD VERIFY AND MATCH EXISTING
- CONSTRUCT APRON CURB SEE SHEET DT1

STORM DRAIN DROP INLET NOTE:

ALL STORM DRAIN INLETS SHALL INCLUDE A STORM WATER INLET CONCRETE STAMP IN ACCORDANCE WITH CCAUSD DWG NO. 421

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.

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-18-176, DATED DECEMBER 30, 2019

SIGHT VISIBILITY ZONES:

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Call before you Dig
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544

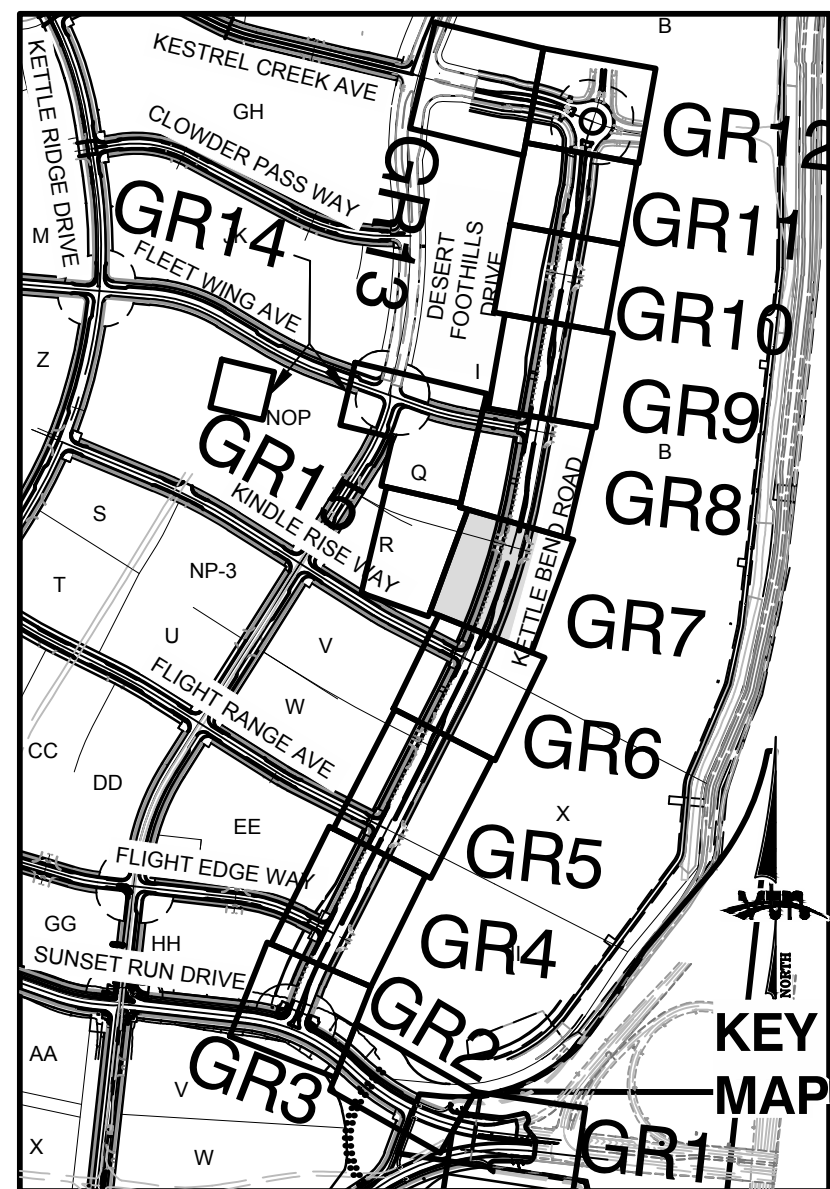
Call before you Dig
1-800-642-2444
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS050204

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

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	
GRADING PLAN 6		SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	
DRAWN BY: BCC	DESIGNED BY: BCC	CHECKED BY: WJM	PROJECT NO: 7861
DATE: 08/25/2020		SCALE: 1"=20' HORIZ. N/A VERT.	
SHEET GR6 25 OF 107 SHEETS			
DRAWING NO. L20-01282 107V8449			

SEE SHEET GR6 FOR CONTINUATION



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

SHEET
GR7
26 OF 107 SHEET

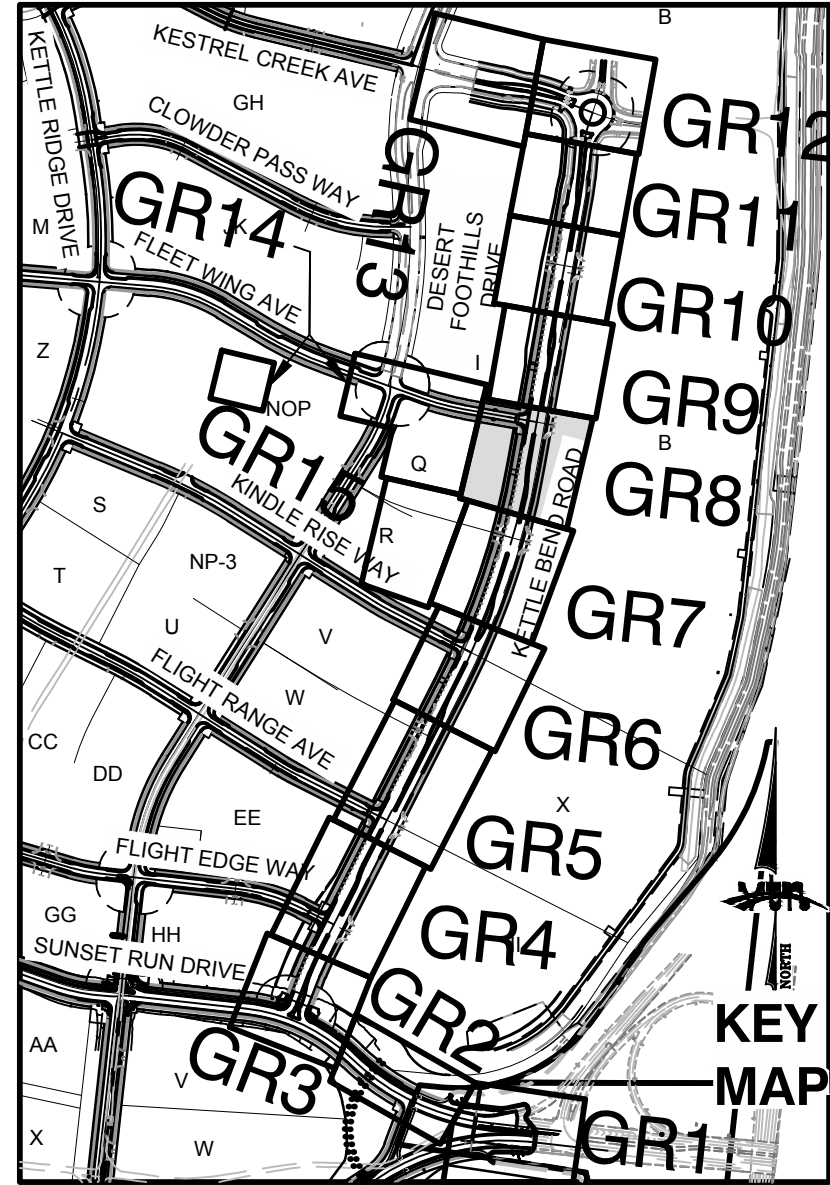
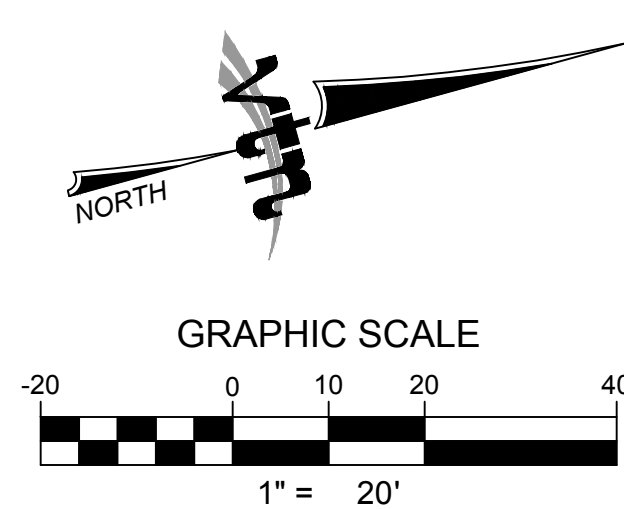
DRAWING NO.
L20-01282
107V8449

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PARCEL Q
FINAL MAP
BOOK
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APN:137-23-210-001
PARCEL B
FINAL MAP
BOOK
PAGE



CONSTRUCTION NOTES

- FUTURE 24" TYPE "L" CURB & GUTTER
- FUTURE TYPE "A" CURB
- FUTURE HANDICAP RAMP
- FUTURE SIDEWALK
- CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
- CONSTRUCT TYPE "A" CURB PER STD. DWG. 219.
- CONSTRUCT HANDICAP RAMP SEE DETAIL ON SHEET DT 2, 3, 4 & 5
- SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
- FIELD VERIFY AND MATCH EXISTING
- CONSTRUCT APRON CURB SEE SHEET DT1

STORM DRAIN DROP INLET NOTE:

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OFFSITE FLOOD CONTROL NOTE:

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GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

REFER TO SOILS REPORT: NOVA GEOTECHNICAL PROJECT #G-18-176, DATED DECEMBER 30, 2019

SIGHT VISIBILITY ZONES:

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Call before you Dig
Avoid hitting overhead power lines. It's costly.

Call before you Dig
Avoid cutting underground utility lines. It's costly.

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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, #DS050204

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

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 973-7550 FAX: (702) 382-2587 WEB: WWW.VTNVY.COM
CONSULTING ENGINEERS & LAND SURVEYORS

GRADING PLAN 8

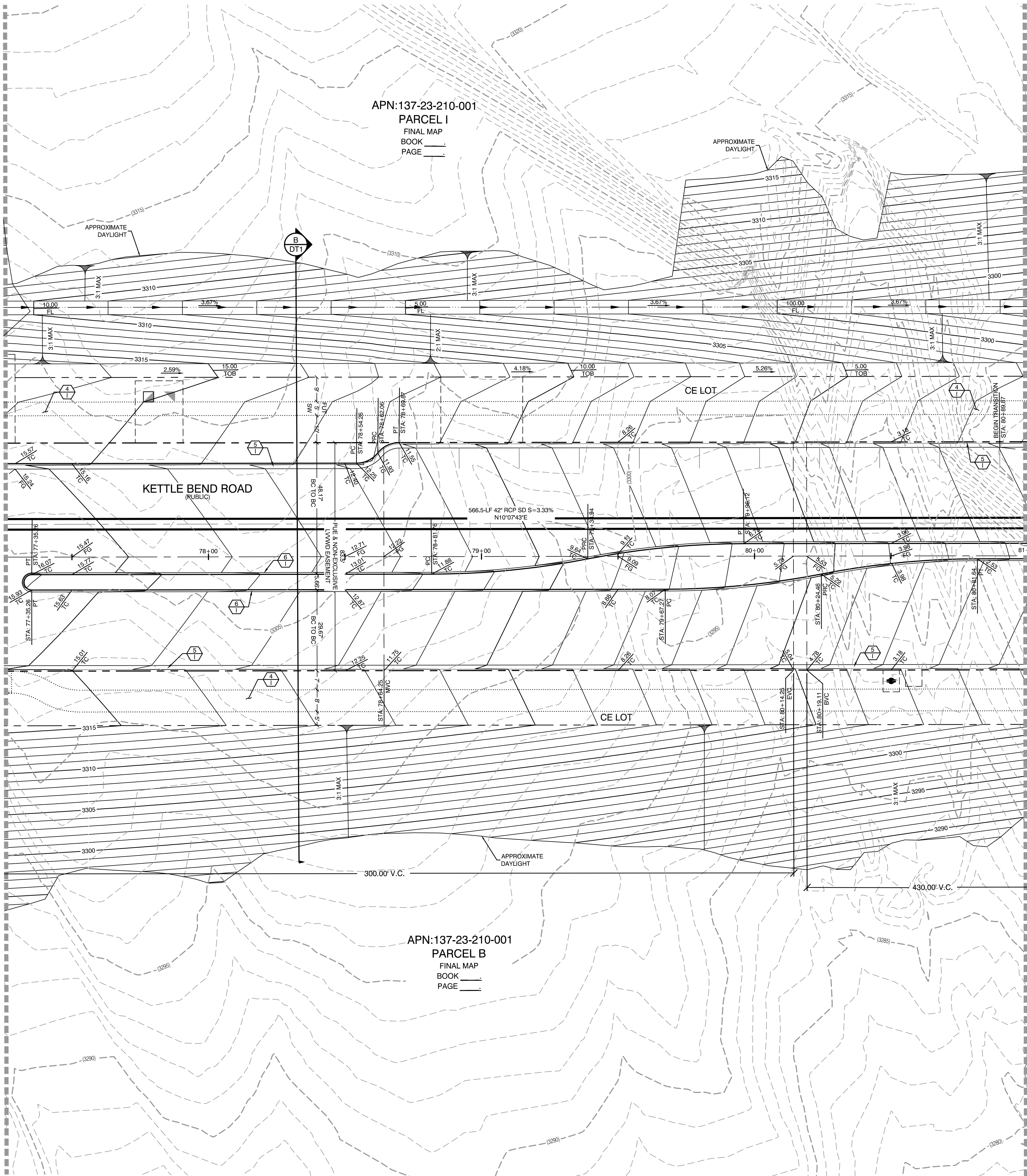
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861

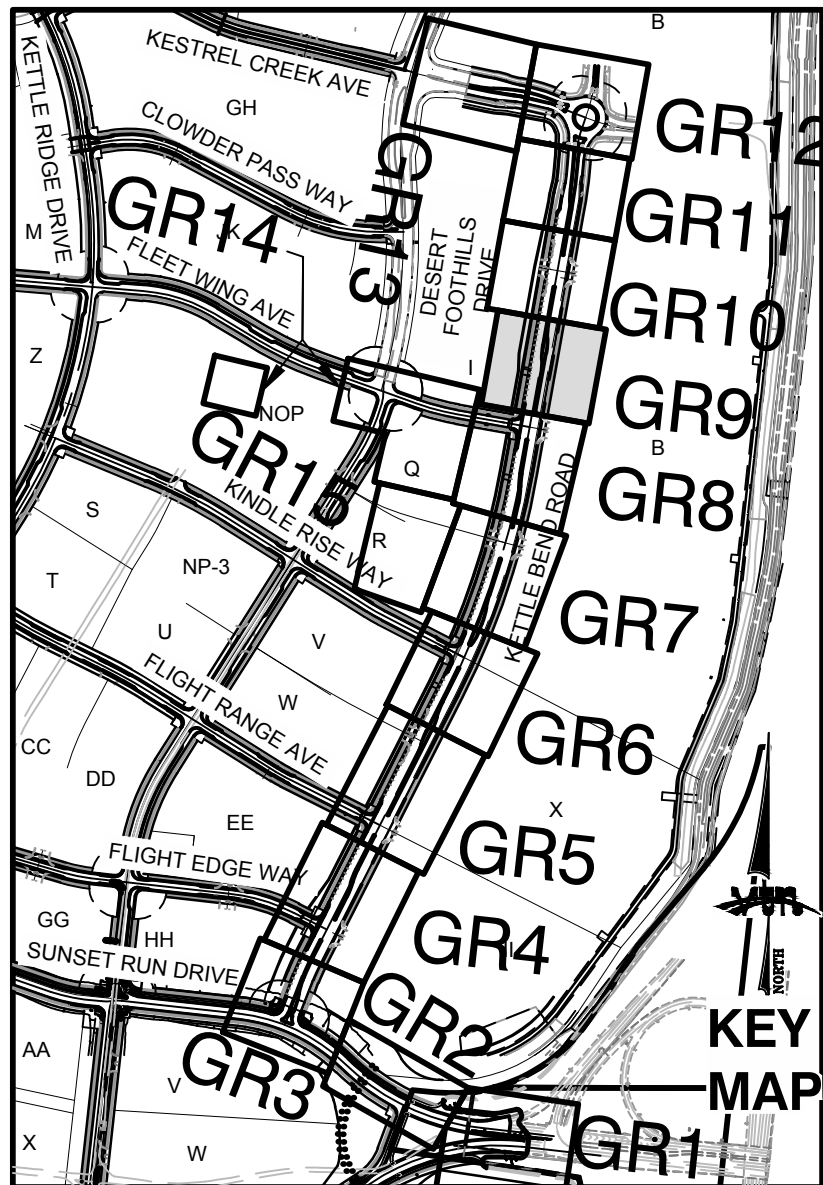
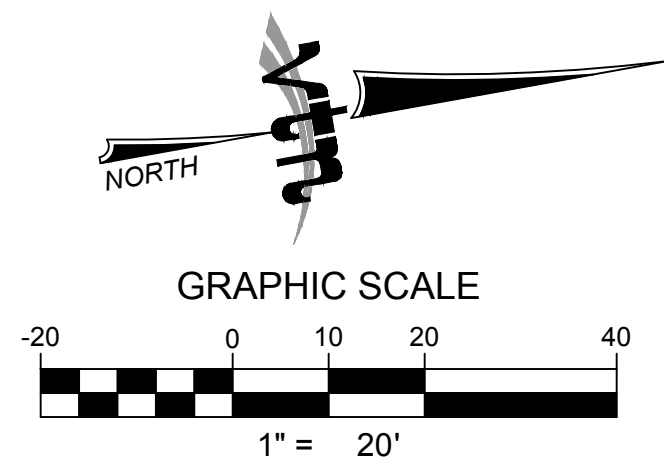
DATE: 08/22/2020
DATE: 08/22/2020
DATE: 08/22/2020
SCALE: 1"=20' HORIZ. VERT. N/A

WILLIAM J MEYER, P.E. No. 15745
SHEET GR8 OF 107 SHEETS
DRAWING NO. L20-01282 107V8449

SEE SHEET GR8 FOR CONTINUATION



SEE SHEET GR10 FOR CONTINUATION



CONSTRUCTION NOTES

- FUTURE 24" TYPE 'L' CURB & GUTTER
- FUTURE TYPE 'A' CURB
- FUTURE HANDICAP RAMP
- FUTURE SIDEWALK
- CONSTRUCT 24" TYPE 'L' CURB & GUTTER PER STD. DWG. 216.
- CONSTRUCT TYPE 'A' CURB PER STD. DWG. 219.
- CONSTRUCT HANDICAP RAMP SEE DETAIL ON SHEET DT 2, 3, 4 & 5
- SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
- FIELD VERIFY AND MATCH EXISTING
- CONSTRUCT APRON CURB SEE SHEET DT1

STORM DRAIN DROP INLET NOTE:

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OFFSITE FLOOD CONTROL NOTE:

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GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

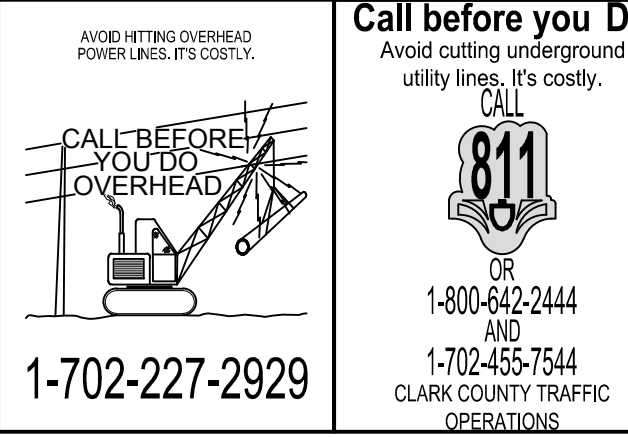
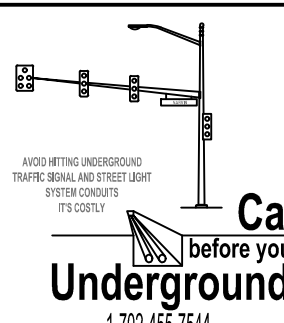
REFER TO SOILS REPORT: NOVA GEOTECHNICAL PROJECT #G-18-176, DATED DECEMBER 30, 2019

SIGHT VISIBILITY ZONES:

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ENGINEER DISCLAIMER NOTE:

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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, #DS050204

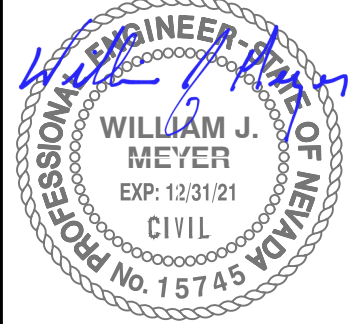
WILLIAM J MEYER, P.E. No. 15745 DATE

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

GRADING PLAN 9

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20'
HORIZ. VERT. N/A

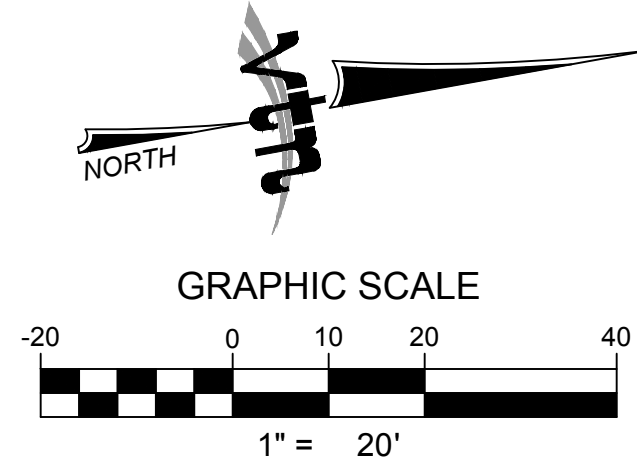


2020-09-25
SHEET
GR9
28 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

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APN:137-23-210-001
PARCEL B
FINAL MAP
BOOK _____
PAGE _____

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	FUTURE 24' TYPE "L" CURB & GUTTER
	FUTURE TYPE "A" CURB
	FUTURE HANDICAP RAMP
	FUTURE SIDEWALK
	CONSTRUCT 24' TYPE "L" CURB & GUTTER PER STD. DWG. 216.
	CONSTRUCT TYPE "A" CURB PER STD. DWG. 219.
	CONSTRUCT HANDICAP RAMP SEE DETAIL ON SHEET DT 2, 3, 4 & 5
	SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.3
	FIELD VERIFY AND MATCH EXISTING
	CONSTRUCT APRON CURB SEE SHEET DT1

ALL STORM DRAIN INLETS SHALL INCLUDE A STORM WATER
INLET CONCRETE STAMP IN ACCORDANCE WITH CCAUSD DWG
NO. 421

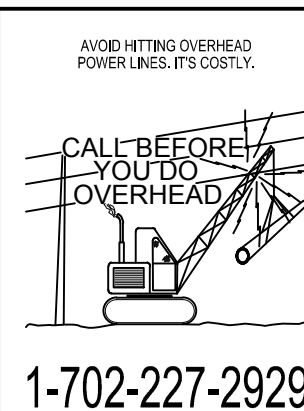
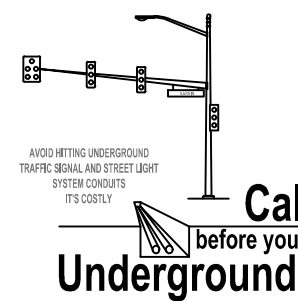
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REFER TO SOILS REPORT: NOVA GEOTECHNICAL
PROJECT #G-18-176, DATED DECEMBER 30, 2019

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AND
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APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH
CITY OF LAS VEGAS, #DS05204

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

GRADING PLAN 12

**SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE**

DRAWN BY:		BCC		08/25/2020	
DESIGNED BY:		BCC		08/25/2020	
CHECKED BY:		WJM		08/28/2020	
PROJECT NO:		7861		SCALE: 1"=20'	
				HORIZ. VER.	



SHEET
GR12
31 OF 107 SHEETS

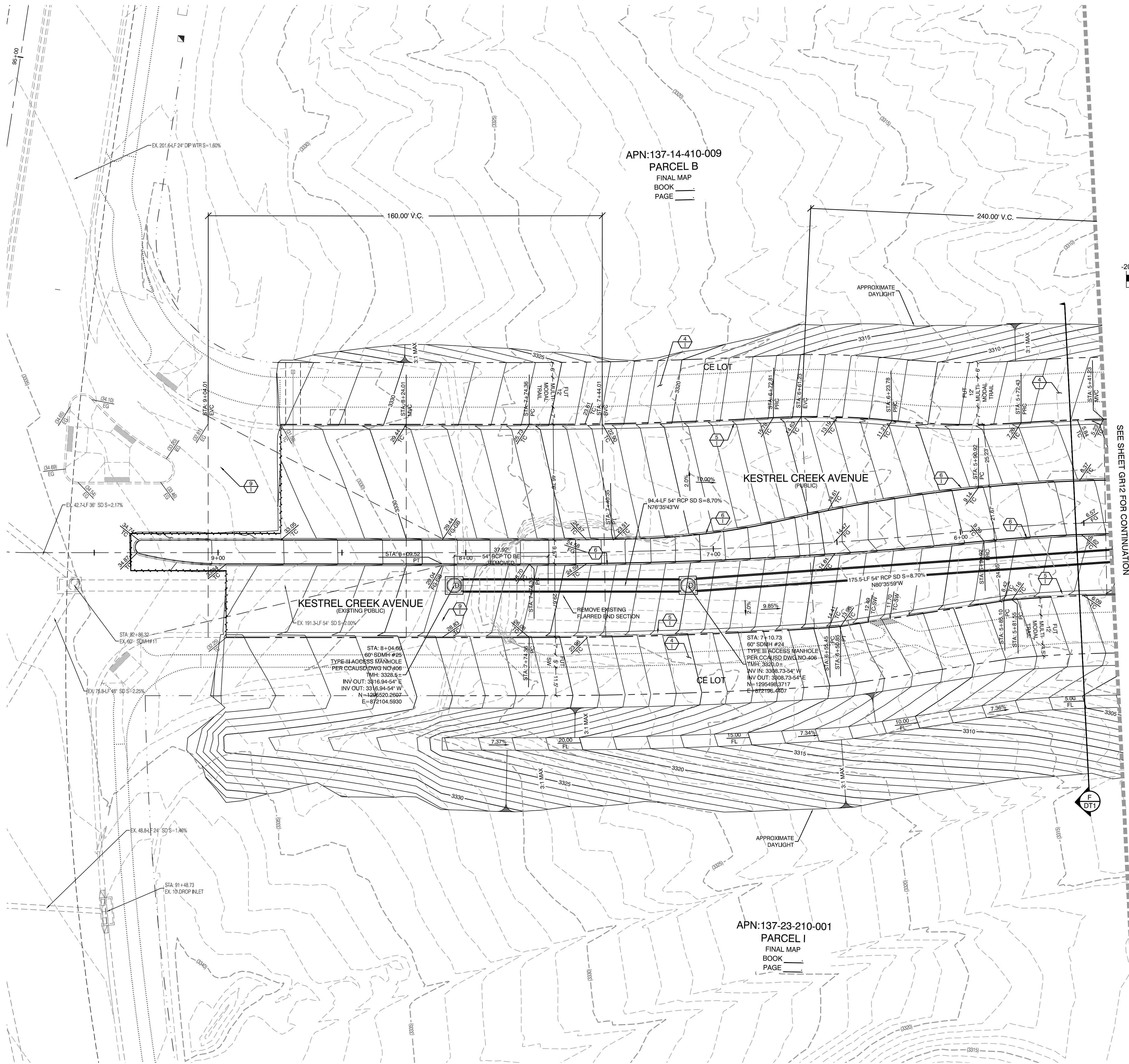
DRAWING NO.
L20-01282
107V8449

NY
CITY OF LAS VEGAS

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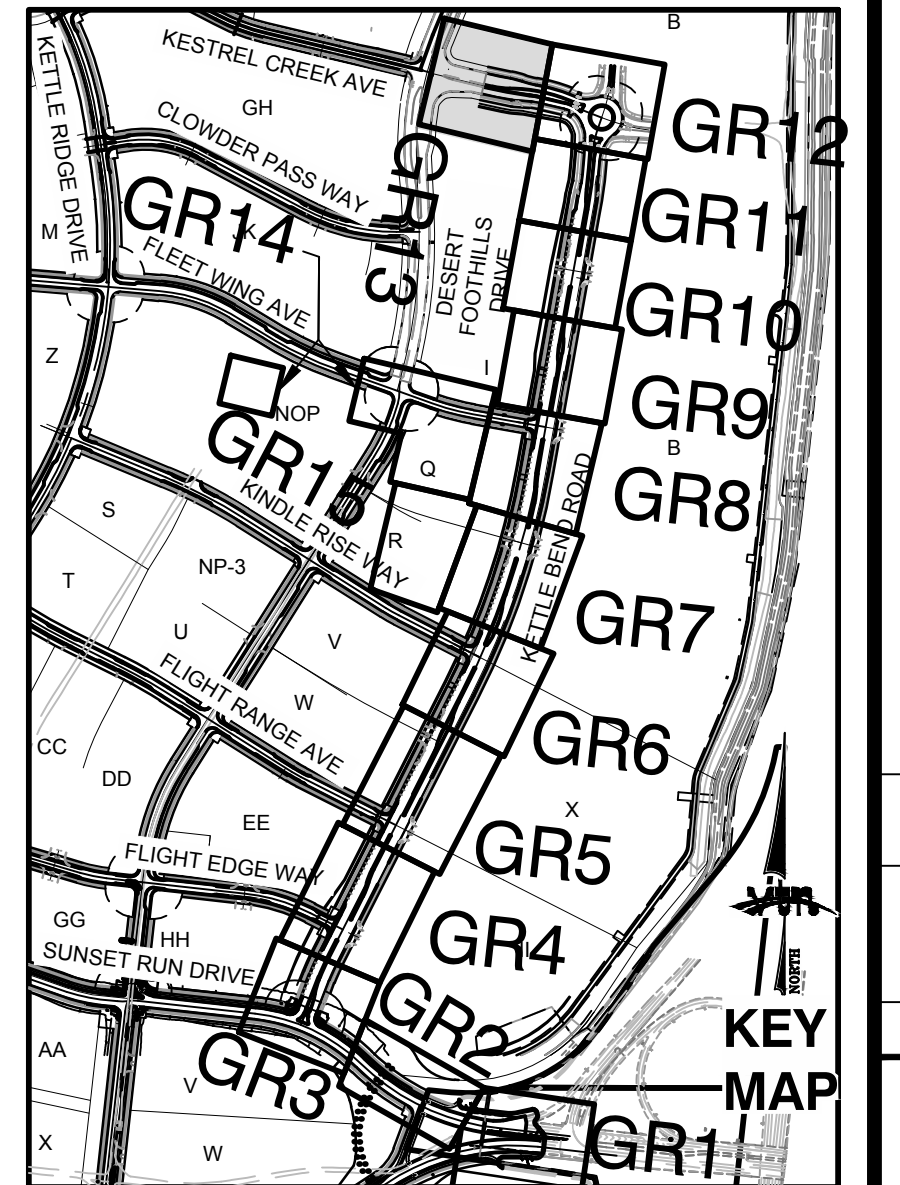
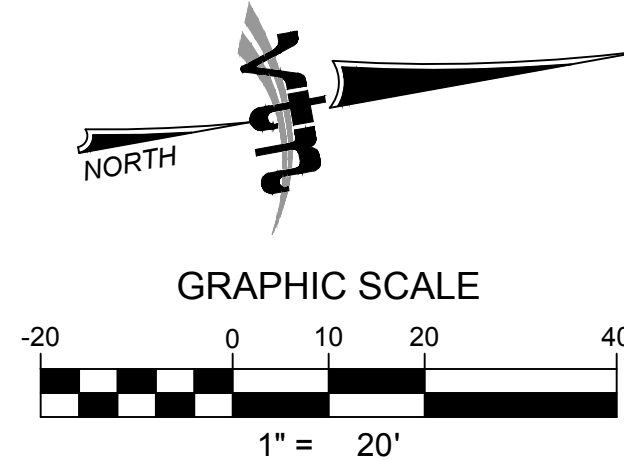


7861



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BOOK _____
PAGE _____

APN:137-23-210-001
PARCEL I
FINAL MAP
BOOK _____
PAGE _____



CONSTRUCTION NOTES

- FUTURE 24" TYPE "L" CURB & GUTTER
- FUTURE TYPE "A" CURB
- FUTURE HANDICAP RAMP
- FUTURE SIDEWALK
- CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
- CONSTRUCT TYPE "A" CURB PER STD. DWG. 219.
- CONSTRUCT HANDICAP RAMP SEE DETAIL ON SHEET DT 2, 3, 4 & 5
- SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
- FIELD VERIFY AND MATCH EXISTING
- CONSTRUCT APRON CURB SEE SHEET DT1

STORM DRAIN DROP INLET NOTE:

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OFFSITE FLOOD CONTROL NOTE:

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GRADING PERMIT NOTE

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GEOTECHNICAL NOTE:

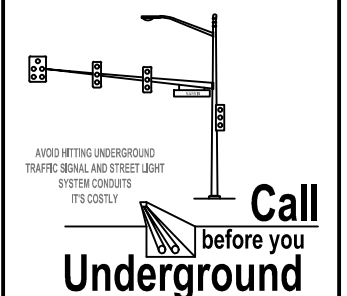
REFER TO SOILS REPORT: NOVA GEOTECHNICAL PROJECT #G-18-176, DATED DECEMBER 30, 2019

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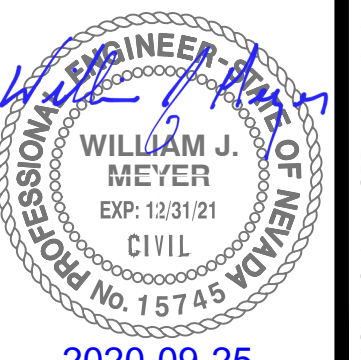
I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH CITY OF LAS VEGAS, #DS050204

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

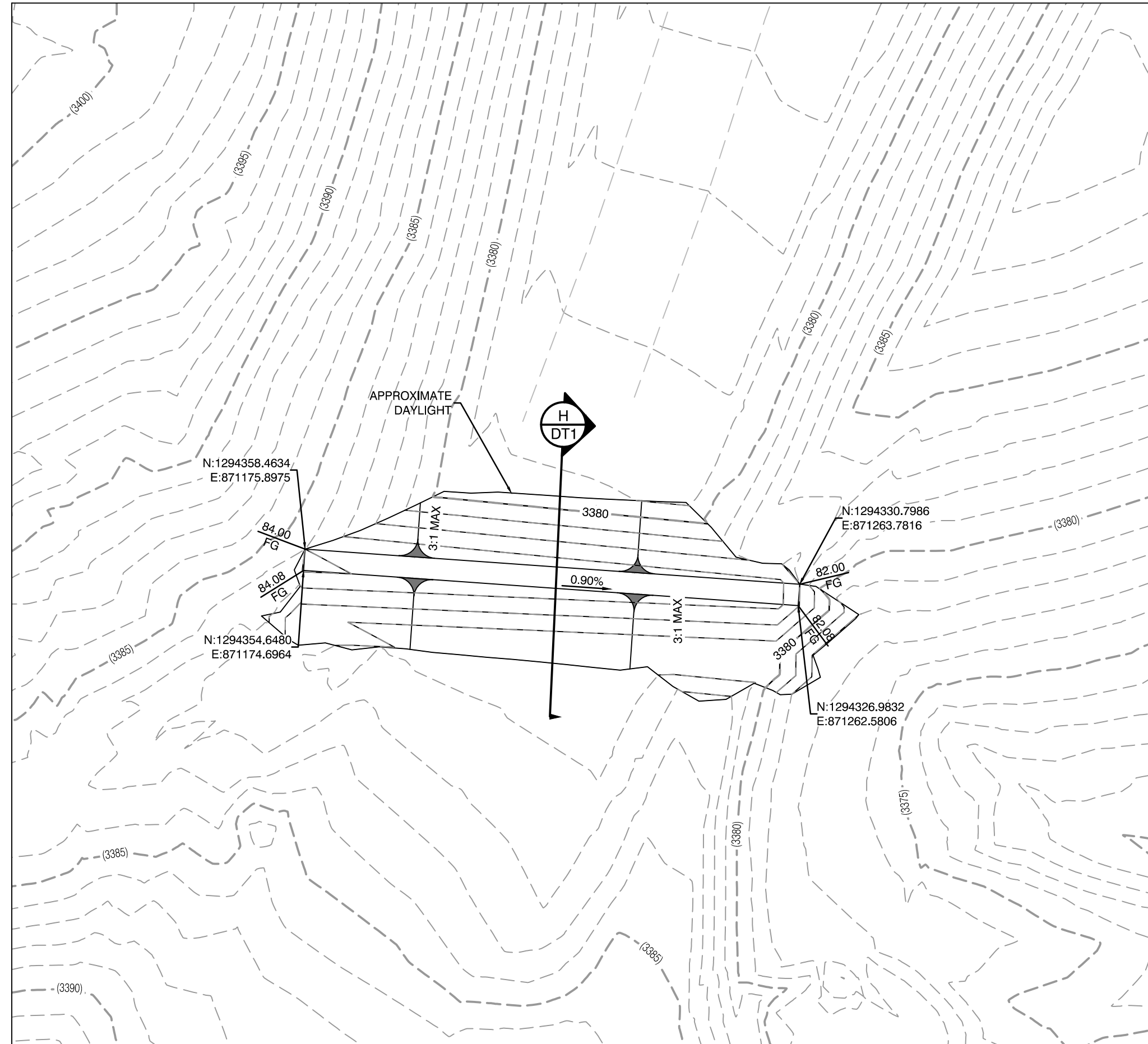
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 793-7550 FAX: (702) 382-2587 WEB: WWW.VTINY.COM
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GRADING PLAN 13
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

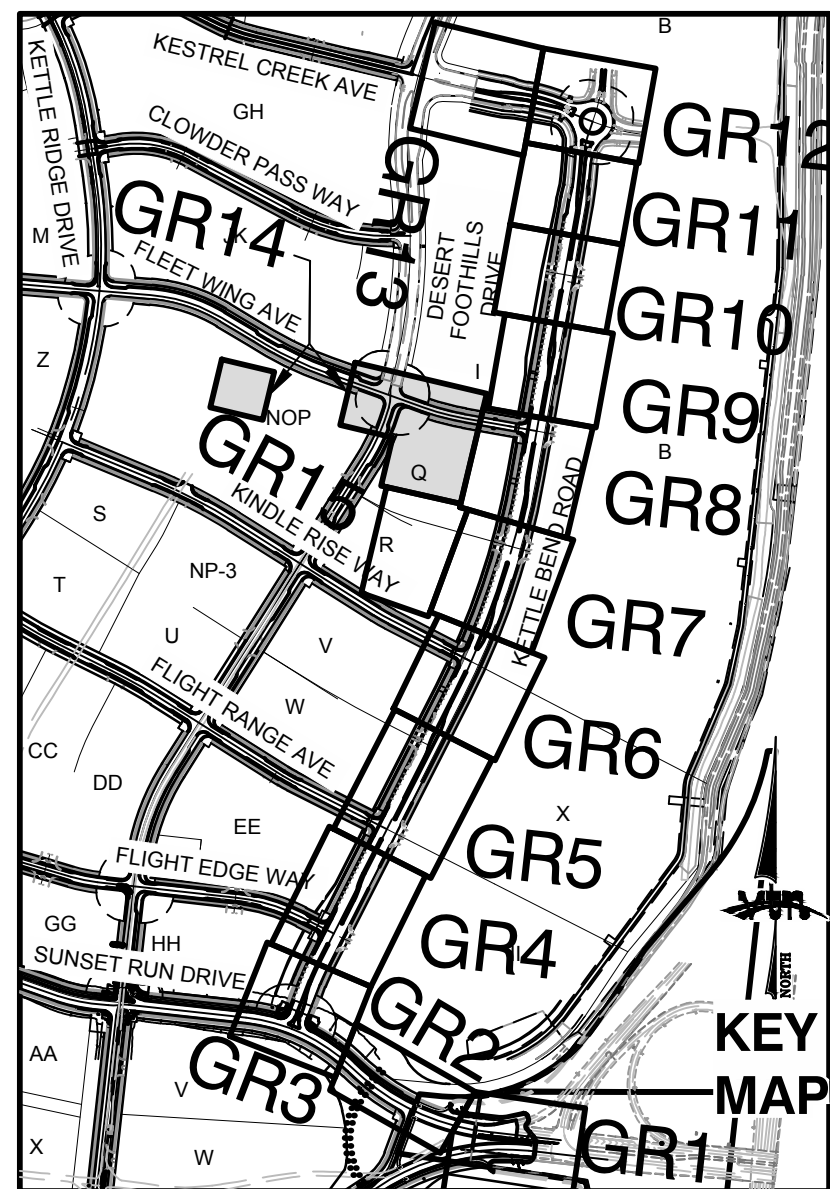
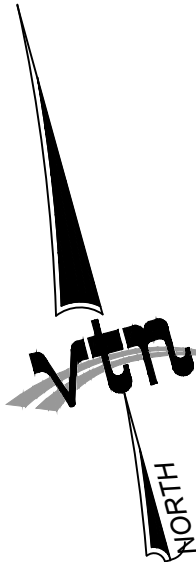
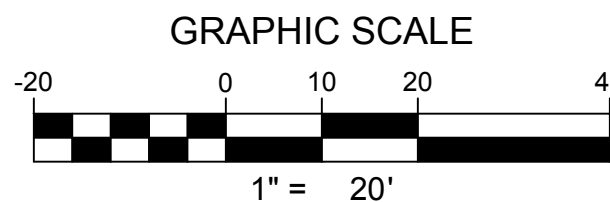
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DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20'
HORIZ: N/A
VERT: N/A



2020-09-25
SHEET
GR13
32 OF 107 SHEETS
DRAWING NO. L20-01282
107V8449



SEE SHEET GR15 FOR CONTINUATION



CONSTRUCTION NOTES

- | | |
|--|---|
| | FUTURE 24" TYPE "L" CURB & GUTTER |
| | FUTURE TYPE "A" CURB |
| | FUTURE HANDICAP RAMP |
| | FUTURE SIDEWALK |
| | CONSTRUCT 24" TYPE "L" CURB & GUTTER
PER STD. DWG. 216. |
| | CONSTRUCT TYPE "A" CURB PER STD. DWG. 219. |
| | CONSTRUCT HANDICAP RAMP
SEE DETAIL ON SHEET DT 2, 3, 4 & 5 |
| | SAWCUT AND REMOVE ASPHALT PAVING AND MATCH
WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503. |
| | FIELD VERIFY AND MATCH EXISTING |
| | CONSTRUCT APRON CURB SEE SHEET DT1 |

STORM DRAIN DROP INLET NOTE:

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INLET CONCRETE STAMP IN ACCORDANCE WITH CCAUSD DW
NO. 421

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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.

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:

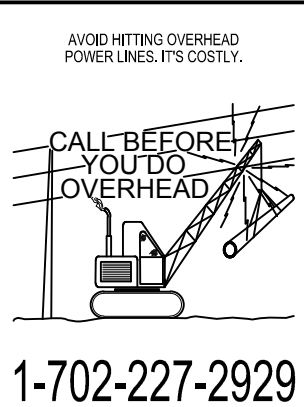
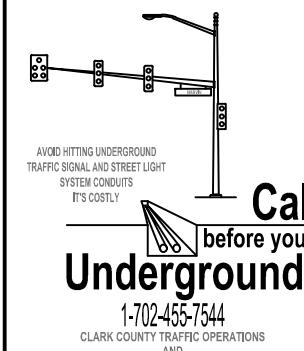
REFER TO SOILS REPORT: NOVA GEOTECHNICAL
PROJECT #G-18-176, DATED DECEMBER 30, 2019

SIGHT VISIBILITY ZONES:

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

ENGINEER DISCLAIMER NOTE:

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



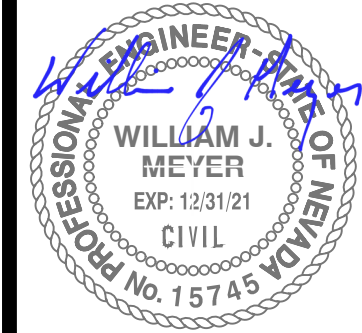
I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE
APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH
CITY OF LAS VEGAS, #DS05204

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

**HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY**
10845 GRIFFITH PEAK DRIVE, SUITE 100

GRADING PLAN 14

DRAWN BY: BCC	08/25/2020
DESIGNED BY: BCC	08/25/2020
CHECKED BY: WJM	08/28/2020
PROJECT NO: 7981	SCALE: 1"=20' N/A HORIZ. VERT.



2020-09-25
SHEET
GR14
33 OF 107 SHEETS

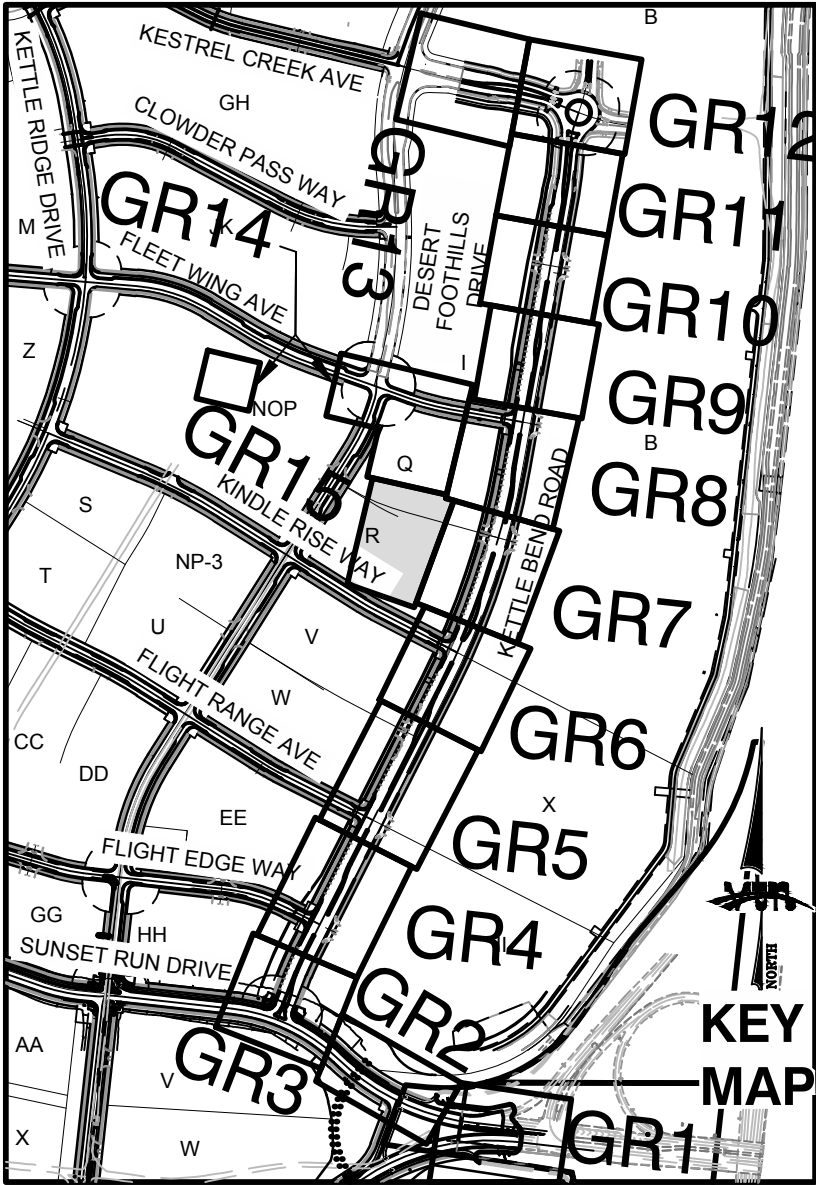
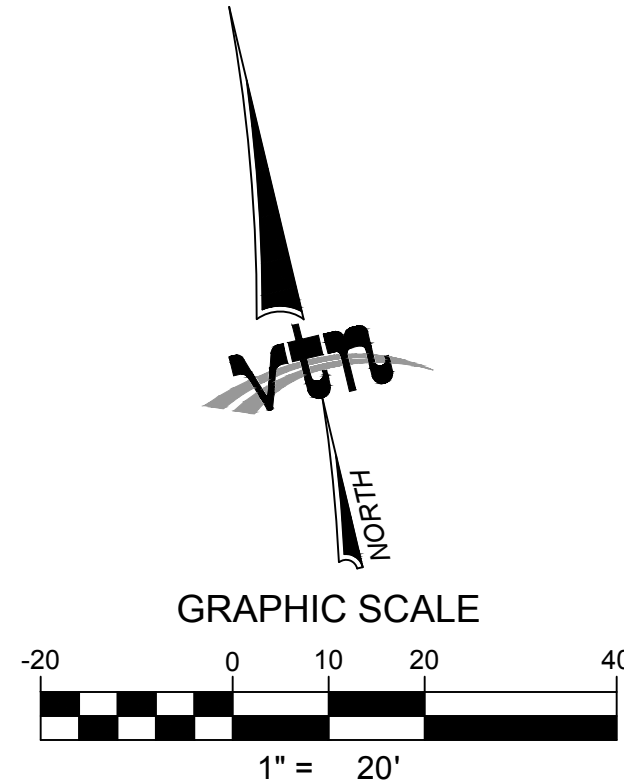
DRAWING NO.
L20-01282
107V8449

H:\7861\Kettle Bend Road\Sheet Set\7861-GRD-2.dwg;8/27/2020 2:45 PM;brandonc

SEE SHEET GR12 FOR CONTINUATION



SEE SHEET GR7 FOR CONTINUATION



CONSTRUCTION NOTES

- FUTURE 24" TYPE "L" CURB & GUTTER
- FUTURE TYPE "A" CURB
- FUTURE HANDICAP RAMP
- FUTURE SIDEWALK
- CONSTRUCT 24" TYPE "L" CURB & GUTTER PER STD. DWG. 216.
- CONSTRUCT TYPE "A" CURB PER STD. DWG. 219.
- CONSTRUCT HANDICAP RAMP SEE DETAIL ON SHEET DT 2, 3, 4 & 5
- SAWCUT AND REMOVE ASPHALT PAVING AND MATCH WITH NEW CONSTRUCTION PER CCAUSD #500.5 & #503.
- FIELD VERIFY AND MATCH EXISTING
- CONSTRUCT APRON CURB SEE SHEET DT1

STORM DRAIN DROP INLET NOTE:

ALL STORM DRAIN INLETS SHALL INCLUDE A STORM WATER INLET CONCRETE STAMP IN ACCORDANCE WITH CCAUSD DWG NO. 421

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.

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:

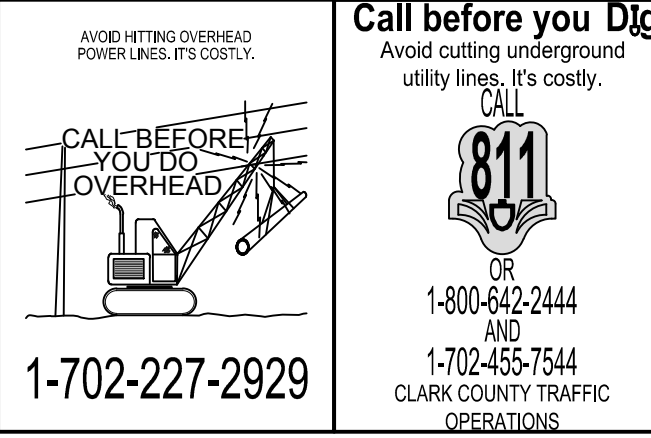
REFER TO SOILS REPORT: NOVA GEOTECHNICAL PROJECT #G-18-176, DATED DECEMBER 30, 2019

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:

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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, #DS050204

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

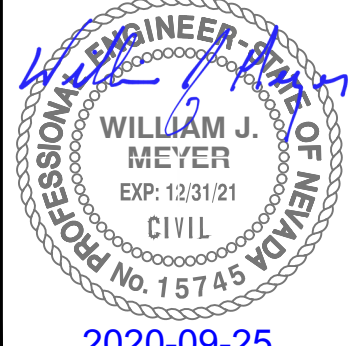
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89125
702.791.4000

CITY OF LAS VEGAS

GRADING PLAN 15

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

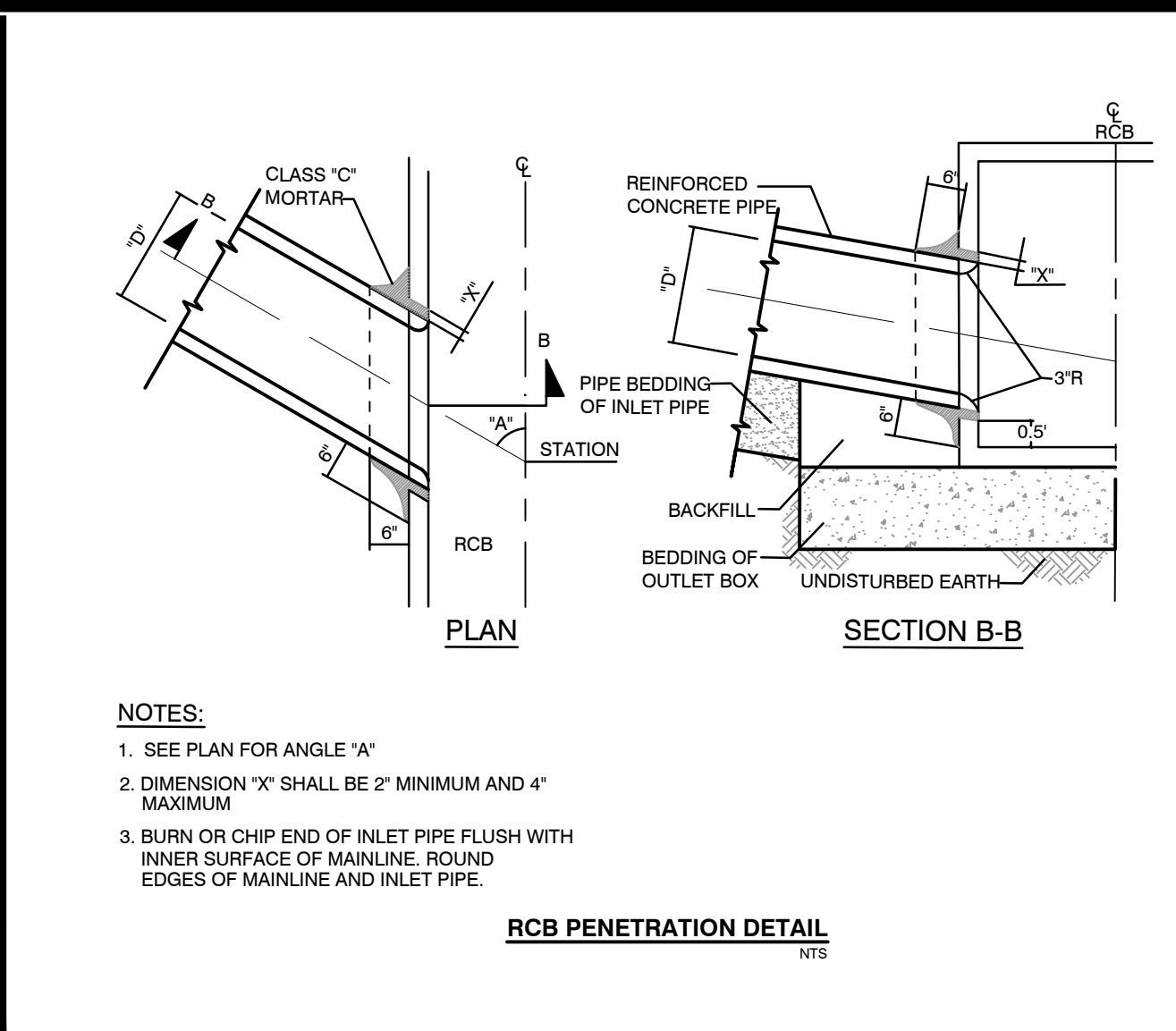
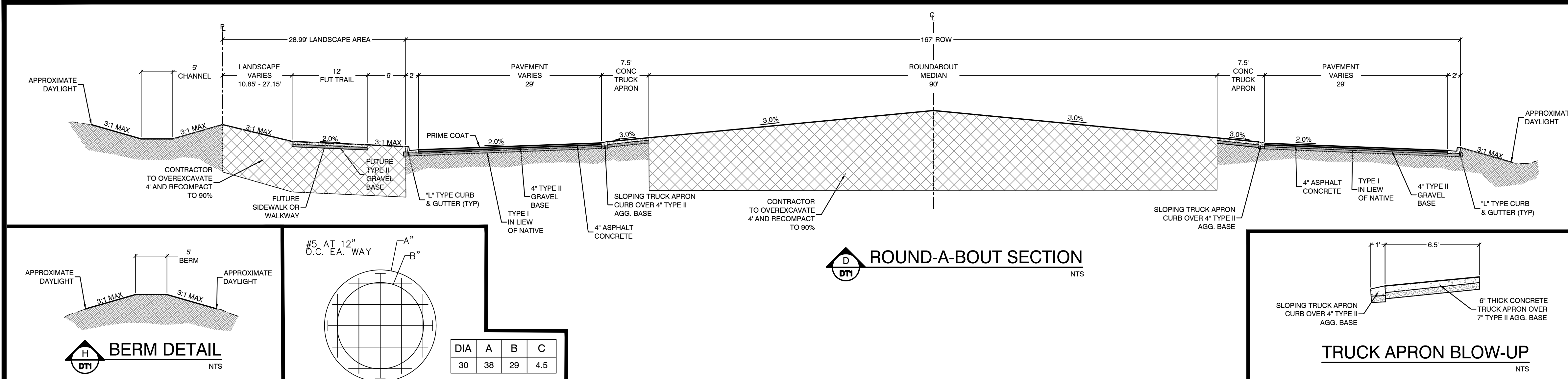
DRAWN BY: BCC	08/25/2020
DESIGNED BY: BCC	08/25/2020
CHECKED BY: WJM	08/28/2020
PROJECT NO: 7861	SCALE: 1"=20'
	HORIZ. VERT.
	N/A



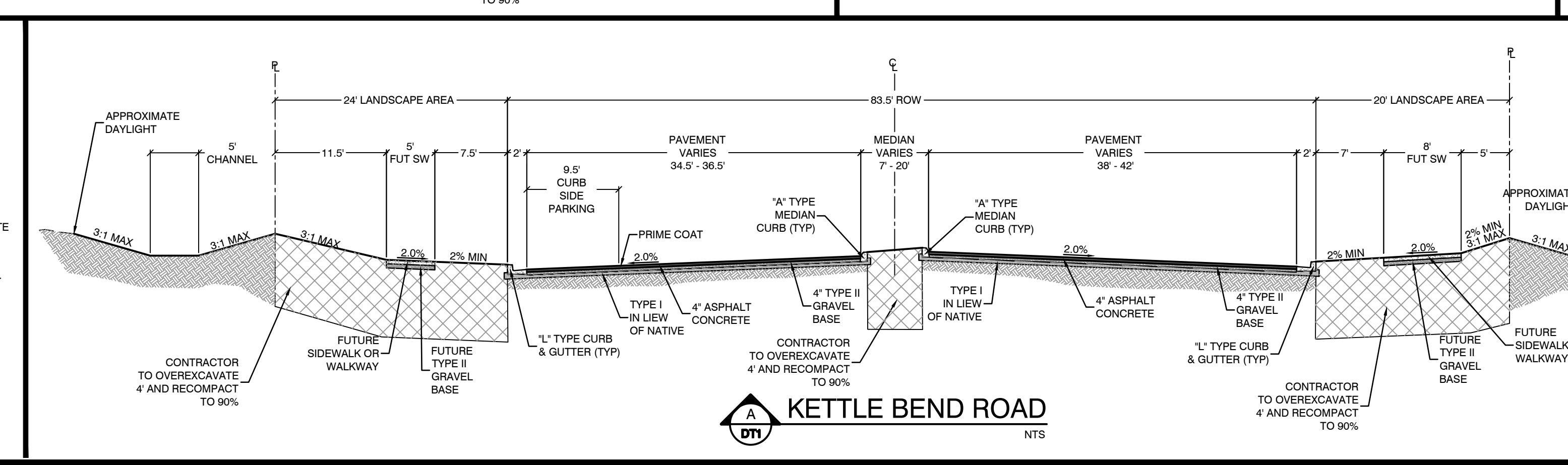
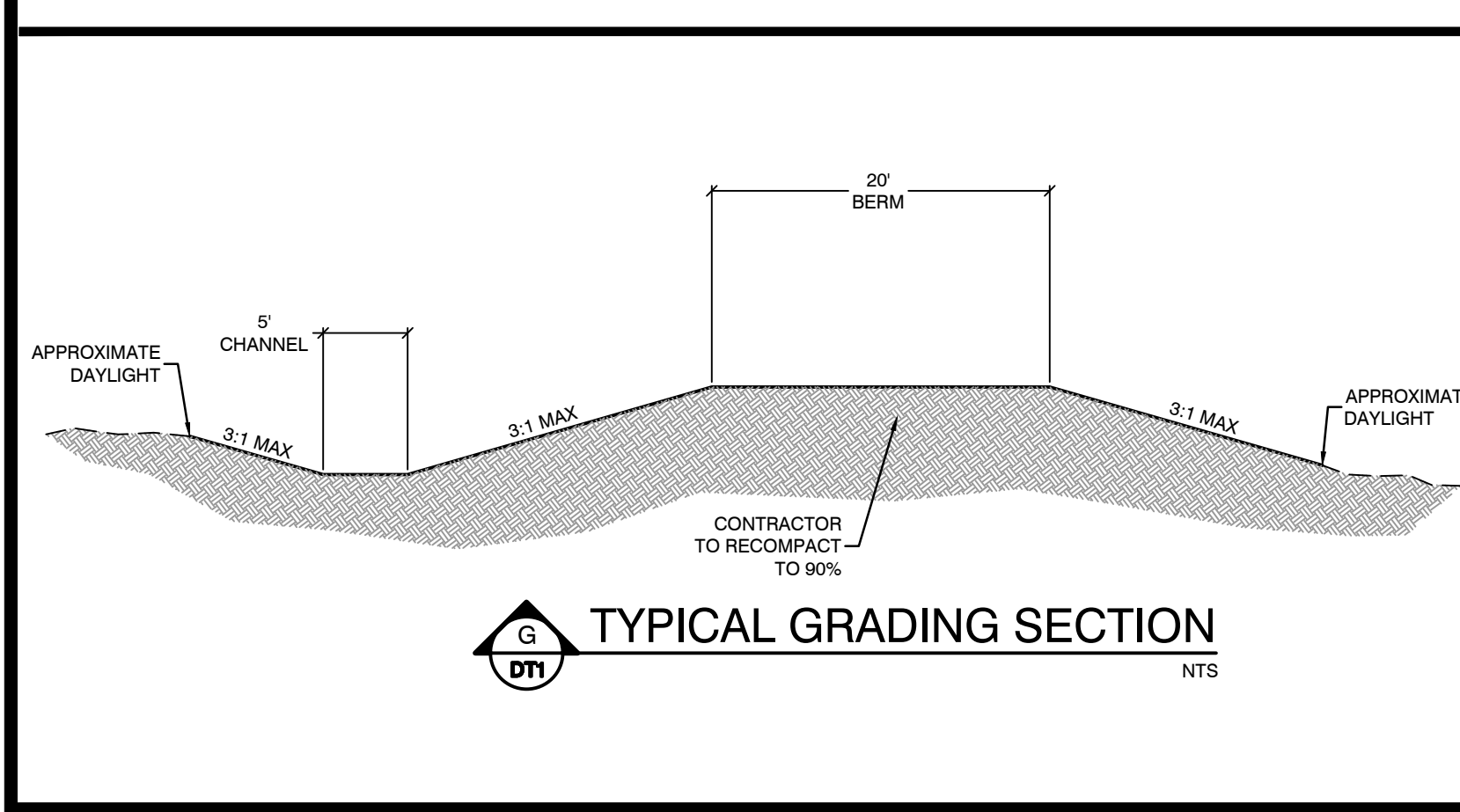
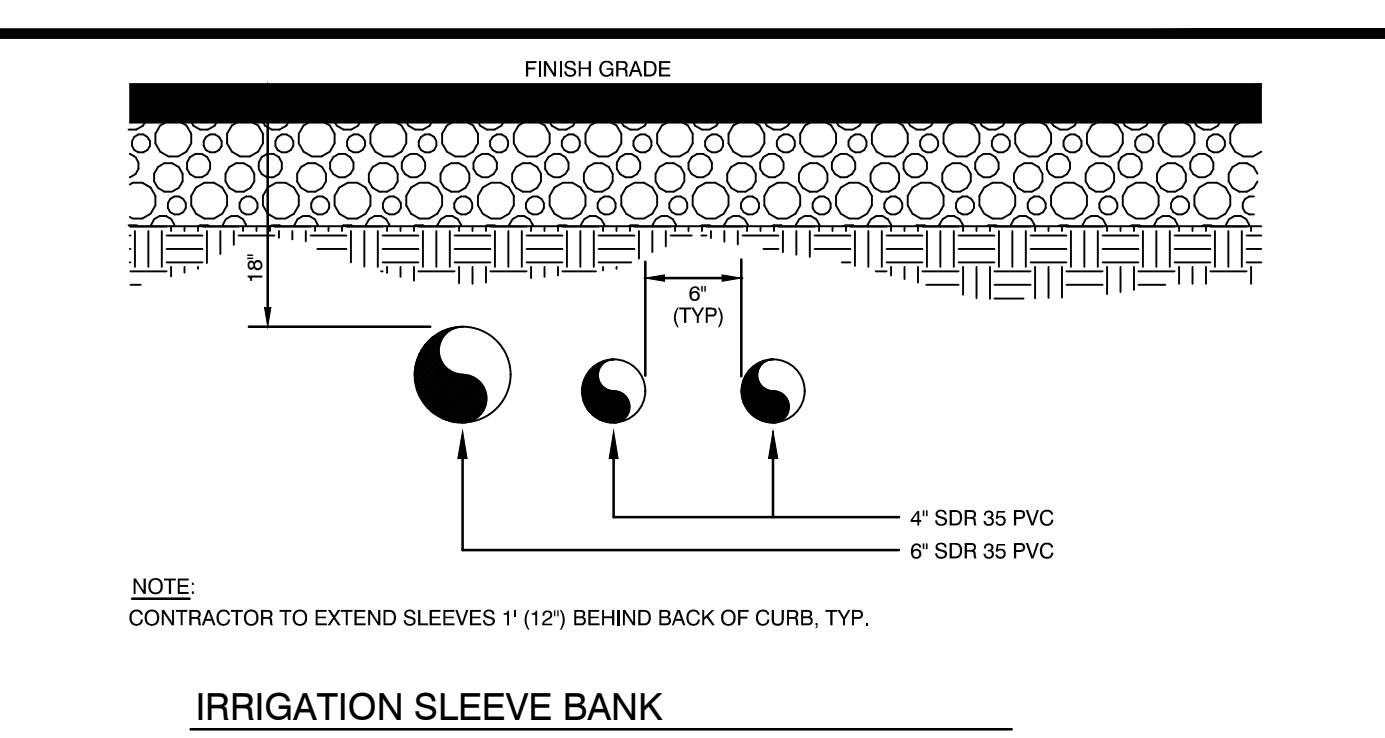
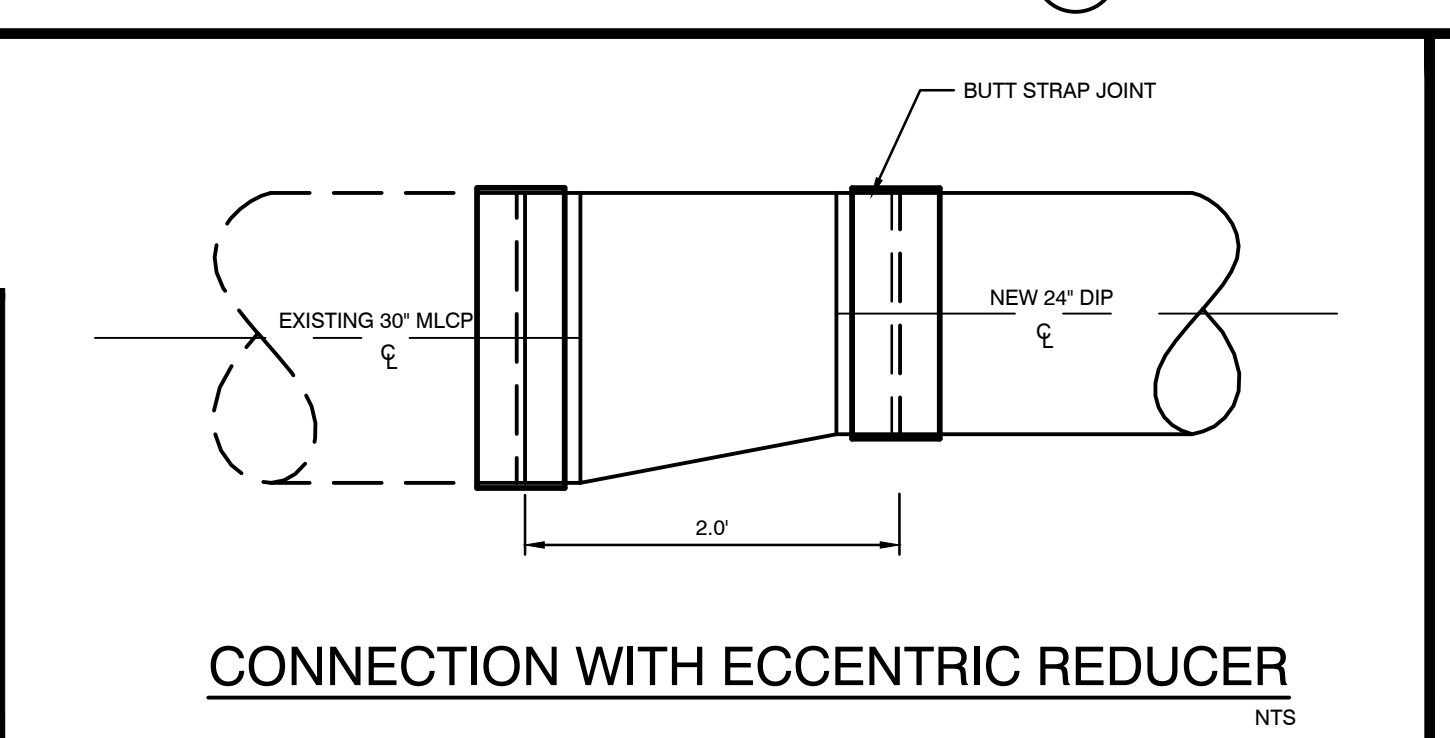
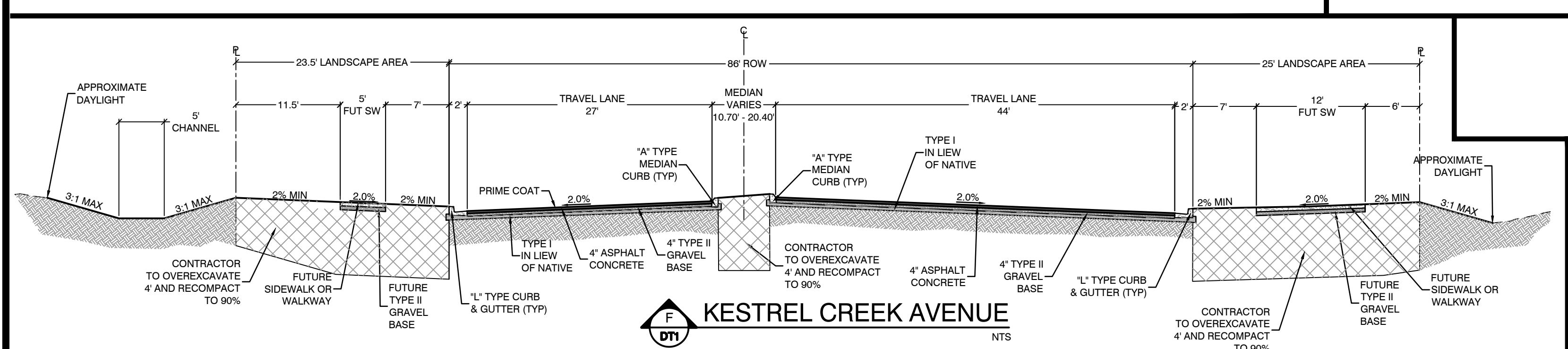
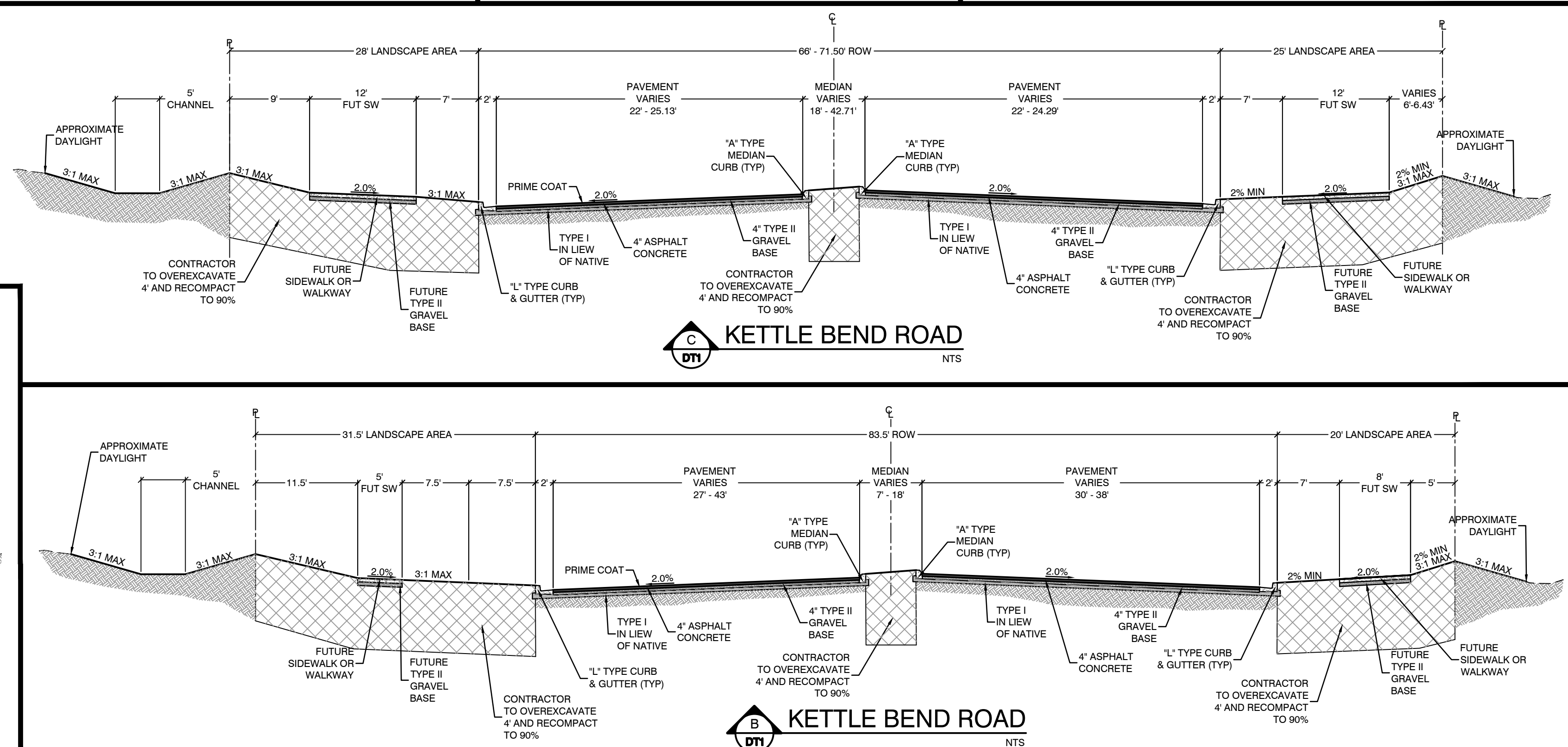
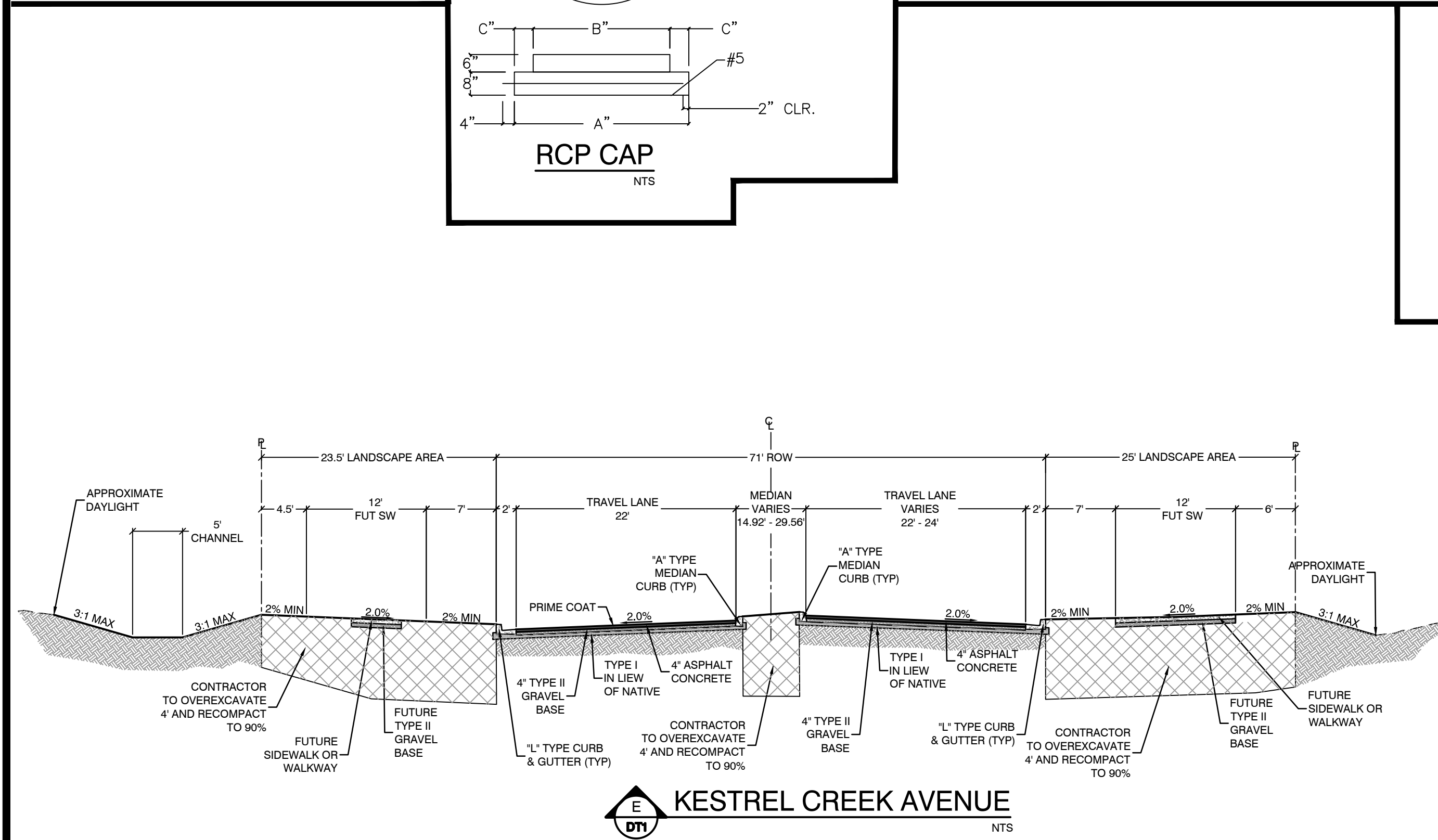
2020-09-25

SHEET
GR15
34 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449



- NOTES:
1. SEE PLAN FOR ANGLE 'A'
 2. DIMENSION 'X' SHALL BE 2" MINIMUM AND 4" MAXIMUM
 3. BURN OR CHIP END OF INLET PIPE FLUSH WITH INNER SURFACE OF MAINLINE. ROUND EDGES OF MAINLINE AND INLET PIPE.



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE: _____

2020-09-25

SHEET DT1 35 OF 107 SHEETS

DRAWING NO. L20-01282 107W4449

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

CITY OF LAS VEGAS

227 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 973-7550 FAX: (702) 382-2587 WEB: WWW.VTNNY.COM
CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS

DETAIL SHEET 1

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 08/04/2019

DESIGNED BY: BCC 08/04/2019

CHECKED BY: WJM 08/28/2020

PROJECT NO: 7861

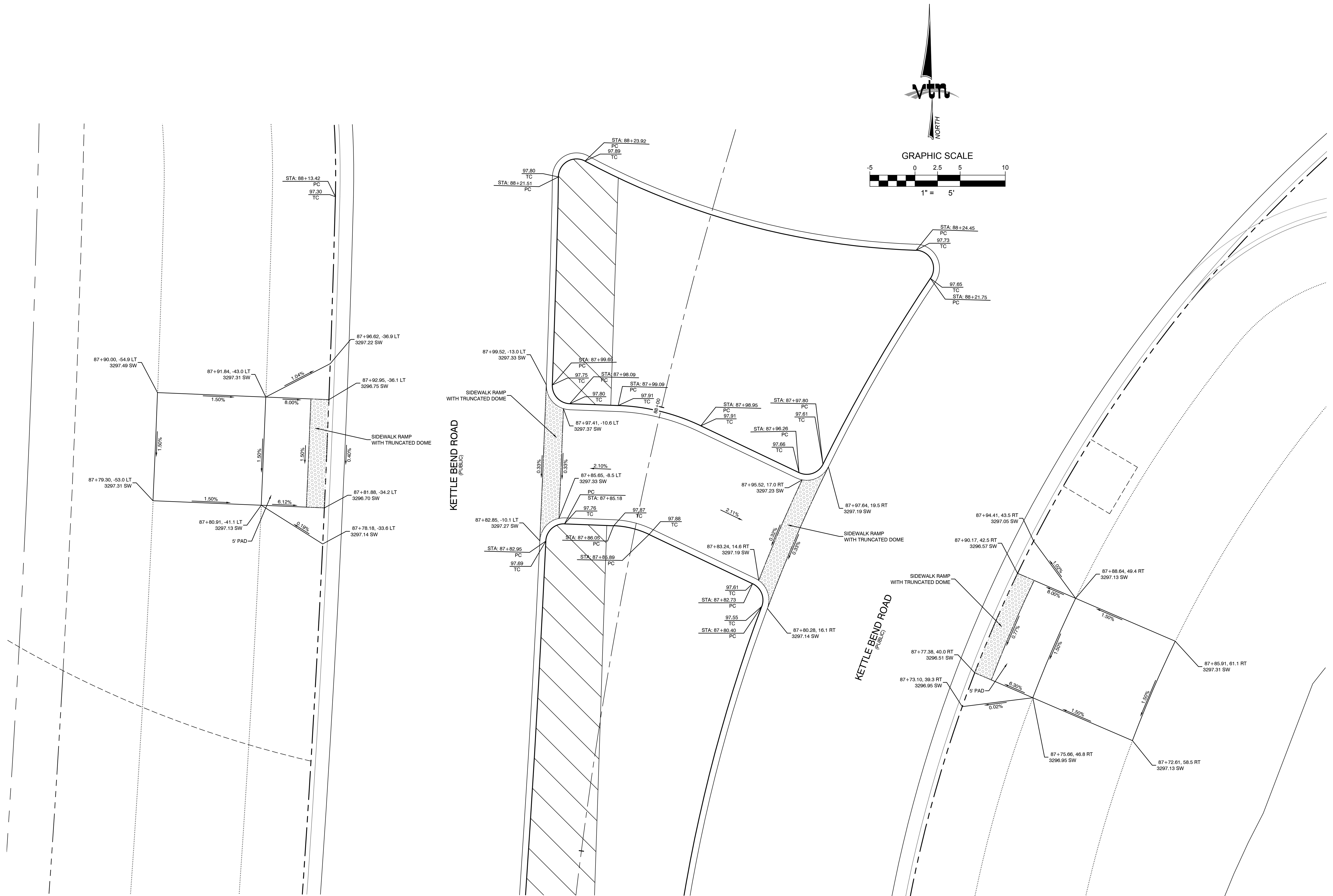
SCALE: HORIZ. VERT. N/A

2020-09-25

WILLIAM J. MEYER
EXP: 12/31/21
CIVIL

PROFESSIONAL ENGINEER

137333 Kettle Bend Road Sheet 35 of 107 DT 1 Aug 30, 2020 8:24 AM Brandon

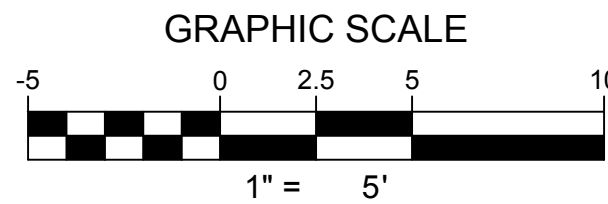
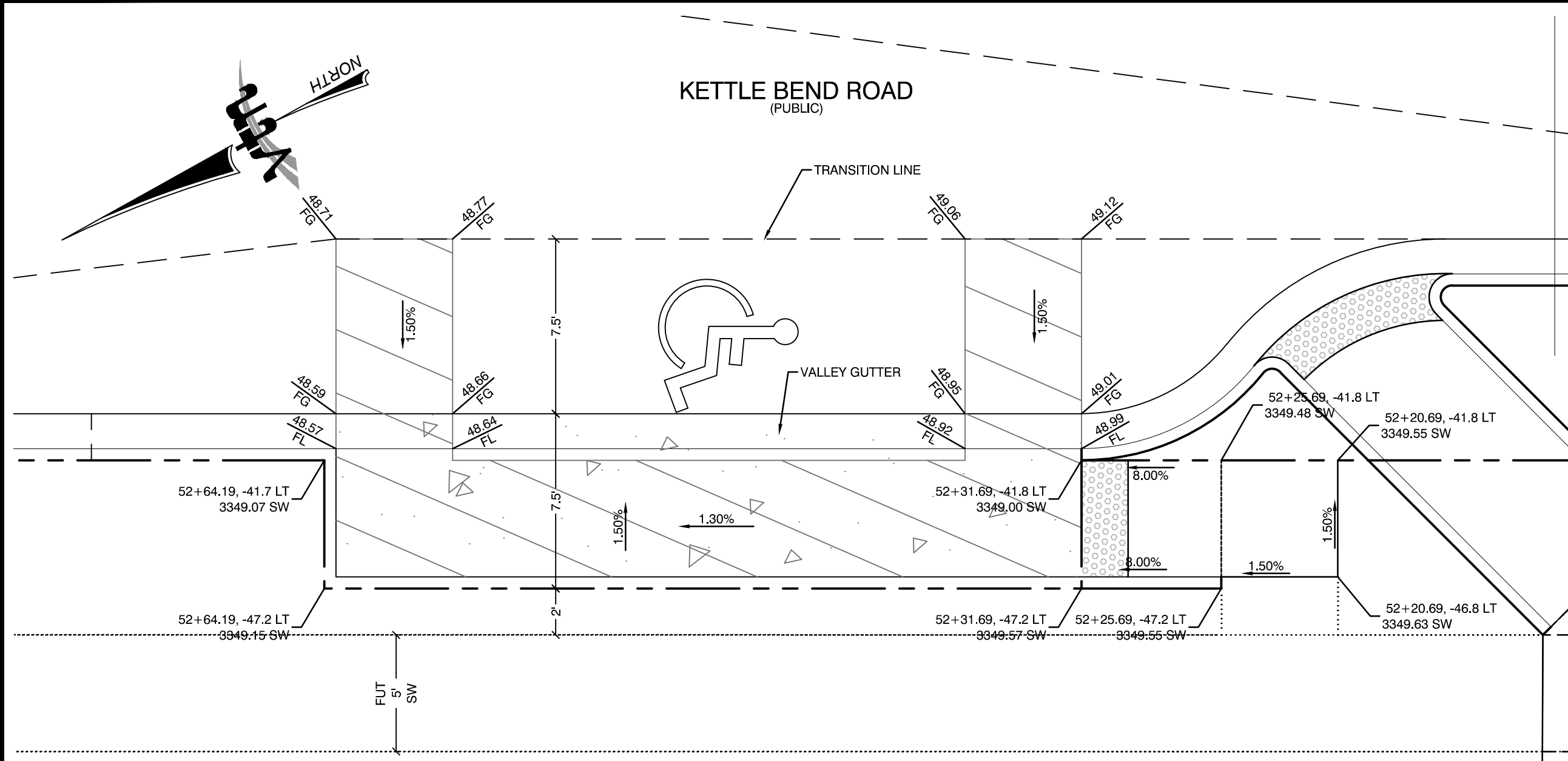


KETTLE BEND ROAD MEDIAN HANDICAP RAMPS

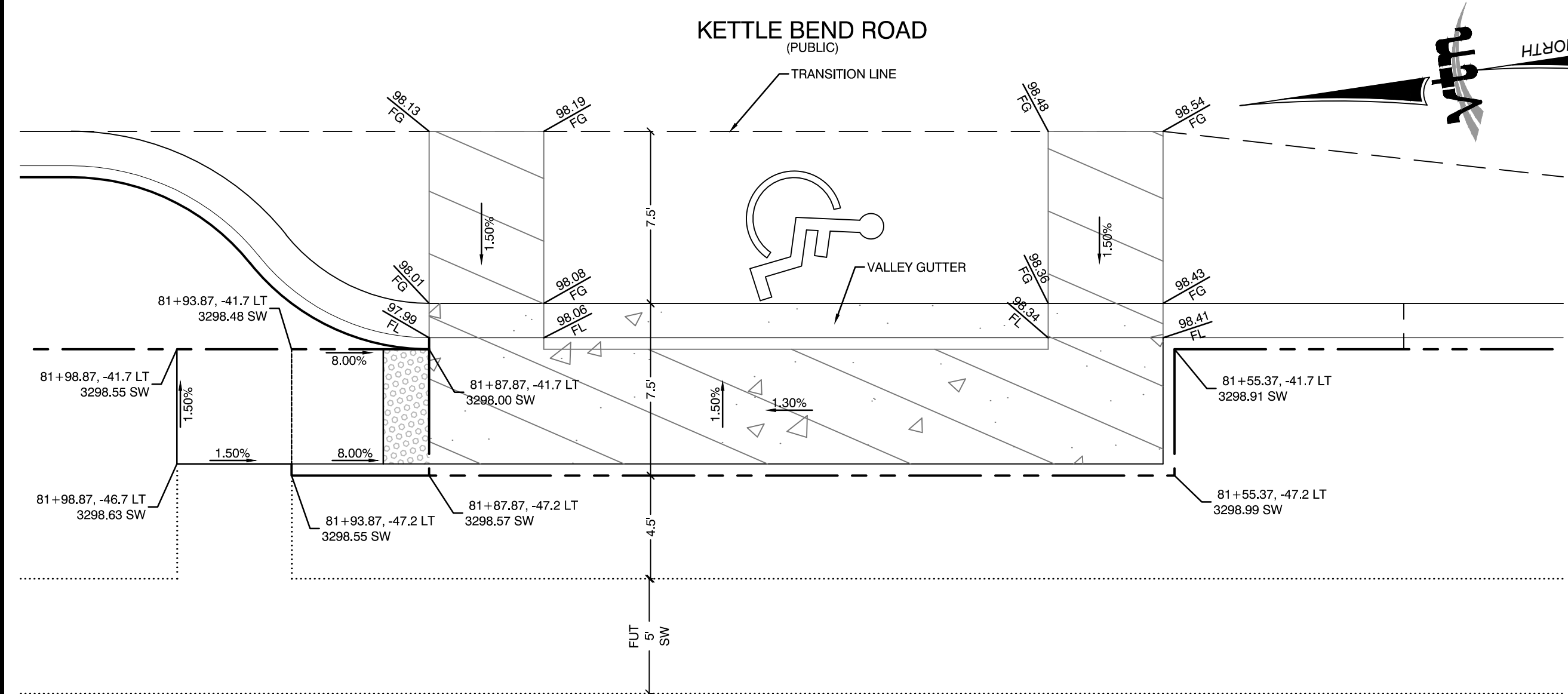
NTS

DRAWN BY: BCC		DESIGNED BY: BCC		CHECKED BY: WJM		PROJECT NO: 7861		SCALE: 1"=5'		HORIZ. VERT.	
08/04/2019		08/04/2019		08/28/2020		2020-09-25					
PROFESSIONAL ENGINEER WILLIAM J. MEYER EXP. 12/31/21 CIVIL NO. 15745 2020-09-25 SHEET DT2 36 OF 107 SHEETS DRAWING NO. L20-01282 107V8449											
HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10885 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) 793-7550 FAX: (702) 382-2587 WWW.VTNV.COM CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS					
DETAIL SHEET 2						SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE					
REV						DATE					
BY						REVISION					

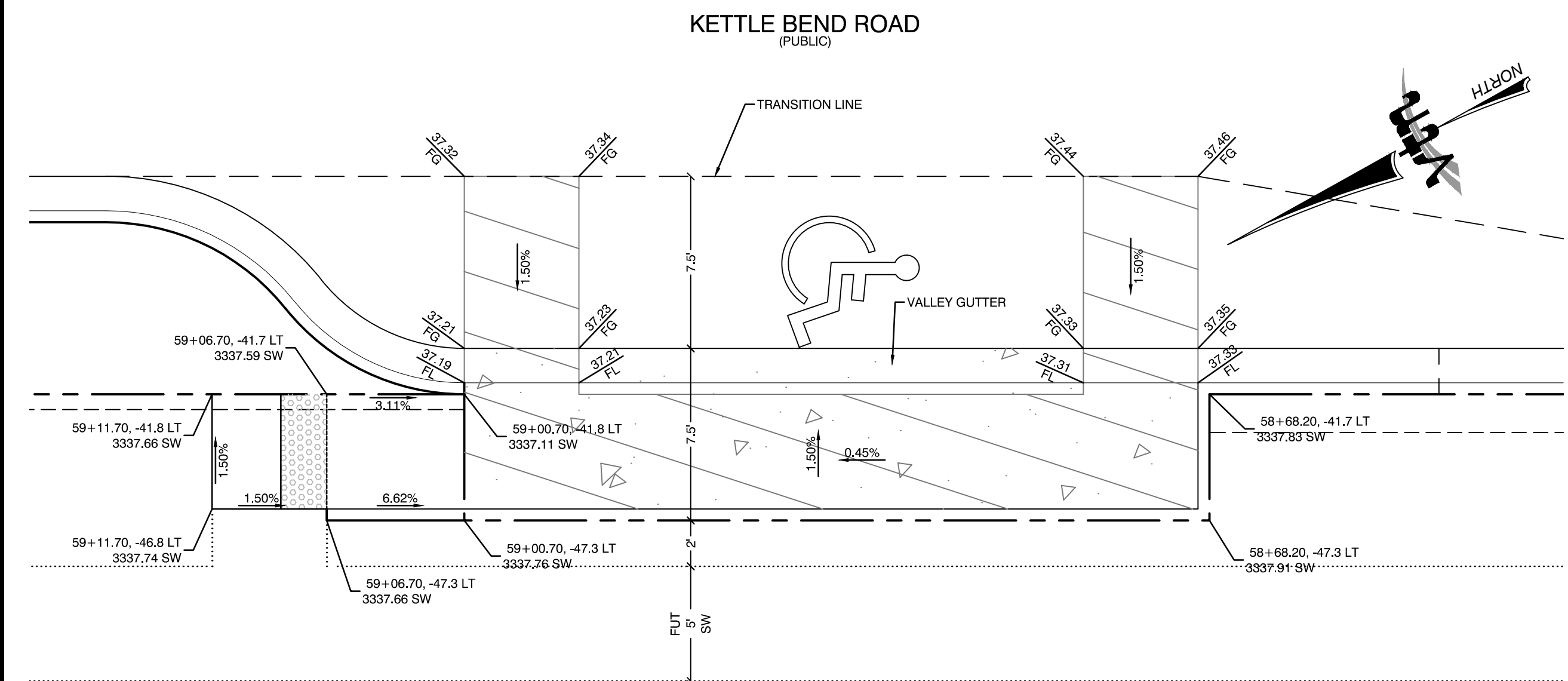
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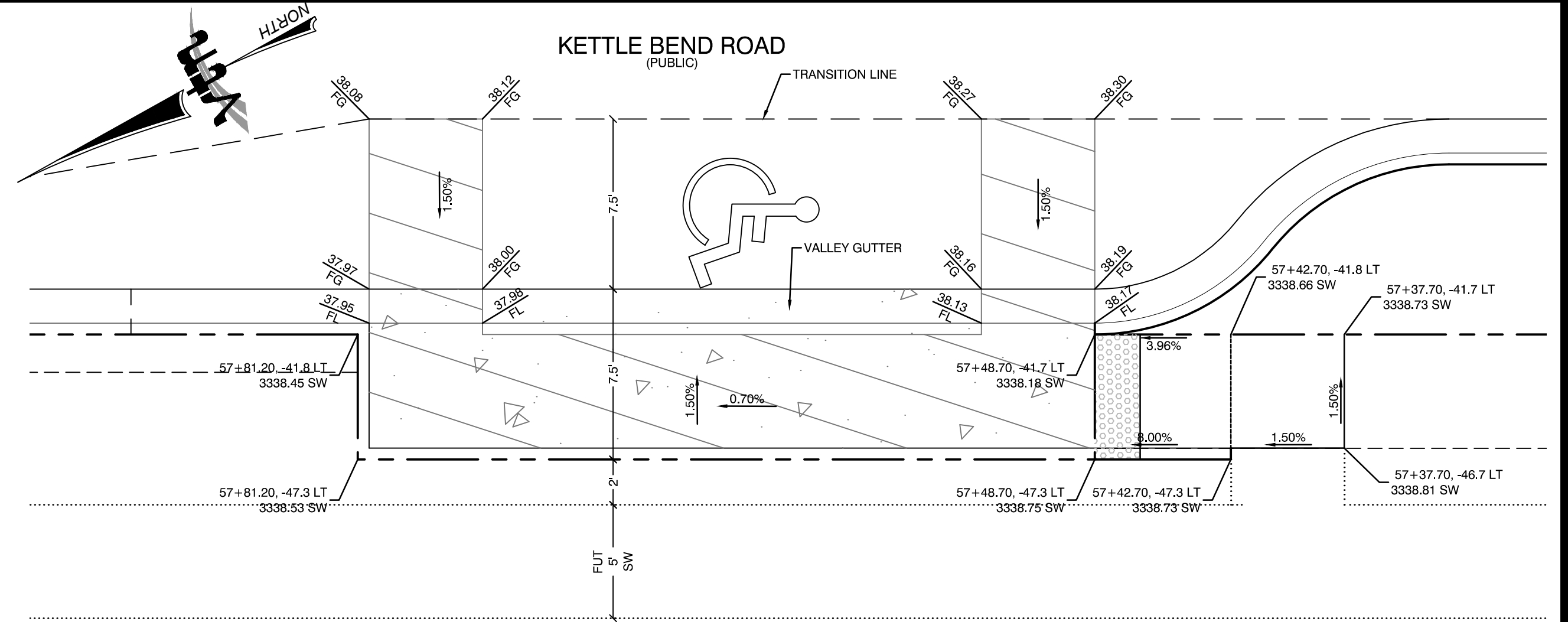
KETTLE BEND ROAD HANDICAP PARKING RAMP
NTS



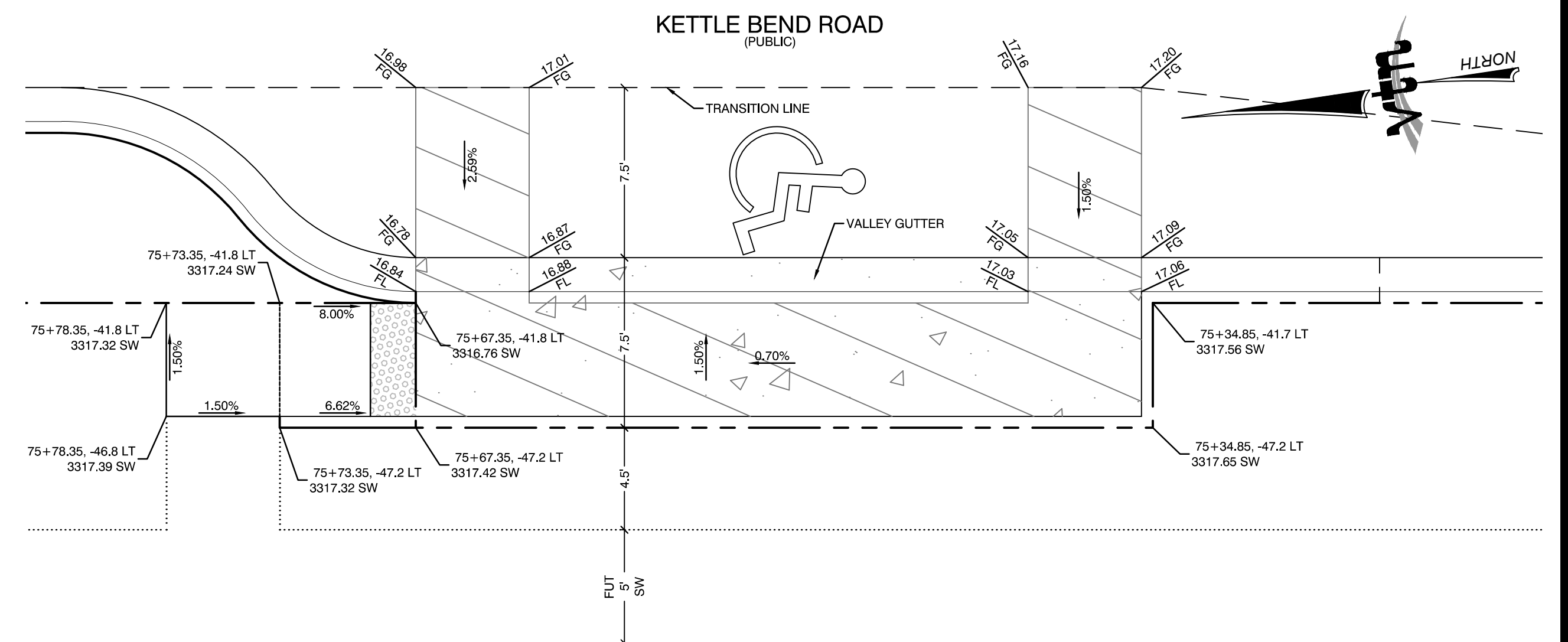
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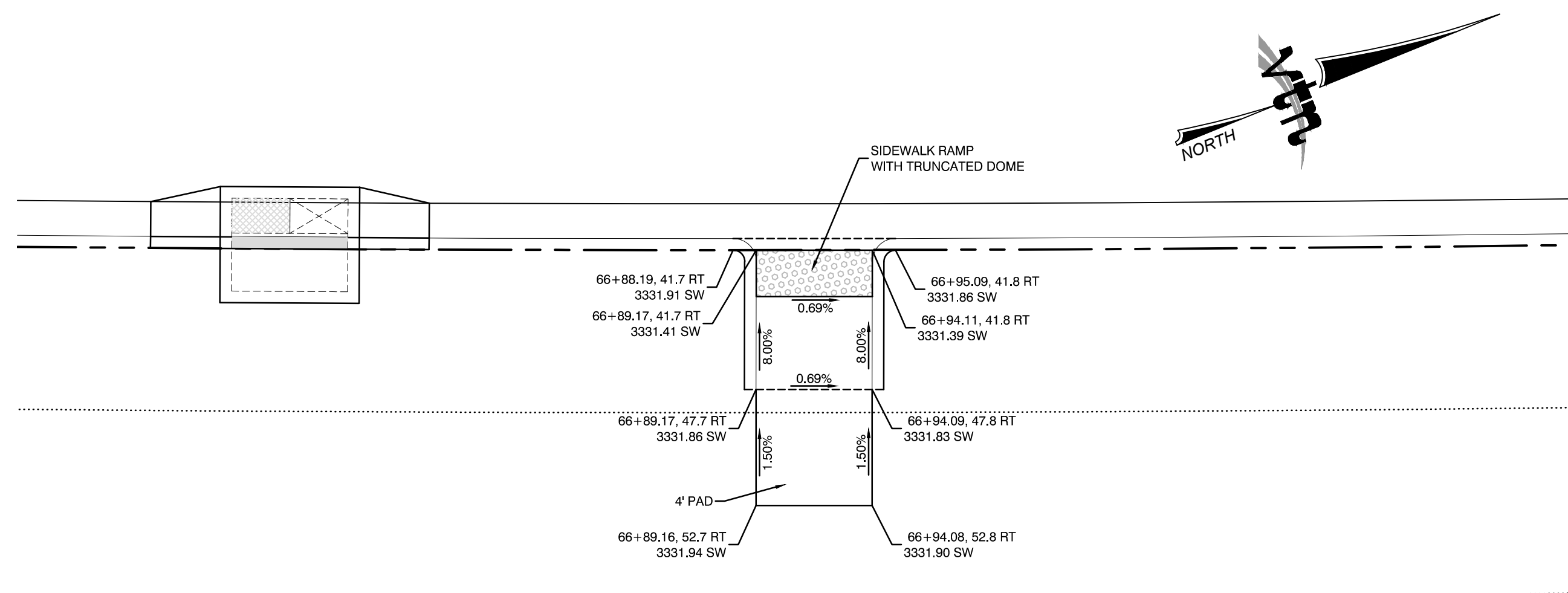
KETTLE BEND ROAD HANDICAP PARKING RAMP
NTS



KETTLE BEND ROAD HANDICAP PARKING RAMP
NTS



KETTLE BEND ROAD HANDICAP PARKING RAMP
NTS



KETTLE BEND ROAD MEDIAN HANDICAP RAMP
NTS

REV	DATE	BY	REVISION

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10815 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) 793-7550 FAX: (702) 382-2587
WWW.VTNV.COM
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DETAIL SHEET 4

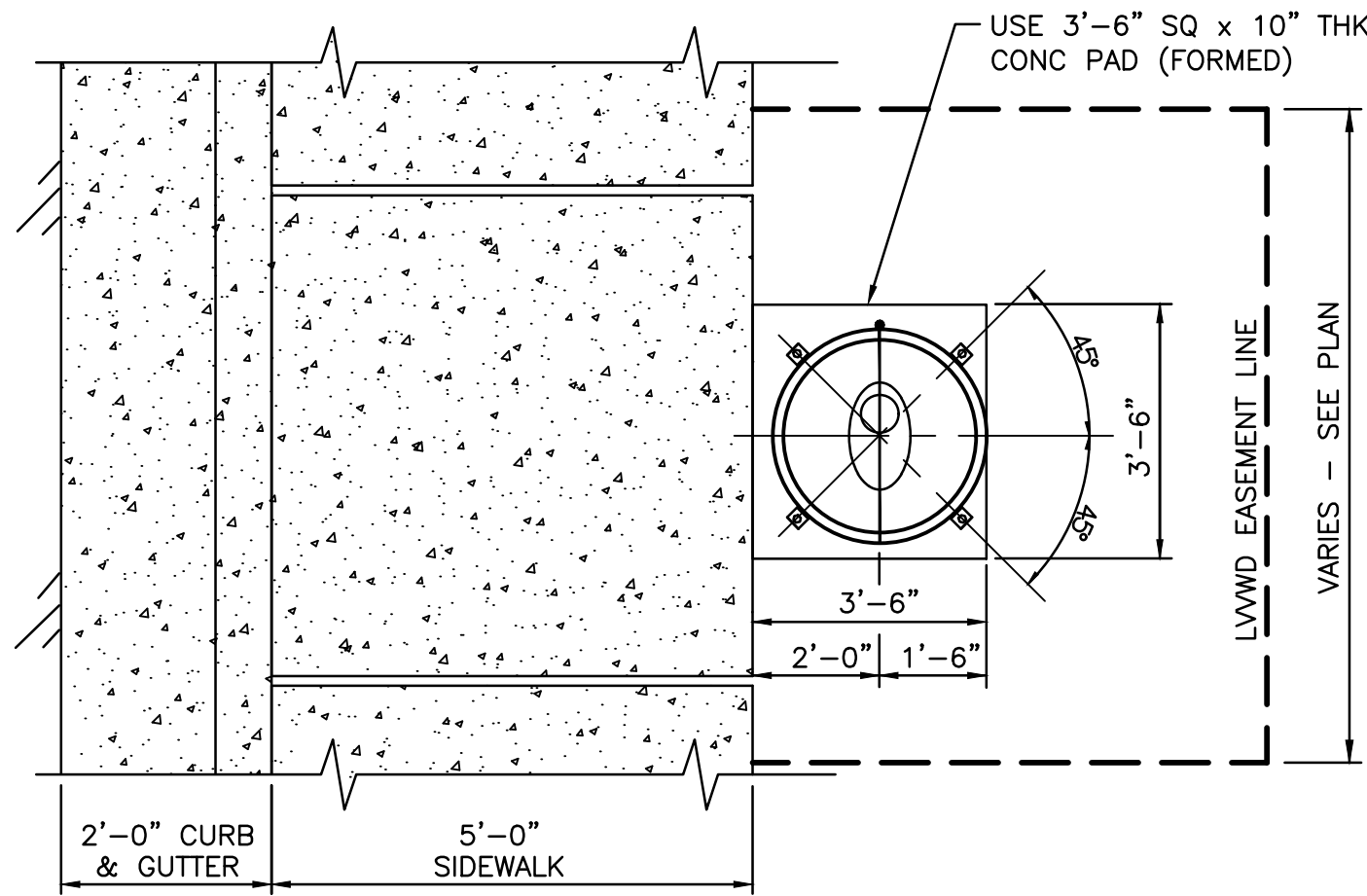
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC	09/11/2019
DESIGNED BY: BCC	09/11/2019
CHECKED BY: WJM	09/28/2020
PROJECT NO: 7861	SCALE: 1"=5' HORIZ. VERT.

2020-09-25

SHEET
DT4
38 OF 107 SHEETS

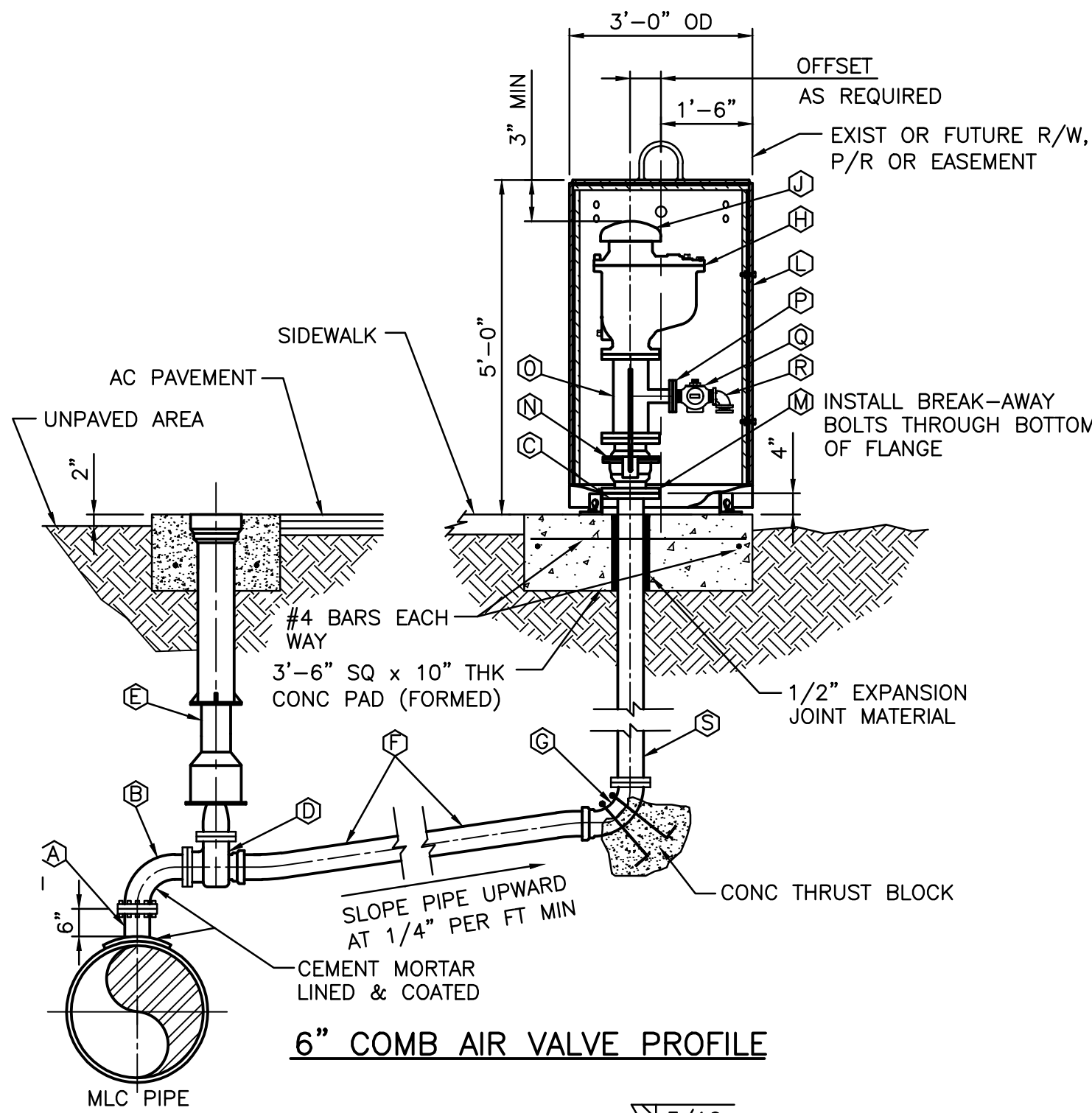
DRAWING NO.
L20-01282
107V8449



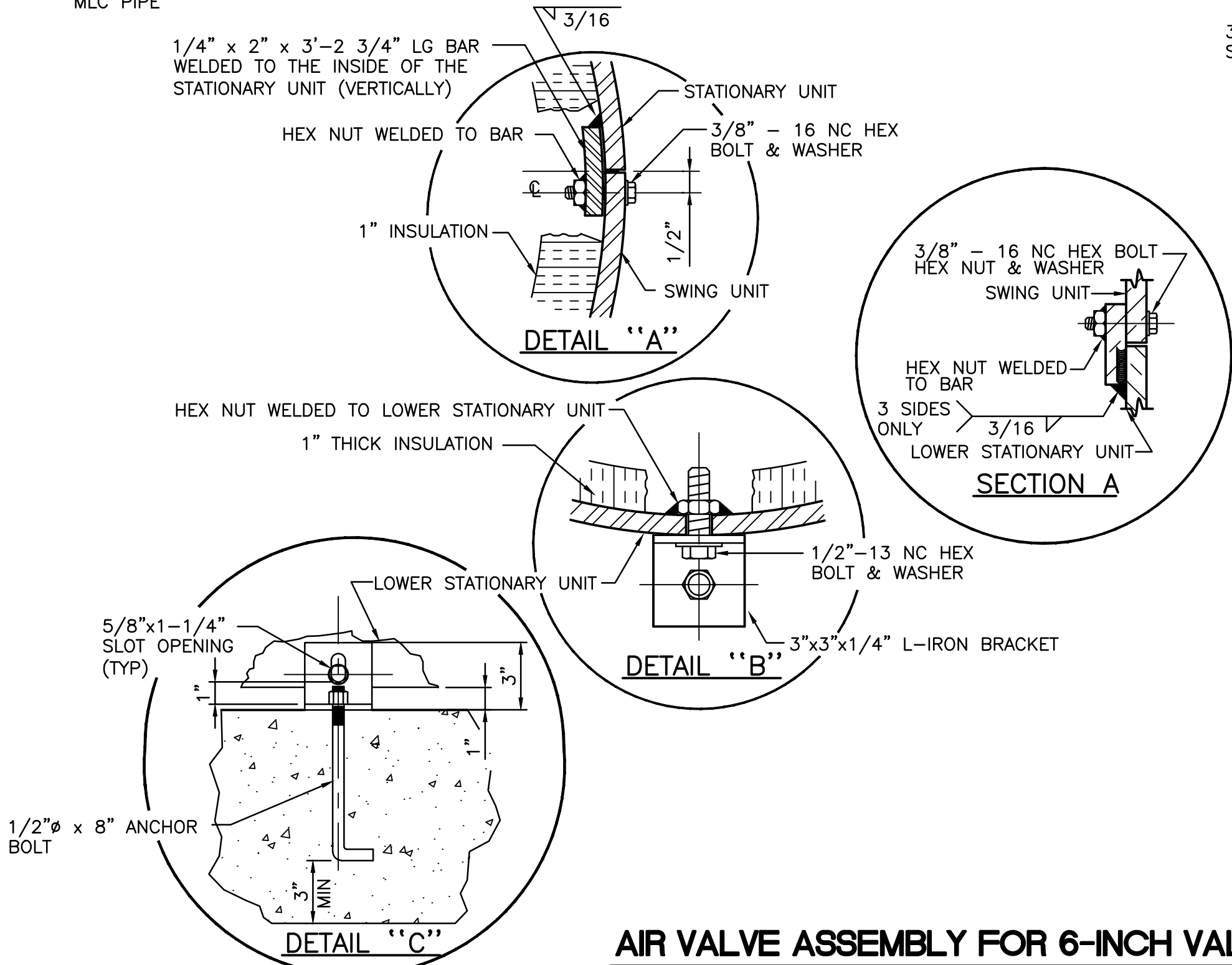
PLAN VIEW

NOTES

IN IMPROVED AREAS CONTRACTOR TO REPLACE FULL SIDEWALK PANEL.
IN UNIMPROVED AREAS CONTRACTOR TO CONSTRUCT FORMED
3'-6" SQ x 10" THICK CONCRETE SLAB.



6" COMB AIR VALVE PROFILE

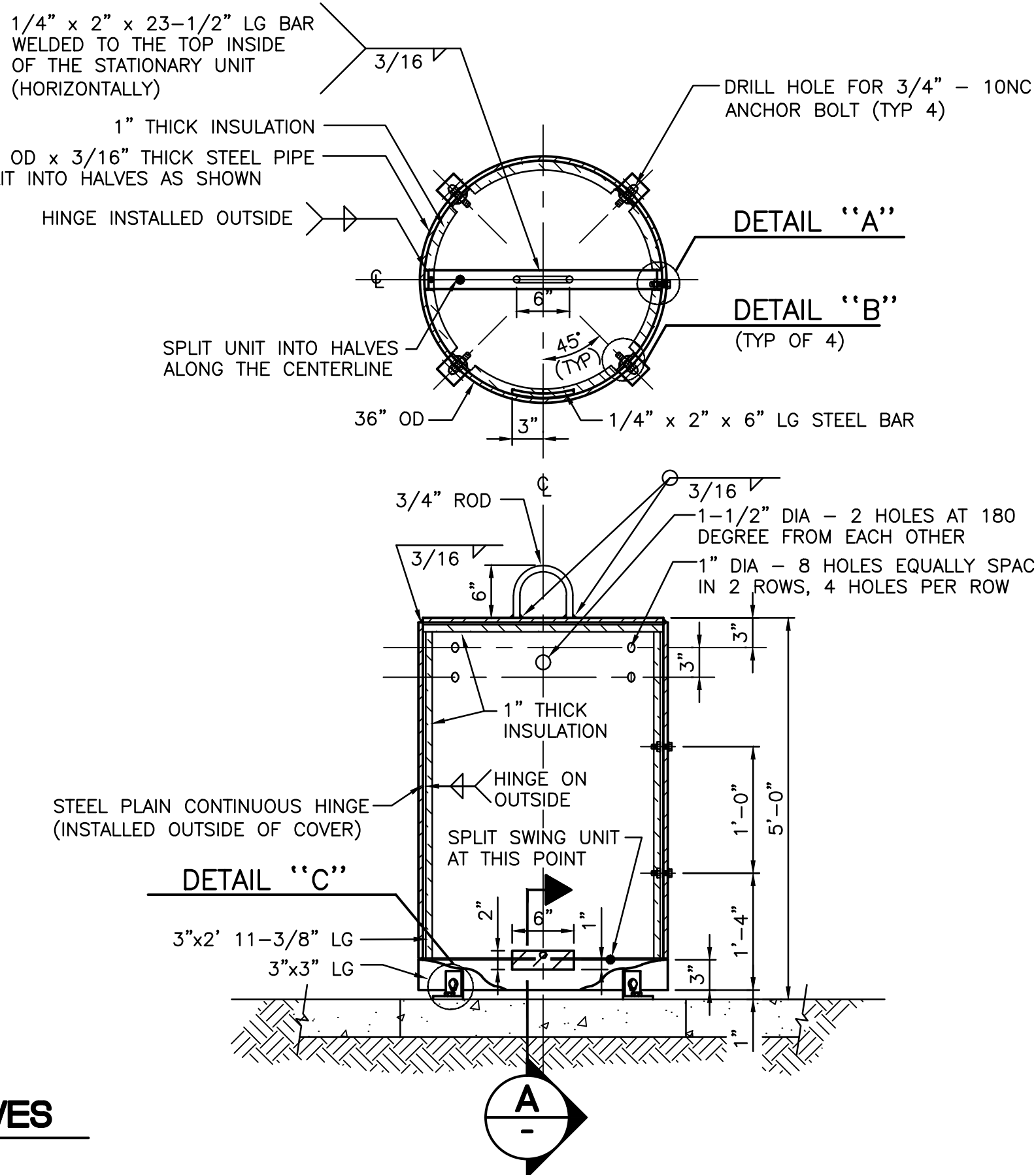


AIR VALVE ASSEMBLY FOR 6-INCH VALVES

NOT TO SCALE

LEGEND

- Ⓐ 6" FLG STL OUTLET FOR MLC STL PIPE, FLG TEE FOR DIP
- Ⓑ 6"- 90° FLG DUCTILE IRON BEND
- Ⓒ 6" DUCTILE IRON FLANGE ADAPTOR
- Ⓓ 6" FLG x PO OR FLG x MJ GATE VALVE W/2" OPERATING NUT
- Ⓔ VALVE BOX & COVER
- Ⓕ 6" DUCTILE IRON PC350 OR 6" PVC CL150 DR18 PIPE
- Ⓖ 6" - 90° FLG x PO OR FLG x MJ CI BEND
- Ⓗ 6" AIR VALVE, FLANGED INLET
- Ⓙ 6" MUSHROOM VENT CAP WITH #22/24 STAINLESS STEEL MESH SCREEN
- Ⓚ 3'-0" OD x 4'-6" HIGH STEEL COVER
- Ⓛ 5/8"-11NC BREAK-AWAY ZINC PLATED HEX HD BOLT, HEX NUT AND LOCKWASHER
- Ⓜ 6" BALL VALVE - QUARTER TURN
- Ⓨ 6" X 2" FLG TEE
- Ⓟ 2" THREADED FLANGE
- Ⓡ 2" CORP STOP, THREADED BOTH ENDS W/ THREADED NIPPLES
- Ⓢ 2" 90° ELBOW, THREADED W/ THREADED CAP
- Ⓣ 6" DUCTILE IRON PC350





NOT TO SCALE



NOT TO SCALE



NOTES:

1. USE ONLY NATIVE SOIL FREE OF ROCKS AND CLODS FOR BACKFILL AROUND CELLS WITH A MINIMUM OF (10) TEN GALS OF WATER SATURATION DURING INSTALLATION. DO NOT USE SAND AS BACKFILL.
2. SUFFLY ENOUGH WIRE FROM EACH LEAD TO REACH FULL R/W WIDTH PLUS FIVE (5) ADDITIONAL FEET. COIL WIRE IN BOTTOM OF BOX.
3. TEST STATION PLACEMENT TO BE PERPENDICULAR TO PIPE AT INTERSECTIONS, TEST STATION WIRE TO BE PLACED PARALLEL TO PIPE FOR PLACEMENT PERPENDICULAR TO PIPE AFTER ROAD EASEMENT RADIUS.

[illegible]

TEST STATION INSTALLATION WITH PRE-PACKAGED ANODES

NOT TO SCALE



NOT TO SCALE

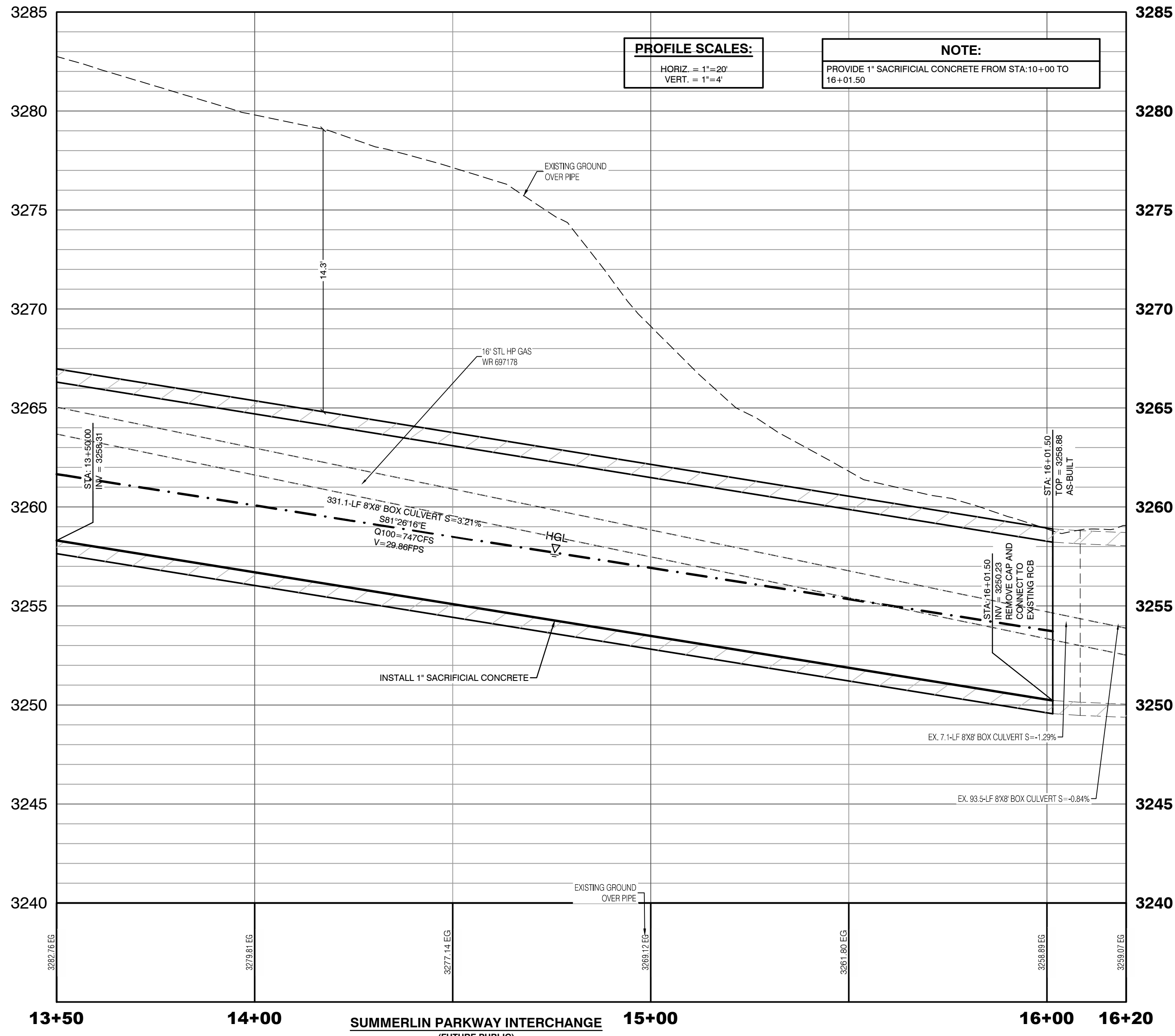
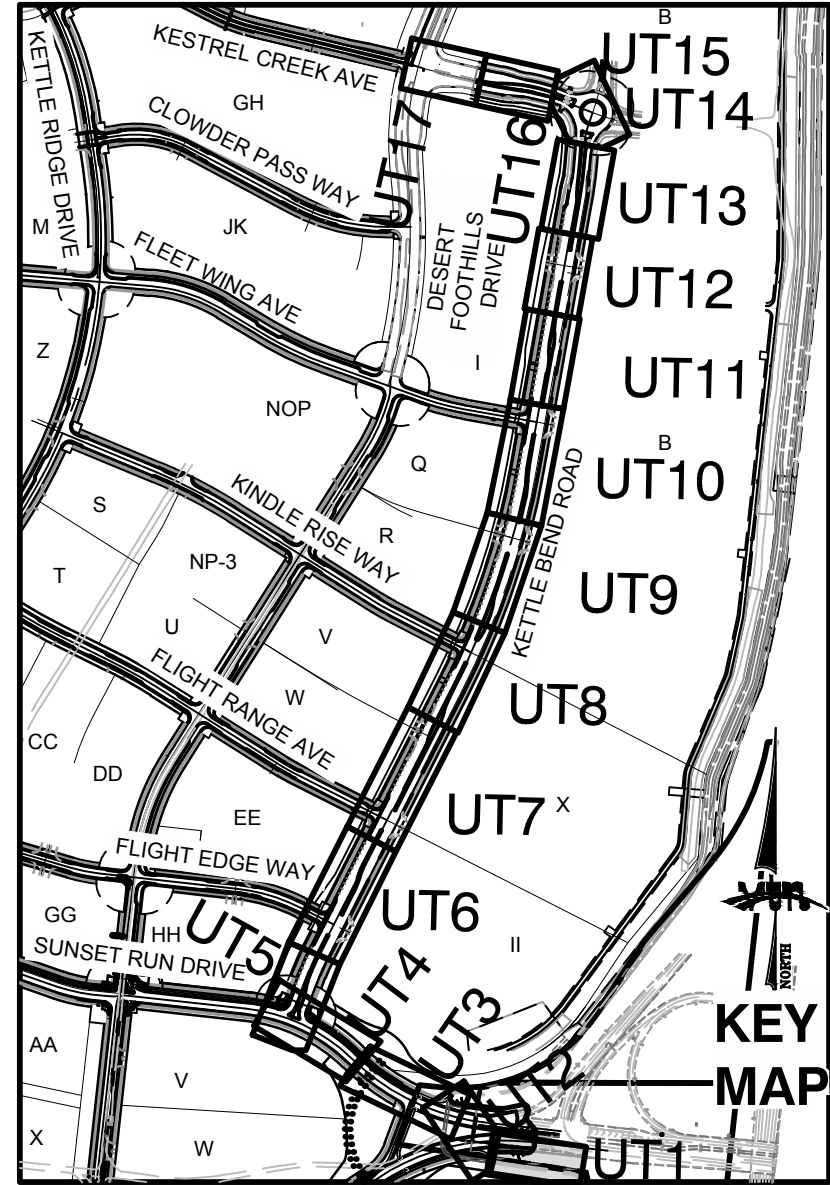
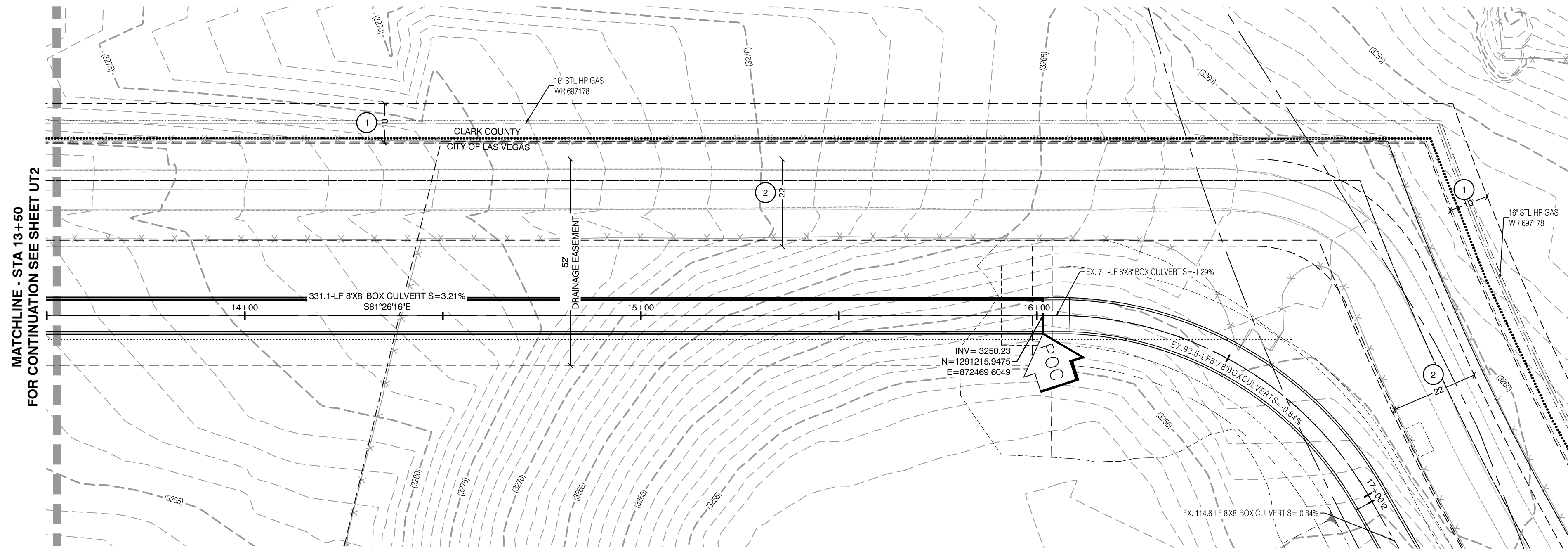


NOT TO SCALE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:_____



EASEMENT REFERENCE LEGEND

- 1 GAS EASEMENT GRANTED TO SOUTHWEST GAS COMPANY PER OR: 19991103-0000824.
- 4 PEDESTRIAN TRAIL EASEMENT GRANTED TO CLARK COUNTY PER OR: 20080527-0005041.

CAUTION: HIGH PRESSURE GAS!!

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION

DISCLAIMER: THE DATA CONTAINED HEREIN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. SOUTHWEST GAS CORPORATION MAKES NO WARRANTIES AND DOES NOT GUARANTEE THE CORRECTNESS, COMPLETENESS, OR USEFULNESS FOR ANY PURPOSES AND HEREBY DISCLAIMS ANY LIABILITY FOR ANY LOSS OF DAMAGE, HOWEVER ARISING, FROM THE USE OF OR RELIANCE ON THE DATA PROVIDED. THE FIELD LOCATION AND DEPTH OF ALL SOUTHWEST GAS FACILITIES SHOULD BE VERIFIED.

INITIAL: AMZ DATE: 08/24/2020

Call before you Dig

Avoid cutting underground utility lines. It's costly.

811

OR

1-800-642-2444 AND 1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

CONSTRUCTION NOTES	
WATER	PUBLIC
1. FIRE HYDRANT ASSEMBLY, INCLUDING 12"x6" OR 24"x6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)	7 EA.
2. 12" GATE VALVE (PER UDACS PLATE 30 & 39)	14 EA.
3. 12" CAP & BLOW OFF (PER UDACS PLATE 36)	12 EA.
4. 24" CAP & BLOW OFF (PER UDACS PLATE 36)	1 EA.
5. 12"x12" TEE (PER UDACS PLATE 31)	3 EA.
6. 24"x12" TEE (PER UDACS PLATE 31)	6 EA.
7. 24" 5" BEND (PER UDACS PLATE 31)	10 EA.
8. 24" 11" BEND (PER UDACS PLATE 31)	5 EA.
9. 24" 22" BEND (PER UDACS PLATE 31)	9 EA.
10. 12" 45" BEND (PER UDACS PLATE 31)	1 EA.
11. 12" 5" BEND (PER UDACS PLATE 31)	1 EA.
12. 1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" PIPA PER UDACS PLATE #8 AND SHEET D17	2 EA.
13. 24"x6" TEE (PER UDACS PLATE 31)	3 EA.
14. 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	84 LF.
15. 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17	1,361 LF.
16. 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17	276 LF.
17. 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17	3,407 LF.
WATER POINT OF CONNECTION	
SEWER	
1. STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8	12 EA.
2. 8" C-900-16 SANITARY SEWER MAIN	296 LF.
3. 16" C-900-16 SANITARY SEWER MAIN	3,174 LF.
4. SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.	8 EA.
SEWER POINT OF CONNECTION	
WATERLINE TRENCH NOTE:	
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.	
WATER PRESSURE ZONE:	
WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.	
WATER MAIN COVER NOTE:	
ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.08	
TO ENSURE LVVWD ACCESS WITHIN EASEMENT	
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.	

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 1
16 + 20 TO 13 + 50

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 07/15/2020

DESIGNED BY: BCC 07/15/2020

CHECKED BY: WJAT 07/15/2020

PROJECT NO: 7861

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

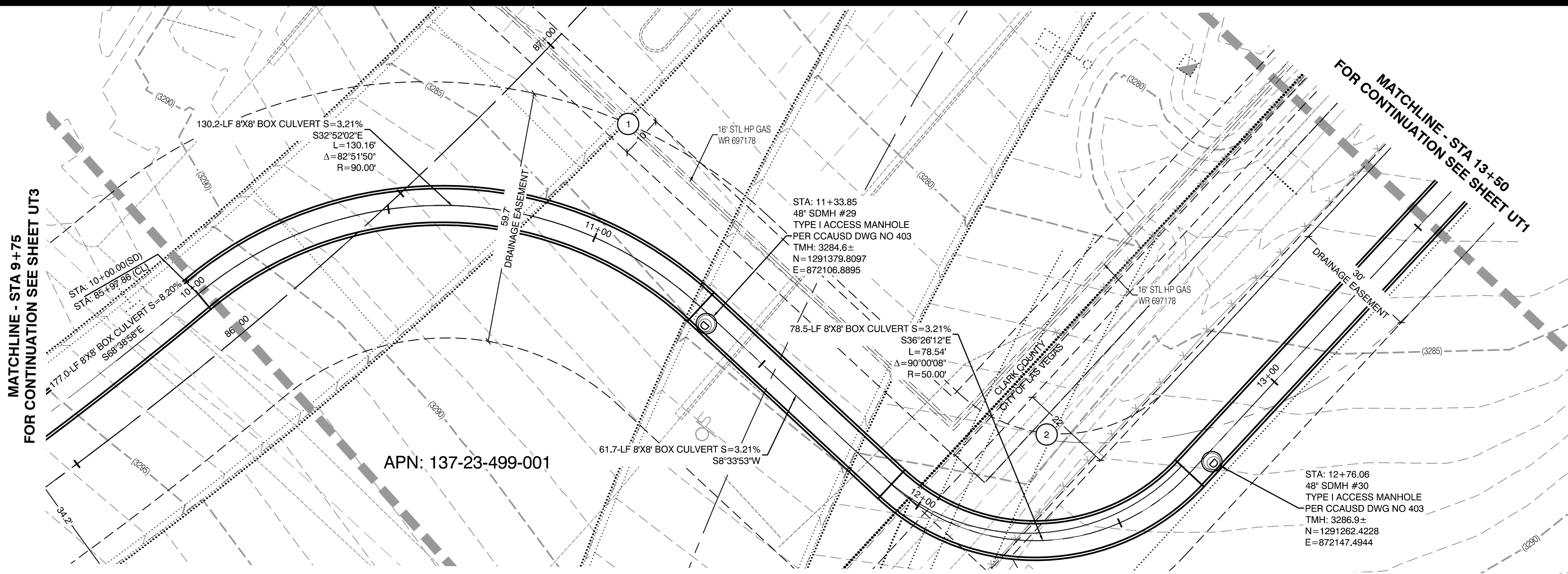
2020-09-25

SHEET
UT1
41 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

REVISION

REV	DATE	BY



SUMMERLIN PARKWAY INTERCHANGE
(FUTURE PUBLIC)

PROFILE SCALES:

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

NOTE:

PROVIDE 1" SACRIFICIAL CONCRETE FROM STA 10+00 TO 16+01.50

STORM DRAIN MANHOLE NOTE:

ALL STORM DRAIN MANHOLE RIMS SHOWN ON THESE PLANS ARE SET TO ROUGH GRADE ELEVATIONS. THE RIMS SHALL BE RAISED TO THE AC GRADE WHEN THE ROADWAYS ARE CONSTRUCTED.

CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

CONTRACTOR NOTE:

LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

NOTE:

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

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS PER UDACS PLATE No. 15 AND 19.

FIRE HYDRANT MARKER NOTES

- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVVWD EXISTING FACILITIES NOTE:

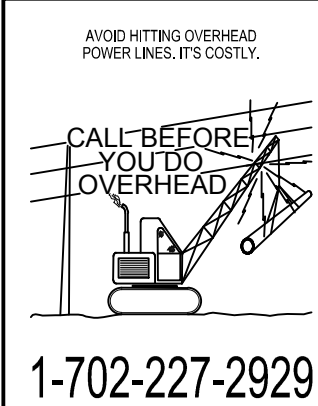
PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

UTILITY CROSSING NOTE:

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

ENGINEER DISCLAIMER NOTE:

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Call before you Dig
Avoid cutting underground utility lines. It's costly.
811
OR
1-800-642-2444
AND
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS



EASEMENT REFERENCE LEGEND

- 10' GAS EASEMENT GRANTED TO SOUTHWEST GAS COMPANY PER OR: 19991103.0000824.
- PEDESTRIAN TRAIL EASEMENT GRANTED TO CLARK COUNTY PER OR: 20080527.0005041.

CAUTION: HIGH PRESSURE GAS!!

CALL SOUTHWEST GAS AT 702-273-8451 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION

DISCLAIMER: THE DATA CONTAINED HEREIN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. SOUTHWEST GAS CORPORATION MAKES NO WARRANTIES AND DOES NOT GUARANTEE THE CORRECTNESS, COMPLETENESS, OR USEFULNESS FOR ANY PURPOSES AND HEREBY DISCLAIMS ANY LIABILITY FOR ANY LOSS OF DAMAGE, HOWEVER ARISING, FROM THE USE OF OR RELIANCE ON THE DATA PROVIDED. THE FIELD LOCATION AND DEPTH OF ALL SOUTHWEST GAS FACILITIES SHOULD BE VERIFIED.

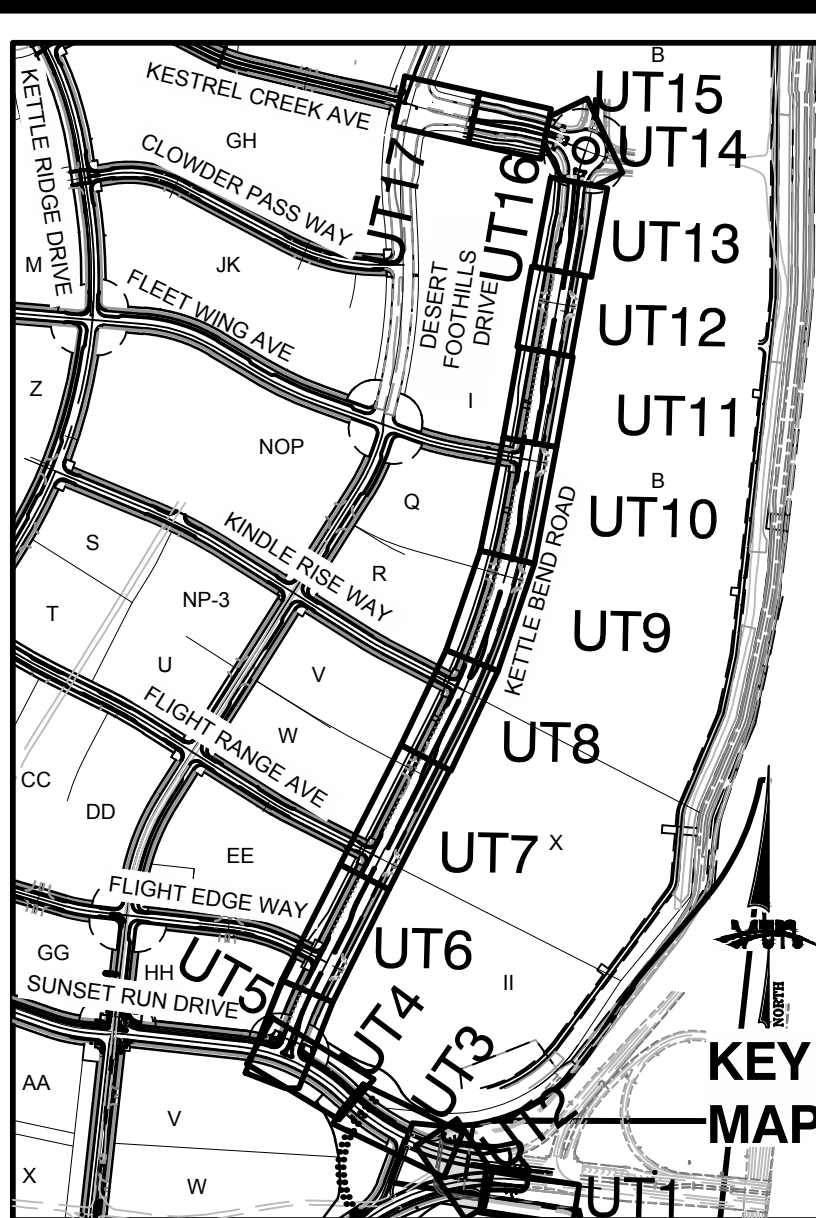
INITIAL: AMZ

DATE: 06/24/2020

SOUTHWEST GAS CORPORATION

UID

DATE



CONSTRUCTION NOTES

WATER

- FIRE HYDRANT ASSEMBLY: INCLUDING 12"x6" OR 24"x6" TEE WITH 6" G.V. (PER UDACS PLATE No. 38 & 40)
- 12" GATE VALVE (PER UDACS PLATE 30 & 39)
- 12" CAP & BLOW OFF (PER UDACS PLATE 36)
- 24" CAP & BLOW OFF (PER UDACS PLATE 36)
- 12"x12" TEE (PER UDACS PLATE 31)
- 24"x12" TEE (PER UDACS PLATE 31)
- 24" 5" BEND (PER UDACS PLATE 31)
- 24" 11" BEND (PER UDACS PLATE 31)
- 24" 22" BEND (PER UDACS PLATE 31)
- 12" 45" BEND (PER UDACS PLATE 31)
- 12" 5" BEND (PER UDACS PLATE 31)
- 1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET DT7
- 24"x6" TEE (PER UDACS PLATE 31)
- 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
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- WATER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
- 8" C-900-16 SANITARY SEWER MAIN
- 16" C-900-16 SANITARY SEWER MAIN
- SEWER CAP (SAME SIZE AS PIPE) PER STD 4.8 & 4.11.
- SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

WATER MAIN COVER NOTE:

ALL NEW WATER MAIN TO HAVE MINIMUM DEPTH OF COVER PER UDACS SECTION 2.06

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT: 137333

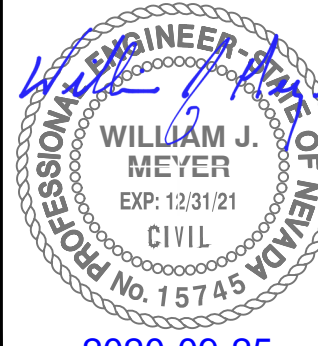
FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10815 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

UTILITY PLAN & PROFILE 2
13+50 TO 9+75

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.



2020-09-25

SHEET

UT2

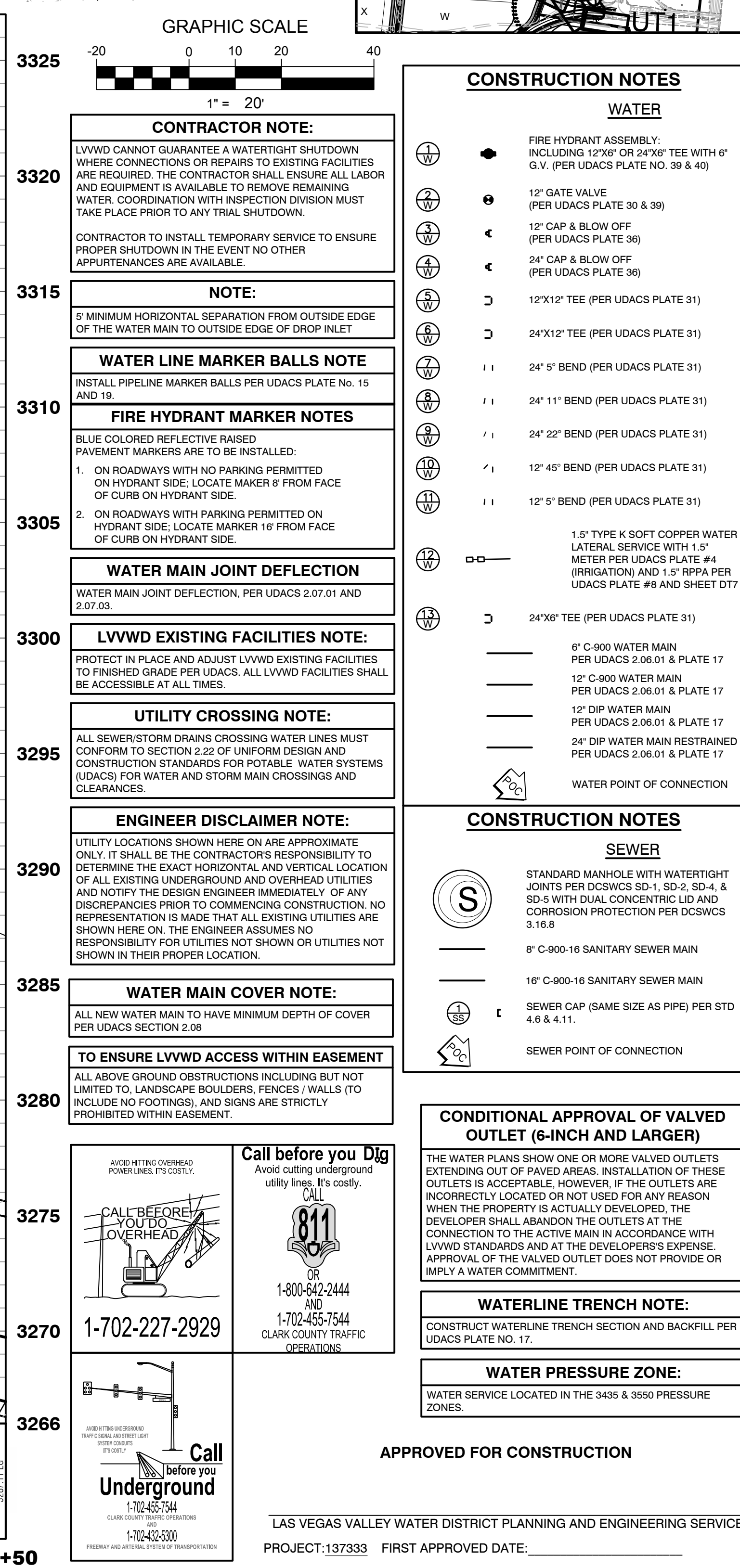
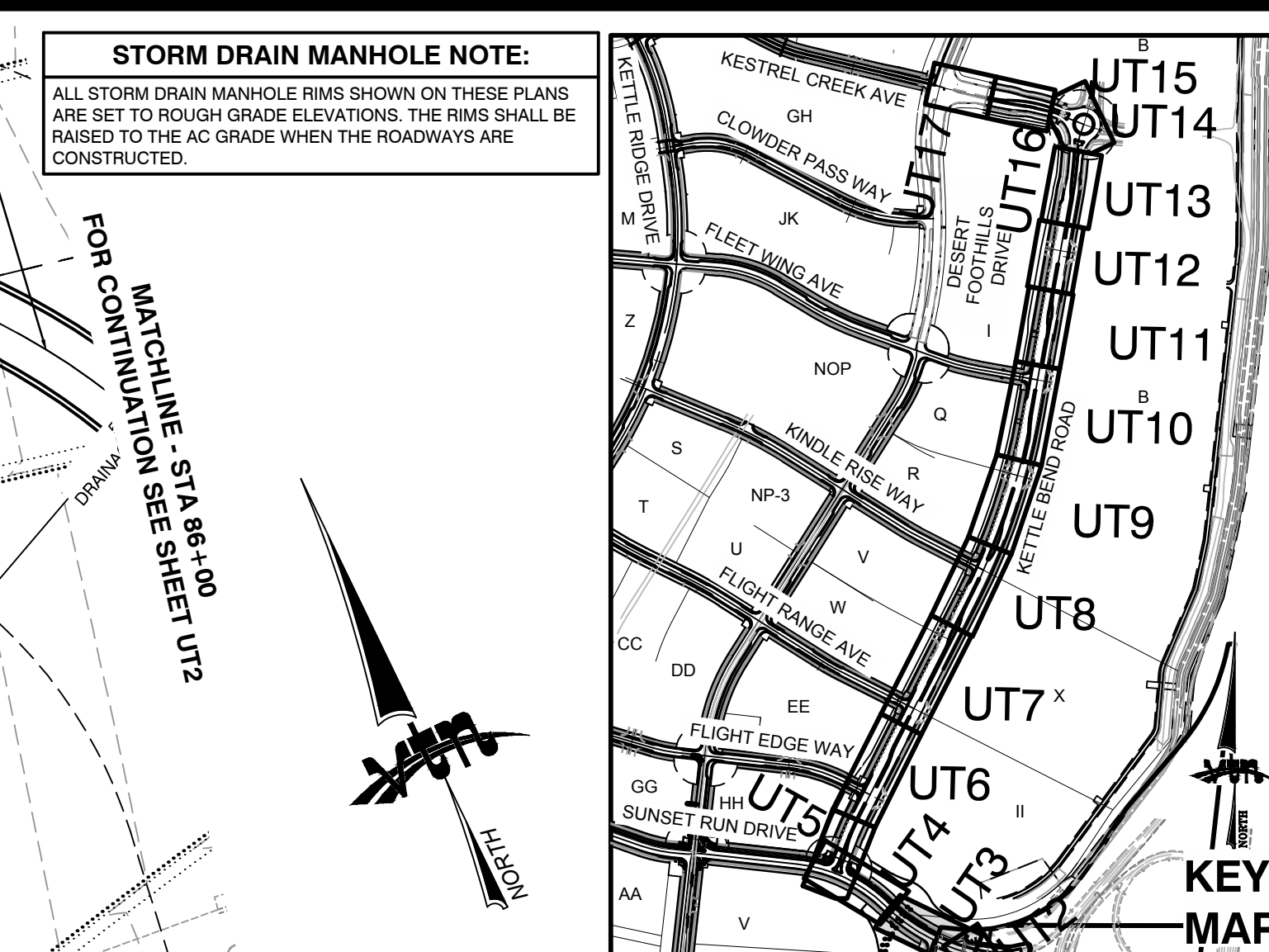
42 OF 107 SHEETS

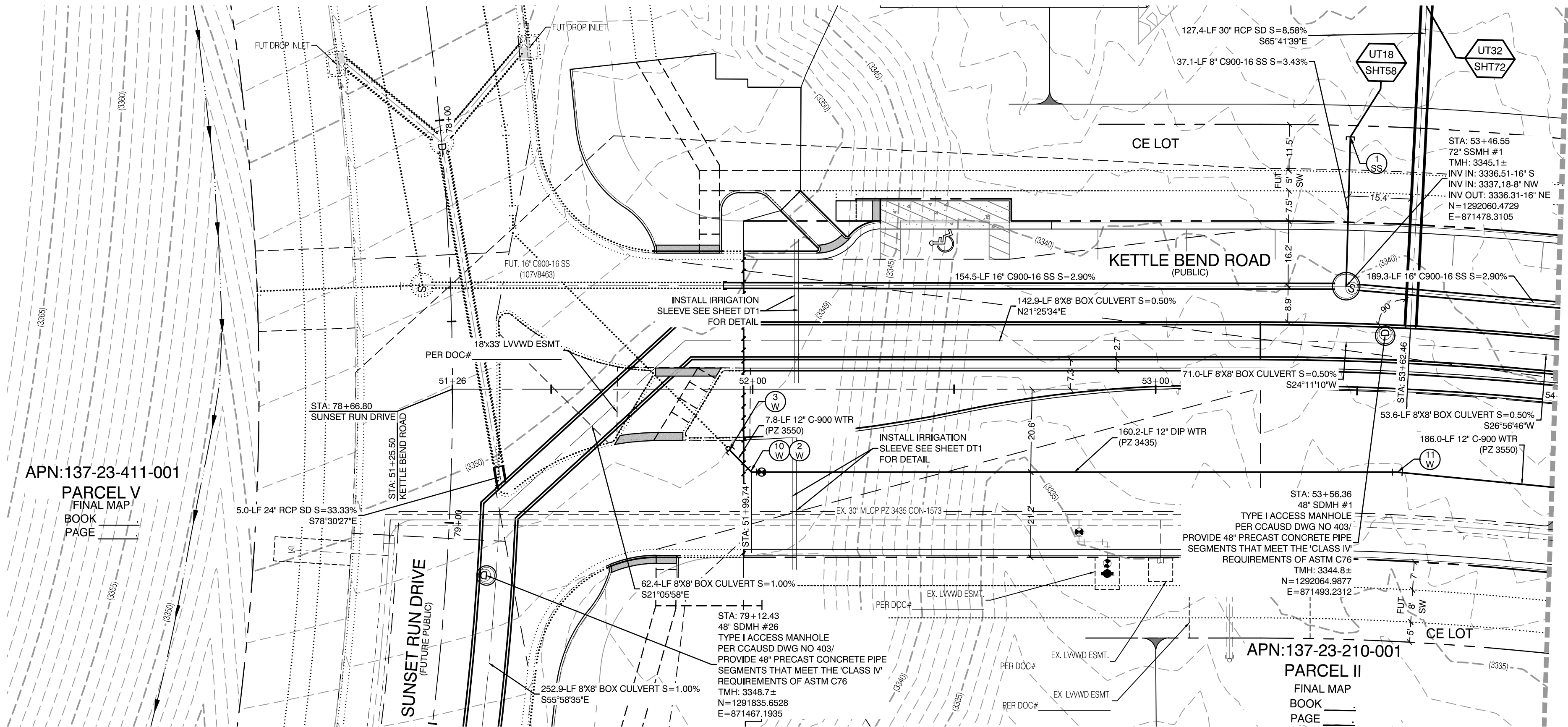
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L20-01282

107V8449

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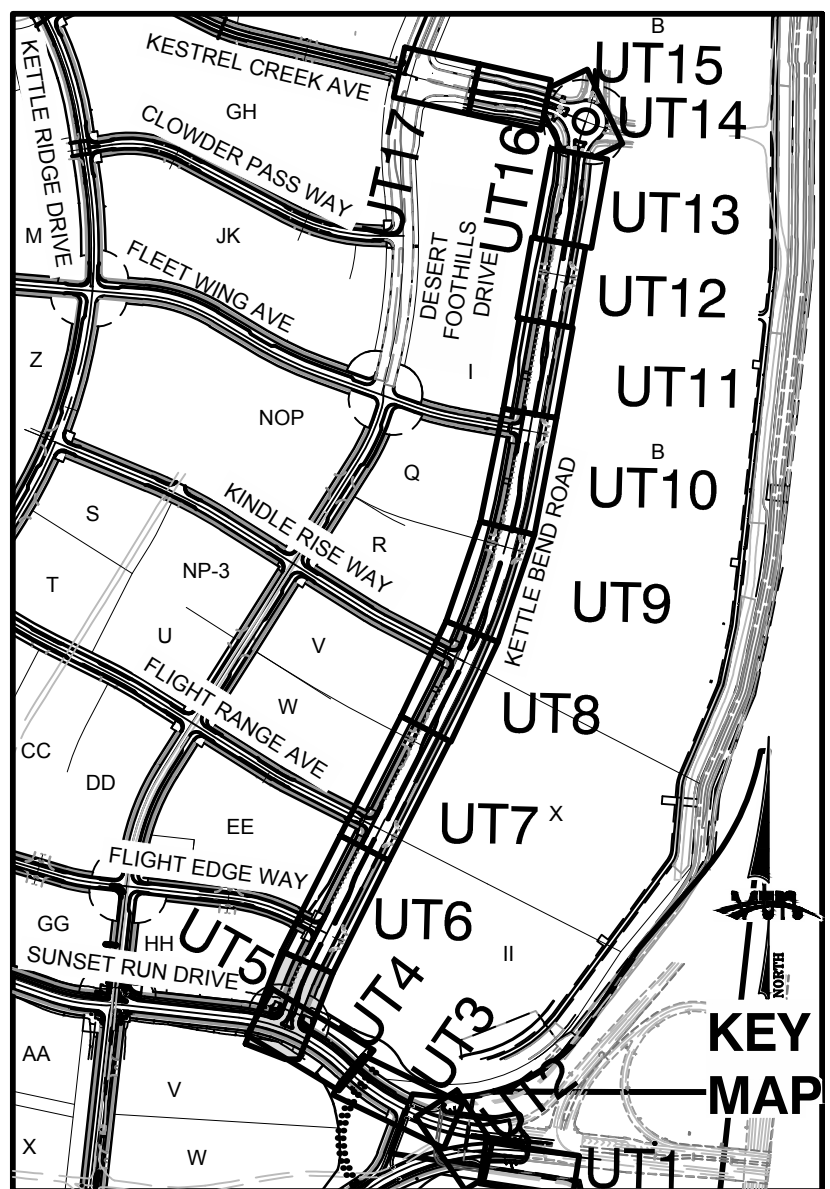
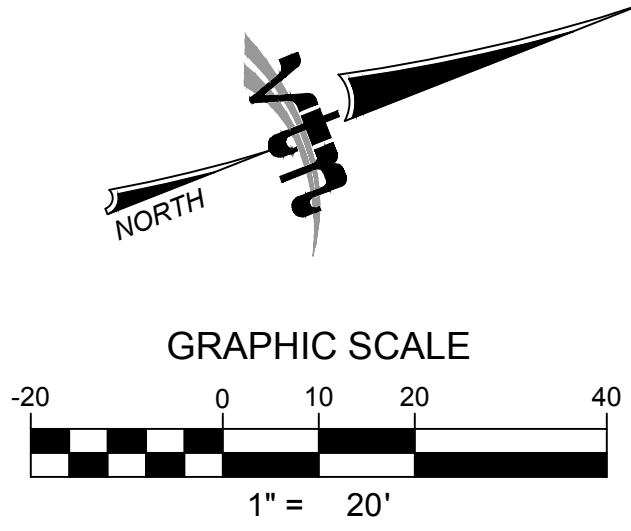
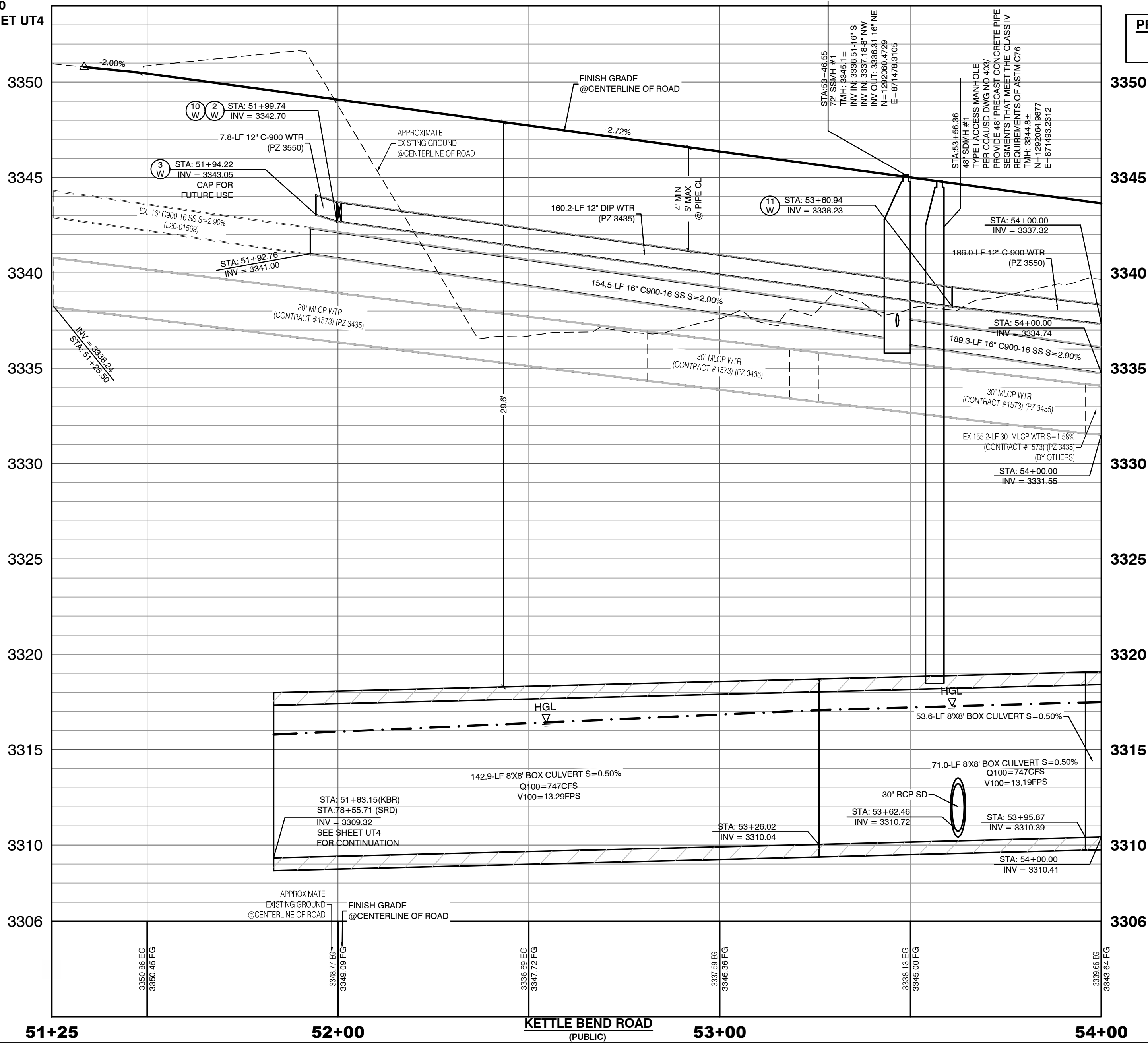
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PARCEL V
FINAL MAP
BOOK
PAGE

APN:137-23-210-001
PARCEL II
FINAL MAP
BOOK
PAGE

MATCHLINE - STA 79+50
FOR CONTINUATION SEE SHEET UT4

MATCHLINE - STA 54+00
FOR CONTINUATION SEE SHEET UT6

KETTLE BEND ROAD
(PUBLIC)
PROFILE SCALES:
HORIZ. = 1"=20'
VERT. = 1"=4'



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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NOTE:

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

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

- BLUE COLORED REFLECTIVE MARKER:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVVWD EXISTING FACILITIES NOTE:

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AND
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CLARK COUNTY TRAFFIC OPERATIONS



CONSTRUCTION NOTES

WATER

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

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APPROVED FOR CONSTRUCTION

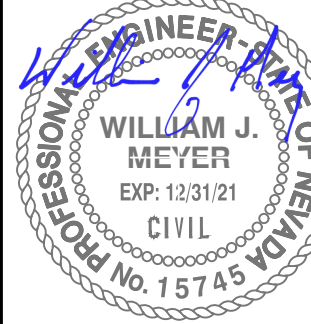
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.791.4000

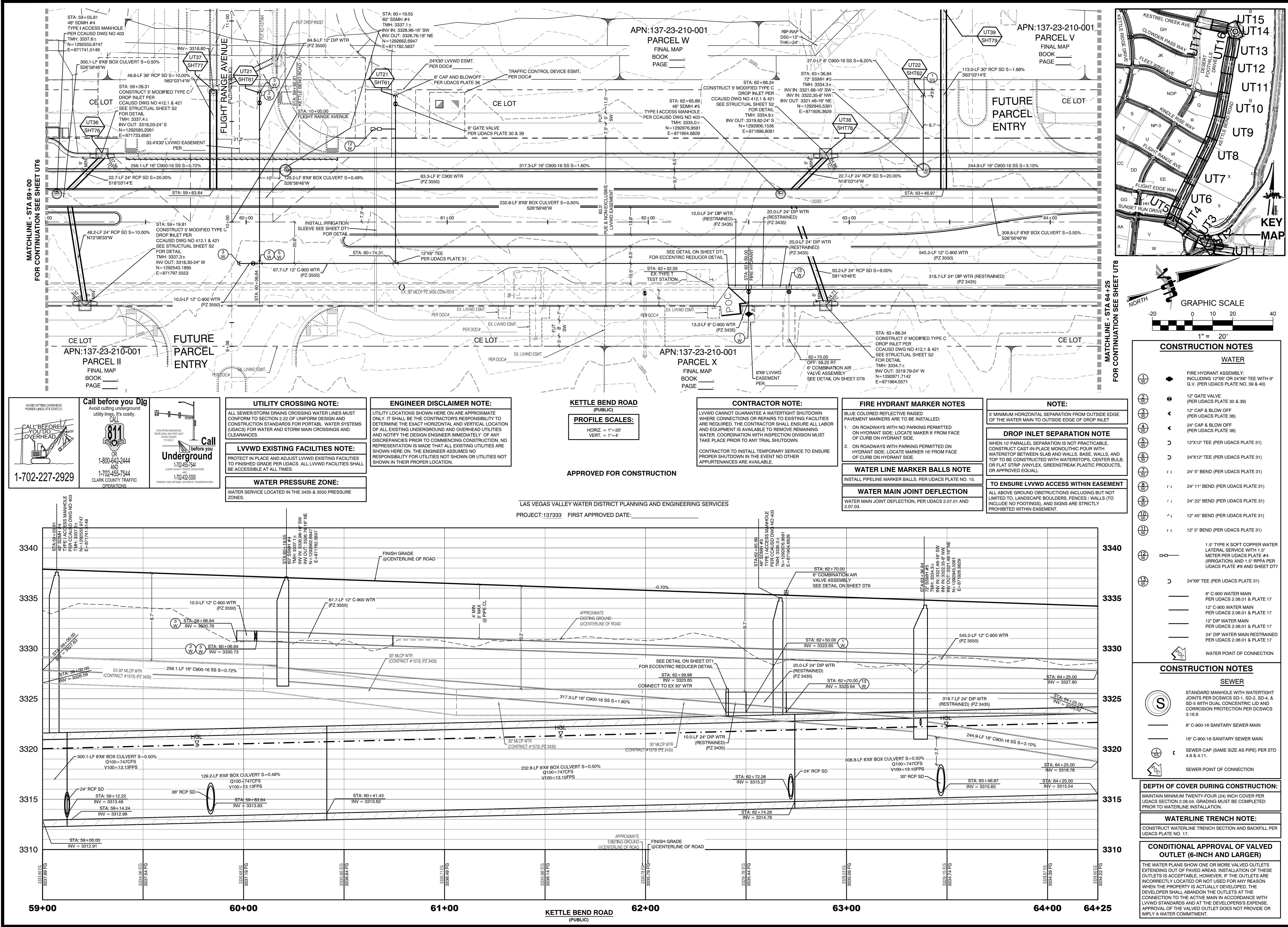
UTILITY PLAN & PROFILE 5
79+50 TO 54+00

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.



2020-09-25
SHEET
UT5
45 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449



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1-702-435-7544
CLARK COUNTY TRAFFIC OPERATIONS

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LVVWD EXISTING FACILITIES NOTE:
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WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

KETTLE BEND ROAD (PUBLIC)

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

CONTRACTOR NOTE:
LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APURTENANCES ARE AVAILABLE.

FIRE HYDRANT MARKER NOTES:
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE. LOCATE MAKER 9' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE. LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER LINE MARKER BALLS NOTE:
INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

WATER MAIN JOINT DEFLECTION:
WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

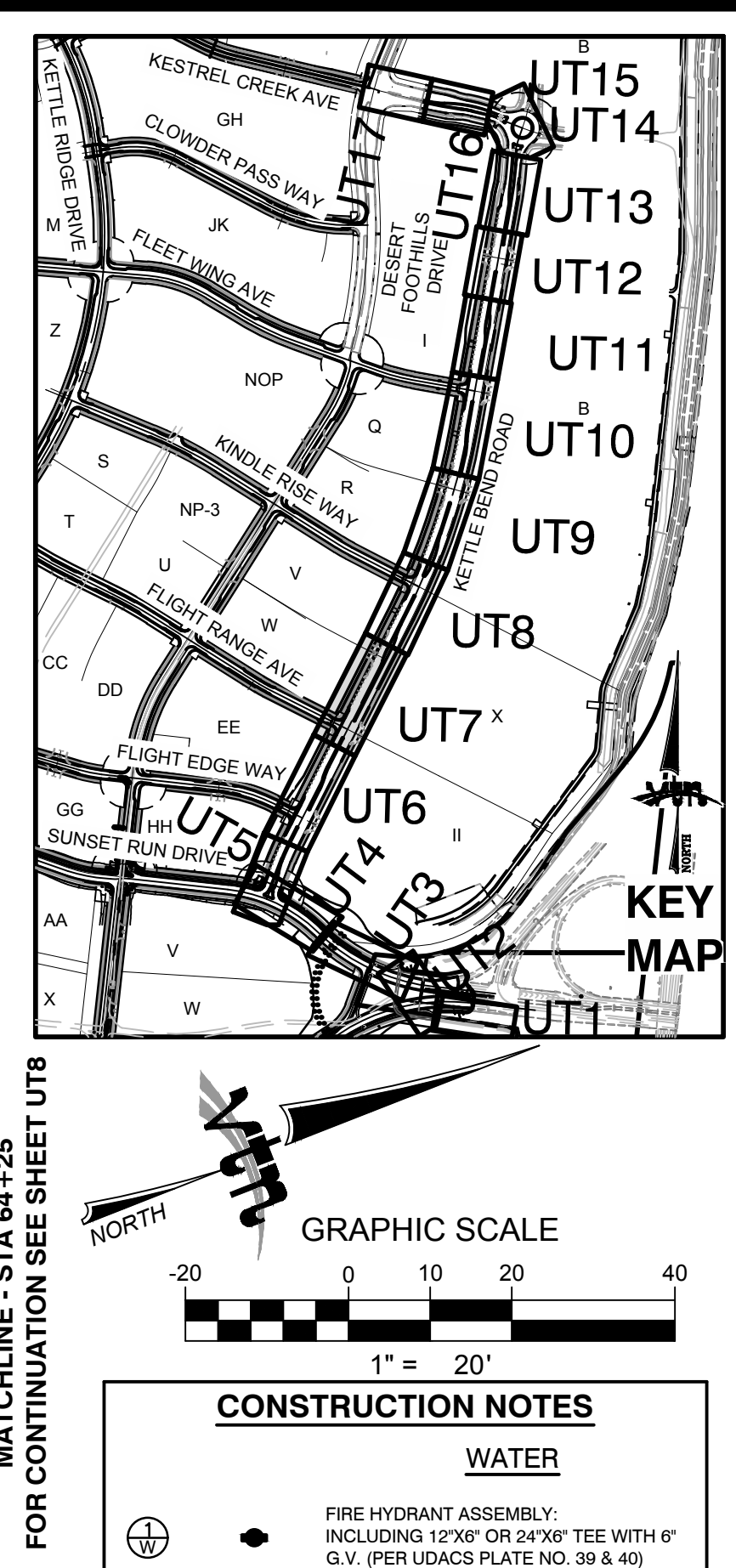
NOTE:
5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET

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).

TO ENSURE LVVWD ACCESS WITHIN EASEMENT:
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE: _____



CONSTRUCTION NOTES

WATER

- FIRE HYDRANT ASSEMBLY: INCLUDING 12"x8" OR 24"x8" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
- 12" GATE VALVE (PER UDACS PLATE 30 & 39)
- 12" CAP & BLOW OFF (PER UDACS PLATE 36)
- 24" CAP & BLOW OFF (PER UDACS PLATE 36)
- 12"x12" TEE (PER UDACS PLATE 31)
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- WATER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4 & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
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- 16" C-900-16 SANITARY SEWER MAIN
- SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
- SEWER POINT OF CONNECTION

DEPTH OF COVER DURING CONSTRUCTION:
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

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

CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)
THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89125
702.781.4000

CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 7
59+00 TO 64+25

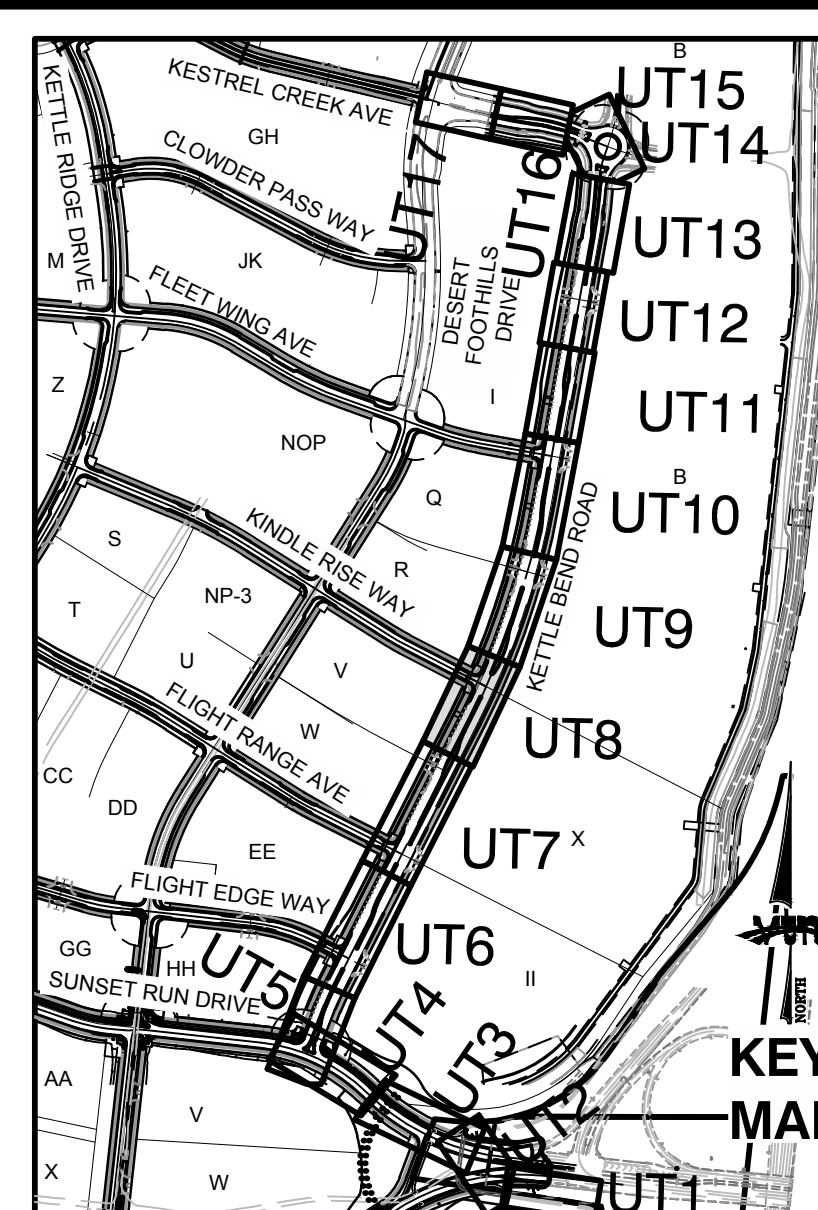
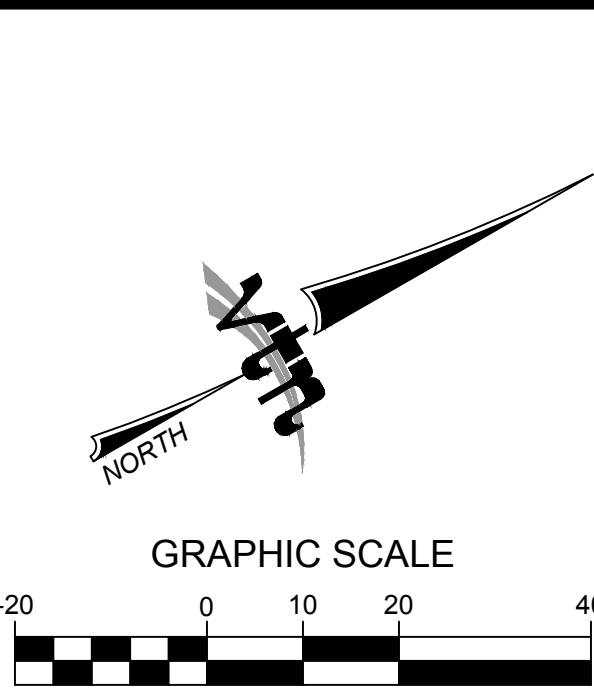
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DESIGNED BY: WILLIAM J. MEYER
CHECKED BY: WILLIAM J. MEYER
PROJECT NO.: 123121
SCALE: 1"=20'
DATE: 09/28/2019

APPROVED: WILLIAM J. MEYER
CIVIL
EXP: 12/31/21
PROF. NO. 15745

2020-09-25

47 OF 107 SHEETS
DRAWING NO. L20-01282
107V8449



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1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET D77

12" W

24"X6" TEE (PER UDACS PLATE 31)

6" C-900 WATER MAIN
PER UDACS 2.06.01 & PLATE 17

12" C-900 WATER MAIN
PER UDACS 2.06.01 & PLATE 17

12" DIP WATER MAIN
PER UDACS 2.06.01 & PLATE 17

24" DIP WATER MAIN RESTRAINED
PER UDACS 2.06.01 & PLATE 17

20'

WATER POINT OF CONNECTION

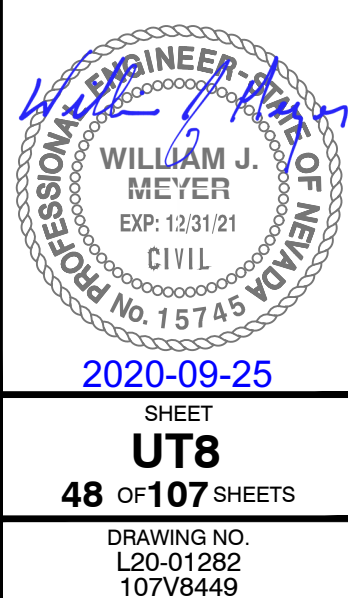
	STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS 3.16.8, SD-4, & SD-C WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
	8" C-900-16 SANITARY SEWER MAIN
	16" C-900-16 SANITARY SEWER MAIN
	SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
	SEWER POINT OF CONNECTION

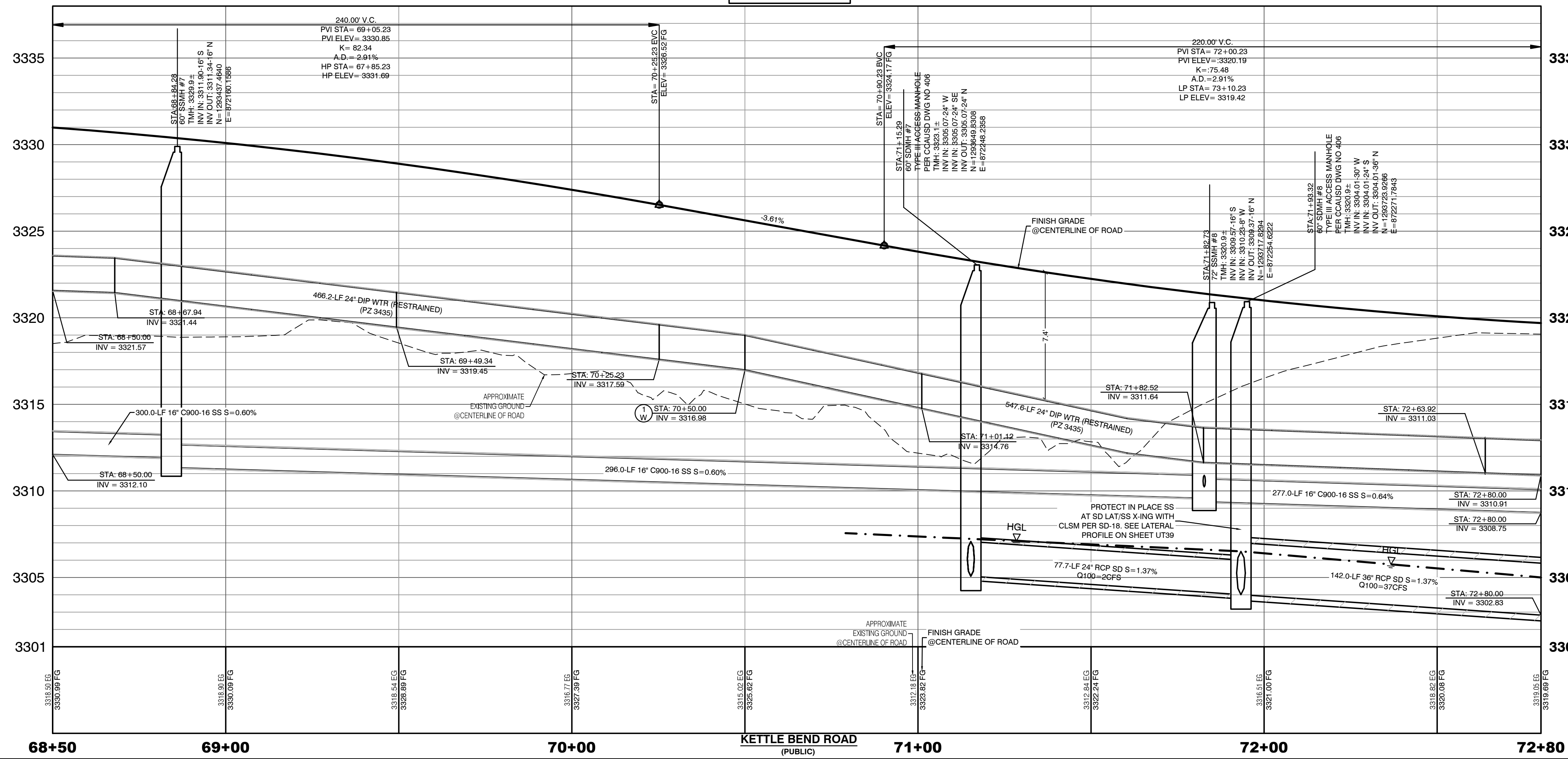
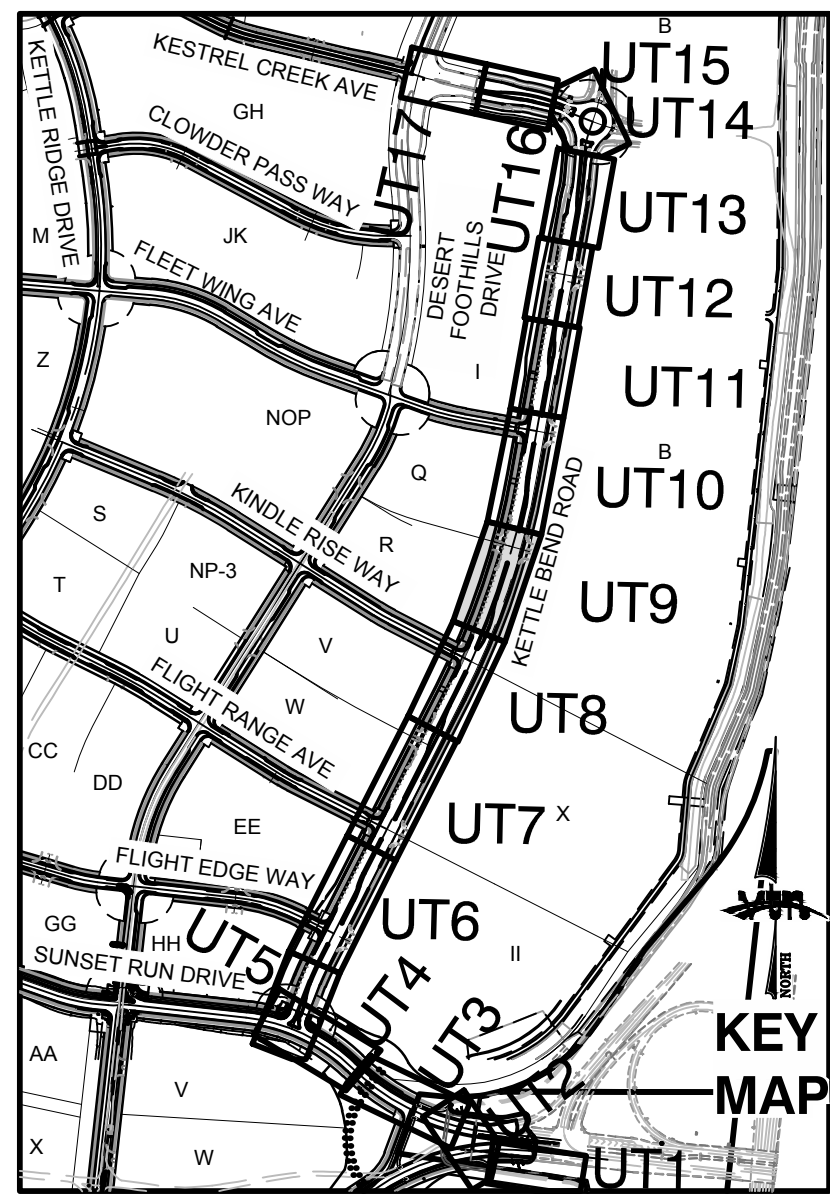
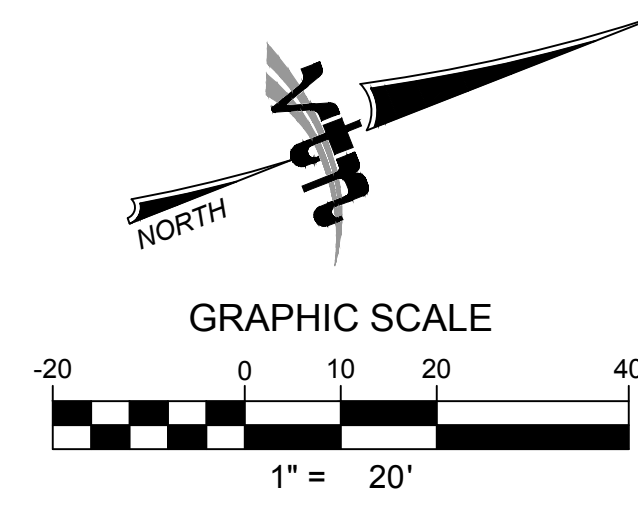
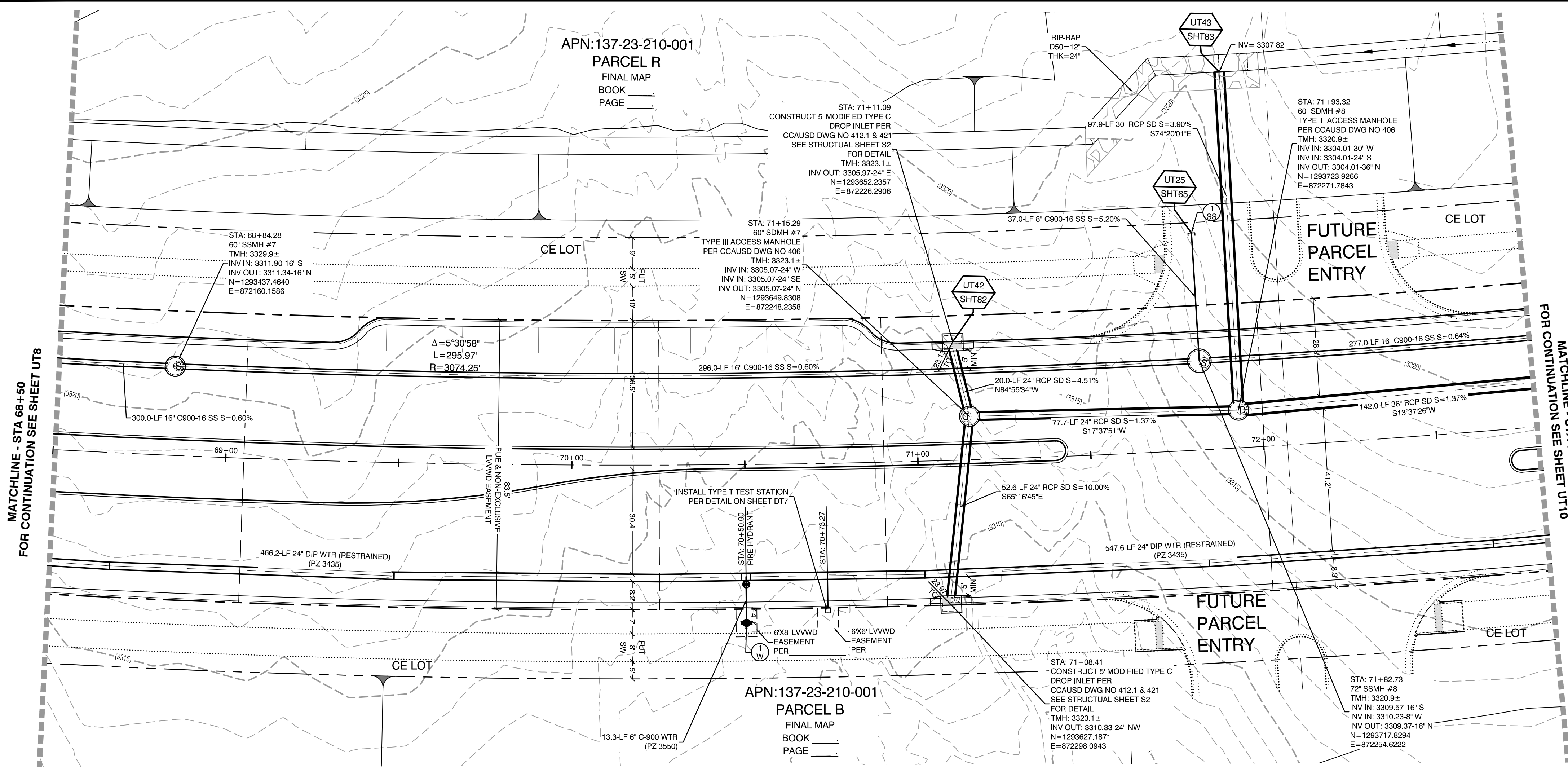
WATER MAIN JOINT DEFLECTION WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.
--

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICE

PROJECT: 137333 FIRST APPROVED DATE: _____





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).

CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)
THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

CONTRACTOR NOTE:
LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

NOTE:
CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APURTENANCES ARE AVAILABLE.

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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

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

Call before you Dig
1-702-227-2929
Call before you Dig
1-702-455-7544

Call before you Dig
1-800-642-2444
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

CONSTRUCTION NOTES

- WATER**
- FIRE HYDRANT ASSEMBLY: INCLUDING 12"X8" OR 24"X8" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
 - 12" GATE VALVE (PER UDACS PLATE 30 & 39)
 - 12" CAP & BLOW OFF (PER UDACS PLATE 36)
 - 24" CAP & BLOW OFF (PER UDACS PLATE 36)
 - 12"X12" TEE (PER UDACS PLATE 31)
 - 24"X12" TEE (PER UDACS PLATE 31)
 - 24" 5" BEND (PER UDACS PLATE 31)
 - 24" 11" BEND (PER UDACS PLATE 31)
 - 24" 22" BEND (PER UDACS PLATE 31)
 - 12" 45" BEND (PER UDACS PLATE 31)
 - 12" 5" BEND (PER UDACS PLATE 31)
 - 1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #4 AND SHEET DT7
 - 24"X6" TEE (PER UDACS PLATE 31)

- SEWER**
- 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
 - 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
 - 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
 - 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17
 - WATER POINT OF CONNECTION

- CONSTRUCTION NOTES**
- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
 - 8" C-900-16 SANITARY SEWER MAIN
 - 16" C-900-16 SANITARY SEWER MAIN
 - SEWER CAP (SAME SIZE AS PIPE) PER STD 4.8 & 4.11.
 - SEWER POINT OF CONNECTION

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

DEPTH OF COVER DURING CONSTRUCTION:
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

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

LVVWD EXISTING FACILITIES NOTE:
PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO: LANDSCAPE Boulders, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

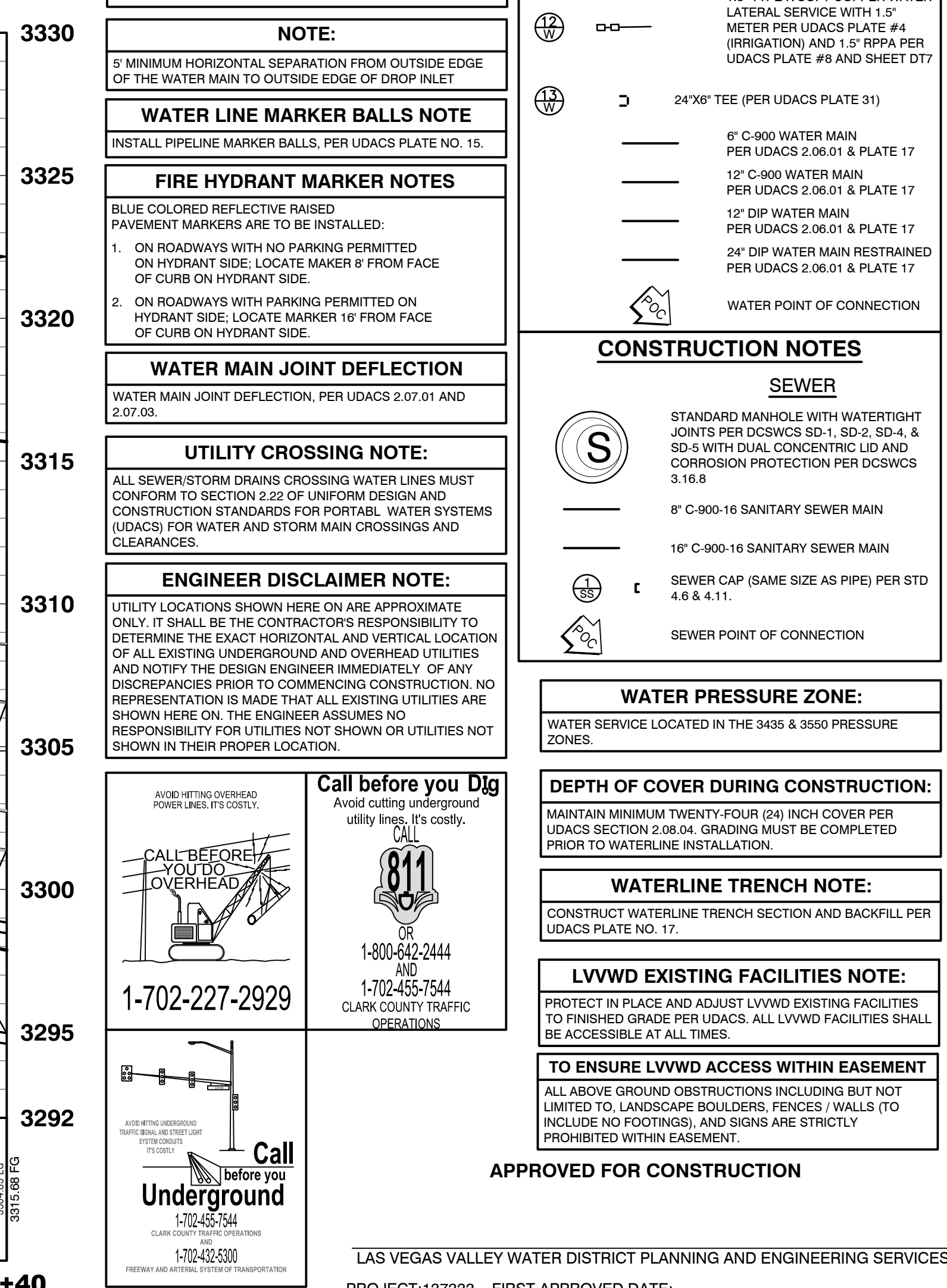
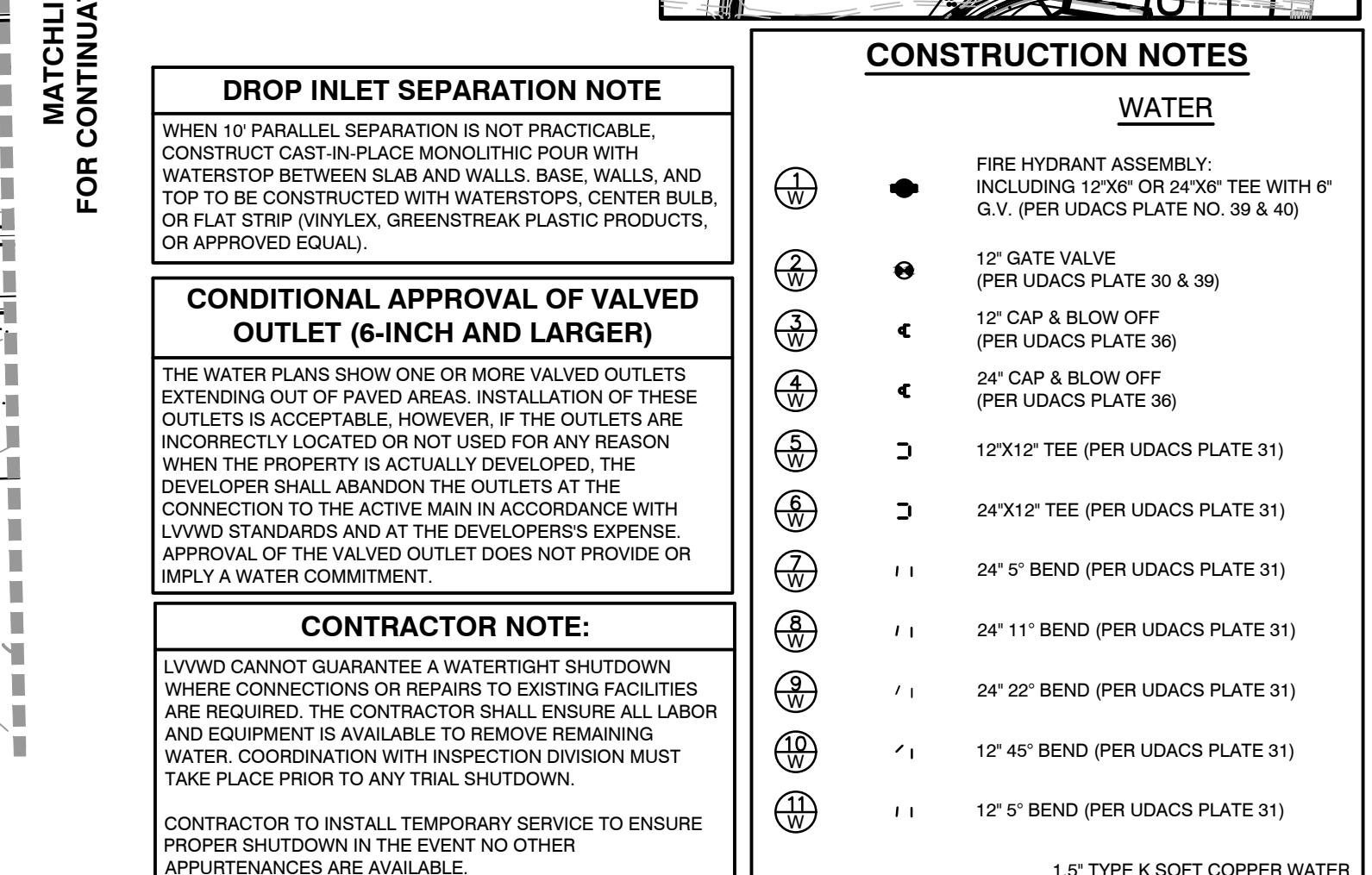
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT: 137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
227 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 973-7550 FAX: (702) 362-2397 WEB: WWW.VTNV.COM
CONSULTING ENGINEERS & PLANNERS & LAND SURVEYORS

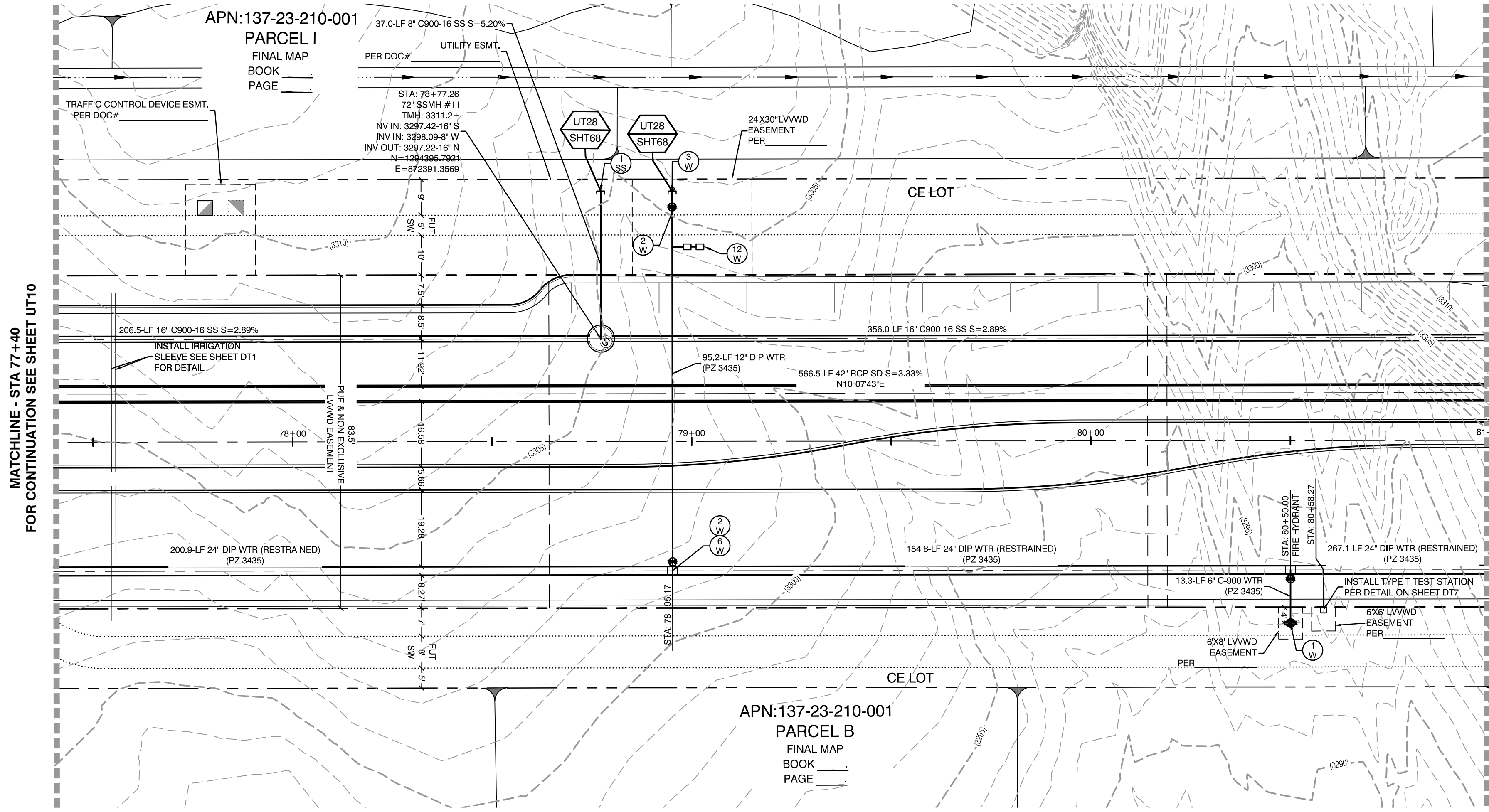
UTILITY PLAN & PROFILE 9
68+50 TO 72+80
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

2020-09-25
SHEET
UT9
49 OF 107 SHEETS
DRAWING NO. L20-01282
107W8449



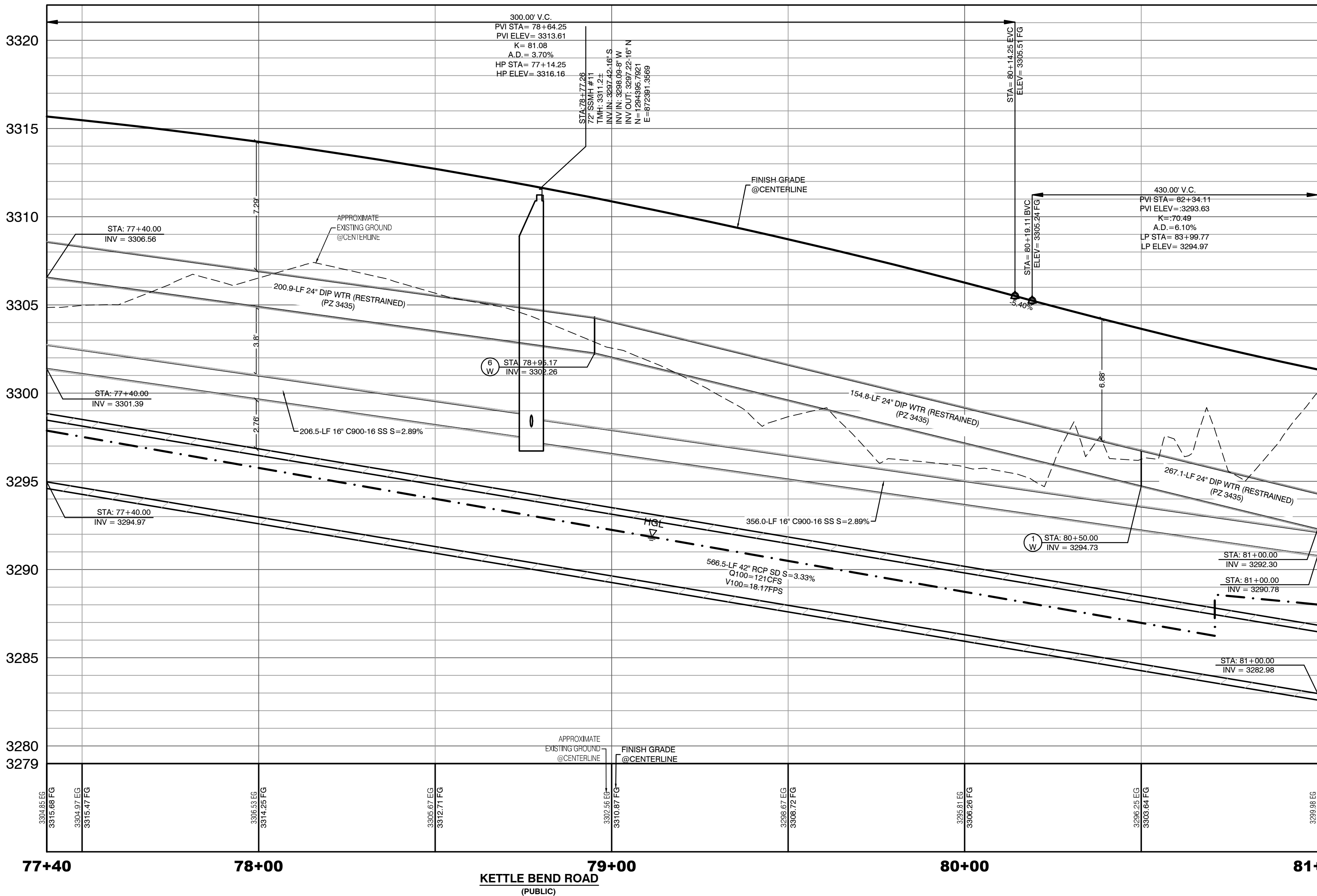
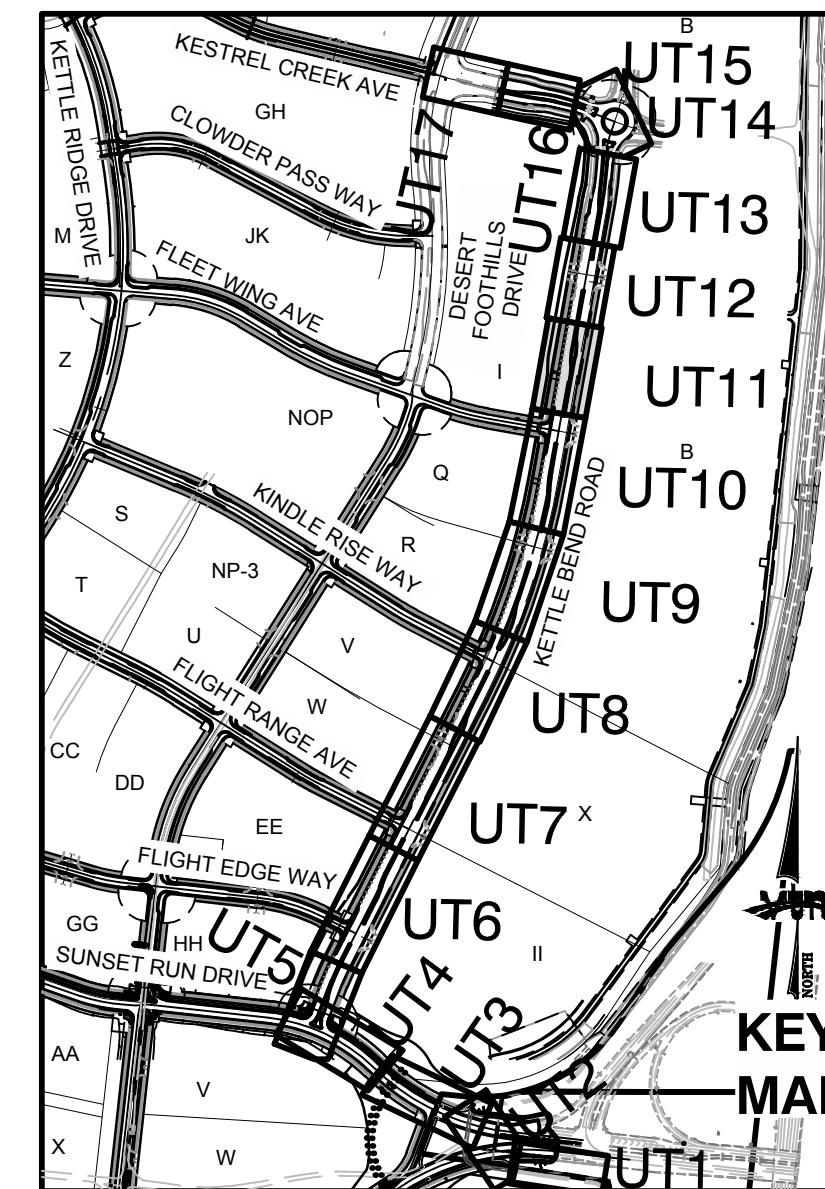
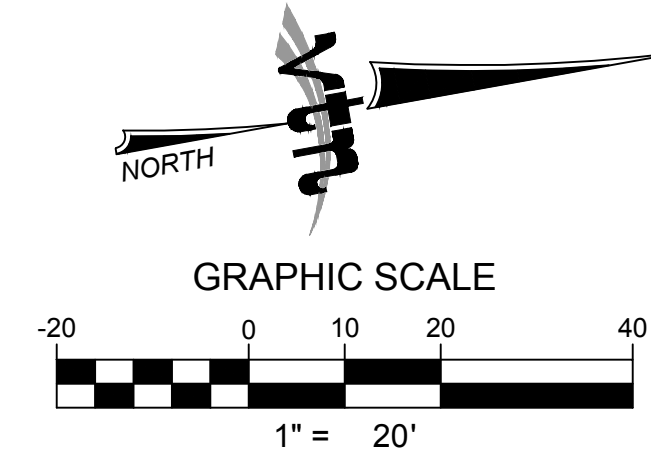
 2020-09-25 SHEET UT107 50 OF 110 SHEETS DRAWING NO. 12107-01-01-250	DRAWN BY: SCC	05/28/2019	UTILITY PLAN & PROFILE 10 72+80 TO 77+40	HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10945 GRIFFITH PEAK DRIVE, SUITE 160 LAS VEGAS, NEVADA 89135 702-791-4000	CITY OF LAS VEGAS	 2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5148 PH. (702) 872-7500 FAX (702) 362-2557 WEB WWW.VTNM.COM CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS	REV	DATE	BY	REVISION
	DESIGNED BY: SCC	05/28/2019								
	CHECKED BY: WJM	08/28/2020								
	PROJECT NO: 7881	SCALE: 1"=20' HORIZ 1"=4' VERT.								



MATCHLINE - STA 81+00
FOR CONTINUATION SEE SHEET UT12

KETTLE BEND ROAD
(PUBLIC)

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



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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CONTRACTOR NOTE:

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CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

NOTE:

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

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVWVD EXISTING FACILITIES NOTE:

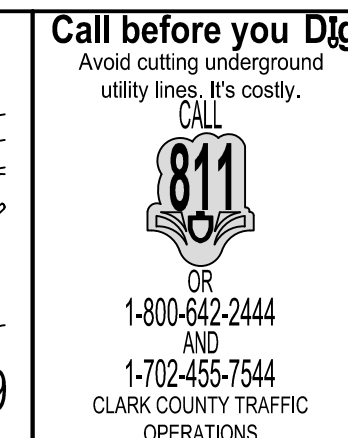
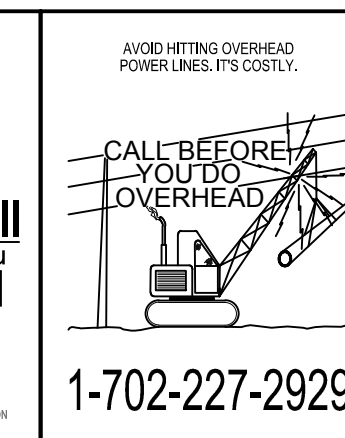
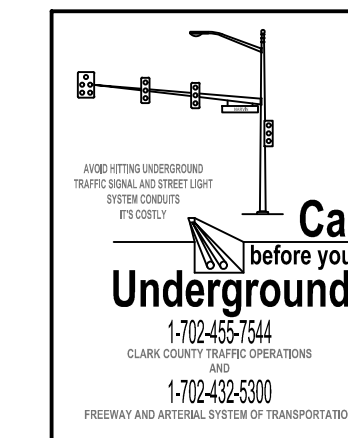
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CONSTRUCTION NOTES

WATER	
1	FIRE HYDRANT ASSEMBLY, INCLUDING 12"X6" OR 24"X6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
2	12" GATE VALVE (PER UDACS PLATE 30 & 39)
3	12" CAP & BLOW OFF (PER UDACS PLATE 30)
4	24" CAP & BLOW OFF (PER UDACS PLATE 30)
5	12"X12" TEE (PER UDACS PLATE 31)
6	24"X12" TEE (PER UDACS PLATE 31)
7	24" 5" BEND (PER UDACS PLATE 31)
8	24" 11" BEND (PER UDACS PLATE 31)
9	24" 22" BEND (PER UDACS PLATE 31)
10	12" 45" BEND (PER UDACS PLATE 31)
11	12" 5" BEND (PER UDACS PLATE 31)
12	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET DT7
13	24"X6" TEE (PER UDACS PLATE 31)
14	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
15	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
16	12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
17	24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17
18	WATER POINT OF CONNECTION

SEWER	
19	STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
20	8" C-900-16 SANITARY SEWER MAIN
21	16" C-900-16 SANITARY SEWER MAIN
22	SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
23	SEWER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER	
24	STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
25	8" C-900-16 SANITARY SEWER MAIN
26	16" C-900-16 SANITARY SEWER MAIN
27	SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
28	SEWER POINT OF CONNECTION

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.06.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

WATERLINE TRENCH NOTE:

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

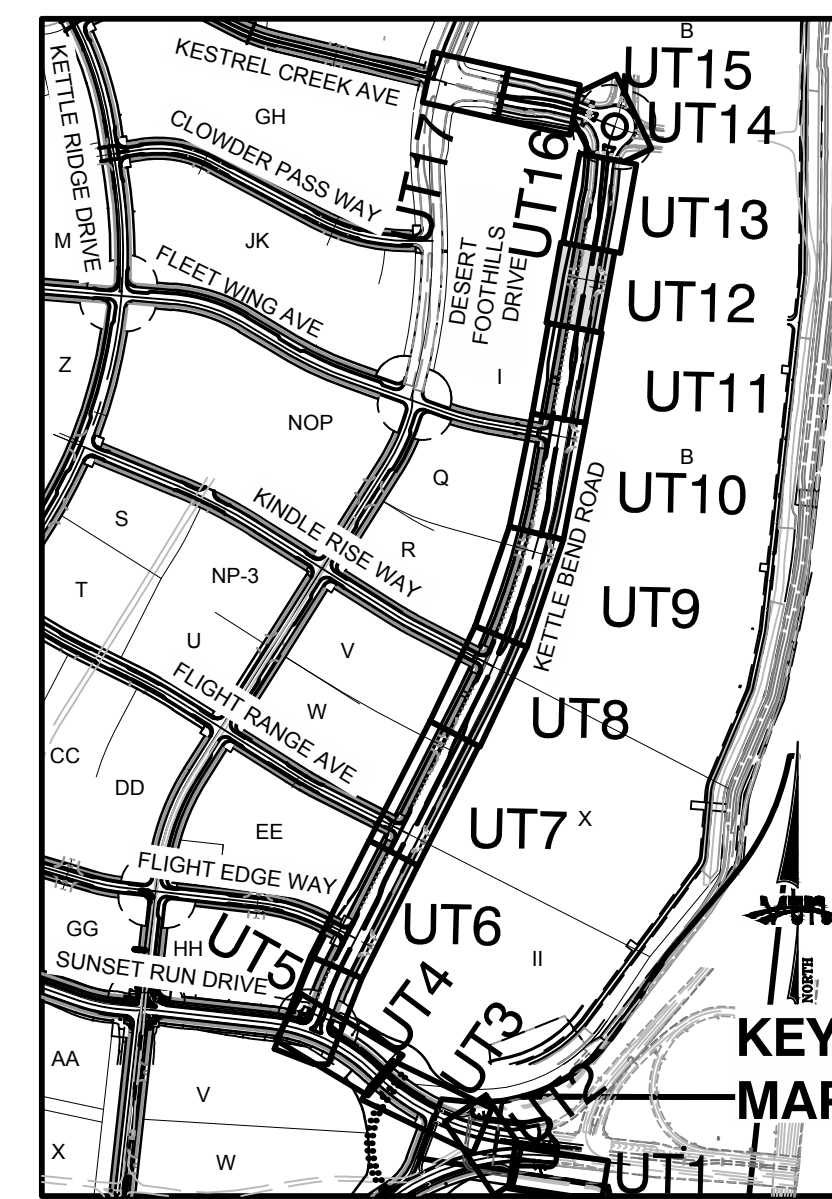
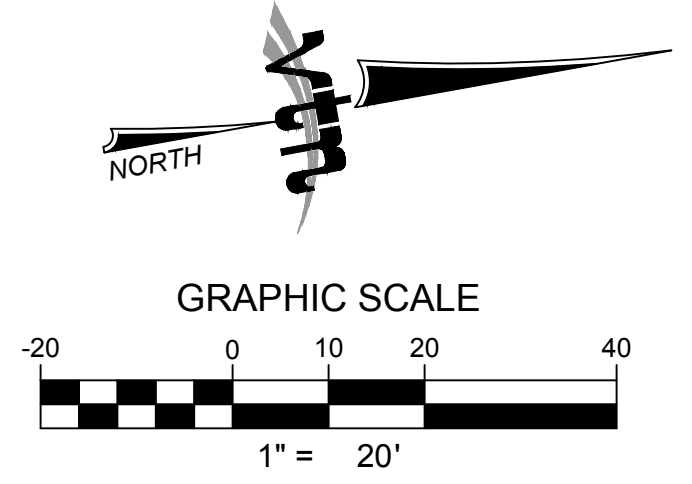
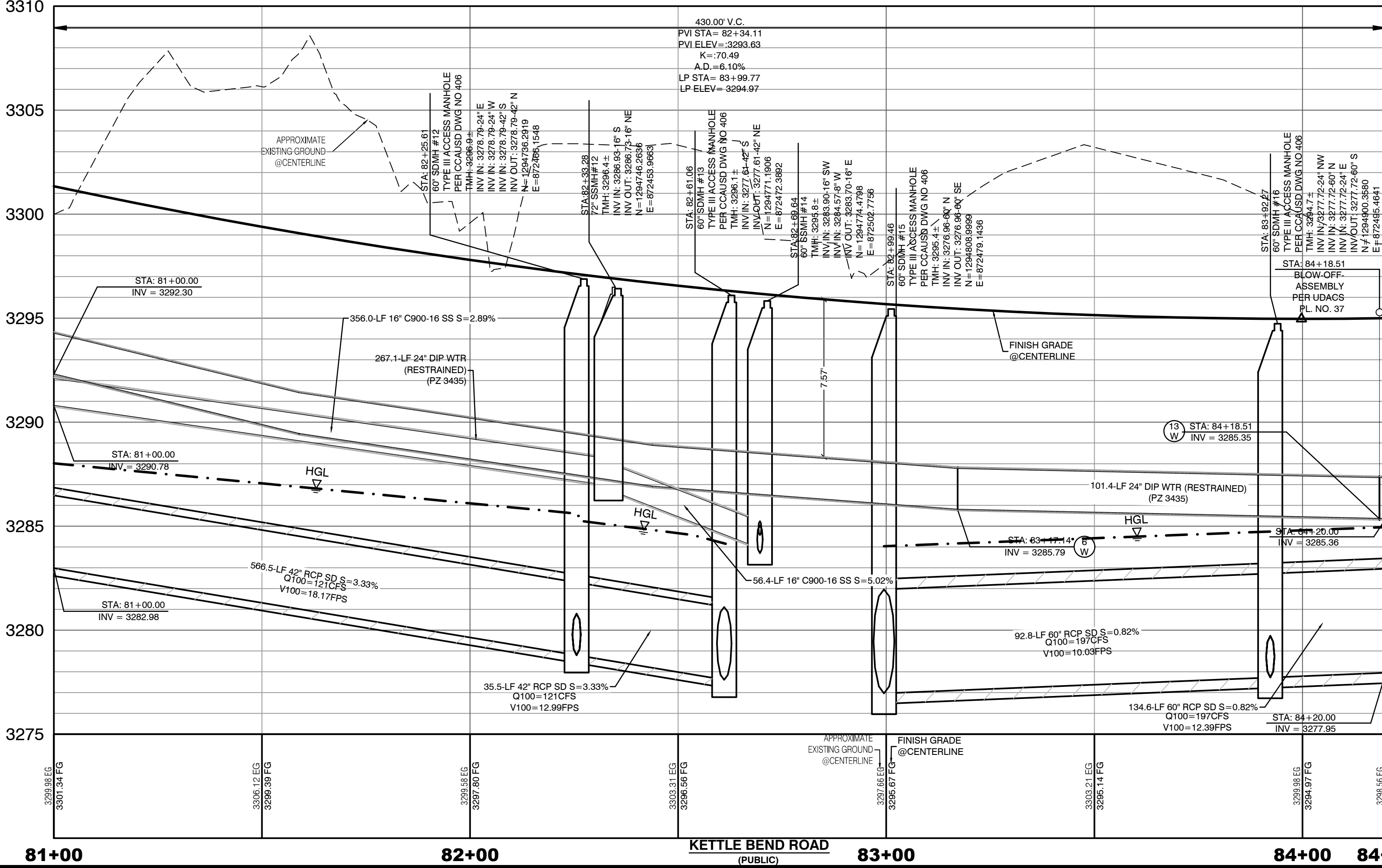
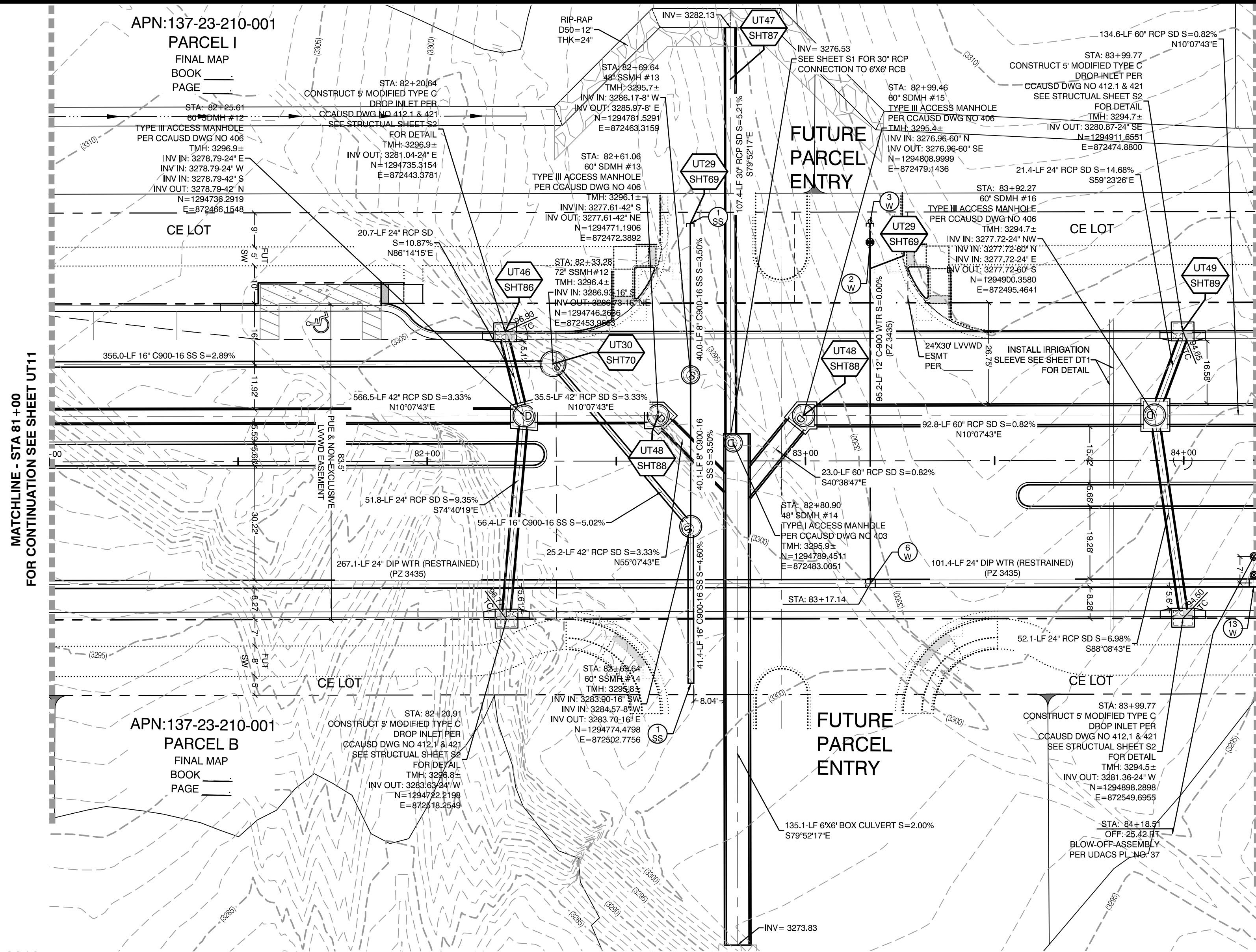
TO ENSURE LVWVD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE: _____

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			
UTILITY PLAN & PROFILE 11 77+40 TO 81+00		SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE			
DRAWN BY: BCC	DESIGNED BY: BCC	CHECKED BY: WJM	PROJECT NO: 7861		
DATE: 09/28/2019		DATE: 09/28/2020			
SCALE: 1"=20'		SCALE: 1"=4'			
SHEET UT11 51 OF 107 SHEETS					
DRAWING NO. L20-01282 107V8449					



- DROP INLET SEPARATION NOTE**
- WHEN 10' PARALLEL SEPARATION IS NOT PRACTICABLE, CONSTRUCT CAST-IN-PLACE MCNOUTH-POUR WITH WATERSTOP BETWEEN SLAB AND WALLS, BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULL, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS, OR APPROVED EQUAL).
- CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)**
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- CONTRACTOR NOTE:**
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- CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
- NOTE:**
- 5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET.
- WATER LINE MARKER BALLS NOTE**
- INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.
- FIRE HYDRANT MARKER NOTES**
- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 5' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.
- WATER MAIN JOINT DEFLECTION**
- WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.
- LVWWD EXISTING FACILITIES NOTE:**
- PROTECT IN PLACE AND ADJUST LVWWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
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- ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
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- WATER**
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 - 24"x6" TEE (PER UDACS PLATE 31)
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 - 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
 - 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
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 - WATER POINT OF CONNECTION
- CONSTRUCTION NOTES**
- SEWER**
- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
 - 8" C-900-16 SANITARY SEWER MAIN
 - 16" C-900-18 SANITARY SEWER MAIN
 - SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
 - SEWER POINT OF CONNECTION
- WATER PRESSURE ZONE:**
- WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.
- DEPTH OF COVER DURING CONSTRUCTION:**
- MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.
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- CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.
- TO ENSURE LVWWD ACCESS WITHIN EASEMENT**
- ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE Boulders, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

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www.clarkcounty.gov

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1-800-642-2444
AND
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT: 137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.791.4000

CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 12
81+00 TO 84+20

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7881
SCALE: 1"=20' HORIZ.
1"=4' VERT.

DATE: 09/28/2019
DATE: 09/28/2019
DATE: 09/28/2020

SHEET
UT12
OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

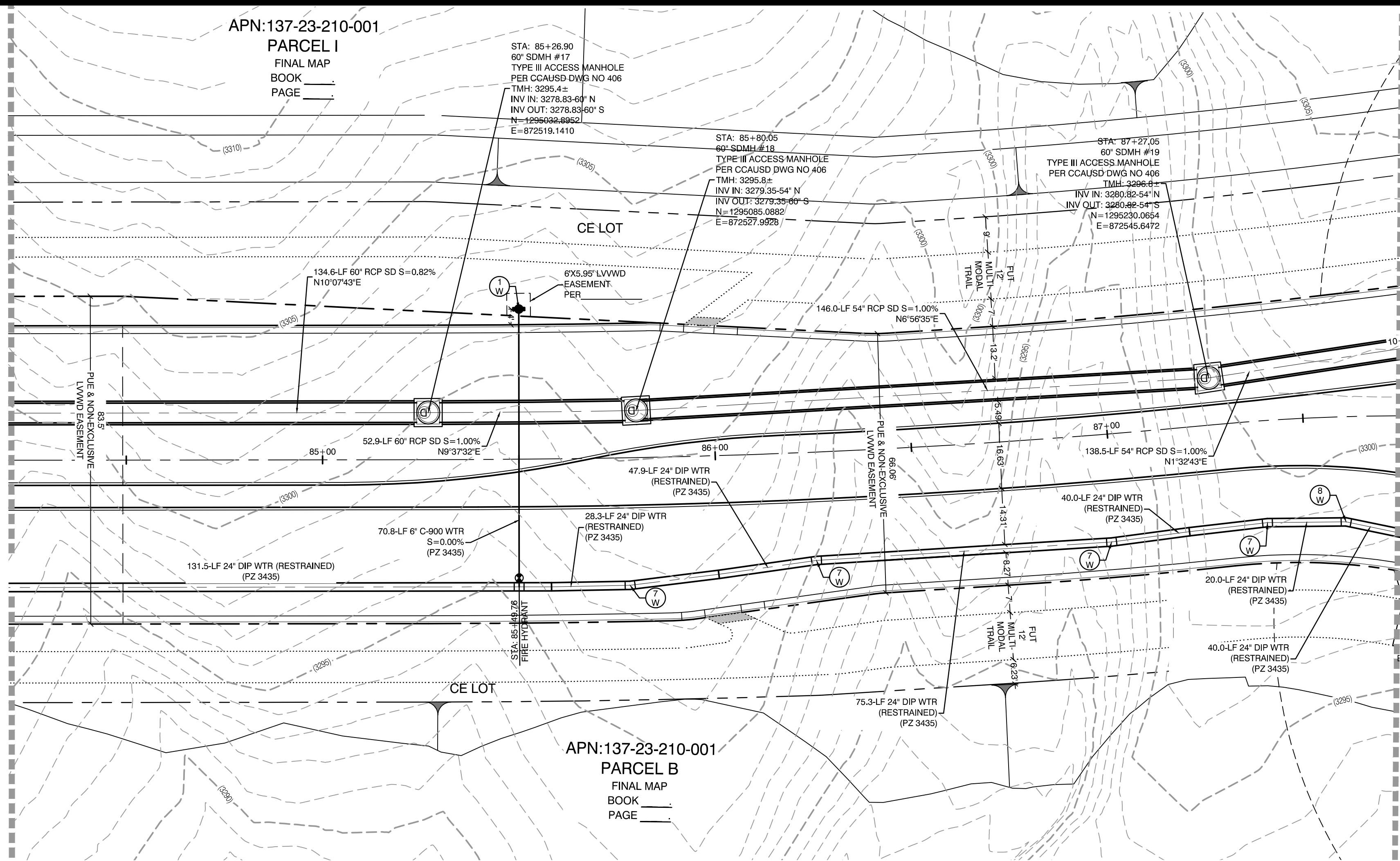
DESIGNED BY: WILLIAM J. MEYER
EXP: 12/31/21
CIVIL

PROJECT NO: 15745
VOWEN

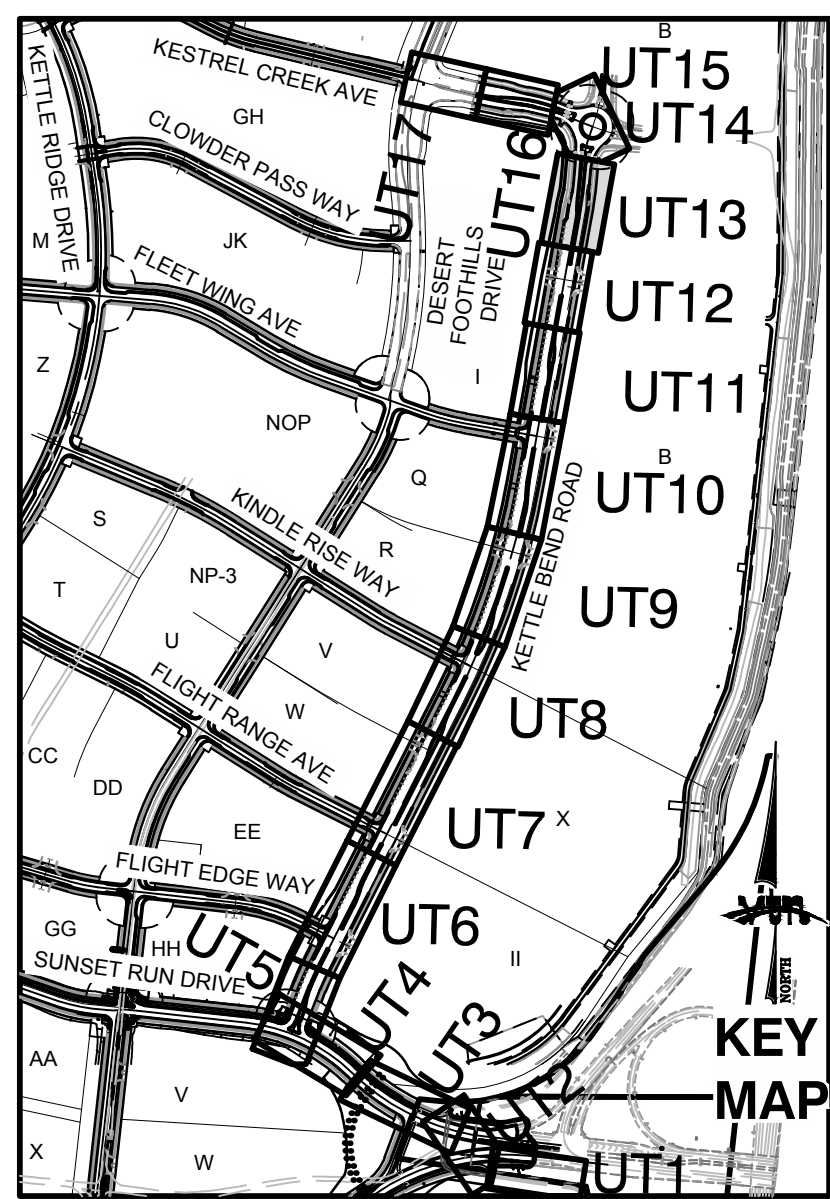
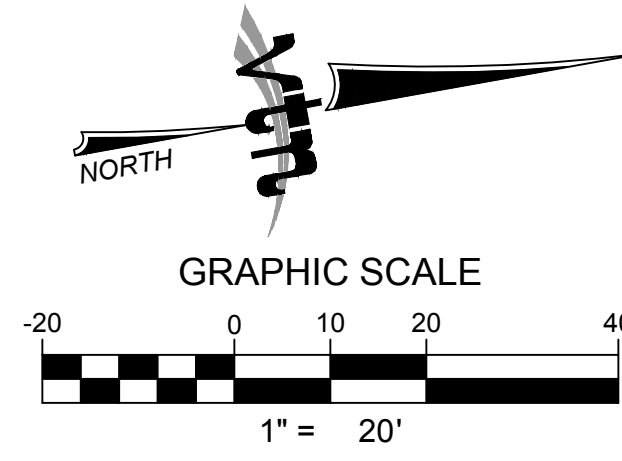
2020-09-25

11/26/20 Kettle Bend Road Sheet 12 of 107 - UT-2.dwg 14/26/20 12:42 PM jcm

MATCHLINE - STA 84+20
FOR CONTINUATION SEE SHEET UT12



MATCHLINE - STA 87+75
FOR CONTINUATION SEE SHEET UT14



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

CONTRACTOR NOTE:

LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APURTENANCES ARE AVAILABLE.

NOTE:

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

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVVWD EXISTING FACILITIES NOTE:

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

UTILITY CROSSING NOTE:

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.02 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ENGINEER DISCLAIMER NOTE:

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

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1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

CONSTRUCTION NOTES	
WATER	
	FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" OR 24"X6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
	12" GATE VALVE (PER UDACS PLATE 30 & 39)
	12" CAP & BLOW OFF (PER UDACS PLATE 36)
	24" CAP & BLOW OFF (PER UDACS PLATE 36)
	12"X12" TEE (PER UDACS PLATE 31)
	24"X12" TEE (PER UDACS PLATE 31)
	24" 5' BEND (PER UDACS PLATE 31)
	24" 11' BEND (PER UDACS PLATE 31)
	24" 22' BEND (PER UDACS PLATE 31)
	12" 45' BEND (PER UDACS PLATE 31)
	12" 5' BEND (PER UDACS PLATE 31)
	1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5' METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5' RPPA PER UDACS PLATE #6 AND SHEET D07
	24"X6" TEE (PER UDACS PLATE 31)
	6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
	12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
	12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
	24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17
	WATER POINT OF CONNECTION

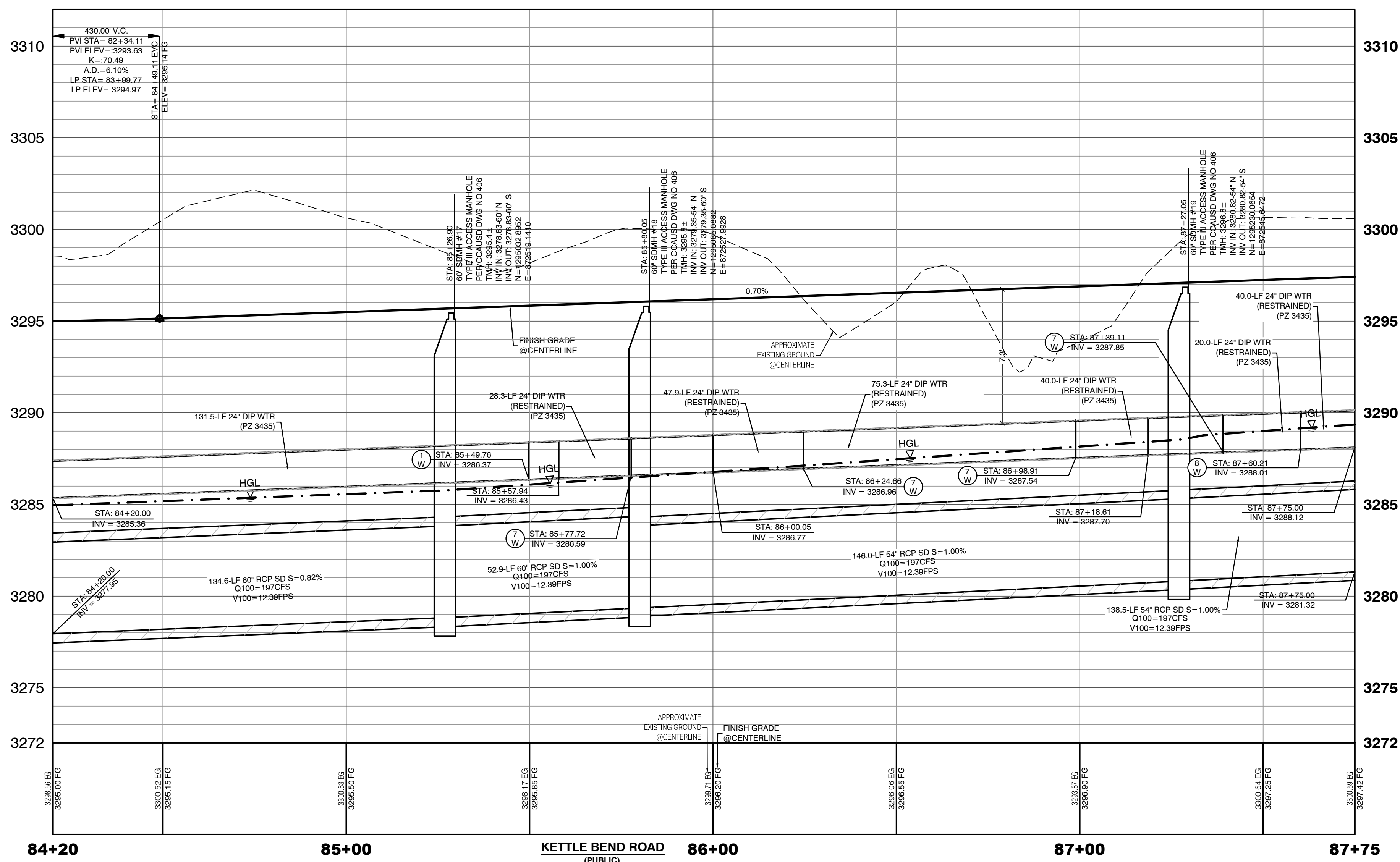
CONSTRUCTION NOTES	
SEWER	
	STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
	6" C-900-16 SANITARY SEWER MAIN
	16" C-900-16 SANITARY SEWER MAIN
	SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
	SEWER POINT OF CONNECTION

WATER PRESSURE ZONE:	
WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.	
DEPTH OF COVER DURING CONSTRUCTION:	
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.	
WATERLINE TRENCH NOTE:	
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.	
TO ENSURE LVVWD ACCESS WITHIN EASEMENT	
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOLLARDS, FENCES, WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.	

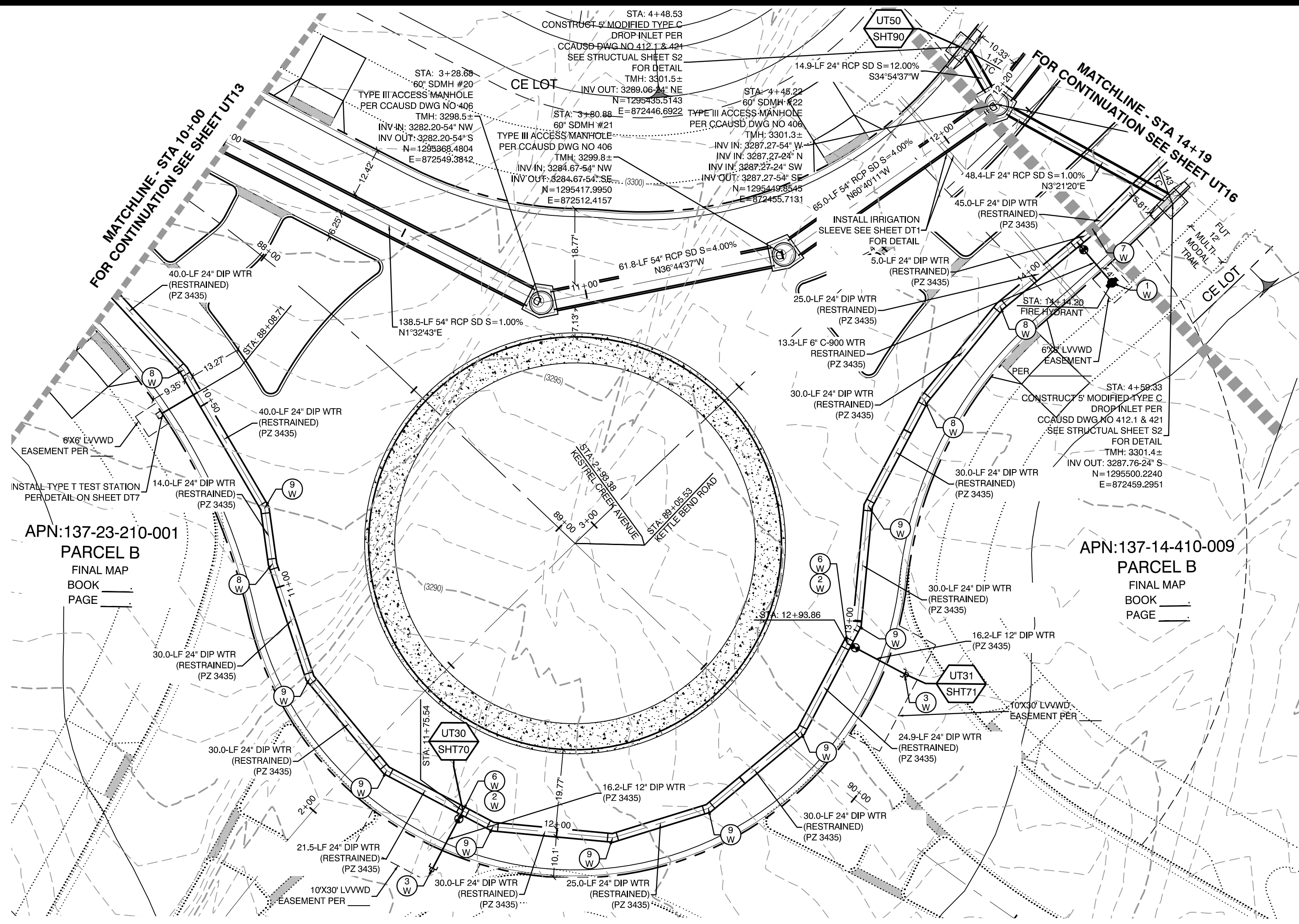
APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE: _____

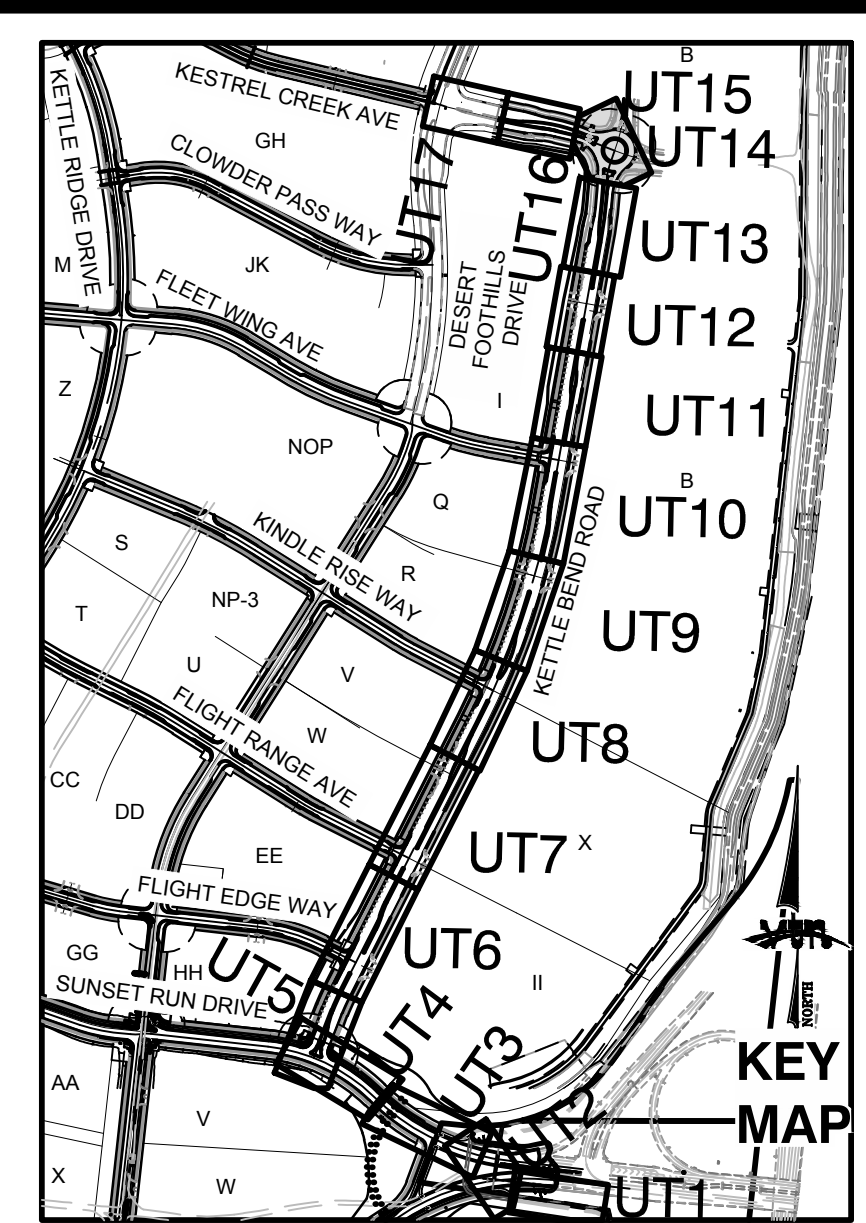
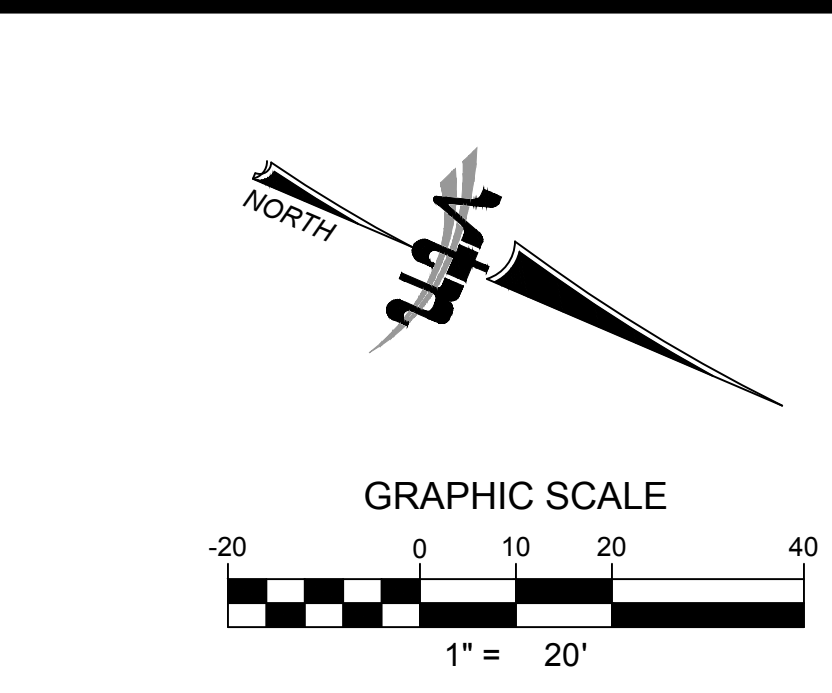


HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10805 GRIFFITH PEAK DRIVE, SUITE 160 LAS VEGAS, NEVADA 89135 702-791-4000		CITY OF LAS VEGAS	
UTILITY PLAN & PROFILE 13 84+20 TO 87+75		SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	
DRAWN BY: BCC	DESIGNED BY: BCC	CHECKED BY: WJM	PROJECT NO: 7861
DATE: 05/26/2019		DATE: 05/26/2019	
SCALE: 1"=20'		SCALE: 1"=4'	
SHEET 53 OF 107 SHEETS		2020-09-25	
DRAWING NO. L20-01282		PROJECT NO. 107V8449	



KETTLE BEND ROAD
(PUBLIC)

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



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AND
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FREETOWN AND AIRPORT, DIVISION OF TRANSPORTATION

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).

CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)
THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

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CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

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

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS. PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE. LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE. LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVVWD EXISTING FACILITIES NOTE:
PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

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

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CONSTRUCTION NOTES

WATER

- 12" GATE VALVE (PER UDACS PLATE 30 & 39)
- 12" CAP & BLOW OFF (PER UDACS PLATE 39)
- 24" CAP & BLOW OFF (PER UDACS PLATE 39)
- 12"x12" TEE (PER UDACS PLATE 31)
- 24"x12" TEE (PER UDACS PLATE 31)
- 24" 5" BEND (PER UDACS PLATE 31)
- 24" 11" BEND (PER UDACS PLATE 31)
- 24" 22" BEND (PER UDACS PLATE 31)
- 12" 45" BEND (PER UDACS PLATE 31)
- 12" 5" BEND (PER UDACS PLATE 31)
- 1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #6 AND SHEET DT7
- 24"x6" TEE (PER UDACS PLATE 31)
- 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 24" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
- WATER POINT OF CONNECTION

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
- 6" C-900-16 SANITARY SEWER MAIN
- 16" C-900-16 SANITARY SEWER MAIN
- SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
- SEWER POINT OF CONNECTION

WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

DEPTH OF COVER DURING CONSTRUCTION:
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

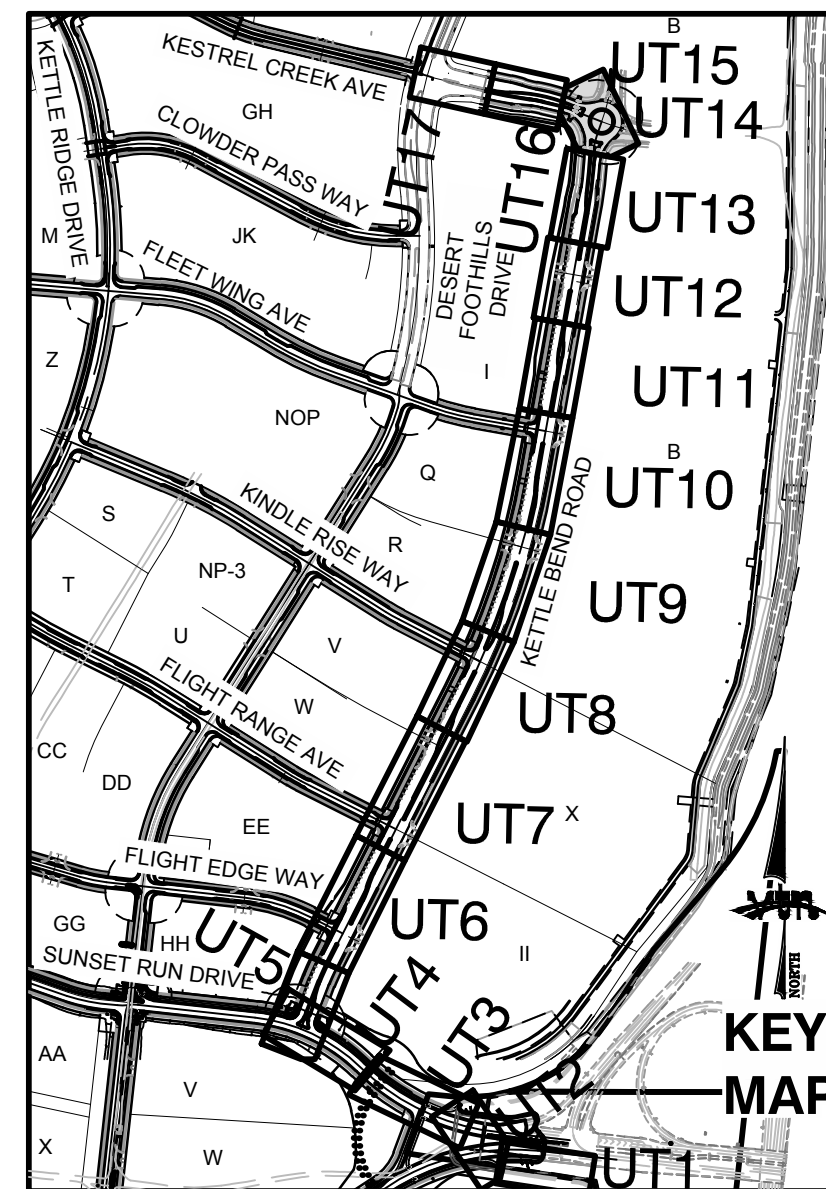
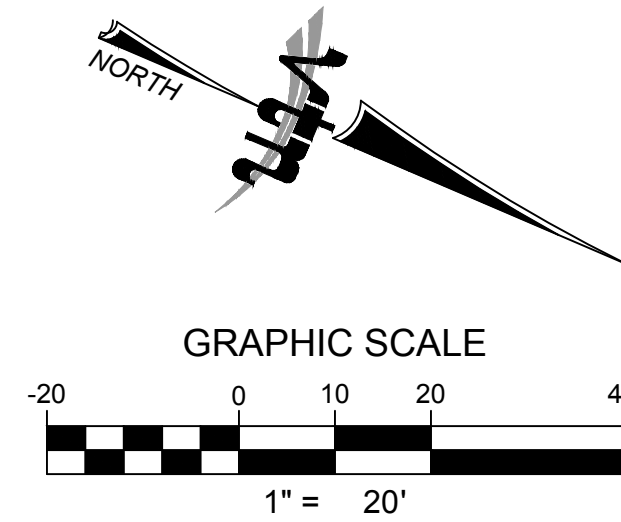
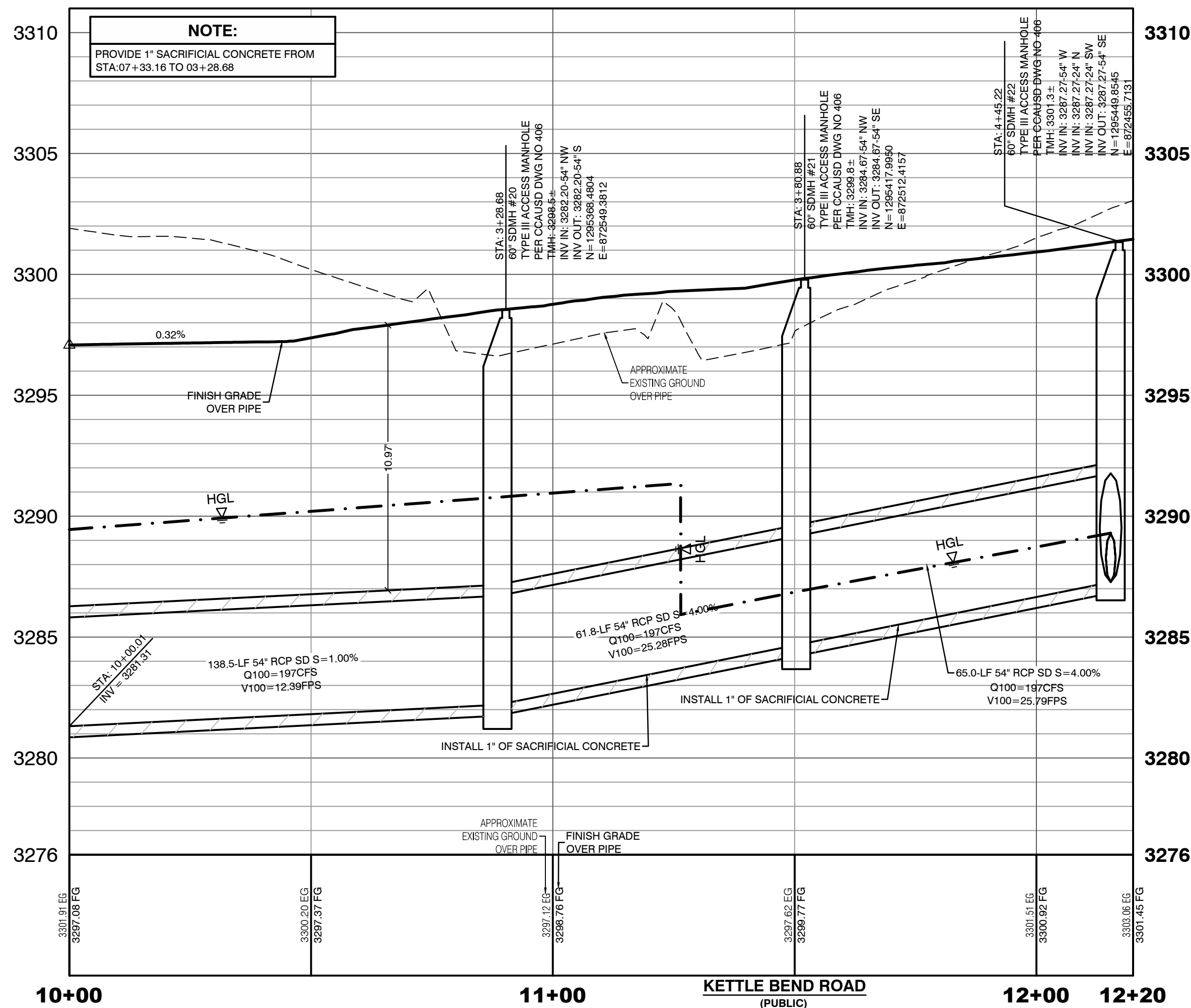
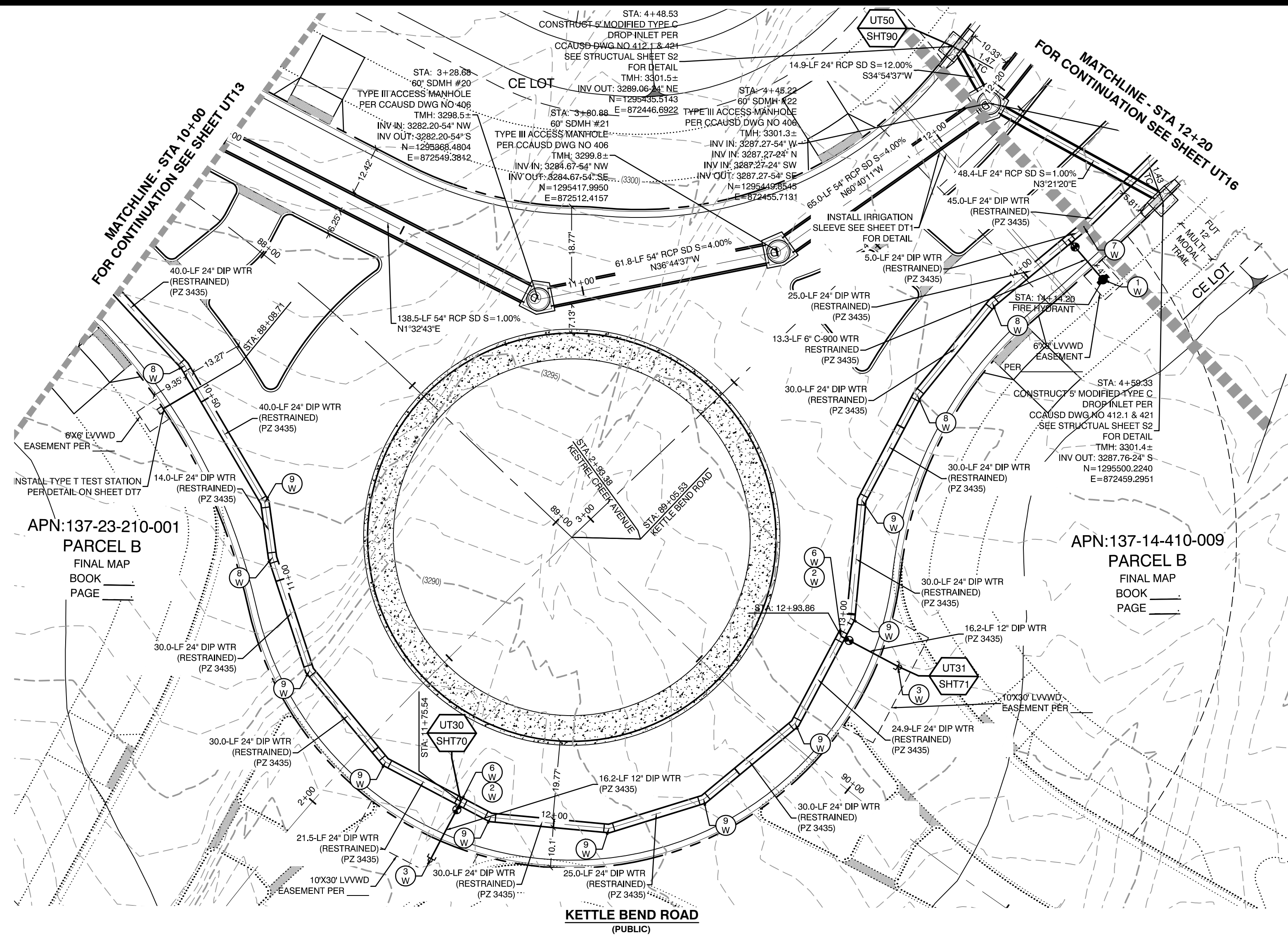
WATERLINE TRENCH NOTE:
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE: _____

CITY OF LAS VEGAS	
HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10885 GRIFFITH PEAK DRIVE, SUITE 160 LAS VEGAS, NEVADA 89135 702-791-4000	
2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5148 PH: (702) 793-7550 FAX: (702) 382-2587 WEB: WWW.VTNV.COM CONSULTING ENGINEERS & PLANNERS & LAND SURVEYORS	
UTILITY PLAN & PROFILE 14 10+00 TO 14+19	
SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	
DRAWN BY: BCC	DESIGNED BY: BCC
CHECKED BY: WJM	PROJECT NO: 7861
SCALE: 1"=20' HORIZ. 1"=4' VERT.	
SHEET UT14 54 OF 107 SHEETS	
DRAWING NO. L20-01282 107V8449	
2020-09-25	
F:\17361 Kettle Bend Road\Sheet\UT14\UT14.dwg 14/26/20 12:42 PM Jcmjap	



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

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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CONSTRUCTION NOTES

- WATER**
- FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" OR 24"X6" TEE WITH 4" G.V. (PER UDACS PLATE NO. 39 & 40)
 - 12" GATE VALVE (PER UDACS PLATE 30 & 39)
 - 12" CAP & BLOW OFF (PER UDACS PLATE 30)
 - 24" CAP & BLOW OFF (PER UDACS PLATE 30)
 - 12"X12" TEE (PER UDACS PLATE 31)
 - 24"X12" TEE (PER UDACS PLATE 31)
 - 24" 5" BEND (PER UDACS PLATE 31)
 - 24" 11" BEND (PER UDACS PLATE 31)
 - 24" 22" BEND (PER UDACS PLATE 31)
 - 12" 45" BEND (PER UDACS PLATE 31)
 - 12" 5" BEND (PER UDACS PLATE 31)

- 1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET D17
- 24"X6" TEE (PER UDACS PLATE 31)
 - 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
 - 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
 - 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
 - 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17

CONSTRUCTION NOTES

- SEWER**
- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
 - 8" C-900-16 SANITARY SEWER MAIN
 - 16" C-900-16 SANITARY SEWER MAIN
 - SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
 - SEWER POINT OF CONNECTION

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

DEPTH OF COVER DURING CONSTRUCTION:

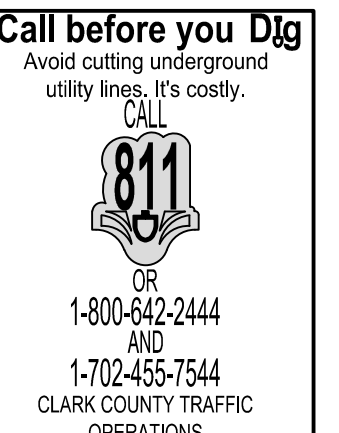
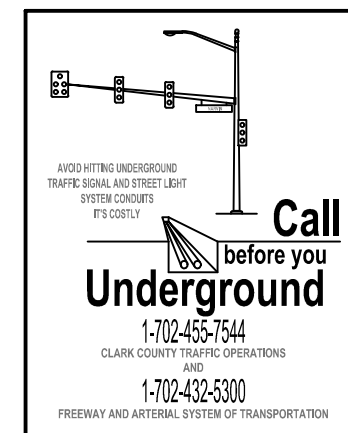
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

WATERLINE TRENCH NOTE:

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TO ENSURE LVVWD ACCESS WITHIN EASEMENT

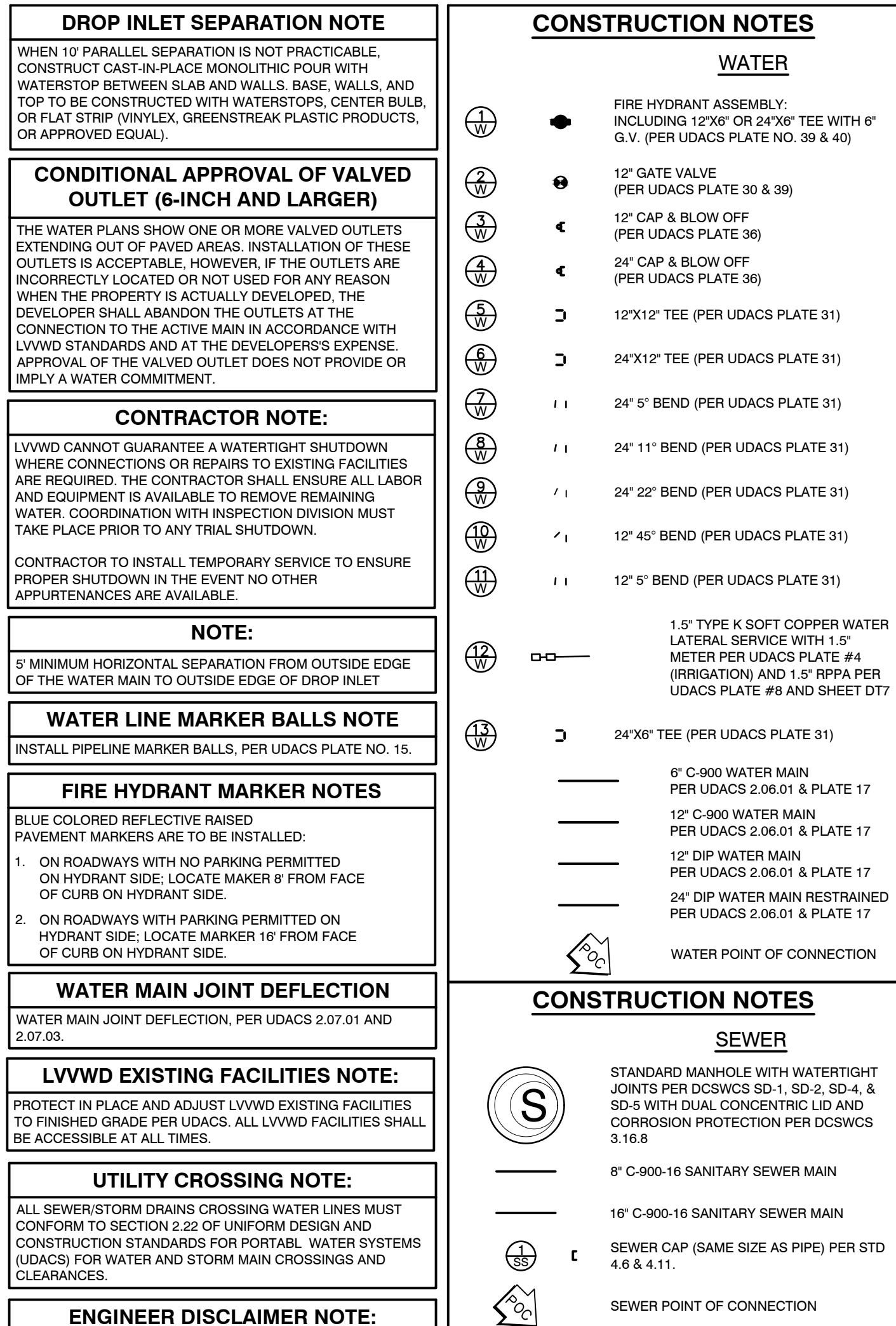
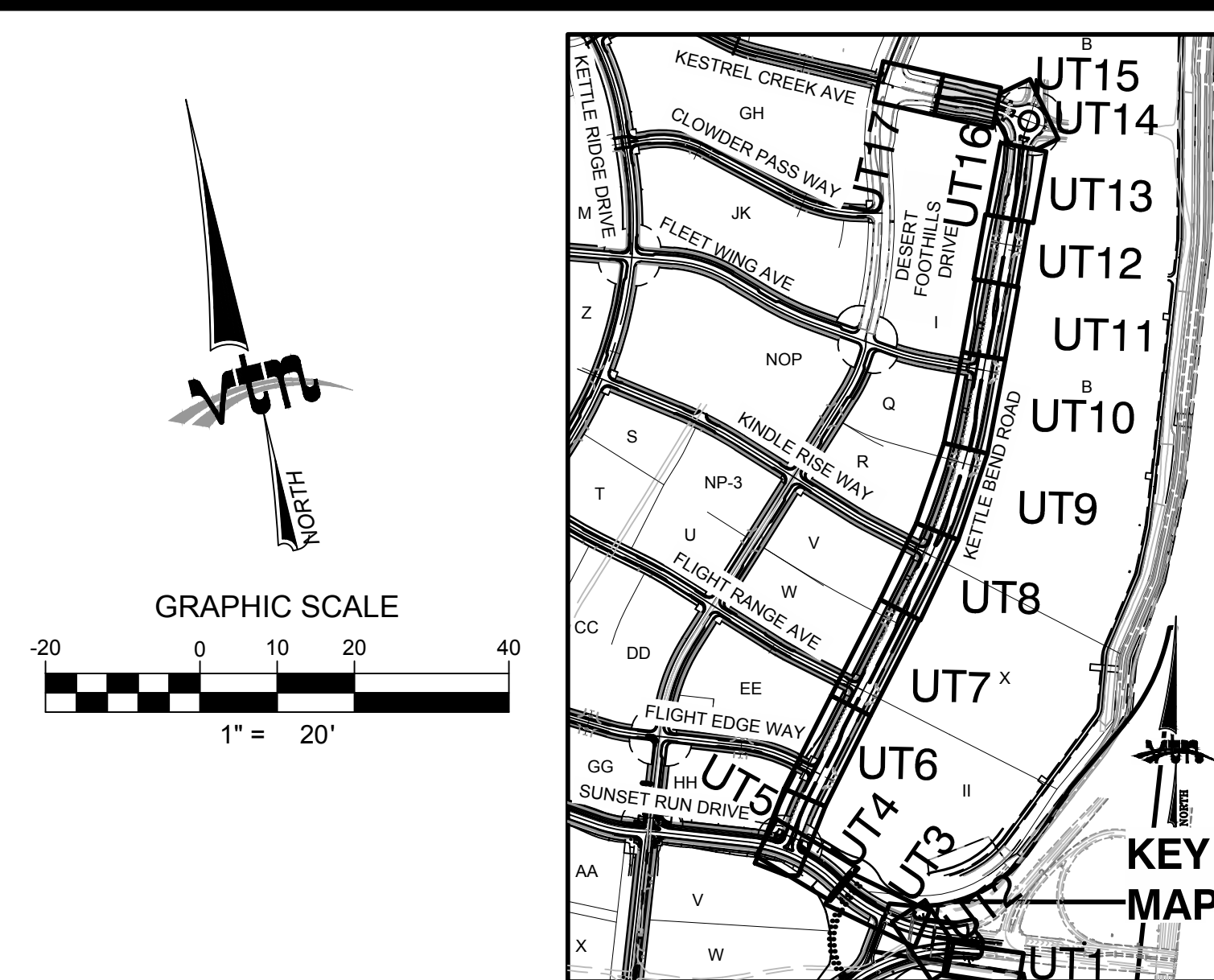
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10805 GRIFFITH PEAK DRIVE, SUITE 160 LAS VEGAS, NEVADA 89146-5148 PH: (702) 973-7550 FAX: (702) 362-2587 CONSULTING ENGINEERS & LAND SURVEYORS		CITY OF LAS VEGAS 2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5148 PH: (702) 973-7550 FAX: (702) 362-2587 WEB: WWW.VTNV.COM CONSULTING ENGINEERS & LAND SURVEYORS	
UTILITY PLAN & PROFILE 15 10+00 TO 12+20 SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE		DRAWN BY: BCC DESIGNED BY: BCC CHECKED BY: WJW PROJECT NO: 7861 SCALE: 1"=20' HORIZ. 1"=4' VERT.	
SHEET UT15 55 OF 107 SHEETS		2020-09-25 1:1500 Kettle Bend Road Sheet 55 of 107	



TION S / / NO RE NOT ing	WATER PRESSURE ZONE: WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.
	DEPTH OF COVER DURING CONSTRUCTION: MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER OVER LUDACS SECTION 2.00-04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.
	WATERLINE TRENCH NOTE: CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER LUDACS PLATE NO. 17.
	TO AVOID LVVWD OBSTRUCTION WITHIN EASEMENT ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDBERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

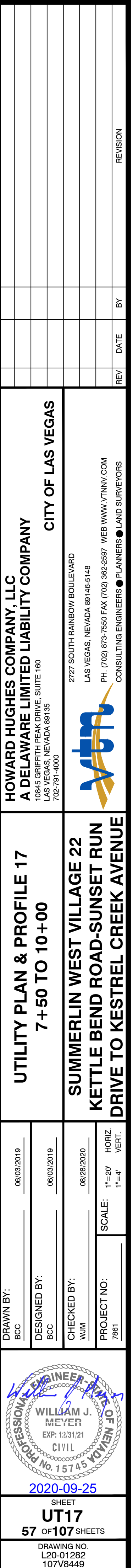
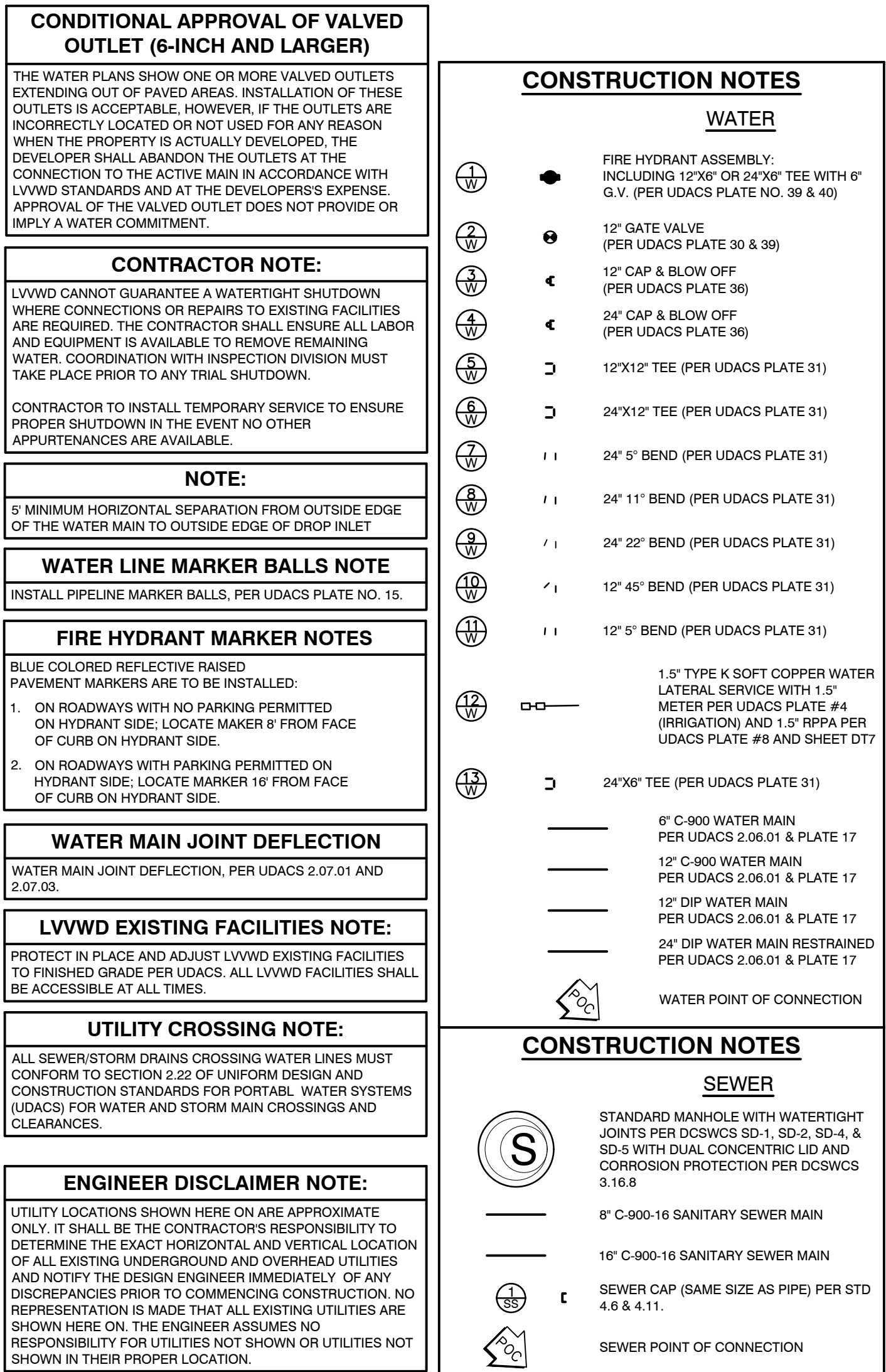
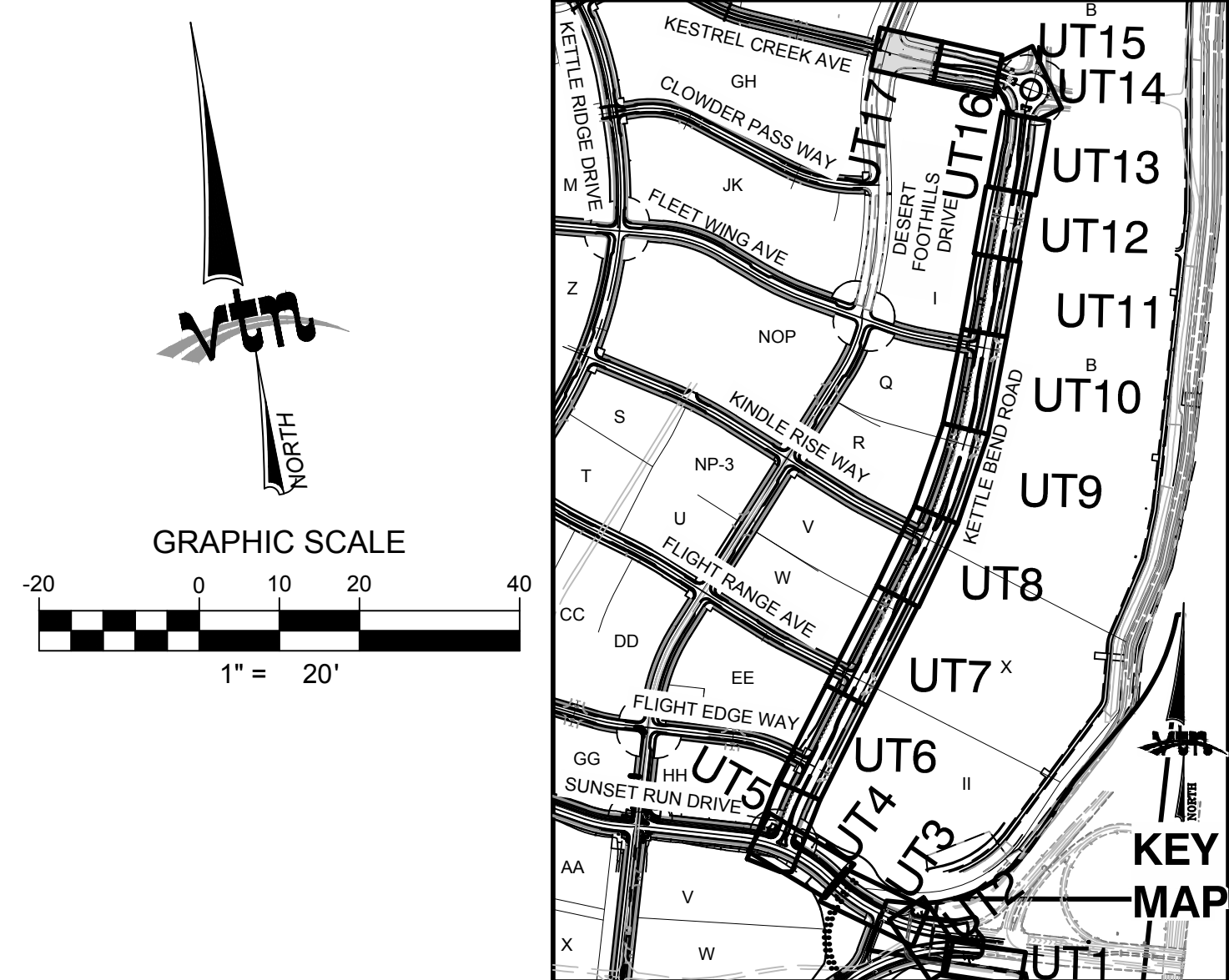
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT: 137333 FIRST APPROVED DATE: _____

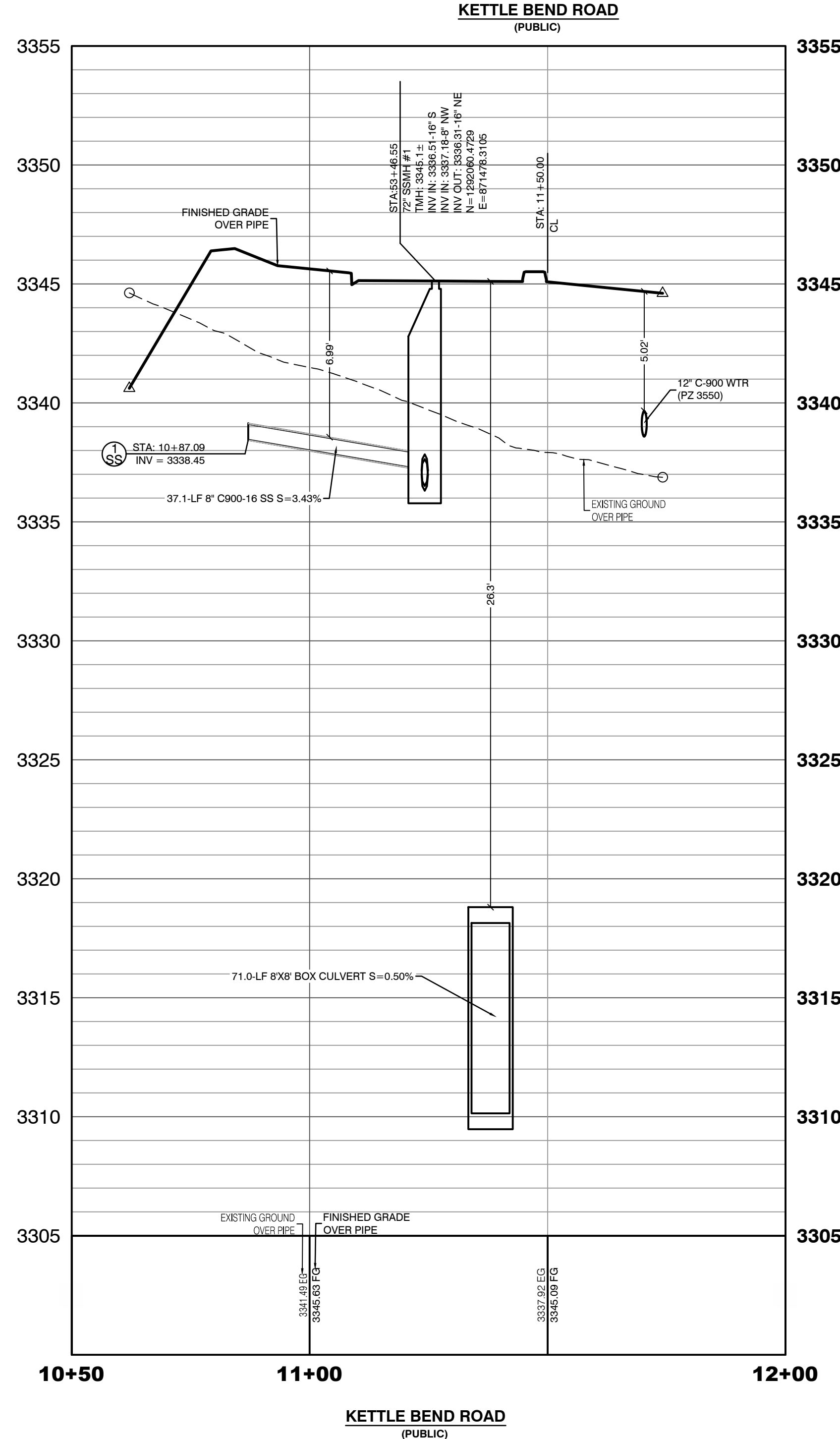
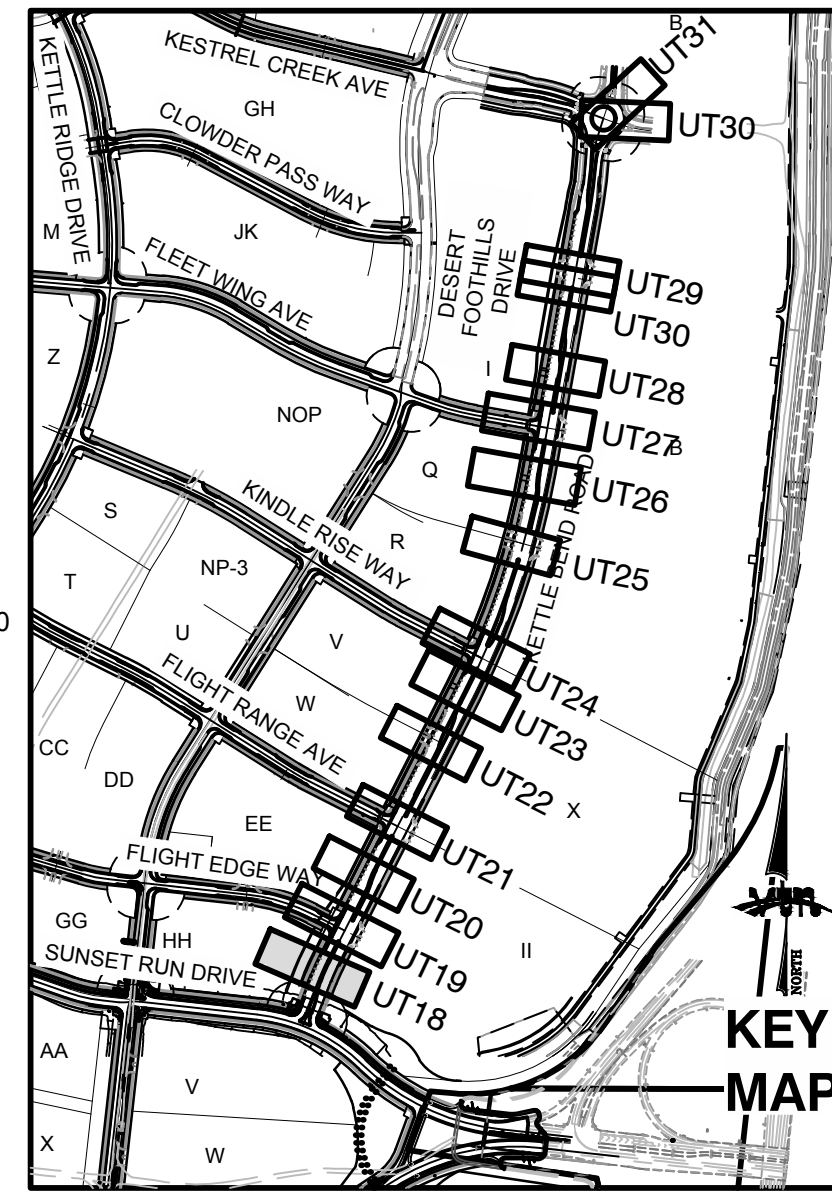
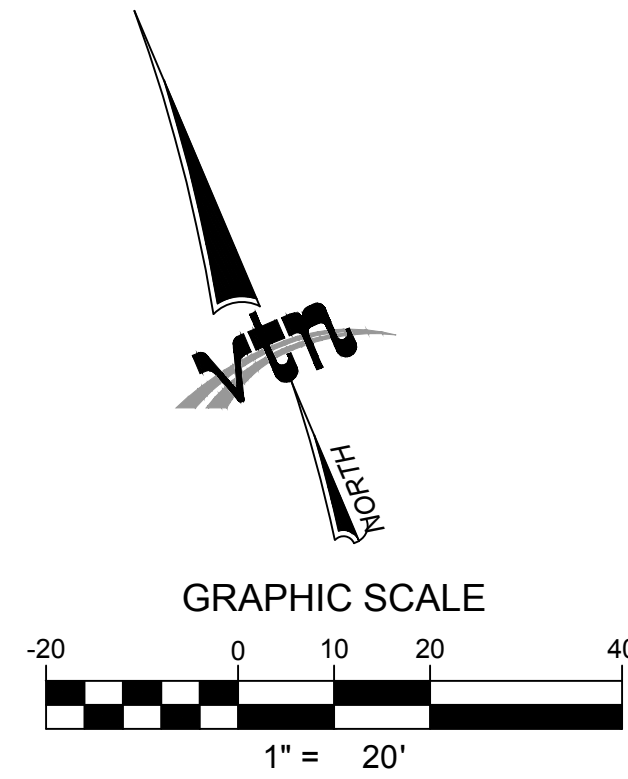
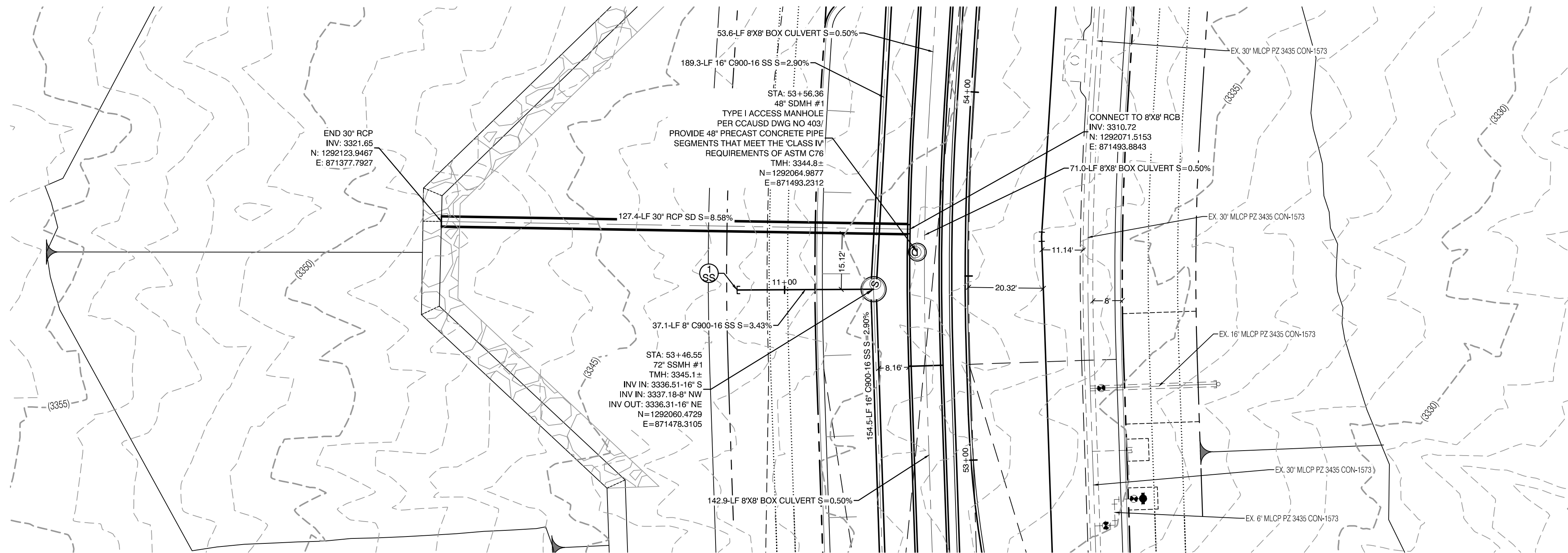
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
 10845 GRIFFITH PEAK DRIVE, SUITE 160
 LAS VEGAS, NEVADA 89135

UTILITY PLAN & PROFILE 16
7+50 TO 4+40.98

	SCALE: 1" = 20' 1" = 4'	
	PROJECT NO.: 7691	HORIZ. VERT.
DRAWING NO.: 56 OF 107 SHEETS	SHEET UT16	DRAWING NO.: L20-01282 L20-01283
CHECKED BY: WJM DATE: 06/28/2020	DESIGNED BY: BCC DATE: 06/03/2019	DRAWN BY: BCC DATE: 06/03/2019

[illegible]





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

CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

CONTRACTOR NOTE:

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CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS. PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVVWD EXISTING FACILITIES NOTE:

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

UTILITY CROSSING NOTE:

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

ENGINEER DISCLAIMER NOTE:

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CONSTRUCTION NOTES

WATER

- FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" OR 24"X6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
- 12" GATE VALVE (PER UDACS PLATE 30 & 39)
- 12" CAP & BLOW OFF (PER UDACS PLATE 30)
- 24" CAP & BLOW OFF (PER UDACS PLATE 30)
- 12"X12" TEE (PER UDACS PLATE 31)
- 24"X12" TEE (PER UDACS PLATE 31)
- 24" 5" BEND (PER UDACS PLATE 31)
- 24" 11" BEND (PER UDACS PLATE 31)
- 24" 22" BEND (PER UDACS PLATE 31)
- 12" 45" BEND (PER UDACS PLATE 31)
- 12" 5" BEND (PER UDACS PLATE 31)

1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #6 AND SHEET D77

- 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17

CONSTRUCTION NOTES

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
- 8" C-900-16 SANITARY SEWER MAIN
- 16" C-900-16 SANITARY SEWER MAIN
- SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
- SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

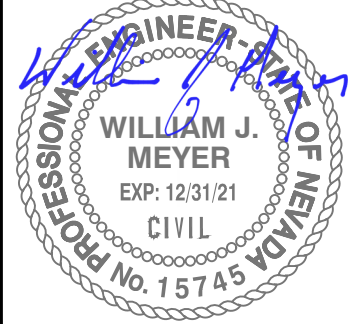
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 873-7550 FAX: (702) 382-2587
WEB: WWW.VTNNY.COM



UTILITY PLAN & PROFILE 18
SEWER LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC	09/09/2019
DESIGNED BY: BCC	09/09/2019
CHECKED BY: WJM	09/28/2020
PROJECT NO: 7861	SCALE: 1"=20' HORIZ. 1"=4' VERT.

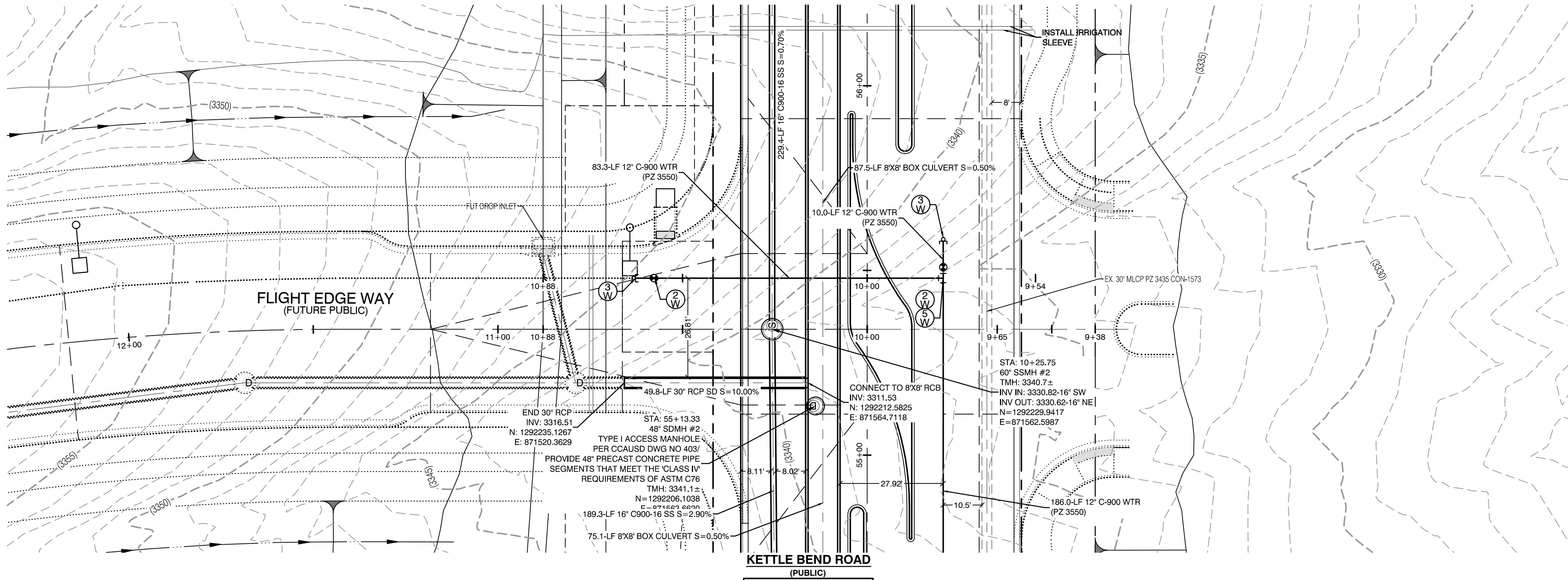


2020-09-25

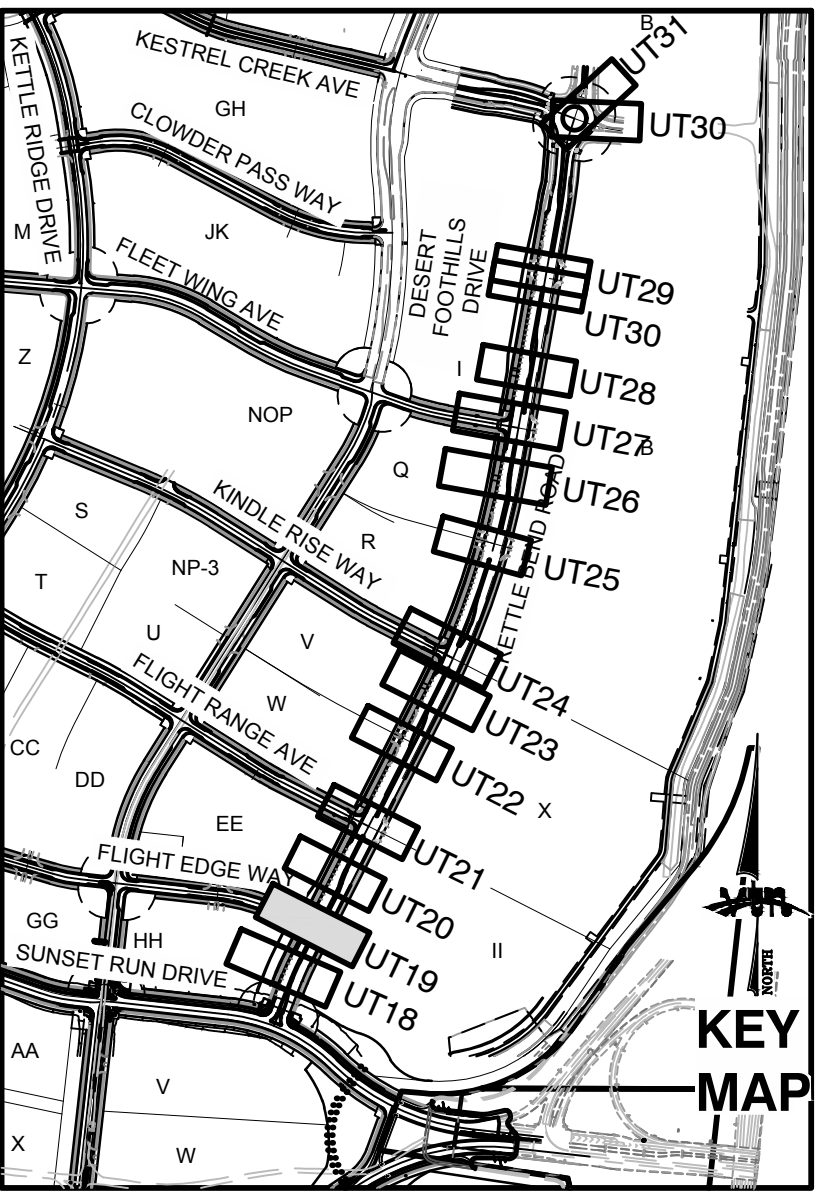
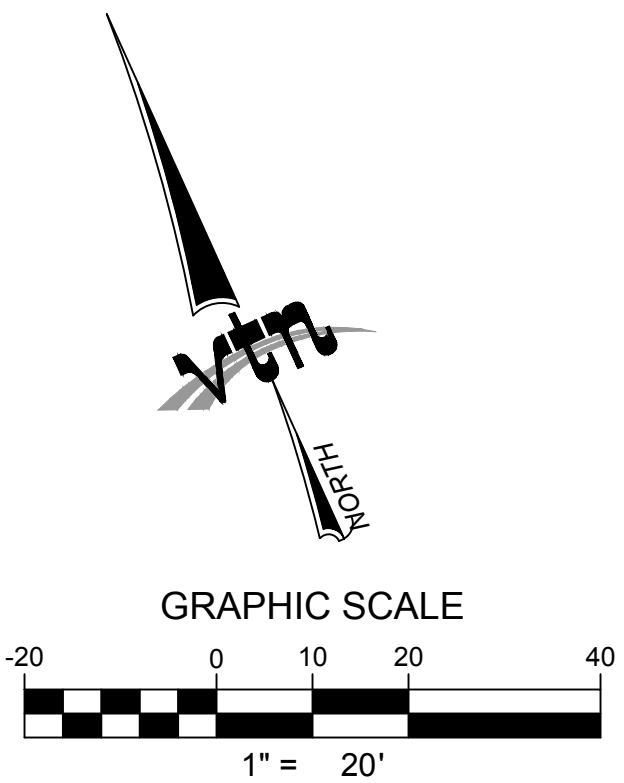
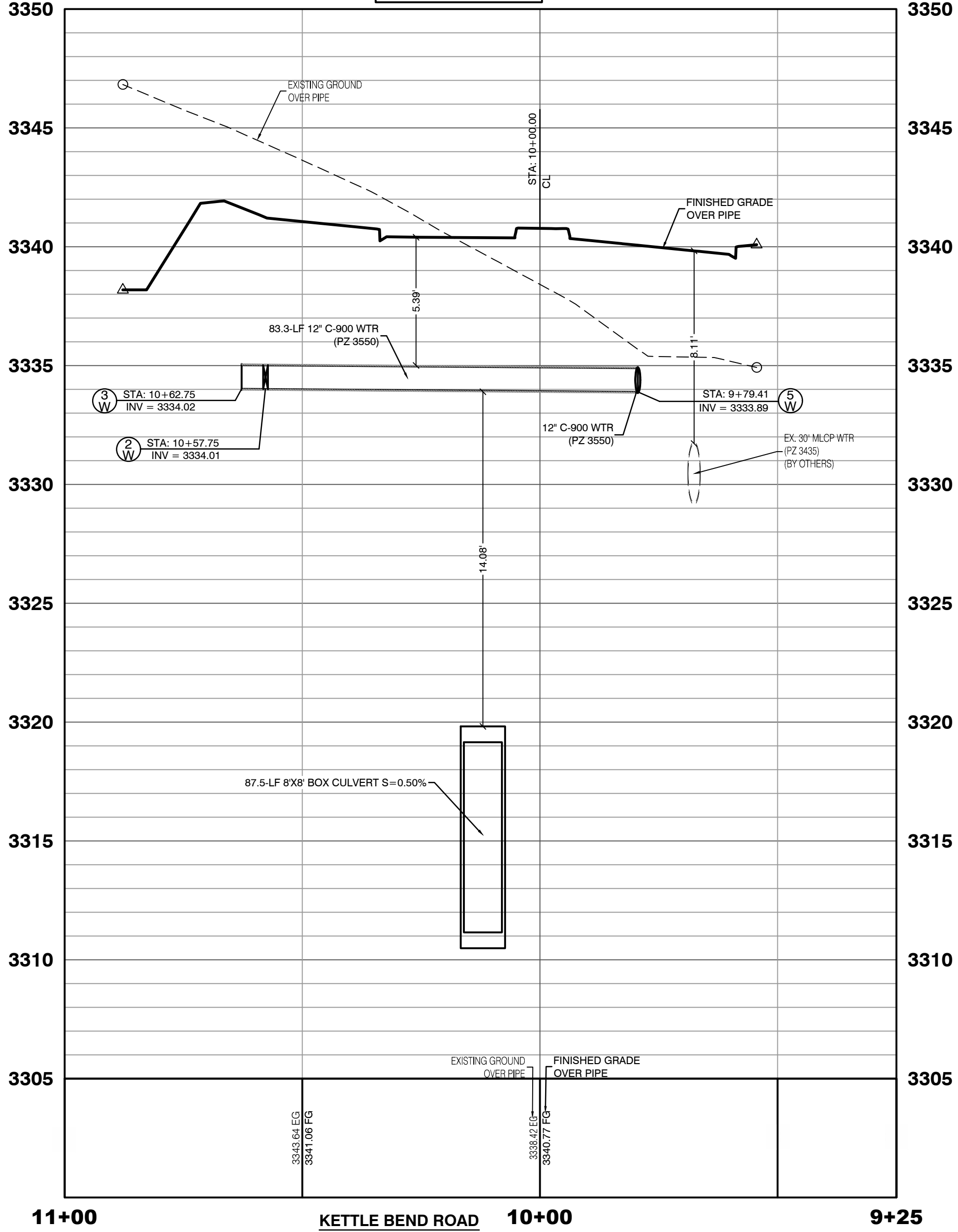
SHEET
UT18
58 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

F:\17361 Kettle Bend Road\Sheet\7861 UT18.dwg 14:20:20 6/19 AM/Stanidone



PROFILE SCALES:
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VERT. = 1"=4'



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WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS. PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

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1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
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WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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- 24"x6" TEE (PER UDACS PLATE 31)
- 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17
- WATER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
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- SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:



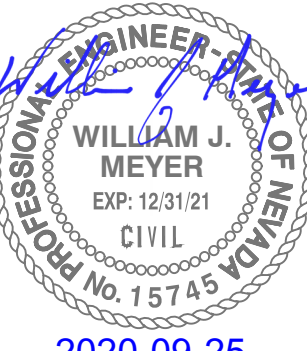
Call before you Dig
Avoid cutting underground utility lines. It's costly.
811
OR
1-800-642-2444
AND
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.791.4000

UTILITY PLAN & PROFILE 19
SEWER & WATER LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

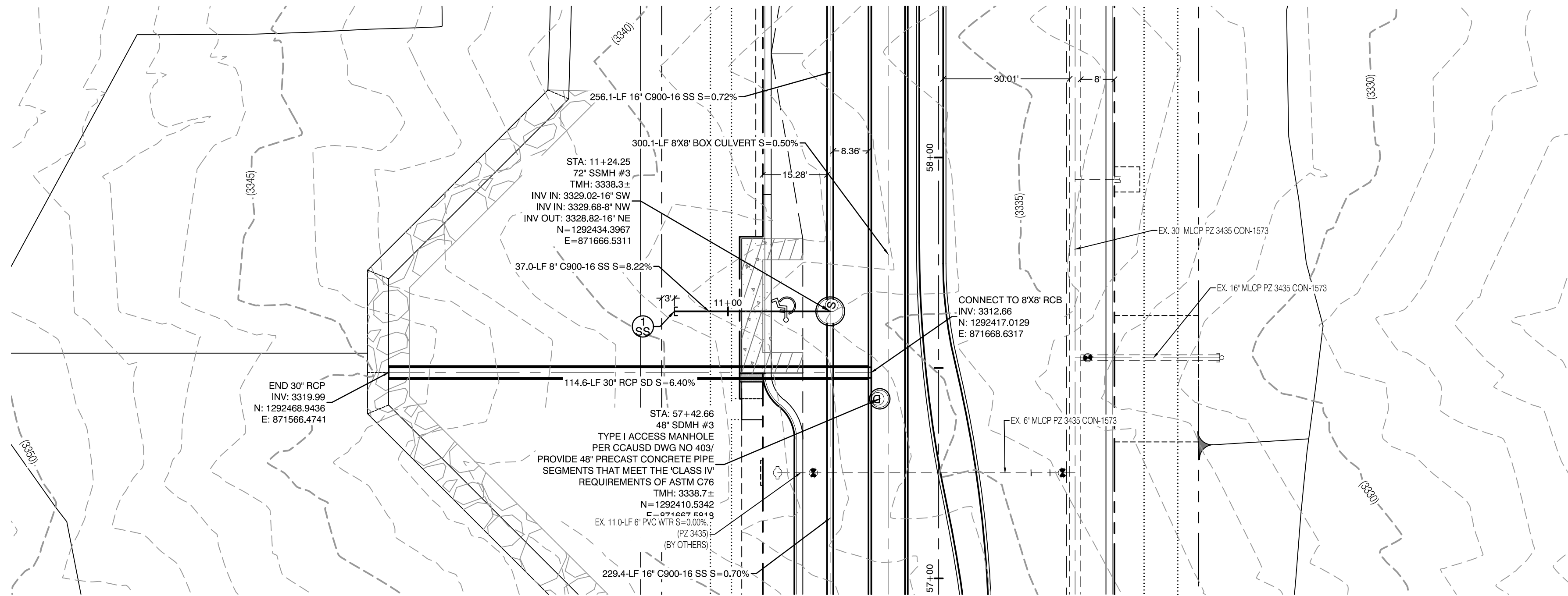


2020-09-25

SHEET
UT19
OF 107 SHEETS

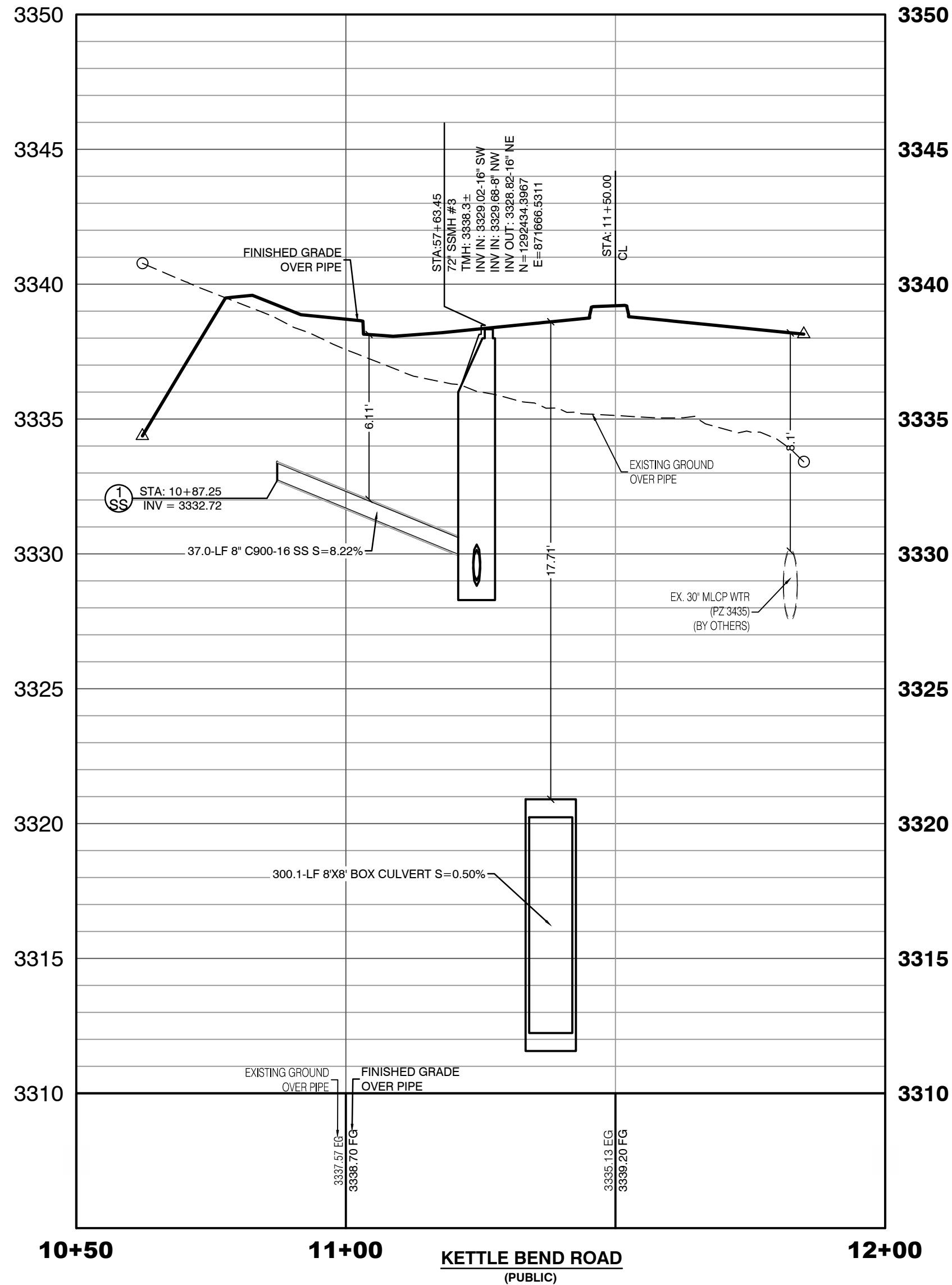
DRAWING NO.
L20-01282
107V8449

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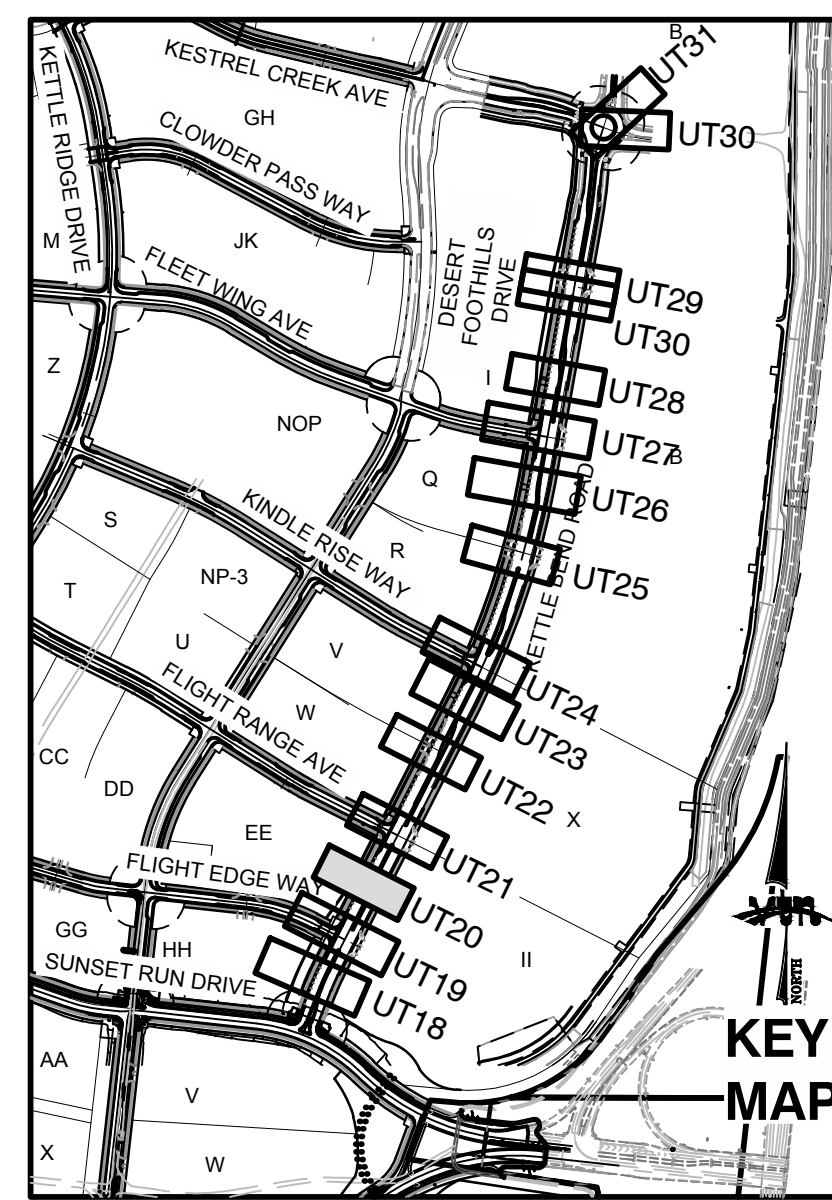
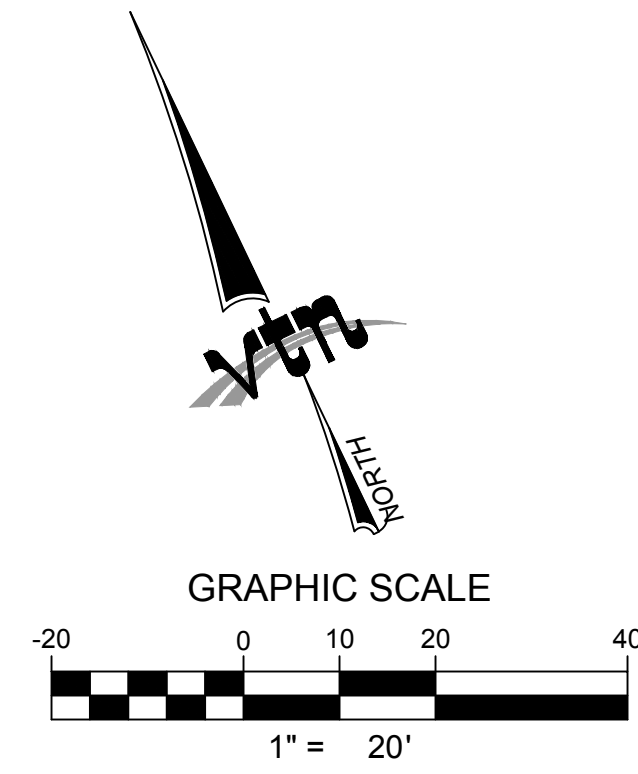


KETTLE BEND ROAD
(PUBLIC)

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



KETTLE BEND ROAD
(PUBLIC)



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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DIG

1-702-227-2929

CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig

811

OR

1-800-642-2444

AND

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

AVOID HITTING UNDERGROUND WATER MAINS AND OTHER LIFE SUPPORTING UTILITIES.

Call before you Dig

1-702-455-7544

AND

1-702-432-8300

CLARK COUNTY TRAFFIC OPERATIONS

CONSTRUCTION NOTES

WATER

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WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

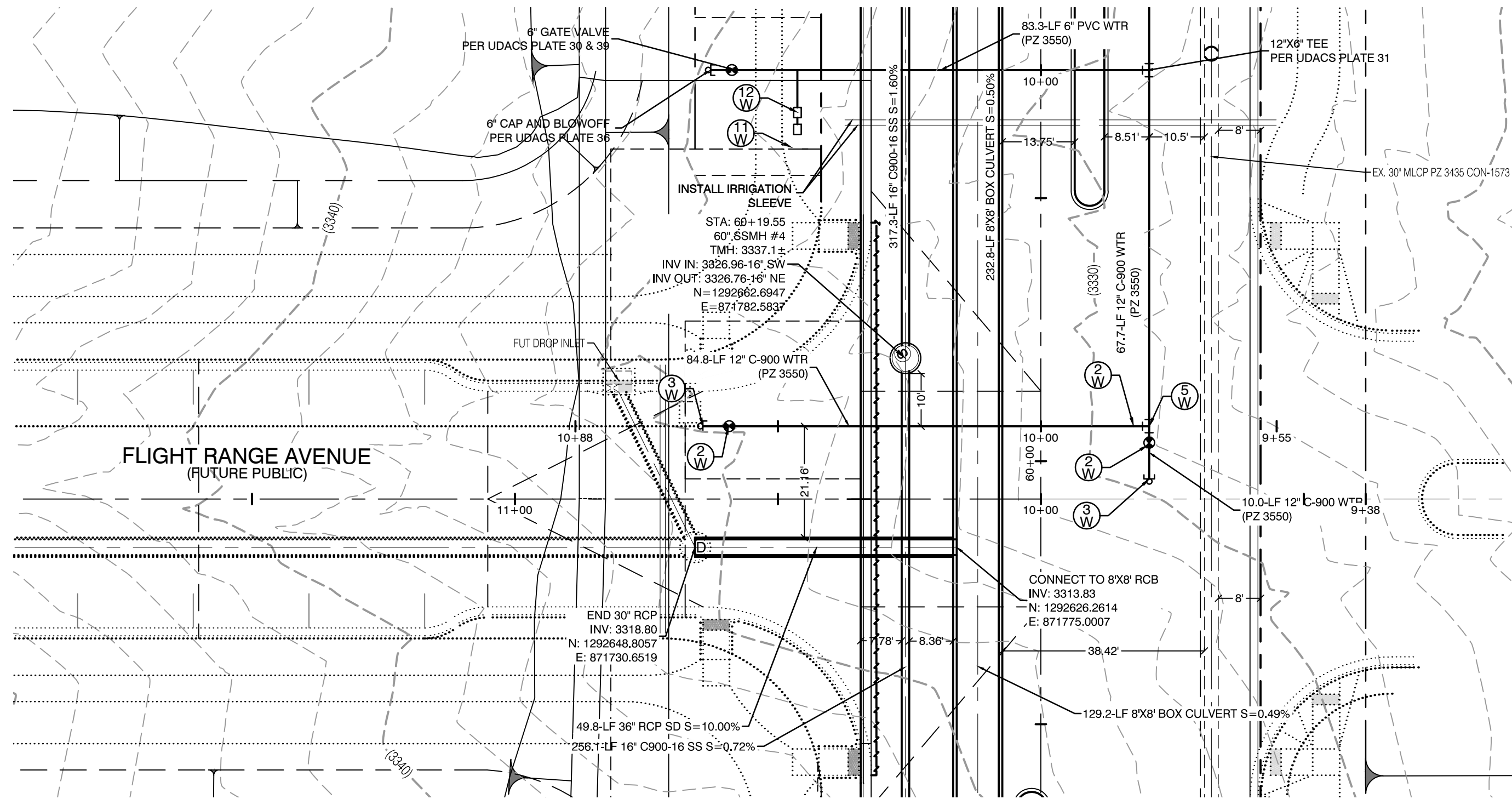
UTILITY PLAN & PROFILE 20
SEWER & WATER LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20'
HORIZ. VERT. N/A

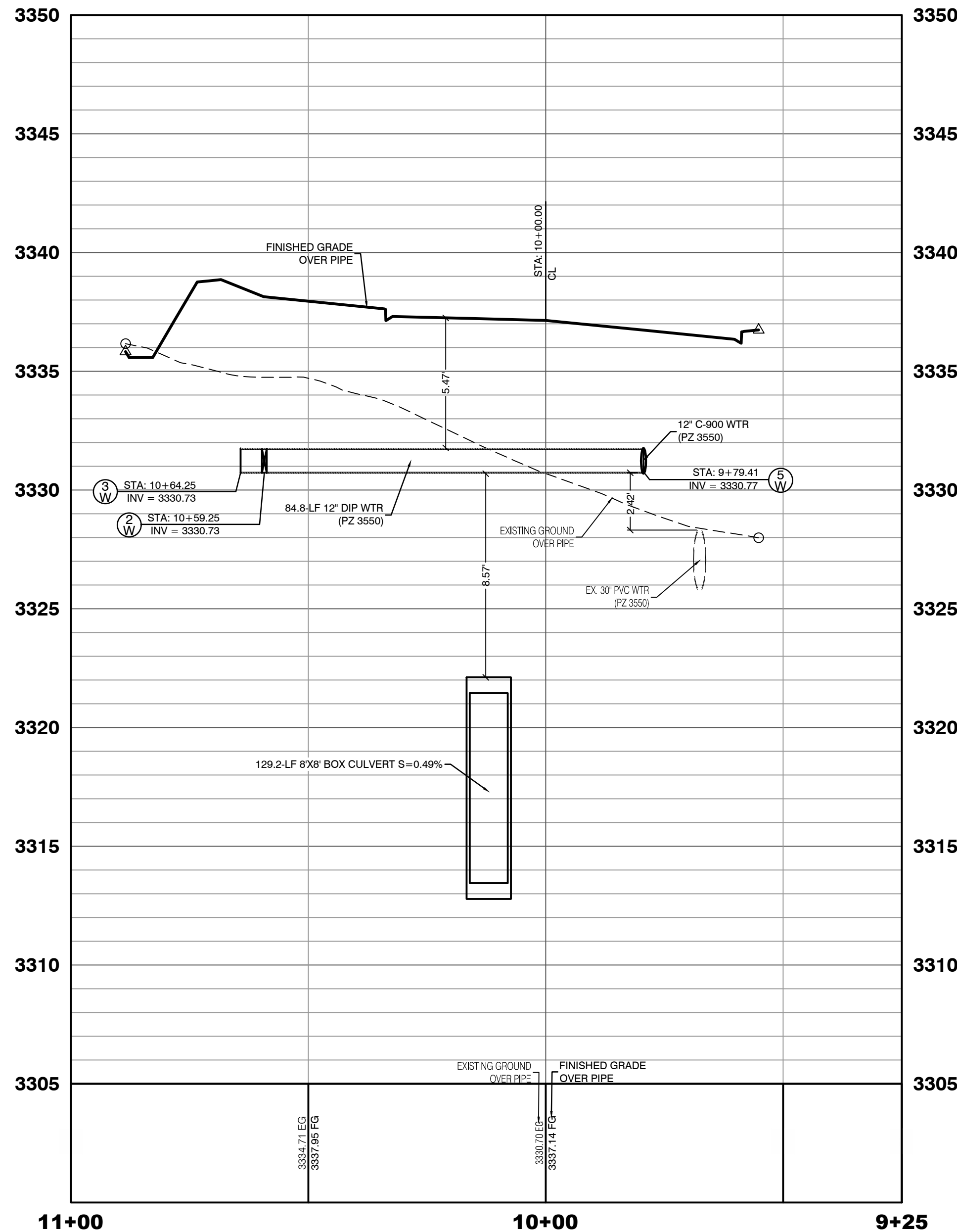
PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
2020-09-25
SHEET
UT20
60 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

F:\17061 Kettle Bend Road\Sheet Set\7861 UTAT-1.dwg 24/14/2020 6:19 AM Jmardone

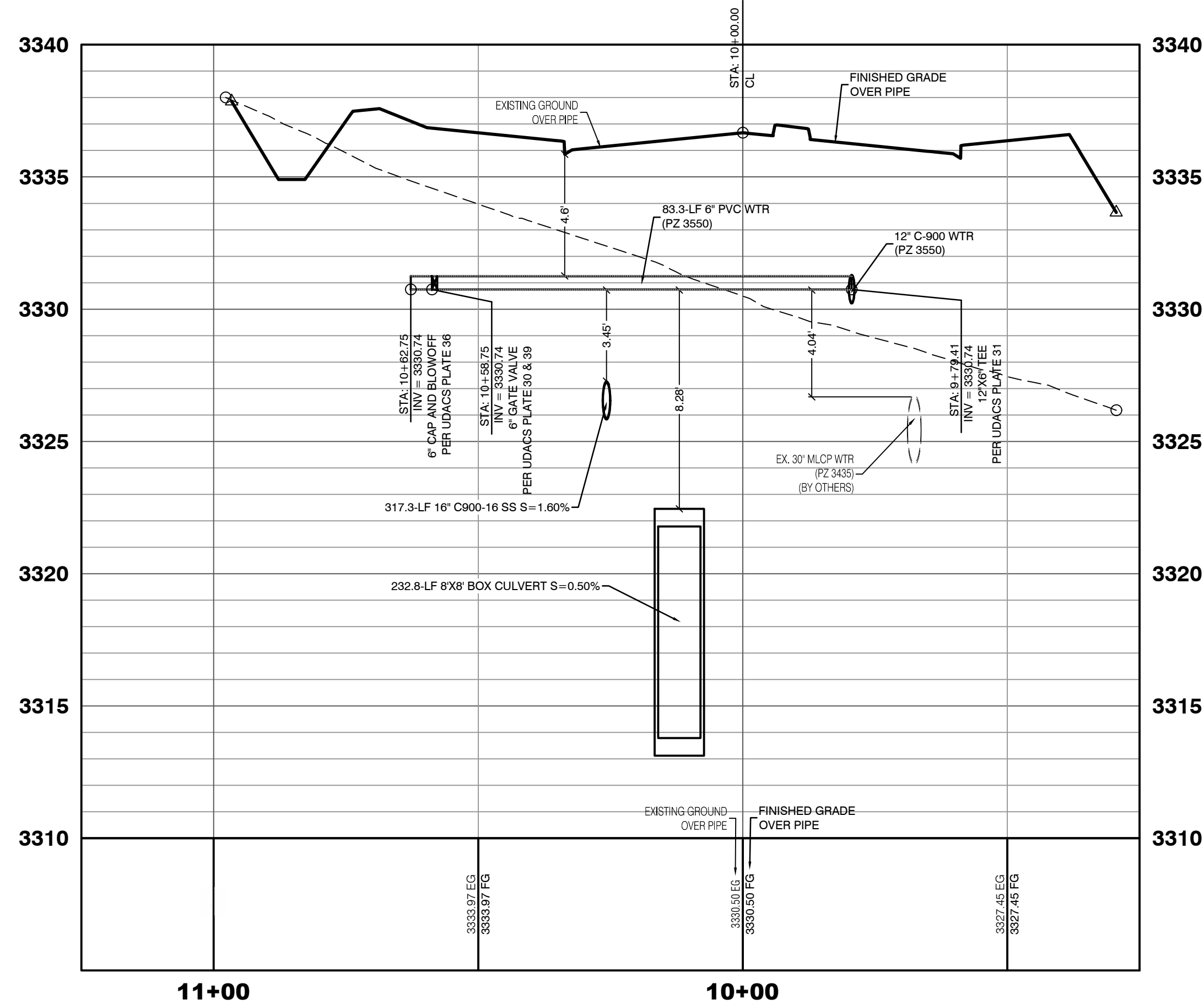


**KETTLE BEND ROAD
(PUBLIC)**

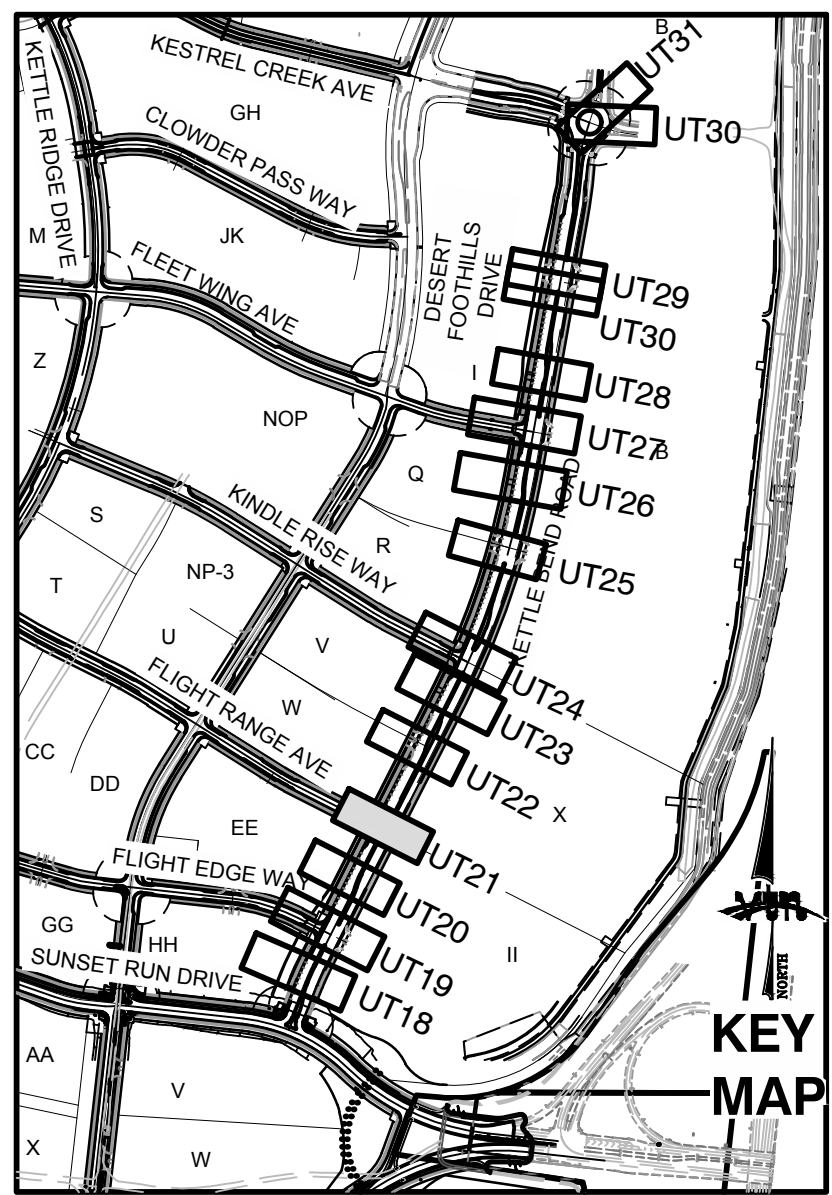
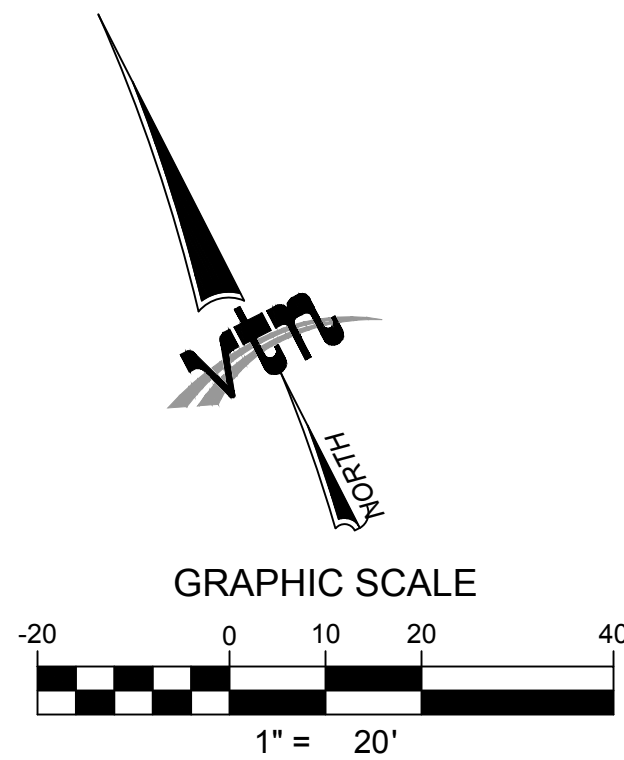
PROFILE SCALES:
HORIZ. = 1"=20'
VERT. = 1"=4'



**KETTLE BEND ROAD
(PUBLIC)**



**KETTLE BEND ROAD
(PUBLIC)**



**KEY
MAP**

**CONDITIONAL APPROVAL OF VALVED
OUTLET (6-INCH AND LARGER)**

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE. HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

CONTRACTOR NOTE:

LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS. PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE: LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE: LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVVWD EXISTING FACILITIES NOTE:

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

UTILITY CROSSING NOTE:

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

ENGINEER DISCLAIMER NOTE:

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

CONSTRUCTION NOTES

WATER

- FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" OR 24"X6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
- 12" GATE VALVE (PER UDACS PLATE 30 & 39)
- 12" CAP & BLOW OFF (PER UDACS PLATE 30)
- 24" CAP & BLOW OFF (PER UDACS PLATE 30)
- 12"X12" TEE (PER UDACS PLATE 31)
- 24"X12" TEE (PER UDACS PLATE 31)
- 24" 5" BEND (PER UDACS PLATE 31)
- 24" 11" BEND (PER UDACS PLATE 31)
- 24" 22" BEND (PER UDACS PLATE 31)
- 12" 45" BEND (PER UDACS PLATE 31)
- 12" 5" BEND (PER UDACS PLATE 31)

1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET D77

- 24"X6" TEE (PER UDACS PLATE 31)
- 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17
- WATER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER

- STANDARD MAN-HOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
- 6" C-900-16 SANITARY SEWER MAIN
- 16" C-900-16 SANITARY SEWER MAIN
- SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
- SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT: 137333 FIRST APPROVED DATE: _____

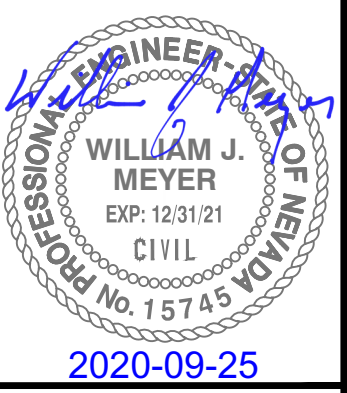
**HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY**

CITY OF LAS VEGAS

**UTILITY PLAN & PROFILE 21
SEWER LATERAL**

**SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE**

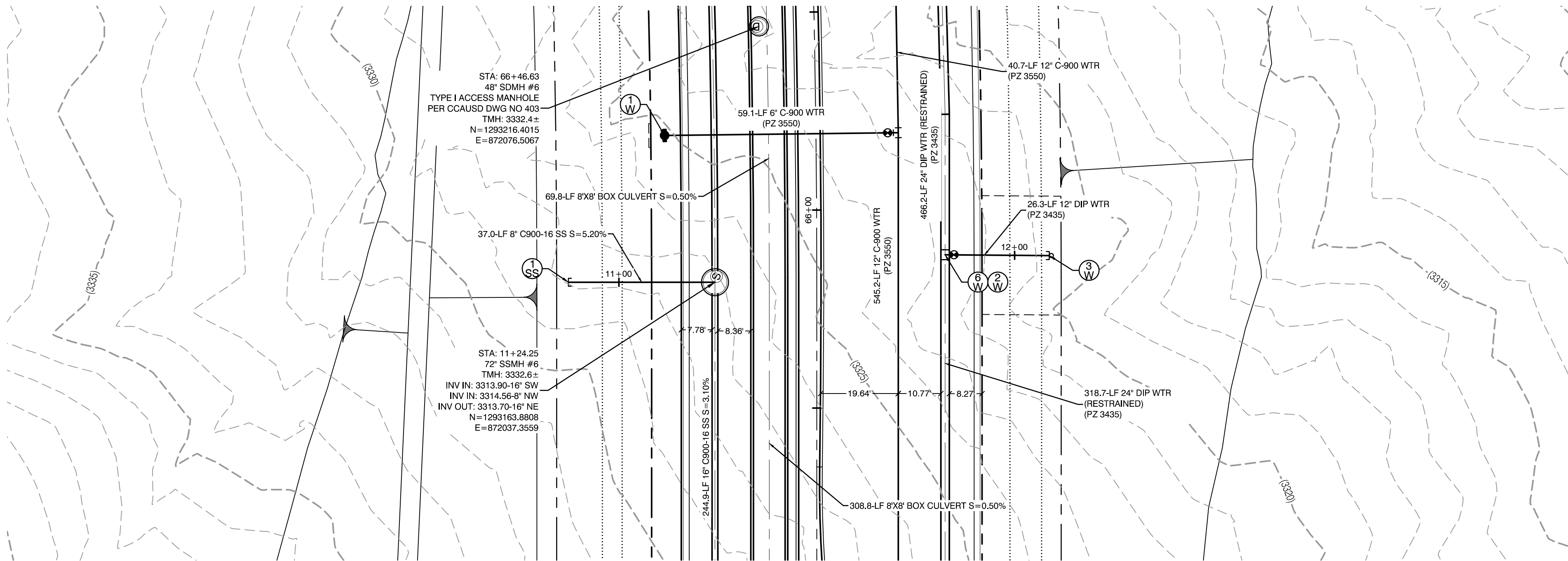
DRAWN BY: BCC	09/09/2019
DESIGNED BY: BCC	09/09/2019
CHECKED BY: WJM	09/28/2020
PROJECT NO: 7861	SCALE: 1"=20' HORIZ. 1"=4' VERT.



2020-09-25

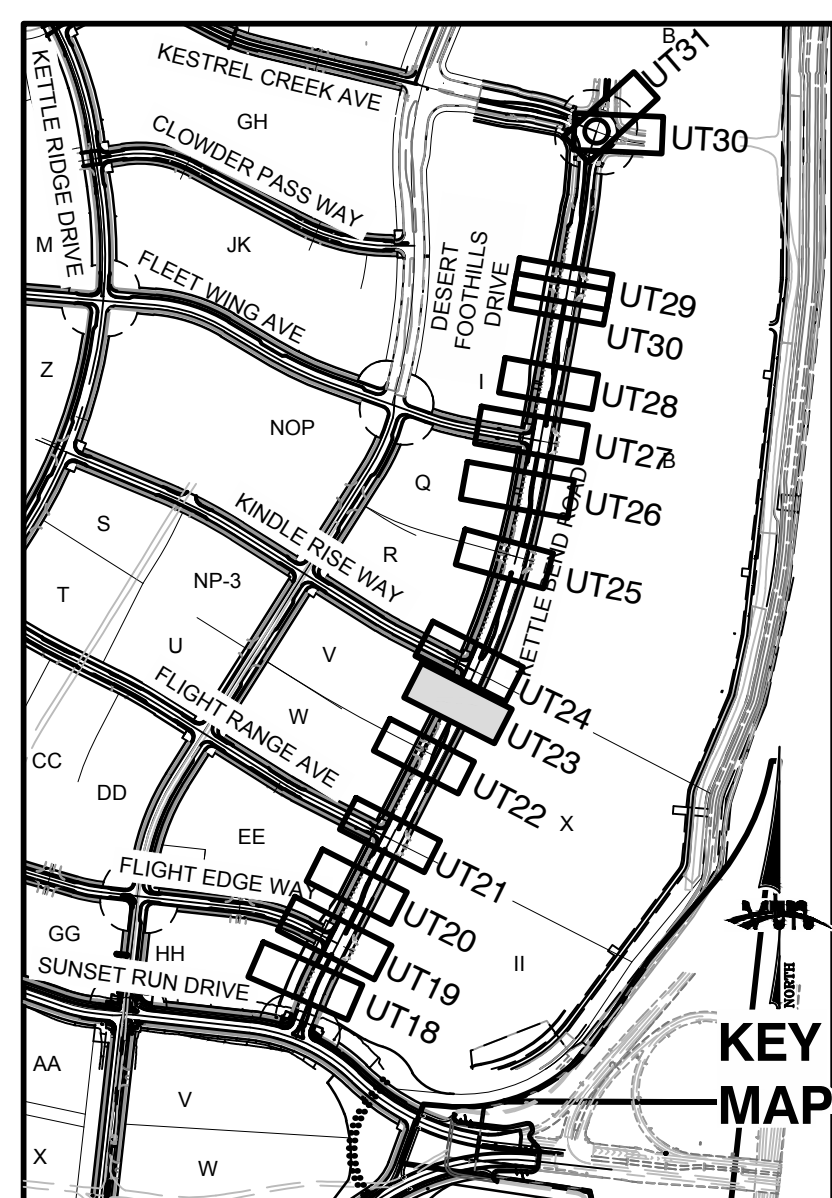
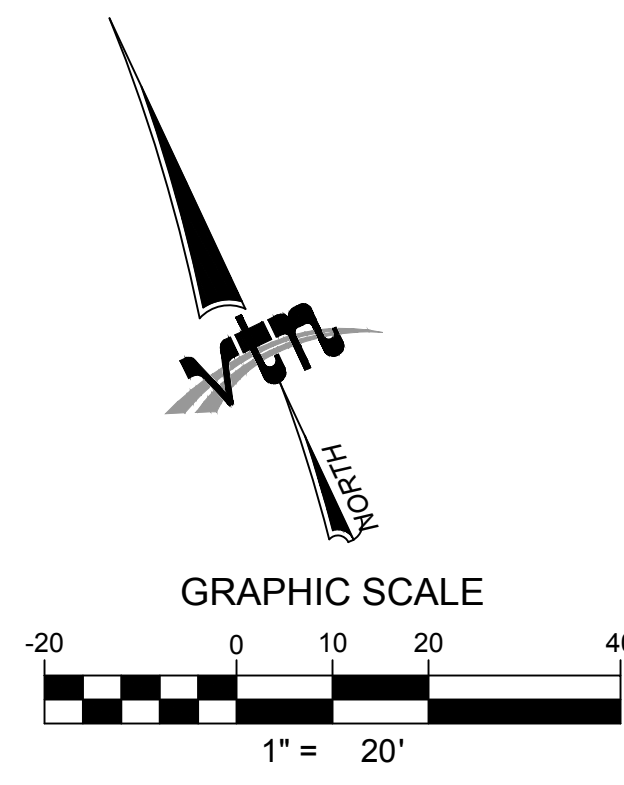
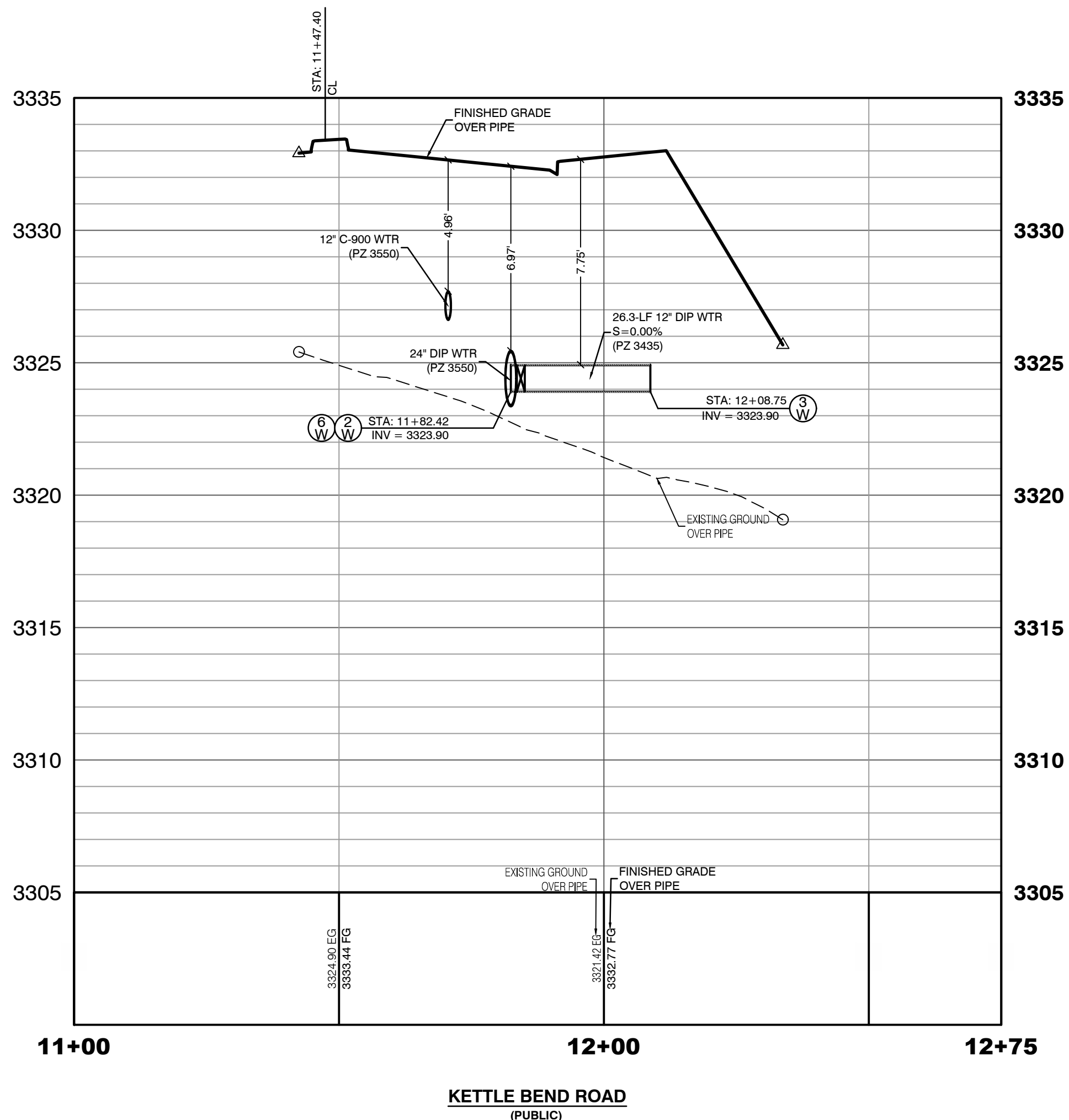
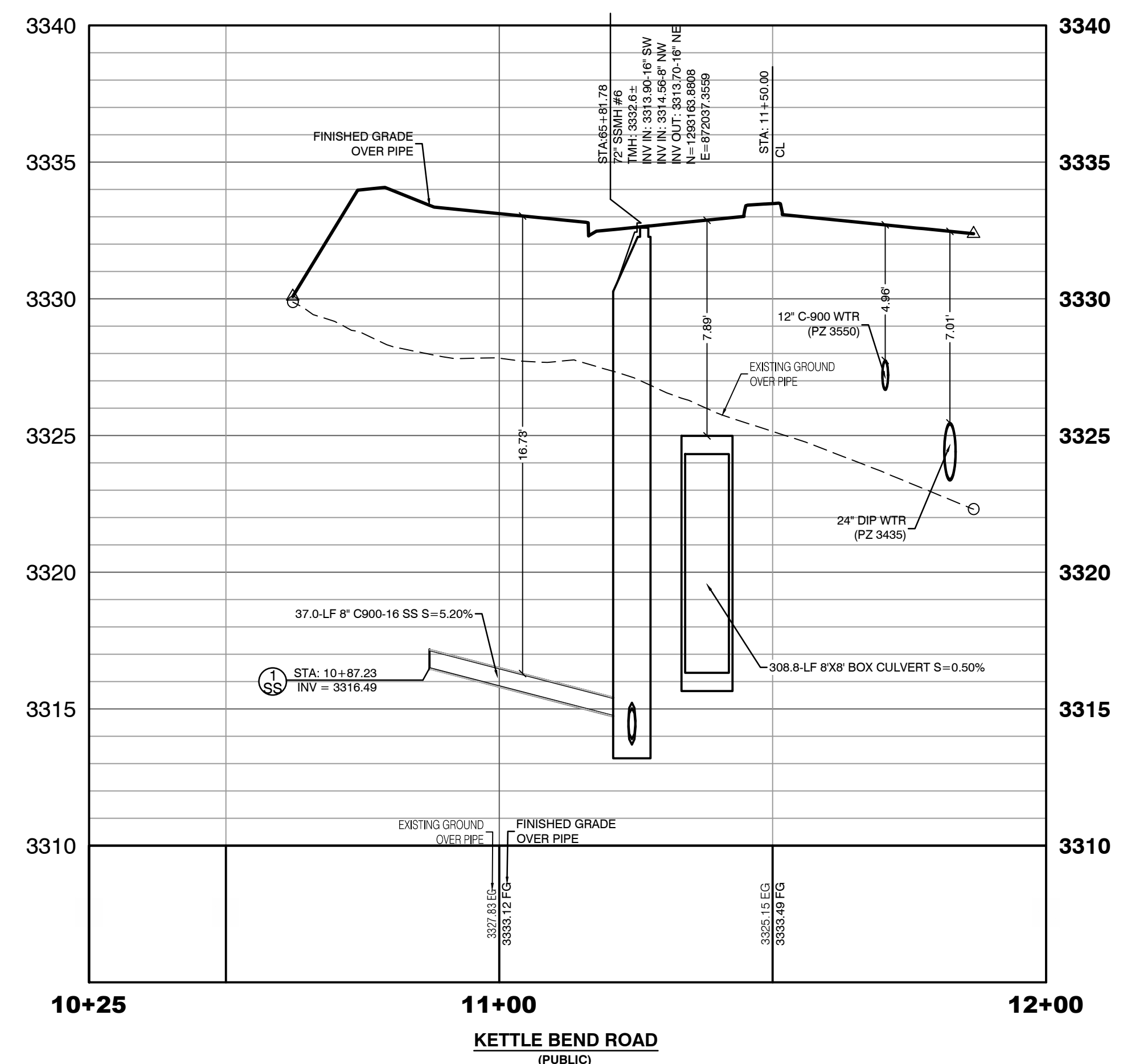
**UT21
61 OF 107 SHEETS**

DRAWING NO.
L20-01282
107V8449



KETTLE BEND ROAD
(PUBLIC)

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



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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DIG

1-702-227-2929

CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig

811

OR

1-800-642-2444

AND

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

CONSTRUCTION NOTES	
WATER	
	FIRE HYDRANT ASSEMBLY INCLUDING 12"x6" OR 24"x6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
	12" GATE VALVE (PER UDACS PLATE 30 & 39)
	12" CAP & BLOW OFF (PER UDACS PLATE 36)
	24" CAP & BLOW OFF (PER UDACS PLATE 36)
	12"x12" TEE (PER UDACS PLATE 31)
	24"x12" TEE (PER UDACS PLATE 31)
	24" 5° BEND (PER UDACS PLATE 31)
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	24" 22° BEND (PER UDACS PLATE 31)
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	WATER POINT OF CONNECTION
SEWER	
	STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
	6" C-900-16 SANITARY SEWER MAIN
	16" C-900-16 SANITARY SEWER MAIN
	SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
	SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE: _____

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) 973-7550 FAX (702) 362-2587
WWW.VTNV.COM

UTILITY PLAN & PROFILE 23
SEWER LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 09/09/2019

DESIGNED BY: BCC 09/09/2019

CHECKED BY: WJM 09/29/2020

PROJECT NO: 7861

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

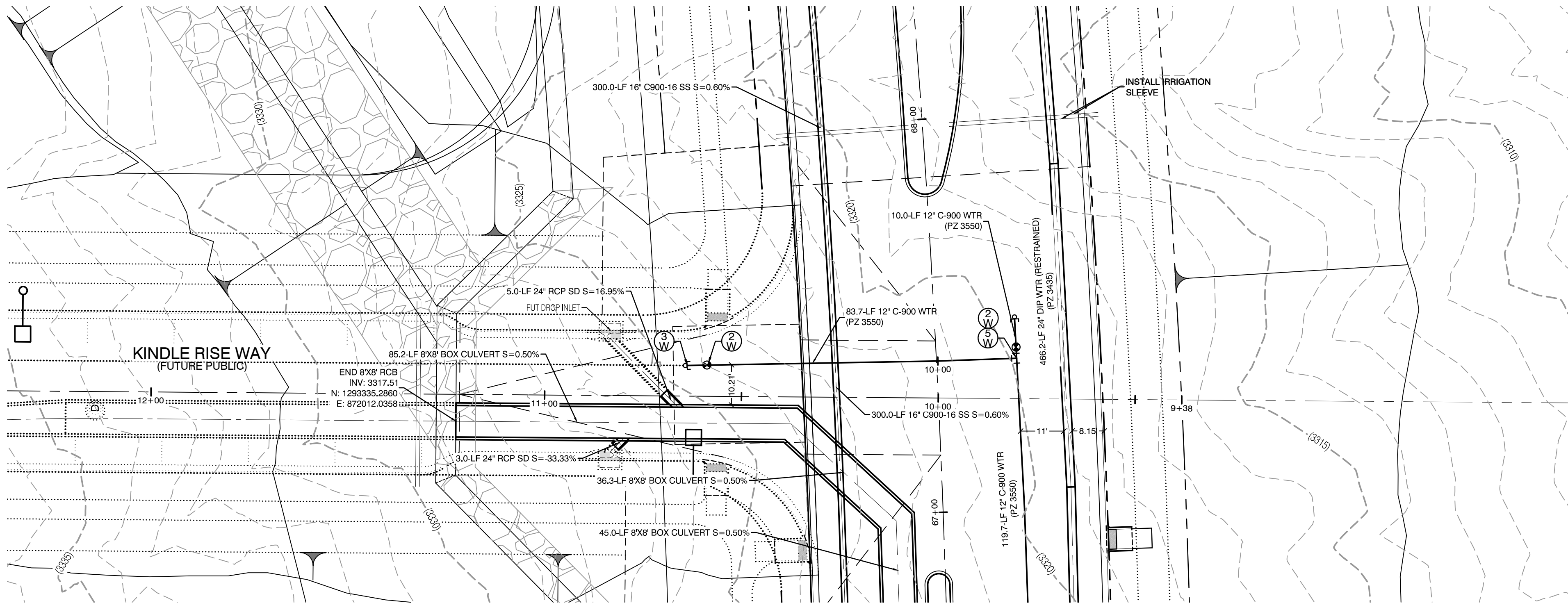
SHEET

UT23

63 OF 107 SHEETS

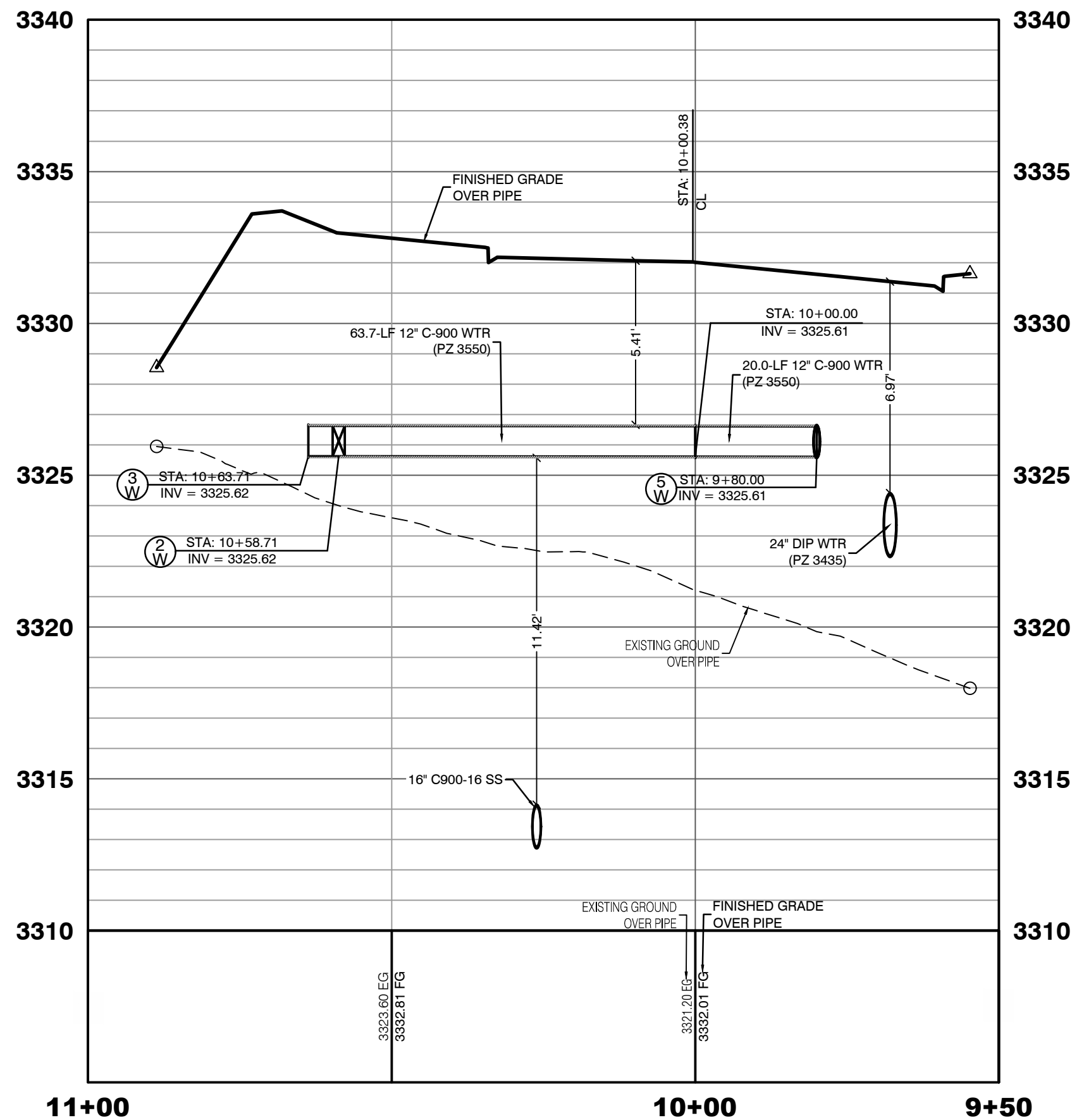
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107V8449

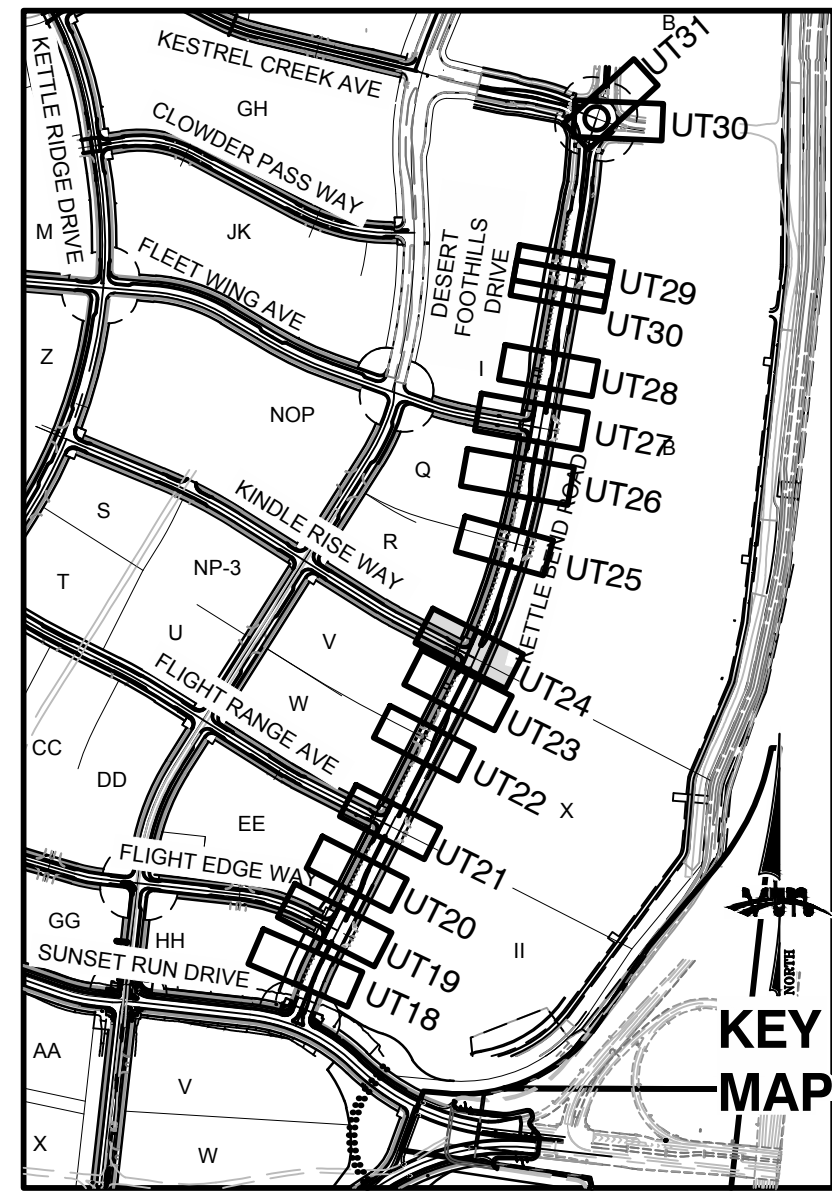
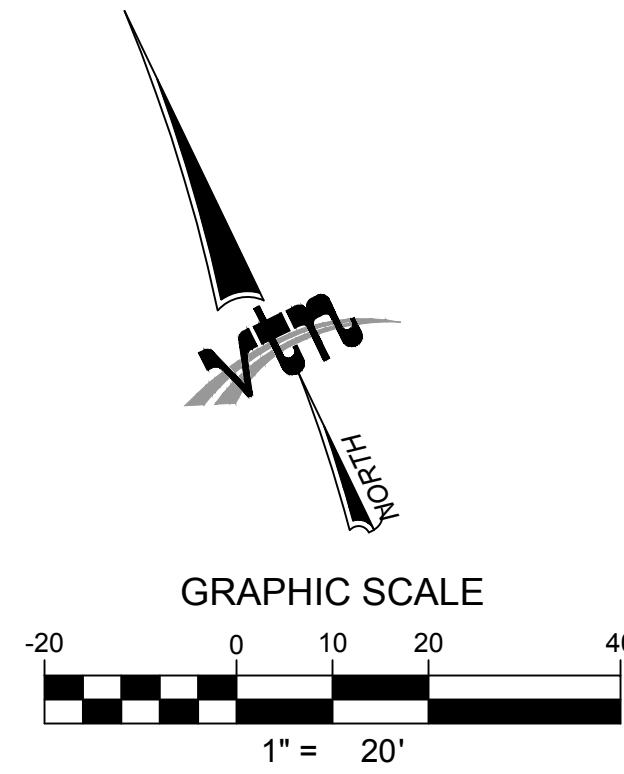


KETTLE BEND ROAD
(PUBLIC)

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



KETTLE BEND ROAD
(PUBLIC)



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

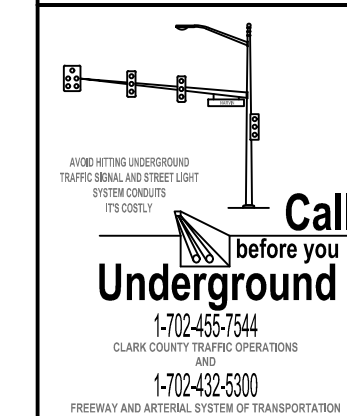
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Call before you Dig
Avoid cutting underground utility lines. It's costly.
OR
1-800-642-2444
AND
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS
PRESENT AND FUTURE SYSTEMS OF TRANSPORTATION

CONSTRUCTION NOTES

WATER

- 1" FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" OR 24"X6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
- 2" 12" GATE VALVE (PER UDACS PLATE 30 & 39)
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CONSTRUCTION NOTES

SEWER

- 1" STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
- 2" 8" C-900-16 SANITARY SEWER MAIN
- 3" 16" C-900-16 SANITARY SEWER MAIN
- 4" SEWER CAP (SAME SIZE AS PIPE) PER STD 4.8 & 4.11.
- 5" SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

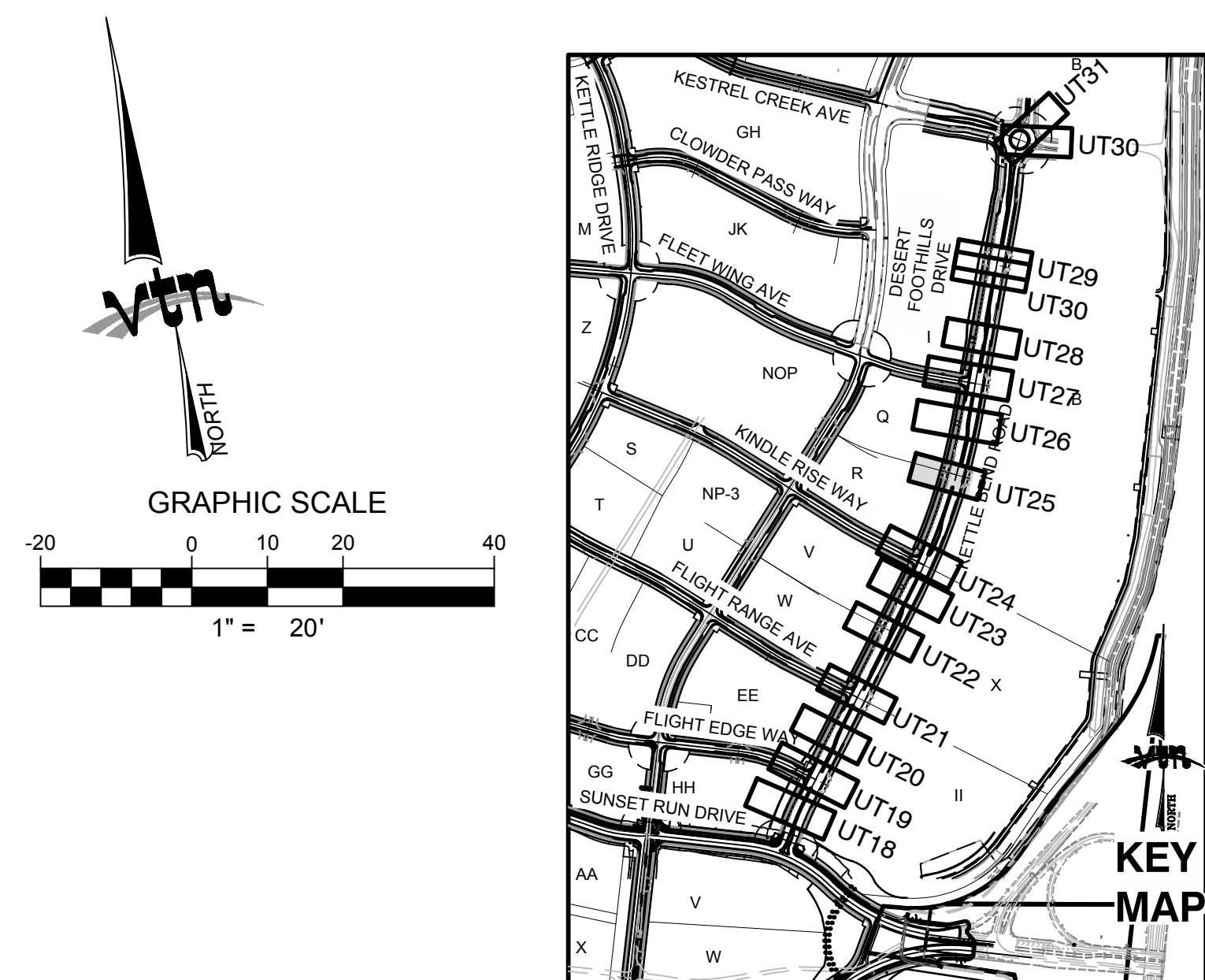
UTILITY PLAN & PROFILE 24
WATER LATERAL

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861

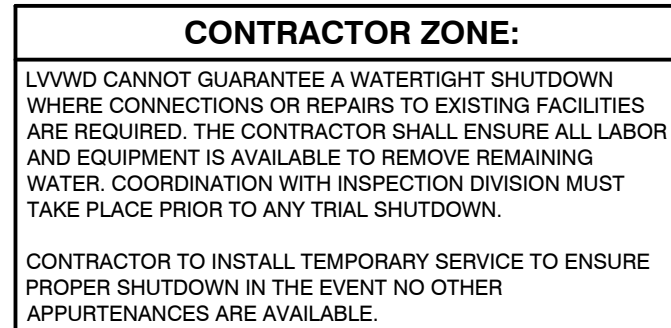
09/09/2019
09/09/2019
09/28/2020
SCALE: 1"=20' HORIZ.
1"=4' VERT.

2020-09-25
SHEET
UT24
64 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

11/19/20 Kettle Bend Road Sheet 64 of 107 UT-AT-2020-09-25 12:41 PM chrisp



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



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OUTLET (6-INCH AND LARGER)**

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2.	ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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

ENGINEER DISCLAIMER NOTE:

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**AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY.**



1-702-227-2929

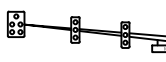
Call before you D

Avoid cutting underground utility lines. It's costly.

**CALL
811**

OR
1-800-642-2444
AND
1-702-455-7544

**CLARK COUNTY TRAFFIC
OPERATIONS**



 AVOID HITTING UNDERGROUND
 TRUCKS, BUSES, AND STREET LIGHTS
 WITH CONCRETE
 PILES

Call
 before you
Underground

1-702-452-1544
 CLARK COUNTY TRAFFIC DEPARTMENT
 800
 1-702-452-5300
 FREEWAY AND HIGHWAY CONSTRUCTION CORPORATION

LAS VEGAS VALLEY

WATER

- | | | |
|---|---|---|
|  |  | FIRE HYDRANT ASSEMBLY:
INCLUDING 12"x6" OR 24"x6" TEE WITH 6"
G.V. (PER UDACS PLATE NO. 39 & 40) |
|  |  | 12" GATE VALVE
(PER UDACS PLATE 30 & 39) |
|  |  | 12" CAP & BLOW OFF
(PER UDACS PLATE 38) |
|  |  | 24" CAP & BLOW OFF
(PER UDACS PLATE 38) |
|  |  | 12"x12" TEE (PER UDACS PLATE 31) |
|  |  | 24"x12" TEE (PER UDACS PLATE 31) |
|  |  | 24" 5" BEND (PER UDACS PLATE 31) |
|  |  | 24" 11" BEND (PER UDACS PLATE 31) |
|  |  | 12" 22" BEND (PER UDACS PLATE 31) |
|  |  | 12" 45" BEND (PER UDACS PLATE 31) |
|  |  | 12" 5" BEND (PER UDACS PLATE 31) |

1.5" TYPE K SOFT COPPER WATER
LATERAL SERVICE WITH 1.5"
METER PER UDACS PLATE #4
(IRRIGATION) AND 1.5" RPPA PER
UDACS PLATE #8 AND SHEET DT2

		24"x60" TEE (PER UDACS PLATE 31)
		6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
		12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
		12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
		24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17
		WATER POINT OF CONNECTION

SEWER

 STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8

 8" C-900-16 SANITARY SEWER MAIN

 16" C-900-16 SANITARY SEWER MAIN

 SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.

 SEWER POINT OF CONNECTION

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

WATER PRESSURE ZONE: WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER
UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED
PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICE

PROJECT:137333 FIRST APPROVED DATE:

**HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY**
10845 GRIFFITH PEAK DRIVE, SUITE 160

UTILITY PLAN & PROFILE 25 SEWER LATERAL

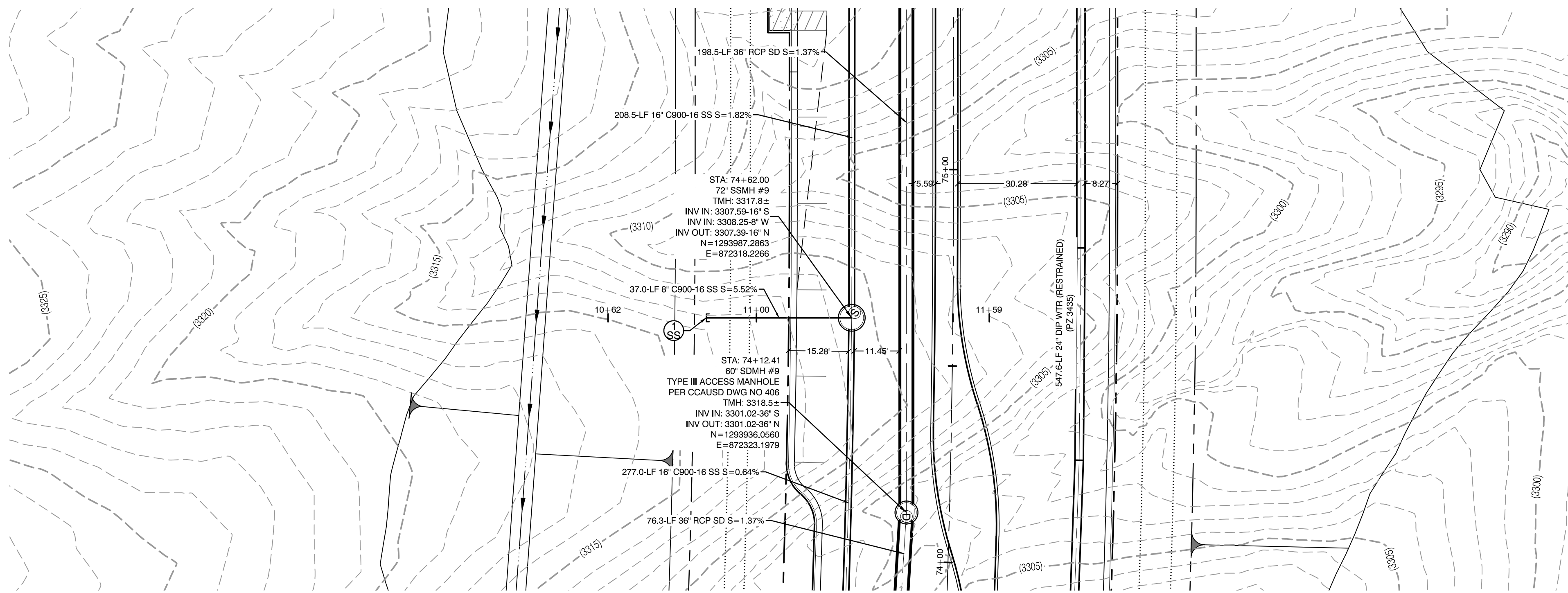
**SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE**

DRAWN BY: BCC	09/06/2019
DESIGNED BY: BCC	09/06/2019
CHECKED BY: MM	08/28/2020
PROJECT NO: 7861	SCALE: 1"=20' HORIZ 1"=4' VERT.

Professional Engineer Seal of Nevada, William J. Meyer, Civil, No. 15745, dated 2020-09-25.

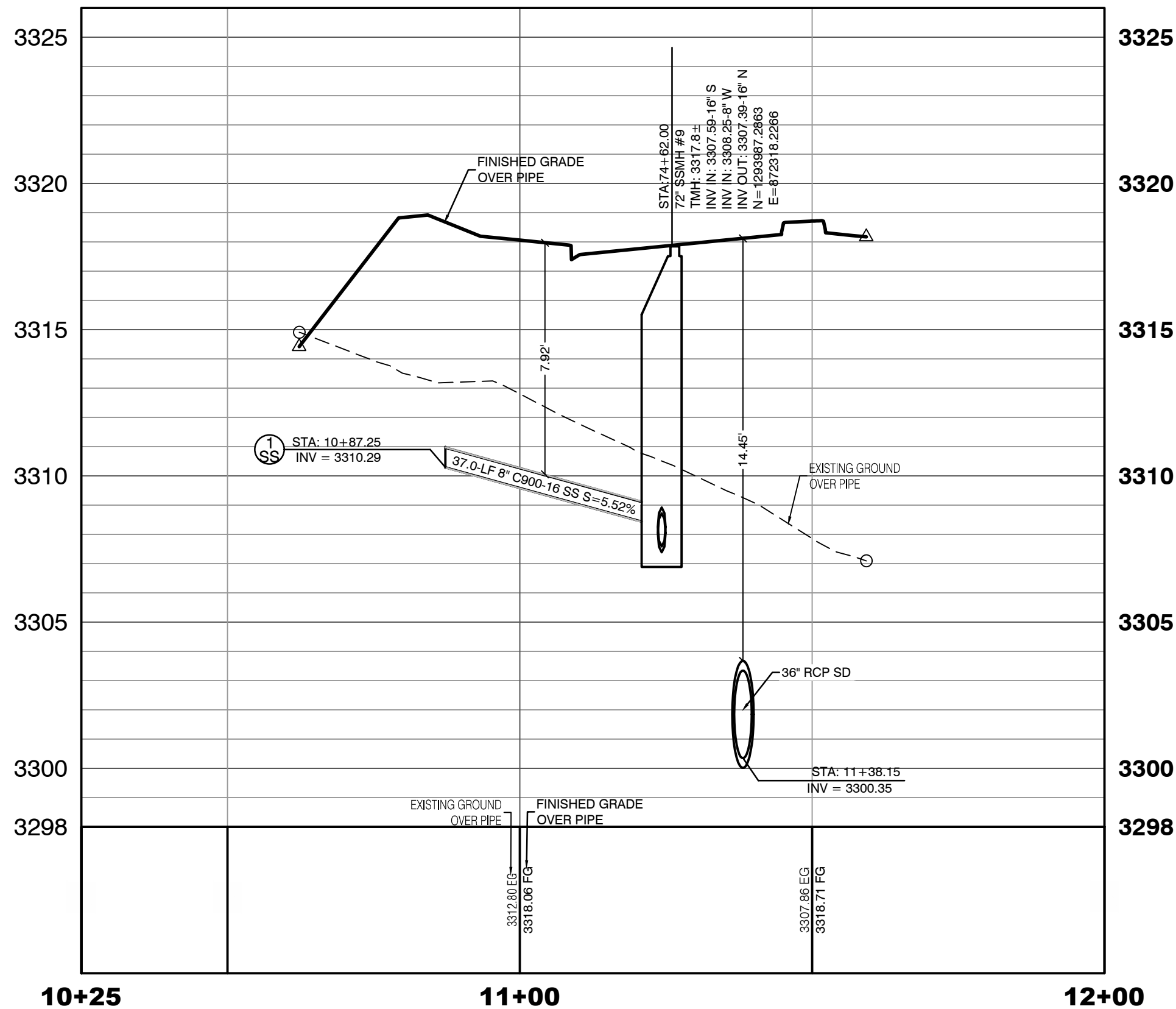
SHEET
UT25
65 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

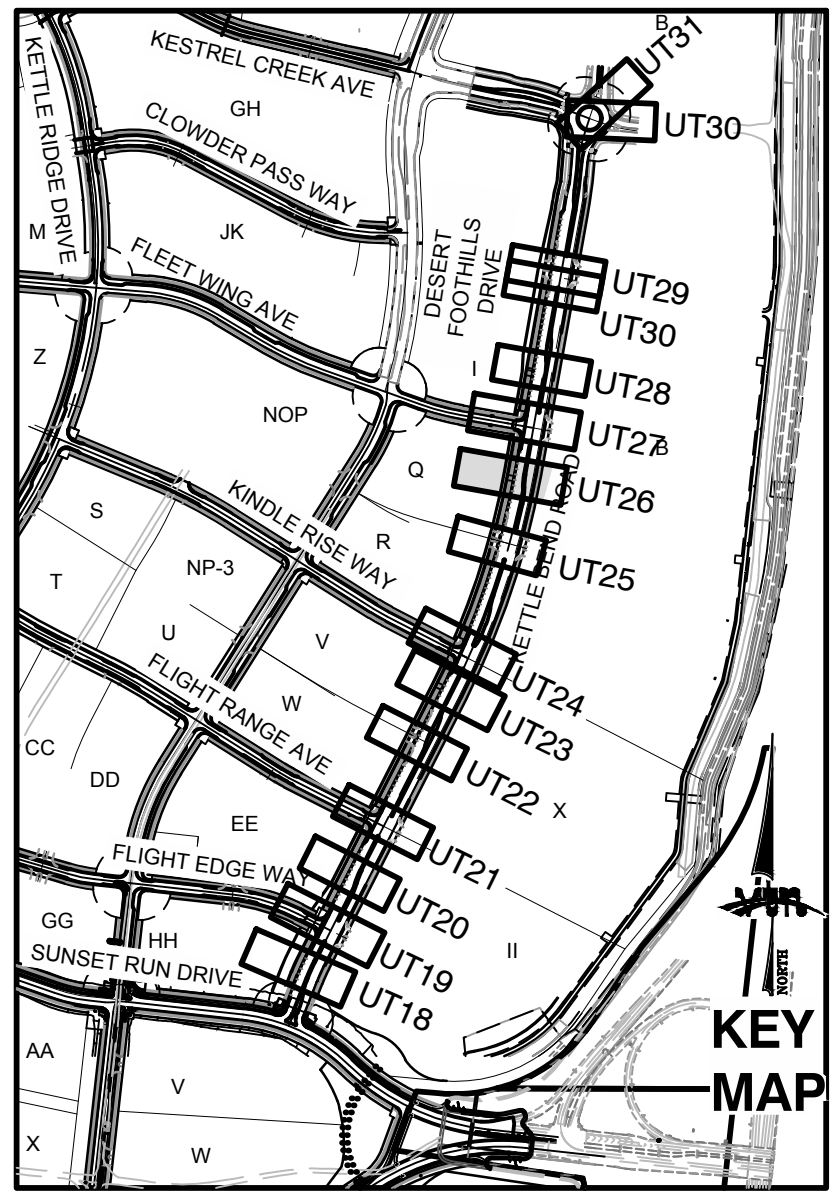
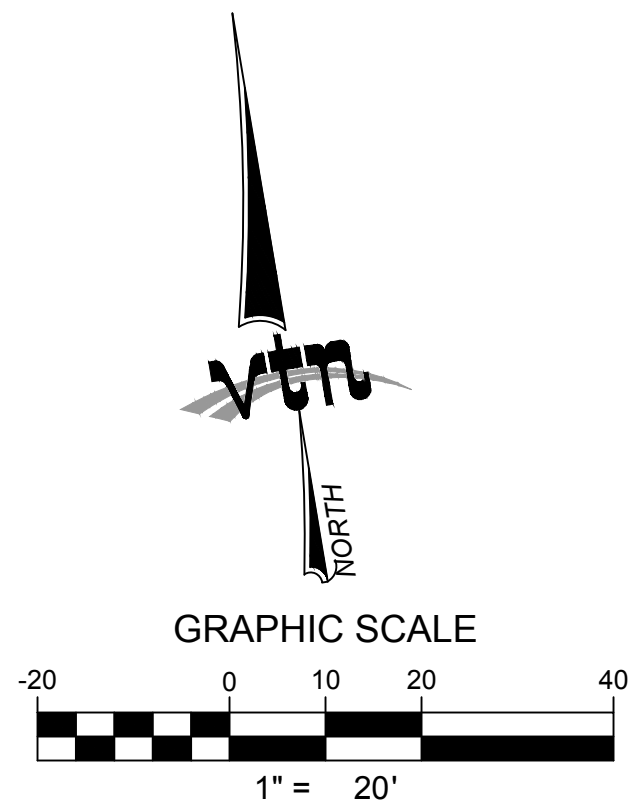


KETTLE BEND ROAD
(PUBLIC)

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



KETTLE BEND ROAD
(PUBLIC)



CONTRACTOR ZONE:
LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)
THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

LVVWD EXISTING FACILITIES NOTE:
PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

WATER LINE MARKER BALLS NOTE
INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES
BLUE COLORED REFLECTIVE RASSED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION
WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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

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OR
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CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig
Call before you Dig
1-702-455-7544
OR
1-702-432-5300
CLARK COUNTY TRAFFIC OPERATIONS

CONSTRUCTION NOTES
WATER
FIRE HYDRANT ASSEMBLY:
INCLUDING 12"x6" OR 24"x6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 38 & 40)
12" GATE VALVE (PER UDACS PLATE 30 & 39)
12" CAP & BLOW OFF (PER UDACS PLATE 36)
24" CAP & BLOW OFF (PER UDACS PLATE 36)
12"x12" TEE (PER UDACS PLATE 31)
24"x12" TEE (PER UDACS PLATE 31)
24" 5" BEND (PER UDACS PLATE 31)
24" 11" BEND (PER UDACS PLATE 31)
24" 22" BEND (PER UDACS PLATE 31)
12" 45" BEND (PER UDACS PLATE 31)
12" 5" BEND (PER UDACS PLATE 31)
1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET D77
24"x6" TEE (PER UDACS PLATE 31)
6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
24" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
WATER POINT OF CONNECTION

CONSTRUCTION NOTES
SEWER
STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
8" C-900-16 SANITARY SEWER MAIN
16" C-900-16 SANITARY SEWER MAIN
SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.
WATER PRESSURE ZONE:
WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.
DEPTH OF COVER DURING CONSTRUCTION:
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.
TO ENSURE LVVWD ACCESS WITHIN EASEMENT
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO LANDSCAPE BOLLERS, FENCES, WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

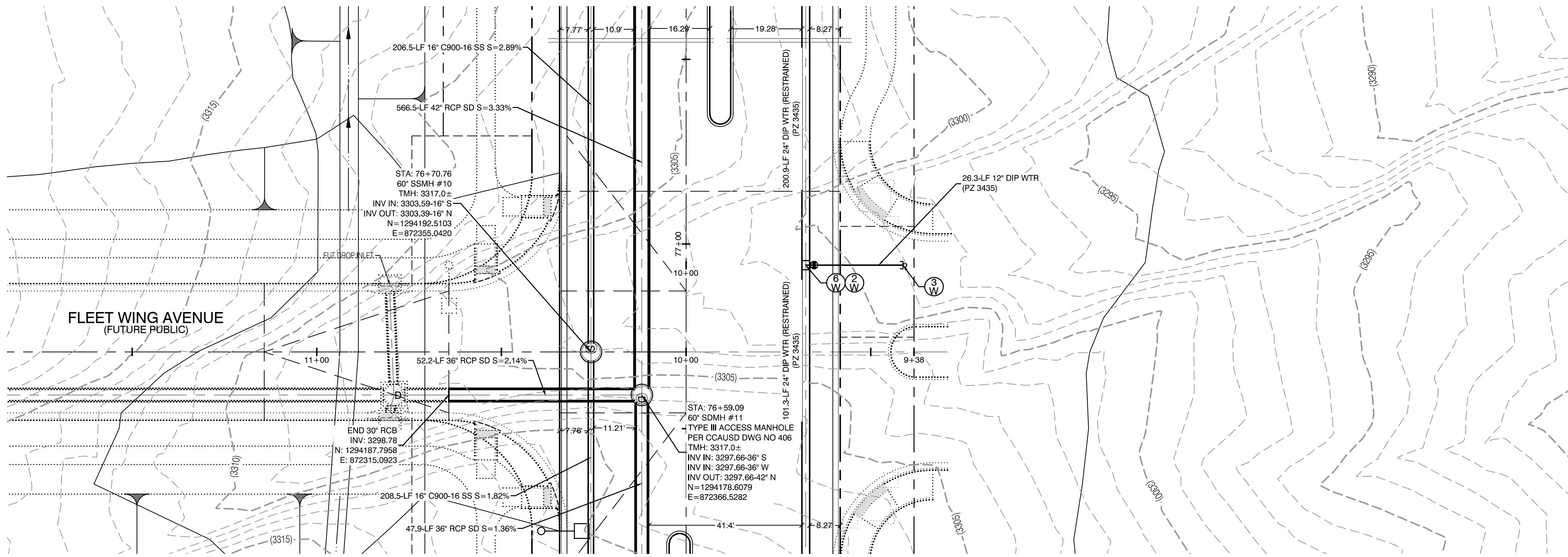
APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

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

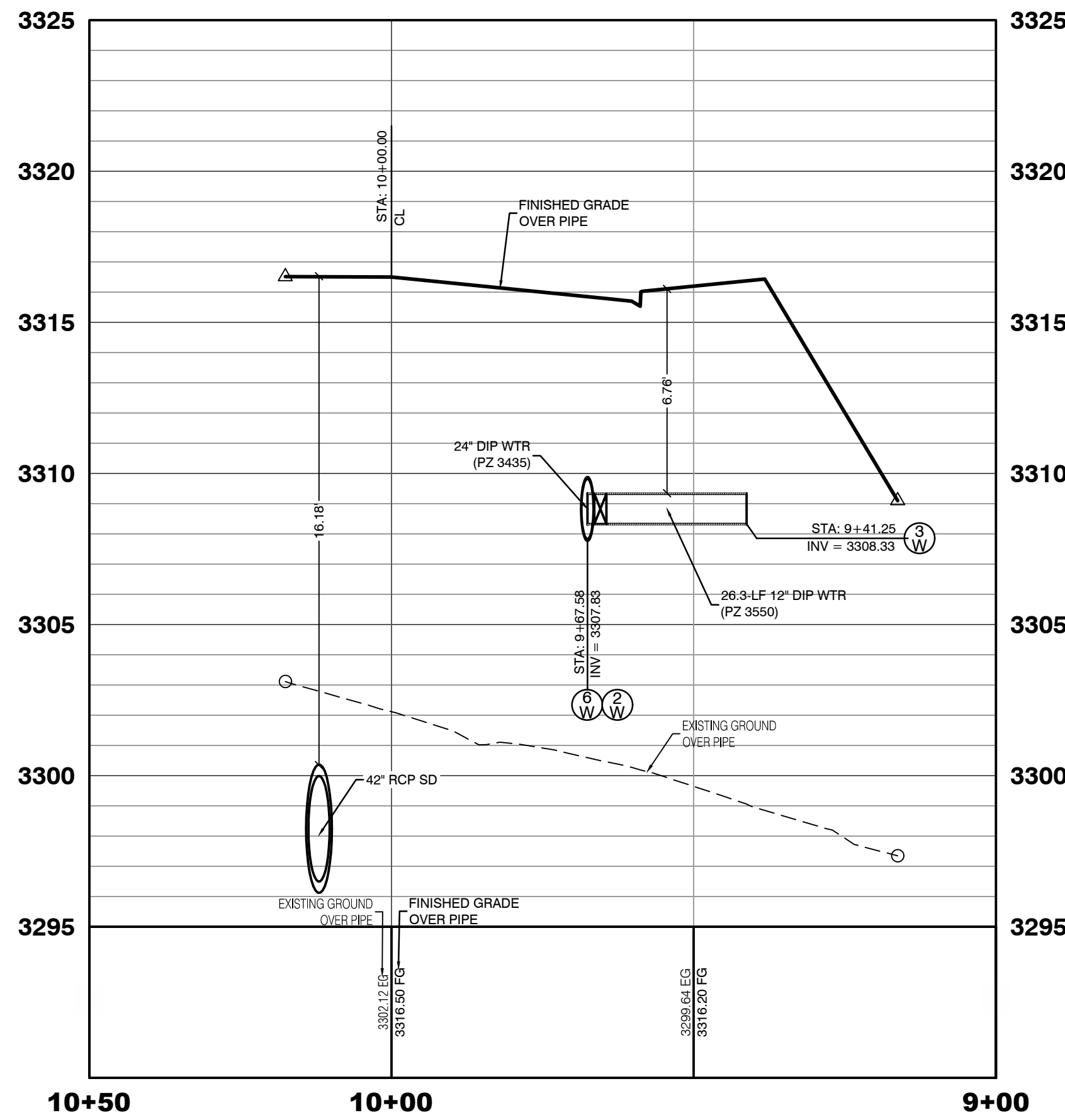
UTILITY PLAN & PROFILE 26
SEWER LATERAL
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.
SHEET
UT26
66 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449
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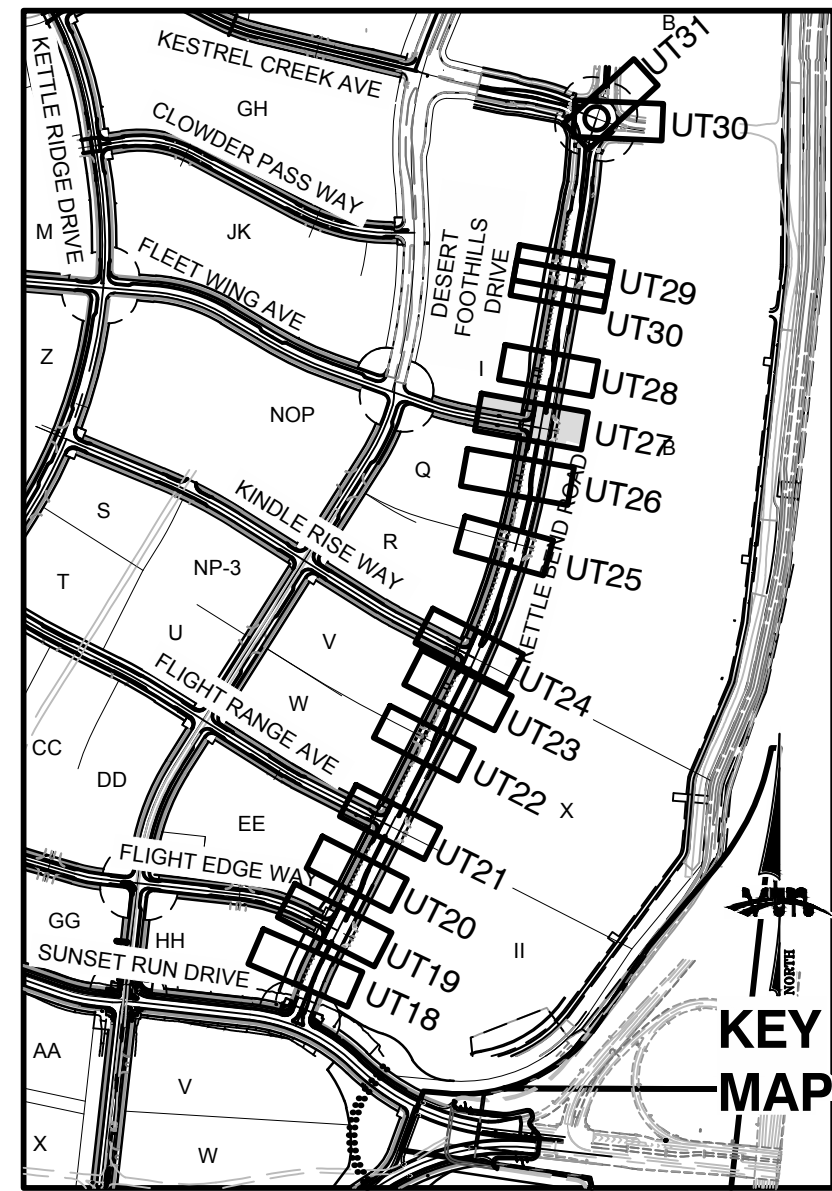
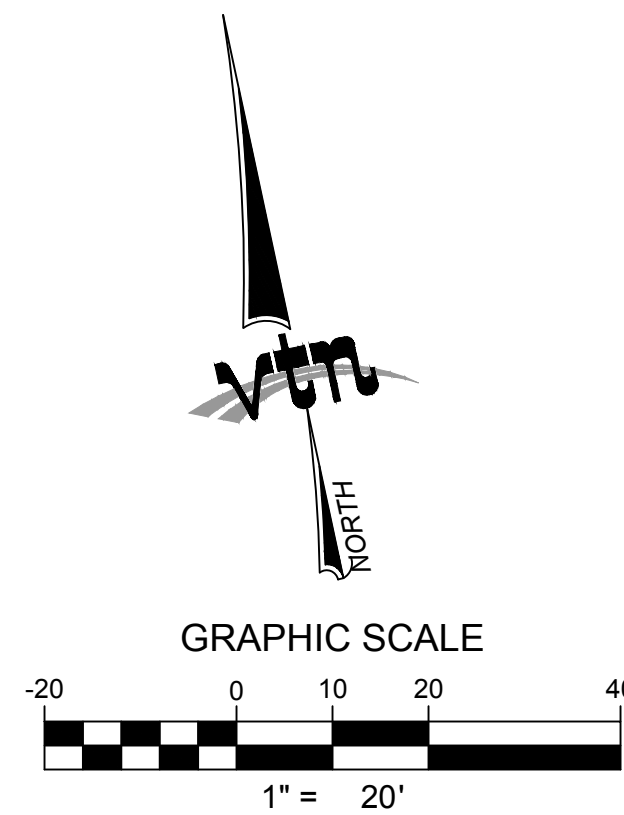


KETTLE BEND ROAD
(PUBLIC)

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



KETTLE BEND ROAD
(PUBLIC)



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

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CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APURTANCES ARE AVAILABLE.

LVWD EXISTING FACILITIES NOTE:

PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

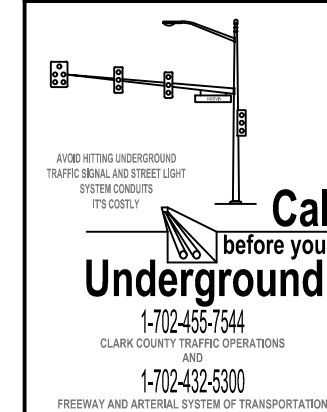
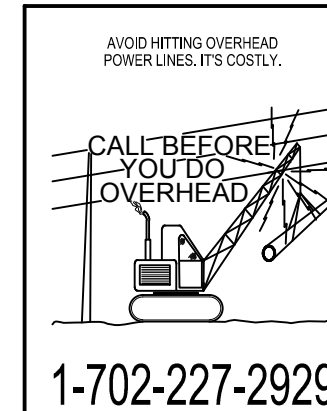
WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

UTILITY CROSSING NOTE:

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

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CLARK COUNTY TRAFFIC OPERATIONS

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Avoid cutting underground utility lines. It's costly.
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS
PRESENT AND FUTURE SYSTEMS OF TRANSPORTATION

CONSTRUCTION NOTES

WATER

- 1. FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" OR 24"X6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 38 & 40)
- 2. 12" GATE VALVE (PER UDACS PLATE 30 & 39)
- 3. 12" CAP & BLOW OFF (PER UDACS PLATE 36)
- 4. 24" CAP & BLOW OFF (PER UDACS PLATE 36)
- 5. 12"X12" TEE (PER UDACS PLATE 31)
- 6. 24"X12" TEE (PER UDACS PLATE 31)
- 7. 24" 5" BEND (PER UDACS PLATE 31)
- 8. 24" 11" BEND (PER UDACS PLATE 31)
- 9. 24" 22" BEND (PER UDACS PLATE 31)
- 10. 12" 45" BEND (PER UDACS PLATE 31)
- 11. 12" 5" BEND (PER UDACS PLATE 31)
- 12. 1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET DT7
- 13. 24"X6" TEE (PER UDACS PLATE 31)
- 14. 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 15. 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 16. 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 17. 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17
- 18. WATER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER

- 1. STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
- 2. 8" C-900-16 SANITARY SEWER MAIN
- 3. 16" C-900-16 SANITARY SEWER MAIN
- 4. SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
- 5. SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10815 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

UTILITY PLAN & PROFILE 27
WATER LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

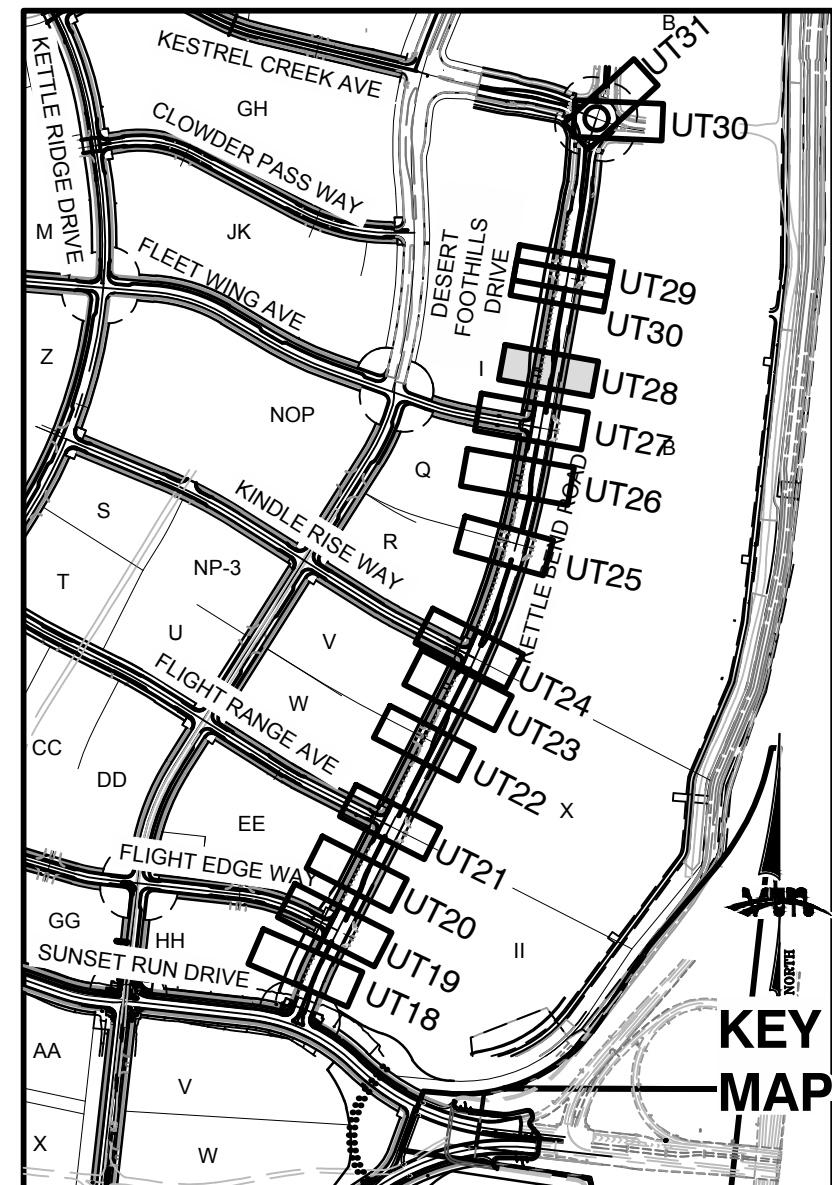
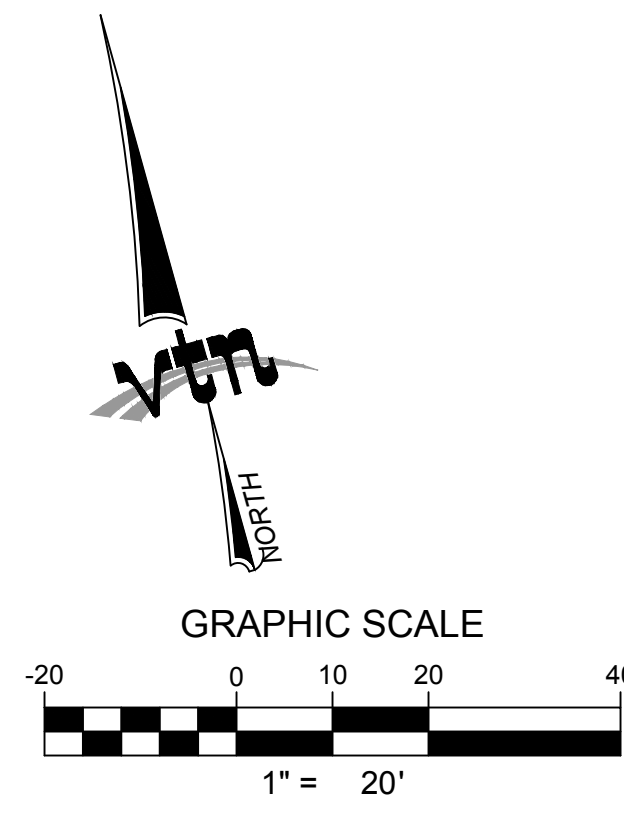
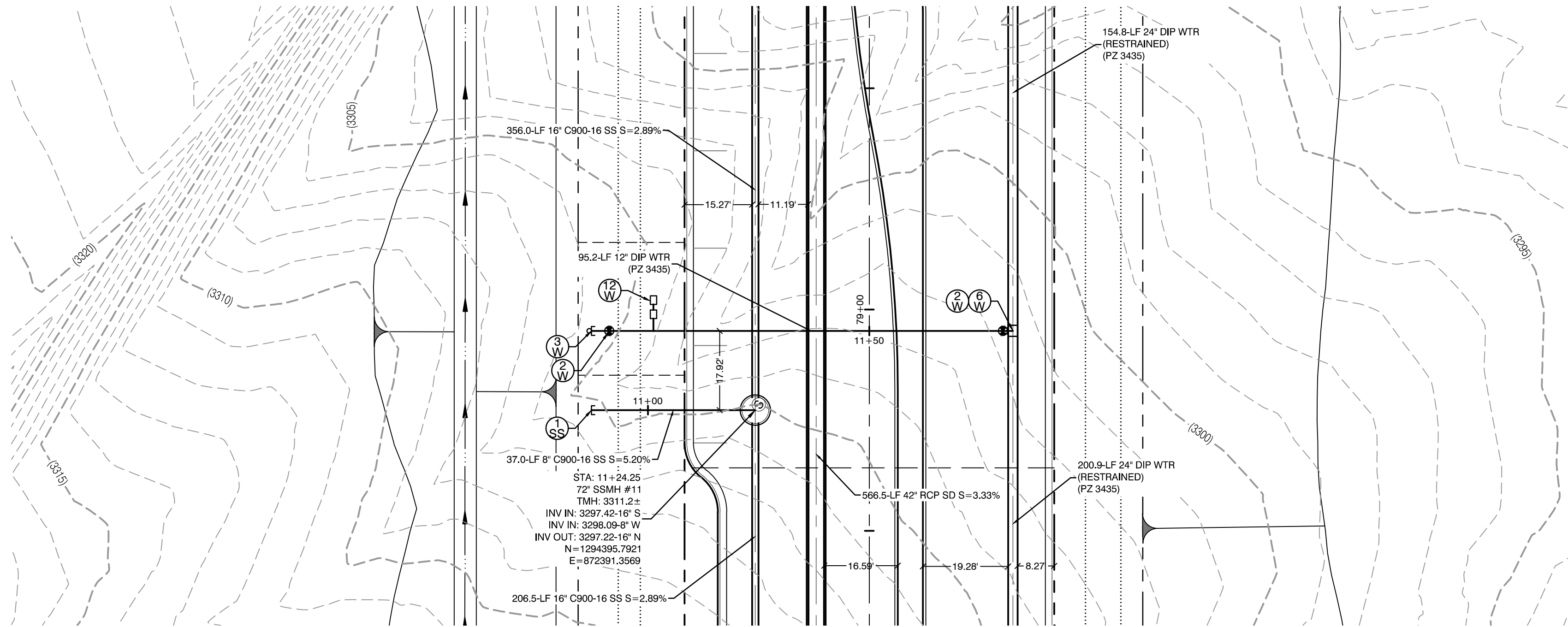
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DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
2020-09-25

SHEET
UT27
67 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

CITY OF LAS VEGAS

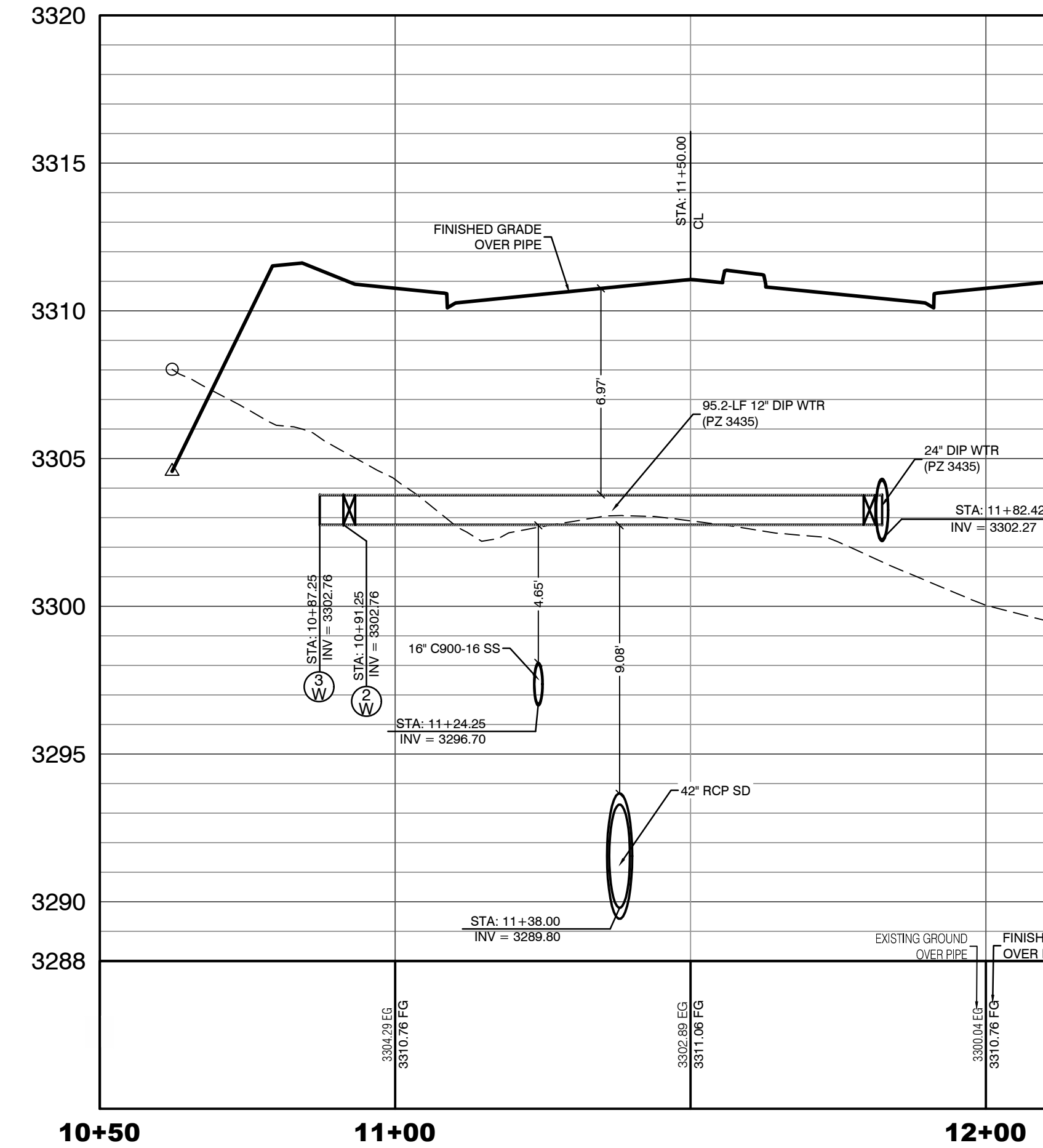
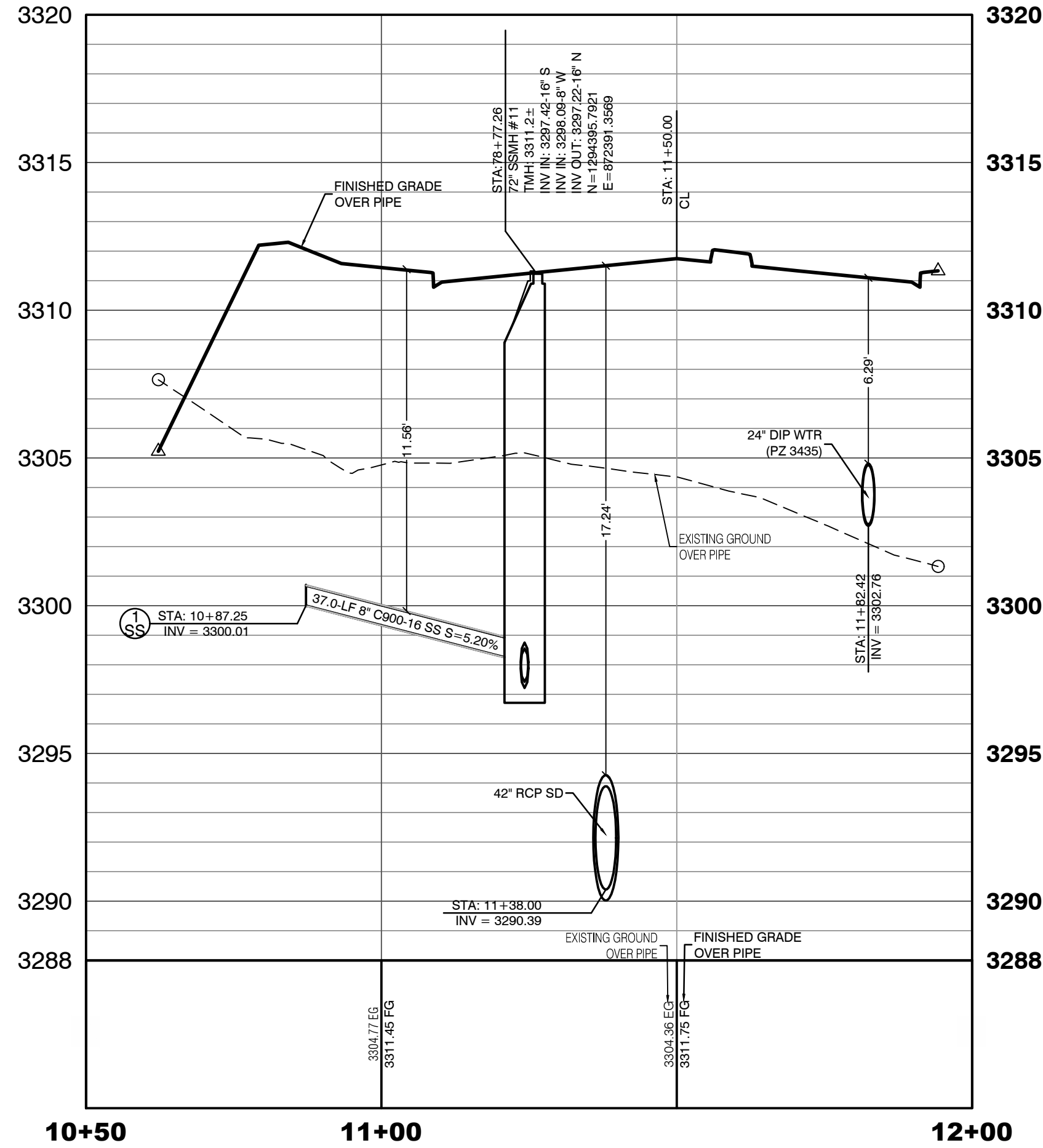
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 793-7550 FAX: (702) 382-2887
WWW.VTNV.COM
CONSULTING ENGINEERS • LAND SURVEYORS



**KETTLE BEND ROAD
(PUBLIC)**

PROFILE SCALES:

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



**CONDITIONAL APPROVAL OF VALVED
OUTLET (6-INCH AND LARGER)**

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WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

UTILITY CROSSING NOTE:

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CONSTRUCTION NOTES

WATER

- FIRE HYDRANT ASSEMBLY: INCLUDING 12"X6" OR 24"X6" TEE WITH 6" G.V. (PER UDACS PLATE NO. 39 & 40)
- 12" GATE VALVE (PER UDACS PLATE 30 & 39)
- 12" CAP & BLOW OFF (PER UDACS PLATE 30)
- 24" CAP & BLOW OFF (PER UDACS PLATE 30)
- 12"X12" TEE (PER UDACS PLATE 31)
- 24"X12" TEE (PER UDACS PLATE 31)
- 24" 5" BEND (PER UDACS PLATE 31)
- 24" 11" BEND (PER UDACS PLATE 31)
- 24" 22" BEND (PER UDACS PLATE 31)
- 12" 45" BEND (PER UDACS PLATE 31)
- 12" 5" BEND (PER UDACS PLATE 31)
- 1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET D77
- 24"X6" TEE (PER UDACS PLATE 31)

- 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17
- WATER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LIP AND CORROSION PROTECTION PER DCSWCS 3.16.8
- 6" C-900-16 SANITARY SEWER MAIN
- 16" C-900-16 SANITARY SEWER MAIN
- SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
- SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOWLDERS, FENCES, WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

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CLARK COUNTY TRAFFIC OPERATIONS

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AND

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CLARK COUNTY TRAFFIC OPERATIONS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT: 137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

CITY OF LAS VEGAS

**UTILITY PLAN & PROFILE 28
SEWER & WATER LATERAL**

**SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE**

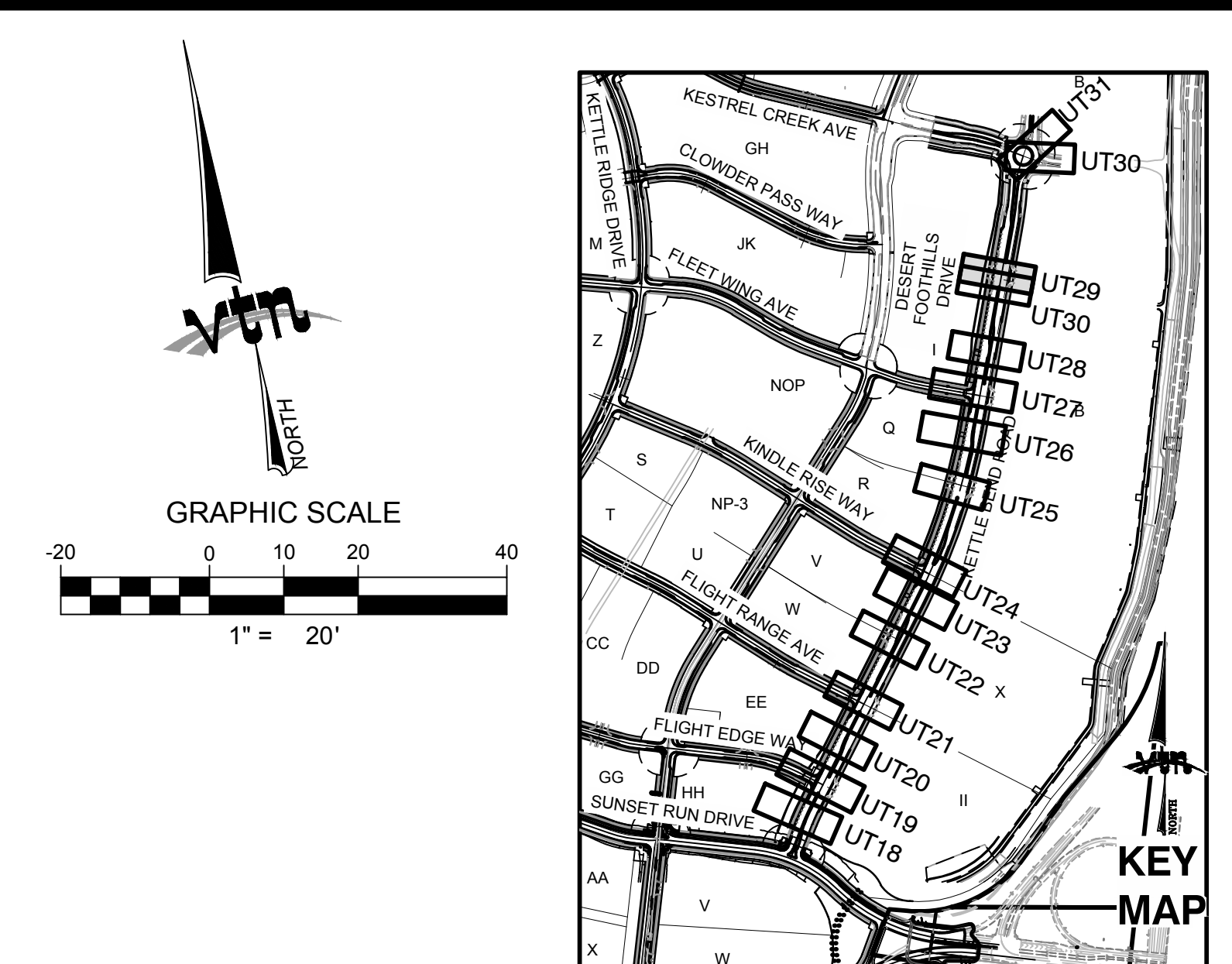
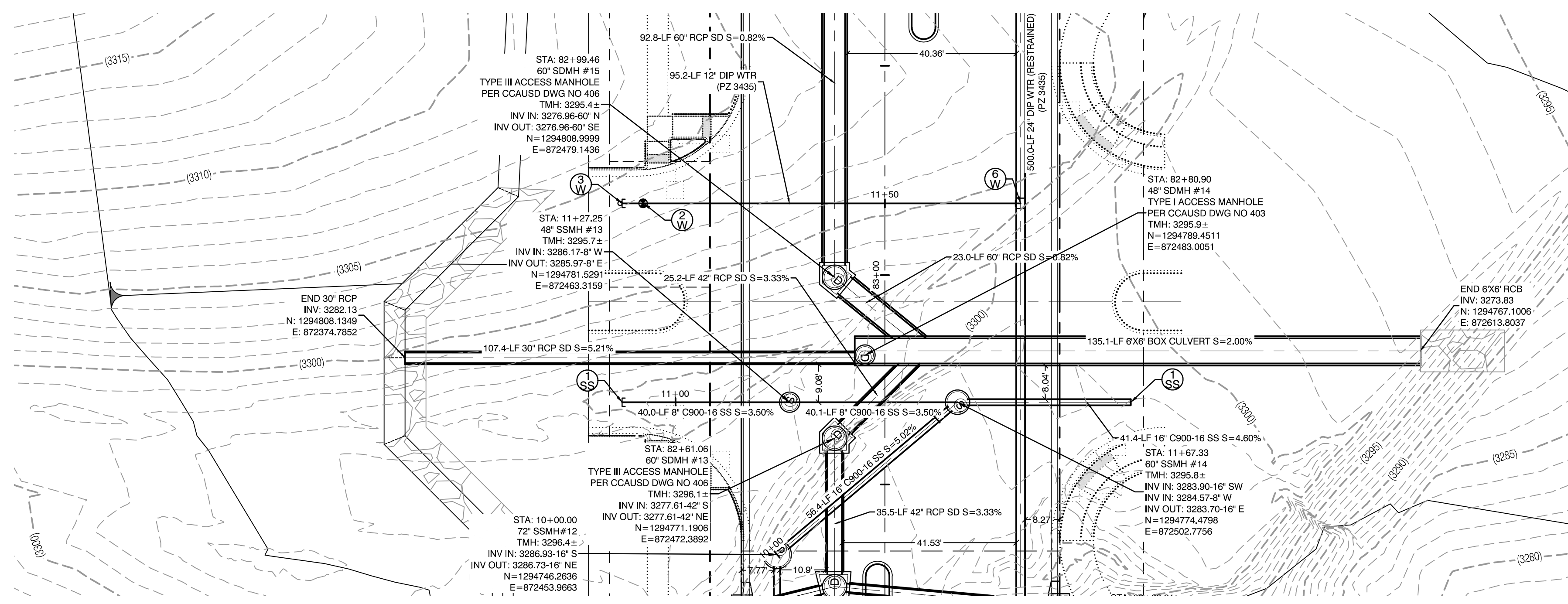
UT28
68 OF 107 SHEETS

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJAT
PROJECT NO: 7861
SCALE: 1"=20'
HORIZ. 1"=4'
VERT. 1"=4'

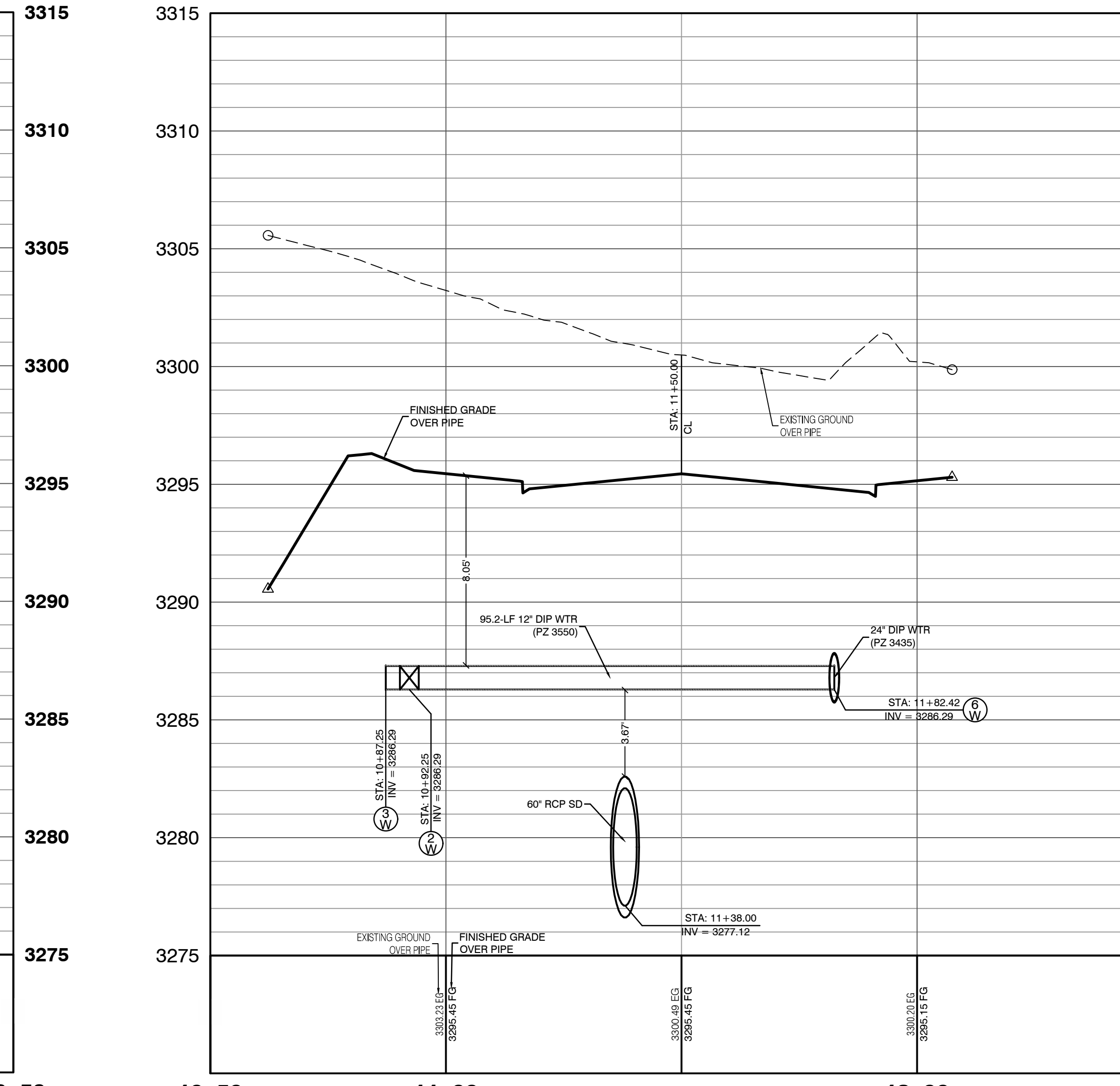
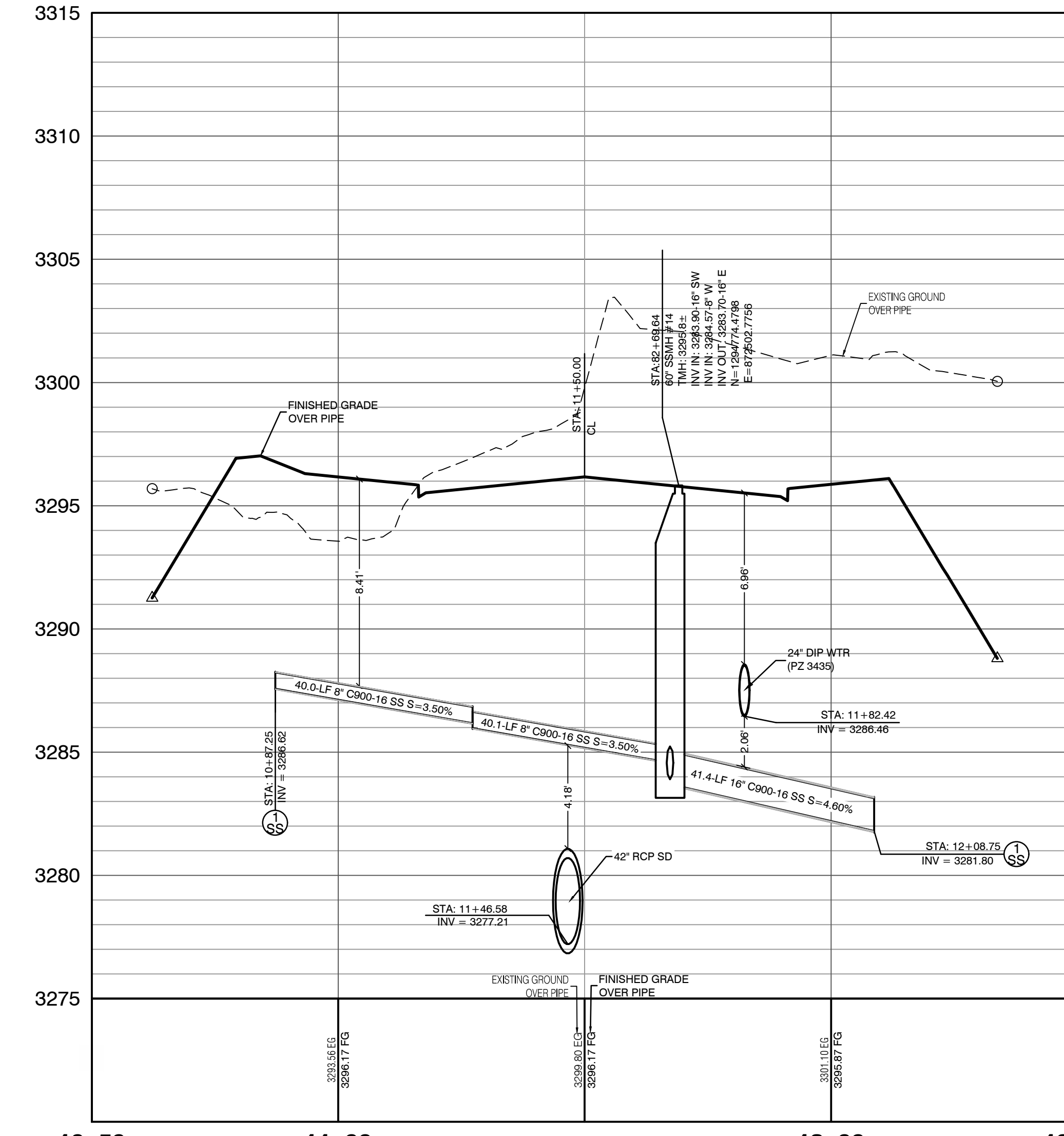
09/09/2019
09/09/2019
09/28/2020

WILLIAM J. MEYER
CIVIL
EXP: 12/31/21
2020-09-25

1:7061 Kettle Bend Road Sheet 68 of 107 UT-AT-2020-01-24-1 PM.chrisp



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



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

CONTRACTOR NOTE:

LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APURTANCES ARE AVAILABLE.

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVVWD EXISTING FACILITIES NOTE:

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

UTILITY CROSSING NOTE:

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

ENGINEER DISCLAIMER NOTE:

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

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TO ENSURE LVVWD ACCESS WITHIN EASEMENT

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CONSTRUCTION NOTES

WATER

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- 12" CAP & BLOW OFF (PER UDACS PLATE 30)
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- 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
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- WATER POINT OF CONNECTION

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
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- SEWER CAP (SAME SIZE AS PIPE) PER STD 4.6 & 4.11.
- SEWER POINT OF CONNECTION

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1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 29
SEWER & WATER LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLER BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 09/09/2019

DESIGNED BY: BCC 09/09/2019

CHECKED BY: WJM 09/29/2020

PROJECT NO: 7861

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

SHEET
UT29
69 OF 107 SHEETS

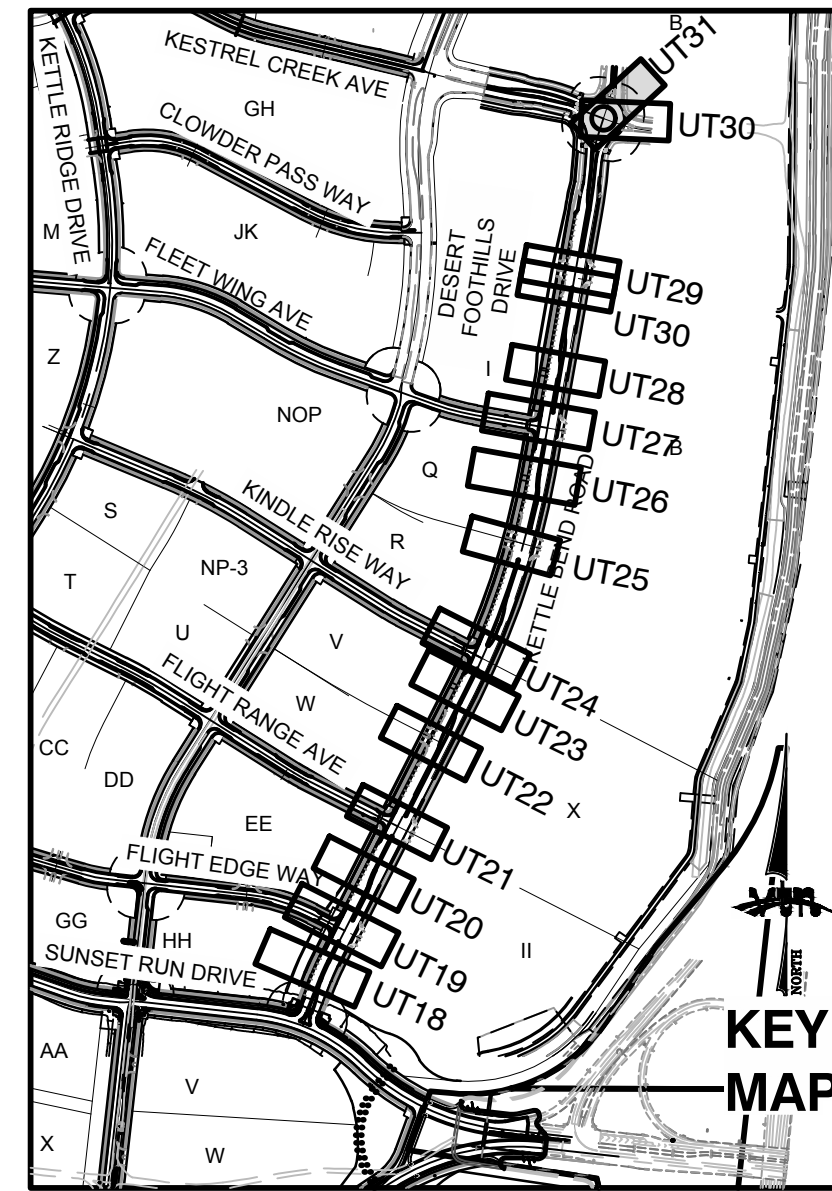
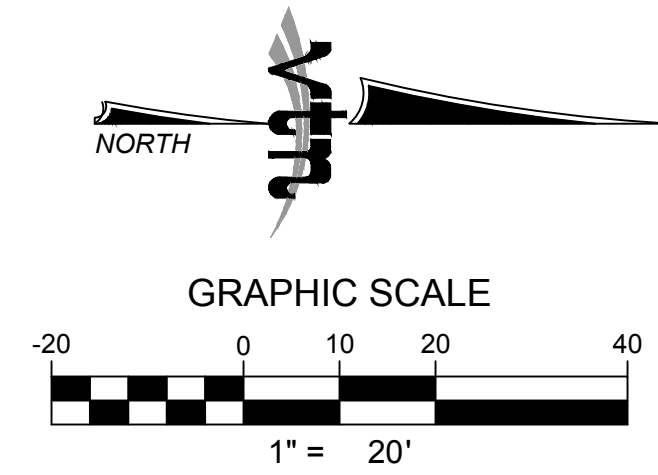
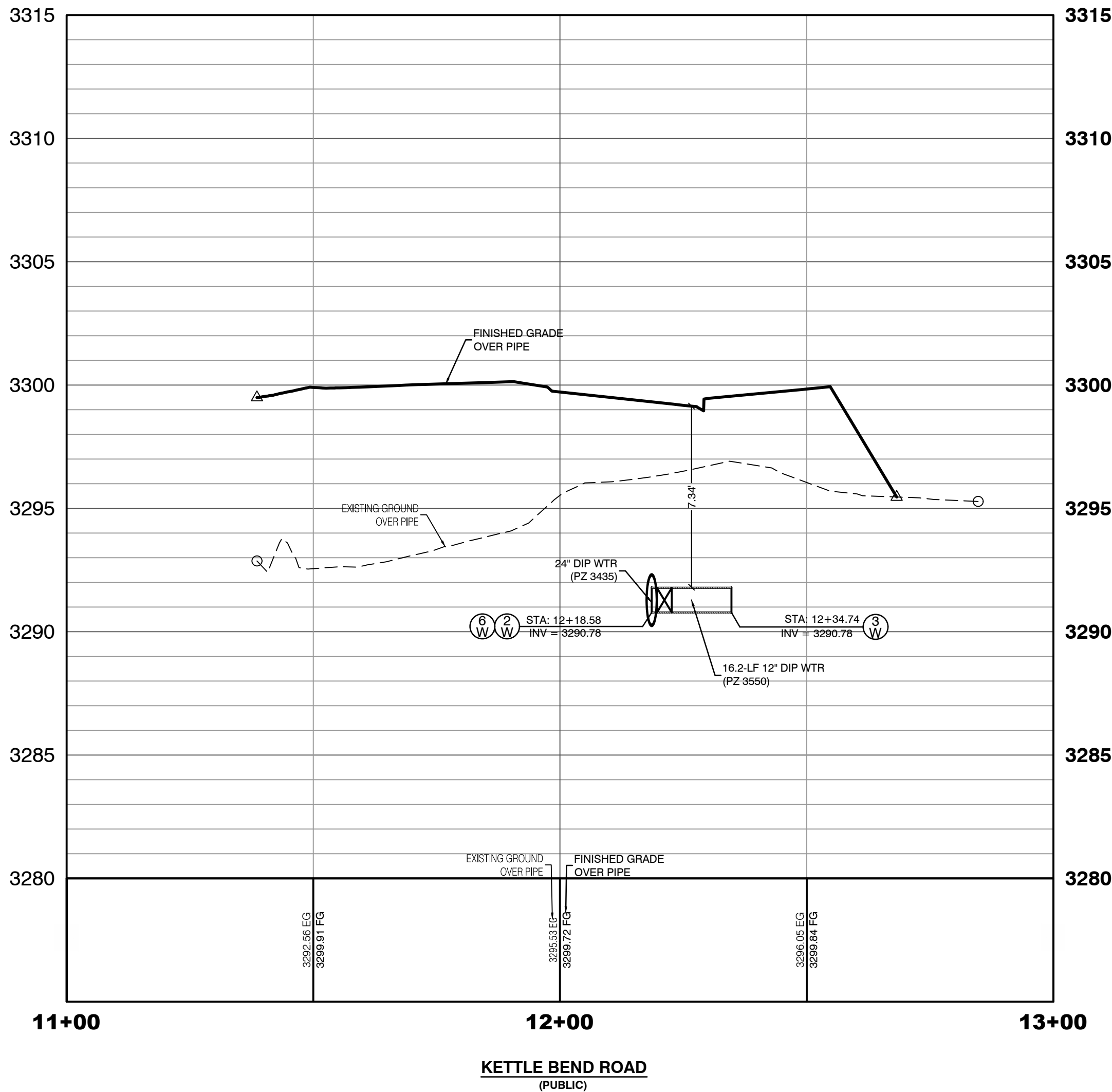
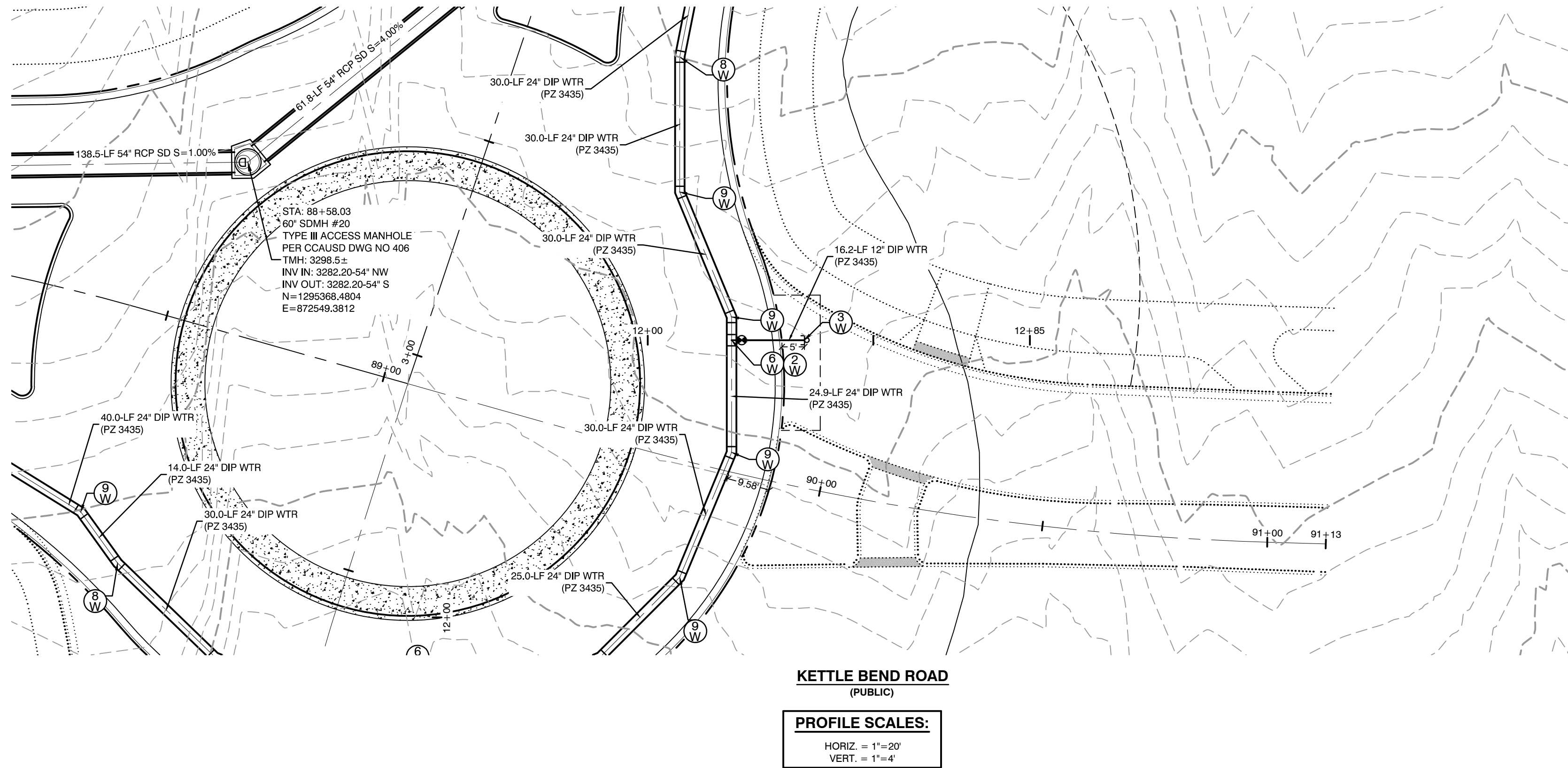
DRAWING NO.
L20-01282
107V8449

REVISION

DATE

BY

REV



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

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WATER LINE MARKER BALLS NOTE

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

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1-702-455-7544
AND
1-702-432-5300
CLARK COUNTY TRAFFIC OPERATIONS

CONSTRUCTION NOTES

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1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #6 AND SHEET DT7

24"X6" TEE (PER UDACS PLATE 31)

6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17

12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17

12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17

24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17

WATER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
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- 16" C-900-16 SANITARY SEWER MAIN
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- SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT: 137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

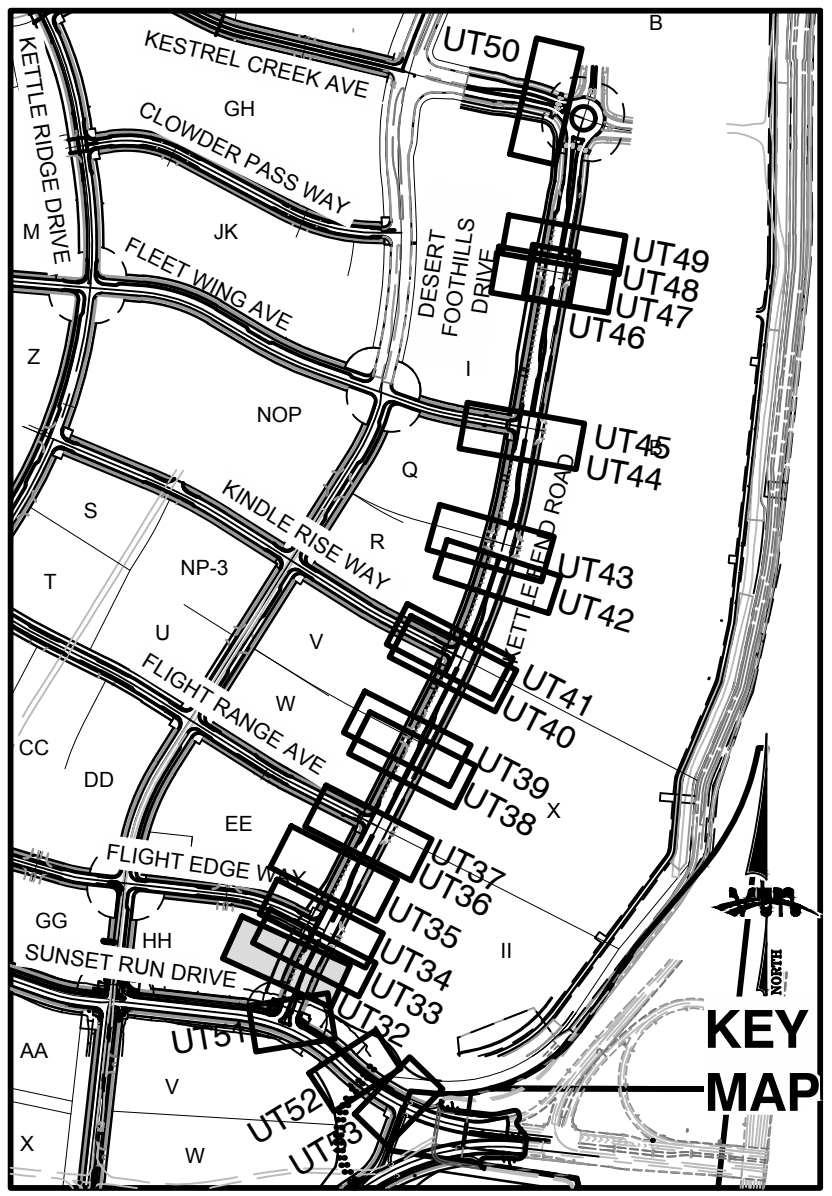
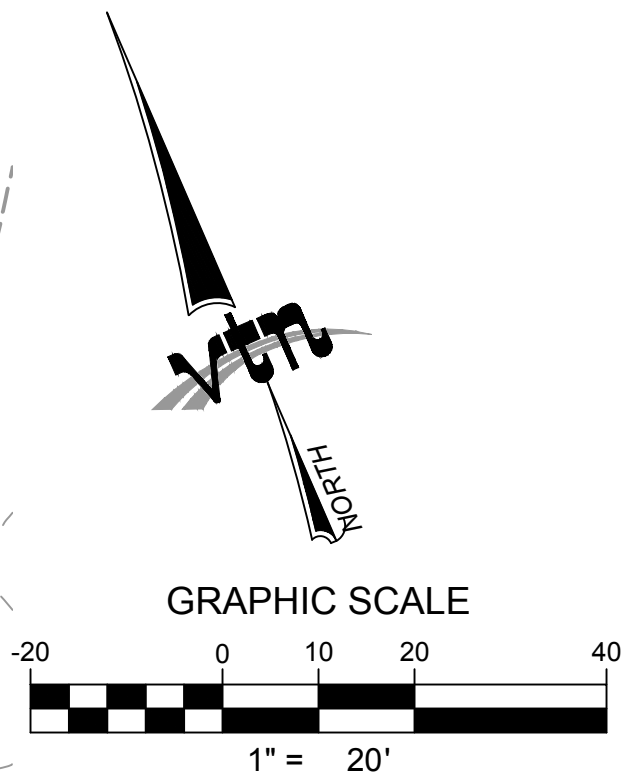
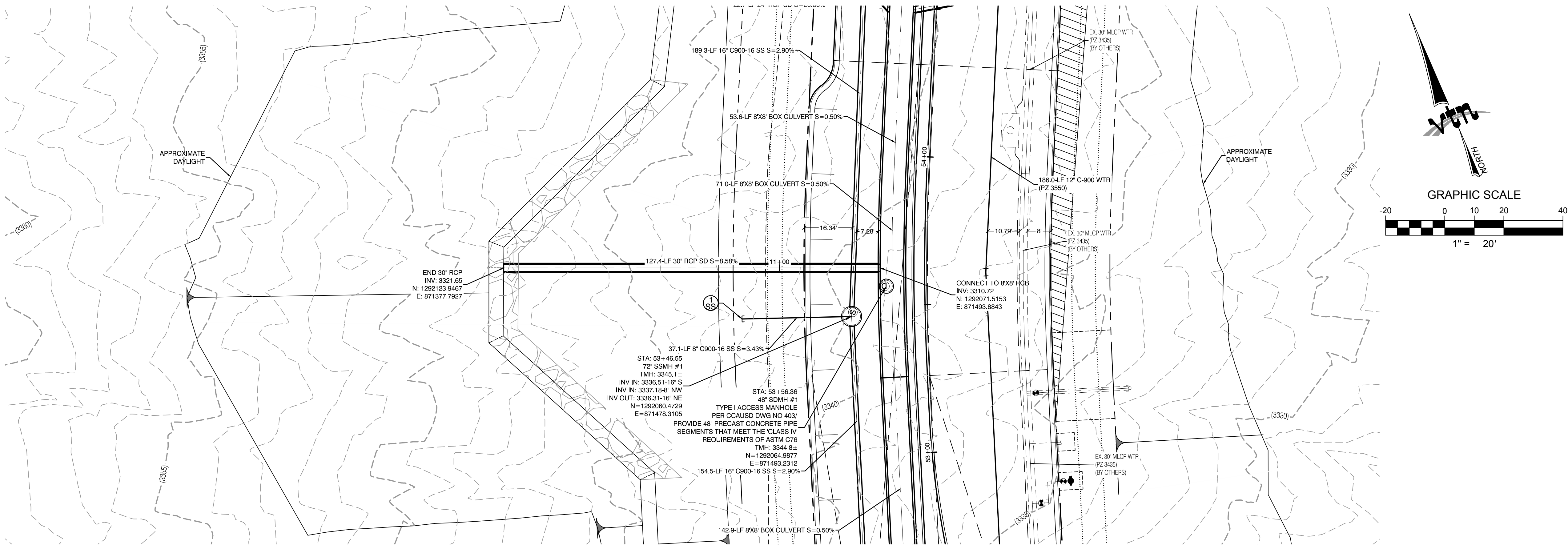
UTILITY PLAN & PROFILE 31
WATER LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
2020-09-25

SHEET
UT31
OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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WATER LINE MARKER BALLS NOTE

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 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

UTILITY CROSSING NOTE:

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

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APPROVED FOR CONSTRUCTION

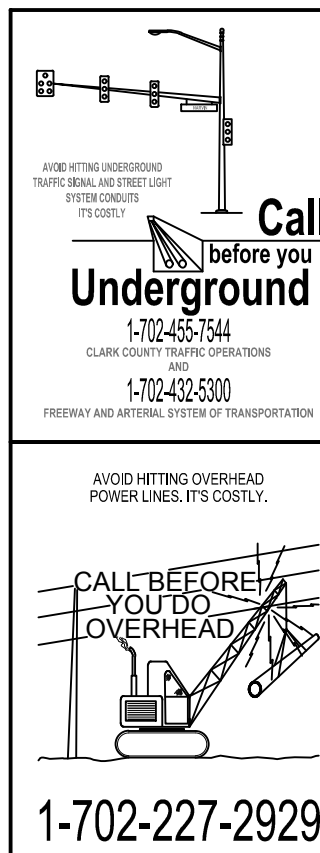
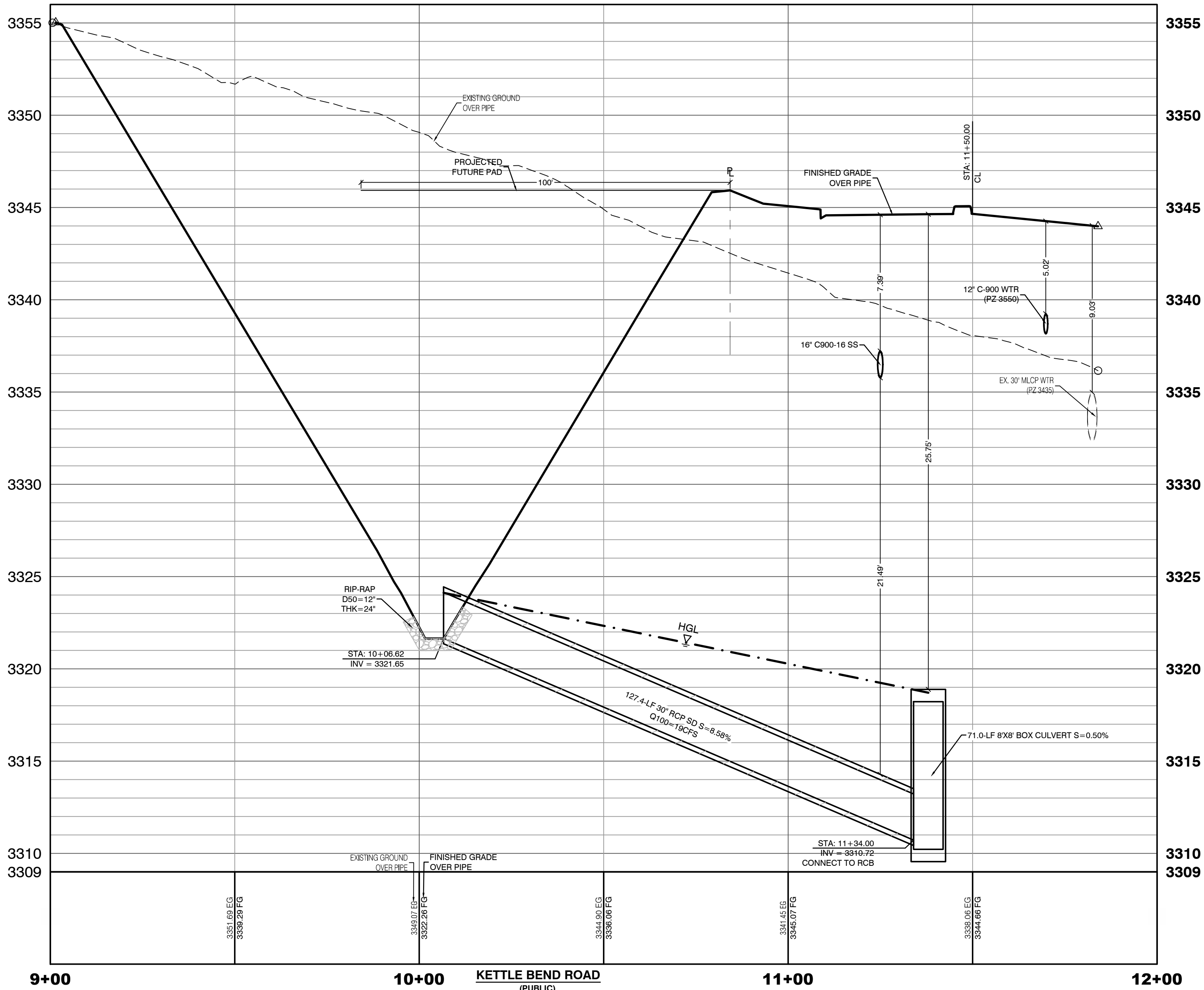
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE: _____

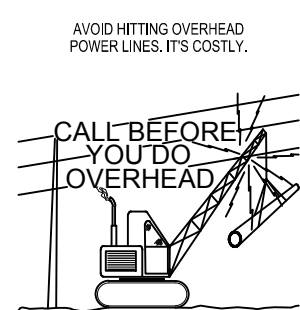
KETTLE BEND ROAD (PUBLIC)

PROFILE SCALES:

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



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AND
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CLARK COUNTY TRAFFIC OPERATIONS



HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
UTILITY PLAN & PROFILE 32
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

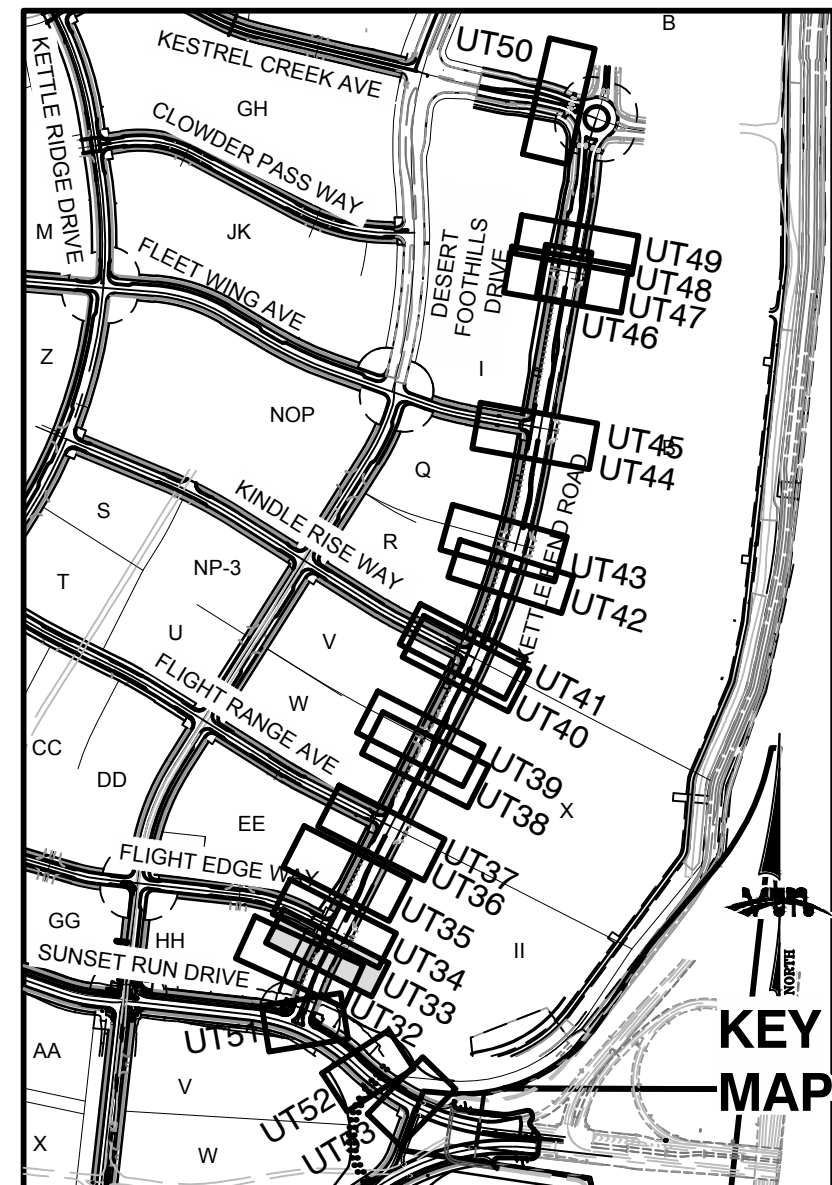
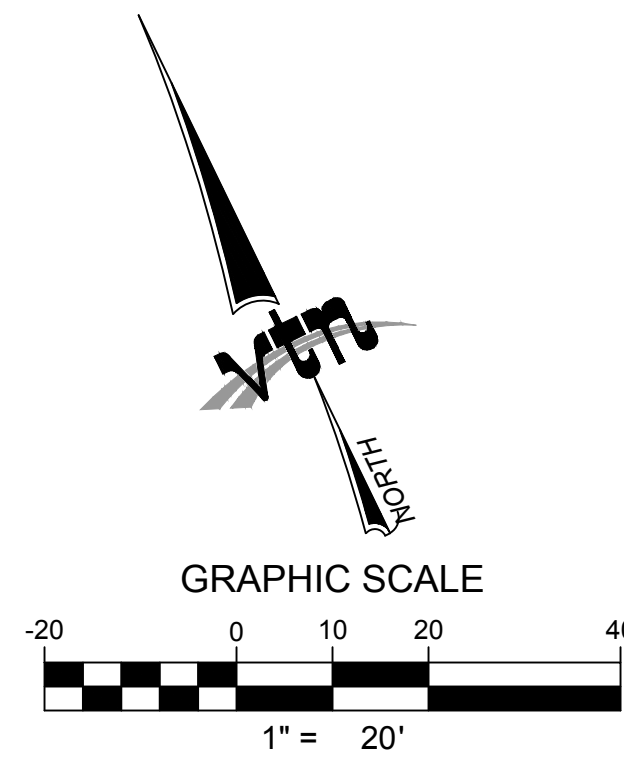
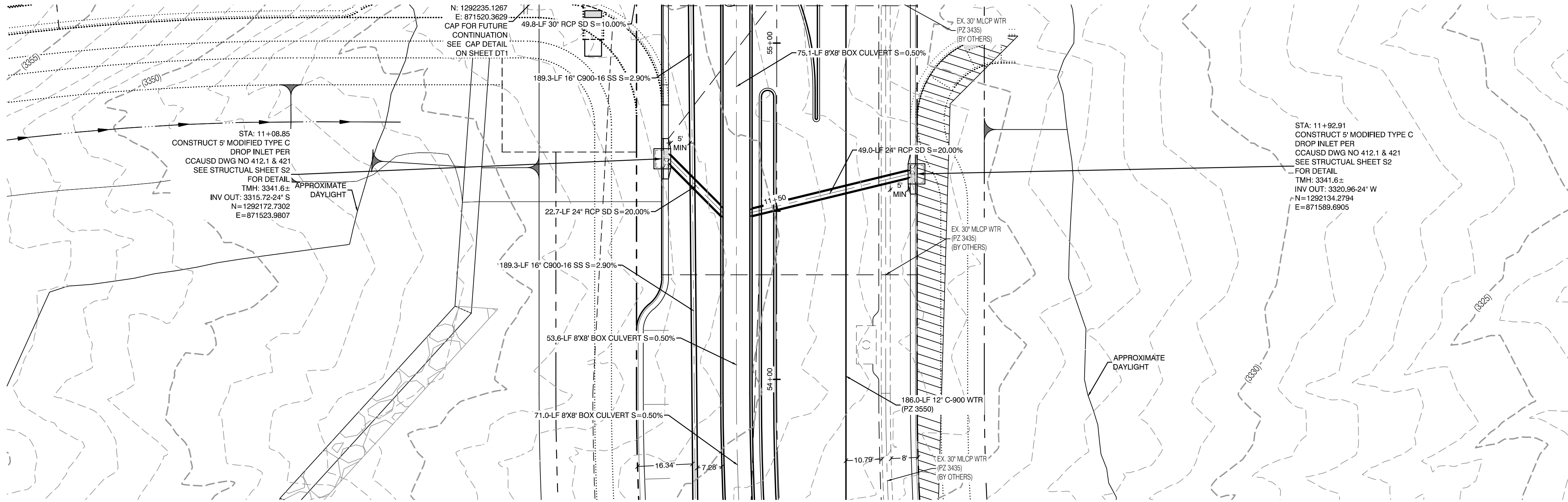
DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
2020-09-25

SHEET
UT32
OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

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CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

CONTRACTOR ZONE:

LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

LVVWD EXISTING FACILITIES NOTE:

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

NOTE:

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

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE. LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE. LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

UTILITY CROSSING NOTE:

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

ENGINEER DISCLAIMER NOTE:

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE Boulders, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT: 137333 FIRST APPROVED DATE:

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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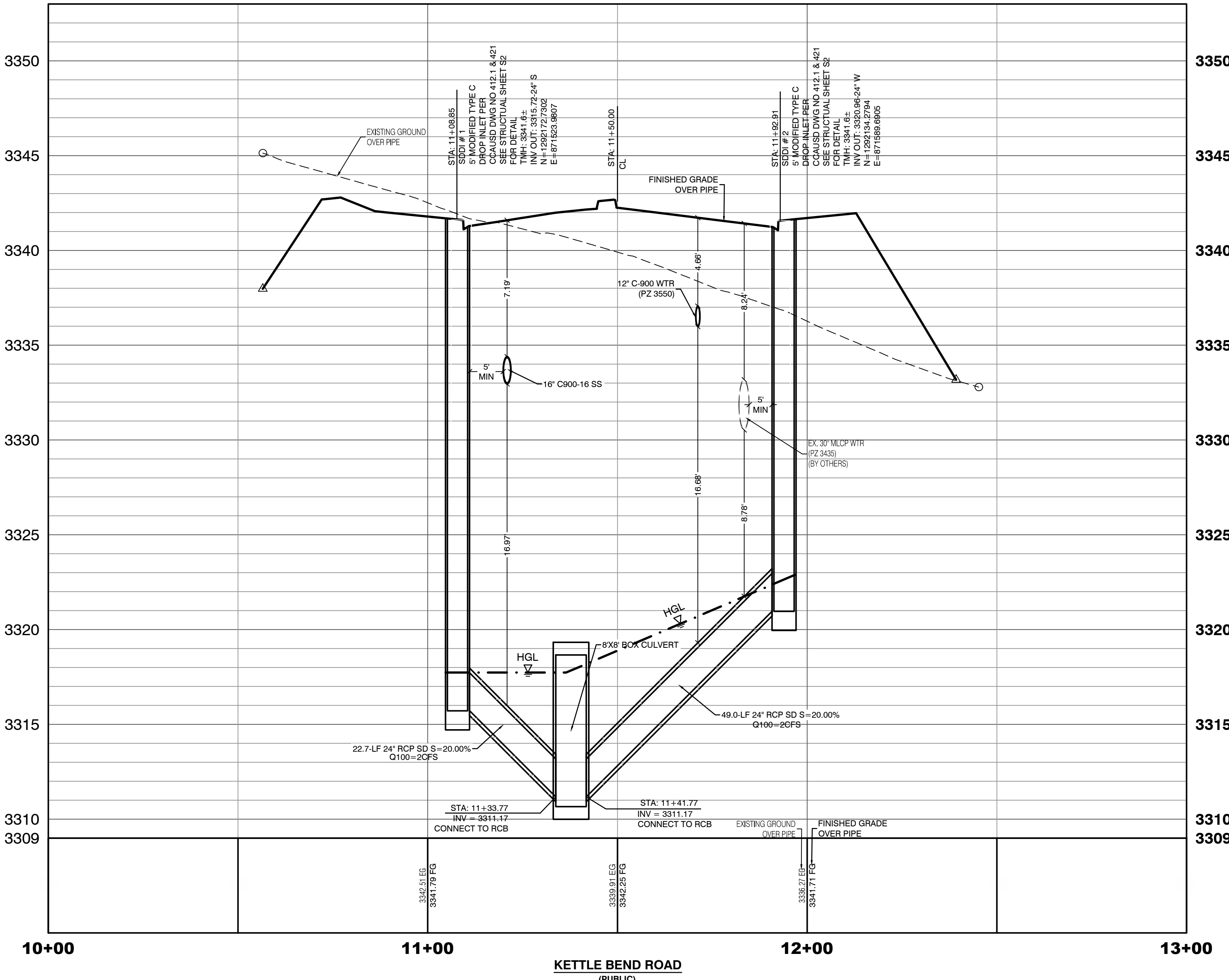
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1-800-642-2444
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

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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

UTILITY PLAN & PROFILE 33
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC

DESIGNED BY: BCC

CHECKED BY: WJM

PROJECT NO: 7861

DATE: 09/10/2019

DATE: 09/10/2019

DATE: 09/28/2020

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

2020-09-25

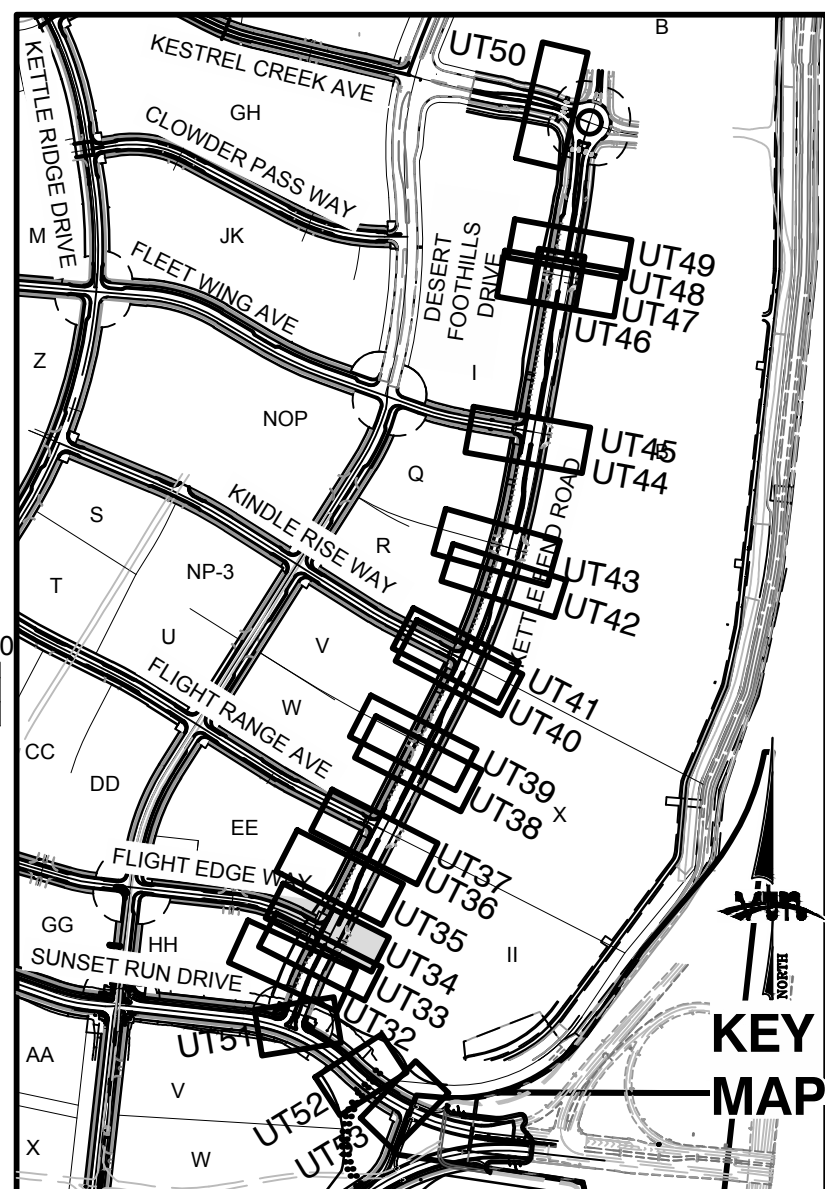
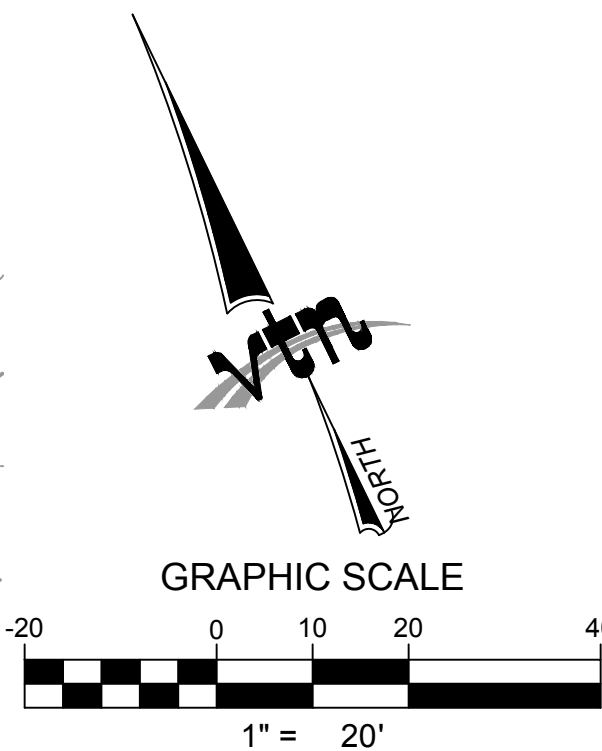
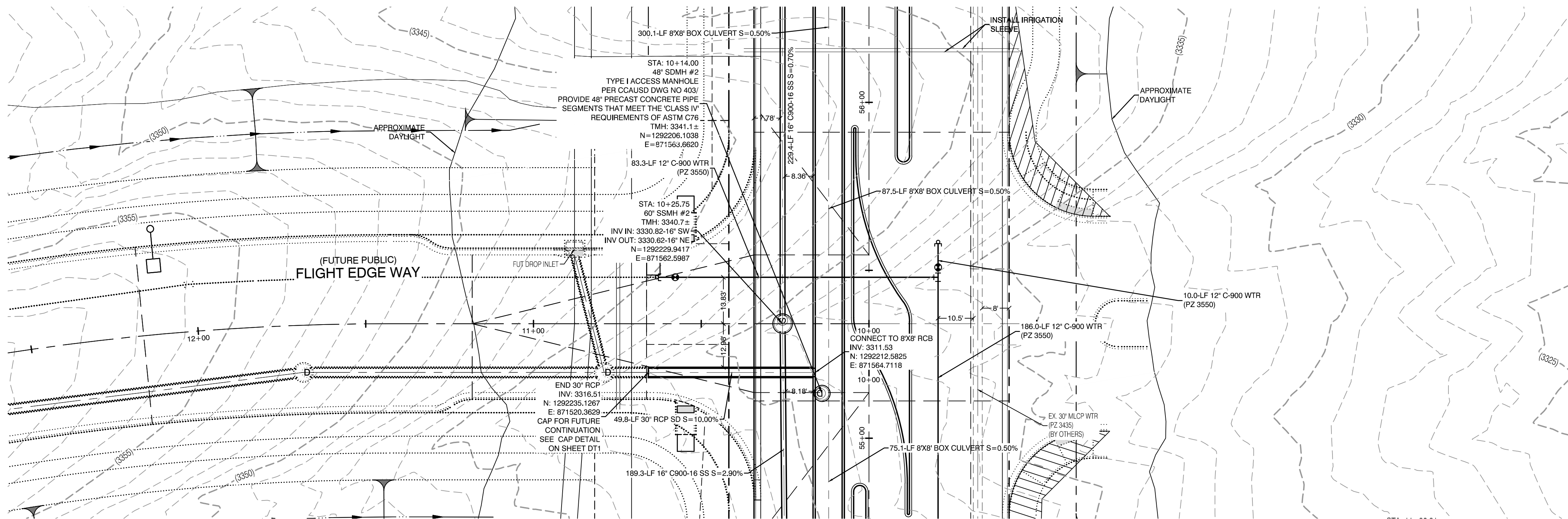
UT33
73 OF 107 SHEETS

WILLIAM J. MEYER
EXP: 12/31/21
CIVIL

WILLIAM J. MEYER
EXP: 12/31/21
CIVIL

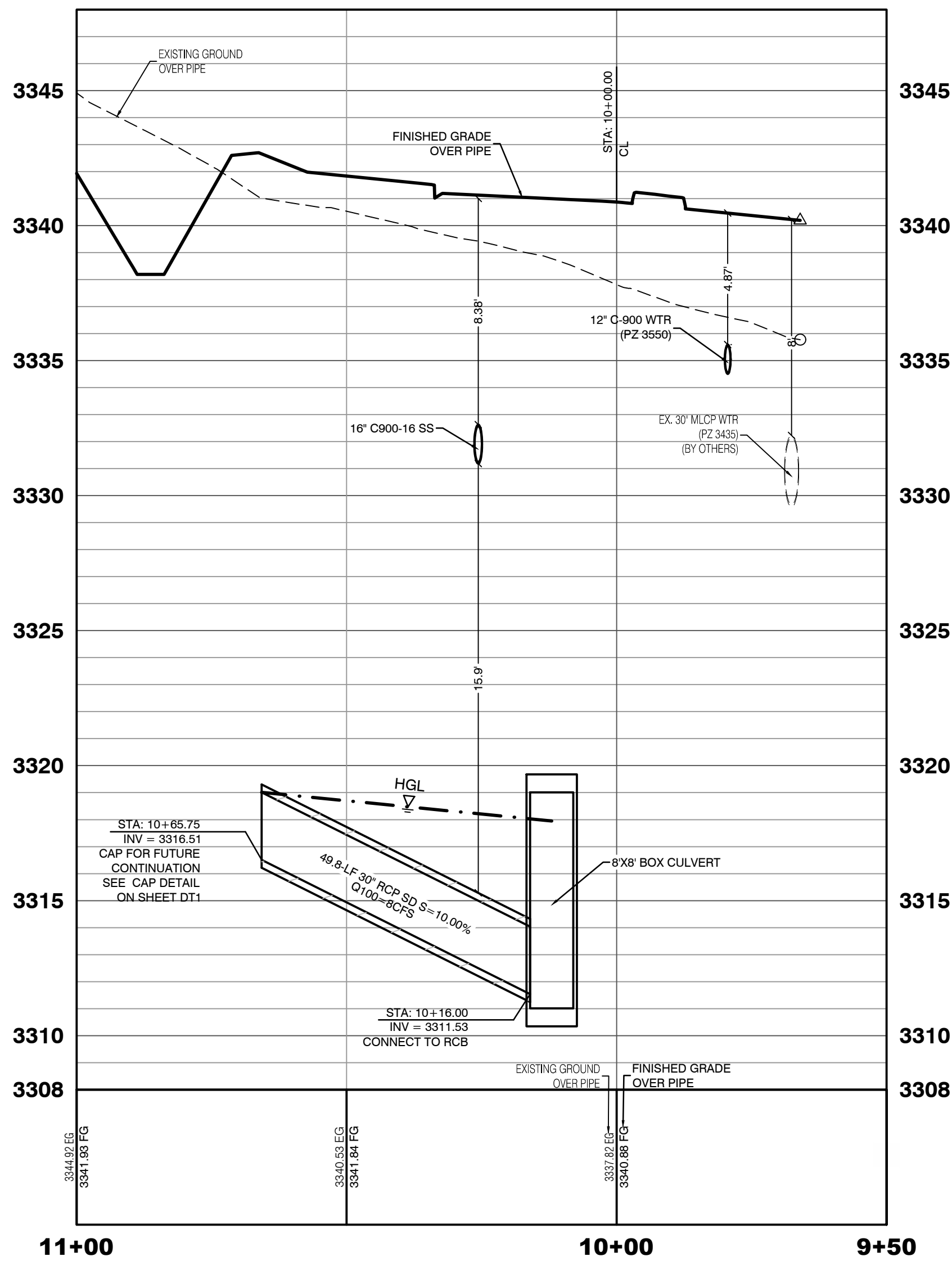
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KETTLE BEND ROAD
(PUBLIC)

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



KETTLE BEND ROAD
(PUBLIC)

CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

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

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

UTILITY CROSSING NOTE:

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WATERLINE TRENCH NOTE:

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WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

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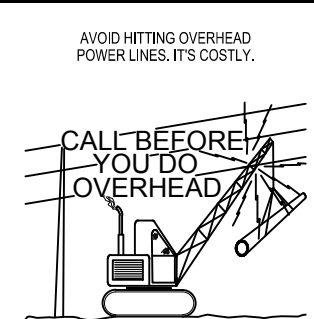
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT: 137333 FIRST APPROVED DATE: _____

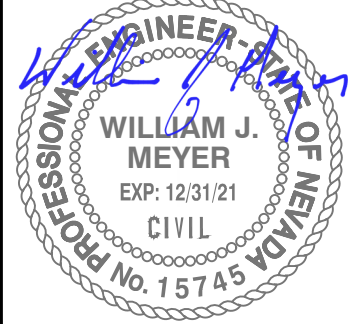


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HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
UTILITY PLAN & PROFILE 34
STORM DRAIN LATERAL
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC	09/10/2019
DESIGNED BY: BCC	09/10/2019
CHECKED BY: WJM	09/28/2020
PROJECT NO: 7861	SCALE: 1"=20' 1"=4'
SHEET UT34 74 OF 107 SHEETS	



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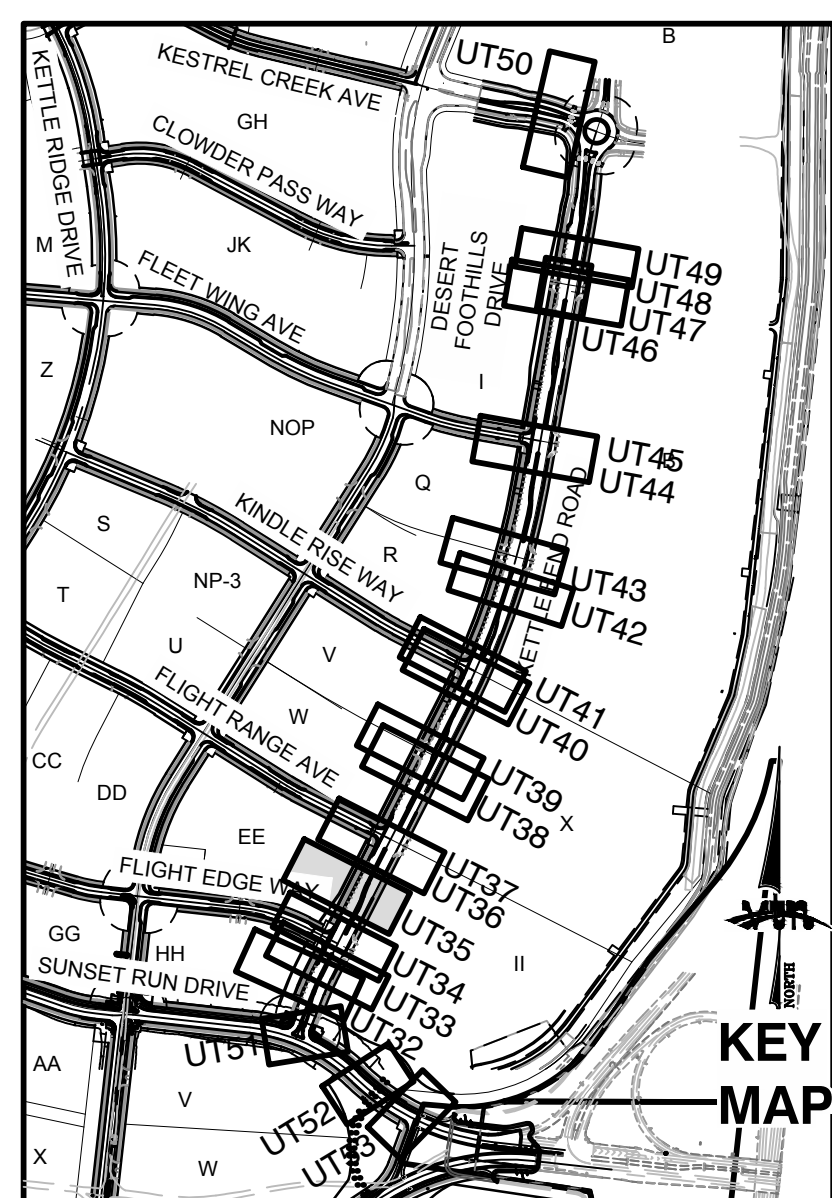
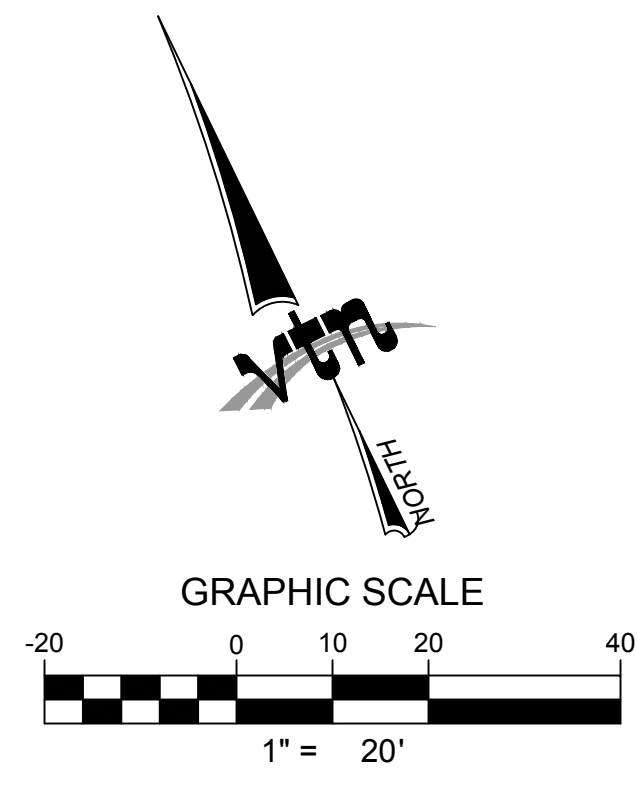
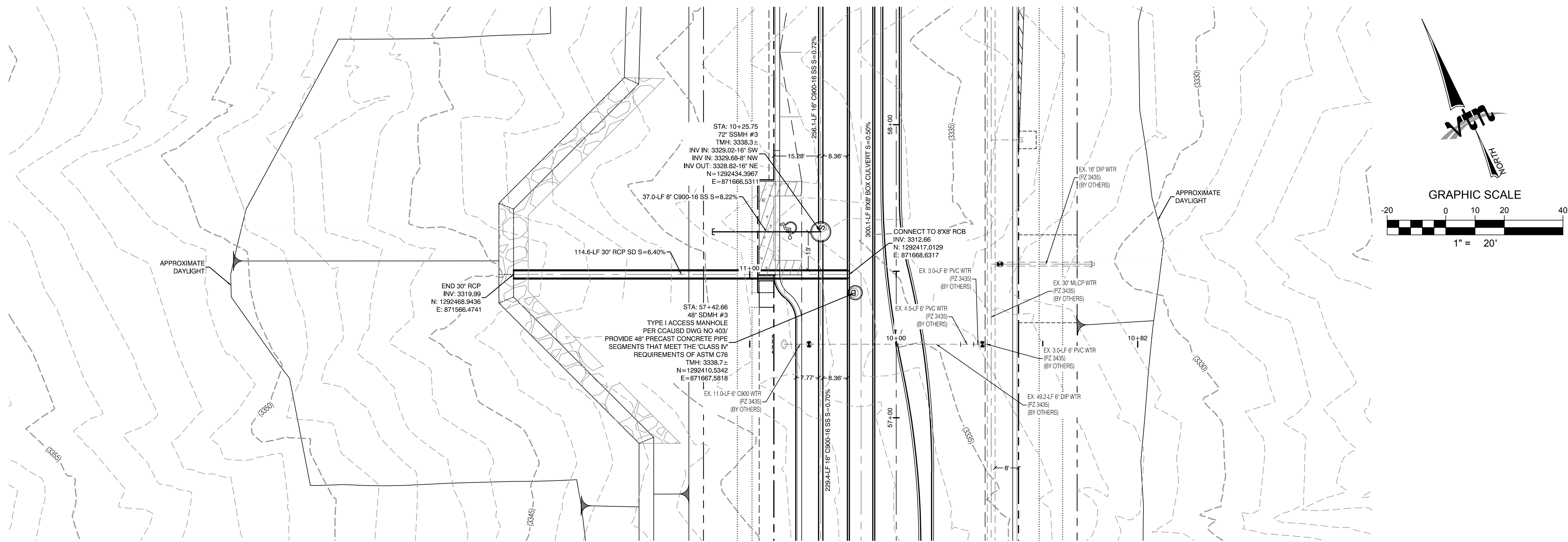
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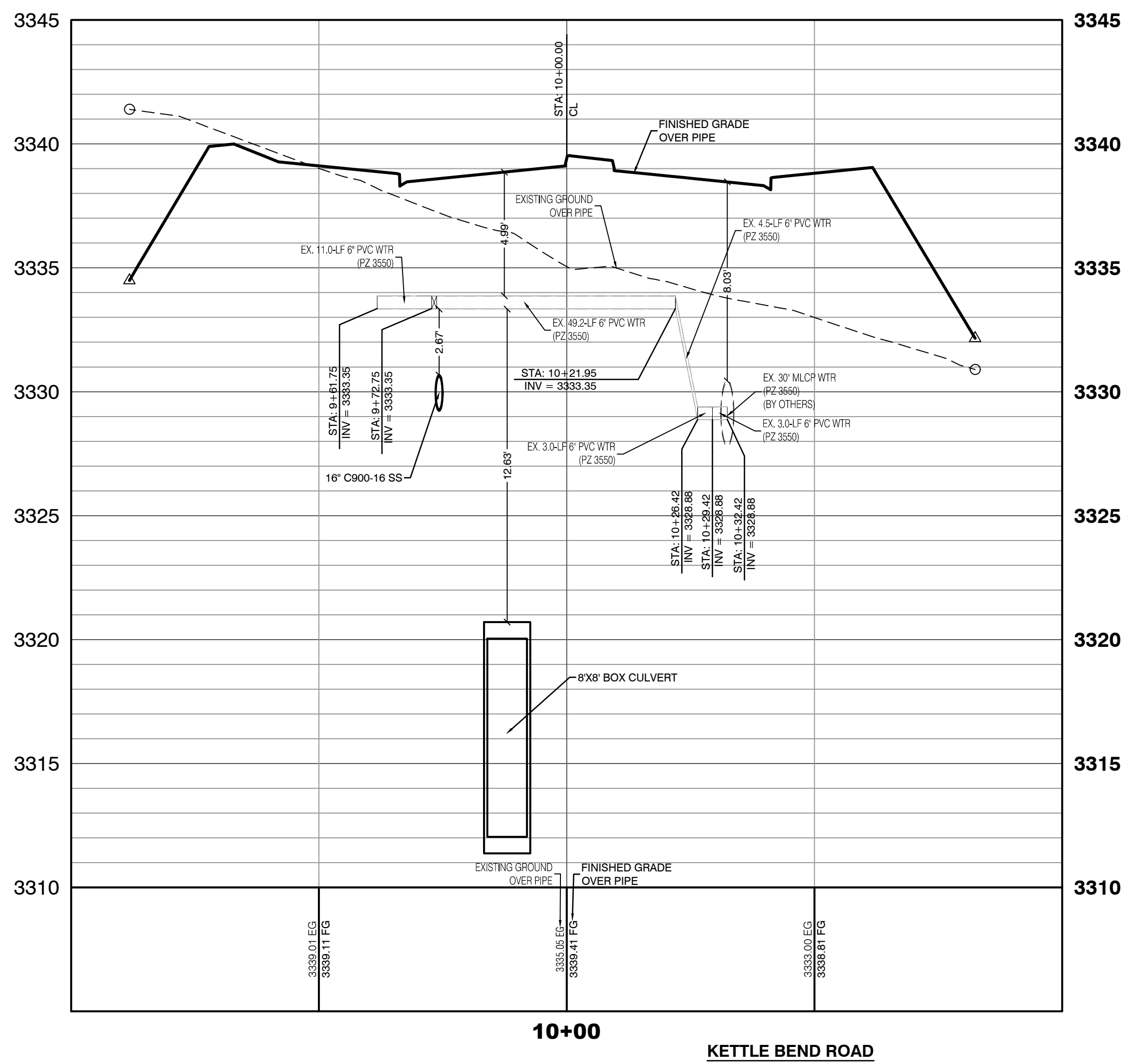
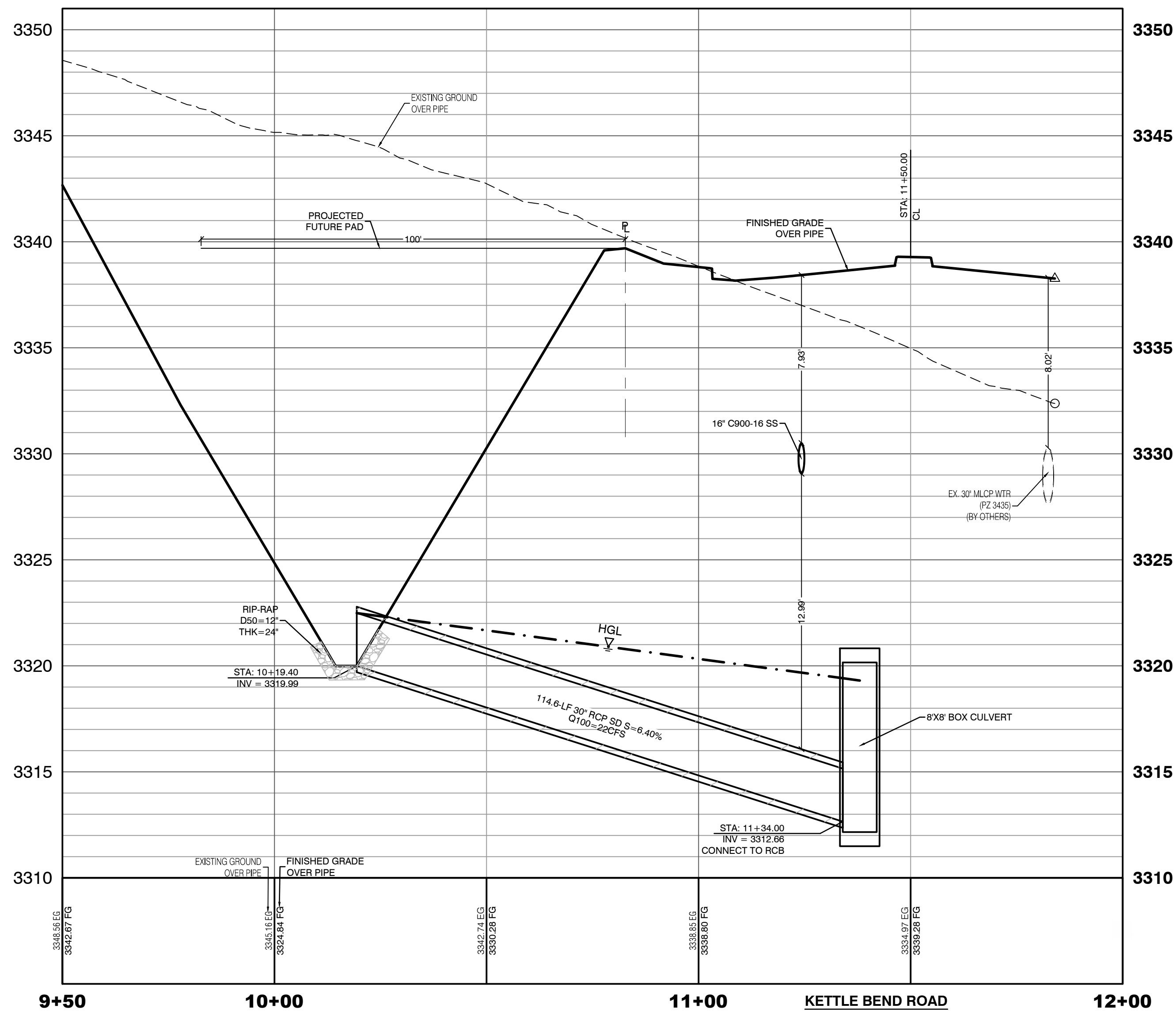
2020-09-25

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KETTLE BEND ROAD
(PUBLIC)

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



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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WATER LINE MARKER BALLS NOTE

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FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

UTILITY CROSSING NOTE:

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

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TO ENSURE LVVWD ACCESS WITHIN EASEMENT

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

UTILITY PLAN & PROFILE 35
STORM DRAIN LATERAL

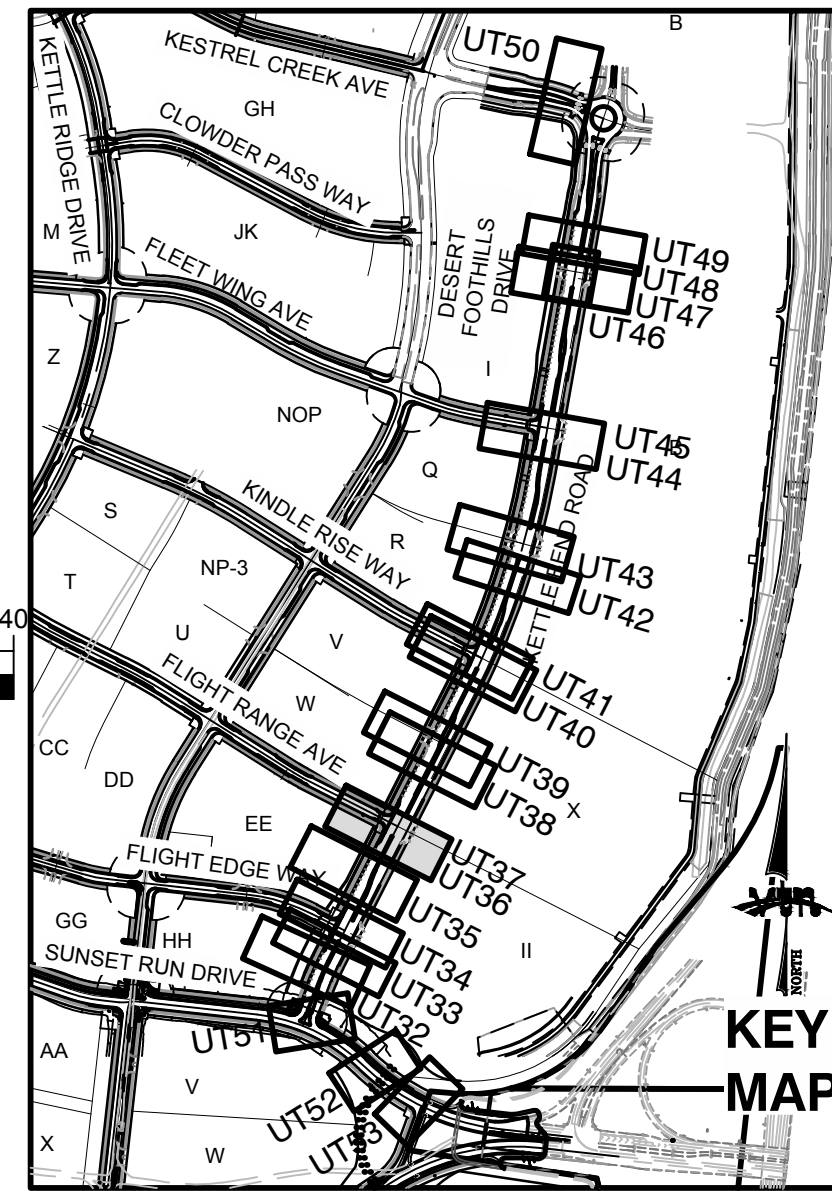
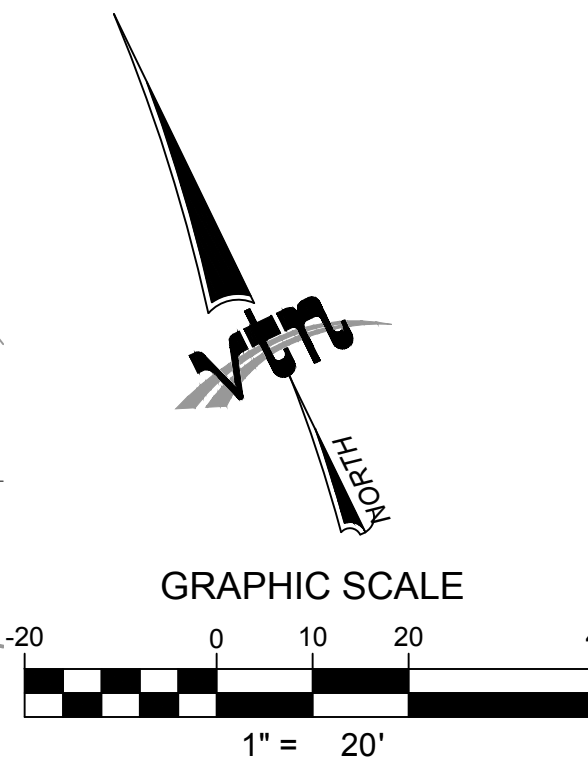
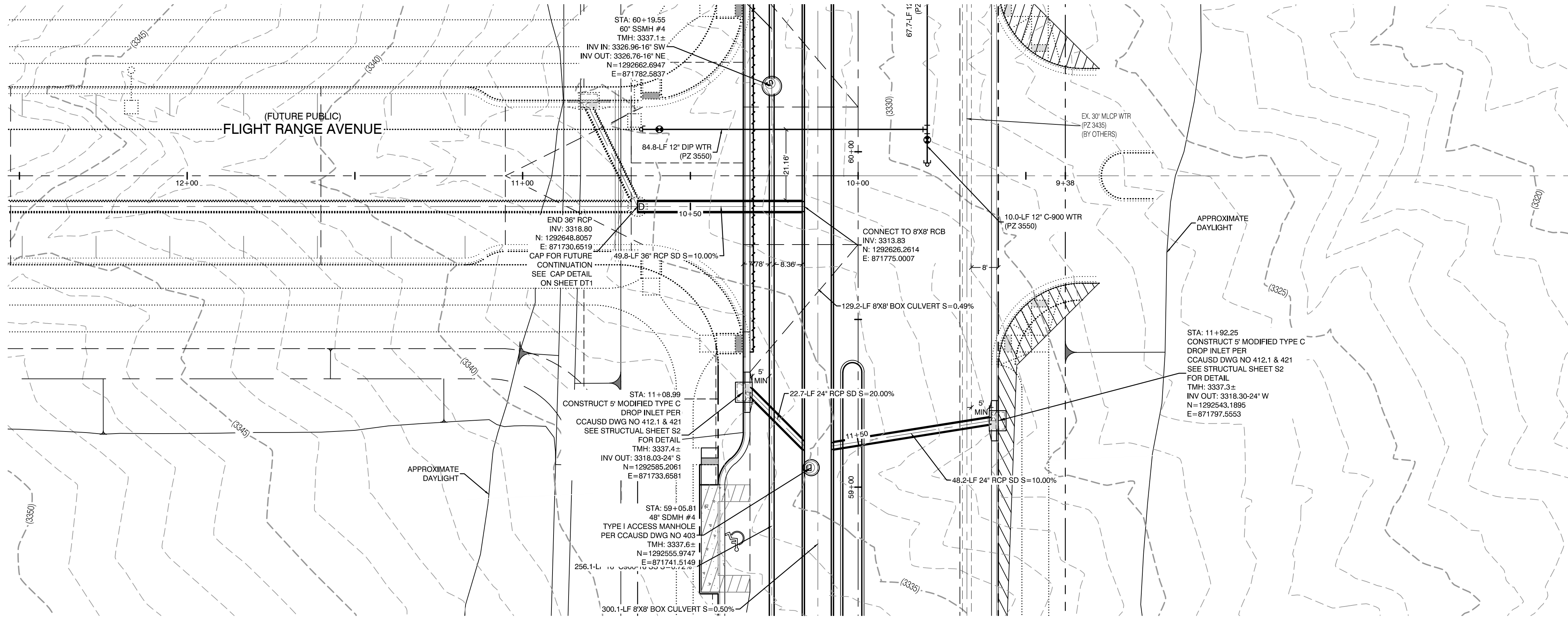
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
2020-09-25

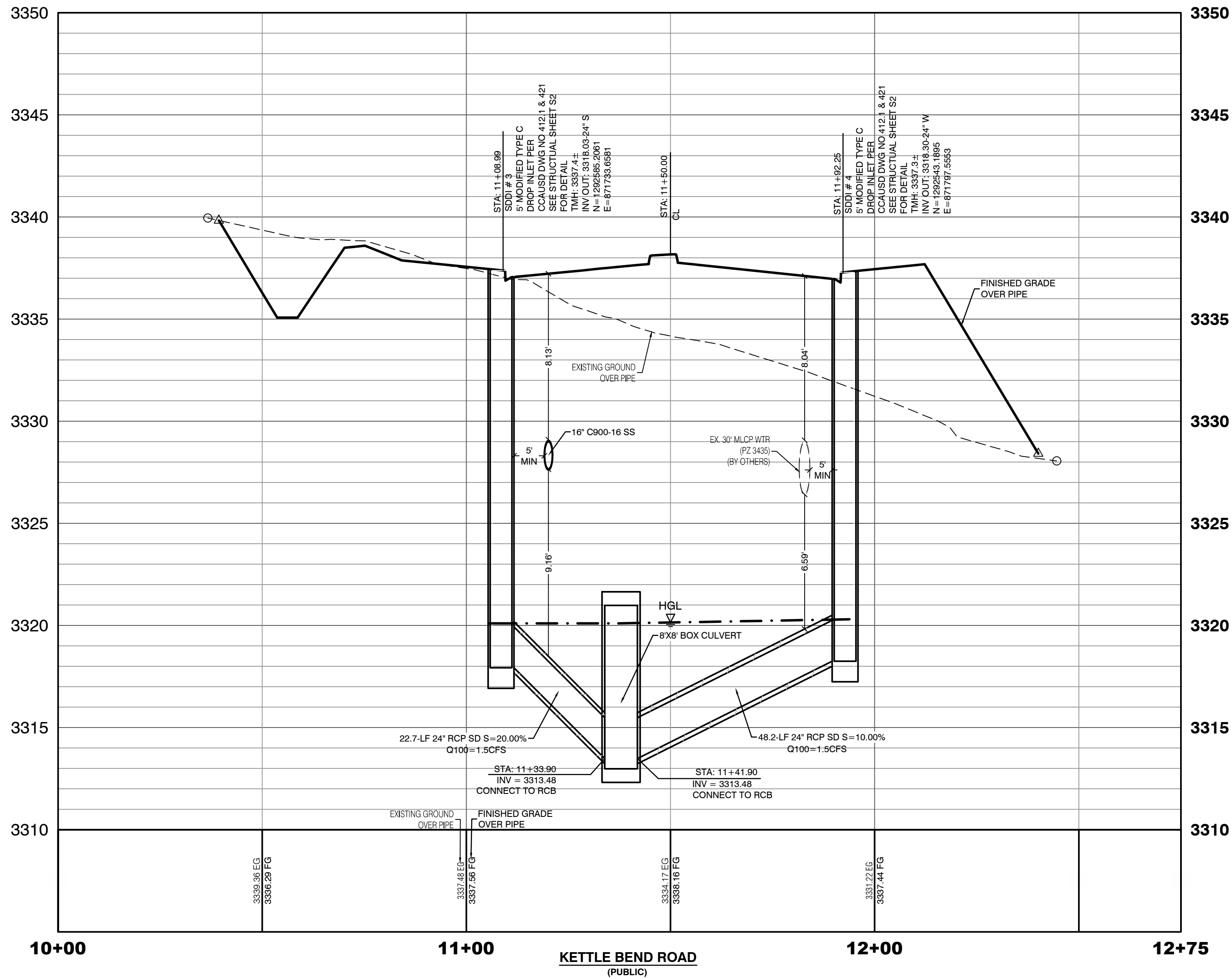
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OF 107 SHEETS
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KETTLE BEND ROAD
(PUBLIC)

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



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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- CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)**

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- NOTE:**

5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET.
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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03
- UTILITY CROSSING NOTE:**

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- WATER PRESSURE ZONE:**

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT: 137333 FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 973-7550 FAX: (702) 382-2587
WWW.VTNV.COM
CONSULTING ENGINEERS & PLANNERS • LAND SURVEYORS

UTILITY PLAN & PROFILE 36
STORM DRAIN LATERAL
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC

DESIGNED BY: BCC

CHECKED BY: WJAT

PROJECT NO: 7861

09/10/2019

09/10/2019

09/28/2020

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

PROFESSIONAL ENGINEER

WILLIAM J. MEYER

EXP: 12/31/21

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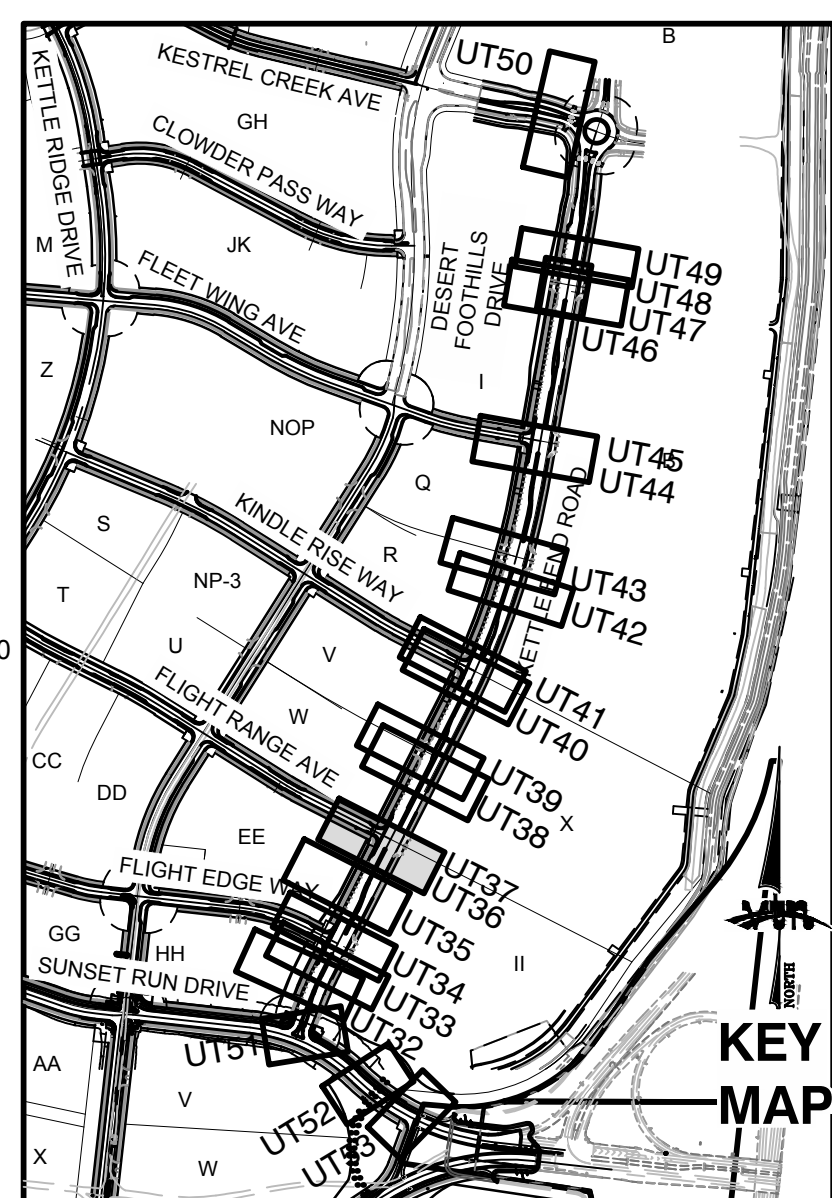
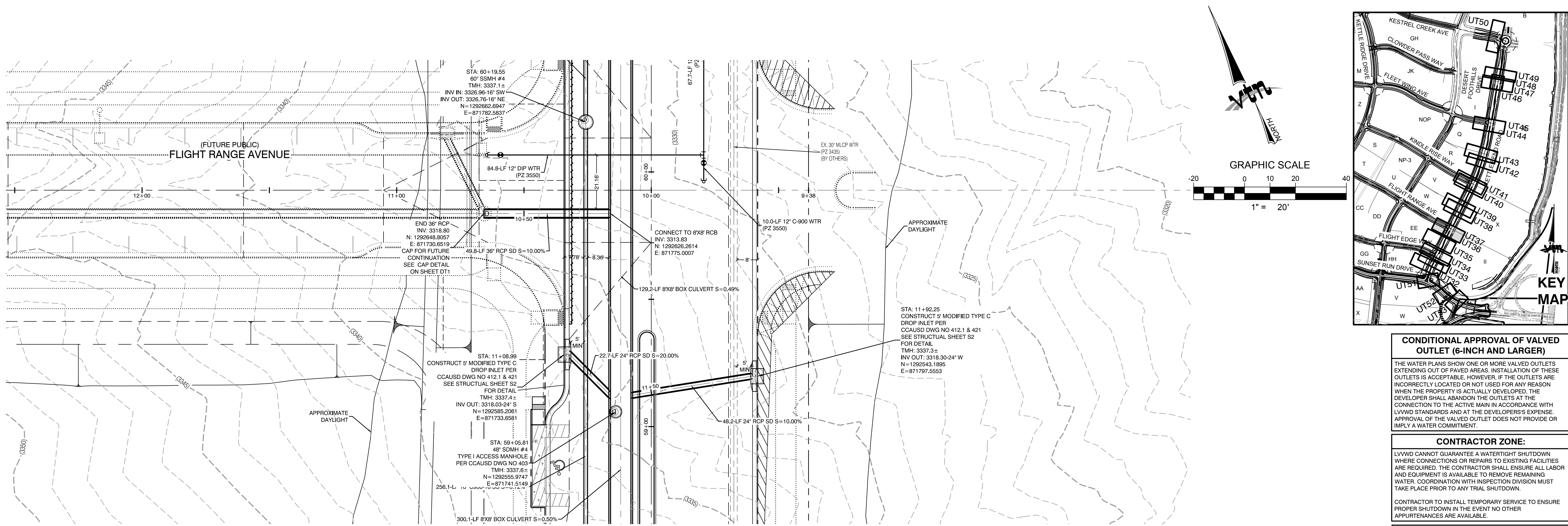
NO. 15745

2020-09-25

SHEET

UT36

76 OF 107 SHEETS



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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NOTE:

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

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

UTILITY CROSSING NOTE:

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

ENGINEER DISCLAIMER NOTE:

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOLLARDS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT: 137333 FIRST APPROVED DATE: _____

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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CLARK COUNTY TRAFFIC OPERATIONS

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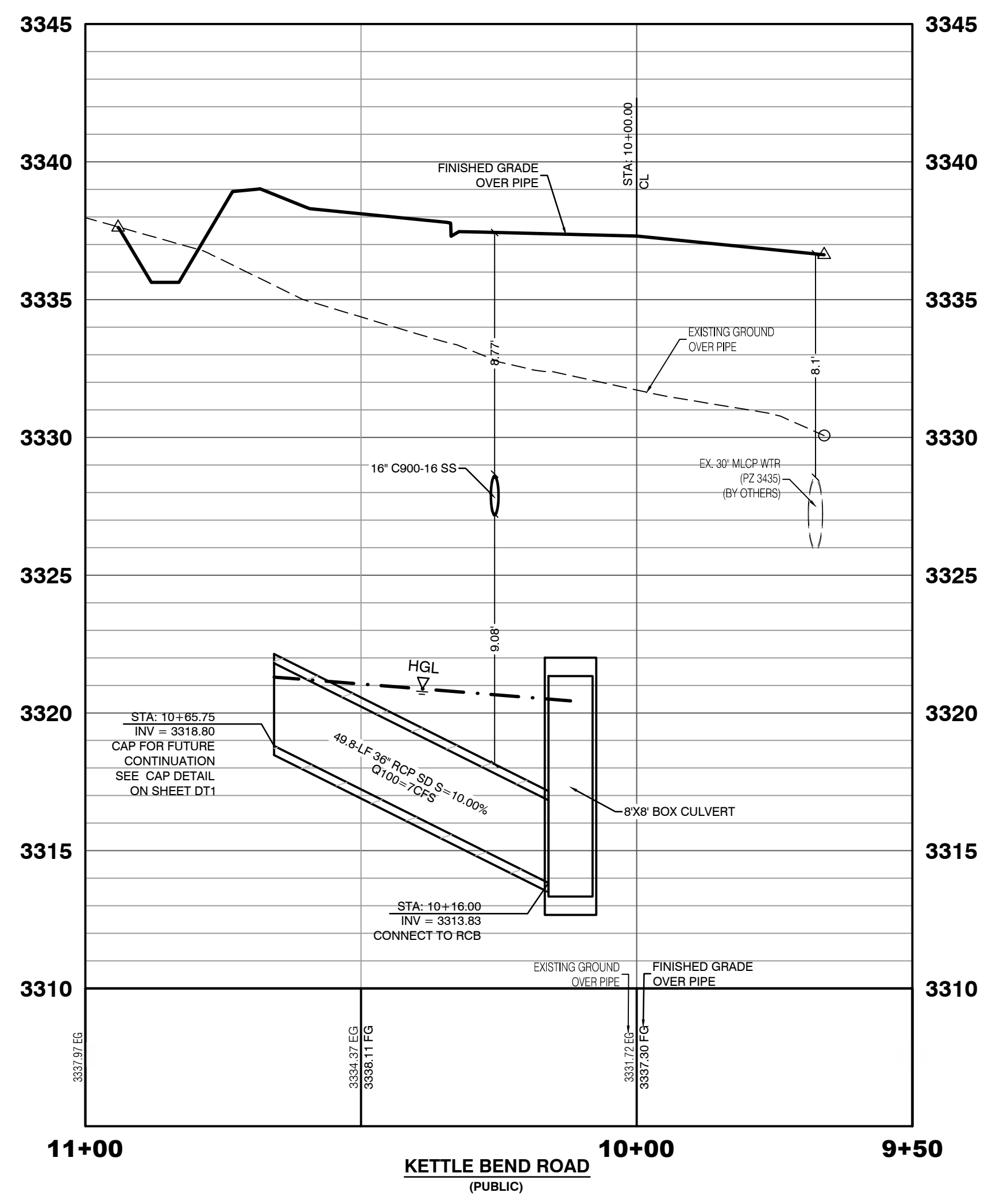
1-800-642-2444
AND
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

Call before you Dig

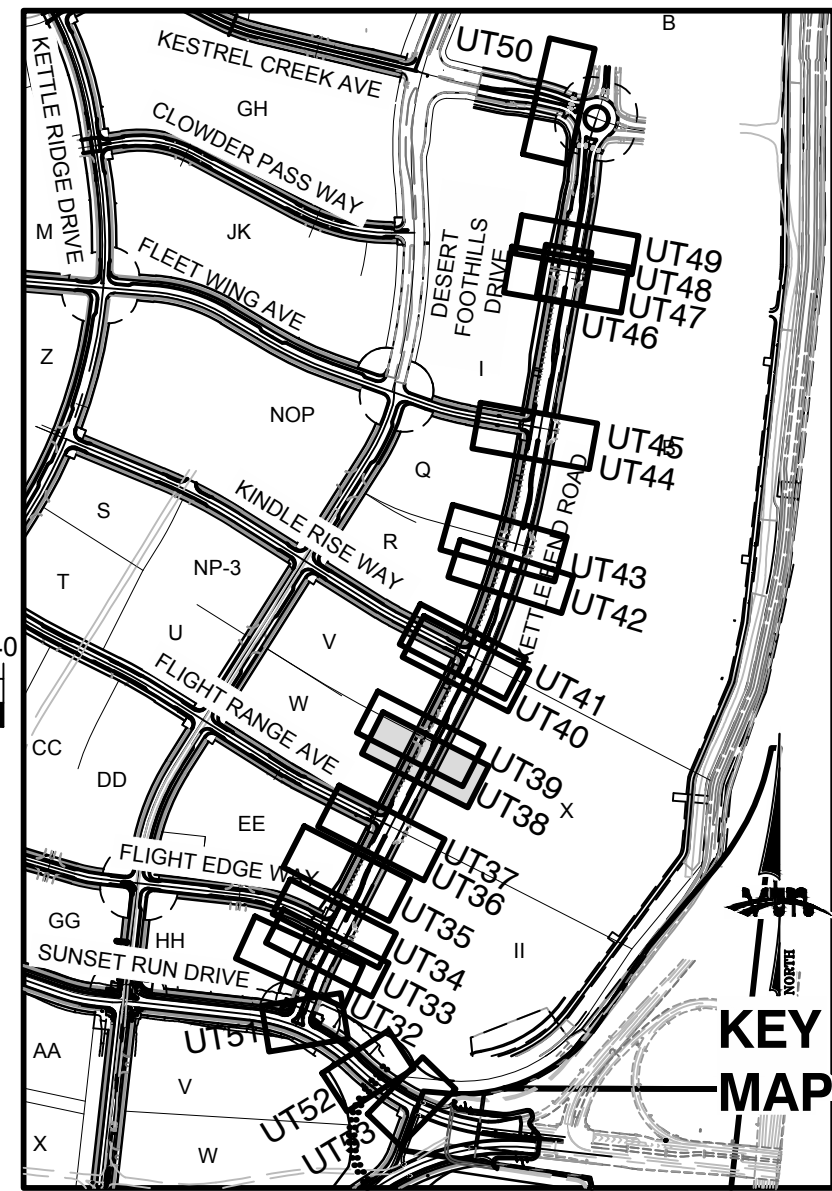
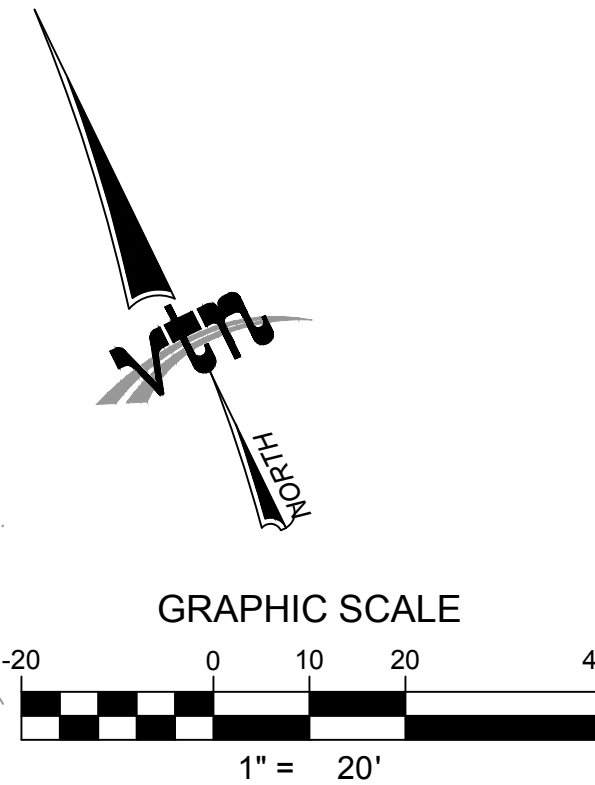
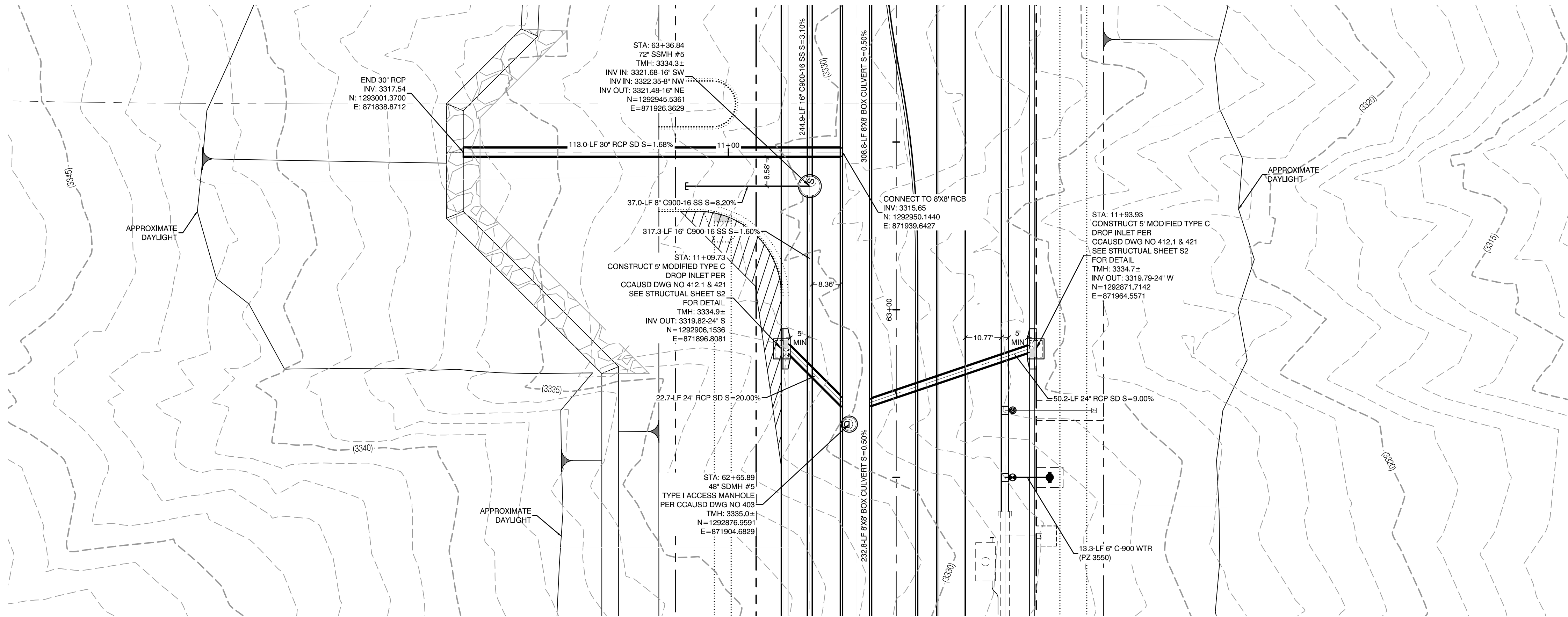
Avoid hitting overhead power lines. It's costly.

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HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10845 GRIFFITH PEAK DRIVE, SUITE 160 LAS VEGAS, NEVADA 89135 702.781.4000		CITY OF LAS VEGAS 2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5148 PH: (702) 873-7550 FAX: (702) 382-2587 WEB: WWW.VTNV.COM CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS	
UTILITY PLAN & PROFILE 37 STORM DRAIN LATERAL		SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	
DRAWN BY: BCC	DESIGNED BY: BCC	CHECKED BY: WJM	PROJECT NO: 7861
DATE: 09/10/2019		DATE: 09/28/2020	
SCALE: 1"=20'		SCALE: 1"=4'	
PROFESSIONAL ENGINEER WILLIAM J. MEYER EXP: 12/31/21 NO. 15745 2020-09-25			
SHEET UT37 OF 107 SHEETS DRAWING NO. L20-01282 107V8449			



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

CONTRACTOR ZONE:

LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

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TO ENSURE LVVWD ACCESS WITHIN EASEMENT

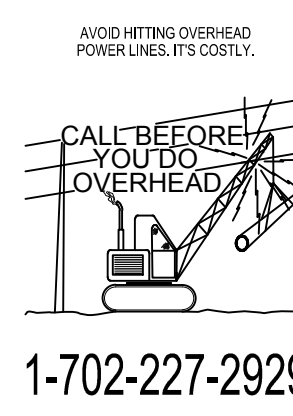
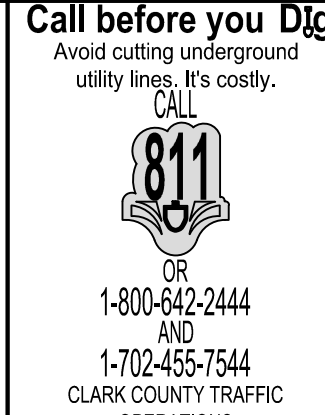
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

DROP INLET SEPARATION NOTE

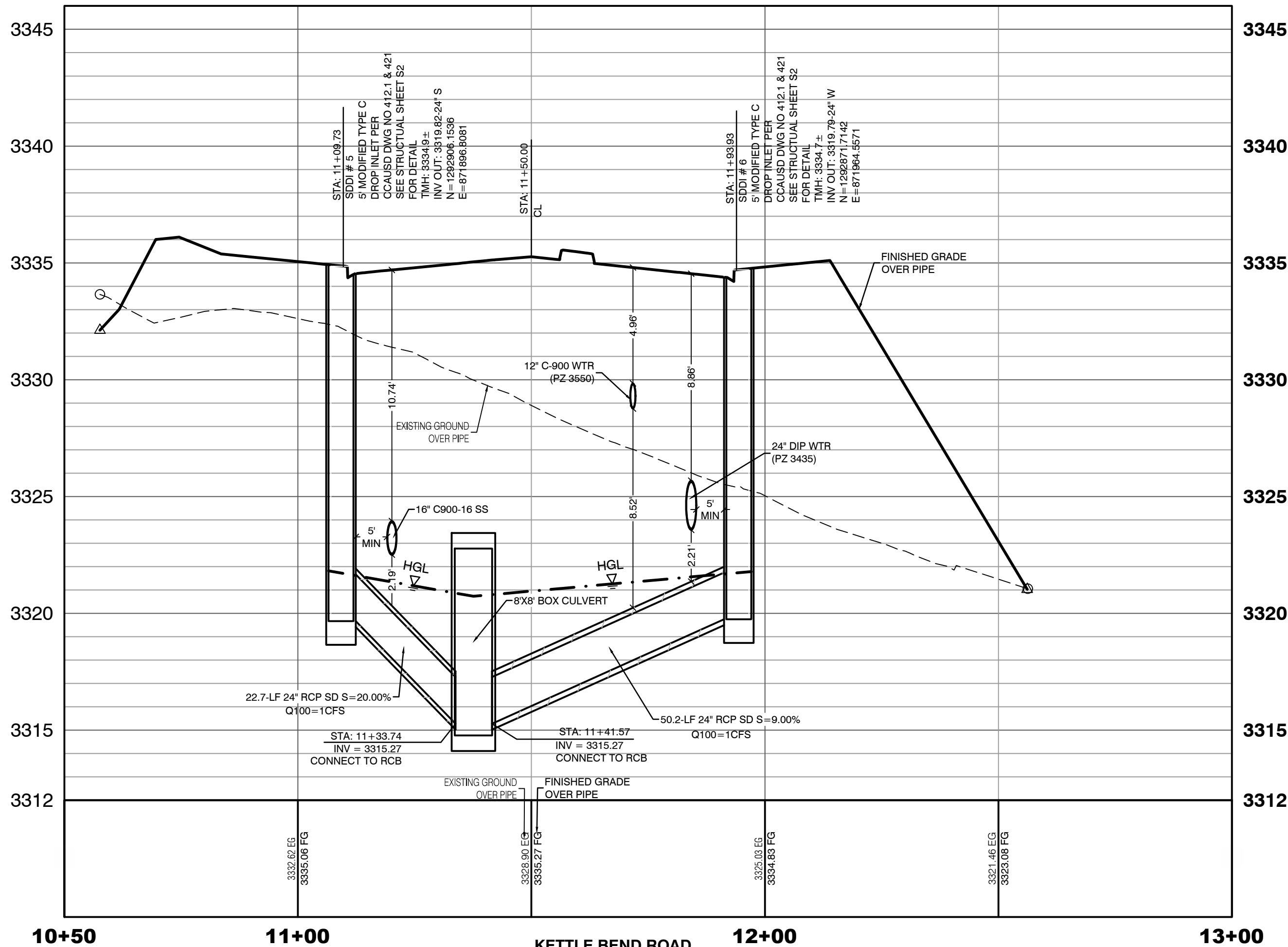
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KETTLE BEND ROAD (PUBLIC)

PROFILE SCALES:

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



HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702-791-4000

UTILITY PLAN & PROFILE 38
STORM DRAIN LATERAL
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

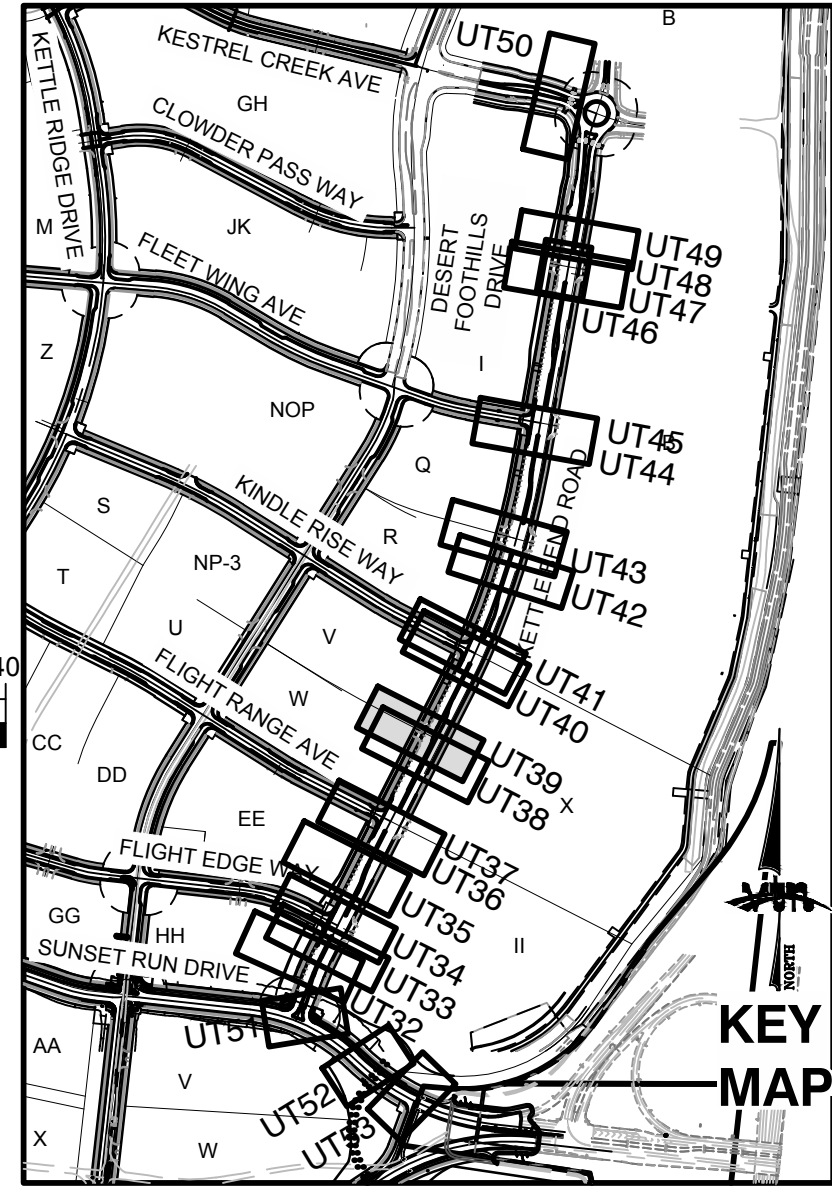
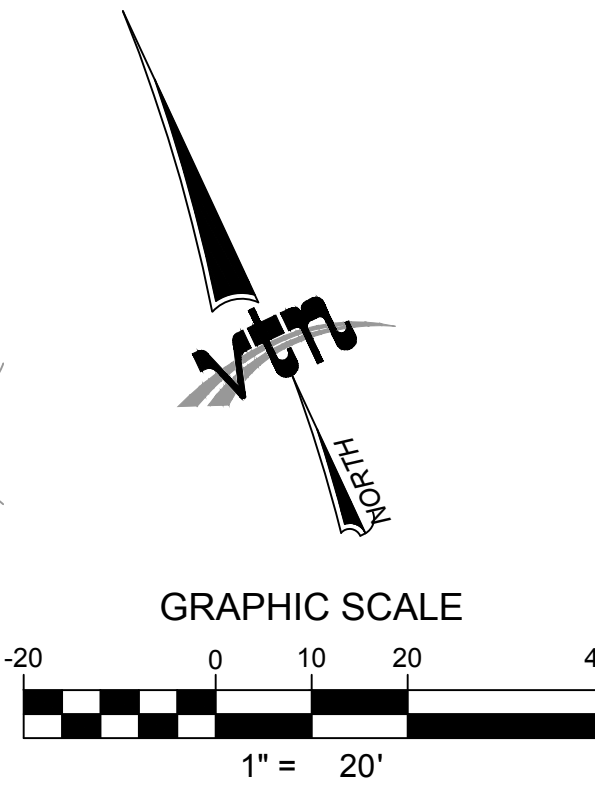
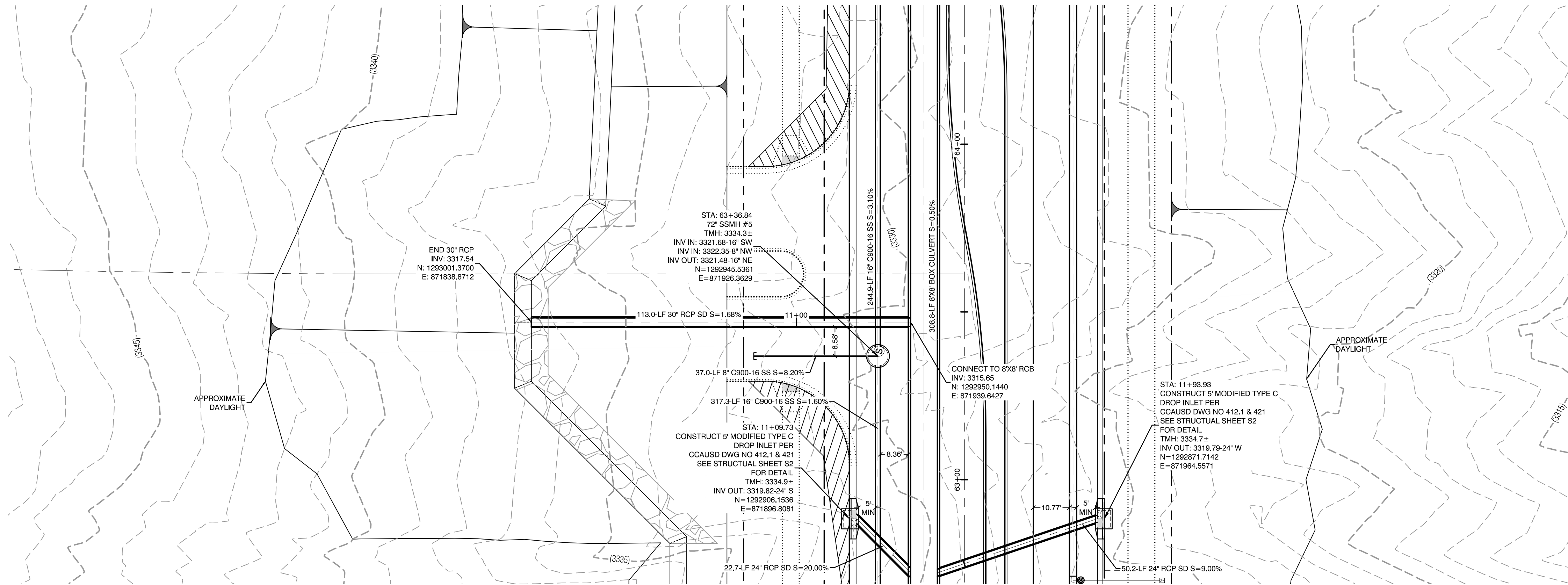
DRAWN BY: BCC	09/10/2019
DESIGNED BY: BCC	09/10/2019
CHECKED BY: WJM	09/28/2020
PROJECT NO: 7861	SCALE: 1"=20' HORIZ. 1"=4' VERT.

2020-09-25

SHEET
UT38
78 of 107 SHEETS

DRAWING NO.
L20-01282
107V8449

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

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WATERLINE TRENCH NOTE:

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WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

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TO ENSURE LVVWD ACCESS WITHIN EASEMENT

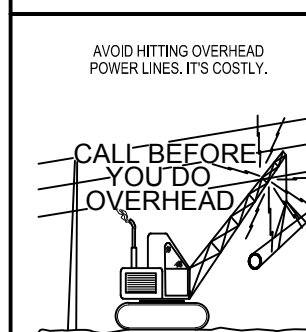
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

DROP INLET SEPARATION NOTE

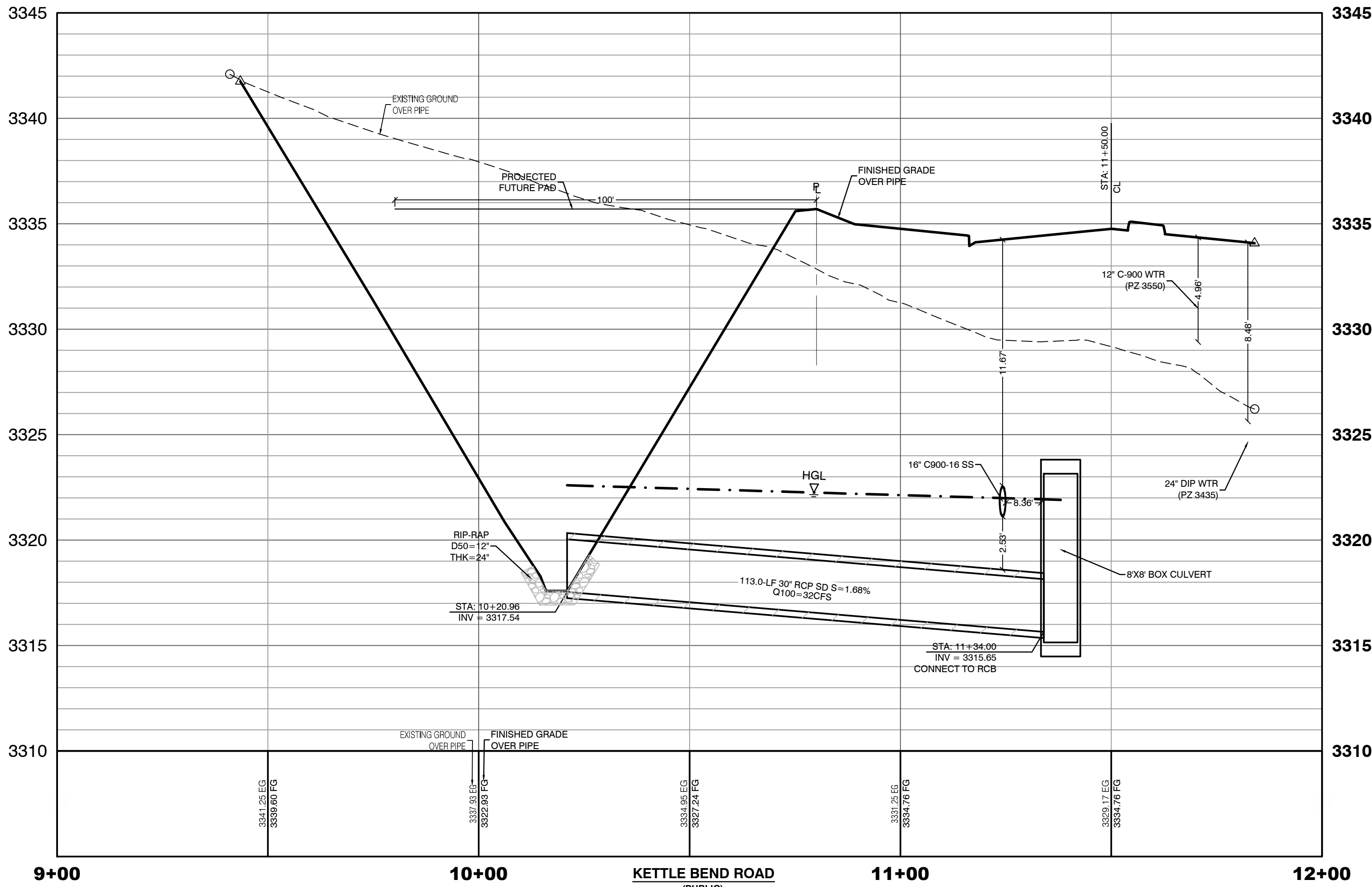
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CLARK COUNTY TRAFFIC OPERATIONS

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CLARK COUNTY TRAFFIC OPERATIONS



KETTLE BEND ROAD
(PUBLIC)

PROFILE SCALES:

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

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10885 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

UTILITY PLAN & PROFILE 39
STORM DRAIN LATERAL

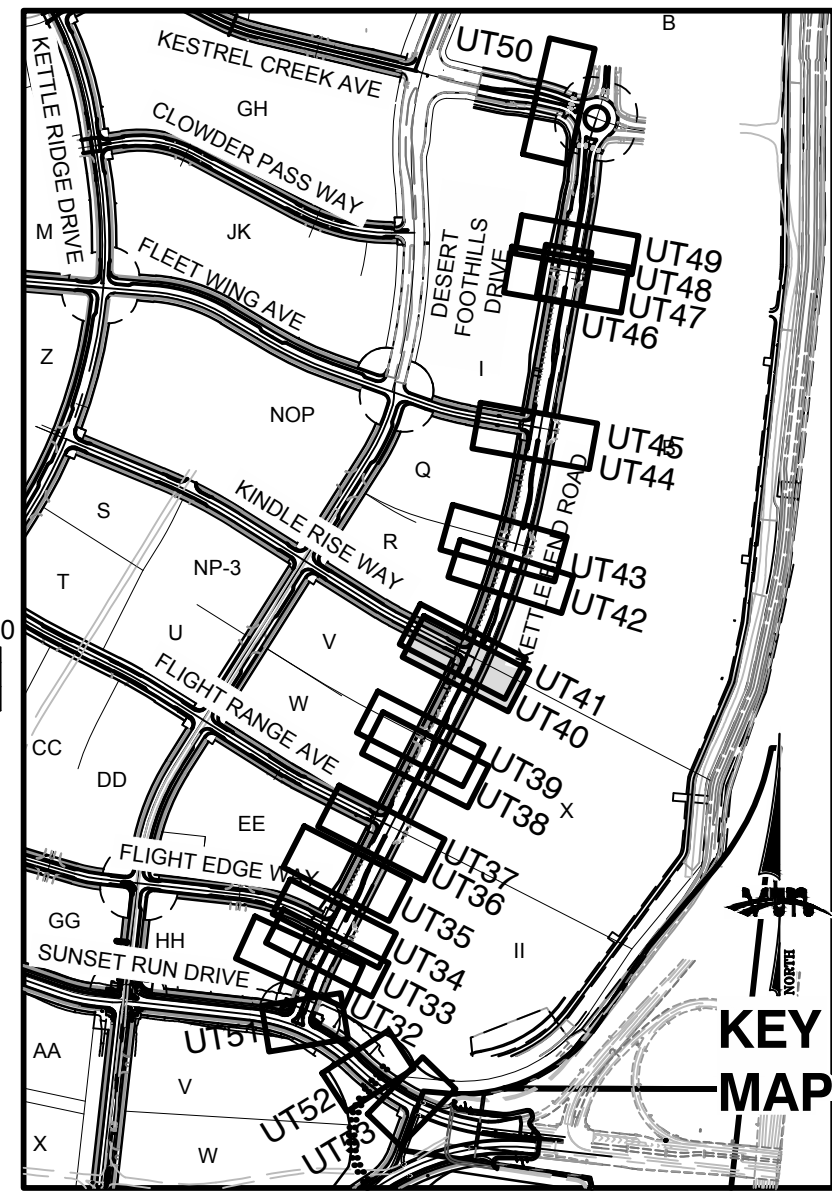
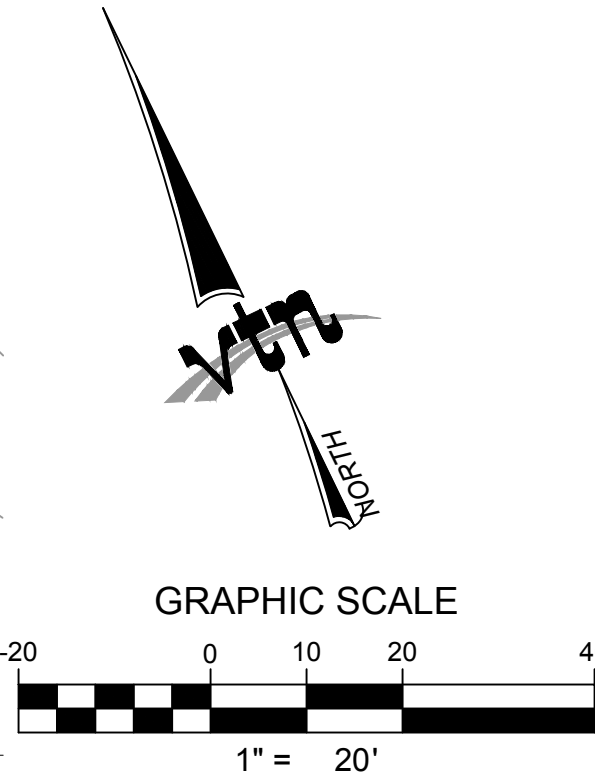
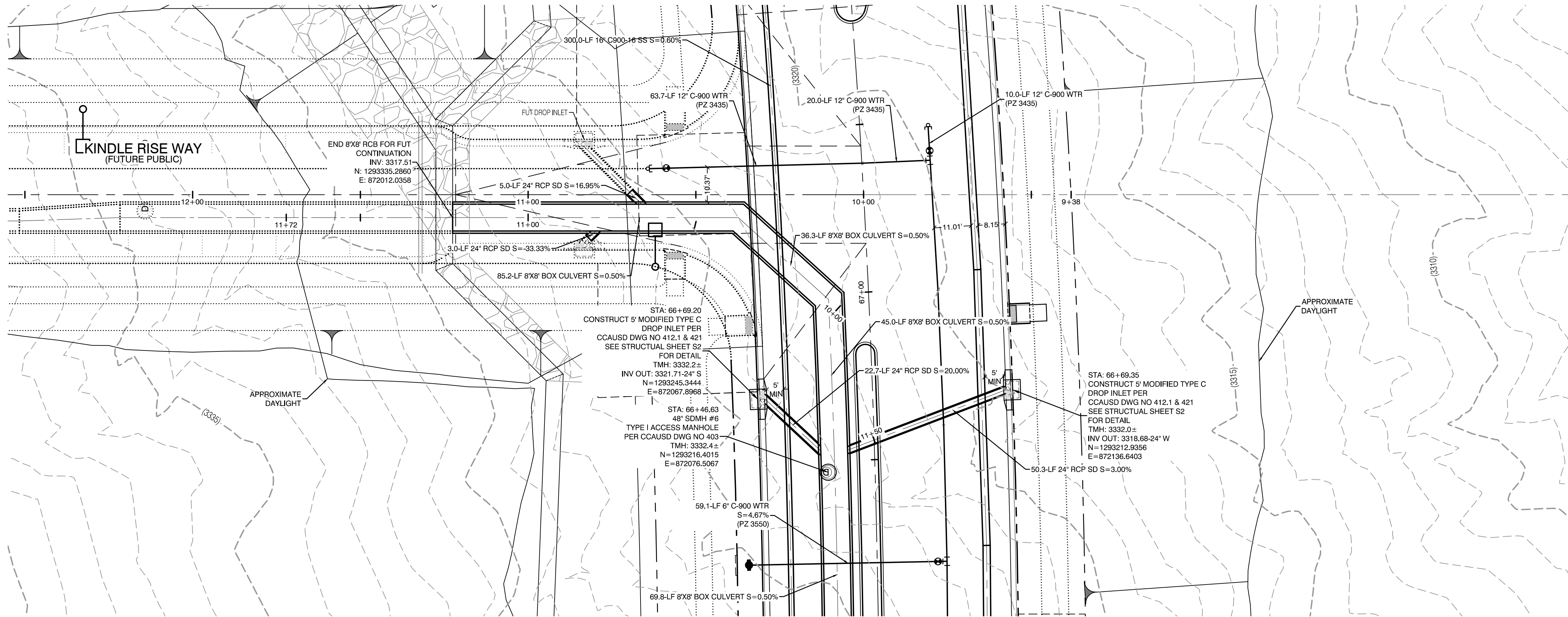
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20'
HORIZ. 1"=4'

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
2020-09-25

SHEET
UT39
79 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

1:\7861 Kettle Bend Road\Sheet\UT39 UT-SD LAT-1.dwg 9/10/2020 10:57 Altrevor

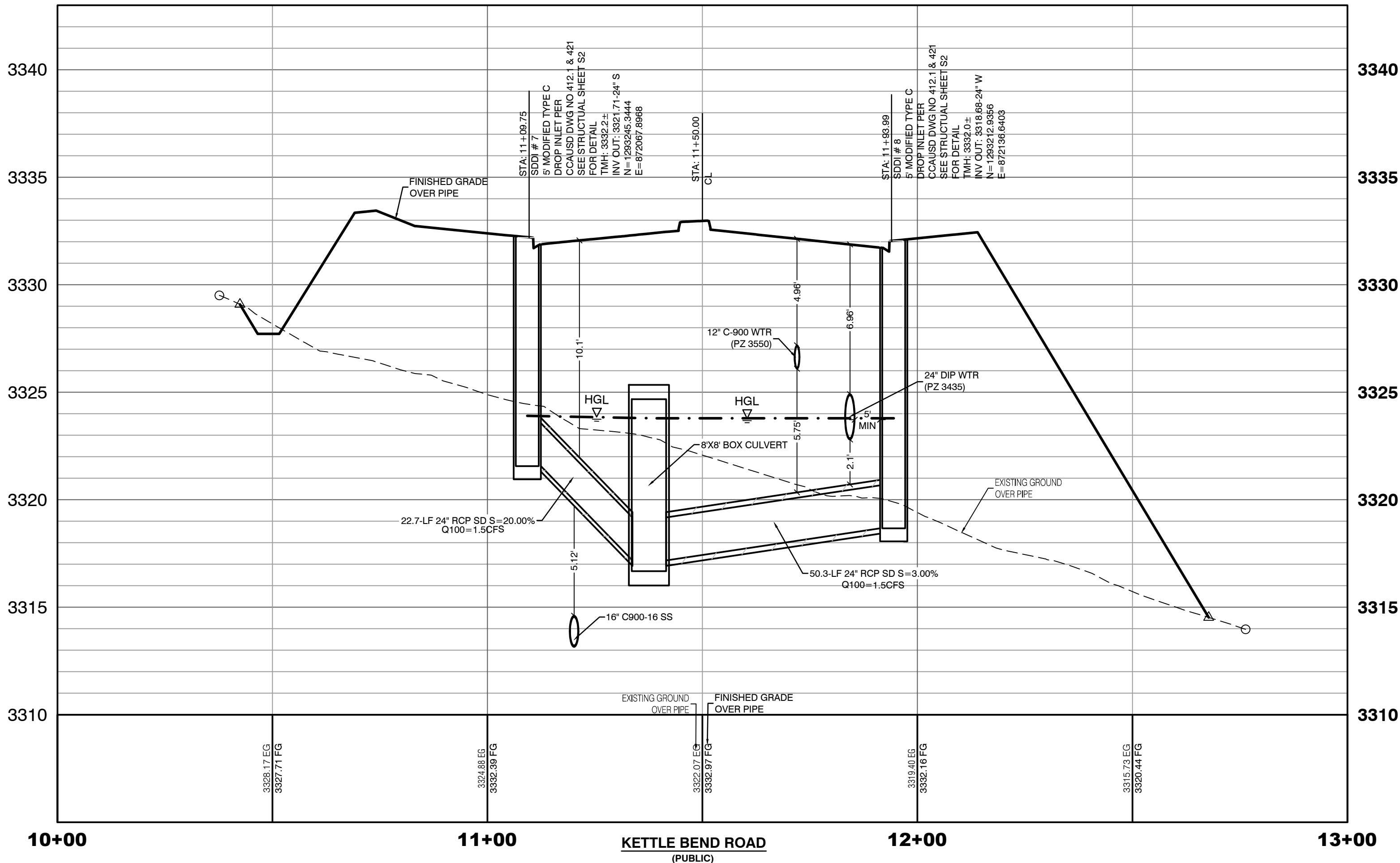


KETTLE BEND ROAD
(PUBLIC)

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DROP INLET SEPARATION NOTE

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AND

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

PREVENT AND MITIGATE SYSTEMS OF TRANSPORTATION

CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

UTILITY PLAN & PROFILE 40
STORM DRAIN LATERAL

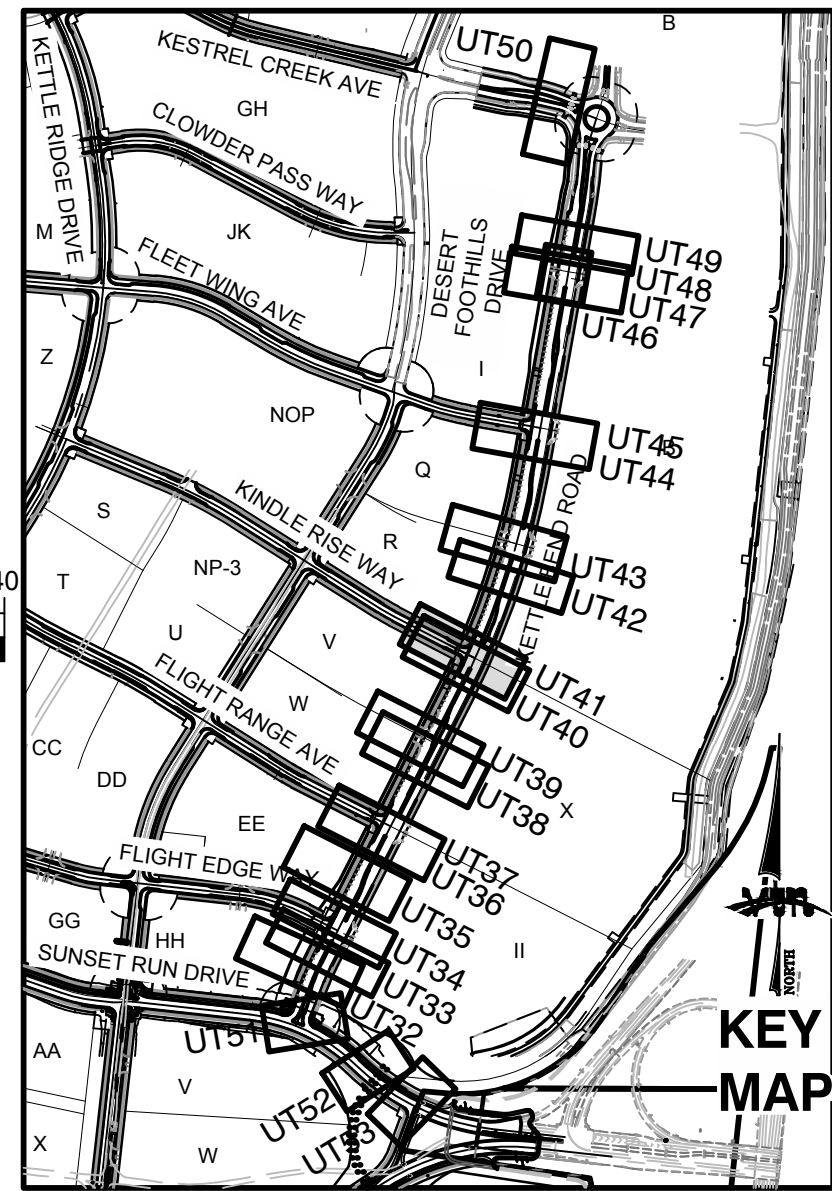
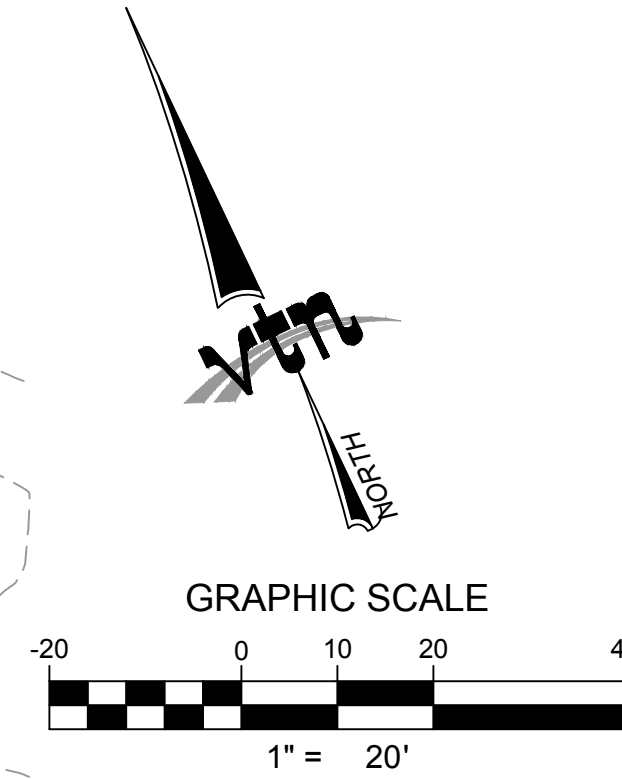
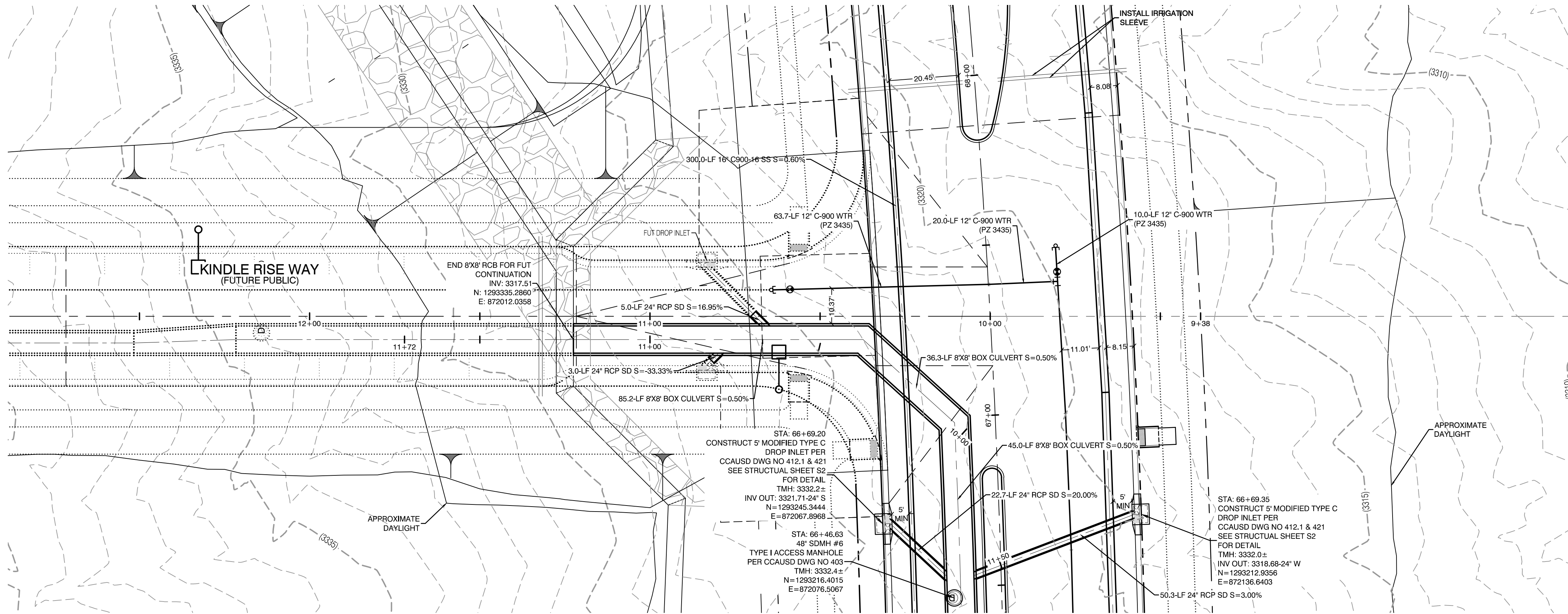
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJAT
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
2020-09-25

SHEET
UT40
80 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

1:1760 Kettle Bend Road Sheet 80 of 107 UT-SD LAT 2.dwg 9/26/2020 11:53 AM brandon.c



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INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

UTILITY CROSSING NOTE:

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

ENGINEER DISCLAIMER NOTE:

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

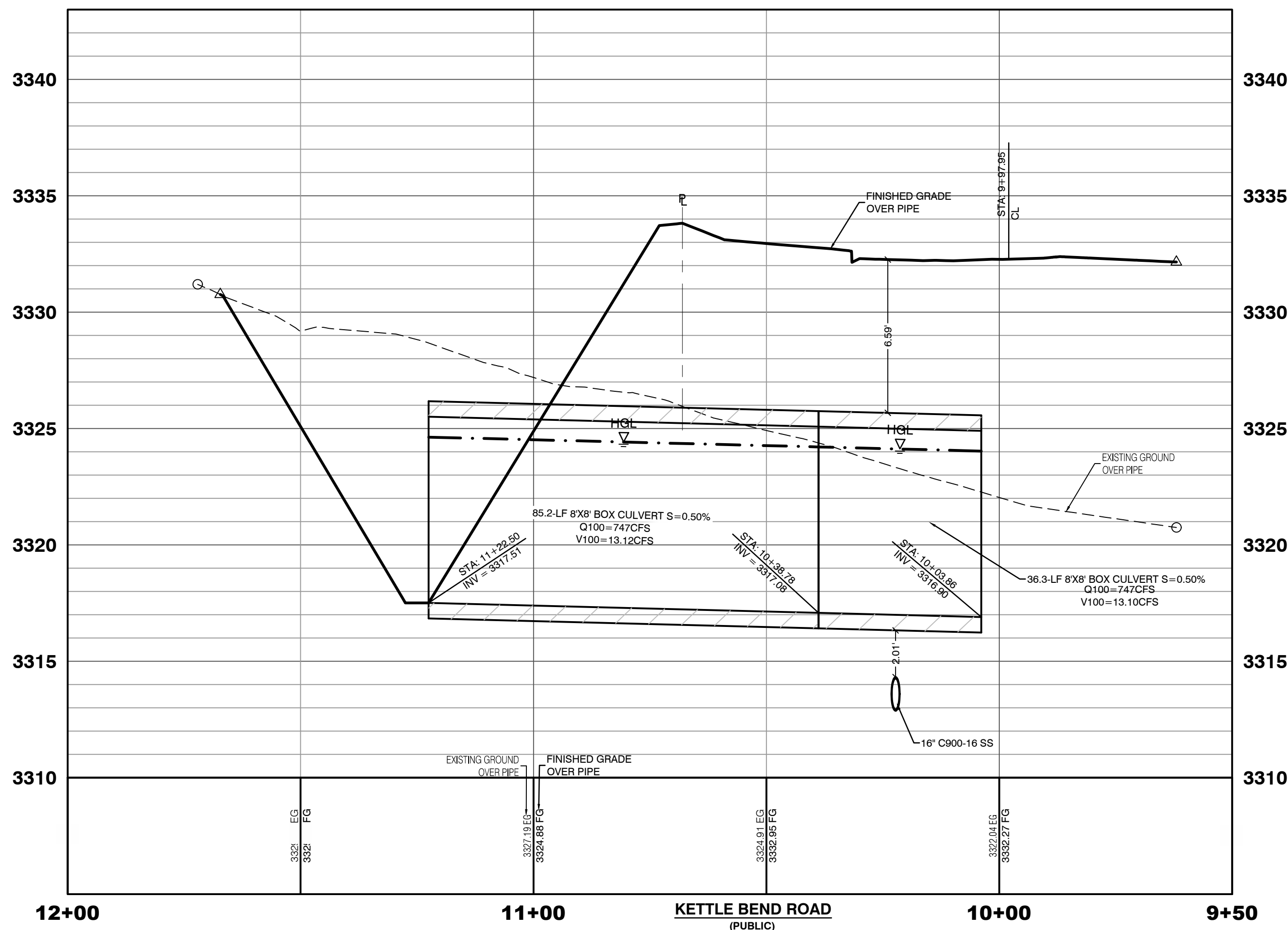
WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

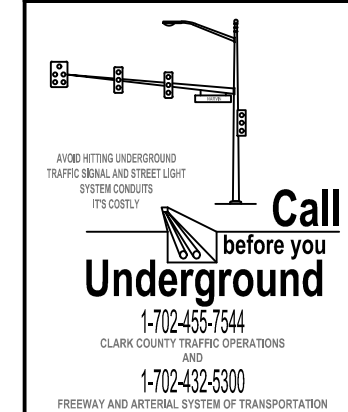
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.



1-702-227-2929



1-702-455-7544

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811
OR
1-800-642-2444
AND
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT: 137333 FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 41
STORM DRAIN LATERAL

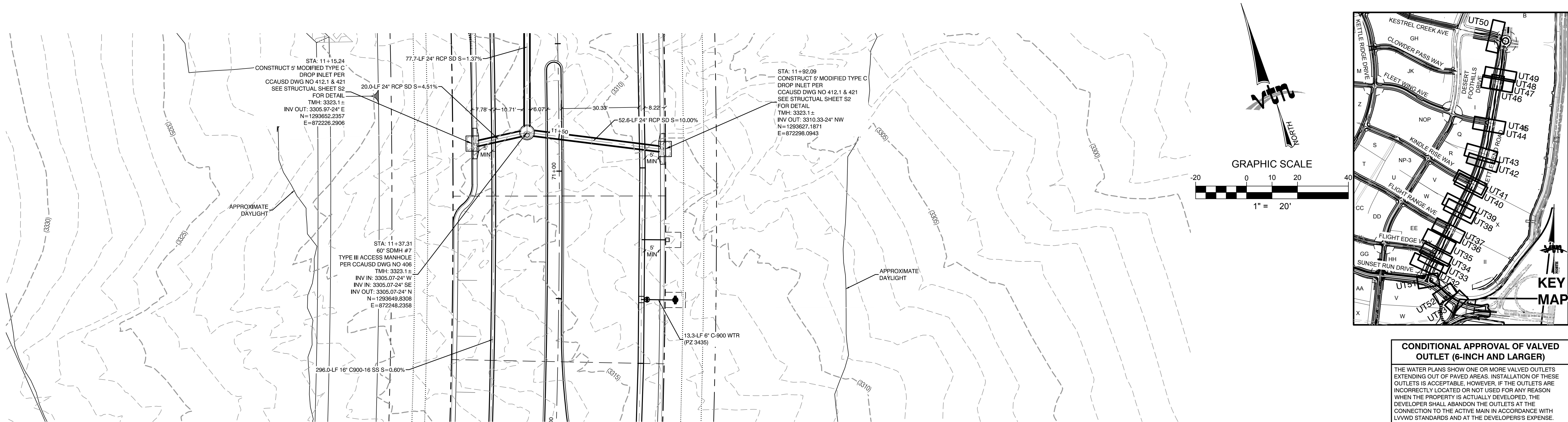
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
2020-09-25

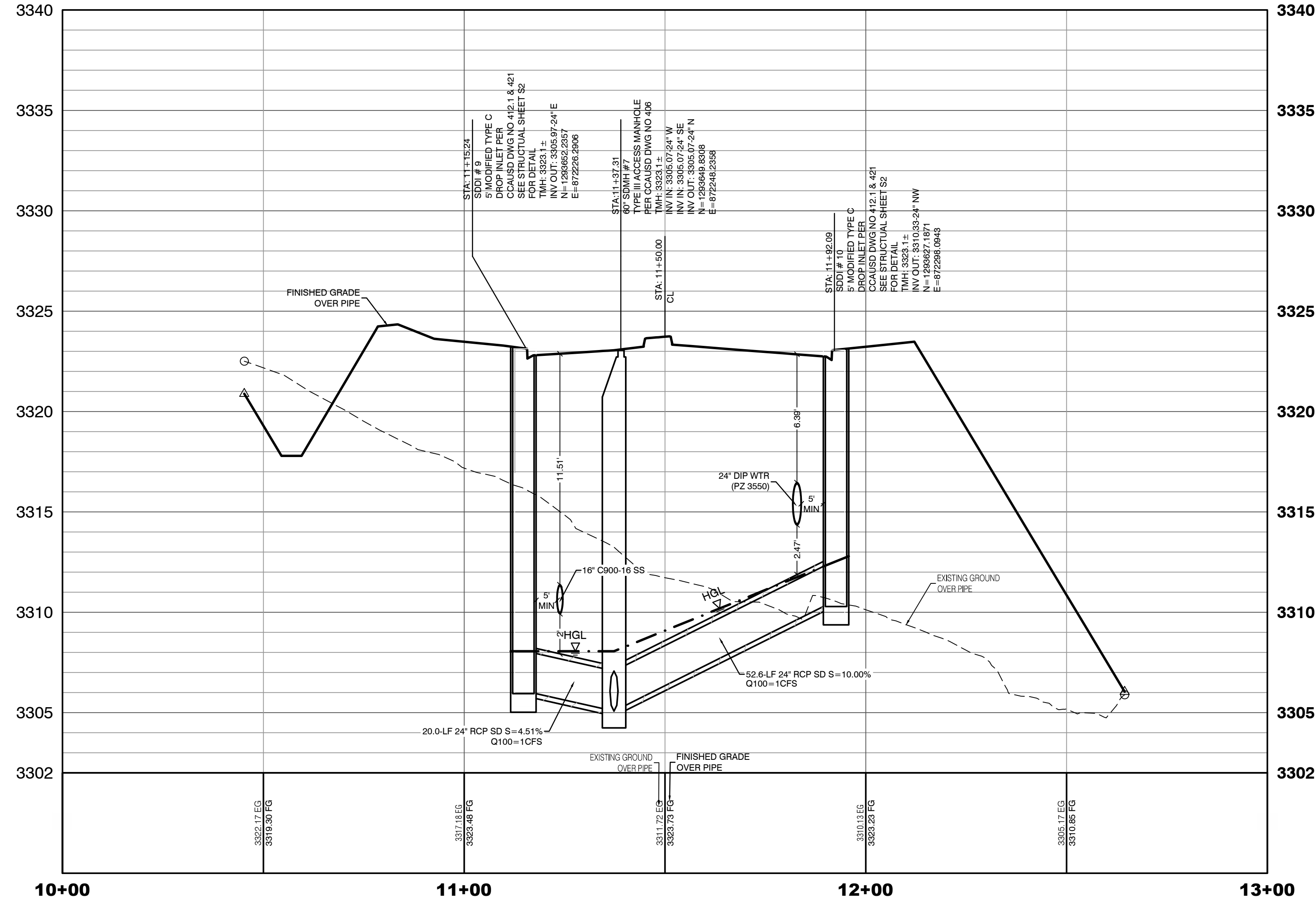
SHEET
UT41
81 OF 107 SHEETS
DRAWING NO. L20-01282
107V8449

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 793-7550 FAX: (702) 382-2587 WEB: WWW.VTVNY.COM
CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS



KETTLE BEND ROAD
(PUBLIC)

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



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).

Call before you Dig
Avoid cutting underground utility lines. It's costly.

Call before you Dig
Call 811 or 1-800-842-2444 and 1-702-455-7544 CLARK COUNTY TRAFFIC OPERATIONS.

Call before you Dig
Call 1-702-455-7544 and 1-702-432-5300 CLARK COUNTY TRAFFIC OPERATIONS.

- CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)**
THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.
- CONTRACTOR ZONE:**
LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APURTENANCES ARE AVAILABLE.
- LVVWD EXISTING FACILITIES NOTE:**
PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
- NOTE:**
5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET
- WATER LINE MARKER BALLS NOTE**
INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.
- FIRE HYDRANT MARKER NOTES**
BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
1. ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
2. ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.
- WATER MAIN JOINT DEFLECTION**
WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.
- UTILITY CROSSING NOTE:**
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- ENGINEER DISCLAIMER NOTE:**
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- WATERLINE TRENCH NOTE:**
CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.
- WATER PRESSURE ZONE:**
WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.
- DEPTH OF COVER DURING CONSTRUCTION:**
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.
- TO ENSURE LVVWD ACCESS WITHIN EASEMENT**
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO: LANDSCAPE BOLLARDS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

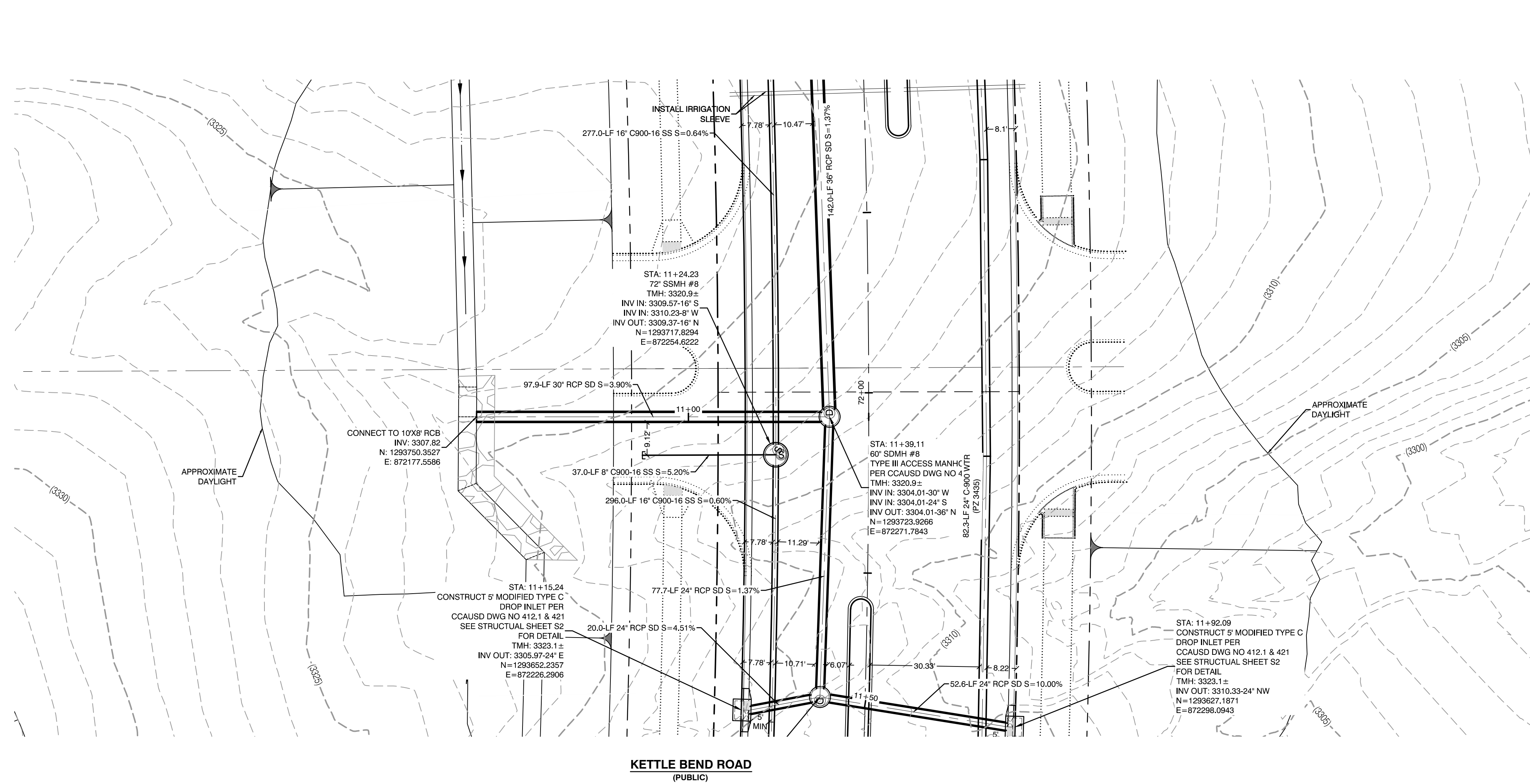
APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC A DELAWARE LIMITED LIABILITY COMPANY 10805 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) 382-2587 WEB: WWW.VTNV.COM CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS	
UTILITY PLAN & PROFILE 42 STORM DRAIN LATERAL		SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	
DRAWN BY: BCC	DESIGNED BY: BCC	CHECKED BY: WJW	PROJECT NO: 7861
DATE: 09/10/2019		DATE: 09/28/2020	
SCALE: 1"=20'		SCALE: 1"=4'	
SHEET UT42 82 OF 107 SHEETS			
DRAWING NO. L20-01282 107V8449			

2020-09-25

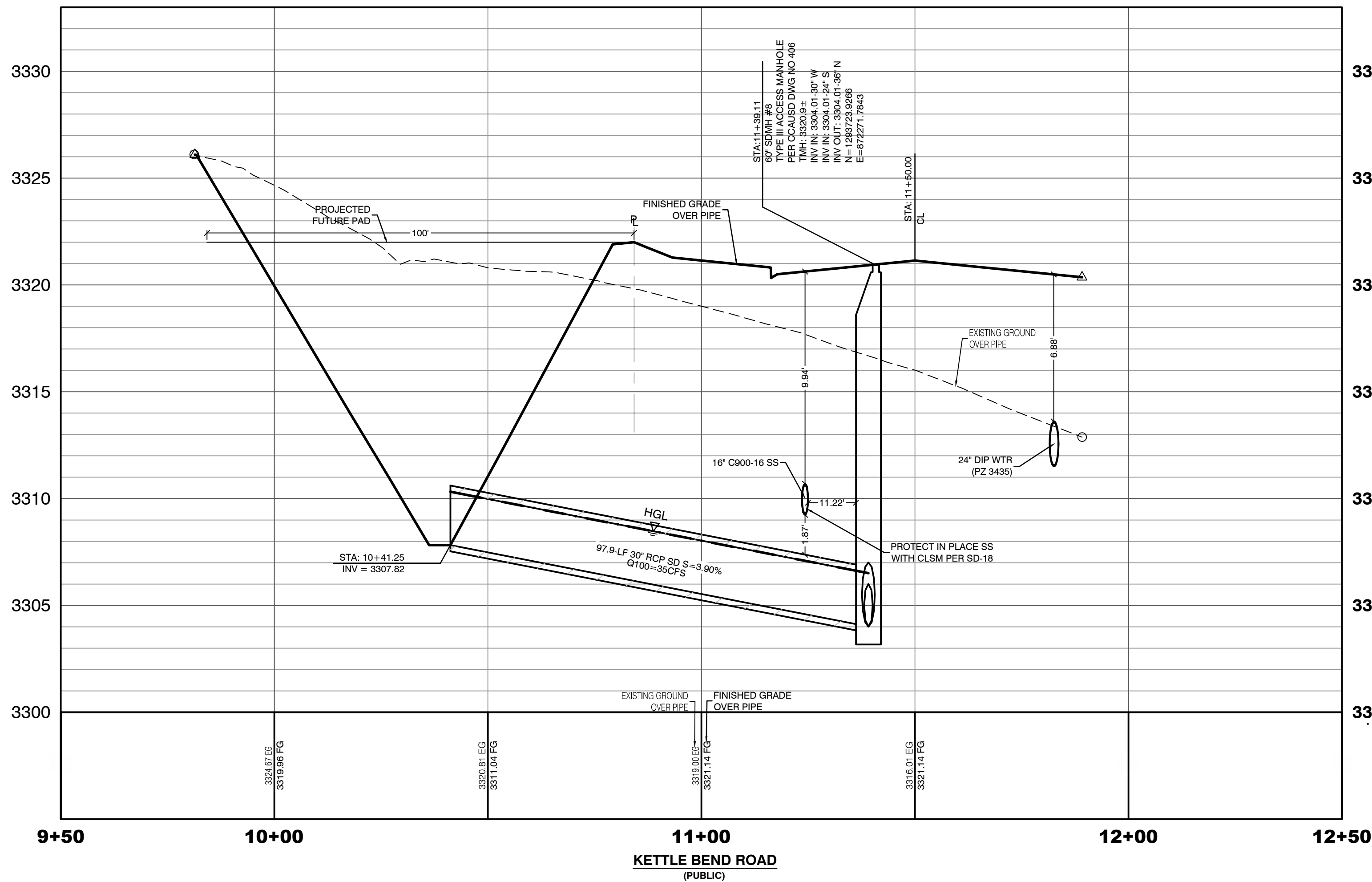
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL

1-702-455-7544
1-702-432-5300

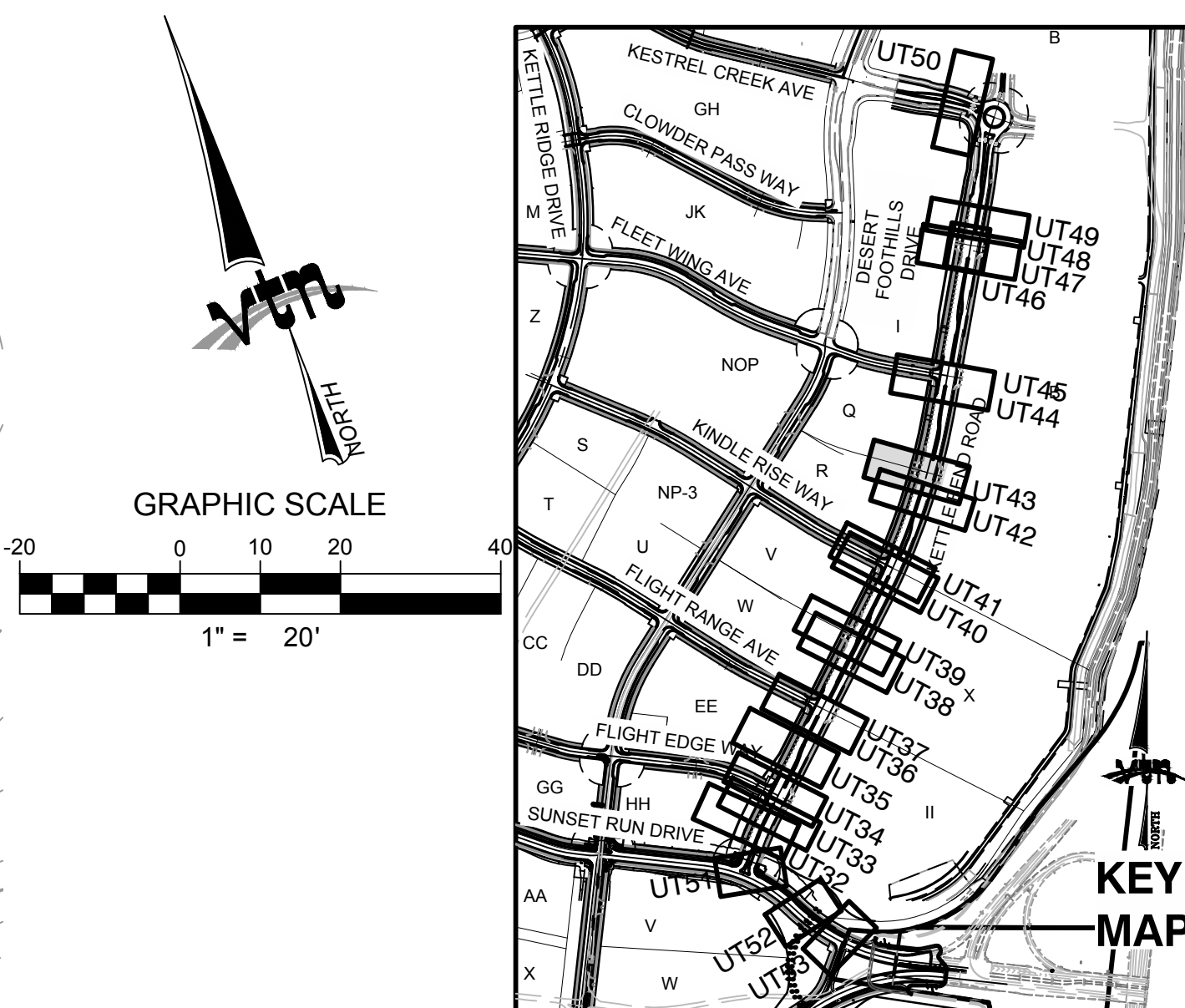


KETTLE BEND ROAD
(PUBLIC)

PROFILE SCALES:
HORIZ. = 1"=20'
VERT. = 1"=40'



KETTLE BEND ROAD
(PUBLIC)



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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CONTRACTOR ZONE:

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LVVWD EXISTING FACILITIES NOTE:

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WATER LINE MARKER BALLS NOTE

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- ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

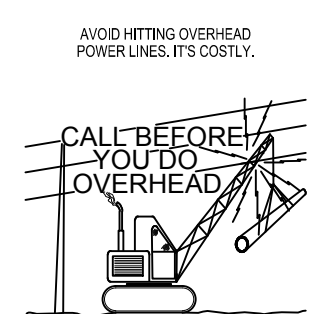
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Avoid cutting underground utility lines. It's costly.
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OR
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AND
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

Call before you Underground
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS
1-702-432-6300
PRESERVING AND IMPROVING SYSTEMS OF TRANSPORTATION

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.791.4000

UTILITY PLAN & PROFILE 43
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=40' VERT.

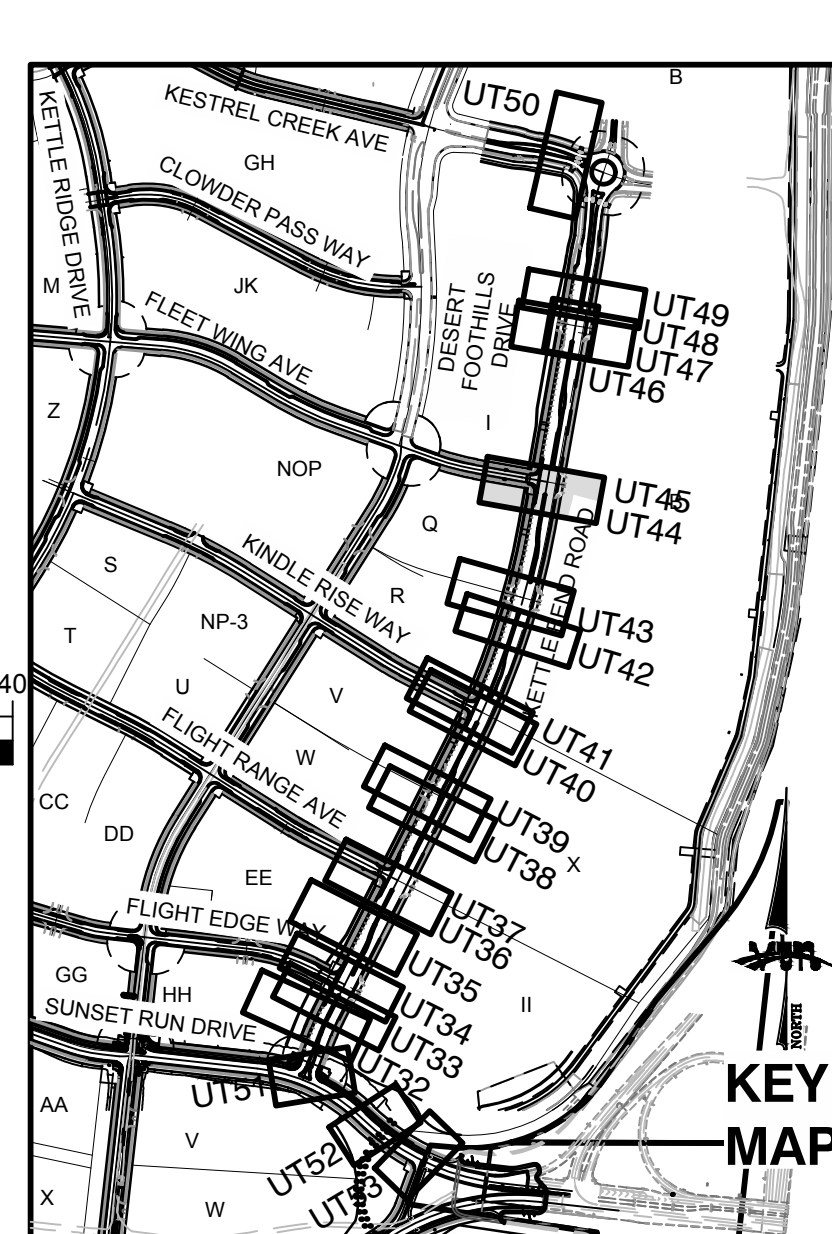
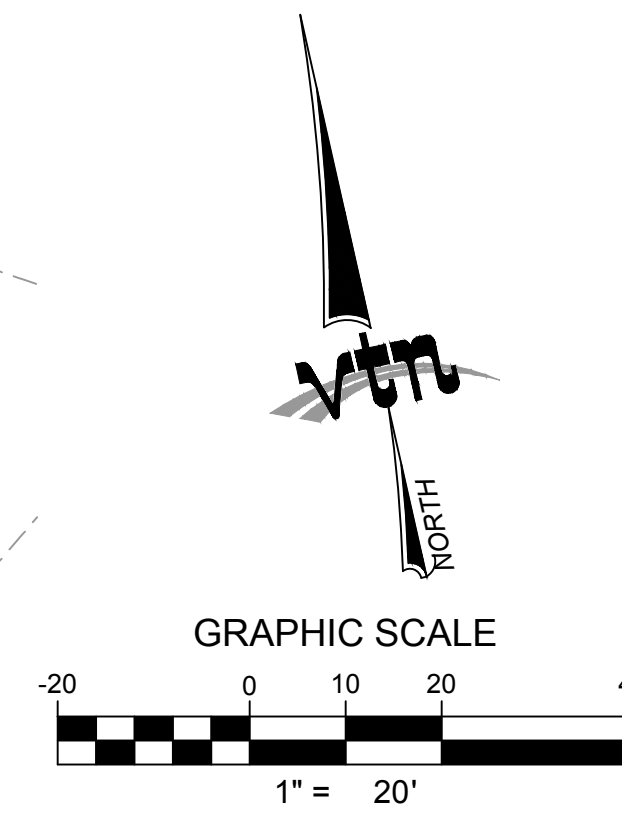
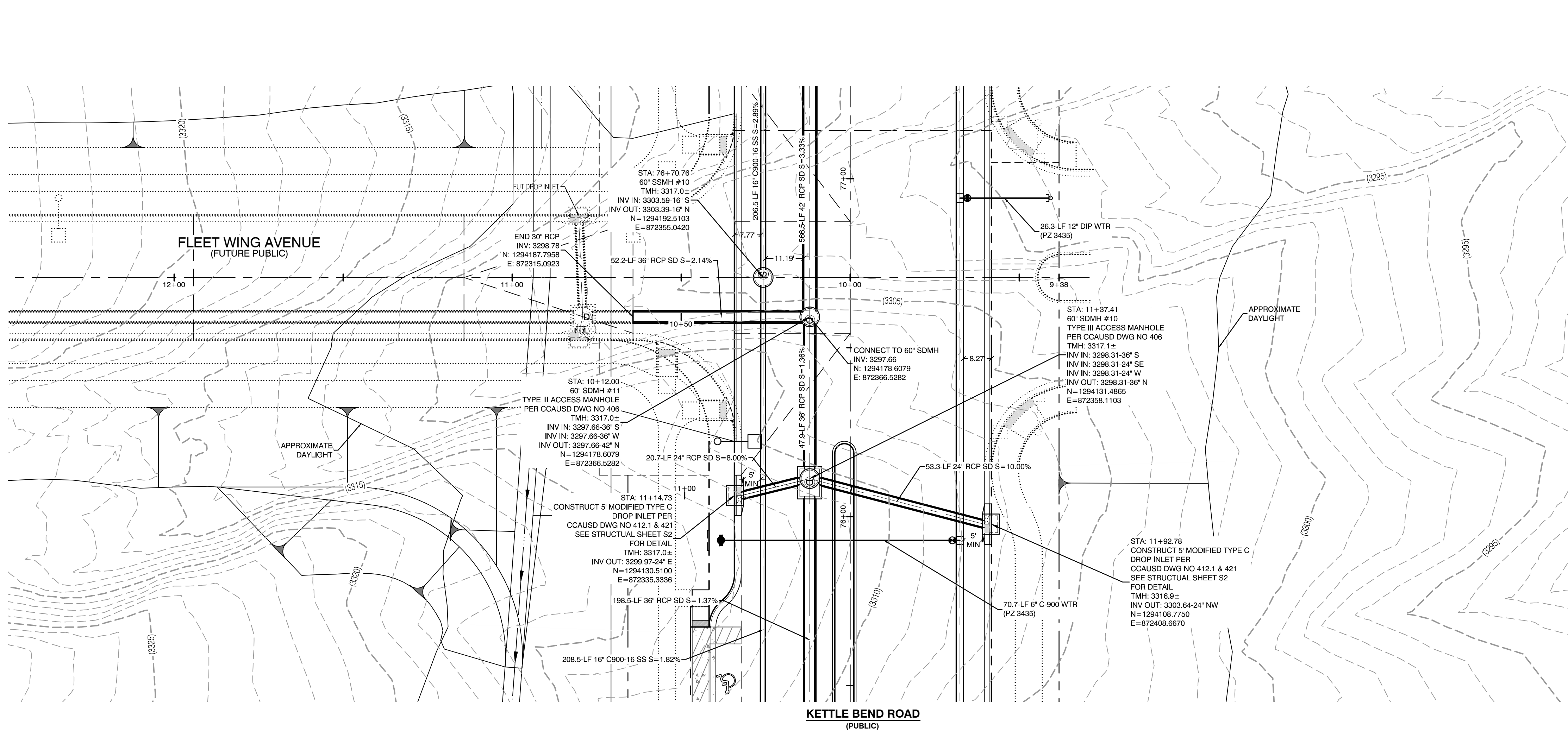
PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
NO. 15745
2020-09-25

SHEET
UT43
83 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 873-7550 FAX: (702) 382-2587
WEB: WWW.VTNN.COM



REV. DATE BY REVISION



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:

DROP INLET SEPARATION NOTE
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AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DIG

1-702-227-2929

Call before you Dig

811

OR

1-800-642-2444

AND

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS

AVOID HITTING UNDERGROUND WATER MAIN AND FIBER OPTIC FIBERS. IT'S COSTLY.

Call before you Undergo

1-702-455-7544

AND

1-702-432-6300

CLARK COUNTY TRAFFIC OPERATIONS

FREIGHT AND METAL SYSTEMS OF TRANSPORTATION

Call before you Dig

811

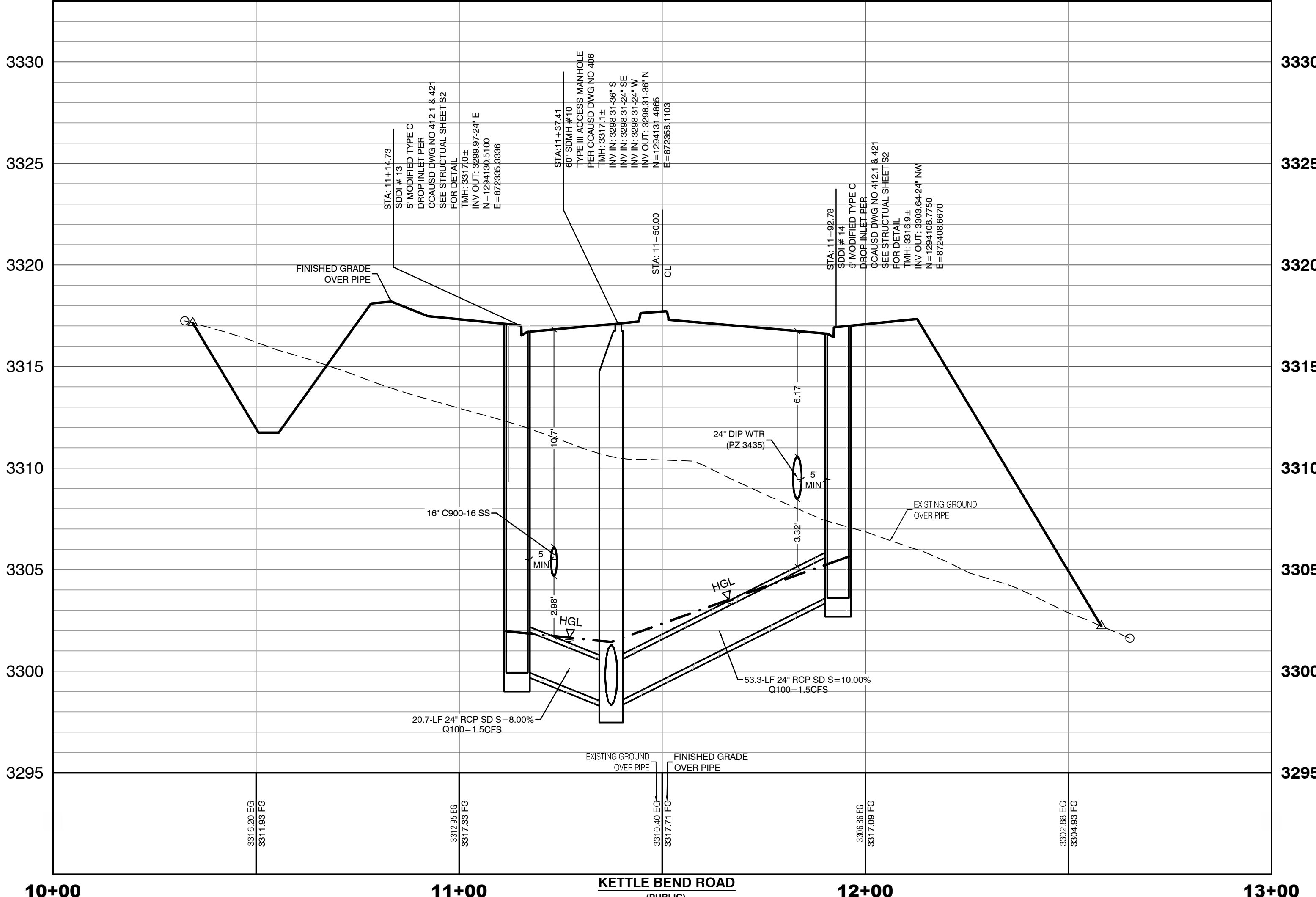
OR

1-800-642-2444

AND

1-702-455-7544

CLARK COUNTY TRAFFIC OPERATIONS



HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 793-7550 FAX: (702) 382-2587 WEB: WWW.VTNN.COM
CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS

UTILITY PLAN & PROFILE 44
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 09/10/2019

DESIGNED BY: BCC 09/10/2019

CHECKED BY: WJM 09/28/2020

PROJECT NO: 7861

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

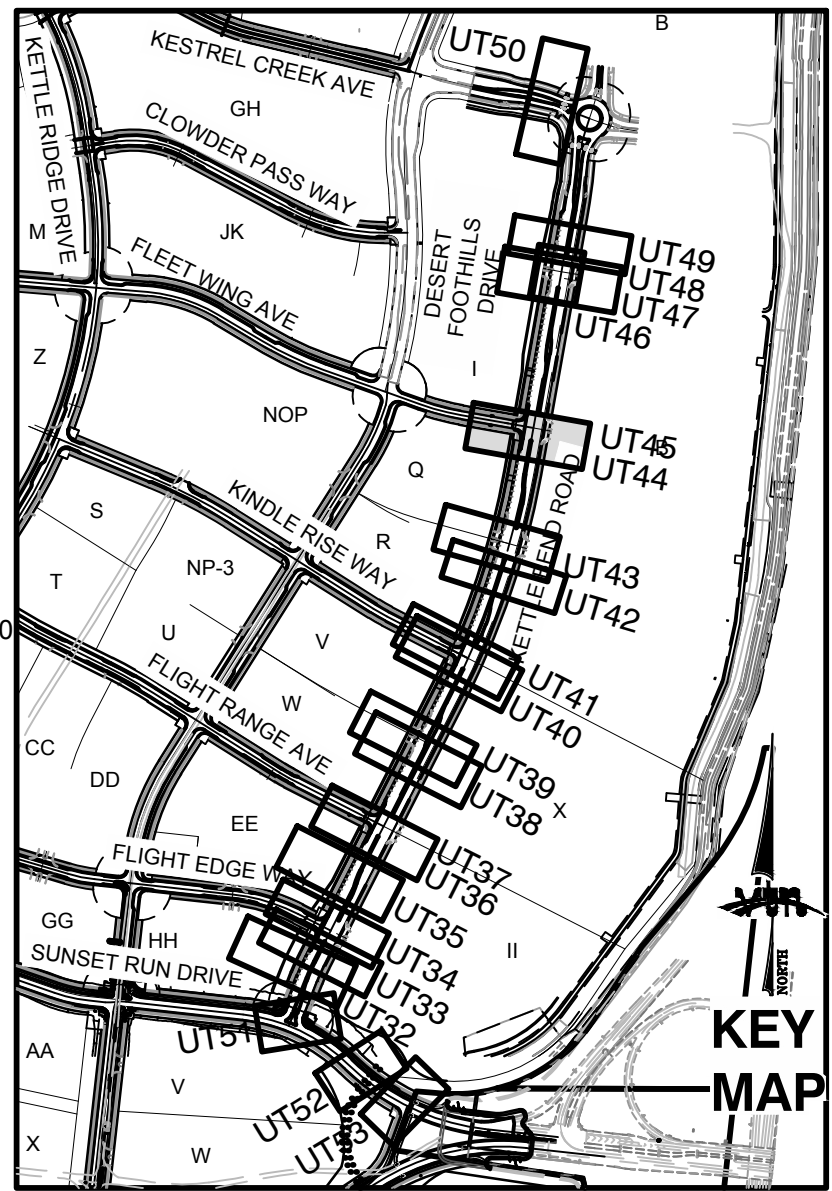
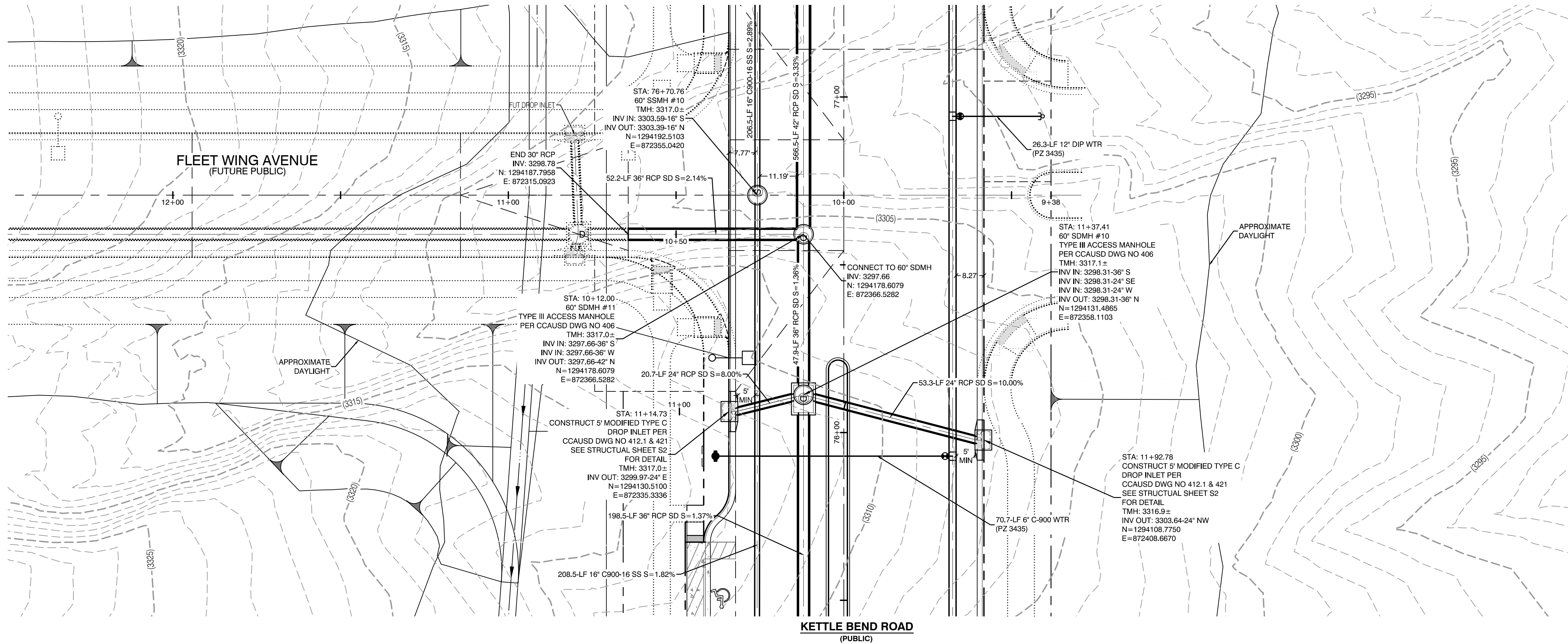
PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL

2020-09-25

SHEET
84 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

137333 Kettle Bend Road Sheet 84 of 107 UT-SD LAT-2.dwg 2/26/2020 11:53 AM Brandon



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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FIRE HYDRANT MARKER NOTES

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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

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WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.

DEPTH OF COVER DURING CONSTRUCTION:

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

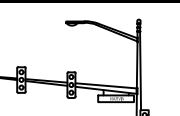
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOUNDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

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).



1-702-227-2929



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1-702-432-5300

1-702-432-5300

1-702-432-5300

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OR
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AND
1-702-455-7544
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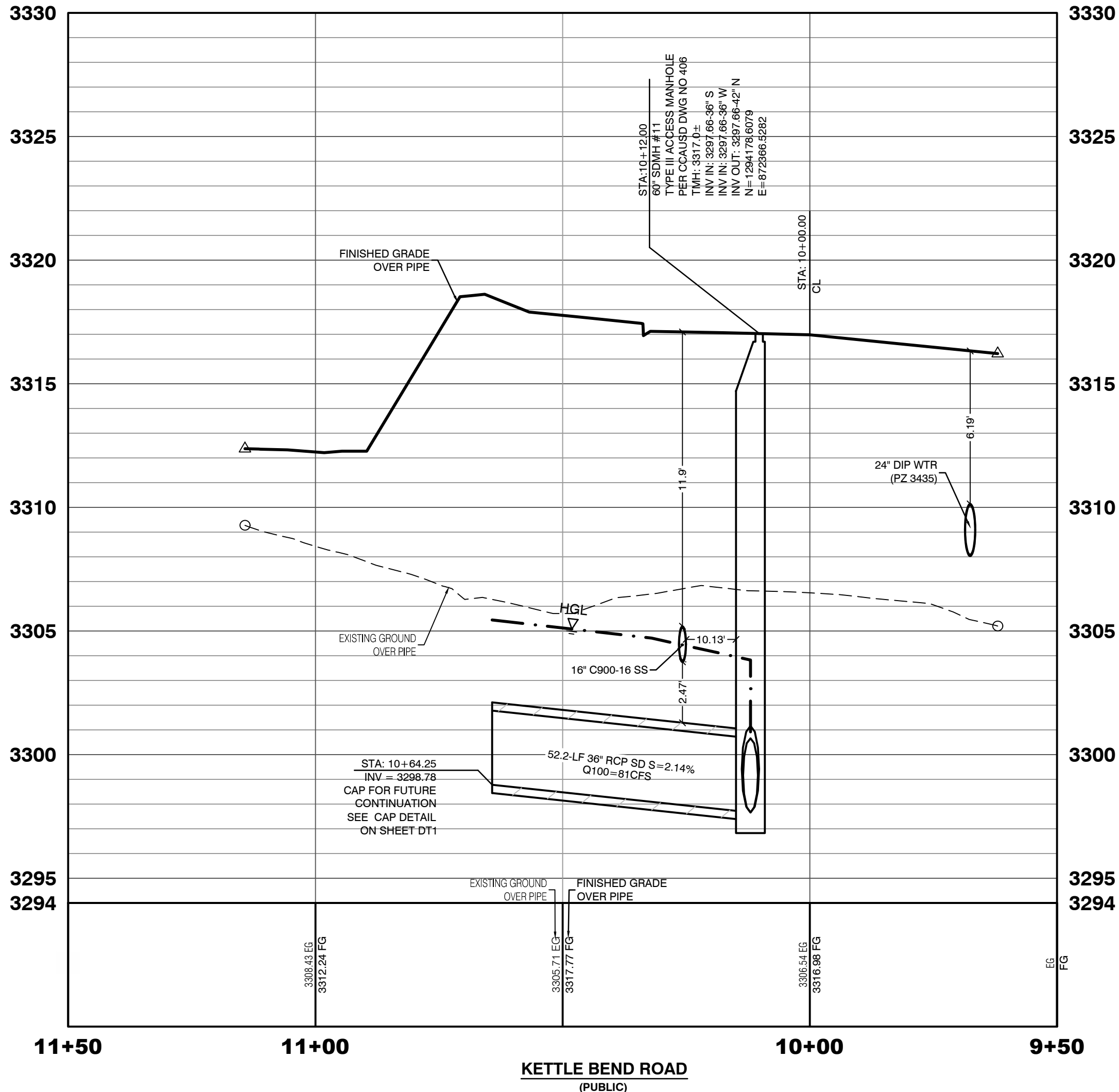
1-702-432-5300

1-702-432-5300

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:



HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 45
STORM DRAIN LATERAL

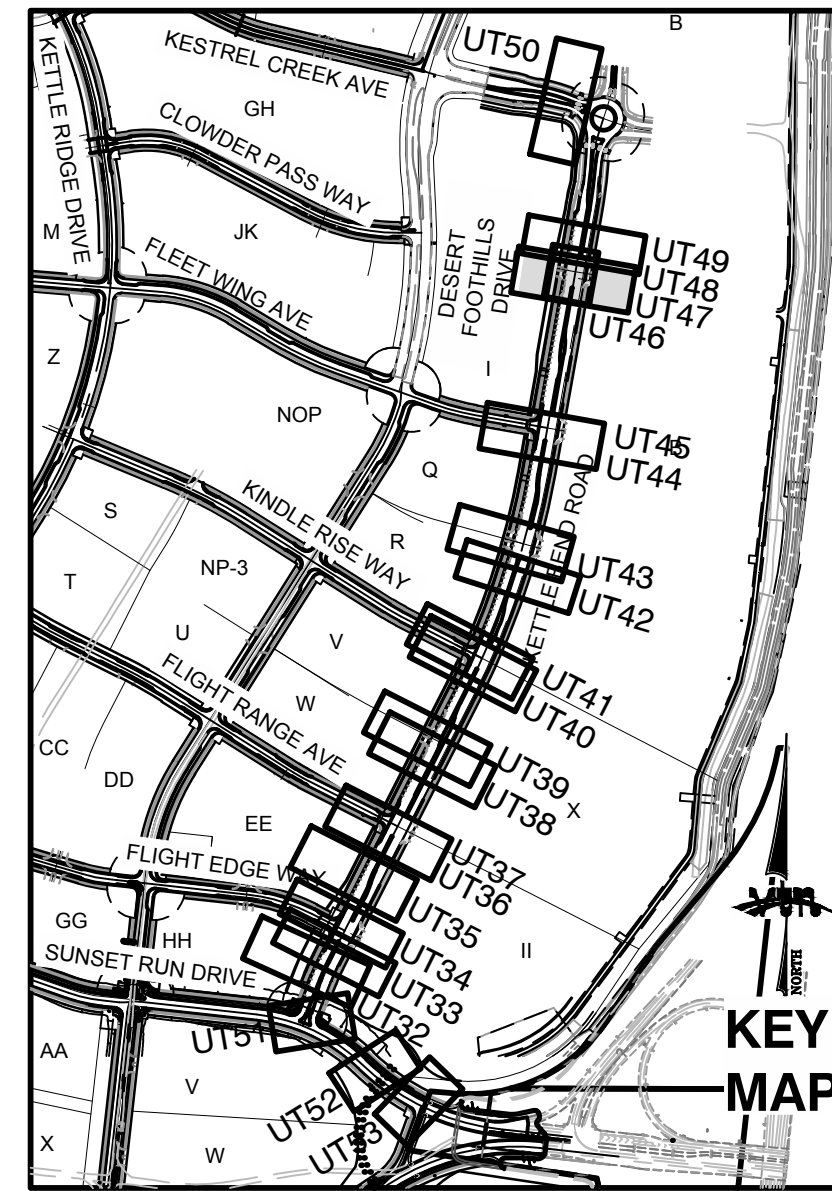
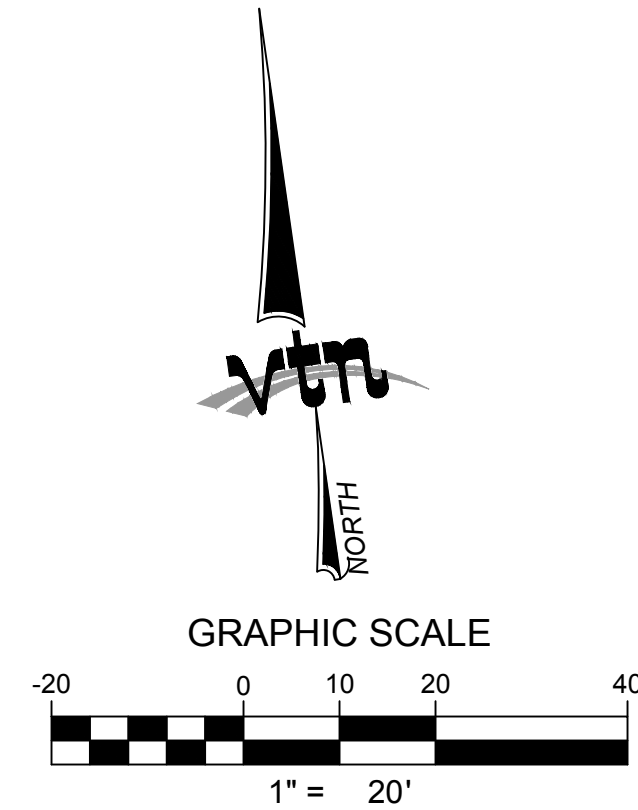
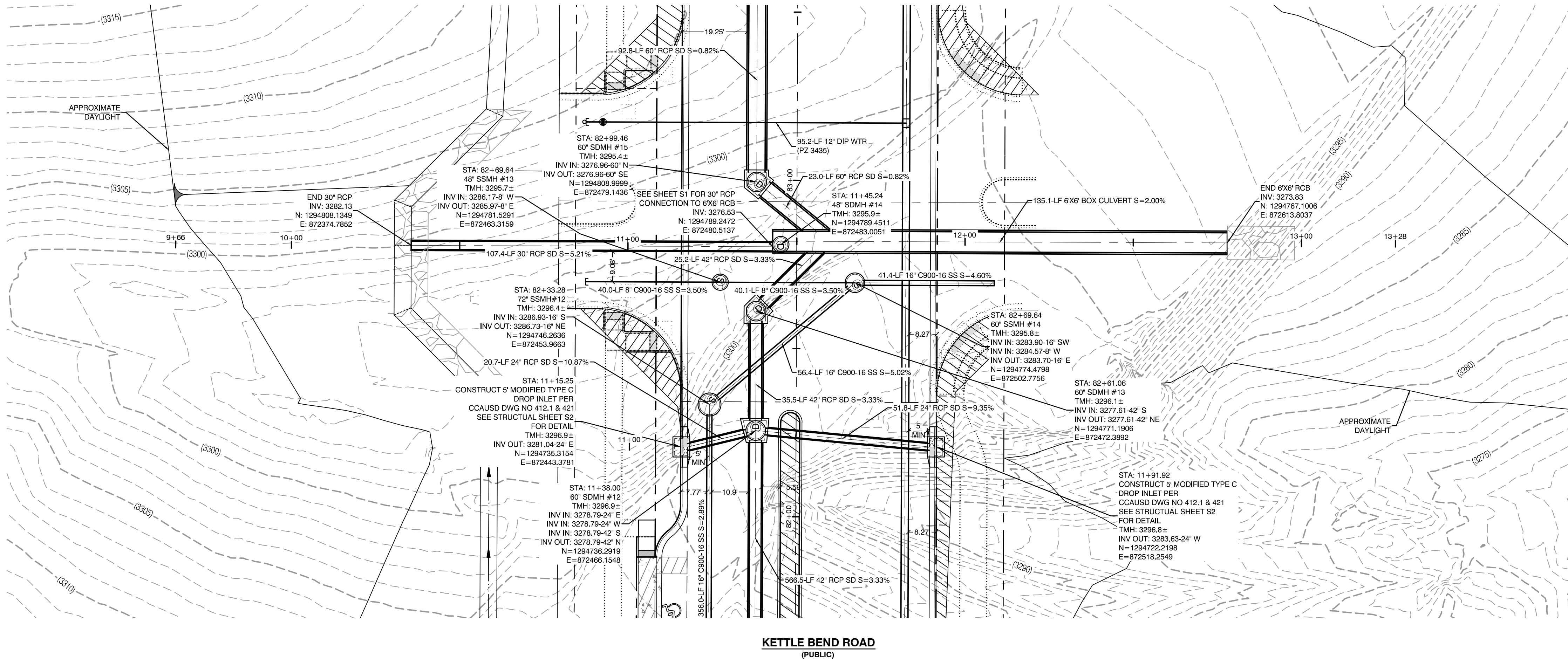
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745
2020-09-25

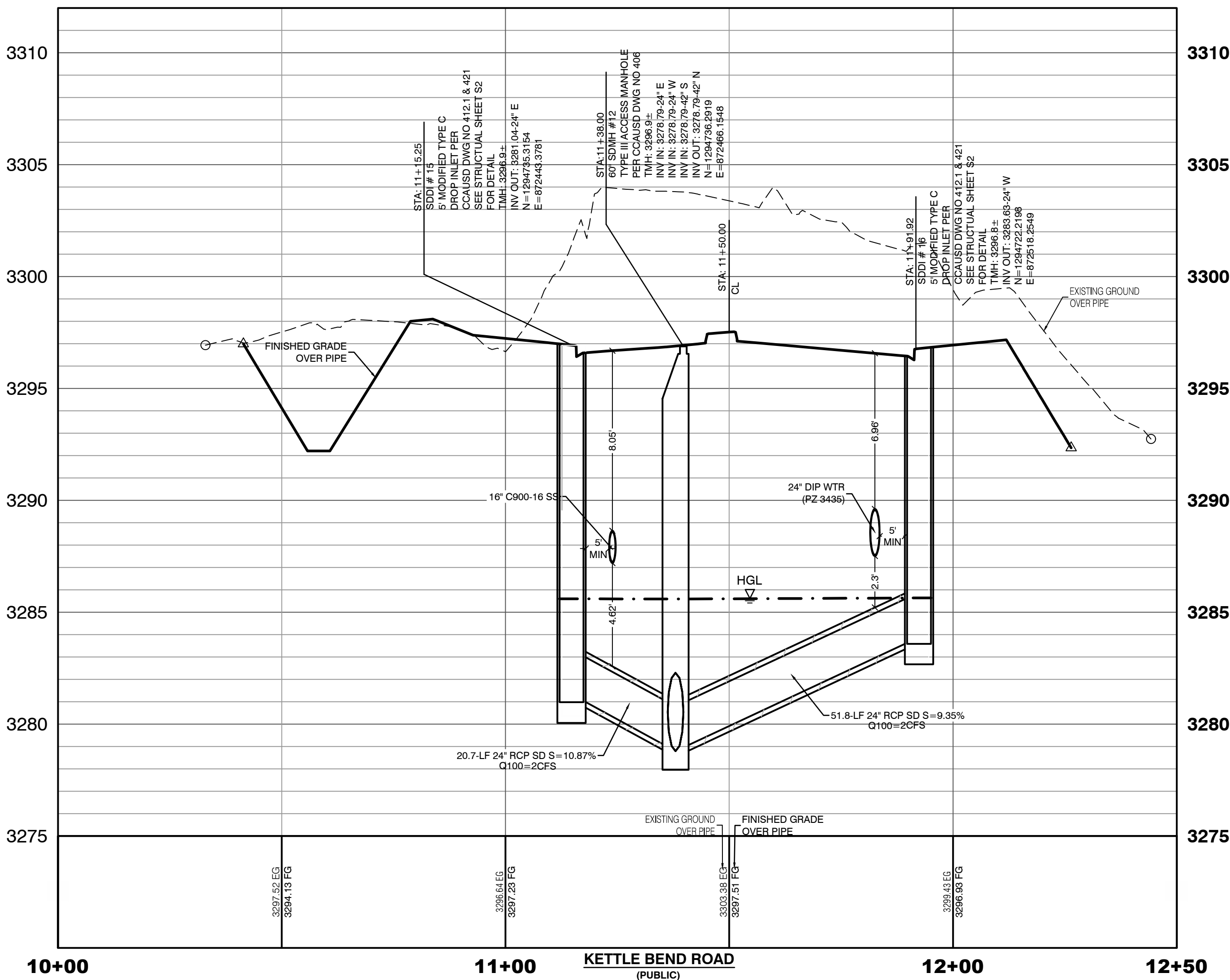
SHEET
UT45
85 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

2277 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 973-7550 FAX: (702) 382-2987
WWW.VTVN.COM
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KETTLE BEND ROAD
(PUBLIC)

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



DROP INLET SEPARATION NOTE

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AND
1-702-455-7544
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1-702-227-2929

OR

1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

- CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)**
- THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE. HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.
- CONTRACTOR ZONE:**
- LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
- CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APURTANCES ARE AVAILABLE.
- LVVWD EXISTING FACILITIES NOTE:**
- PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
- NOTE:**
- 5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET
- WATER LINE MARKER BALLS NOTE**
- INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.
- FIRE HYDRANT MARKER NOTES**
- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 8' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 16' FROM FACE OF CURB ON HYDRANT SIDE.
- WATER MAIN JOINT DEFLECTION**
- WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.
- UTILITY CROSSING NOTE:**
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- ENGINEER DISCLAIMER NOTE:**
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- WATERLINE TRENCH NOTE:**
- CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.
- WATER PRESSURE ZONE:**
- WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.
- DEPTH OF COVER DURING CONSTRUCTION:**
- MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.
- TO ENSURE LVVWD ACCESS WITHIN EASEMENT**
- ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 793-7550 FAX: (702) 382-2587 WEB: WWW.VTNN.COM
CONSULTING ENGINEERS & LAND SURVEYORS

UTILITY PLAN & PROFILE 46
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 09/10/2019

DESIGNED BY: BCC 09/10/2019

CHECKED BY: WJM 09/28/2020

PROJECT NO: 7861

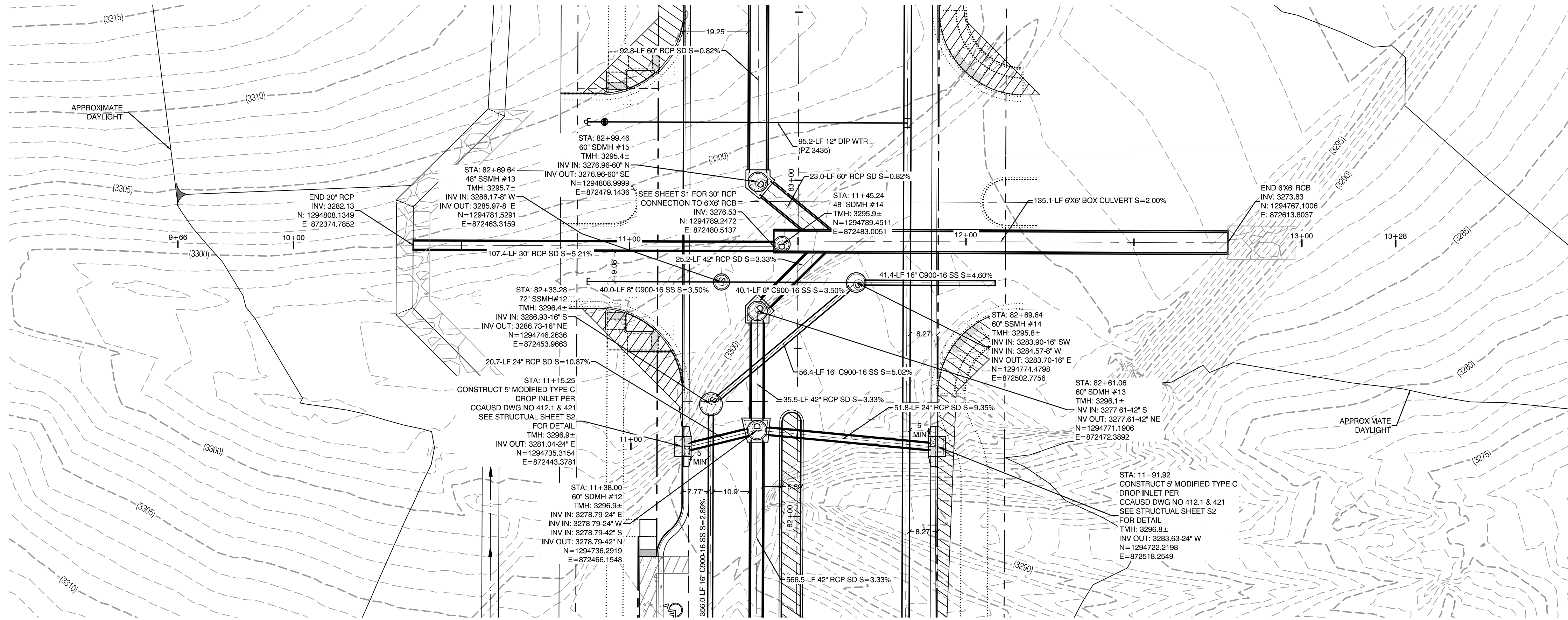
SCALE: 1"=20' HORIZ.
1"=4' VERT.

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL
No. 15745 NVEN-1

2020-09-25

SHEET
UT46
86 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

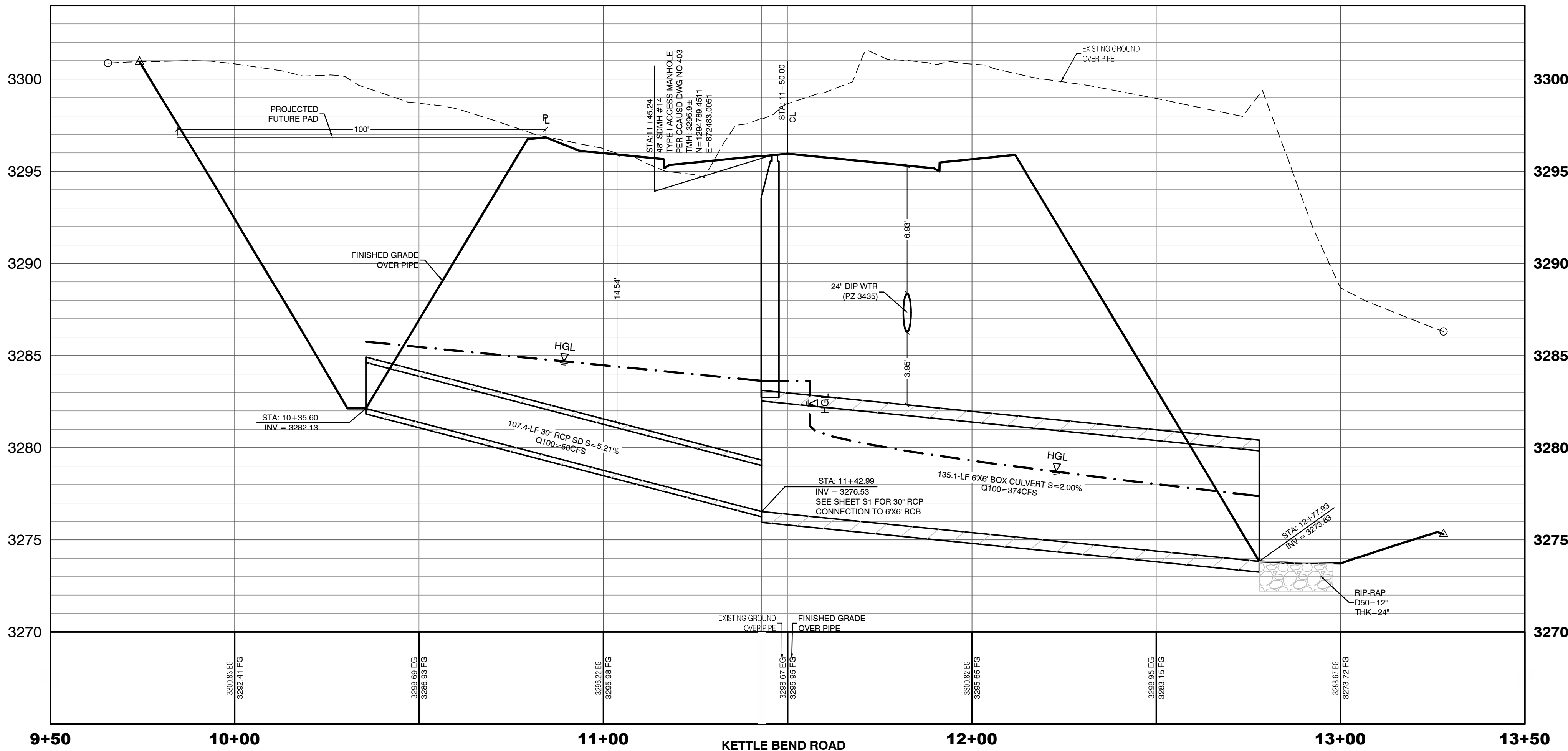


KETTLE BEND ROAD
(PUBLIC)

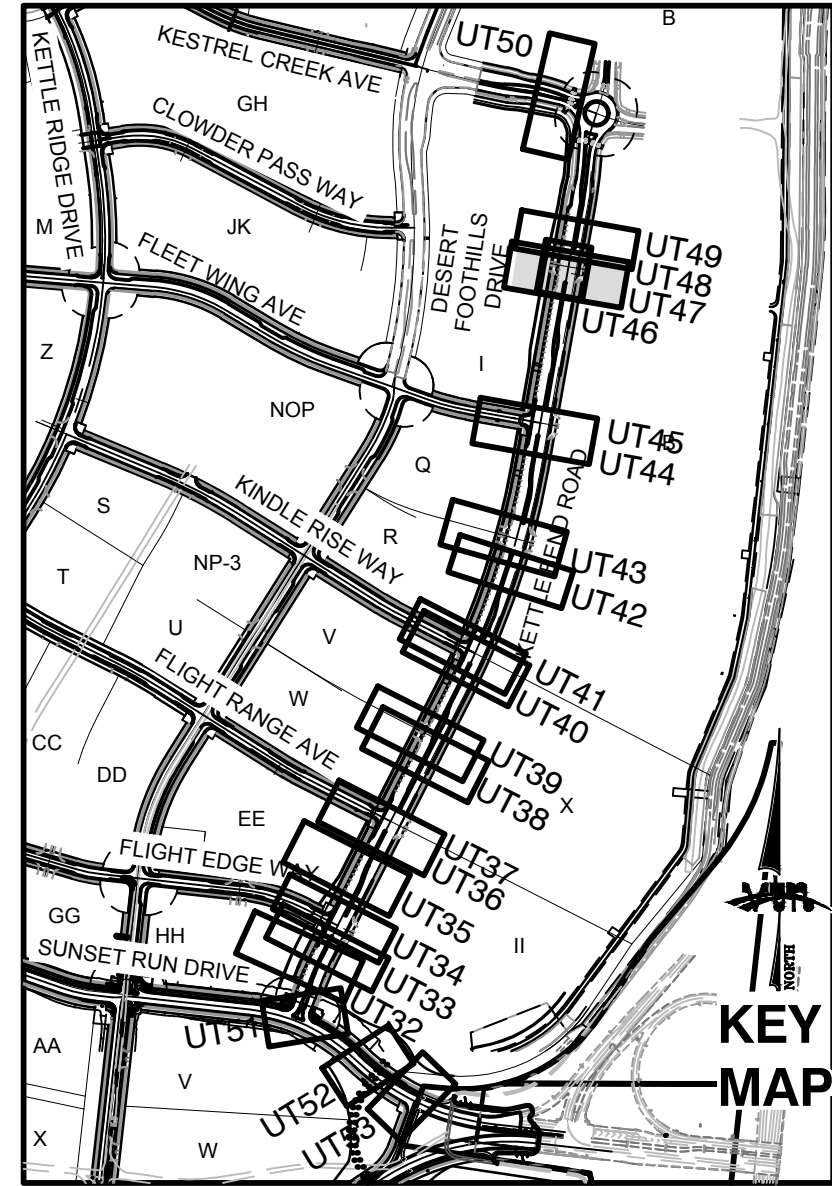
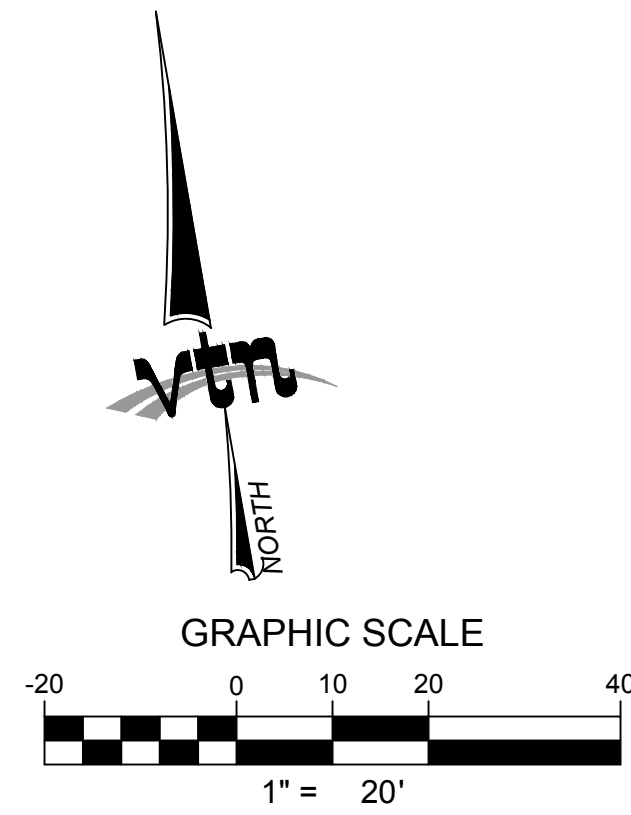
PROFILE SCALES:

HORIZ. = 1"=20'

VERT. = 1"=4'



KETTLE BEND ROAD
(PUBLIC)



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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NOTE:

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

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

FIRE HYDRANT MARKER NOTES

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE: LOCATE MARKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE: LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:

DROP INLET SEPARATION NOTE

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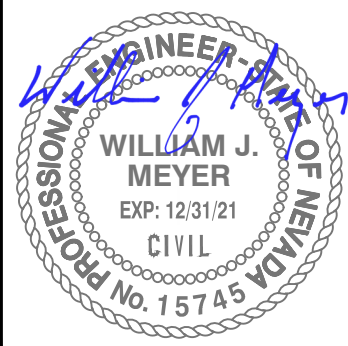
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HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10815 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

UTILITY PLAN & PROFILE 47
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.



2020-09-25

SHEET
UT47
87 OF 107 SHEETS

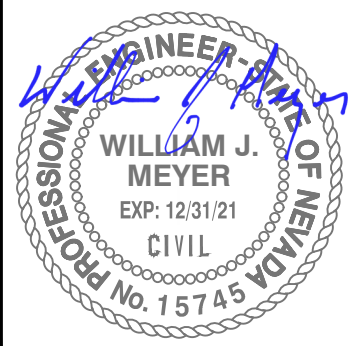
DRAWING NO.
L20-01282
107V8449

CITY OF LAS VEGAS

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LAS VEGAS, NEVADA 89146-5148
PH: (702) 973-7550 FAX: (702) 382-2587
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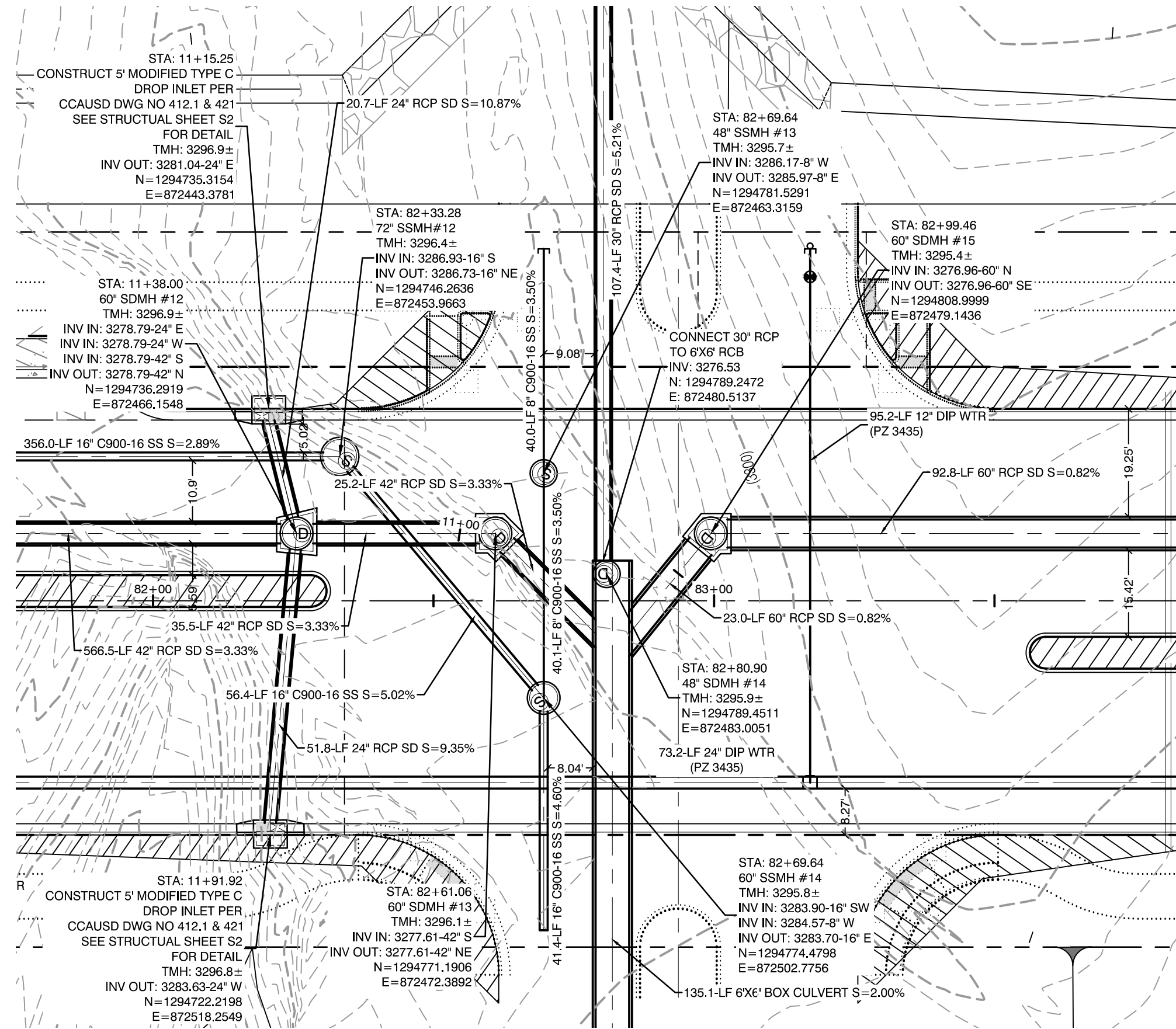
09/10/2019
09/10/2019
09/28/2020
1"=20' HORIZ.
1"=4' VERT.



2020-09-25

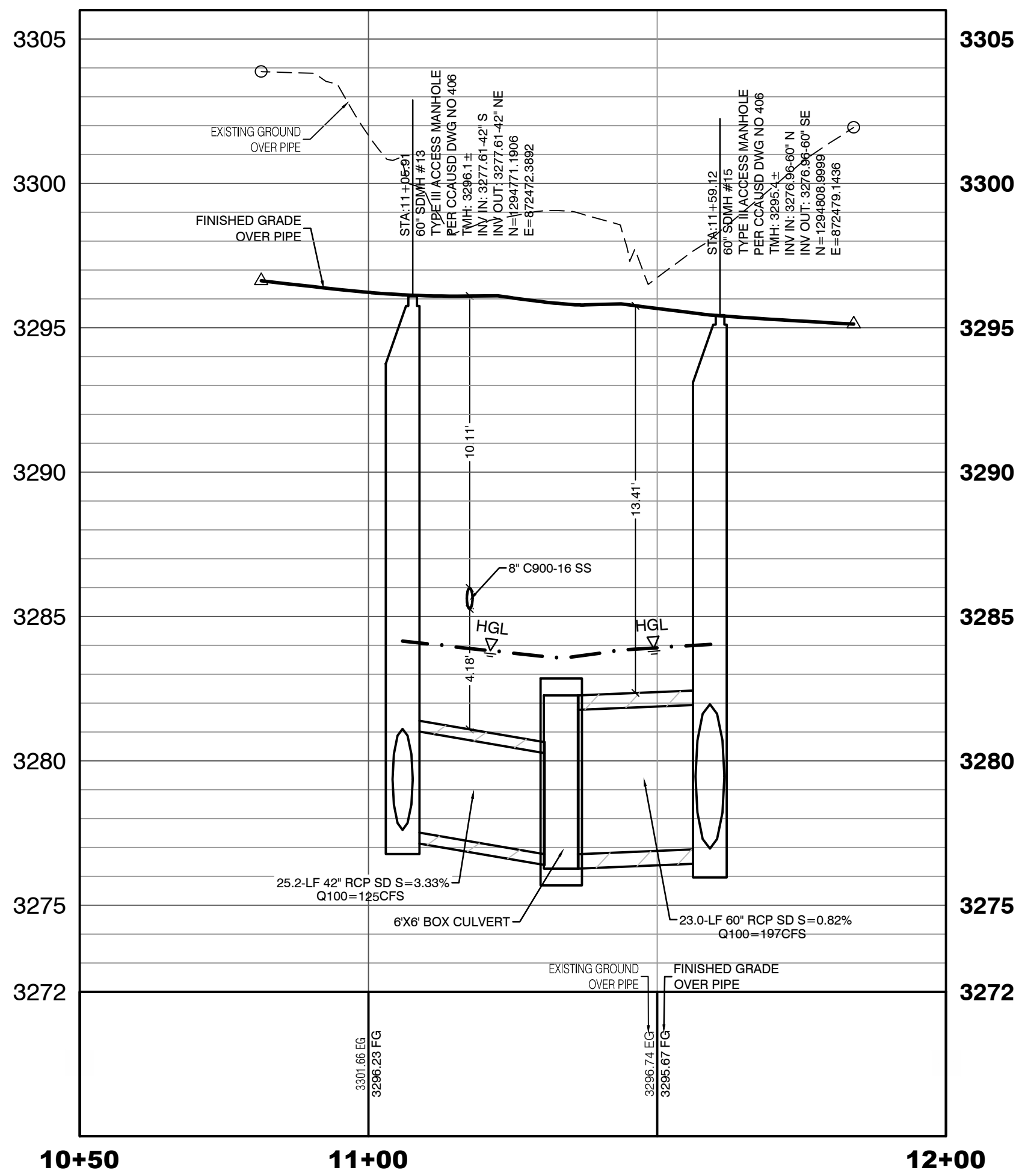
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UT47
87 OF 107 SHEETS

DRAWING NO.
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107V8449

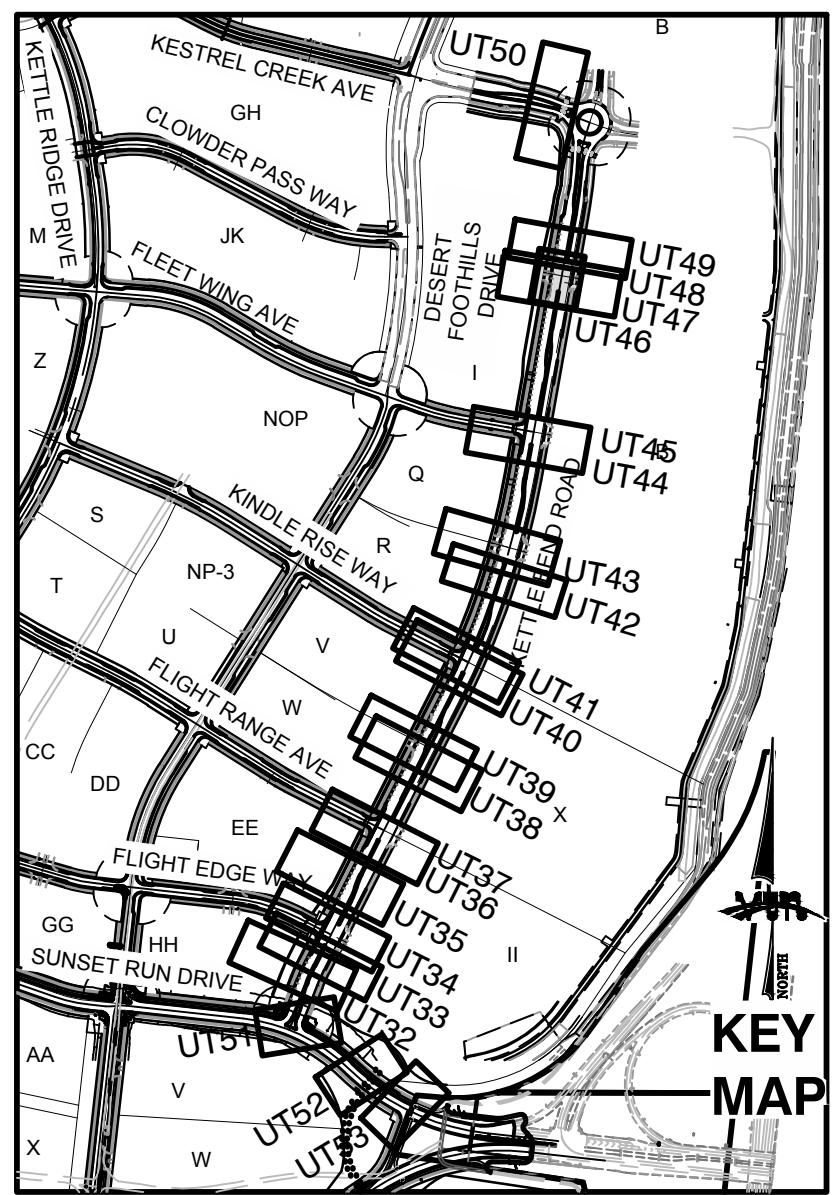
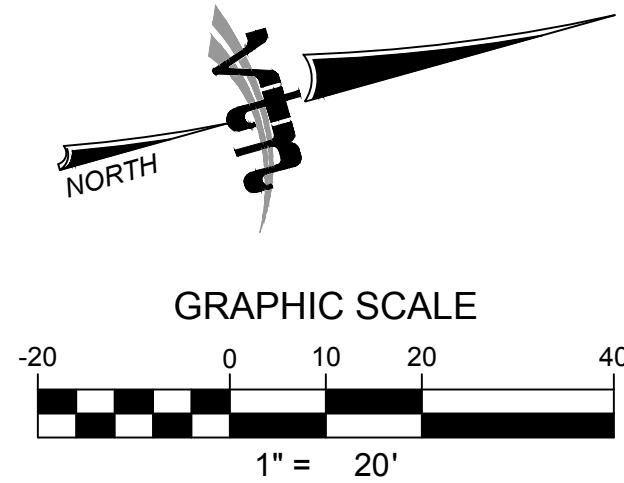


KETTLE BEND ROAD
(PUBLIC)

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



KETTLE BEND ROAD
(PUBLIC)



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WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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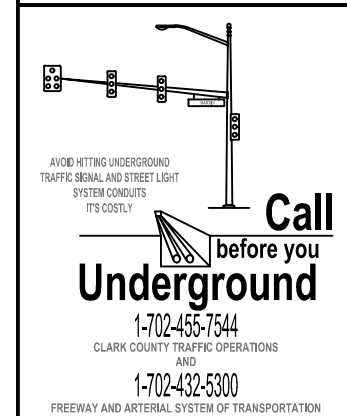
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT:137333 FIRST APPROVED DATE:



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AND

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CLARK COUNTY TRAFFIC OPERATIONS

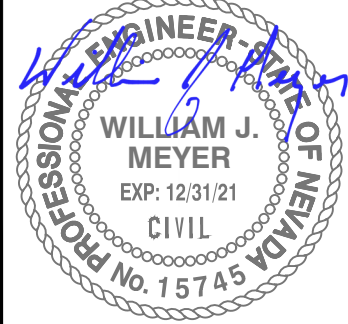
HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10885 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.781.4000

CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 48
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC	09/10/2019
DESIGNED BY: BCC	09/10/2019
CHECKED BY: WJM	09/28/2020
PROJECT NO: 7861	SCALE: 1"=20' HORIZ. 1"=4' VERT.



2020-09-25

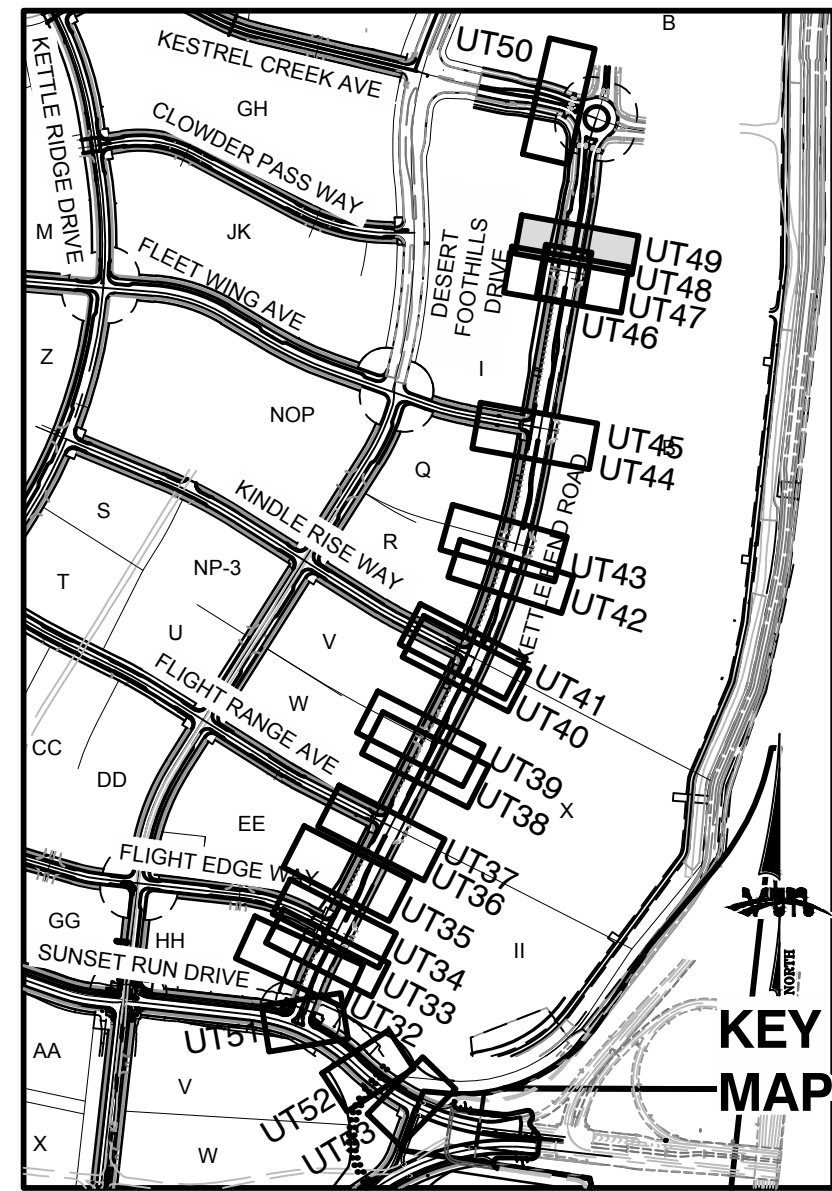
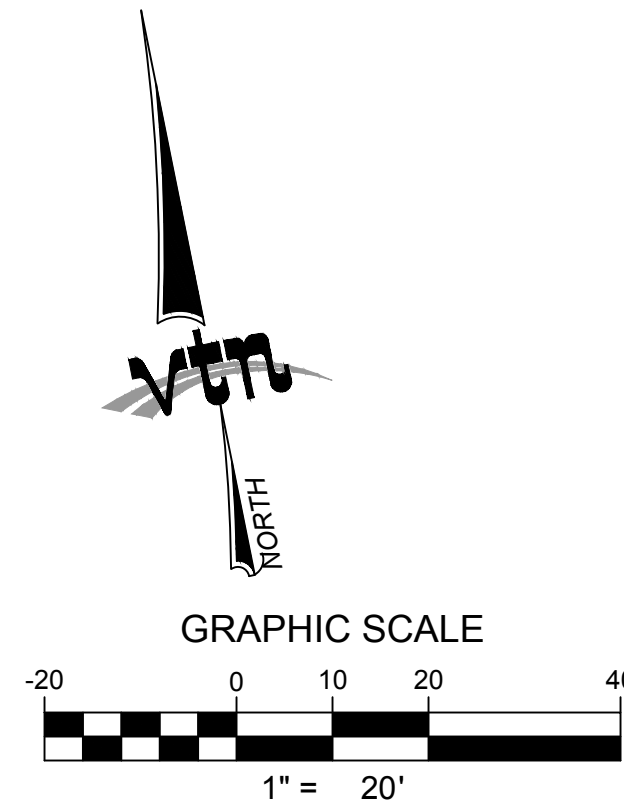
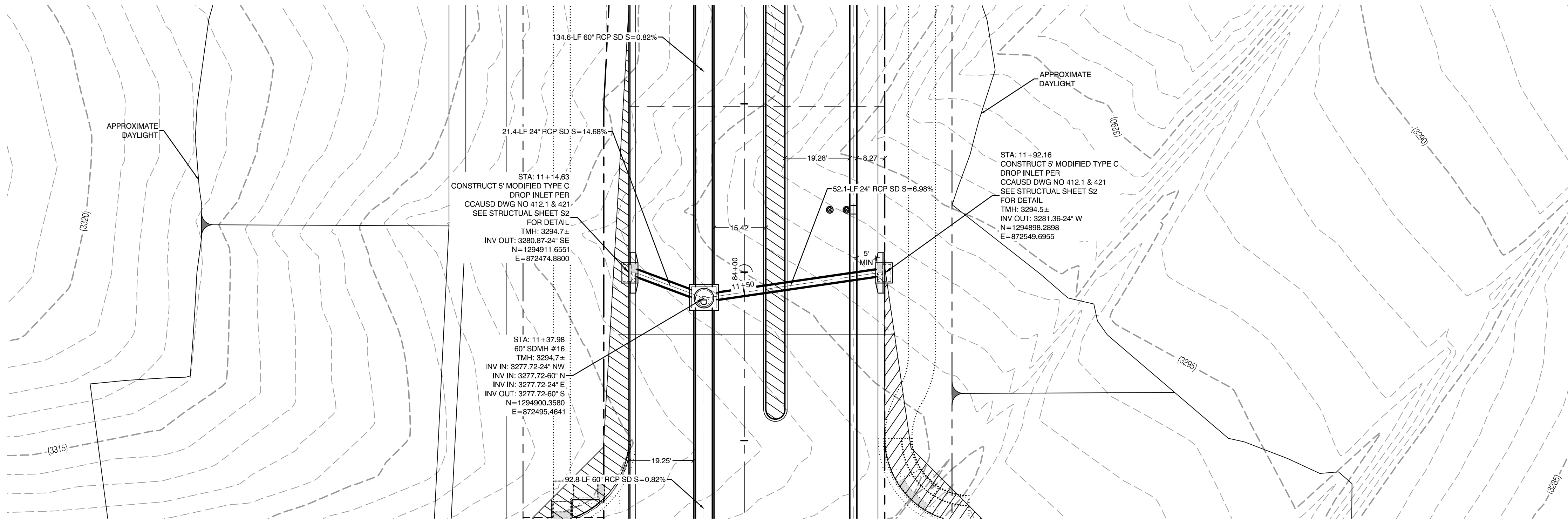
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UT48

88 of 107 SHEETS

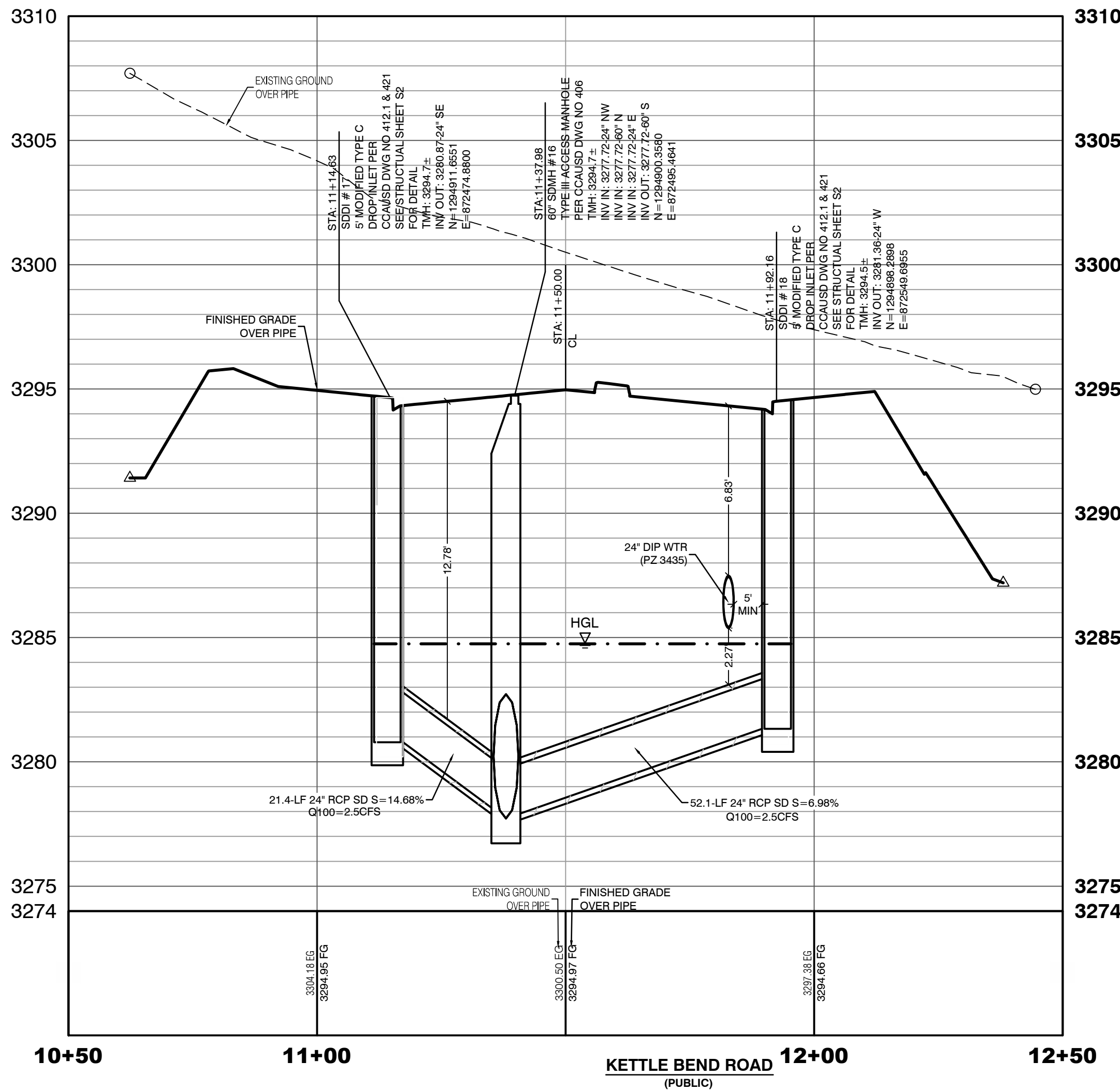
DRAWING NO.
L20-01282
107V8449

F:\17661 Kettle Bend Road\Sheet\7861 UT-SD LAT 4.dwg 2/26/2020 5:19 AM Brandon



KETTLE BEND ROAD
(PUBLIC)

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



DROP INLET SEPARATION NOTE

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CLARK COUNTY TRAFFIC OPERATIONS

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1-702-455-7544

AND

1-702-432-5300

CLARK COUNTY TRAFFIC OPERATIONS

PREVENT AND MITIGATE SYSTEMS OF TRANSPORTATION

- CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)**

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLET ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH LVVWD STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.
- CONTRACTOR ZONE:**

LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
- LVVWD EXISTING FACILITIES NOTE:**

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
- NOTE:**

5' MINIMUM HORIZONTAL SEPARATION FROM OUTSIDE EDGE OF THE WATER MAIN TO OUTSIDE EDGE OF DROP INLET
- WATER LINE MARKER BALLS NOTE**

INSTALL PIPELINE MARKER BALLS. PER UDACS PLATE NO. 15.
- FIRE HYDRANT MARKER NOTES**

BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:

 - ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE, LOCATE MAKER 5' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE, LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.
- WATER MAIN JOINT DEFLECTION**

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.
- UTILITY CROSSING NOTE:**

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

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

CONSTRUCT WATERLINE TRENCH SECTION AND BACKFILL PER UDACS PLATE NO. 17.
- WATER PRESSURE ZONE:**

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONE.
- DEPTH OF COVER DURING CONSTRUCTION:**

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.
- TO ENSURE LVVWD ACCESS WITHIN EASEMENT**

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO: LANDSCAPE BOULDER, FENCES, WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 873-7550 FAX: (702) 382-2587 WEB: WWW.VTNY.COM
CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS

UTILITY PLAN & PROFILE 49
STORM DRAIN LATERAL

SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC 09/10/2019

DESIGNED BY: BCC 09/10/2019

CHECKED BY: WJAT 09/28/2020

PROJECT NO: 7861

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

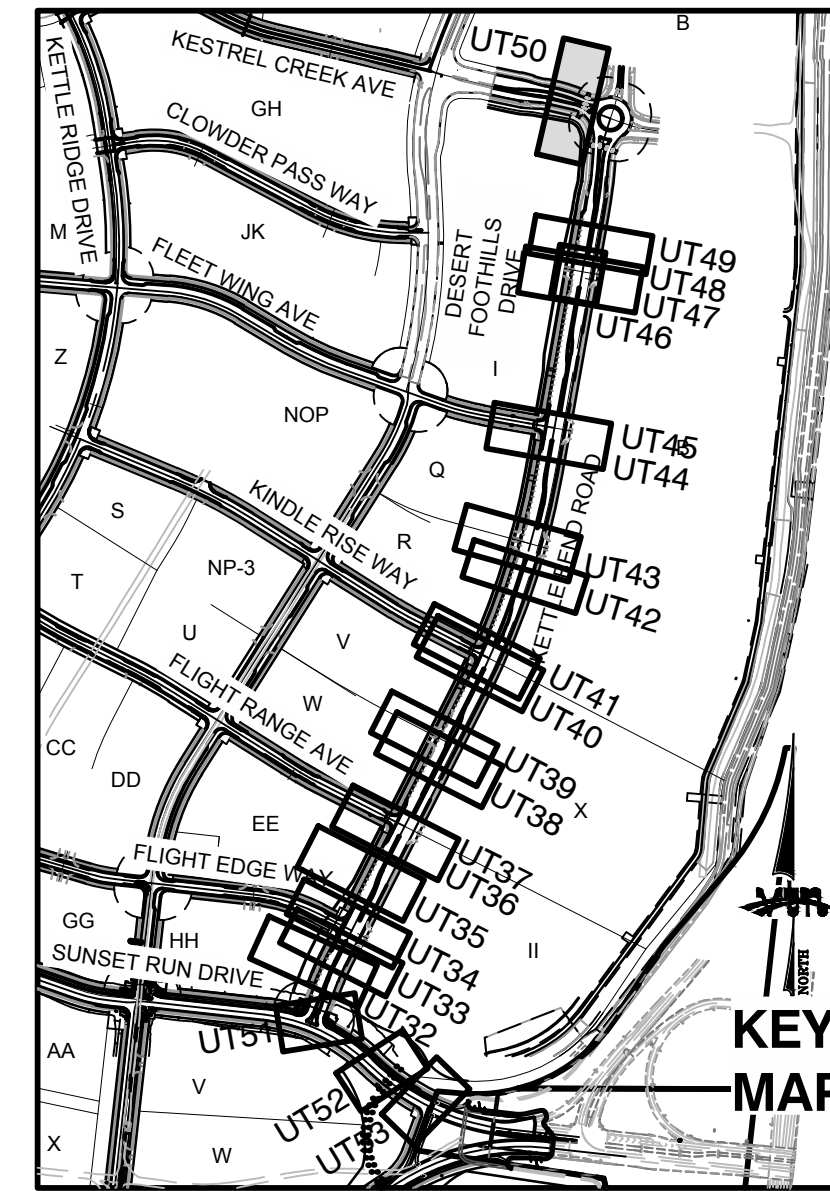
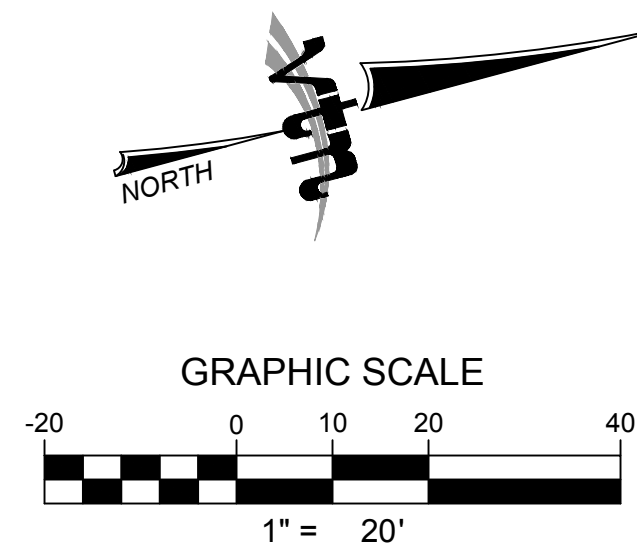
2020-09-25

SHEET
UT49
89 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

PROFESSIONAL ENGINEER
WILLIAM J. MEYER
EXP: 12/31/21
CIVIL

2020-09-25



TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPE BOULDERS, FENCES / WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT:137333 FIRST APPROVED DATE:



SHEET
UT50
90 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10945 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.737.4060

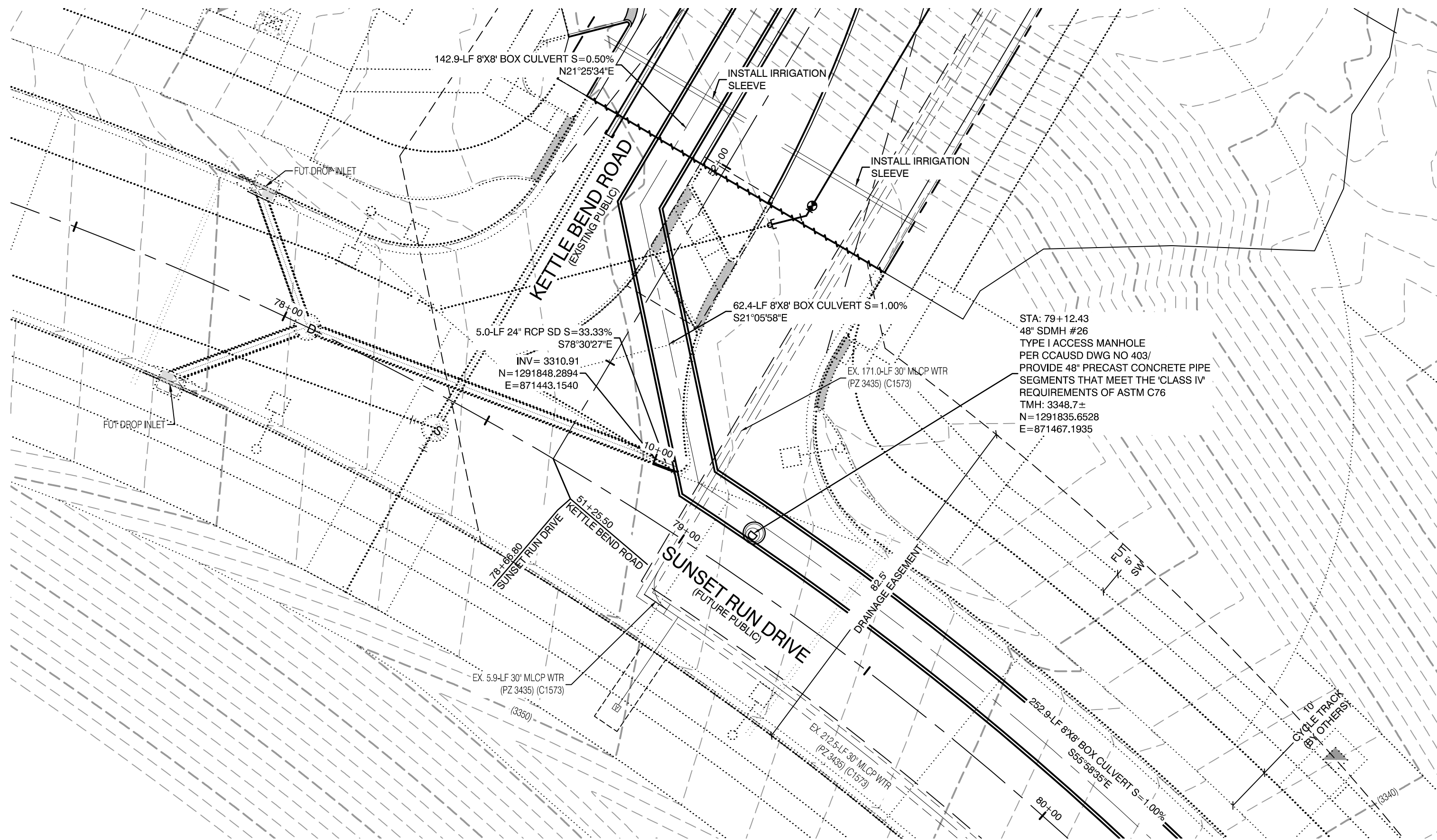
CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH: (702) 737-7550 FAX: (702) 382-2597 WEB: WWW.VTNV.COM
CONSULTING ENGINEERS • ANIMATORS • AND SURVIVORS



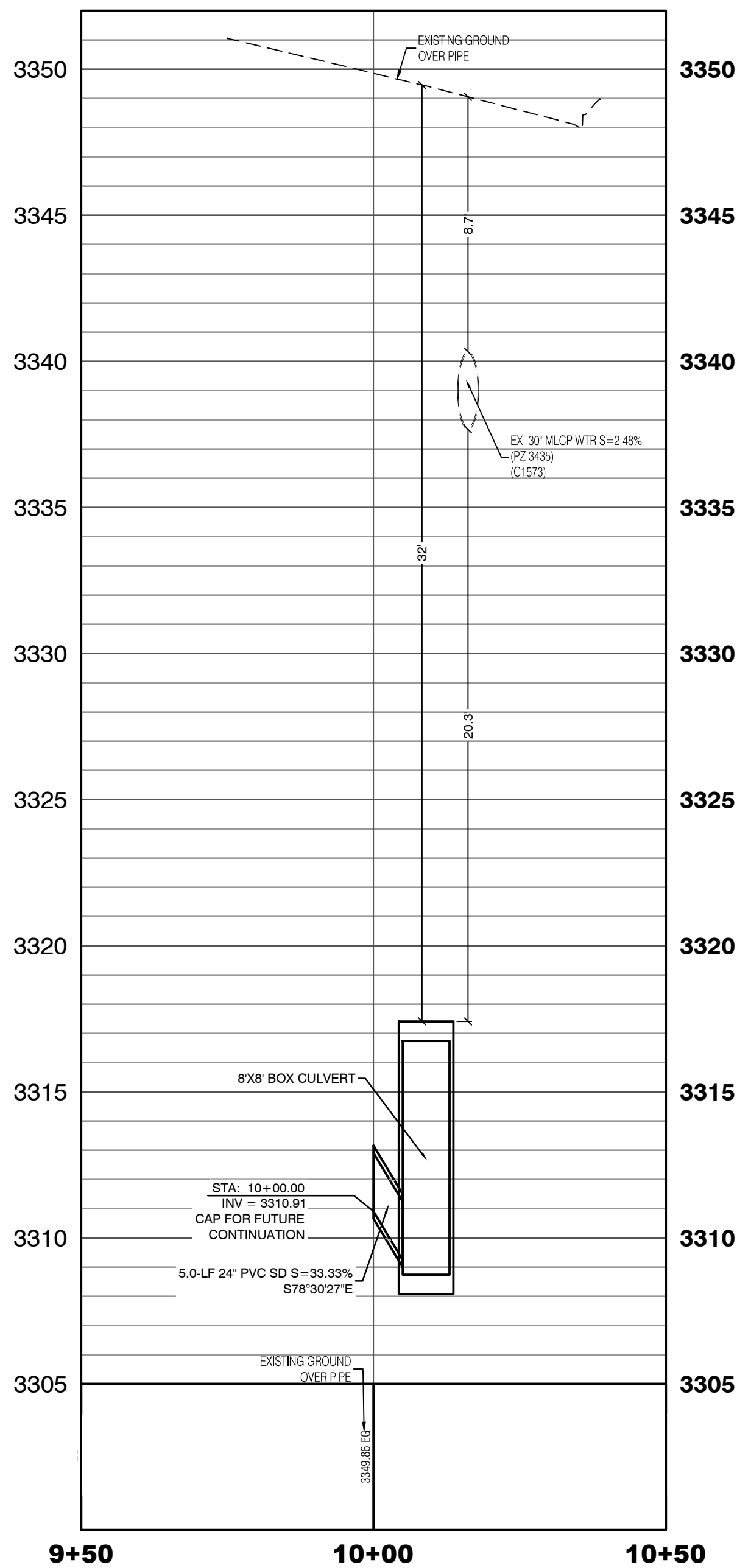
UTILITY PLAN & PROFILE 50
STORM DRAIN LATERAL

PROJECT NO: 7691	SCALE:	1"=20' 1"=4'	HORIZ VERT.
DRAWN BY: BOC		09/10/2019	
DESIGNED BY: BOC		09/10/2019	
CHECKED BY: WJM		09/29/2020	

SHEET
UT50
90 OF 107 SHEETS
DRAWING NO.
L20-01282
107V8449



SUNSET RUN DRIVE
(FUTURE PUBLIC)
PROFILE SCALES:
HORIZ. = 1"=20'
VERT. = 1"=4'



CONDITIONAL APPROVAL OF VALVED OUTLET (6-INCH AND LARGER)

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CONTRACTOR NOTE:

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CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

NOTE:

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

WATER LINE MARKER BALLS NOTE

INSTALL PIPELINE MARKER BALLS PER UDACS PLATE No. 15 AND 19.

FIRE HYDRANT MARKER NOTES

- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ARE TO BE INSTALLED:
- ON ROADWAYS WITH NO PARKING PERMITTED ON HYDRANT SIDE; LOCATE MAKER 6' FROM FACE OF CURB ON HYDRANT SIDE.
 - ON ROADWAYS WITH PARKING PERMITTED ON HYDRANT SIDE; LOCATE MARKER 16' FROM FACE OF CURB ON HYDRANT SIDE.

WATER MAIN JOINT DEFLECTION

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

LVVWD EXISTING FACILITIES NOTE:

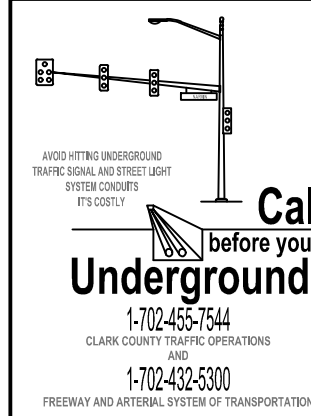
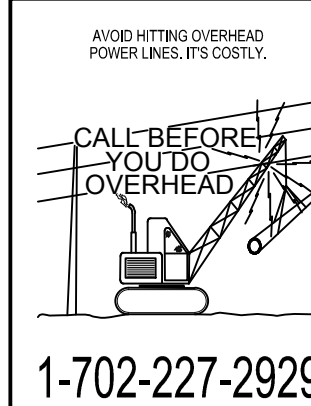
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Call before you Dig
Avoid cutting underground utility lines. It's costly.
811
OR
1-800-642-2444
AND
1-702-455-7544
CLARK COUNTY TRAFFIC OPERATIONS

CONSTRUCTION NOTES

WATER

- 1" FIRE HYDRANT ASSEMBLY: INCLUDING 12"x6" OR 24"x6" TEE WITH 6" G.V. (PER UDACS PLATE No. 38 & 40)
- 12" GATE VALVE (PER UDACS PLATE 30 & 39)
- 12" CAP & BLOW OFF (PER UDACS PLATE 36)
- 24" CAP & BLOW OFF (PER UDACS PLATE 36)
- 12"x12" TEE (PER UDACS PLATE 31)
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- 24" 5" BEND (PER UDACS PLATE 31)
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- 12" 45" BEND (PER UDACS PLATE 31)
- 12" 5" BEND (PER UDACS PLATE 31)

- 1.5" TYPE K SOFT COPPER WATER LATERAL SERVICE WITH 1.5" METER PER UDACS PLATE #4 (IRRIGATION) AND 1.5" RPPA PER UDACS PLATE #8 AND SHEET DT7

- 24"x6" TEE (PER UDACS PLATE 31)

- 6" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" C-900 WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17
- 24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17

SEWER

- STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8
- 8" C-900-16 SANITARY SEWER MAIN
- 16" C-900-16 SANITARY SEWER MAIN
- SEWER CAP (SAME SIZE AS PIPE) PER STD 4.8 & 4.11.

- SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

WATER MAIN COVER NOTE:

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

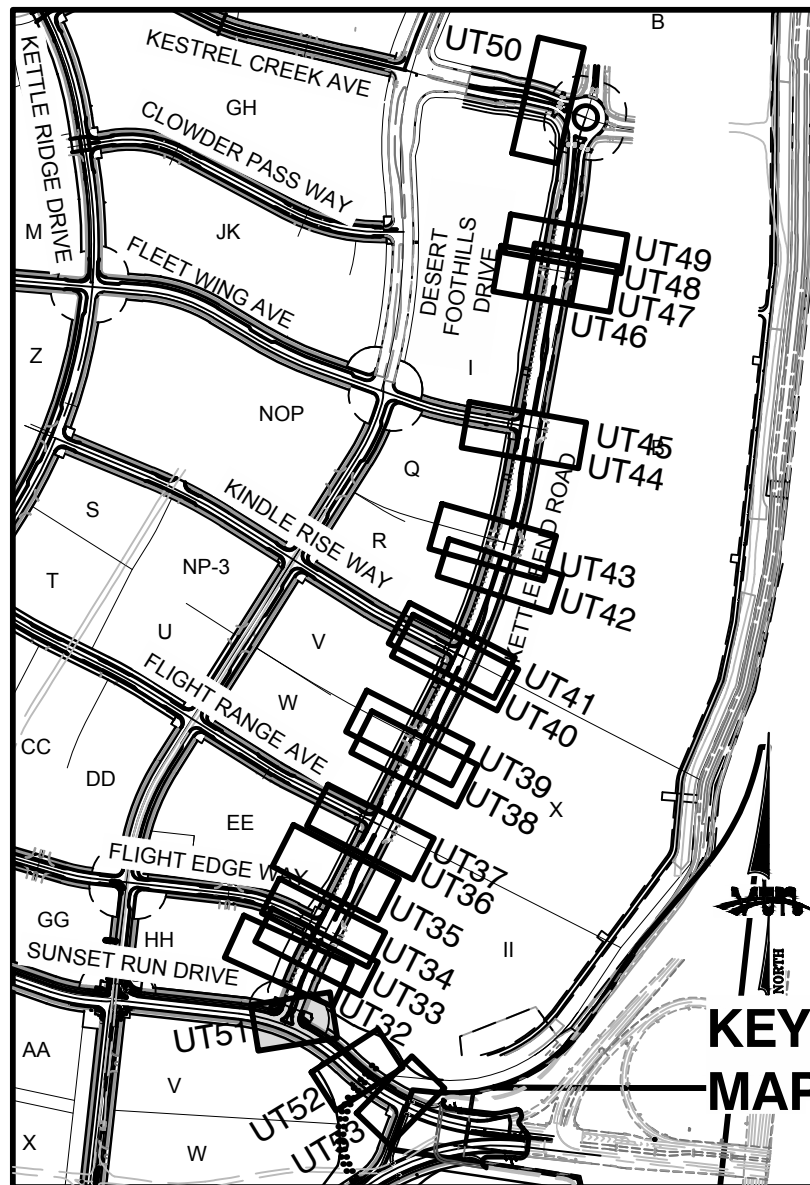
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT: 137333 FIRST APPROVED DATE: _____

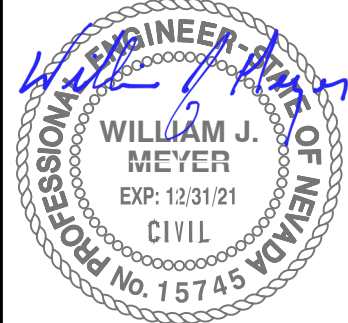


HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.791.4000

CITY OF LAS VEGAS

UTILITY PLAN & PROFILE 51 STORM DRAIN LATERAL
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

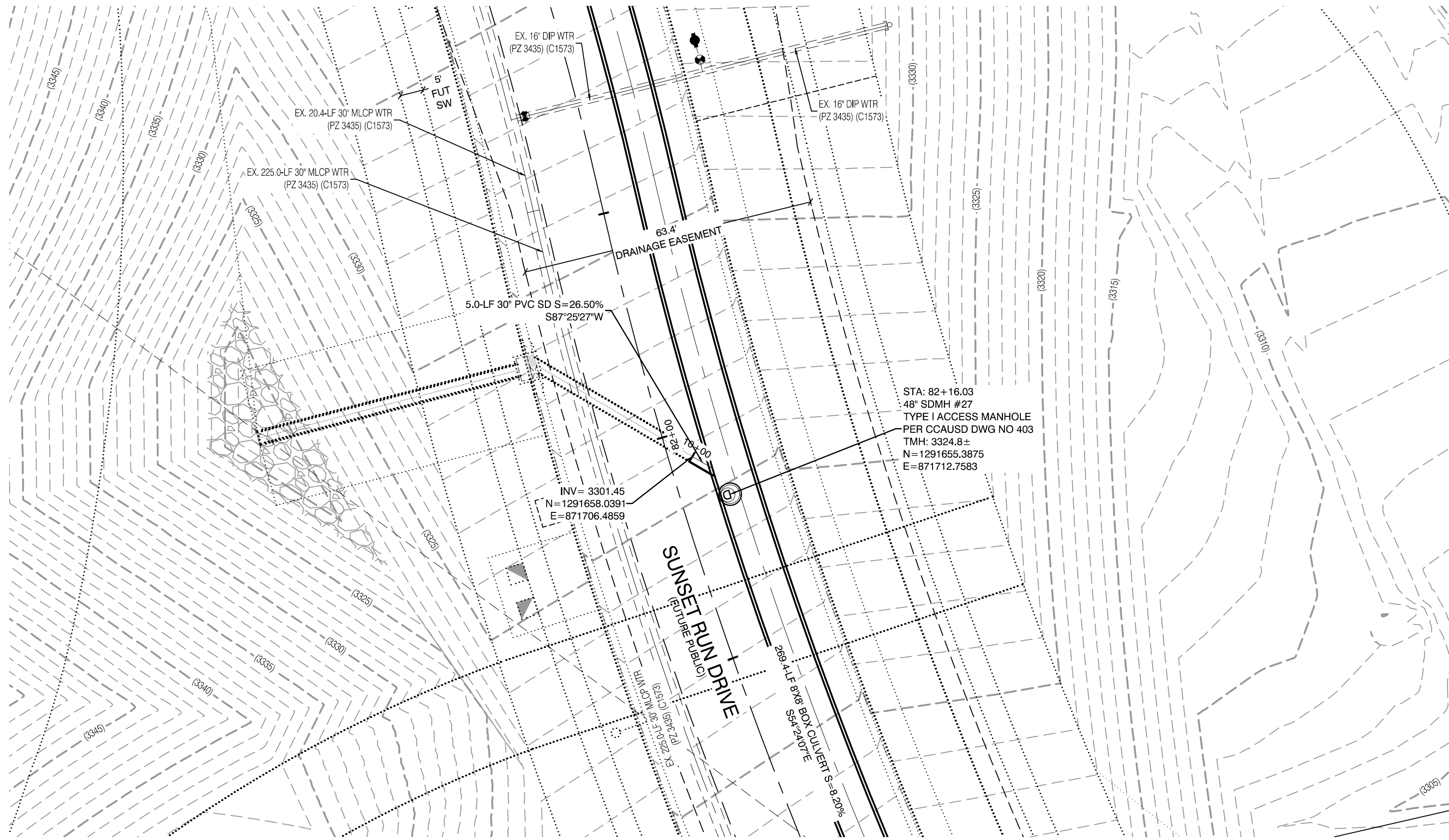


2020-09-25

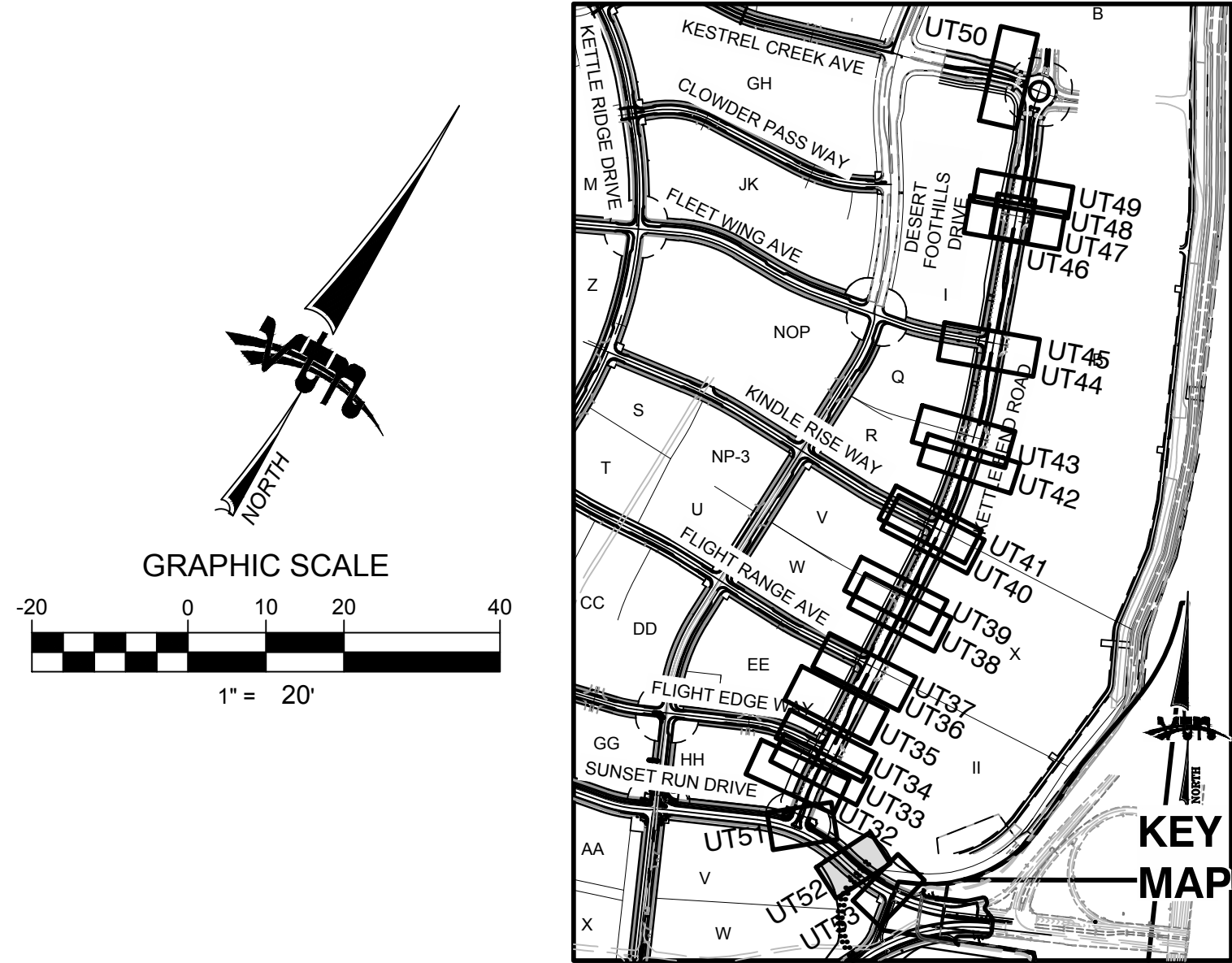
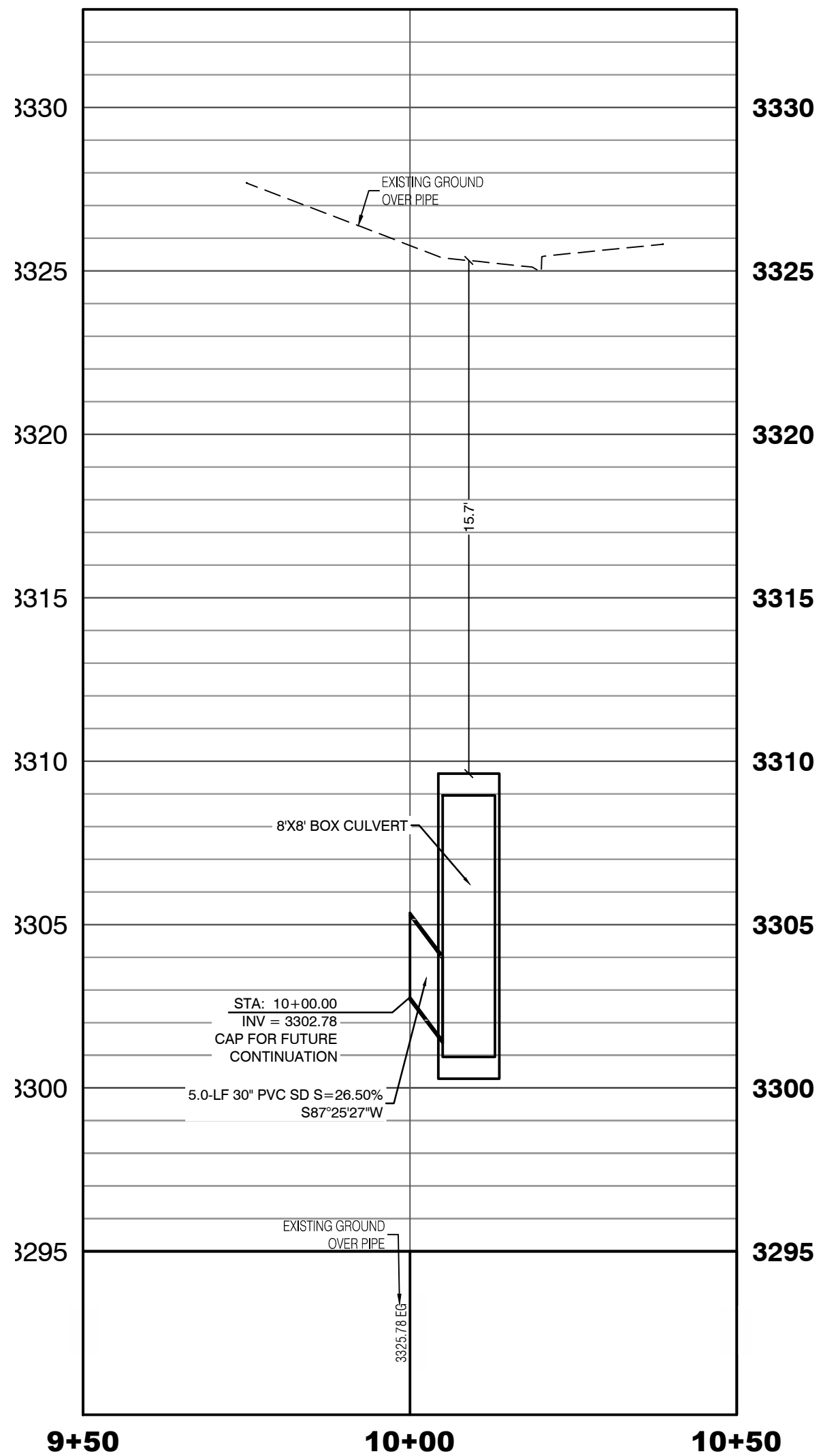
SHEET
UT51
91 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

F:\17601 Kettle Bend Road\Sheet\7861 UT-50 LAT 5.dwg 2/31/2020 9:49 AM Brandon



SUNSET RUN DRIVE
(FUTURE PUBLIC)
PROFILE SCALES:
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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03.

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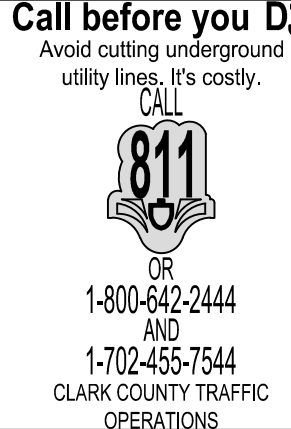
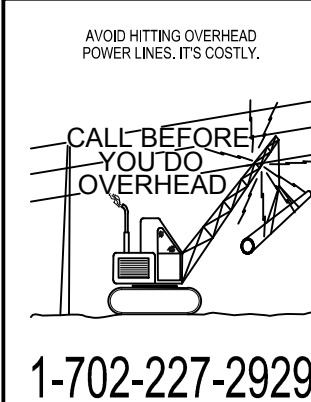
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CONSTRUCTION NOTES

WATER

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12" DIP WATER MAIN PER UDACS 2.06.01 & PLATE 17

24" DIP WATER MAIN RESTRAINED PER UDACS 2.06.01 & PLATE 17

WATER POINT OF CONNECTION

CONSTRUCTION NOTES

SEWER

STANDARD MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1, SD-2, SD-4, & SD-5 WITH DUAL CONCENTRIC LID AND CORROSION PROTECTION PER DCSWCS 3.16.8

8" C-900-16 SANITARY SEWER MAIN

16" C-900-16 SANITARY SEWER MAIN

SEWER CAP (SAME SIZE AS PIPE) PER STD 4.8 & 4.11.

SEWER POINT OF CONNECTION

WATERLINE TRENCH NOTE:

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

WATER PRESSURE ZONE:

WATER SERVICE LOCATED IN THE 3435 & 3550 PRESSURE ZONES.

WATER MAIN COVER NOTE:

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APPROVED FOR CONSTRUCTION

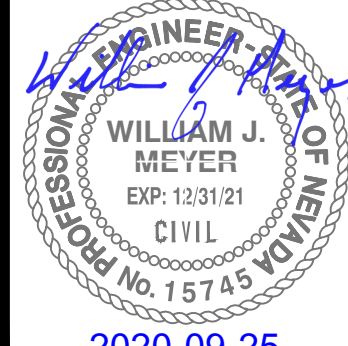
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT: 137333 FIRST APPROVED DATE: _____

HOWARD HUGHES COMPANY, LLC
A DELAWARE LIMITED LIABILITY COMPANY
10805 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
702.791.4000

UTILITY PLAN & PROFILE 52 STORM DRAIN LATERAL
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: BCC
DESIGNED BY: BCC
CHECKED BY: WJM
PROJECT NO: 7861
SCALE: 1"=20' HORIZ.
1"=4' VERT.

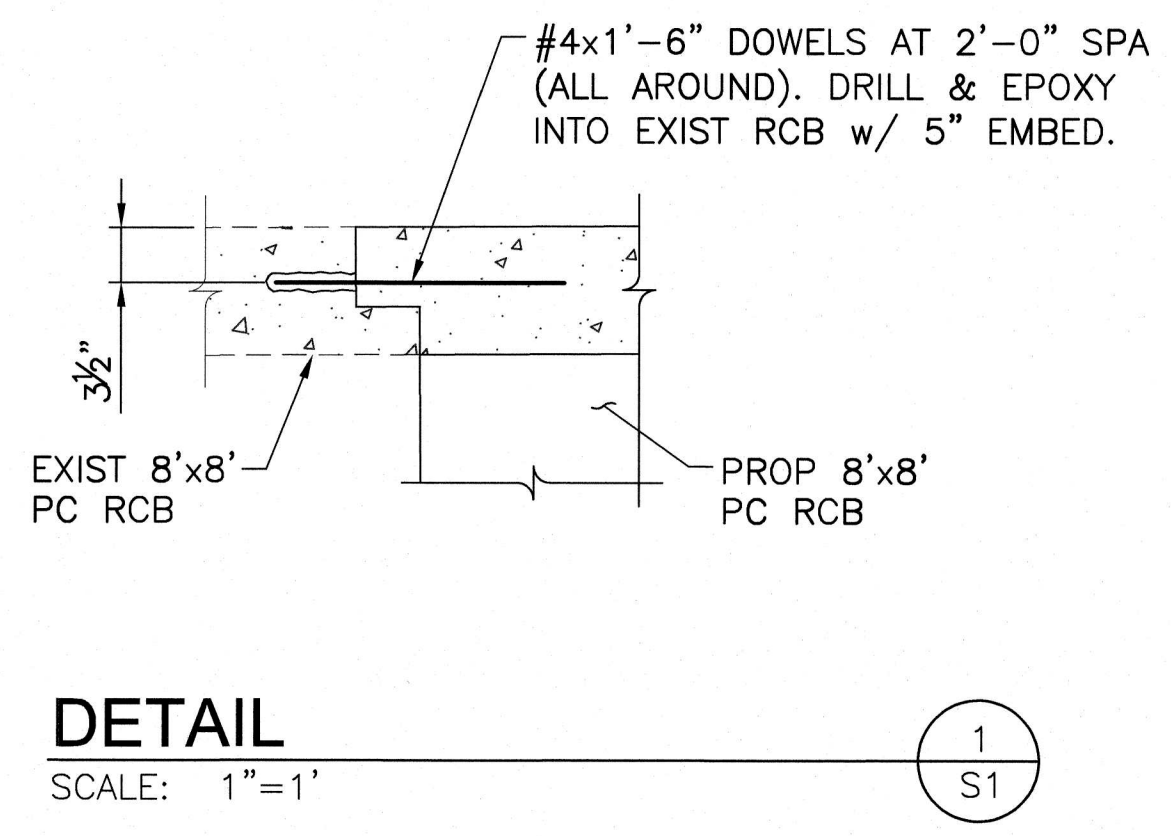
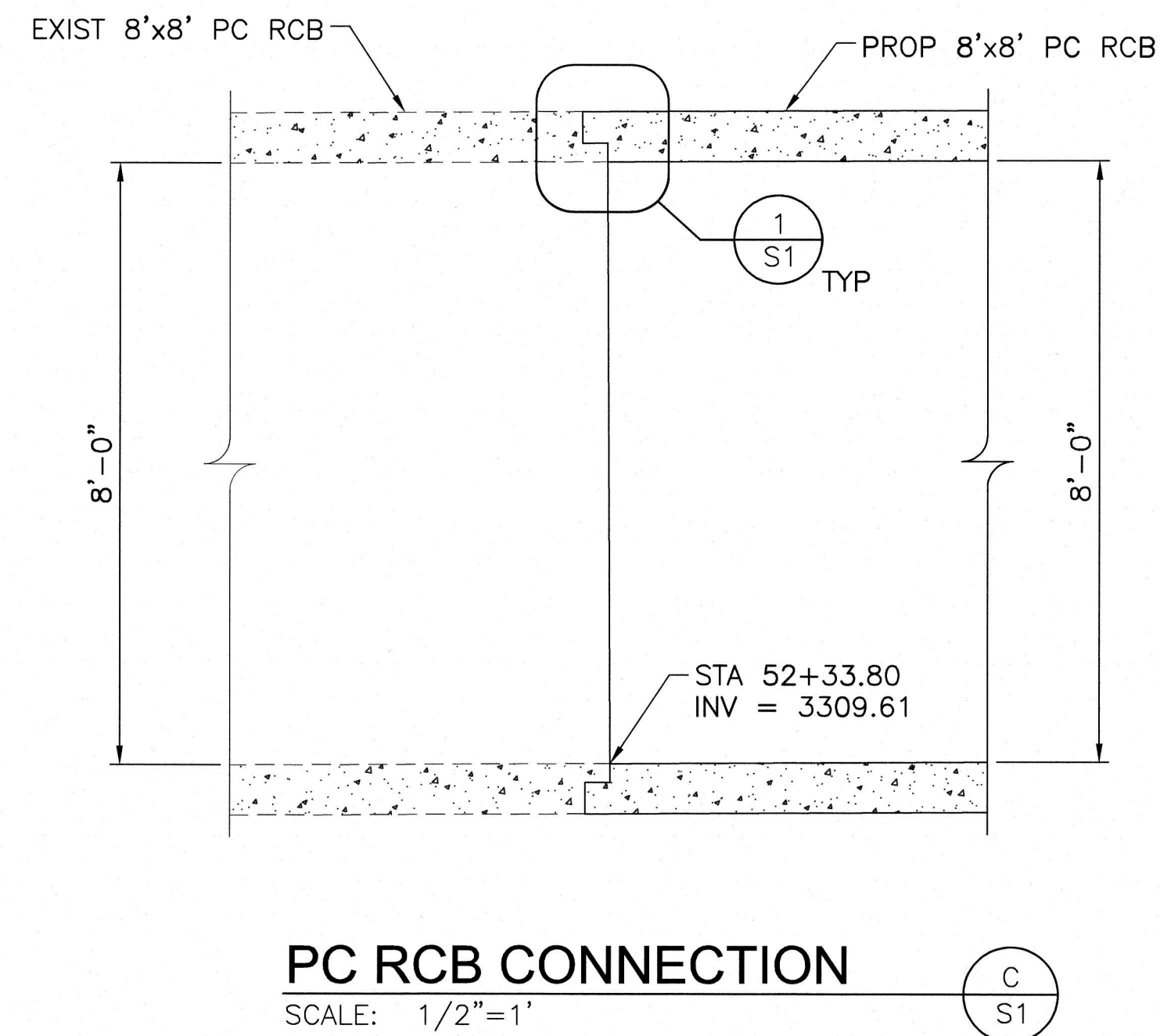
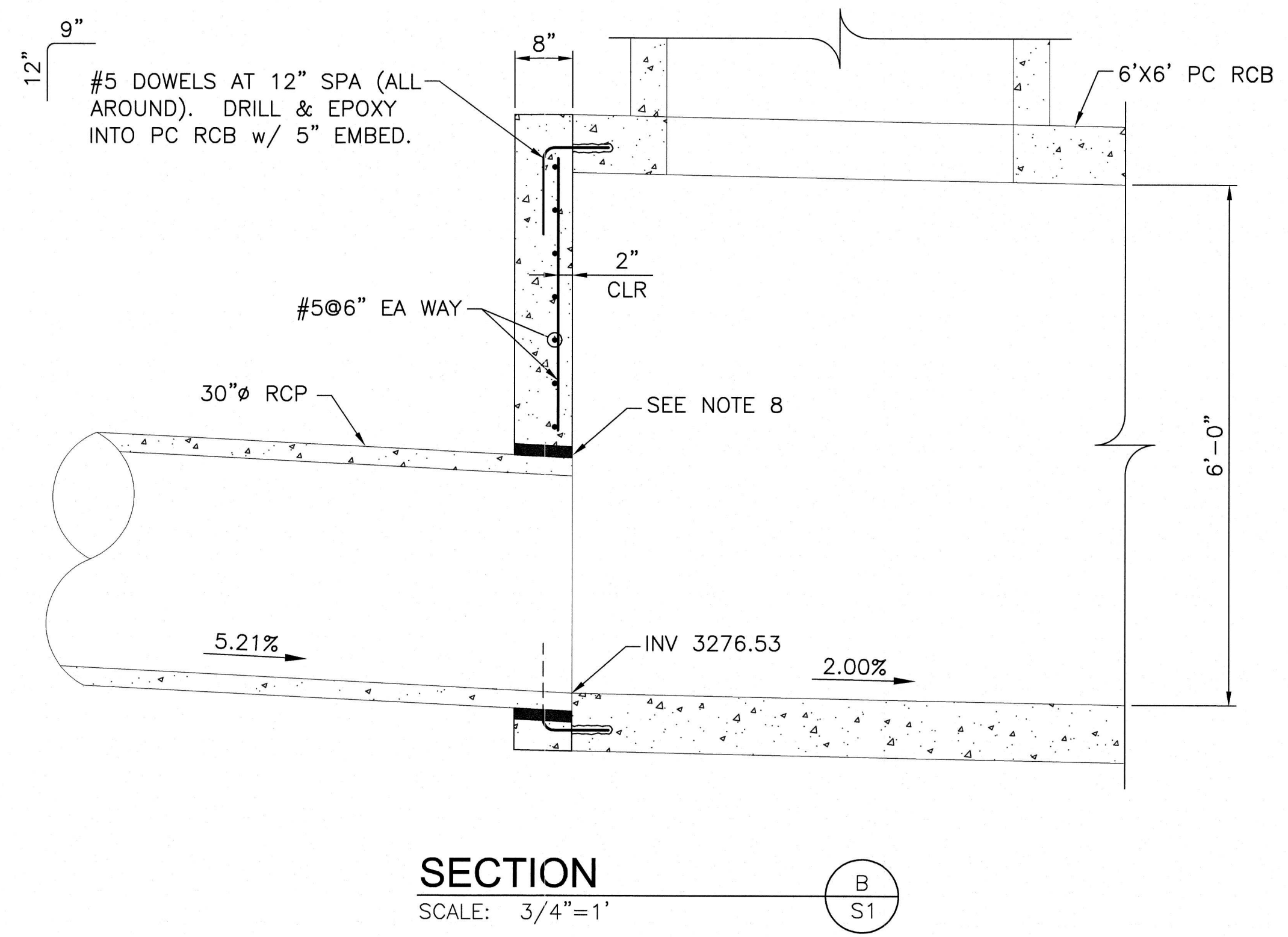
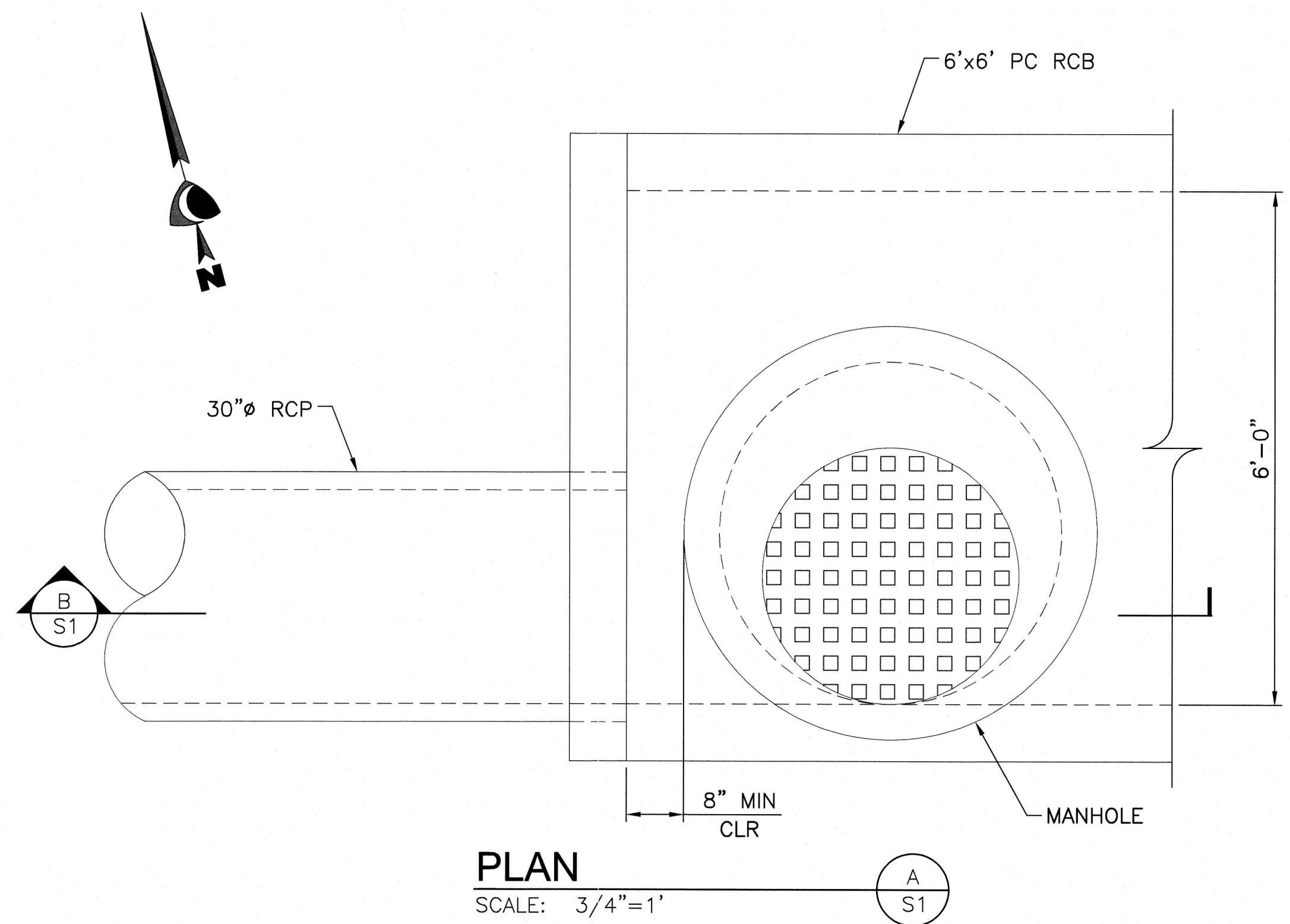


2020-09-25

SHEET
UT52
92 OF 107 SHEETS

DRAWING NO.
L20-01282
107V8449

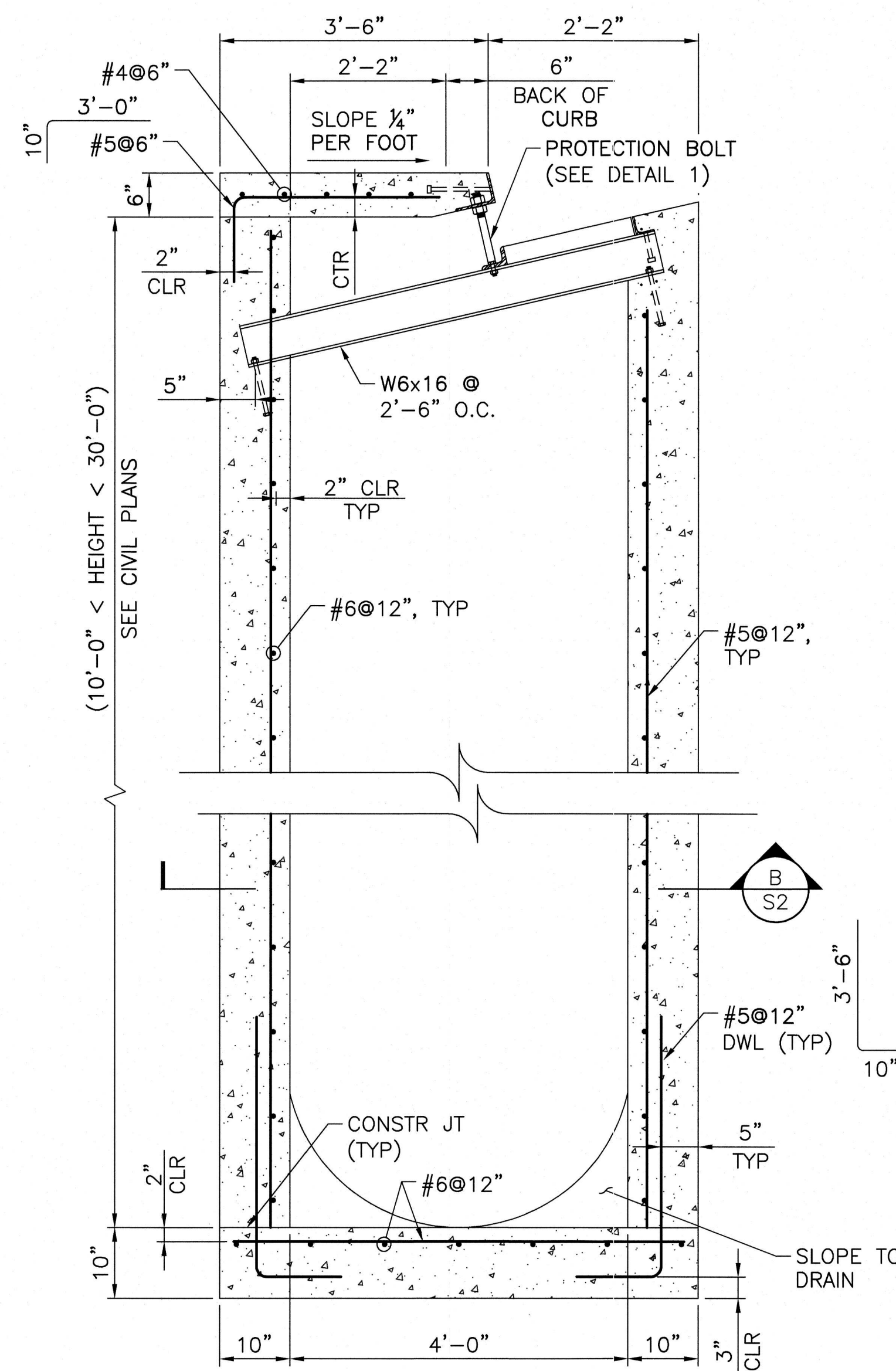
F:\17361 Kettle Bend Road\Sheet\92\92 UT-52 LAT 5.dwg 9/31/2020 9:49 AM Brandon



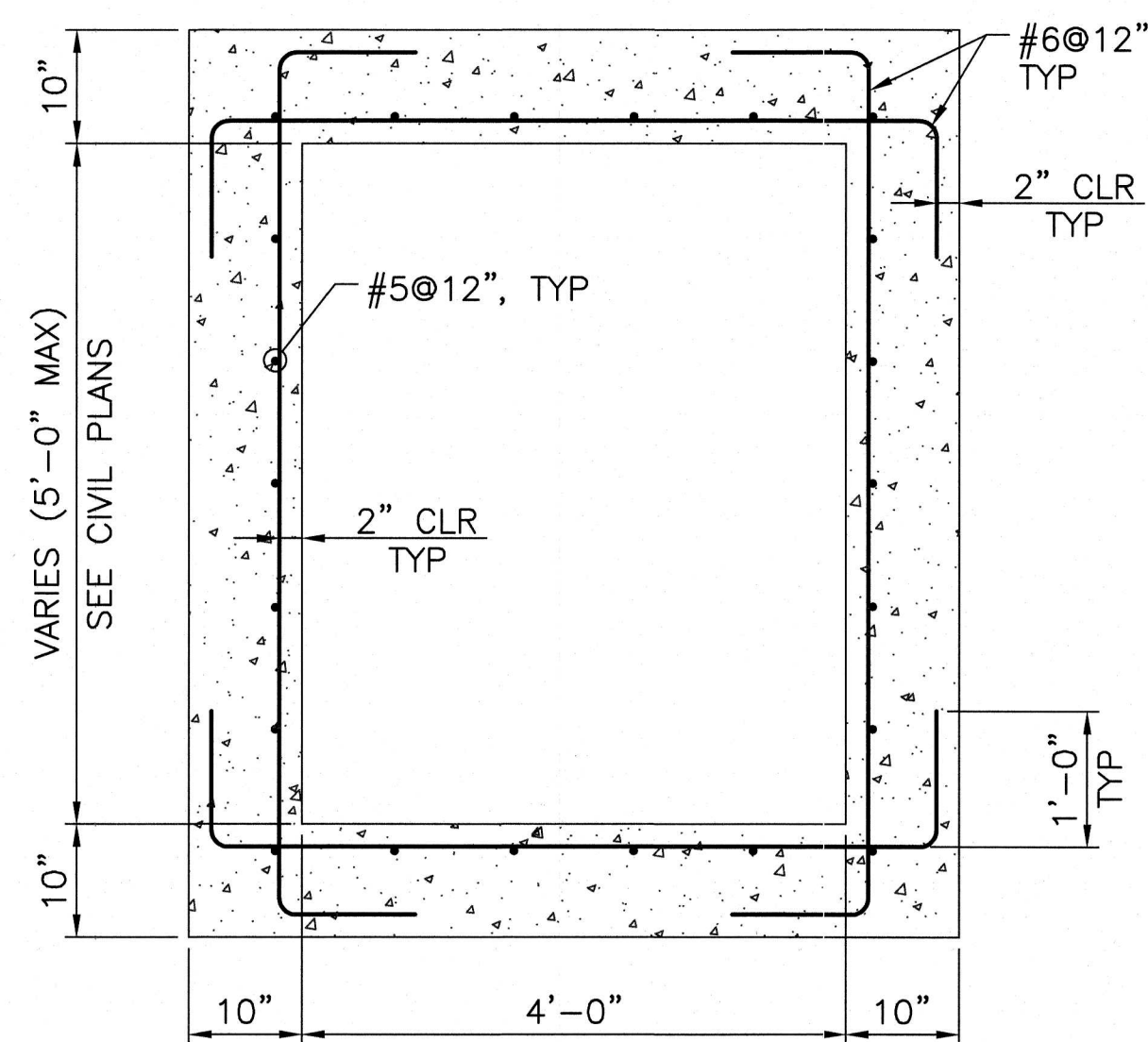
- NOTES:
1. PORTLAND CEMENT SHALL CONFORM TO A.S.T.M. C 150-18, TYPE V. AGGREGATE SHALL CONFORM TO A.S.T.M. C 33-18.
 2. ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
 3. ALL REINFORCING STEEL SHALL BE ASTM DESIGNATION A615 GRADE 60.
 4. COVERAGE FOR REINFORCING BARS, EXCEPT WHERE OTHERWISE SHOWN, SHALL BE: 3" FOR CONCRETE PLACED AGAINST EARTH; 2" FOR OTHERS.
 5. USE 3/4" CHAMFER ON ALL EXPOSED CORNERS.
 6. ALL REINFORCING BAR LAP SPLICES SHALL CONFORM TO ACI 318.
 7. PROVIDE 'SIMPSON SET-XP' EPOXY OR ENGINEER APPROVED EQUAL.
 8. THE OPENING SIZE MAY BE INCREASED ($\pm 3"$) FOR EASE OF INSTALLATION. SEAL THE GAP WITH NON-SHRINK GROUT.

DRAWN BY: CW		###	STRUCTURAL DETAILS 6'x6' PC RCB TO 30" RCP CONNECTION	HOWARD HUGHES COMPANY, LLC A DELEWARD LIMITED LIABILITY COMPANY 10845 GRIFFITH PEAK DRIVE, SUITE 100 LAS VEGAS, NV 89135 702.797.4000	CITY OF LAS VEGAS	2785 S. RAINBOW BLVD SUITE 200 LAS VEGAS, NV 89146 PHONE: (702) 685-5945
DESIGNED BY: CW		###		PREPARED BY		
CHECKED BY: JMI		###	SUMMERLIN WEST VILLAGE 22 KETTLE BEND ROAD-SUNSET RUN DRIVE TO KESTREL CREEK AVENUE	CA Group, Inc CAVIOLO ANSON	BY	PERSON
PROJECT NO: #		SCALE: NA HORIZ. NA VERT. NA				
			106 of 107 SHEETS			
DRAUGHTING NO. L20-01282 107V0449			SHEET S1			

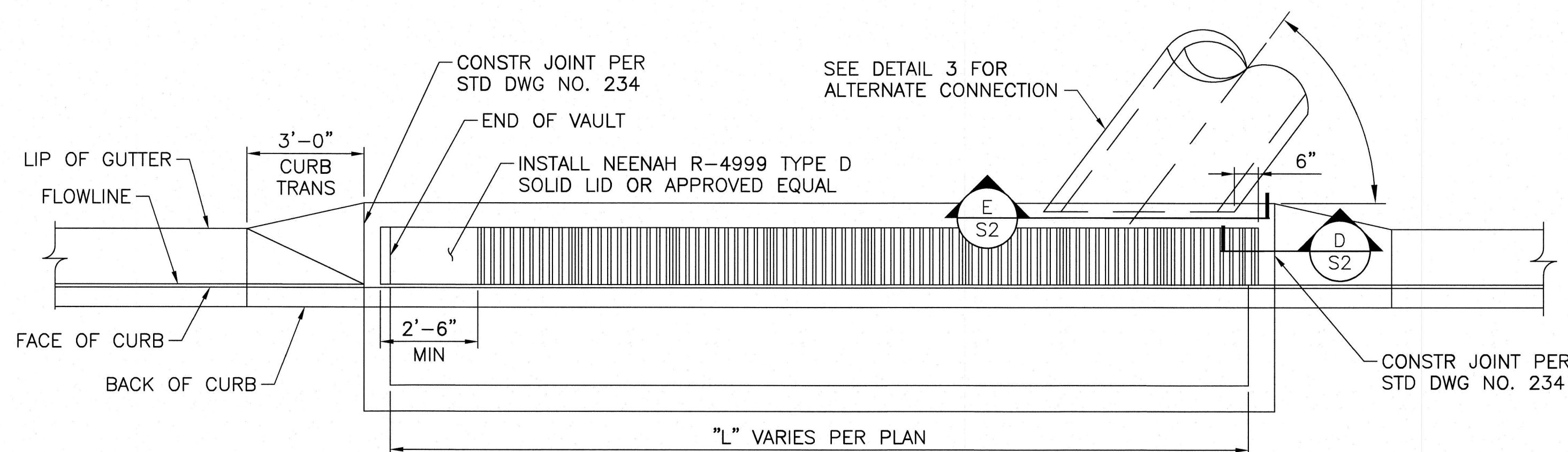
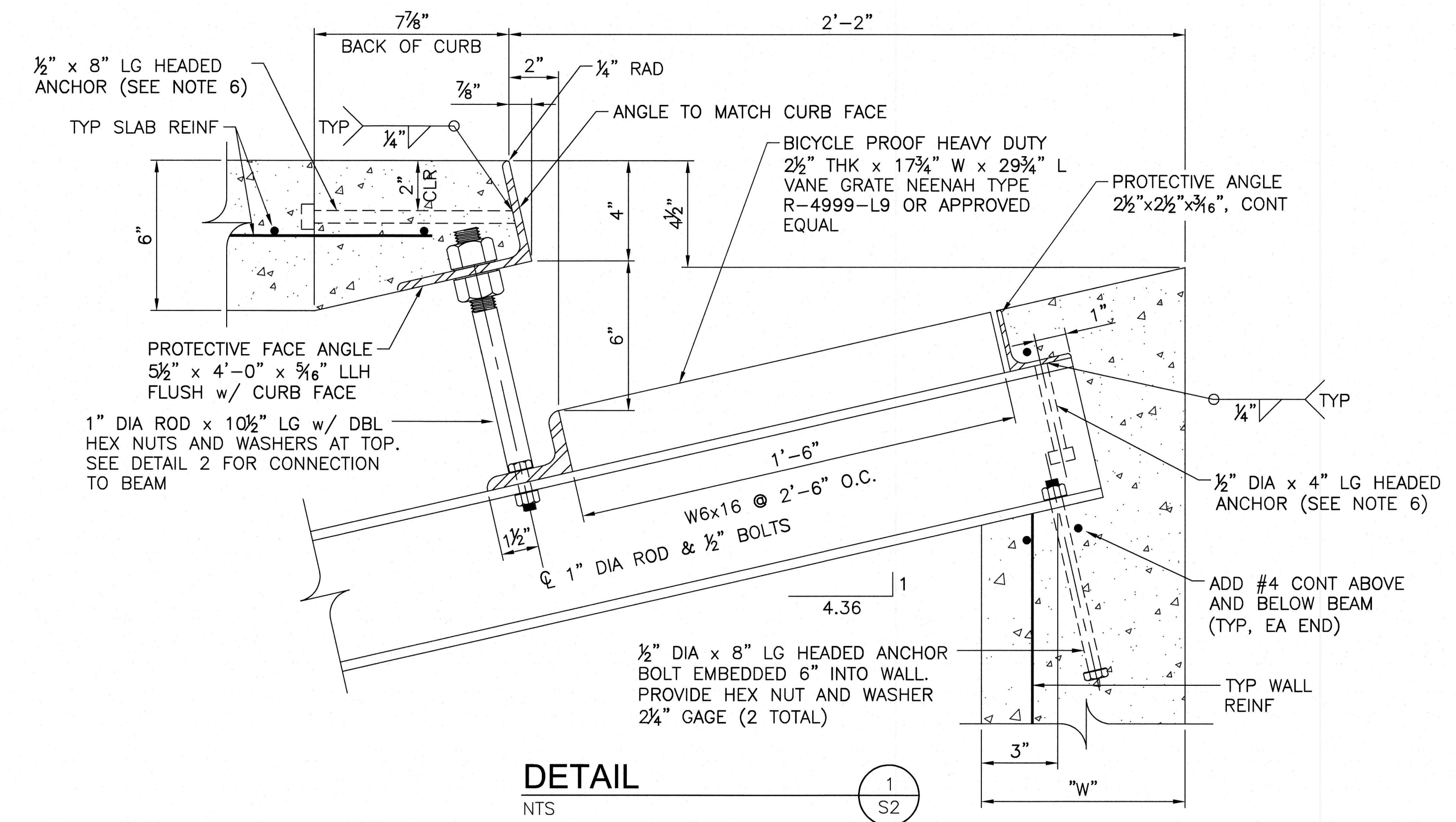
H:\0168 Summerlin West Jobs (sub to VTN)\Kettle Bend_Tek 01\CADD\ST.dwg 8/8/2020 8:55 AM Chris Wunsch



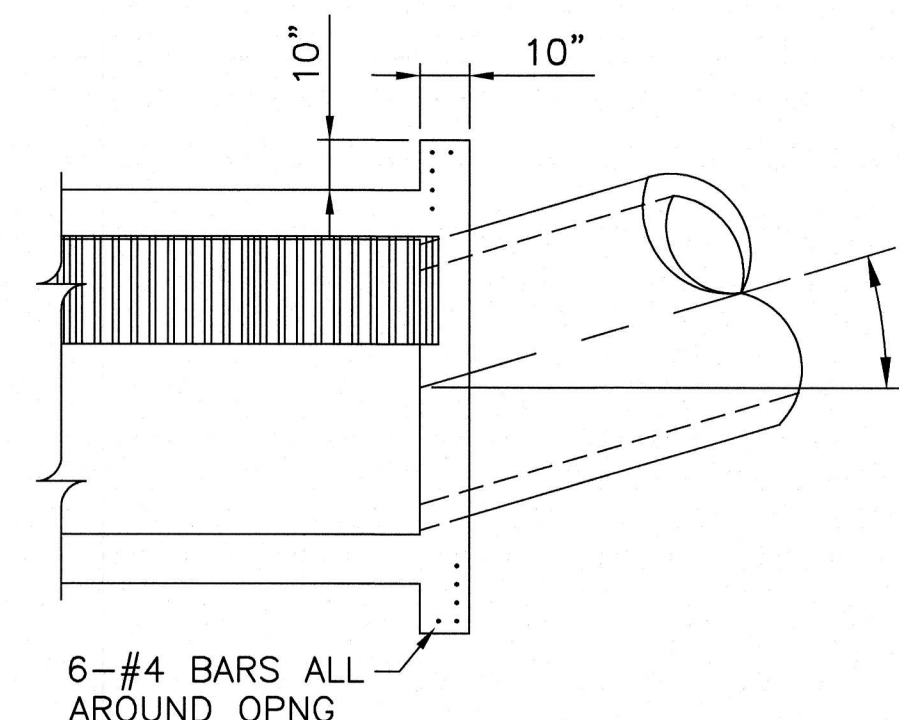
TYPE C MOD DROP INLET SECTION
SCALE: 3/4"=1'



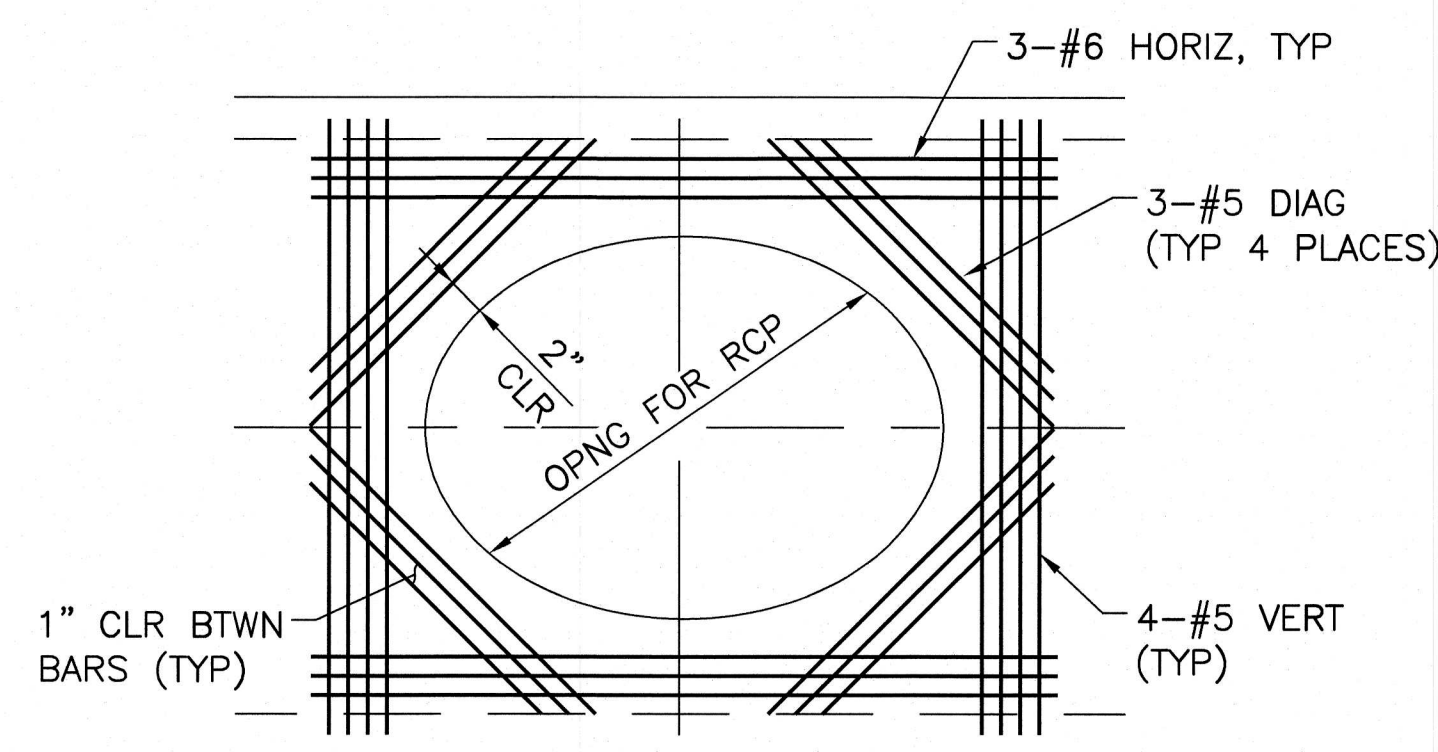
SECTION
NTS



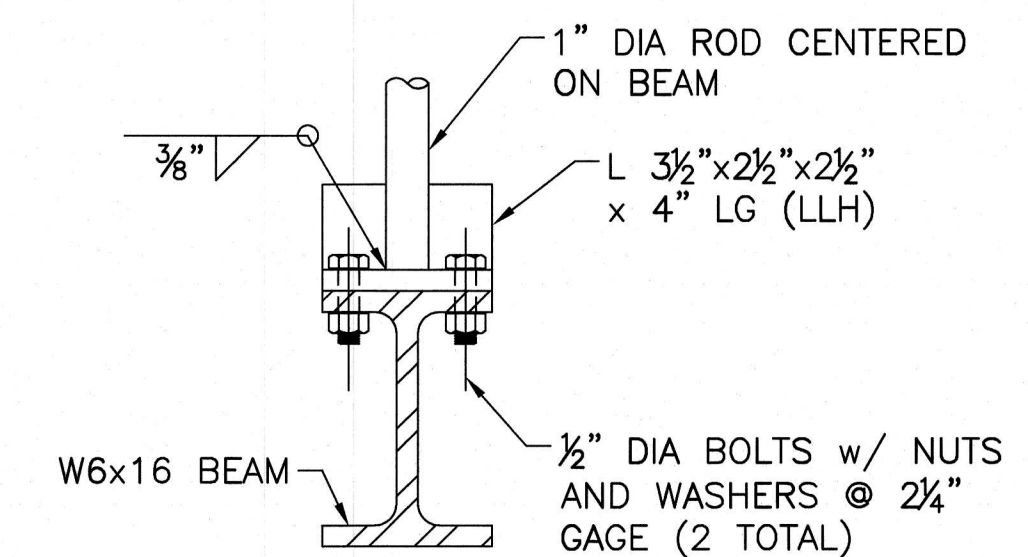
DROP INLET LAYOUT PLAN
SCALE: 1/4"=1'



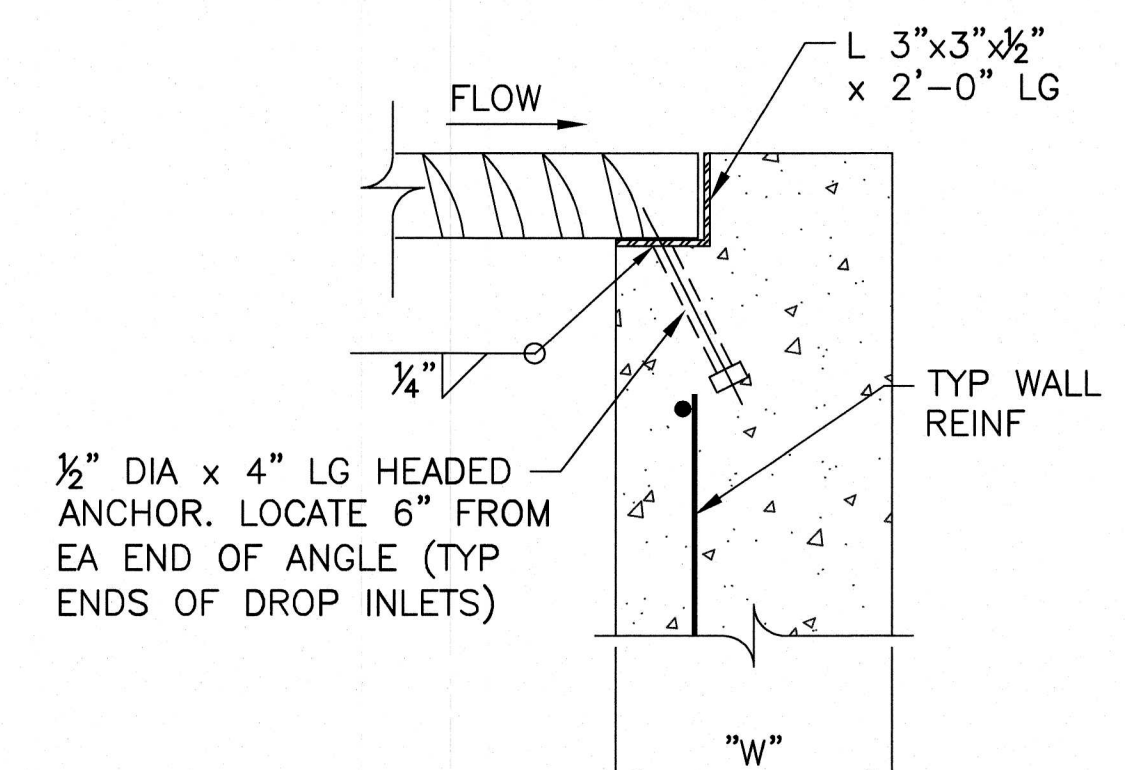
DETAIL
NTS



SECTION
NTS



DETAIL
NTS



SECTION
NTS

NOTES:

- ALL EXPOSED METALS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
- PROVIDE 1/2" MIN CLEARANCE ALL AROUND THE STEEL BEAM. DRY PACK AFTER INSTALLATION.
- WHEN REQUIRED BY LENGTH OF OPENING, PLATE ANGLE MAY BE DELIVERED IN SECTIONS AND BUTT WELDED IN PLACE.
- ALL GALVANIZED DAMAGED BY WELDING SHALL RECEIVE TWO COATS OF GALVALLOY OR APPROVED EQUAL.
- CONCRETE SHALL BE MODIFIED CLASS DA 4000 PSI. SEE SPECIAL PROVISIONS SECTION 501.
- ANGLE ANCHORS SHALL BE EMBEDDED MIDPOINT IN EACH ENDWALL AND EVENLY SPACED (MAXIMUM SPACING OF 2").
- FOR MODIFIED TYPE 'C' INLETS THAT ARE 10' DEEP OR LESS, SEE CCAUSD DWG. NO. 412.1.

HOWARD HUGHES COMPANY, LLC
A DELEWARD LIMITED LIABILITY COMPANY
CITY OF LAS VEGAS
10846 GRIFFITH PEAK DRIVE, SUITE 100
LAS VEGAS, NV 89135
PREPARED BY

STRUCTURAL DETAILS
MOD. TY C INLET
SUMMERLIN WEST VILLAGE 22
KETTLE BEND ROAD-SUNSET RUN
DRIVE TO KESTREL CREEK AVENUE

DRAWN BY: ###
DESIGNED BY: ###
CHECKED BY: ###
PROJECT NO: 18349
SCALE: N/A
HORIZ: N/A
VERT: N/A

PROFESSIONAL ENGINEER-STATE OF NEVADA
CHRISTOPHER WUNSCH
EXP. 6/30/22
CIVIL
No. 18349

09/25/2020
SHEET
S2
107 OF 107 SHEETS
DRAWING NO.
L20-01282
107/8449