

DS #: 5210.2

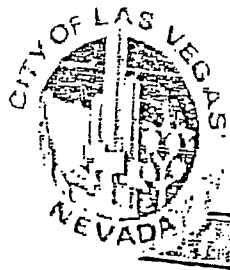
APN: 164-04-511-001

PROJECT: Summerlin V24 Parcels F6H - Units 1, 2 and 3 - Update #2

SUBMITTAL: A/H

SCANNED BY/DATE:

CHECKED BY/DATE:



CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM

DATE:

December 22, 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 V24 Parcels FGH - Units 1, 2 and 3 – Update #2

Cross Streets: Crossbridge Drive & Sky Vista Drive

File Number: F:\Depot\DSMemos\DS5210F.doc

Parcel Number: 164-04-511-001

Zoning Action: TMP-76536

FEMA Flood Zone YES NO **X**

Proposed Storm Drain YES **X** NO

COPIES TO:

RCI Engineering

Lennar Communities Nevada, LLC

Bart Anderson, P.E., DevCo

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	10/30/2019	12/2/2019	Not Approved	\$400.00	3627256: \$400
2 nd Submittal	1/23/2020	2/12/2020	Not Approved	\$400.00	3716412: \$400
Supplement	2/20/2020	2/24/2020	Conditional Approval	N/C	N/C
CCPW	4/2/2020	4/14/2020	Concurrence Recv'd	N/C	N/C
3 rd Submittal	9/15/2020	9/24/2020	Approved	\$100.00	3992803: \$100
4 th Submittal	12/3/2020	12/22/2020	See Comments Below	\$100.00	4089320: \$100
TOTAL FEES (LDDRS):				\$1,000.00	----

REMARKS:

4th Submittal: Update #2 to revise some storm drains from RCP to C900 PVC for Unit 2 Improvements only

3rd Submittal: Update to revise some storm drains from RCP to C900 PVC in compliance to recent changes of LVVWD and SNHD criteria

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

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

- Page 1 of the Update stated that the subject development is, quote: "The project is a 103 acre residential subdivision located between the Red Rock Wash and Crossbridge Drive in Summerlin Village 24 on the southwest corner of Hualapai Way and Mesa Park Drive in Summerlin Village 16A", end quote.

The subject site is seemingly not anywhere close to *Hualapai Way* or *Mesa Park Drive*. Conduct better quality control of work in the future studies.

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/04
AREA P-04

**UPDATE #2 TO THE
TECHNICAL DRAINAGE STUDY
For
SUMMERLIN VILLAGE 24 PARCELS FGH
Units 1, 2 and 3**

Prepared for:

**Lennar Communities Nevada LLC
9275 Russell Road, Suite 400
Las Vegas, NV 89148
Phone: (702) 736-9100
Fax: (702) 736-9200**

December 2020

PROJECT 3040.0057

**RCI Engineering
500 South Rancho Drive, Suite 17 * Las Vegas, NV 89106
Tel: 702.453.0800 * Fax: 702.453.0801
www.rcinevada.com**

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Summerlin Village 24 Parcels FGH Units 1, 2 and 3 Date: December 2020

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

East/West: Crossbridge Drive

b) Section: 33 Township: 20 South Range: 59 East

c) APN : 164-04-511-001

Name of Owner: Lennar Communities Nevada, LLC

Telephone No.: 702-739-9100 Fax No.: 702-739-9200 E-Mail Address: _____

Address: 9275 Russell Road, Suite 400, Las Vegas, NV 89148

Contact Person-Name: Chris Zrinyi, P.E. Telephone No.: 702-453-0800

* E-Mail Address: czrinyi@rcinevada.com Fax No.: 702-453-0801

Firm: RCI Engineering

Address: 500 South Rancho Drive, Suite 17, Las Vegas, Nevada 89106

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		

1. Total Owned Land Area: At Site: 103.8 acres +/- Being Developed/Disturbed: 103.8 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.): Residential

5. Approximate upstream land area which drains to the subject site: 3,300 acres +/-

6. Has the site drainage been evaluated in the past? ☒ YES ☐ NO If yes, please identify documentation: Technical Drainage Study for Summerlin Village 24 Parcels FGH Units 1,2, and 3(DS 5210)

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: east into the COS-3 Wash, the COS-4 Wash and south and west into the Redrock Conservation Area

8. Briefly describe your proposed schedule for the subject project: ASAP



Engineer's Seal

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

*New Required Field

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

	Revision	Date

Local Entity File No. _____

REFERENCE:

STANDARD FORM 1



RCI
ENGINEERING

December 2, 2020

City of Las Vegas
Flood Control
333 N Rancho Dr.
Las Vegas, NV 89106

**RE: Certification Letter for Paper and Digital Plans for the
 Update #2 to the Technical Drainage Study for Summerlin Village 24 Parcels FGH**

Mr. Sung,

This letter has been provided as certification that the paper version of the plans match the digital PDF plans on the CD submitted with the drainage study.

Sincerely,

RCI Engineering

Chris Zrinyi, P.E.



RCI
ENGINEERING

3040.0057

December 2, 2020

City Of Las Vegas Public Works
Flood Control Division
333 North Rancho Drive
Las Vegas, NV 89106

**Subject: Update #2 to the Technical Drainage Study for Summerlin Village 24
Parcels FGH Units 1, 2, and 3 (DS 5210E)**

The project is a 103 acre residential subdivision located between the Red Rock Wash and Crossbridge Drive in Summerlin Village 24 on the southwest corner of Hualapai Way and Mesa Park Drive in Summerlin Village 16A. A copy of the approval letter for the Original Study has been enclosed. Figure 1 (Vicinity Map), Figure 2 (Location Map), Figure 3a and 3b (FIRM Panel) and Figure 4 (201 MPU Facilities Map) from the Original Study have also been enclosed. The purpose of this update is to address some minor changes to the storm drain in Unit 2 of the Project. This Update will address only Unit 2 of the Project and if any changes are made to Unit 3 an update will be submitted at a later date to address those changes. Please note that in the original drainage study Unit 2 was the northern half of the Project and Unit 3 was the southern half. Due to water availability the Units were switched. Therefore, Unit 2 is now the southern half of the project. This change was previously made when the improvement plans for Unit 2 were submitted to the CLV Land Development. The Unit 2 plans have been conditionally approved for mylar signature.

Since the Original Study was approved the plans have been submitted to the Las Vegas Valley Water District (LVVWD) and Southern Nevada Health District (SNHD) for improvement plan review. There have been recent changes to the LVVWD and SNHD criteria for the vertical separation of domestic water and storm drain and for the horizontal alignment for the crossings that have caused the plans to be revised. In several cases the privately maintained storm drain has been changed from RCP to C900 PVC pipe to meet current LVVWD and SNHD criteria that all crossings not at 90 degrees must be constructed with water quality storm drain no matter the vertical separation. There are a couple locations where the storm drain manhole callouts have been revised to call out "use full strength grout with water tight joints and encase manhole with a minimum of 4-inches of cement slurry" to meet LVVWD and SNHD separation criteria from SDMH to water main. Additionally, the SNHD required additional separation from SDMH to SSMH which created some adjustments to the storm drain system. Unit 2 has four storm drain branches and the revisions to each branch (with corresponding P Sheets) will be discussed as follows:

Norfolk Pine Storm Drain (Sheets P-1, P-3, and P-4)

Pipe slope, length, and alignment were not changed, therefore an updated Standard Form 6 model was not required. The following pipes were changed to C900 storm drain.

Sheets P-1 and P-3

- 18" lateral from SDMH#3-1 to DI U3-26.
- 18" lateral from SDMH#3-2 to DI U3-40.
- 24" mainline from SDMH#3-3 to SDMH#3-2.

Primrose Grove Cul-de-sac Storm Drain (Sheet P-4)

Pipe slope, length, and alignment were not changed, therefore an updated Standard Form 6 model was not required. This run of pipe material was not changed. The only change is this profile used to be shown on Sheet P-7 and it has been moved to Sheet P-4.

Primrose Grove Lane Main Line Storm Drain (Sheets P-5, P-6, P-7 and P-8)

Pipe slope, length, and alignment were revised including the addition of a manhole to meet SNHD criteria. Updated Standard Form 6 models for the mainline and lateral stubs have been included. As shown on the revised plan and profiles sheets, the 100-year HGL remains a minimum of 1-foot below finished grade per Manual criteria. Changes to this system are as follows:

Sheet P-5

- 18" lateral from SDMH#3-7 to DI U3-27 changed to C900 SD.
- 18" lateral from SDMH#3-9 to DI U3-29 changed to C900 SD.
- Added SDMH#3-8A.
- Revised alignment and slope of 24" mainline.

Sheet P-6

- 18" lateral from SDMH#3-11 to DI U3-31 changed to C900 SD.
- 18" lateral from SDMH#3-13 to DI U3-33 changed to C900 SD.
- Changed mainline 30" SD to C900 Sd from SDMH#3-14 to SDMH#3-13.
- Revised alignment and slope of 30" and 24" mainline.

Sheet P-8

- 18" lateral from SDMH#3-7 to DI U3-27 changed to C900 SD.
- 18" lateral from SDMH#3-9 to DI U3-29 changed to C900 SD.
- 18" lateral from SDMH#3-11 to DI U3-31 changed to C900 SD.
- 18" lateral from SDMH#3-13 to DI U3-33 changed to C900 SD.
- Revised length and slope of all 18" storm drains on this sheet.

Heritage Bend Drive Main Line Storm Drain (Sheets P-2 and P-7)

Pipe slope, length, and alignment were revised to meet SNHD criteria. Updated Standard Form 6 models for the mainline and lateral stubs have been included. As shown on the revised plan and profiles sheets, the 100-year HGL remains a minimum of 1-foot below finished grade per Manual criteria. Changes to this system are as follows:

Sheets P-2 and P-7

- 18" lateral from SDMH#3-17 to DI U3-35 changed to C900 SD.
- Changed mainline 24" SD to C900 SD from SDMH#3-14 to SDMH#3-16.
- Revised alignment and slope of 24" mainline from SDMH#3-14 to SDMH#3-16

As shown on the revised plan and profiles sheets, the 100-year HGL remains a minimum of 1-foot below finished grade per Manual criteria. A copy of the plans that were approved with the Original Study have been enclosed so you can see that the revisions are minor and have not had a negative impact to the storm drain system. If you have any questions or require any additional information please do not hesitate to contact me (702-998-2104).

Sincerely,

RCI Engineering



Chris Zrinyi, P.E.

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: September 24, 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 Village 24 Parcels FGH - Units 1, 2 and 3 - Update		COPIES TO:
Cross Streets:	Crossbridge Drive & Sky Vista Drive	Lennar Communities Nevada, LLC
File Number:	F:\Depot\DSMemos\DS5210E.doc	Bart Anderson, P.E., DevCo
Parcel Number:	164-04-511-001	CCPW
Zoning Action:	TMP-76536	BLM
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	10/30/2019	12/2/2019	Not Approved	\$400.00	3627256: \$400
2 nd Submittal	1/23/2020	2/12/2020	Not Approved	\$400.00	3716412: \$400
Supplement	2/20/2020	2/24/2020	Conditional Approval	N/C	N/C
CCPW	4/2/2020	4/14/2020	Concurrence Recv'd	N/C	N/C
3 rd Submittal	9/15/2020	9/24/2020	See Comments Below	\$100.00	3992803: \$100
TOTAL FEES (LDDRS):				\$900.00	----

REMARKS:

3rd Submittal: Update to revise some storm drains from RCP to C900 PVC in compliance to recent changes of LVVWD and SNHD criteria

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

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

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/04
AREA P-04

PROJECT SITE



**SUMMERLIN VILLAGE 24
PARCEL FGH UNITS 1, 2 AND 3**

LENNAR

**FIGURE 1
VICINITY MAP**

RCI Engineering

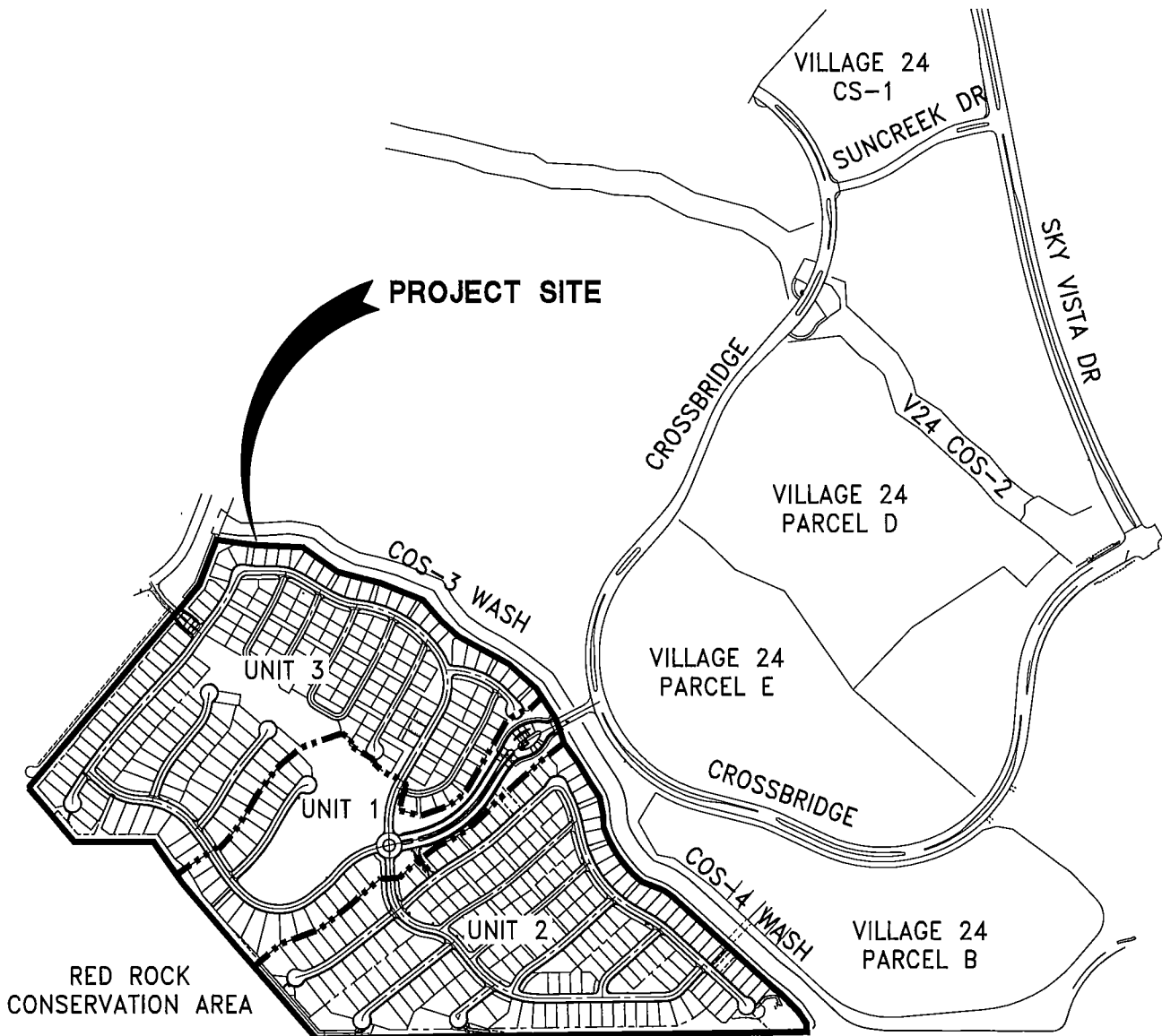
500 S. RANCHO DRIVE, SUITE 17
LAS VEGAS, NV 89106
PH#702.453.0800 FAX#702.453.0801



400' 0' 400' 800'



SCALE: 1" = 800'



----- PHASE LINE

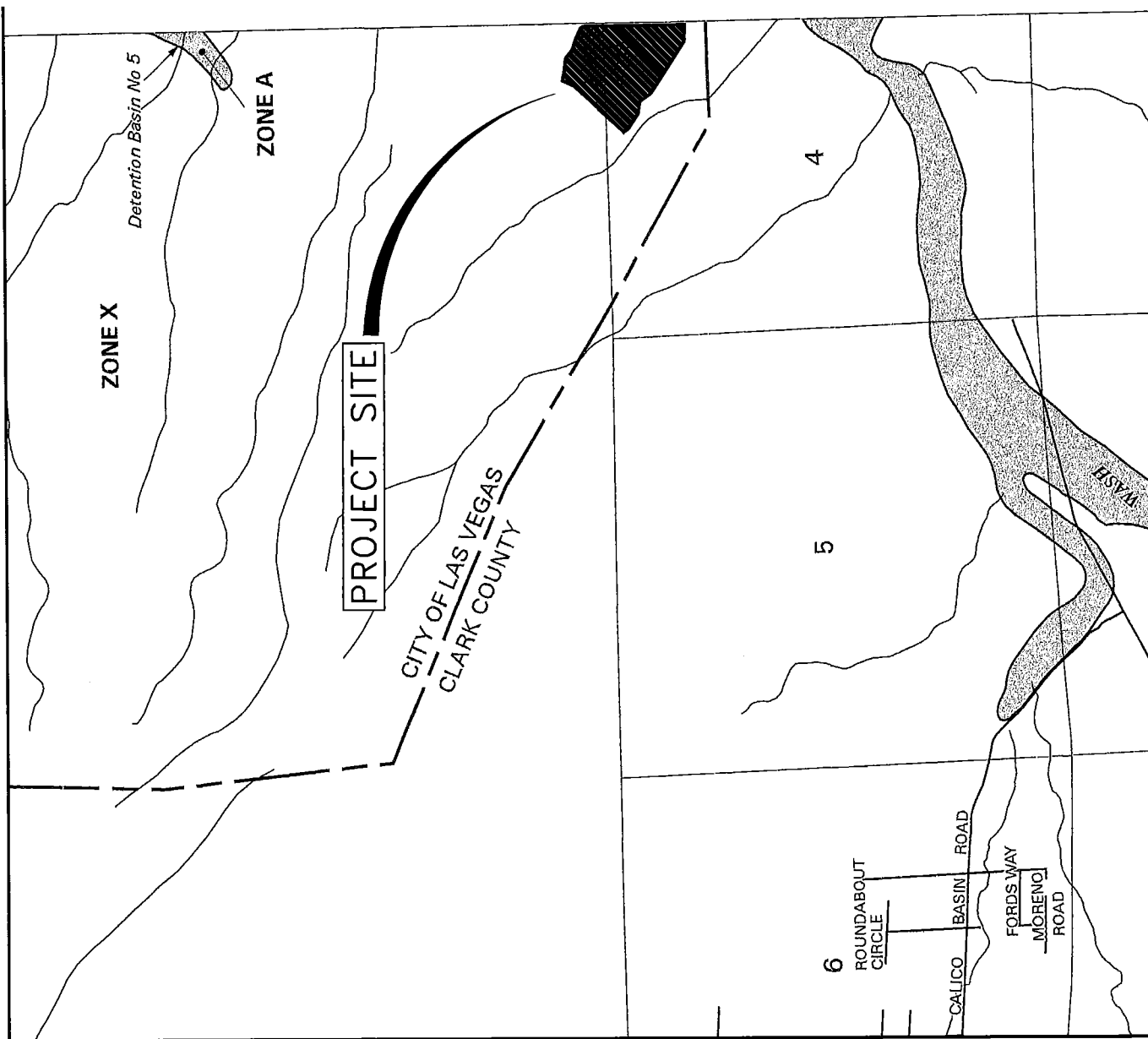
SUMMERLIN VILLAGE 24 PARCEL FGH UNITS 1-3

LENNAR

FIGURE 2 VICINITY MAP

RCI Engineering

500 S. RANCHO DRIVE, SUITE 17
LAS VEGAS, NV 89106
PH#702.453.0800 FAX#702.453.0801



PANEL 2125 E

FIRM
FLOOD INSURANCE RATE MAP
CLARK COUNTY,
NEVADA AND
INCORPORATED AREAS

PANEL 2125 OF 4090

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:	COMMUNITY	NUMBER	PANEL	SUFFIX
	LAS VEGAS, CITY OF	325276	2125	E
	CLARK COUNTY	320003	2125	E
	UNINCORPORATED AREAS			

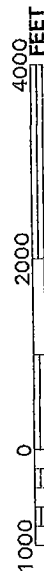
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
32003C2125 E

MAP REVISED:
SEPTEMBER 27, 2002

MAP SCALE 1" = 2000'

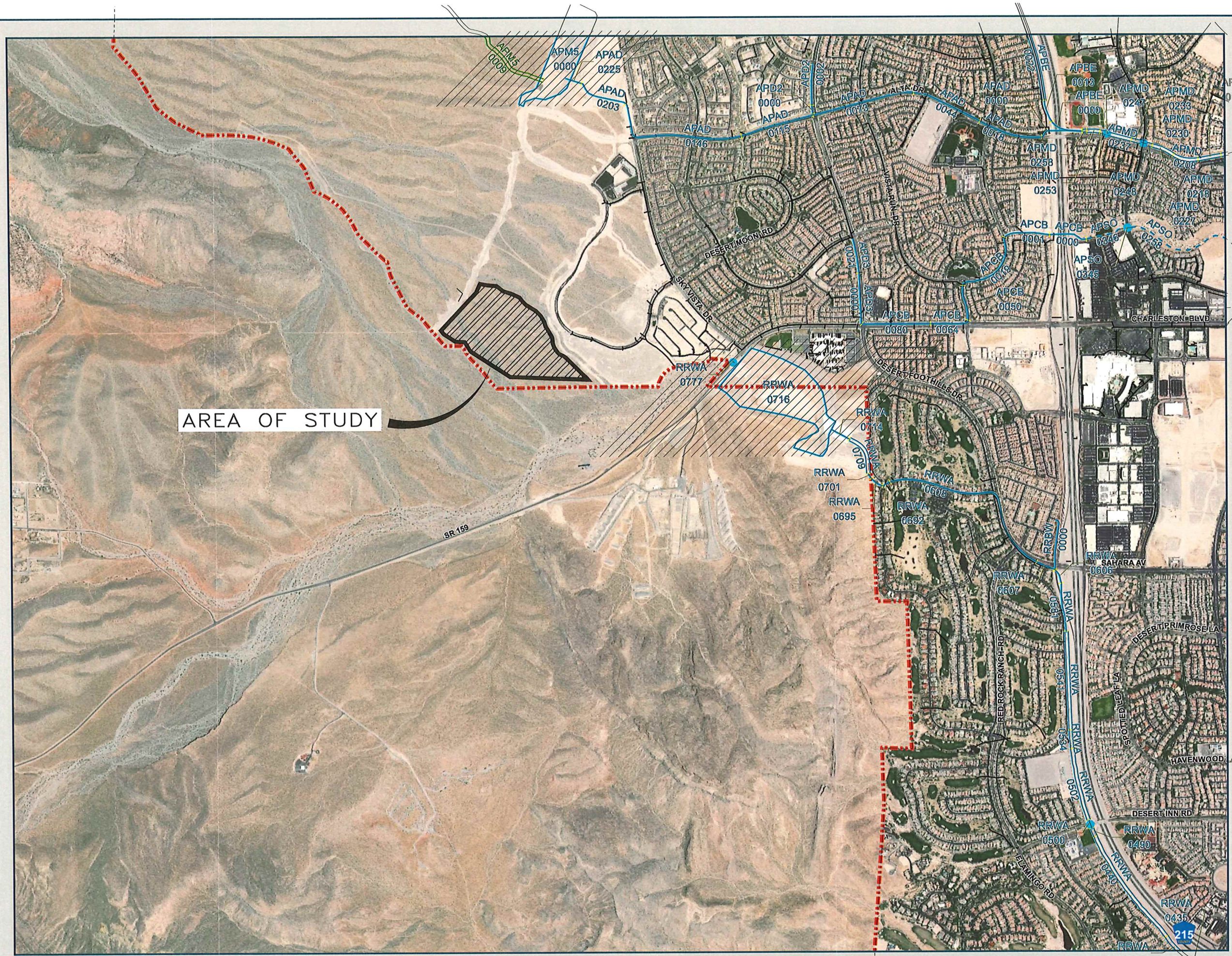


SUMMERLIN VILLAGE 24 PARCEL FGH
LENNAR

FIGURE 3.B
F.I.R.M. MAP

RCI Engineering

500 S. RANCHO DRIVE, SUITE 17 LAS VEGAS, NV 89106
PH#702.453.0800 FAX#702.453.0801

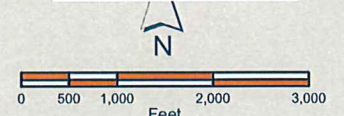


2018
LAS VEGAS VALLEY
FLOOD CONTROL
MASTER PLAN UPDATE

**FIGURE F-27
FLOOD CONTROL FACILITIES
LEGEND**

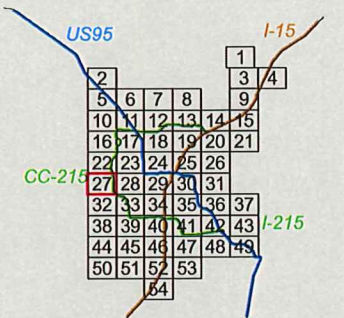
- Ultimate Development Boundary
- Existing Facilities
- Category A Proposed Facilities
- Category B Proposed Facilities
- Local Existing Facilities
- Detention Basin
- Culvert or Bridge Crossing
- Stormdrain
- Lined Channel
- Unlined Channel
- X
X
X
X
 Levee/Dike
- Natural Wash/Floodway
- +
+
+
+
 ID-Mile Separator
- Remove & Replace/Parallel Facilities**
- Category A**
- Channel
- Stormdrain
- Crossing
- Category B**
- Channel
- Stormdrain
- Crossing

FIGURE 4



Scale: 1 inch = 2,000 feet

AerialSource: Esri World Imagery 2017



ATKINS
Member of the SNC-Lavalin Group

Louis Berger

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN-MAINLINE PRIMROSE GROVE CURRENT UNIT 2

DATE: 12/01/20

[illegible]

For DI's 33 AND 34

Junction Head Loss Calculation			
Known			
Diameter of Pipe 1 (in)	24.0		
Diameter of Pipe 2 (in)	30.0		
Diameter of Pipe 3 (in)	18.0		
Diameter of Pipe 4 (in)*	18.0		
Flow in Pipe 1 (cfs)	48		
Flow in Pipe 2 (cfs)	62		
Flow in Pipe 3 (cfs)	7		
Flow in Pipe 4 (cfs)*	7		
Angle of Pipe 3	56		
Angle of Pipe 4*	60		
*Optional			
Headloss is applied at Entrance to Junction			
Solve For		Insert Loss in Misc. Loss Column and leave Junction Loss Column Blank	
Area of Pipe 1 (ft²)	3.14		
Area of Pipe 2 (ft²)	4.91		
Area of Pipe 3 (ft²)	1.77		
Area of Pipe 4 (ft²)	1.77		
Head Loss at Junction (ft)	0.66		
Equation Used:			
Incorporates Pressure plus Momentum Laws			
$H_j = ((Q_2^2/A_{2g} - Q_1^2/A_{1g} - Q_3^2 \cos(\text{Ang}3)/A_{3g} - Q_4^2 \cos(\text{Ang}4)/A_{4g}) * 2 / (A_1 + A_2) - D_1 + D_2)$			

$Q_2^2/(A_2*32.2)$

24.32

$Q_1^2/(A_1*32.2)$

22.78

$Q_3^2*\text{COS}(\text{ANG}3)/(A_3*32.2)$

0.48

$Q_4^2*\text{COS}(\text{ANG}4)/(A_4*32.2)$

0.43

$(2/(A_1+A_2))$

0.25

$(-D_1/12)+(D_2/12)$

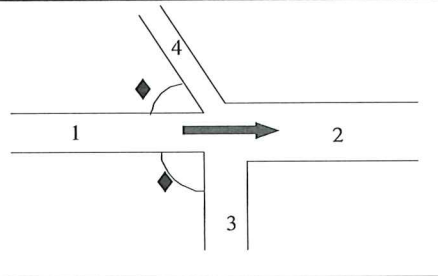
0.50

0.656914

Note: This calculation only works properly when the storm drain is full. It may result in a negative result if Pipe 2 is partial flow.

For DI's 31 AND 32

Junction Head Loss Calculation			
Known			
Diameter of Pipe 1 (in)	24.0		
Diameter of Pipe 2 (in)	24.0		
Diameter of Pipe 3 (in)	18.0		
Diameter of Pipe 4 (in)*	18.0		
Flow in Pipe 1 (cfs)	34		
Flow in Pipe 2 (cfs)	48		
Flow in Pipe 3 (cfs)	7		
Flow in Pipe 4 (cfs)*	7		
Angle of Pipe 3	45		
Angle of Pipe 4*	59		
*Optional			
Headloss is applied at Entrance to Junction			
Solve For		Insert Loss in Misc. Loss Column and	
Area of Pipe 1 (ft ²)		3.14	
Area of Pipe 2 (ft ²)		3.14	
Area of Pipe 3 (ft ²)		1.77	
Area of Pipe 4 (ft ²)		1.77	
Head Loss at Junction (ft) 3.28			
Equation Used:			
Incorporates Pressure plus Momentum Laws			
$H_j = ((Q_2^2/A_{2*g} - Q_1^2/A_{1*g} - Q_3^2 \cos(\text{Ang}3)/A_{3*g} - Q_4^2 \cos(\text{Ang}4)/A_{4*g}) * 2 / (A_1 + A_2) - D_1 + D_2)$			



$Q_2^2/(A_2*32.2)$

22.78

$Q_1^2/(A_1*32.2)$

11.43

$Q_3^2*\text{COS}(\text{ANG}3)/(A_3*32.2)$

0.61

$Q_4^2*\text{COS}(\text{ANG}4)/(A_4*32.2)$

0.44

$(2/(A_1+A_2))$

0.32

$(-D_1/12)+(D_2/12)$

0.00

3.277329

Note: This calculation only works properly when the storm drain is full. It may result in a negative result if Pipe 2 is partial flow.

For DI's 29 AND 30

Junction Head Loss Calculation			
Known			
Diameter of Pipe 1 (in)	24.0		
Diameter of Pipe 2 (in)	24.0		
Diameter of Pipe 3 (in)	18.0		
Diameter of Pipe 4 (in)*	18.0		
Flow in Pipe 1 (cfs)	20		
Flow in Pipe 2 (cfs)	34		
Flow in Pipe 3 (cfs)	7		
Flow in Pipe 4 (cfs)*	7		
Angle of Pipe 3	76		
Angle of Pipe 4*	56		
*Optional			
Headloss is applied at Entrance to Junction			
Solve For		Insert Loss in Misc. Loss Column and	
Area of Pipe 1 (ft ²)		3.14	
Area of Pipe 2 (ft ²)		3.14	
Area of Pipe 3 (ft ²)		1.77	
Area of Pipe 4 (ft ²)		1.77	
Head Loss at Junction (ft) 2.16			
Equation Used:			
Incorporates Pressure plus Momentum Laws			
$H_j = ((Q_2^2/A_{2*g} - Q_1^2/A_{1*g} - Q_3^2 \cos(\text{Ang}3)/A_{3*g} - Q_4^2 \cos(\text{Ang}4)/A_{4*g}) * 2 / (A_1 + A_2) - D_1 + D_2)$			

$Q_2^2/(A_2*32.2)$

11.43

$Q_1^2/(A_1*32.2)$

3.95

$Q_3^2 \cos(\text{ANG}3)/(A_3*32.2)$

0.21

$Q_4^2 \cos(\text{ANG}4)/(A_4*32.2)$

0.48

$(2/(A_1+A_2))$

0.32

$(-D_1/12)+(D_2/12)$

0.00

2.159259

Note: This calculation only works properly when the storm drain is full. It may result in a negative result if Pipe 2 is partial flow.

Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 2 Lateral to DI 27

DATE: 12/01/20

[illegible]

Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 3 Lateral to DI 29

DATE: 12/01/20

[illegible]

Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 2 Lateral to DI 30

DATE: 12/01/20

Storm Drain Manning's n (typ=0.013)= 0.013															Inlet Structure Type or K _i = D										Headwall: Square Edge (cut concrete and CMP)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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FROM	TO	T/R	D	SPAN	RISE	AREA	HYD RAD		D/S	U/S	(ft)	(%)	(ft²)		(cfs)	(ft/s)	(ft)	(ft/ft)	(ft/ft)	H _f	H _f	Θ	K _{mh}	H _{mh}	Θ	K _j	H _j	Inlet/ Cont	K _i	H _e	Θ	K _e	H _e	R _{bend}	Θ	K _b	H _b	H _m	Total	U/S EGL	U/S HGL	U/S EGL	U/S HGL	PART FLOW	CRTL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 2 Lateral to DI 31

DATE: 12/01/20

[illegible]

Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 2 Lateral to DI 32

DATE: 12/01/20

[illegible]

Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 2 Lateral to DI 33

DATE: 12/01/20

[illegible]

Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 2 Lateral to DI 34

DATE: 12/01/20

[illegible]

Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 2 HERITAGE BEND MAINLINE TO DI U3-35

DATE: 12/02/20

[illegible]

Summary of Results

[illegible]

Storm Drain Hydraulics Calculations

SUMMERLIN VILLAGE 24 PARCELS FGH STORM DRAIN Unit 2 Lateral to DI U3-36

DATE: 12/01/20

[illegible]

Summary of Results

[illegible]

DISCLAIMER NOTE:

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

Call before you Dig

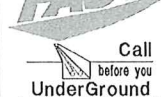
AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.



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BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345W6
RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA
DR.

ELEVATION = 1011.422 METERS (NAVY '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVY '88)

BASIS OF BEARINGS

NORTH 05°30'00" WEST, BEING THE BEARING OF THE WEST
LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION
33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS
SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE
AT THE CLARK COUNTY, NEVADA RECORDERS OFFICE

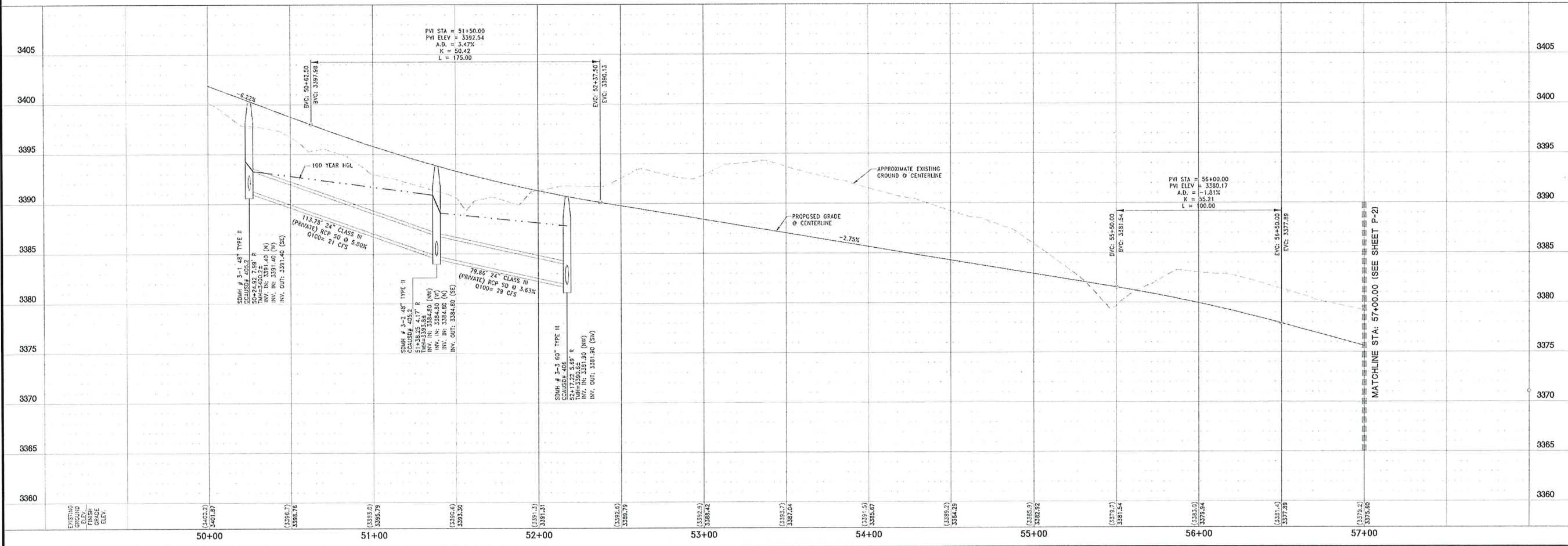
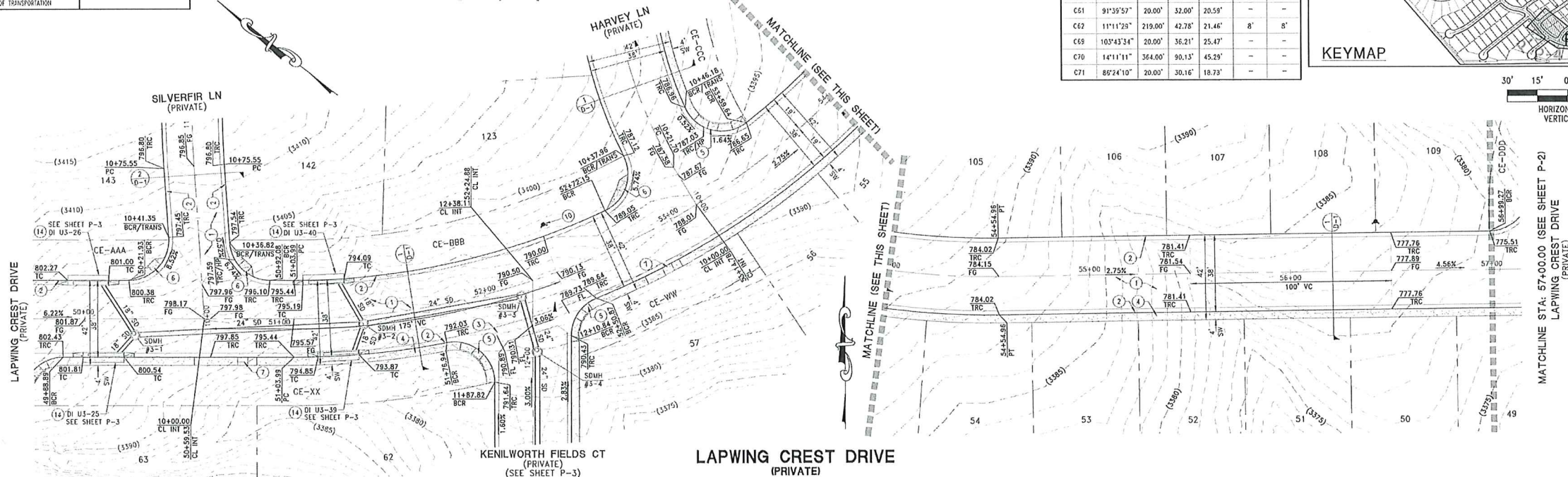
CONSTRUCTION NOTES

- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1
- CONSTRUCT 24" W" CURB PER CCAUSD #217.3 S1
- CONSTRUCT 8" MODIFIED (IN CURB) CROSS CUTTER PER CCAUSD #217.3 S1
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE I) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE III) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6' HIGH WROUGHT IRON FENCE AND/OR GATES
- 2% MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS
- CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 15" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 17.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT FIRE EMERGENCY CRASH GATE PER DETAIL 67 ON SHEET D-4
- INSTALL 8' LONG 7" WIDE RIP RAP D50= 8"
- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4' WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=4", THICKNESS=8"
- SEE GRADING SHEETS FOR DETAILS
- CONSTRUCT HEADWALL PER DETAIL DWG. NO. P-2.5.1
- CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

CURVE TABLE					
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A" "B"
C18	30°31'53"	402.00'	214.22'	109.72'	- -
C19	68°01'36"	20.00'	23.75'	13.50'	4.5' 12'
C20	73°11'12"	20.00'	25.55'	14.85'	- -
C22	100°54'51"	20.00'	35.25'	24.22'	8' 8'
C23	105°44'51"	402.00'	76.58'	38.40'	- -
C24	90°00'00"	20.00'	31.42'	20.00'	4.5' 12'
C50	17°41'36"	219.00'	67.63'	34.09'	- -
C51	90°00'00"	20.00'	31.42'	20.00'	- -
C52	5°21'32"	455.00'	43.49'	21.76'	- -
C59	86°17'52"	20.00'	30.12'	18.75'	- -
C60	25°02'25"	364.00'	159.82'	81.22'	- -
C61	91°35'57"	20.00'	32.00'	20.58'	- -
C62	11°11'28"	219.00'	42.78'	21.46'	8' 8'
C69	105°43'34"	20.00'	36.21'	25.47'	- -
C70	14°11'11"	364.00'	90.13'	45.29'	- -
C71	85°14'10"	20.00'	30.16'	18.73'	- -



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'



FOR REVIEW ONLY

REV	DATE	DESCRIPTION
1	10/17/20	ISSUED FOR PERMIT

DATE: 10/17/20
SCALE: 1" = 30'
VERT. SCALE: 1" = 5'
DRAWN BY: SC
CHECKED BY: AW
APPROVED BY: CE
PROJECT #:

LENNAR
9275 W. RUSSELL RD. SUITE 400 LAS VEGAS, NV 89148
PHONE: (702) 736-9100 FAX: (702) 736-9200

RCI ENGINEERING
500 SOUTH PARK DRIVE, SUITE 17, LAS VEGAS, NV 89106
PHONE: (702) 453-0800 FAX: (702) 453-0801

IMPROVEMENT PLANS FOR
SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
LAPWING CREST DRIVE STA: 50+00.00-57+00.00
CITY OF LAS VEGAS
NEVADA

DATE: 10/17/20
DRAWING
P-1
SHEET 15 OF 22
CLV DRAWING NUMBER
CLV PROJECT #

ORIGINAL APPROVED

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

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CITY OF LAS VEGAS BENCHMARK 7LV09 34SW6

RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA
DR.

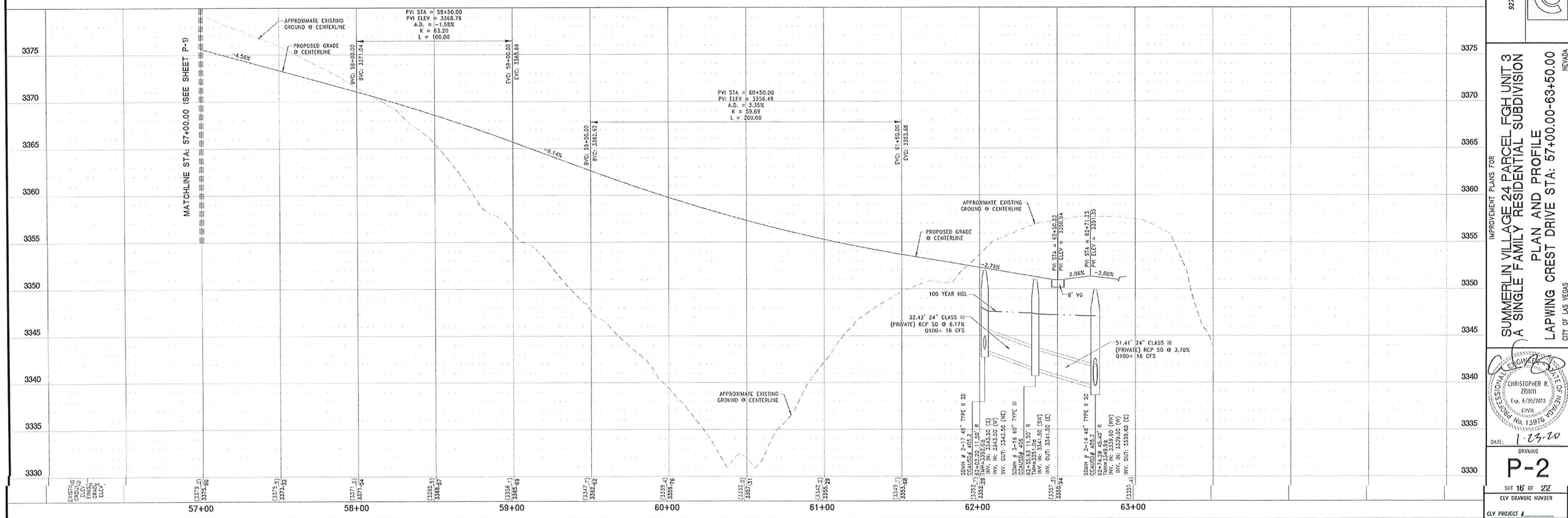
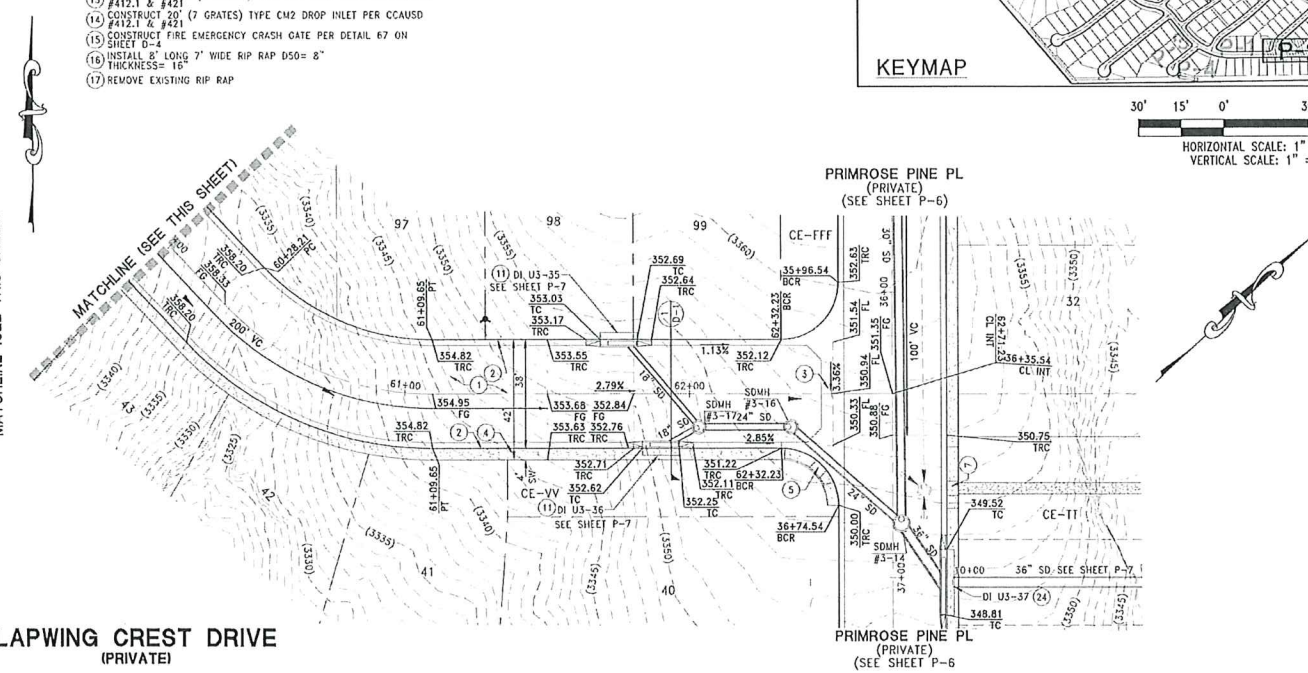
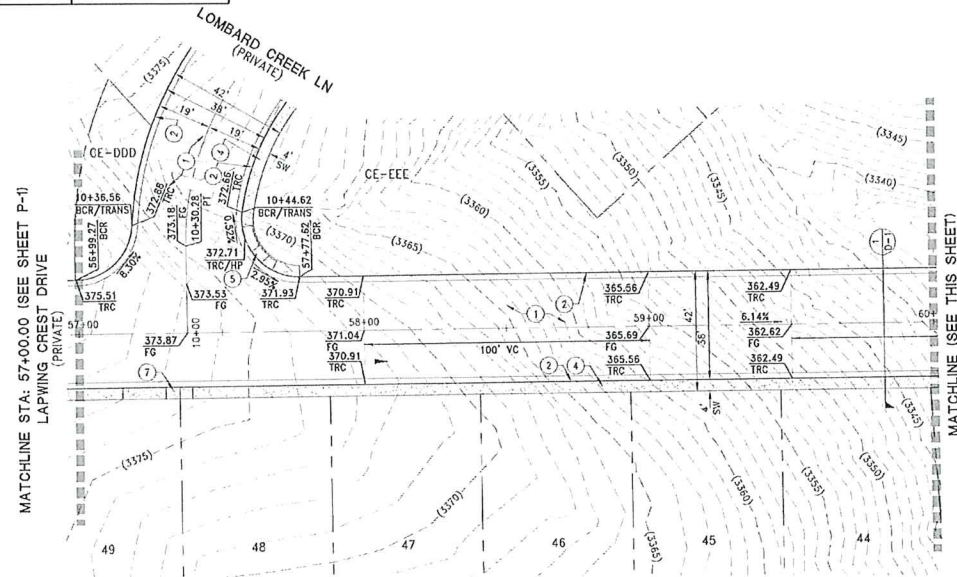
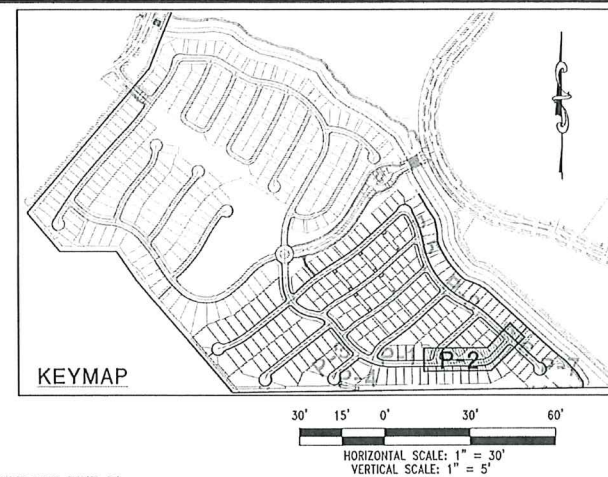
ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '89)

NORTH 05°3'00" WEST, BEING THE BEARING OF THE WEST
LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION
33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS
SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE
AT THE CLARK COUNTY, NEVADA RECORDERS OFFICE.

CURVE TABLE						
CURVE #	DELTA	RAIUS	LENGTH	TANGENT	"A"	"B"
C16	90°00'00"	20.00'	31.42'	20.00'	4.5"	12'
C17	46°39'32"	119.00'	66.91'	51.32'	—	—
C71	85°24'10"	20.00'	30.16'	18.78'	—	—
C72	17°08'51"	119.00'	35.61'	17.94'	—	—
C78	99°13'11"	20.00'	34.23'	23.10'	9.5"	4.5'
C80	22°17'56"	81.00'	31.52'	15.96'	—	—
C81	90°00'00"	20.00'	31.42'	20.00'	—	—
C83	49°34'59"	81.00'	57.37'	29.55'	—	—

- 1) CONSTRUCT 2" AC PAVEMENT PER DETAILS 1 THRU 3 ON
- 2) CONSTRUCT 24" R* CURB PER CCAUSD #217.3 S1
- 3) CONSTRUCT 8" MODIFIED (R* CURB) CROSS GUTTER PER
SECTION IMPROVEMENT AND DAD #35-64
- 4) CONSTRUCT 8" SIDEWALK PER CCAUSD #234
(5" THICK WHEN ADJACENT TO "R" CURBS)
- 5) CONSTRUCT SIDEWALK PER CCAUSD #234 (SEE PLAN)
DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN
AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- 6) CONSTRUCT SIDEWALK PER CCAUSD #235 (CASE III) SEE PLAN
DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE III) SEE PLAN
AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- 7) CONSTRUCT SIDEWALK RAMPS USING ARROW LITE TRUNCATED
DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN
AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- 8) CONSTRUCT 6" WIDE PEDESTRIAN ACCESS GATE
- 9) CONSTRUCT 6" HIGH WOODEN IRON FENCE AND/OR GATES
- 10) 2% MAX GRADING ADJUSTED TO FIRM HYPODROM PER PUBLIC
FIRM HYPODROM INSTALLATION DETAIL ON UTILITY SHEETS
- 11) CONSTRUCT 15.5 (6 GRATES) TYPE CM2 DROP INLET PER
CCAUSD #412.1 & #421
- 12) CONSTRUCT 15.5 (6 GRATES) TYPE CM2 DROP INLET PER
CCAUSD #412.1 & #421
- 13) CONSTRUCT 17.5 (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD
#412.1 & #421
- 14) CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD
#412.1 & #421
- 15) CONSTRUCT FIRE EMERGENCY CRASH GATE PER DETAIL 67 ON
SHEET D-4
- 16) CONSTRUCT 8" WIDE R* CURB PER CCAUSD #217.3 S1
THICKNESS=16"
- 17) REMOVE EXISTING RIP RAP

- (18) INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- (19) INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- (20) 3' TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- (21) CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- (22) 4" WIDE / VARIOUS LENGTH LANDSCAPE ROCK 050#4", THICKNESS=8" SEE GRADING SHEETS FOR LIMITS
- (23) CONSTRUCT HEADWALL PER NDOT DWG. NO. R-2.5.1
- (24) CONSTRUCT 22.5" (Ø GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- (25) CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1



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KCI ENGINEERING
500 SOUTH RANCHO DRIVE, SUITE 17, LAS VEGAS, NV 89102

MAIL: 702.453.0000 FAX: 702.453.0001

IMPROVEMENT PLANS FOR

SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3
A SINGLE FAMILY RESIDENTIAL SUBDIVISION

PI AN AND PROFILE

APWING CREST DRIVE STA: 57+00.00-63+50.00

CITY OF LAS VEGAS
NEVADA



 DATE: 1-29-20

 DRAWING

 P-2

 SHT 16 of 22

 CLV DRAWING NUMBER

 CLV PROJECT #

\\p:\3040_LE\ip\0057_Summerlin_103\CIVIL\pS\Unit 3\S0007_P-02.dwg scarabay 1/17/20 11:04am

DISCLAIMER NOTE:

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1-702-227-2929

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345W6

RISET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA
DR.

ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS

NORTH 09°36'00" WEST, BEING THE BEARING OF THE WEST
LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION
33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS
SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE
AT THE CLARK COUNTY, NEVADA RECORDERS OFFICE

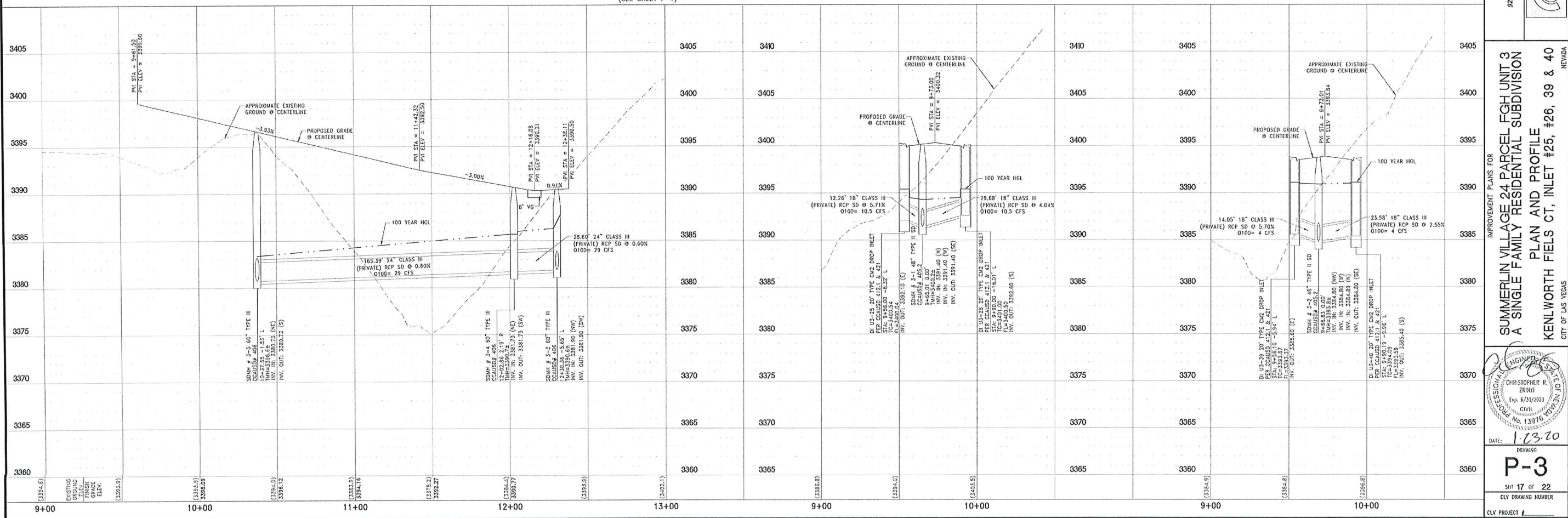
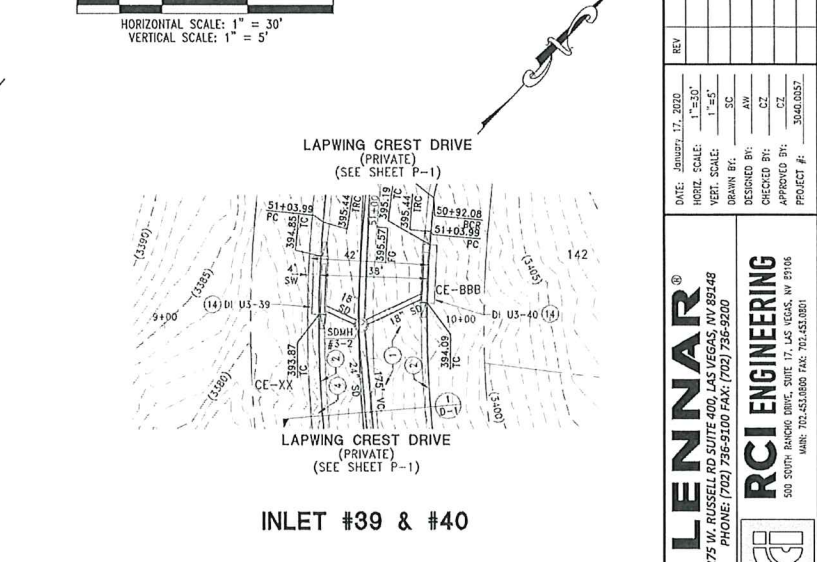
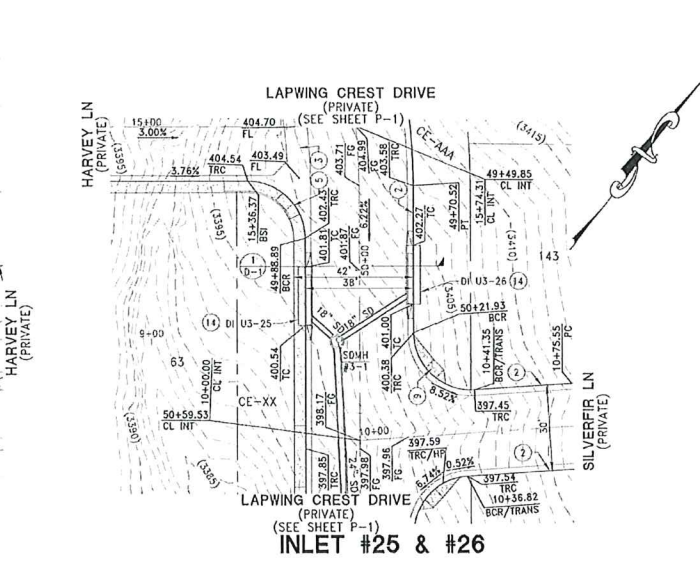
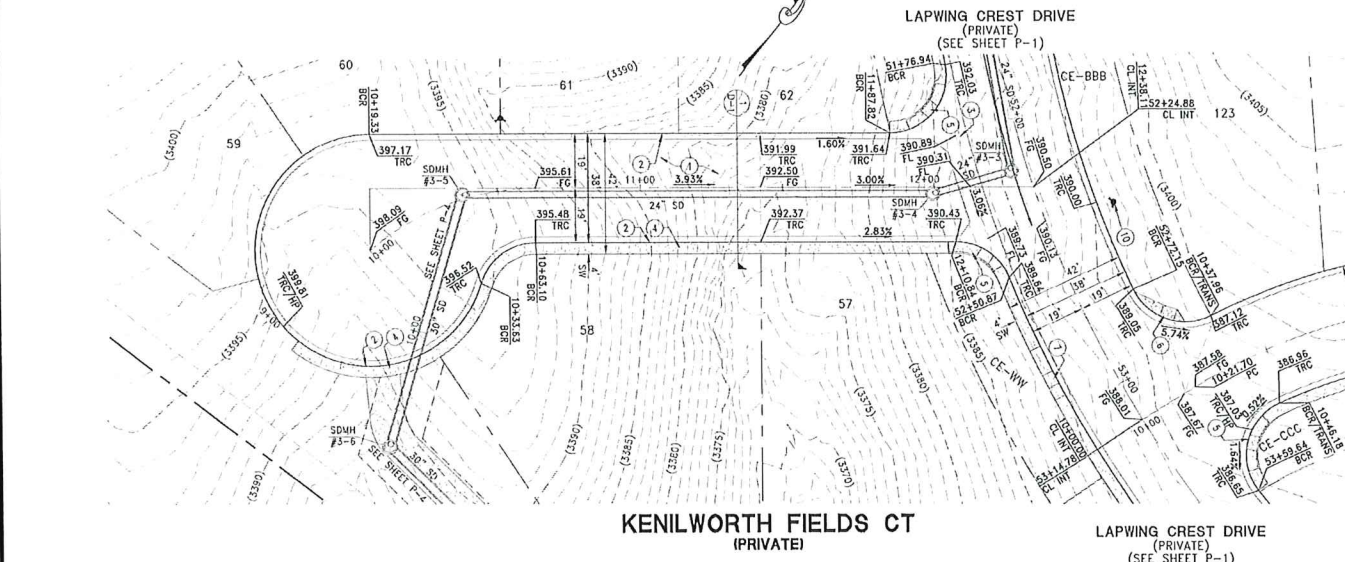
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A"	"B"
C18	30°31'53"	402.00'	214.22'	109.72'	4.5'	12'
C19	69°01'36"	20.00'	23.75'	13.50'	-	-
C20	73°11'12"	20.00'	25.55'	14.55'	-	-
C21	68°54'53"	40.50'	48.71'	27.79'	8'	8'
C22	100°54'51"	20.00'	35.33'	24.22'	-	-
C23	10°54'51"	402.00'	76.58'	38.40'	4.5'	12'
C24	90°00'00"	20.00'	31.42'	20.00'	-	-
C50	17°41'38"	219.00'	67.63'	34.09'	-	-
C51	90°00'00"	20.00'	31.42'	20.00'	-	-
C59	68°17'52"	20.00'	30.12'	18.75'	-	-
C60	25°02'25"	361.00'	159.82'	81.22'	-	-
C61	91°33'57"	20.00'	32.00'	20.59'	8'	8'
C62	11°11'23"	219.00'	42.78'	21.46'	-	-
C65	7°32'15"	435.00'	57.23'	28.65'	-	-
C69	10°54'51"	20.00'	36.21'	25.47'	-	-
C78	29°24'42"	181.00'	92.91'	47.50'	-	-

CONSTRUCTION NOTES

- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1
- CONSTRUCT 24" R" CURB PER CCAUSD #217.3 S1
- CONSTRUCT 8" MODIFIED (R" CURB) CROSS CUTTER PER SUMMERLIN IMPROVEMENT STD DWG #S-62
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- (5" THICK WHEN ADJACENT TO "R" CURB)
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE I) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE III) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
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- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- 3" TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4" WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=4", THICKNESS=8"
- CONSTRUCT HEADWALL PER NDOT DWG. NO. R-2.5.1
- CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'



LENNAR

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RCI ENGINEERING

500 SOUTH RANCH DRIVE, SUITE 17, LAS VEGAS, NV 89106
MAIN: 702-451-8800 FAX: 702-451-0001

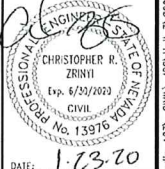
IMPROVEMENT PLANS FOR

SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3

A SINGLE FAMILY RESIDENTIAL SUBDIVISION

PLAN AND PROFILE

KENILWORTH FIELDS CT, INLET #25, #26, 39 & 40



DATE: 1-23-20
DRAWING
P-3
SHEET 17 OF 22
CLV DRAWING NUMBER
CLV PROJECT #

ORIGINAL
APPROVED

DISCLAIMER NOTE:

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

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BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 34SW6

RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA DR.

ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS

NORTH 05°36'00" WEST, BEING THE BEARING OF THE WEST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDERS OFFICE

CURVE TABLE						
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A"	"B"
C20	73°11'12"	20.00'	25.55'	14.85'	-	-
C21	68°54'53"	40.50'	48.71'	27.79'	-	-

CONSTRUCTION NOTES

- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1
- CONSTRUCT 24" R' CURB PER CCAUSD #217.3 S1
- CONSTRUCT 4" MODIFIED (R' CURB) CROSS CUTTER PER CCAUSD #217.3 S1
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES
- PER MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS
- CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 15" (5 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 17.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT FIRE EMERGENCY CRASH GATE PER DETAIL 67 ON SHEET D-1
- INSTALL 8" LONG 7' WIDE RIP RAP D50= 8" THICKNESS= 16"
- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4" WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=4", THICKNESS=8"
- SEE GRADING SHEETS FOR LIMITS
- CONSTRUCT HEADWALL PER DETAIL DWG. NO. R-2.5.1
- CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

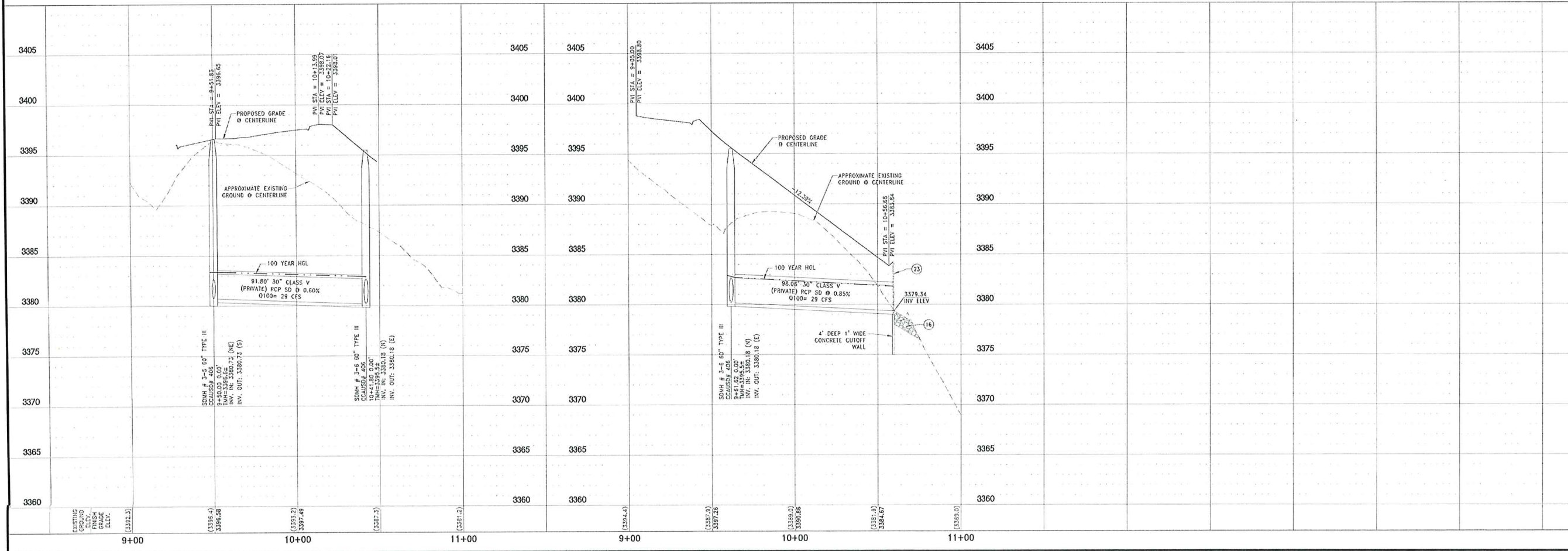
KENILWORTH FIELDS CT
(PRIVATE)
(SEE SHEET P-3)

SEE THIS SHEET RIGHT

SEE THIS SHEET LEFT

STORM DRAIN

STORM DRAIN



FOR REVIEW ONLY

DATE: 2/20/2020
HORIZ. SCALE: 1" = 30'
VERT. SCALE: 1" = 5'
DRAWN BY: SC
DESIGNED BY: AY
CHECKED BY: CZ
APPROVED BY: CZ
PROJECT #: 3040.D057

REVISIONS

DESCRIPTION

BY

DATE

LENNAR
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IMPROVEMENT PLANS FOR
SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
STORM DRAIN

NEVADA

DATE: 1-17-20
DRAWING
P-4
SHEET 18 OF 22
CLV DRAWING NUMBER
CLV PROJECT #

PROFESSIONAL SEAL
CHRISTOPHER R. ZSIVNY
Exp. 6/30/2020
CIVIL
No. 13976

1-17-20

CLV PROJECT #

CLV DRAWING NUMBER

SHEET 18 OF 22

DRAWING

DATE: 1-17-20

ORIGINAL APPROVED

DISCLAIMER NOTE:

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

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BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345SW6
RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA
DR.

ELEVATION = 1011.422 METERS (NAVD '85)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS

NORTH 05°36'00" WEST, BEING THE BEARING OF THE WEST
LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION
33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, W.D.M. AS
SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE
AT THE CLARK COUNTY, NEVADA RECORDERS OFFICE

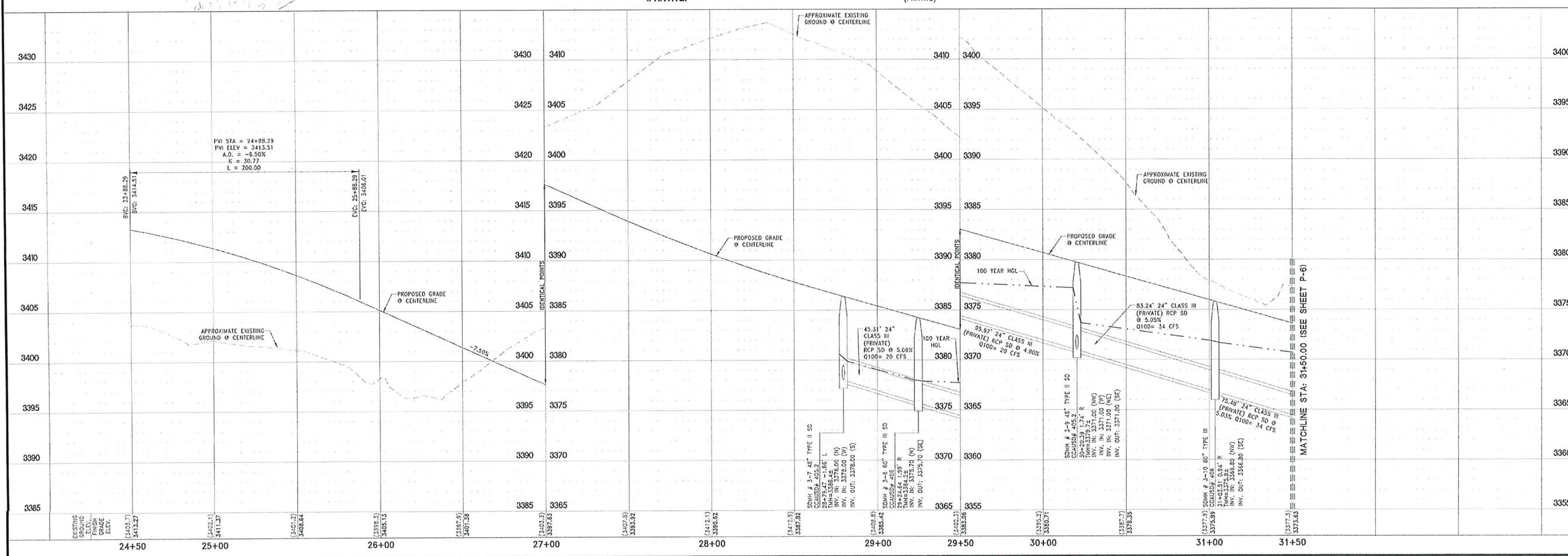
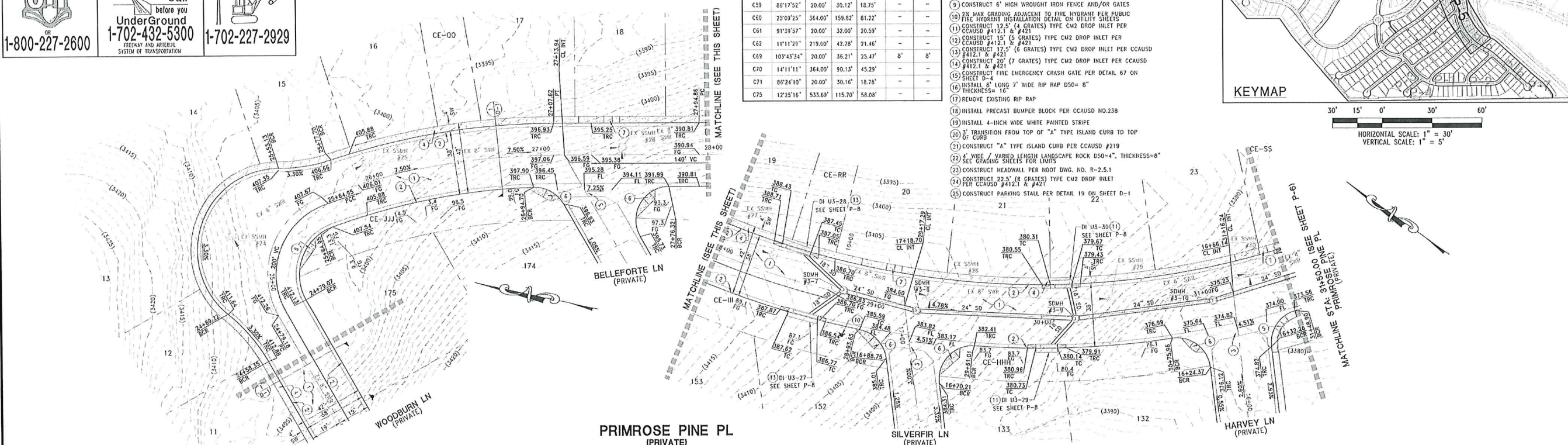
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A"	"B"
C18	30°31'53"	402.00'	214.22'	109.72'	-	-
C19	68°01'36"	20.00'	23.75'	13.50'	4.5'	12'
C22	100°54'51"	20.00'	35.25'	24.22'	-	-
C23	10°54'51"	402.00'	76.58'	38.40'	8'	8'
C24	90°00'00"	20.00'	31.42'	20.00'	4.5'	12'
C51	90°00'00"	20.00'	31.42'	20.00'	-	-
C52	5°21'32"	465.00'	43.49'	21.76'	-	-
C59	86°17'52"	20.00'	30.12'	18.75'	-	-
C60	25°03'25"	364.00'	159.82'	81.22'	-	-
C61	91°39'37"	20.00'	32.00'	20.59'	-	-
C62	11°11'29"	219.00'	42.78'	21.46'	-	-
C69	105°43'34"	20.00'	36.21'	25.47'	8'	8'
C70	14°11'11"	364.00'	90.15'	45.23'	-	-
C71	86°24'10"	20.00'	30.16'	18.76'	-	-
C75	12°25'16"	533.69'	115.70'	58.08'	-	-

CONSTRUCTION NOTES

- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1
- CONSTRUCT 24" "N" CURB PER CCAUSD #217.3 S1
- SUMMERLIN IMPROVEMENT "SID DWS" CROSS GUTTER PER CCAUSD #234
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234 (5" THICK WHEN ADJACENT TO "N" CURB)
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE 1) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE 1) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE 1) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES
- 2X MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEET
- CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 15" (5 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT FIRE EMERGENCY CRASH GATE PER DETAIL 67 ON SHEET D-4
- INSTALL 8" LONG 7" WIDE RIP RAP D50= 8" THICKNESS= 16"
- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- 3" TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4" WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=4", THICKNESS=8" SEE GRADING SHEETS FOR UNITS
- CONSTRUCT HEADWALL PER DETAIL NO. R-2.5.1
- PER CCAUSD #412.1 & #421 TYPE CM2 DROP INLET
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'



FOR REVIEW ONLY

DATE	BY	DATE	DESCRIPTION
January 17, 2020	LENNAR		

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DESIGNED BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]
PROJECT #:

IMPROVEMENT PLANS FOR
SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
PRIMROSE PINE PL STA: 24+50.00-31+50.00
CITY OF LAS VEGAS
NEVADA

DATE: 1-19-20
DRAWING
P-5
SHEET 19 OF 22
CLV DRAWING NUMBER
CLV PROJECT #

ORIGINAL APPROVED

DISCLAIMER NOTE:

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

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BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345W6

RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA
DR.

ELEVATION = 1011.422 METERS (NAVD '86)
ELEVATION = 3318.51 US SURVEY FEET (NAVD '86)

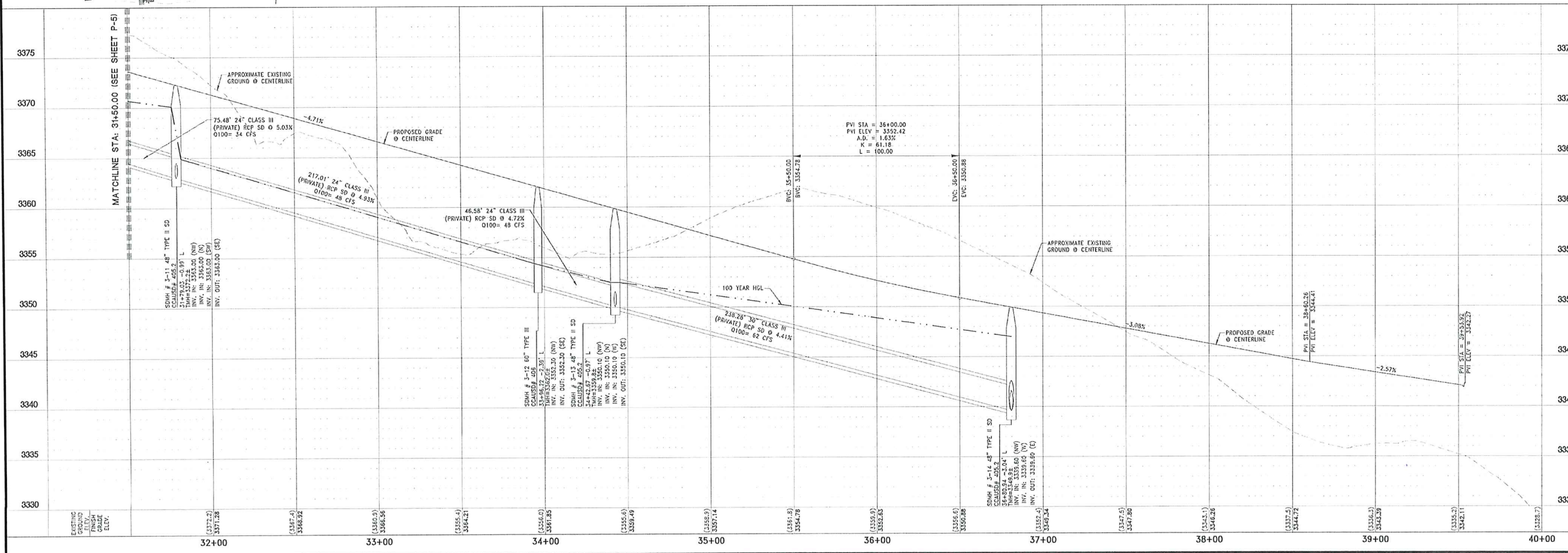
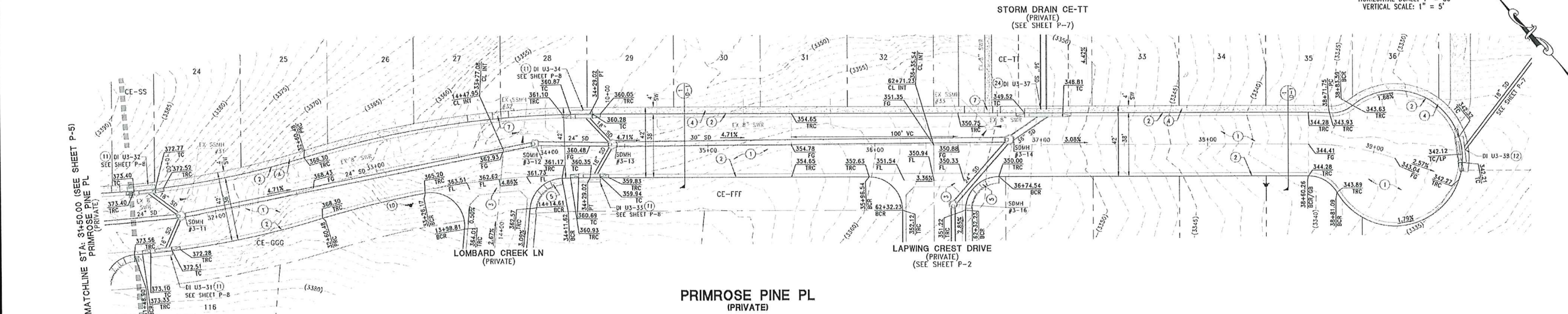
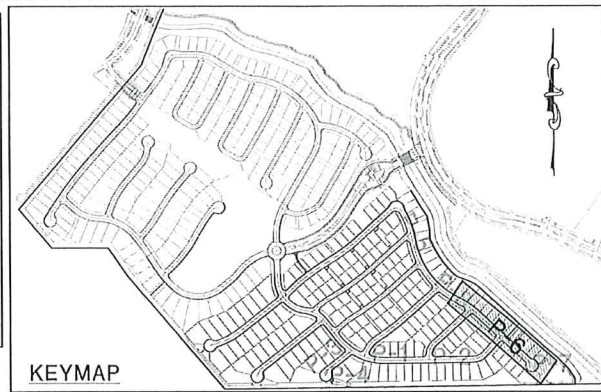
BASIS OF BEARINGS

NORTH 05°36'00" WEST, BEING THE BEARING OF THE WEST
LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION
33, TOWNSHIP 20 SOUTH, RANGE 50 EAST, M.D.M., AS
SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE
AT THE CLARK COUNTY, NEVADA RECORDERS OFFICE

CONSTRUCTION NOTES

- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON
SHEET P-1
- CONSTRUCT 24" R" CURB PER CCAUSD #217.3 S1
- CONSTRUCT 8" MODIFIED (P" CURB) CROSS CUTTER PER
SUMMERLIN IMPROVEMENT STD DWG #3-64
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- 5" THICK WHEN ADJACENT TO "R" CURB
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED
CONES OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN
AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED
CONES OR EQUIVALENT PER CCAUSD #235 (CASE III) SEE PLAN
AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED
CONES OR EQUIVALENT PER CCAUSD #235 (CASE III) SEE PLAN
AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6' HIGH WROUGHT IRON FENCE AND/OR GATES
- 5' MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC
FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS
- CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER
CCAUSD #412.1 & #421
- CONSTRUCT 15" (5 GRATES) TYPE CM2 DROP INLET PER
CCAUSD #412.1 & #421
- CONSTRUCT 17.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD
#412.1 & #421
- CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD
#412.1 & #421
- CONSTRUCT FIRE EMERGENCY CRASH GATE PER DETAIL 67 ON
SHEET P-4
- INSTALL 8" LONG 7" WIDE RIP RAP D50= 8"
- THICKNESS= 18"
- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP
OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4' WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=4", THICKNESS=8"
- SEE GRADING SHEETS FOR LIMITS
- CONSTRUCT HEADWALL PER NDOT DWG. NO. R-2.5.1
- CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET
PER CCAUSD #412.1 & #421
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

CURVE TABLE						
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A"	"B"
C10	51°50'02"	495.69'	448.43'	240.87'	-	-
C11	16°47'40"	594.00'	174.11'	87.68'	-	-
C12	3°56'29"	182.63'	12.52'	6.28'	-	-
C13	42°56'02"	20.00'	14.99'	7.86'	-	-
C14	13°49'57"	40.50'	98.84'	110.77'	-	-
C15	59°43'34"	20.00'	20.85'	11.48'	4.5'	12'
C16	90°00'00"	20.00'	31.42'	20.00'	-	-
C17	91°04'08"	20.00'	31.79'	20.38'	-	-
C18	6°32'43"	558.00'	63.52'	31.79'	-	-
C19	12°25'16"	533.69'	115.70'	58.68'	4.5'	15'
C20	80°03'54"	20.00'	27.98'	16.83'	-	-
C21	59°00'00"	20.00'	31.42'	20.00'	4.5'	15'
C22	52°48'15"	20.00'	28.90'	17.63'	-	-



FOR REVIEW ONLY

REV	DATE	BY	APP	DESCRIPTION
1	11/17/20	CHRISTOPHER R. ZENYI	SC	SC
2	11/17/20	CHRISTOPHER R. ZENYI	AW	AW
3	11/17/20	CHRISTOPHER R. ZENYI	CE	CE
4	11/17/20	CHRISTOPHER R. ZENYI	CE	CE

DATE: 11/17/20
HORIZ. SCALE: 1" = 30'
VERT. SCALE: 1" = 5'
DRAWN BY: SC
DESIGNED BY: AW
CHECKED BY: CE
APPROVED BY: CE
PROJECT #: 3040.005P

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IMPROVEMENT PLANS FOR
SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
PRIMROSE PINE PL STA: 31+50.00-40+00.00
CITY OF LAS VEGAS
NEVADA

PROFESSIONAL ENGINEER

CHRISTOPHER R. ZENYI

Exp. 6/30/2020

CIVIL

No. 135976

DATE: 11-13-20

DRAWING

P-6

SHT 20 OF 22

CLV DRAWING NUMBER

CLV PROJECT #

0:\3040_LENNAR\057_Summerlin_103_CWV\PS\Univ_3\50007_P-6.dwg zcenoby 11/17/20 11:07am

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DISCLAIMER NOTE:

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BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345W6
RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA DR.

ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

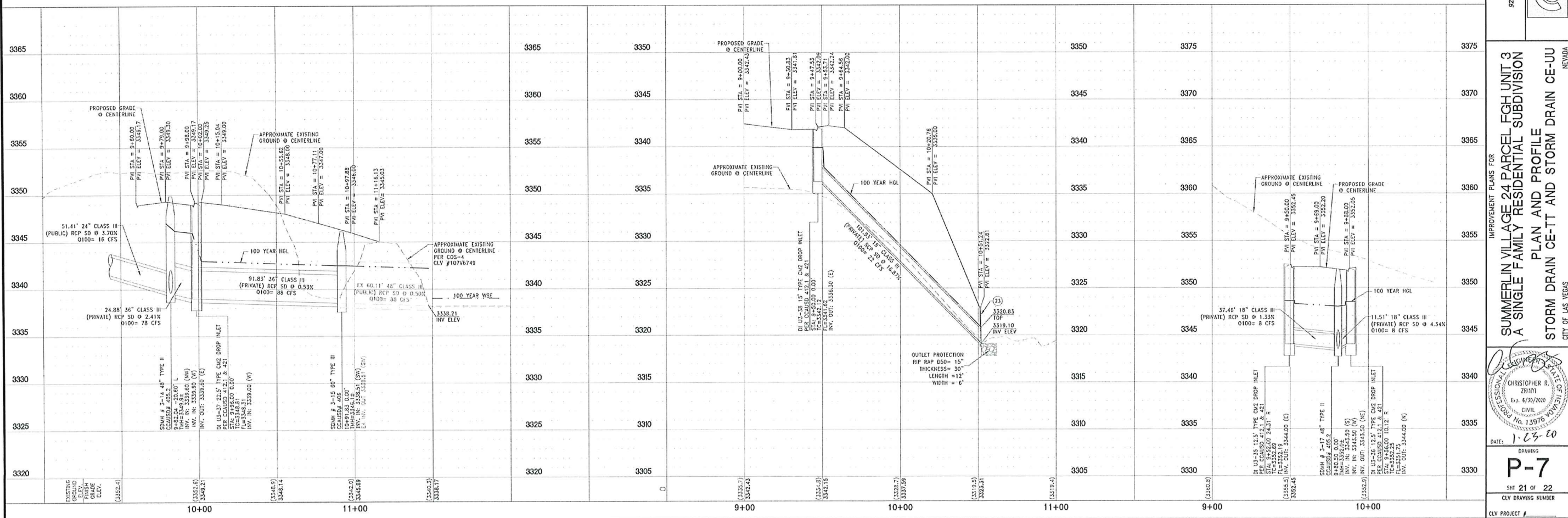
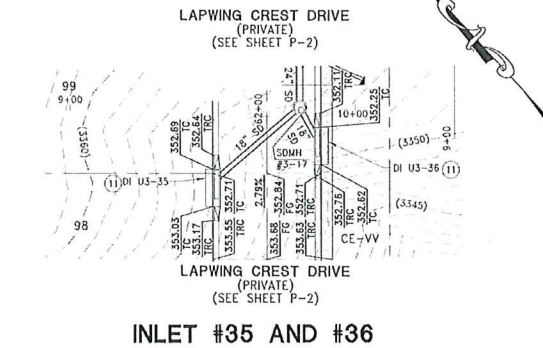
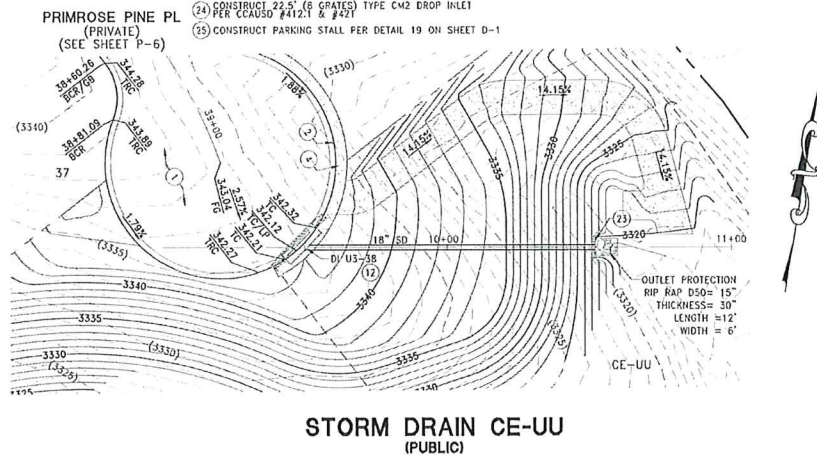
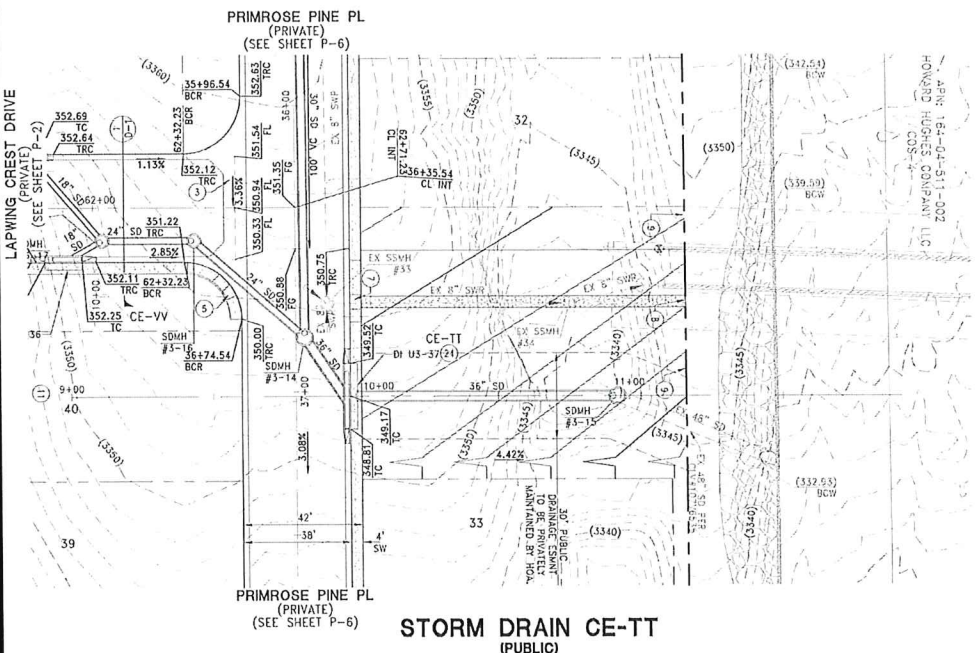
BASIS OF BEARINGS

NORTH 05°36'00" WEST, BEING THE BEARING OF THE WEST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 33, TOWNSHIP 30 SOUTH, RANGE 50 EAST, M.D.M., AS SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDERS OFFICE

CONSTRUCTION NOTES

- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1
- CONSTRUCT 24" "K" CURB PER CCAUSD #217.3 S1
- CONSTRUCT 4" MODIFIED (H. CURB) CROSS CUTTER PER SUMNERLIN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- 6" THICK WHEN ADJACENT TO "P" CURBS
- CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE I) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOWNS OR EQUIVALENT PER CCAUSD #235 (CASE III) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6' HIGH WROUGHT IRON FENCE AND/OR GATES
- 2X MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS
- CONSTRUCT 12.5' (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 15' (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 12.5' (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 20' (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT FIRE EMERGENCY CRASH GATE PER DETAIL 67 ON SHEET D-4
- INSTALL 8' LONG 7' WIDE RIP RAP D50= 8" THICKNESS= 16"
- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- 3" TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4' WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=4", THICKNESS=8" SEE GRADING SHEETS FOR LIMITS
- CONSTRUCT HEADWALL PER NDOT DWG. NO. R-2.5.1
- CONSTRUCT 22.5' (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

CURVE TABLE					
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A" "B"
C14	139°49'57"	40.50'	98.84'	110.77'	- -
C15	59°43'34"	20.00'	20.85'	11.48'	- -
C16	90°00'00"	20.00'	31.42'	20.00'	4.5' 12'
C19	68°01'36"	20.00'	23.75'	13.50'	4.5' 12'
C21	90°00'00"	20.00'	31.42'	20.00'	- -



FOR REVIEW ONLY

REV	DATE	DESCRIPTION
1	1/17/20	ISSUED FOR PERMIT

DATE: JANUARY 17, 2020
HORIZ. SCALE: 1" = 30'
VERT. SCALE: 1" = 5'
DRAWN BY: SC
CHECKED BY: AV
DESIGNED BY: CT
APPROVED BY: CT
PROJECT #: 2000.0057

LENNAR
9275 W. RUSSELL RD. SUITE 400, LAS VEGAS, NV 89148
PHONE: (702) 736-5100 FAX: (702) 736-5600

RCI ENGINEERING
500 SOUTH BANCROFT DRIVE, SUITE 17, LAS VEGAS, NV 89106
MAIN: 702.453.0869 FAX: 702.453.0801

IMPROVEMENT PLANS FOR
SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
STORM DRAIN CE-TT AND STORM DRAIN CE-UU
CITY OF LAS VEGAS
NEVADA

DATE: 1-23-20
DRAWING
P-7
SHEET 21 OF 22
CLV DRAWING NUMBER
CLV PROJECT #

ON: J:\20-00_LENNAR_0057_Summerlin_03_L_01VE_L_P5 (Unit 3) 3/30/2017_P-07.dwg scribbery 1/17/20 11:05am

ORIGINAL APPROVED

DISCLAIMER NOTE:

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

Call before you Dig
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1-800-227-2600

FAST
Call before you UnderGround
1-702-432-5300

Call before you Overhead
1-702-227-2929

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345W6

RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA DR.

ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.51 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS

NORTH 05°36'00" WEST, BEING THE BEARING OF THE WEST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDERS OFFICE

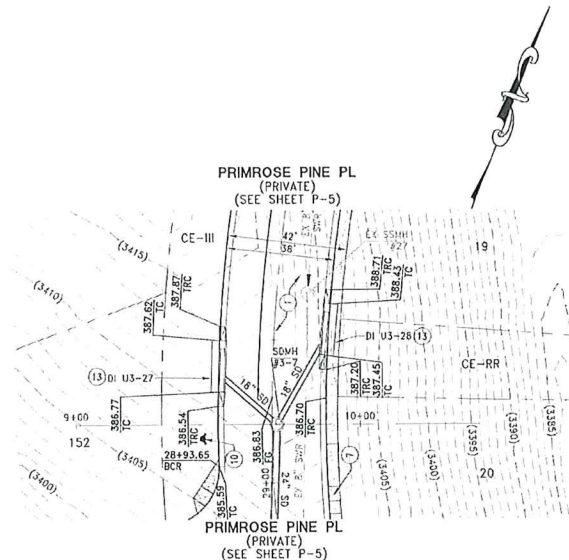
CONSTRUCTION NOTES

- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1
- CONSTRUCT 24" R" CURB PER CCAUSD #217.3 S1
- CONSTRUCT 8" MODIFIED (M) CURB CROSS CUTTER PER SUMMERLIN IMPROVEMENT STD DWG P-54
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED CONES OR EQUIVALENT PER CCAUSD #235 (CASE I) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED CONES OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED CONES OR EQUIVALENT PER CCAUSD #235 (CASE III) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES
- 2% MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS
- CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
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- CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT FIRE EMERGENCY CRASH GATE PER DETAIL 67 ON SHEET D-1
- INSTALL 8" LONG 7" WIDE RIP RAP D50= 6" THICKNESS= 16"
- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- 3" TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4" WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=4", THICKNESS=8" SEE GRADING SHEETS FOR LIMITS
- CONSTRUCT HEADWALL PER NDOT DWG. NO. R-2.5.1
- CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

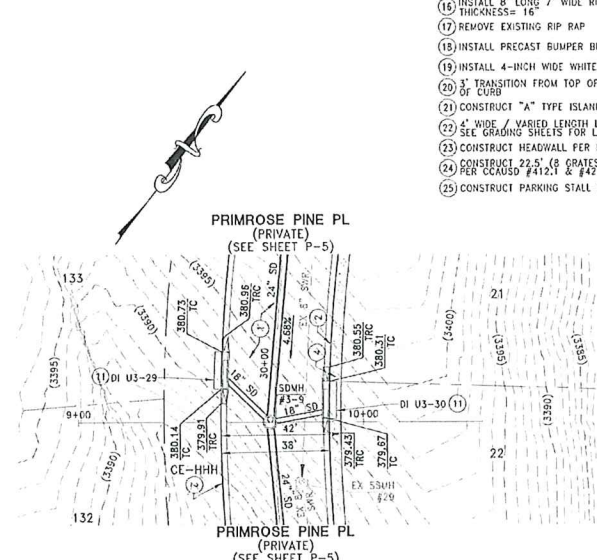
CURVE TABLE					
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A" "B"
C10	51°50'02"	495.69'	448.43'	240.87'	- -
C14	71°25'10"	20.00'	24.93'	14.38'	- -
C55	10°59'50"	533.69'	102.44'	51.35'	- -
C76	80°09'54"	20.00'	27.98'	16.83'	4.5' 15'
C82	82°48'15"	20.00'	28.50'	17.63'	4.5' 15'



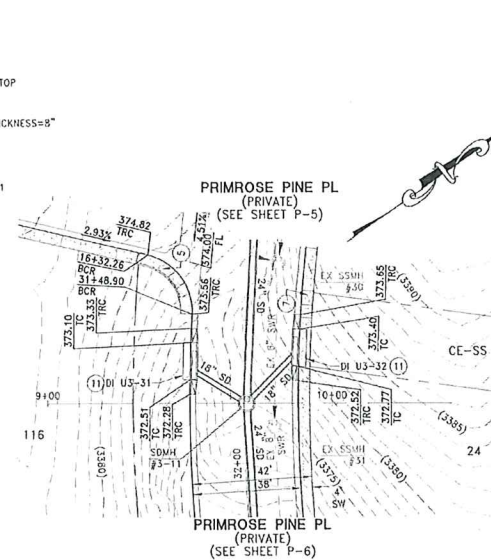
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'



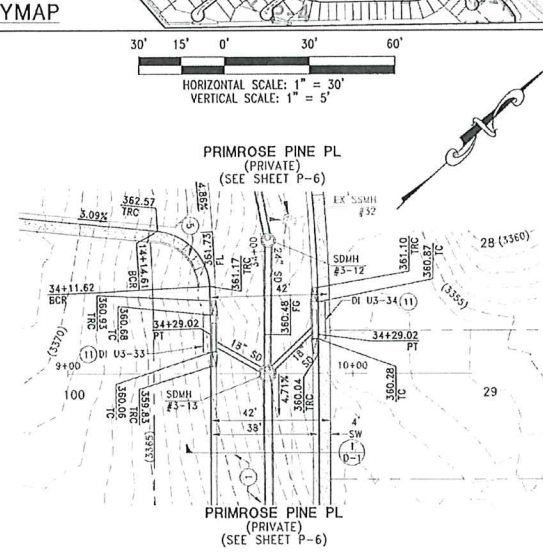
INLET #27 & #28
(PRIVATE)



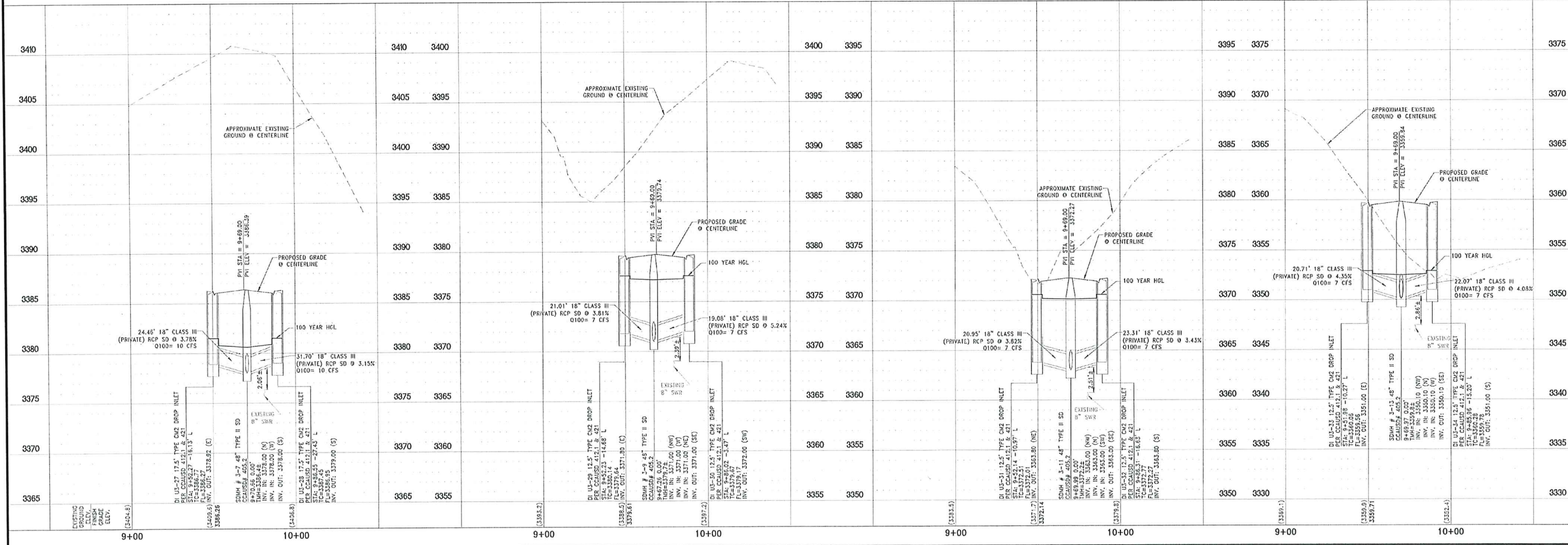
INLET #29 & #30
(PRIVATE)



INLET #31 & #32
(PRIVATE)



INLET #33 & #34
(PRIVATE)



FOR REVIEW ONLY

DATE: JUNE 17, 2020

REV: 1

DESCRIPTION: IMPROVEMENT PLANS FOR SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3 A SINGLE FAMILY RESIDENTIAL SUBDIVISION

DESIGNED BY: RCI ENGINEERING

CHECKED BY: RCI ENGINEERING

APPROVED BY: RCI ENGINEERING

PROJECT #:

LENNAR

9278 W. LAS VEGAS BLVD. SUITE 200 LAS VEGAS, NV 89148

PHONE: (702) 735-9100 FAX: (702) 735-9200

RCI ENGINEERING

303 SOUTH RANDOLPH DRIVE, SUITE 17, LAS VEGAS, NV 89106

MAINE: 702-451-0800 FAX: 702-451-0801

IMPROVEMENT PLANS FOR SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 3 A SINGLE FAMILY RESIDENTIAL SUBDIVISION

PLAN AND PROFILE

INLET #27, #28, #29, #30, #31, #32, #33 AND #34

CITY OF LAS VEGAS

NEVADA

DATE: 1-23-20

DRAWING: P-8

SHEET 22 OF 22

CLV PROJECT #

ORIGINAL APPROVED

DISCLAIMER NOTE:

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

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



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FAST

Call before you
UnderGround

1-702-432-5300

CALL BEFORE
YOU DO
OVERHEAD



1-702-227-2929

SEWER CONNECTION NOTE

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

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345W6

RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY
KNOLL DR.

ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS

NORTH 05°59'55" WEST, BEING THE BEARING OF THE
WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE
59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY,
NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN THE
CLARK COUNTY, NEVADA RECORDER'S OFFICE IN BOOK
135, PAGE 71 OF PLATS.

SEWER CONNECTION NOTE

21) INSTALL 48" STANDARD MANHOLE WITH WATERTIGHT
JOINTS (PER DCSWCS STD. No. SD-1, SD-3, SD-4,
SD-5) WITH SINGLE 24" LD

22) INSTALL 4" SEWER LATERAL (PER DCSWCS STD No. SD-17,
SD-20 & SD-23)

23) LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING.
ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL
CLEARANCE BELOW WATER MAIN AT CROSSINGS.

24) REMOVE EXISTING CAP WITH THRUST BLOCK AND CONNECT
TO EXISTING SEWER STUB

25) EXISTING 4" SEWER LATERAL PER UNIT 1 TO BE PROTECTED AND
REMAIN IN PLACE

26) INSTALL 4" C900 SEWER LATERAL (PER DCSWCS STD No. SD-17,
SD-21 & SD-23)

CONSTRUCTION NOTES

1) CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON
SHEET D-1

2) CONSTRUCT 24" "R" CURB PER CCAUSD #217.3 S1

3) SUMMERLIN IMPROVEMENT STD DWG #S-64

4) CONSTRUCT 4" SIDEWALK PER CCAUSD #234

5" THICK WHEN ADJACENT TO "R" CURB

6) CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED
DOMES OR EQUIVALENT PER CCAUSD #235 (CASE III) SEE PLAN
AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS

7) CONSTRUCT 12" ACCESS ROAD PER DETAIL 90 ON SHEET D-5

8) CONSTRUCT 5" WIDE PEDESTRIAN ACCESS GATE

9) CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES

10) MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC
FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS

11) CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER
CCAUSD #412.1 & #421

12) CONSTRUCT 15" (5 GRATES) TYPE CM2 DROP INLET PER
CCAUSD #412.1 & #421

13) CONSTRUCT 17.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD
#412.1 & #421

14) CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD
#412.1 & #421

15) EXISTING FIRE EMERGENCY CRASH GATE

16) INSTALL 8' LONG 7' WIDE RIP RAP D50= 8"
THICKNESS= 16"

17) REMOVE EXISTING RIP RAP

18) INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238

19) INSTALL 4-INCH WIDE WHITE PAINTED STRIPE

20) 3' TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP
OF CURB

21) CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219

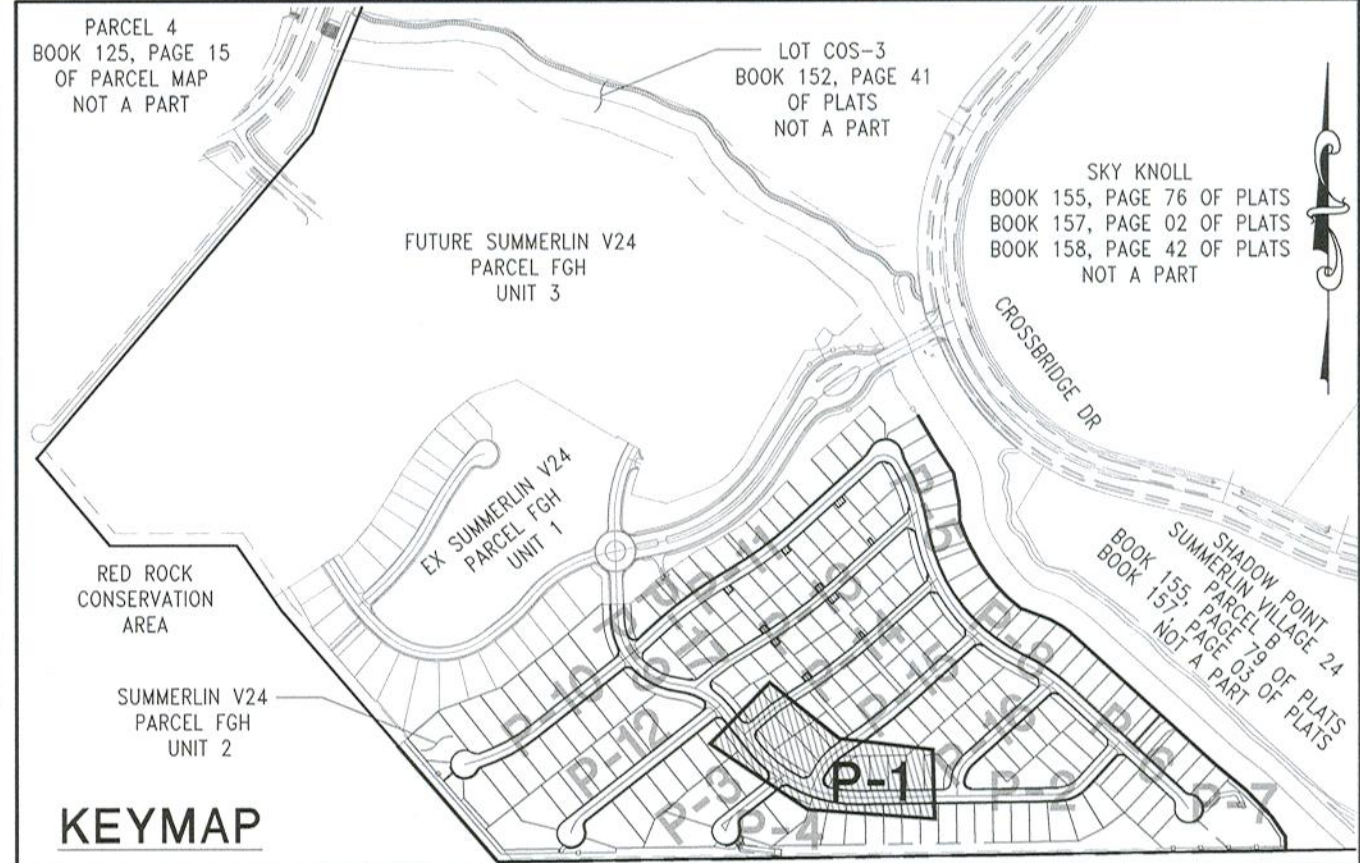
22) 4" WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=6", THICKNESS=12"
SEE GRADING SHEETS FOR LIMITS

23) CONSTRUCT HEADWALL PER NDOT DWG. NO. R-25.1

24) ALL EXPOSED DRAINAGE HEADWALLS ARE TO BE
STAINED CONCRETE TO BLEND INTO LANDSCAPE

25) CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

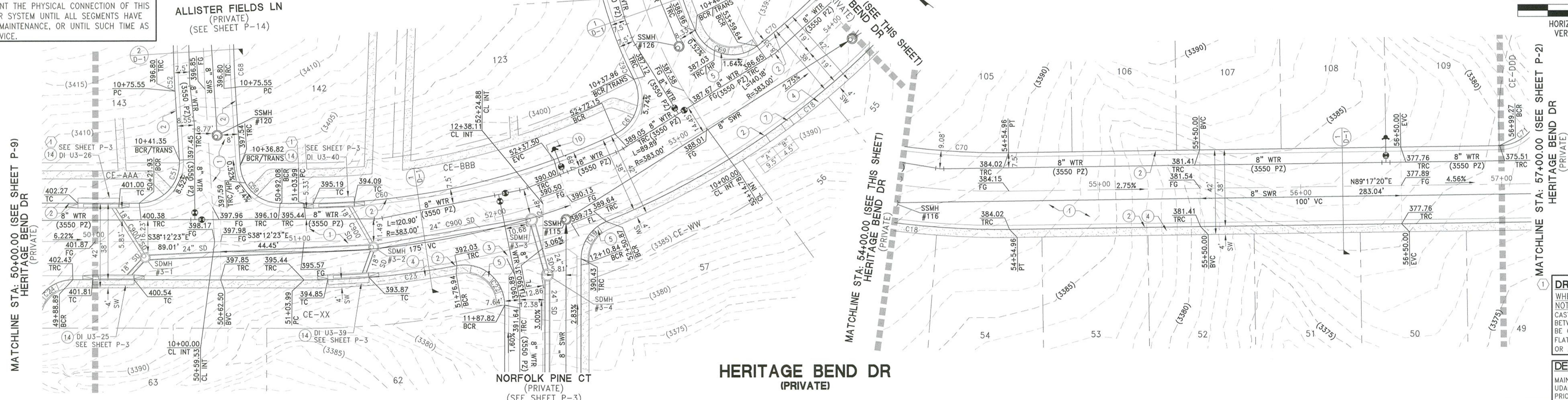
CURVE TABLE						
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A"	"B"
C18	30°31'53"	402.00'	214.22'	109.72'	-	-
C19	68°01'36"	20.00'	23.75'	13.50'	4.5'	12'
C22	100°54'51"	20.00'	35.23'	24.22'	8'	8'
C23	10°54'51"	402.00'	76.58'	38.40'	-	-
C51	90°00'00"	20.00'	31.42'	20.00'	-	-
C59	86°17'52"	20.00'	30.12'	18.75'	-	-
C60	25°09'25"	364.00'	159.82'	81.22'	-	-
C61	91°39'57"	20.00'	32.00'	20.59'	-	-
C62	11°11'29"	219.00'	42.78'	21.46'	-	-
C69	103°43'34"	20.00'	36.21'	25.47'	8'	8'
C70	14°11'11"	364.00'	90.13'	45.29'	-	-
C78	29°24'42"	181.00'	92.91'	47.50'	-	-



30' 15' 0' 30' 60'

HORIZONTAL SCALE: 1" = 30'

VERTICAL SCALE: 1" = 5'



DROP INLET NOTE

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

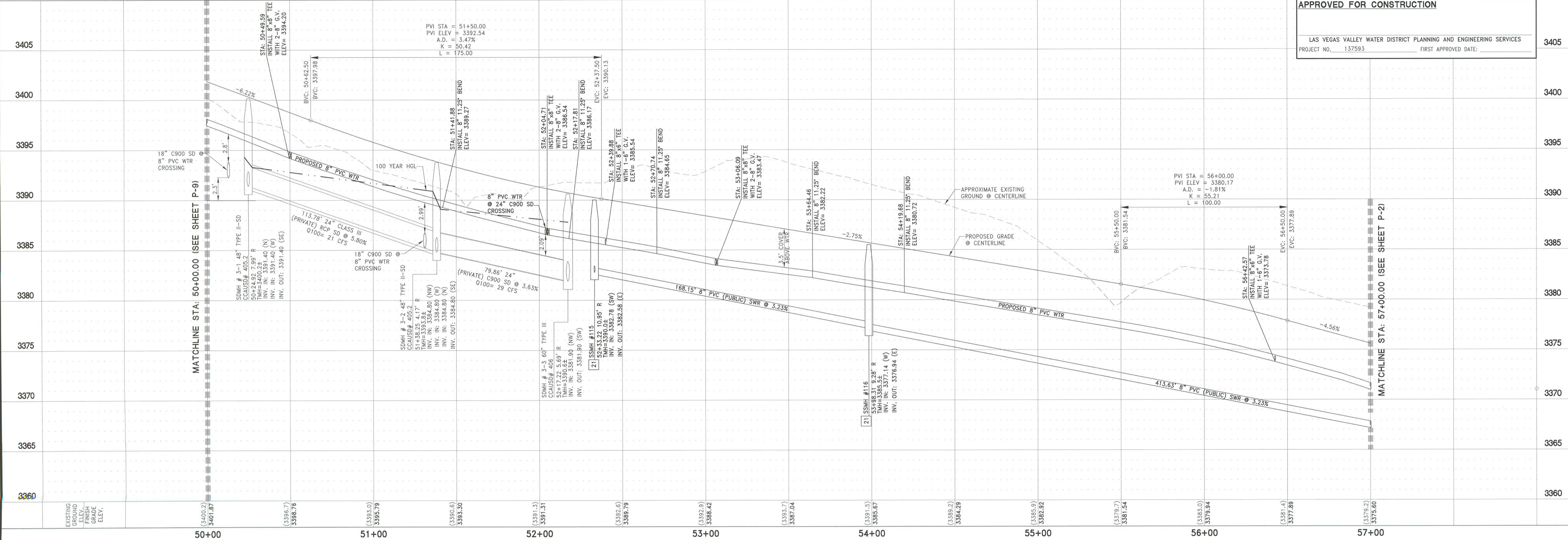
DEPTH OF COVER DURING CONSTRUCTION

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

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 137593 FIRST APPROVED DATE:



DATE	DESCRIPTION	REV
02/20/20	1"=30'	
02/20/20	1"=5'	
02/20/20	SC	
02/20/20	AW	
02/20/20	CZ	
02/20/20	3040.0557	

LENNAR
9275 W. RUSSELL RD SUITE 400, LAS VEGAS, NV 89148
PHONE: (702) 736-5100 FAX: (702) 736-9200

RCI ENGINEERING
500 SOUTH RANCHO DRIVE SUITE 100 LAS VEGAS, NV 89106
MAIN: 702.453.0800 FAX: 702.453.0801

IMPROVEMENT PLANS FOR
SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 2
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
HERITAGE BEND DR STA: 50+00.00-57+00.00

DATE: 12-7-20
DRAWING
P-1
SHT 37 OF 67
CLV DRAWING NUMBER
10715142
CLV PROJECT # L20-01456

DISCLAIMER NOTE:

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AVOID CUTTING UNDERGROUND
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SYSTEM OF TRANSPORTATION

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

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 34SWE

RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY
VISTA DR.
ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS

NORTH 05°59'55" WEST, BEING THE BEARING OF THE
WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE
59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY,
NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN THE
CLARK COUNTY, NEVADA RECORDER'S OFFICE IN BOOK
135, PAGE 71 OF PLATS.

SEWER CONSTRUCTION NOTES

21. INSTALL 48" STANDARD MANHOLE WITH WATERTIGHT JOINTS (PER DCSWCS STD. No. SD-1, SD-3, SD-4, SD-5) WITH SINGLE 24" LID.
22. INSTALL 4" SEWER LATERAL (PER DCSWCS STD. No. SD-17, SD-20 & SD-23).
23. LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
24. REMOVE EXISTING CAP WITH THROUST BLOCK AND CONNECT TO EXISTING SEWER STUB.
25. EXISTING 4" SEWER LATERAL PER UNIT 1 TO BE PROTECTED AND REMAIN IN PLACE.
26. INSTALL 4" C900 SEWER LATERAL (PER DCSWCS STD. No. SD-17, SD-21 & SD-23).

CURVE TABLE						
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A"	"B"
C16	90°00'00"	20.00'	31.42'	20.00'	4.5'	12'
C17	46°39'32"	119.00'	96.91'	51.32'	-	-
C71	86°24'10"	20.00'	30.16'	18.78'	-	-
C72	17°08'51"	119.00'	35.61'	17.94'	-	-
C79	98°13'11"	20.00'	34.29'	23.10'	9.5'	4.5'
C80	22°17'56"	81.00'	31.52'	15.96'	-	-
C81	90°00'00"	20.00'	31.42'	20.00'	-	-
C83	40°34'59"	81.00'	57.37'	29.95'	-	-

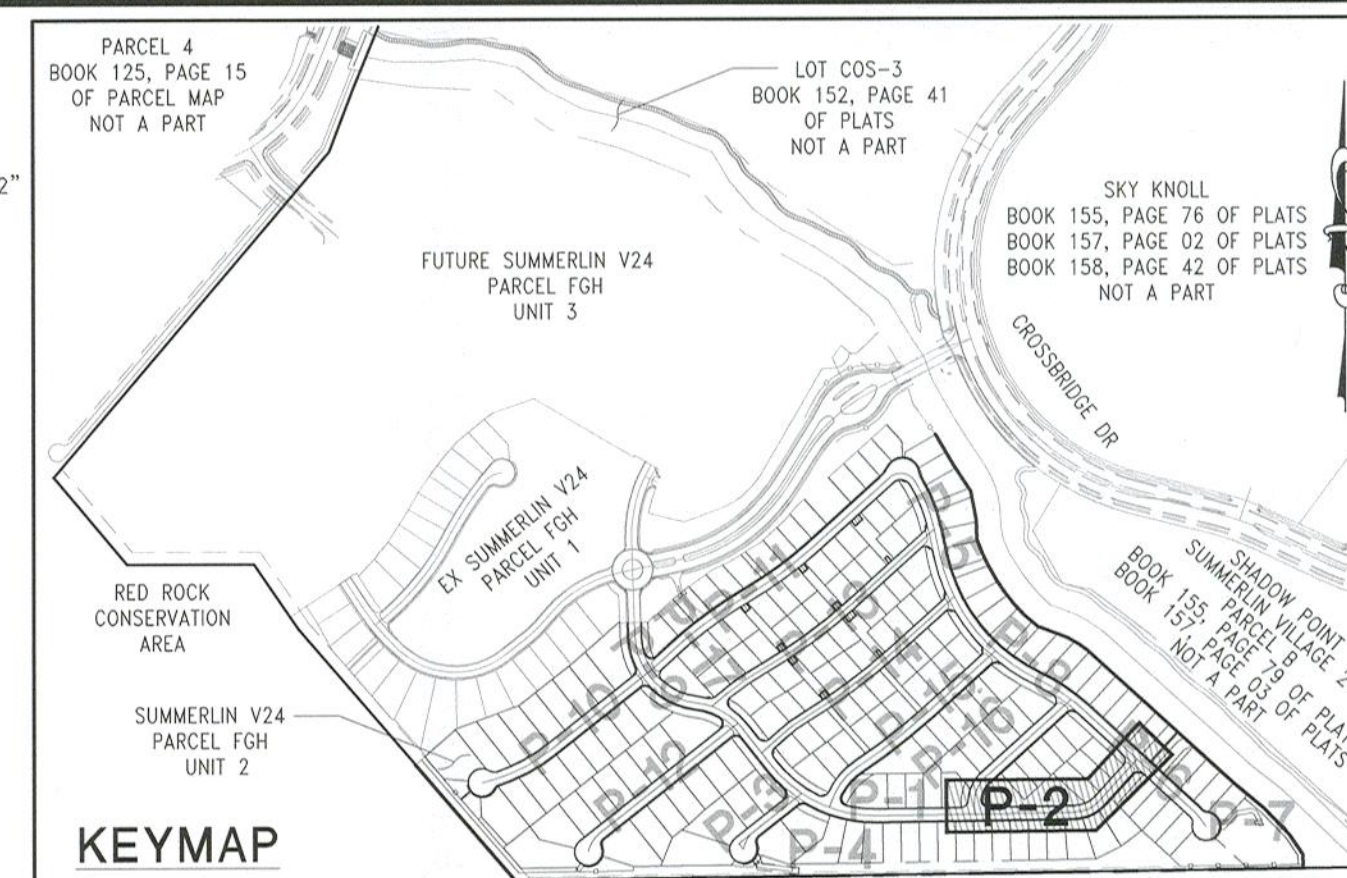
SEWER CONNECTION NOTE

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

CONSTRUCTION NOTES

1. CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1.
2. CONSTRUCT 24" R' CURB PER CCAUSD #217.3 S1.
3. CONSTRUCT 8" MODIFIED (R' CURB) CROSS GUTTER PER SUMMERLIN IMPROVEMENT STD DWG #234.
4. CONSTRUCT 4" SIDEWALK PER CCAUSD #234.
5. CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE I). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS.
6. CONSTRUCT 12" ACCESS ROAD PER DETAIL 90 ON SHEET D-5.
7. CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE II). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS.
8. CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE.
9. CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES.
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14. CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421.
15. EXISTING FIRE EMERGENCY CRASH GATE.
16. INSTALL 8' LONG 7' WIDE RIP RAP D50= 8" THICKNESS= 16".
17. REMOVE EXISTING RIP RAP.
18. INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238.

19. INSTALL 4-INCH WIDE WHITE PAINTED STRIPE.
20. TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB.
21. CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219.
22. 4" WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=6", THICKNESS=12".
23. SEE GRADING SHEETS FOR LIMITS.
24. CONSTRUCT HEADWALL PER DETAIL DWG. NO. R-2.5.1 (ALL EXPOSED DRAINAGE HEADWALLS ARE TO BE STAINED CONCRETE TO BLEND INTO LANDSCAPE).
25. CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421.
26. CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1.



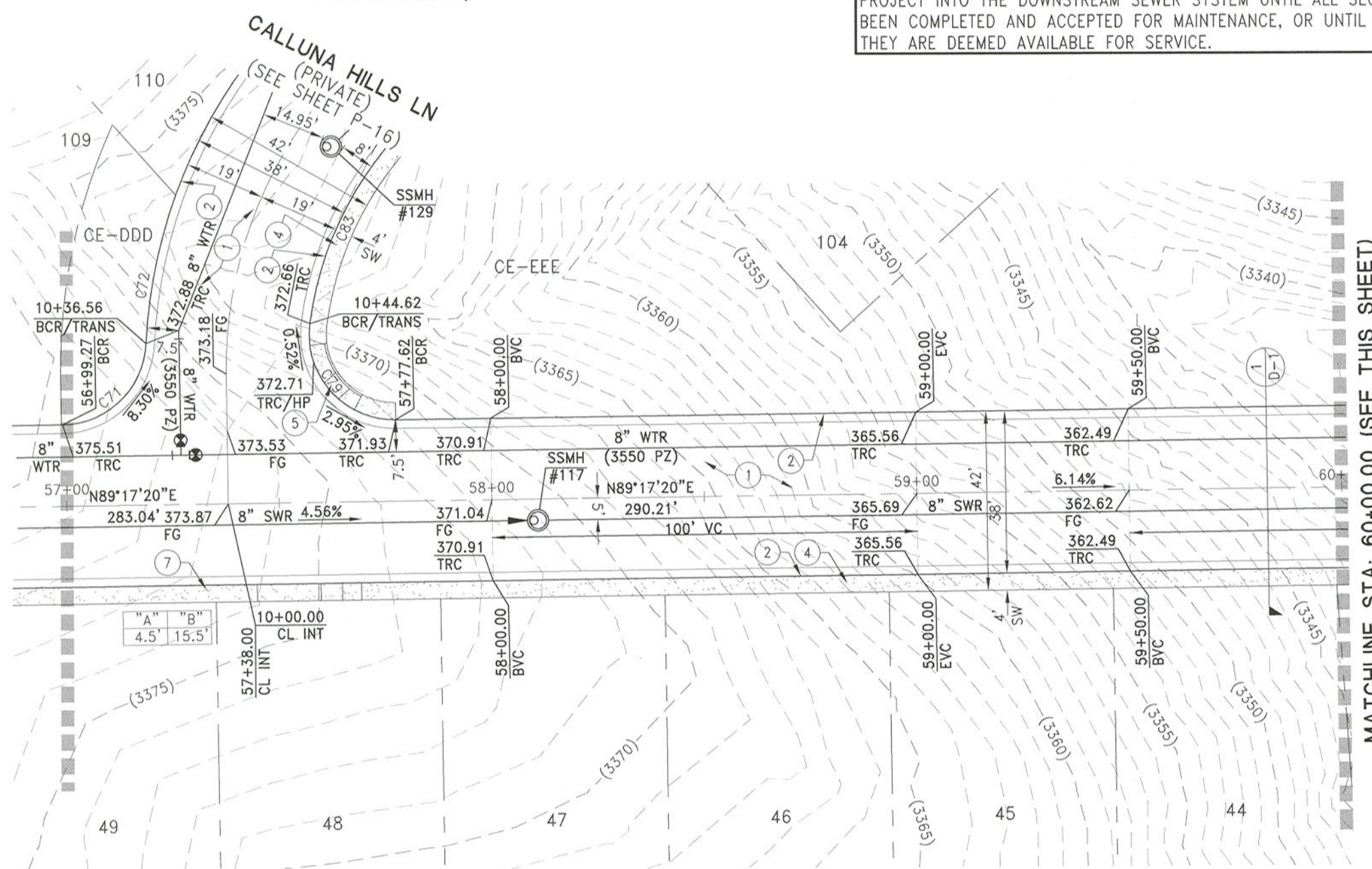
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

DROP INLET NOTE

WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE:
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)

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.

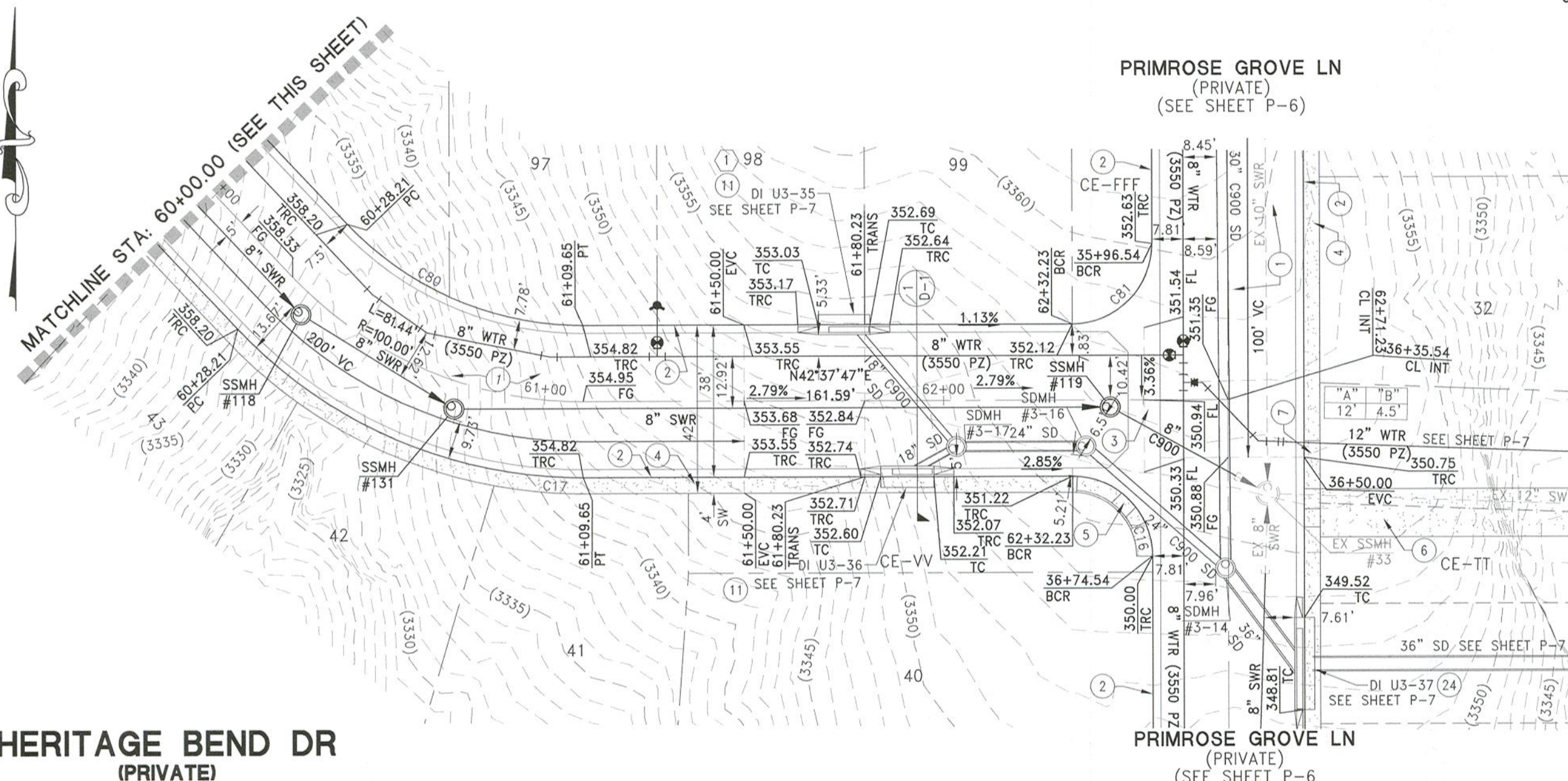
MATCHLINE STA: 57+00.00 (SEE SHEET P-1)
HERITAGE BEND DR (PRIVATE)



MATCHLINE STA: 60+00.00 (SEE THIS SHEET)

HERITAGE BEND DR
(PRIVATE)

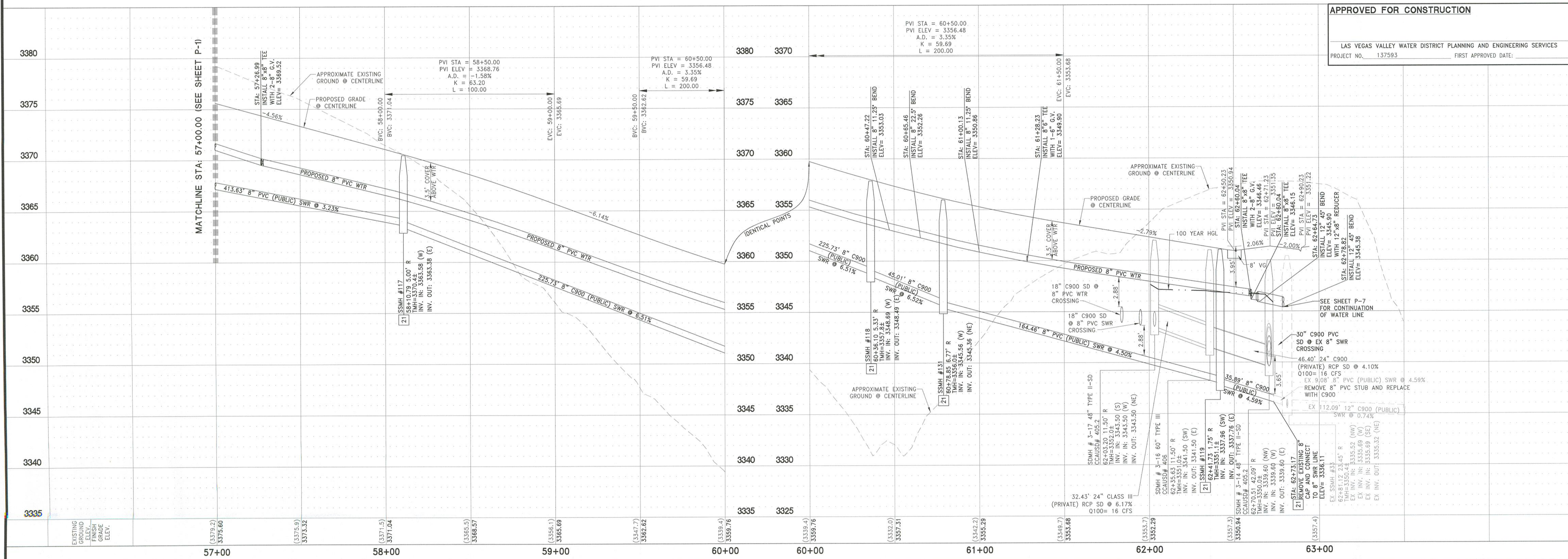
PRIMROSE GROVE LN
(PRIVATE)
(SEE SHEET P-6)



PRIMROSE GROVE LN
(PRIVATE)
(SEE SHEET P-6)

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. 137593 FIRST APPROVED DATE:



LENNAR®
9275 W. RUSSELL RD SUITE 400, LAS VEGAS, NV 89148
PHONE: (702) 736-5100 FAX: (702) 736-5200

RCI ENGINEERING
500 SOUTH RANCHO DRIVE SUITE 17, LAS VEGAS, NV 89106
MAIN: 702.453.0800 FAX: 702.453.0801

SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 2
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
HERITAGE BEND DR STA: 57+00.00-63+50.00

DATE: 12-2-20
DRAWING
P-2
SHT 38 OF 67
CLV DRAWING NUMBER
1075142
CLV PROJECT # L20-01456

DISCLAIMER NOTE:

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

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
Call 811
OR
1-800-642-2444

FAST
Call before you Dig
Underground
1-702-432-5300
FREEMAN AND ARTERIAL SYSTEM OF TRANSPORTATION

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

SEWER CONNECTION NOTE

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

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 34SW6

RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA DR.

ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS

NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN THE CLARK COUNTY, NEVADA RECORDER'S OFFICE IN BOOK 135, PAGE 71 OF PLATS.

SEWER CONSTRUCTION NOTES

- INSTALL 48" STANDARD MANHOLE WITH WATERTIGHT JOINTS (PER DCSWCS STD. No. SD-1, SD-3, SD-4, SD-5 WITH SINGLE 24" LID)
- INSTALL 4" SEWER LATERAL (PER DCSWCS STD. No. SD-17, SD-20 & SD-23)
- LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
- REMOVE EXISTING CAP WITH THRUST BLOCK AND CONNECT TO EXISTING SEWER SUB
- EXISTING 4" SEWER LATERAL PER UNIT 1 TO BE PROTECTED AND REMAIN IN PLACE
- INSTALL 4" C900 SEWER LATERAL (PER DCSWCS STD. No. SD-17, SD-21 & SD-23)

CURVE TABLE					
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A" "B"
C18	30°31'53"	402.00'	214.22'	109.72'	- -
C19	68°01'36"	20.00'	23.75'	13.50'	4.5' 12'
C20	73°11'12"	20.00'	25.55'	14.85'	- -
C21	68°54'53"	40.50'	48.71'	27.79'	- -
C22	100°54'51"	20.00'	35.23'	24.22'	8' 8'
C23	10°54'51"	402.00'	76.58'	38.40'	- -
C51	90°00'00"	20.00'	31.42'	20.00'	- -
C52	5°21'32"	465.00'	43.49'	21.76'	- -
C59	86°17'52"	20.00'	30.12'	18.75'	- -
C60	25°09'25"	364.00'	159.82'	81.22'	- -
C61	91°39'57"	20.00'	32.00'	20.59'	- -

CONSTRUCTION NOTES

- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1
- CONSTRUCT 24" 'R' CURB PER CCAUSD #217.3 S1
- CONSTRUCT 8" MODIFIED ('R' CURB) CROSS GUTTER PER SUMMERLIN IMPROVEMENT STD DWG #5-24
- CONSTRUCT 4" SIDEWALK PER CCAUSD #254
- 5" THICK WHEN ADJACENT TO 'R' CURB
- CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE I). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR 'A' AND 'B' DIMENSIONS
- CONSTRUCT 12' ACCESS ROAD PER DETAIL 90 ON SHEET D-5
- CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE II). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR 'A' AND 'B' DIMENSIONS
- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6' HIGH WROUGHT IRON FENCE AND/OR GATES
- 2% MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS
- CONSTRUCT 12.5' (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 15' (5 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 17.5' (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 20' (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- EXISTING FIRE EMERGENCY CRASH GATE
- INSTALL 8' LONG 7" WIDE RIP RAP D50= 8" THICKNESS= 15"
- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD No.238

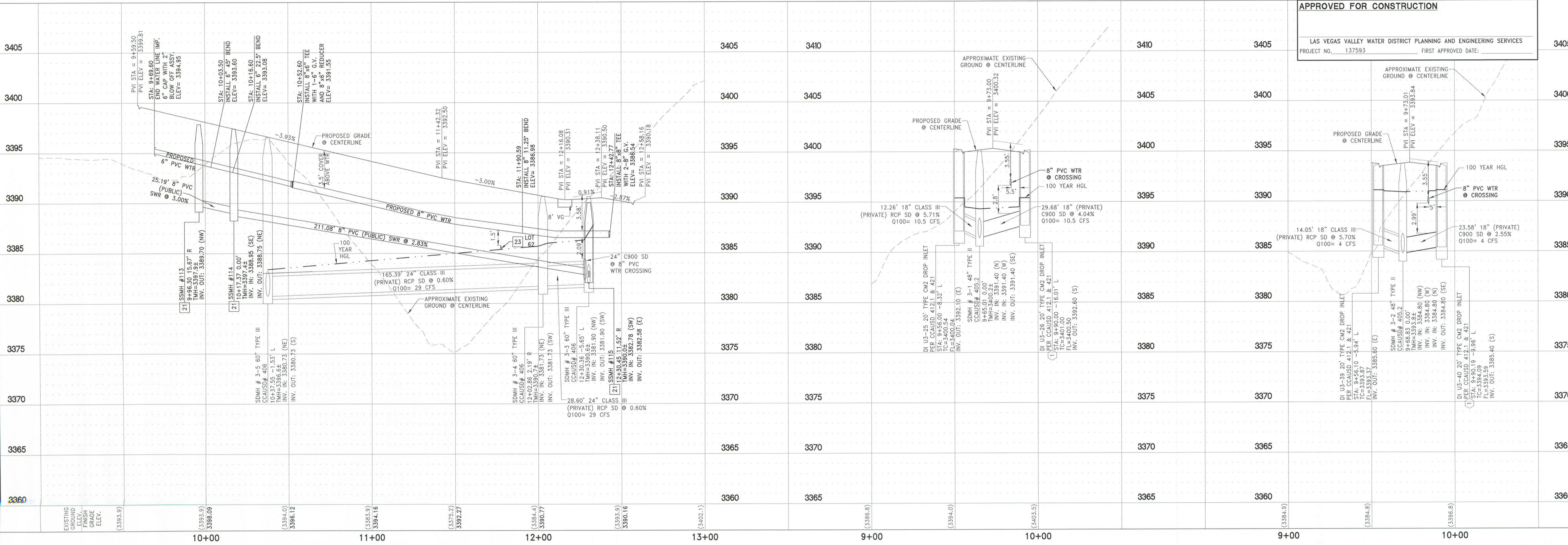
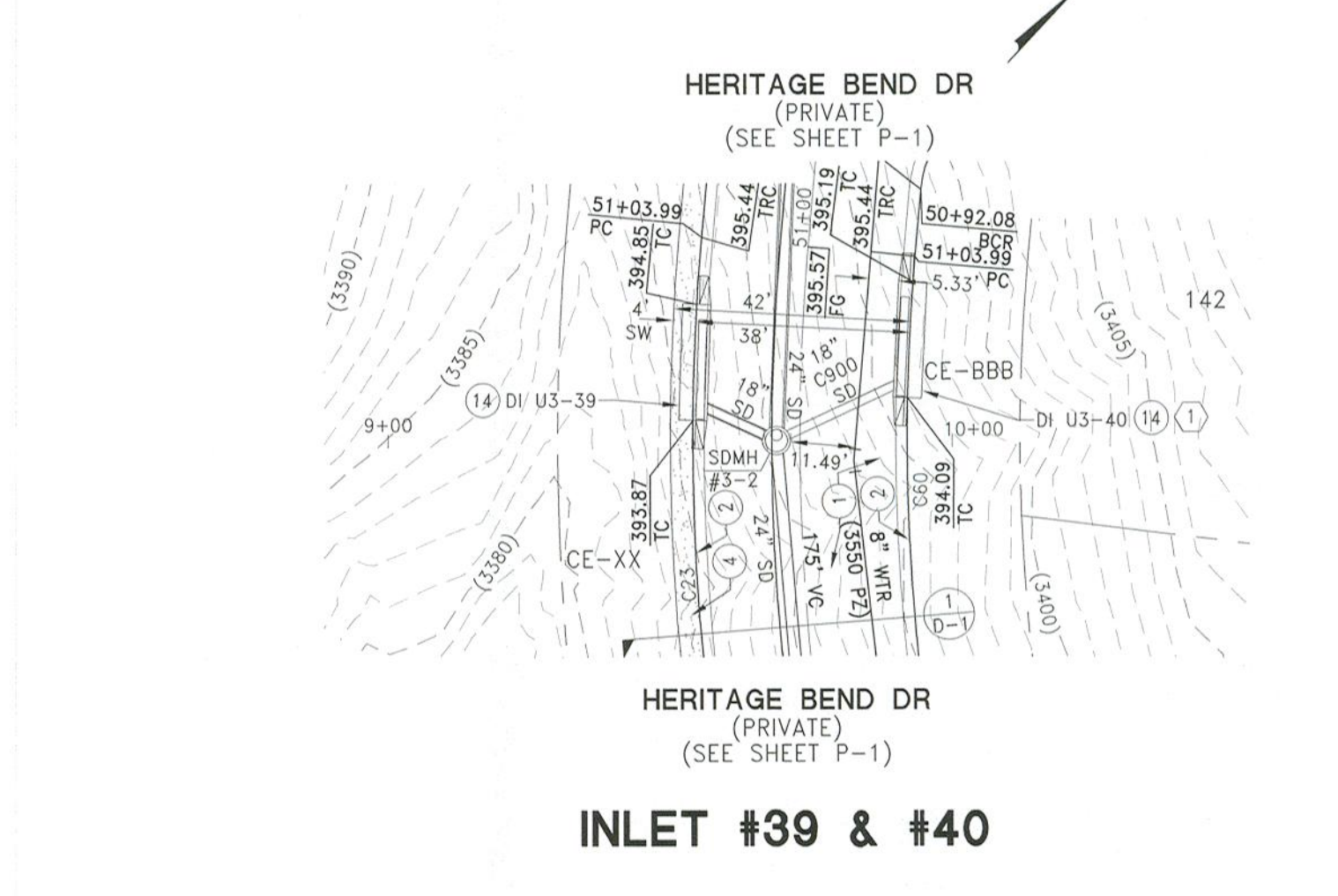
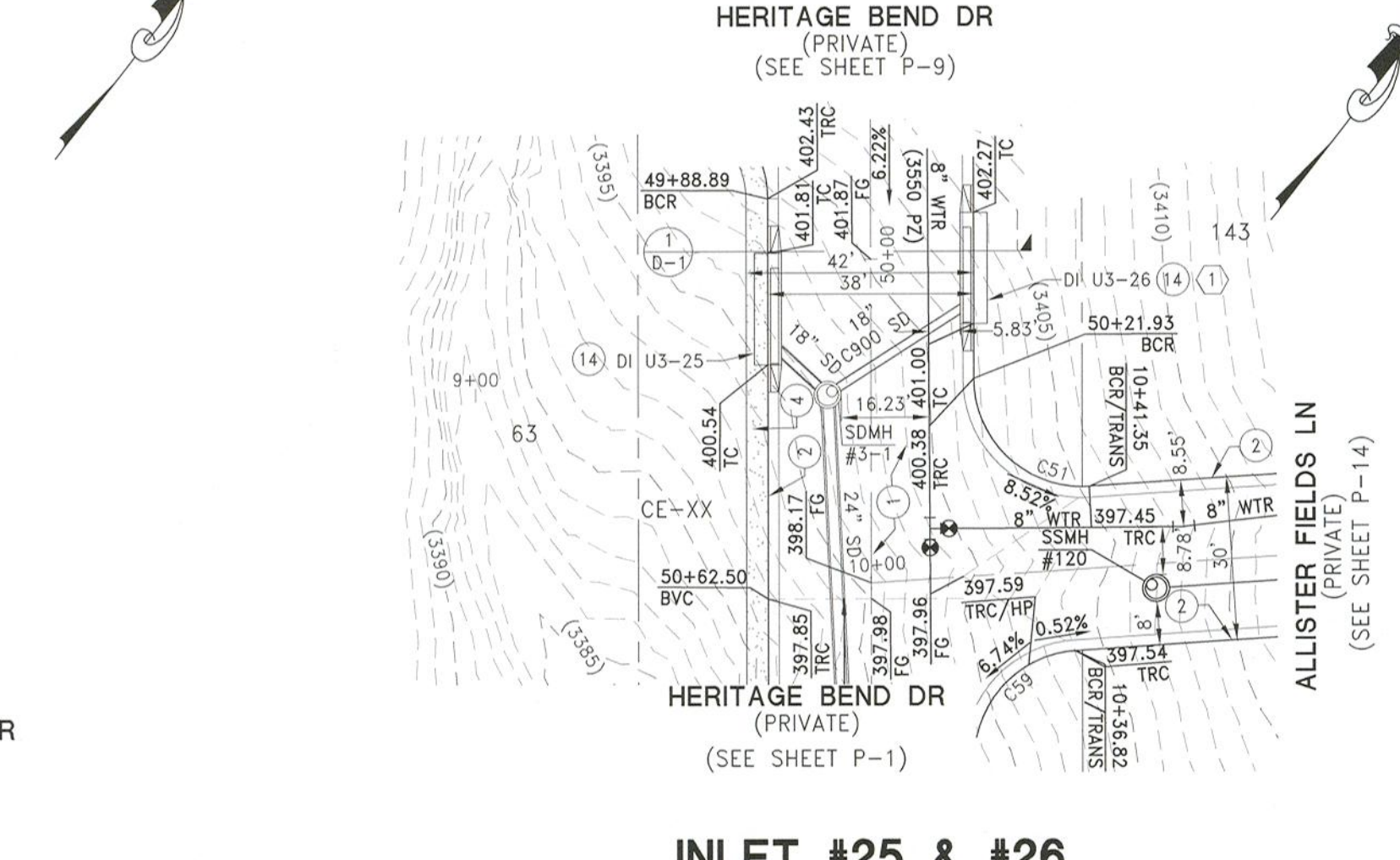
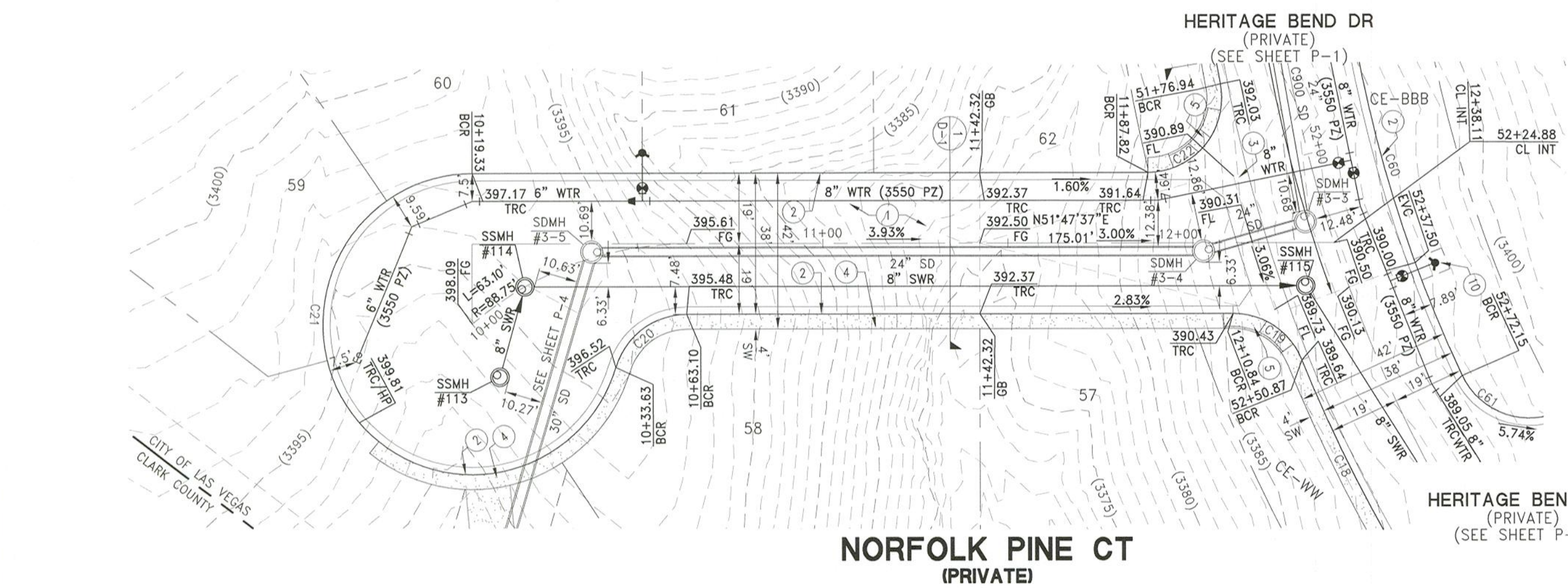
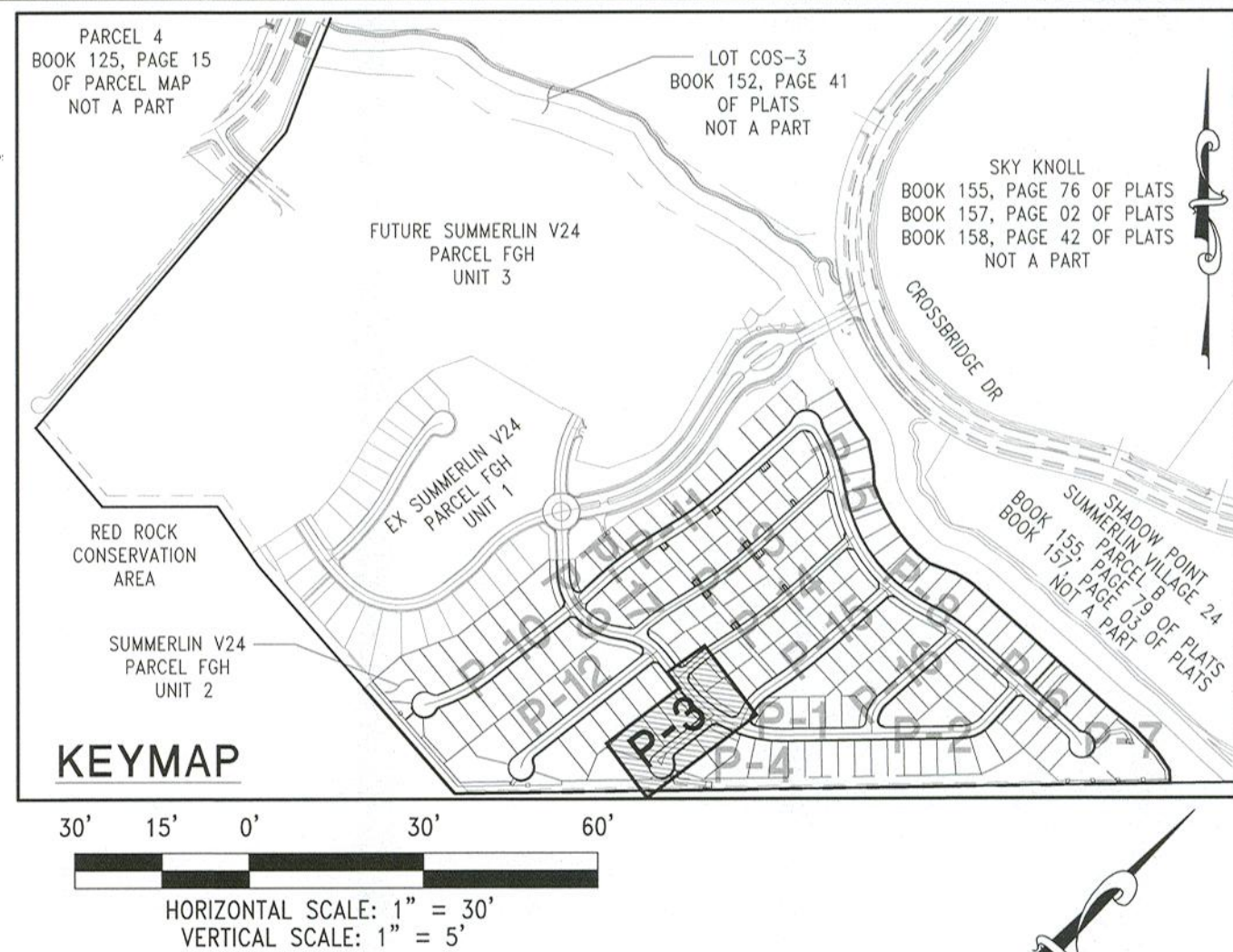
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- TRANSITION FROM TOP OF 'A' TYPE ISLAND CURB TO TOP OF 'B' CURB
- CONSTRUCT 'A' TYPE ISLAND CURB PER CCAUSD #219
- 4' WIDE / VARIED LENGTH LANDSCAPE ROCK D50=6", THICKNESS=12"
- SEE GRADING SHEETS FOR LIMITS
- CONSTRUCT HEADWALL PER NOT DWG. NO. R-2.5.1 (ALL EXPOSED DRAINAGE HEADWALLS ARE TO BE STAINED CONCRETE TO BLEND INTO LANDSCAPE)
- CONSTRUCT 22.5' (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

DROP INLET NOTE

WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE, 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)

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.



DATE: December 02, 2020
HORIZ. SCALE: 1"=30'
VERT. SCALE: 1"=5'
DRAWN BY: SC
DESIGNED BY: AW
CHECKED BY: CZ
APPROVED BY: 3040.0057
PROJECT #:

LENNAR
9275 W. RUSSELL RD SUITE 400, LAS VEGAS, NV 89148
PHONE: (702) 736-9100 FAX: (702) 736-9200

RCI ENGINEERING
500 SOUTH RANCHO DRIVE, SUITE 17, LAS VEGAS, NV 89106
MAIN: 702-453-0800 FAX: 702-453-0801

IMPROVEMENT PLANS FOR
SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 2
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
NORFOLK PINE CT, INLET #25, #26, 39 & 40
CITY OF LAS VEGAS, NEVADA

DATE: 12-2-10
DRAWING
P-3
SHT 39 OF 67
CLV DRAWING NUMBER
1075142
CLV PROJECT # L20-01456

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1-702-227-2929

BENCHMARK
CITY OF LAS VEGAS BENCHMARK 7LV09 345W6
RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA DR.
ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

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NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN THE CLARK COUNTY, NEVADA RECORDER'S OFFICE IN BOOK 135, PAGE 71 OF PLATS.

SEWER CONSTRUCTION NOTES
1) INSTALL 48" STANDARD MANHOLE WITH WATERTIGHT JOINTS (PER DCSWCS STD. No. SD-1, SD-5, SD-4, SD-5) WITH SINGLE 14" LID
2) INSTALL 4" SEWER LATERAL (PER DCSWCS STD No. SD-17, SD-20 & SD-23)
3) LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
4) REMOVE EXISTING CAP WITH THRUST BLOCK AND CONNECT TO EXISTING SEWER STUB
5) EXISTING 4" SEWER LATERAL PER UNIT 1 TO BE PROTECTED AND REMAIN IN PLACE
6) INSTALL 4" C900 SEWER LATERAL (PER DCSWCS STD No. SD-17, SD-21 & SD-23)

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

CURVE TABLE					
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A" "B"
C14	139°49'57"	40.50'	98.84'	110.77'	- -
C15	59°43'34"	20.00'	20.85'	11.48'	- -
C20	73°11'12"	20.00'	25.55'	14.85'	- -
C21	68°54'53"	40.50'	48.71'	27.79'	- -

CONSTRUCTION NOTES

1) CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1

2) CONSTRUCT 24" "R" CURB PER CCAUSD #217.3 S1

3) CONSTRUCT 8" MODIFIED ("R" CURB) CROSS GUTTER PER SUMMERLIN IMPROVEMENT STD DWG #5-64

4) CONSTRUCT 4" SIDEWALK PER CCAUSD #234

5) 1/2" THICK WHEN ADJACENT TO "R" CURB

6) CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE I). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS

7) CONSTRUCT 12" ACCESS ROAD PER DETAIL 90 ON SHEET D-5

8) CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE I). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS

9) CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE

10) CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES

11) 2% MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS

12) CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421

13) CONSTRUCT 15" (5 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421

14) CONSTRUCT 17.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421

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16) EXISTING FIRE EMERGENCY CRASH GATE

17) INSTALL 8' LONG 7' WIDE RIP RAP D50= 8" THICKNESS= 16"

18) REMOVE EXISTING RIP RAP

19) INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238

20) INSTALL 4-INCH WIDE WHITE PAINTED STRIPE

21) TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB

22) CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219

23) 4' WIDE / VARIED LENGTH LANDSCAPE ROCK D50=6", THICKNESS=12"

24) SEE GRADING SHEETS FOR LIMITS

25) CONSTRUCT HEADWALL PER NDOT DWG. NO. R-2.5.1 (ALL EXPOSED DRAINAGE HEADWALLS ARE TO BE STAINED CONCRETE TO BLEND INTO LANDSCAPE)

26) CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421

27) CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

DATE: 12-2-20

BY: [Signature]

REV: [Table]

DESCRIPTION: [Table]

DATE: December 02, 2020

HORIZ. SCALE: 1"=30'

VERT. SCALE: 1"=5'

DRAWN BY: SC

DESIGNED BY: AW

CHECKED BY: C2

APPROVED BY: [Signature]

PROJECT #: 3040.0057

LENNAR®

9275 W. RUSSELL RD SUITE 400, LAS VEGAS, NV 89148

PHONE: (702) 736-9100 FAX: (702) 736-9200

RCI ENGINEERING

500 SOUTH RANCHO DRIVE, SUITE 17, LAS VEGAS, NV 89106

MAIN: 702.453.0800 FAX: 702.453.0801

IMPROVEMENT PLANS FOR

SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 2

A SINGLE FAMILY RESIDENTIAL SUBDIVISION

PLAN AND PROFILE

STORM DRAIN

NEVADA

CITY OF LAS VEGAS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 137593 FIRST APPROVED DATE: [Blank]

DATE: 12-2-20

DRAWING

P-4

SHT 40 OF 67

CLV DRAWING NUMBER 10715142

CLV PROJECT # 120-01456

PROFESSIONAL ENGINEER

CHRISTOPHER R. ZRINTI

Exp. 6/30/2022

CIVIL

No. 13976

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FAST



1-702-432-5300

Call before you Dig
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UTILITY LINES. IT'S COSTLY.



1-702-227-2929

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345W6
RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY
VISTA DR.

ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

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UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED
PRIOR TO WATERLINE INSTALLATION.

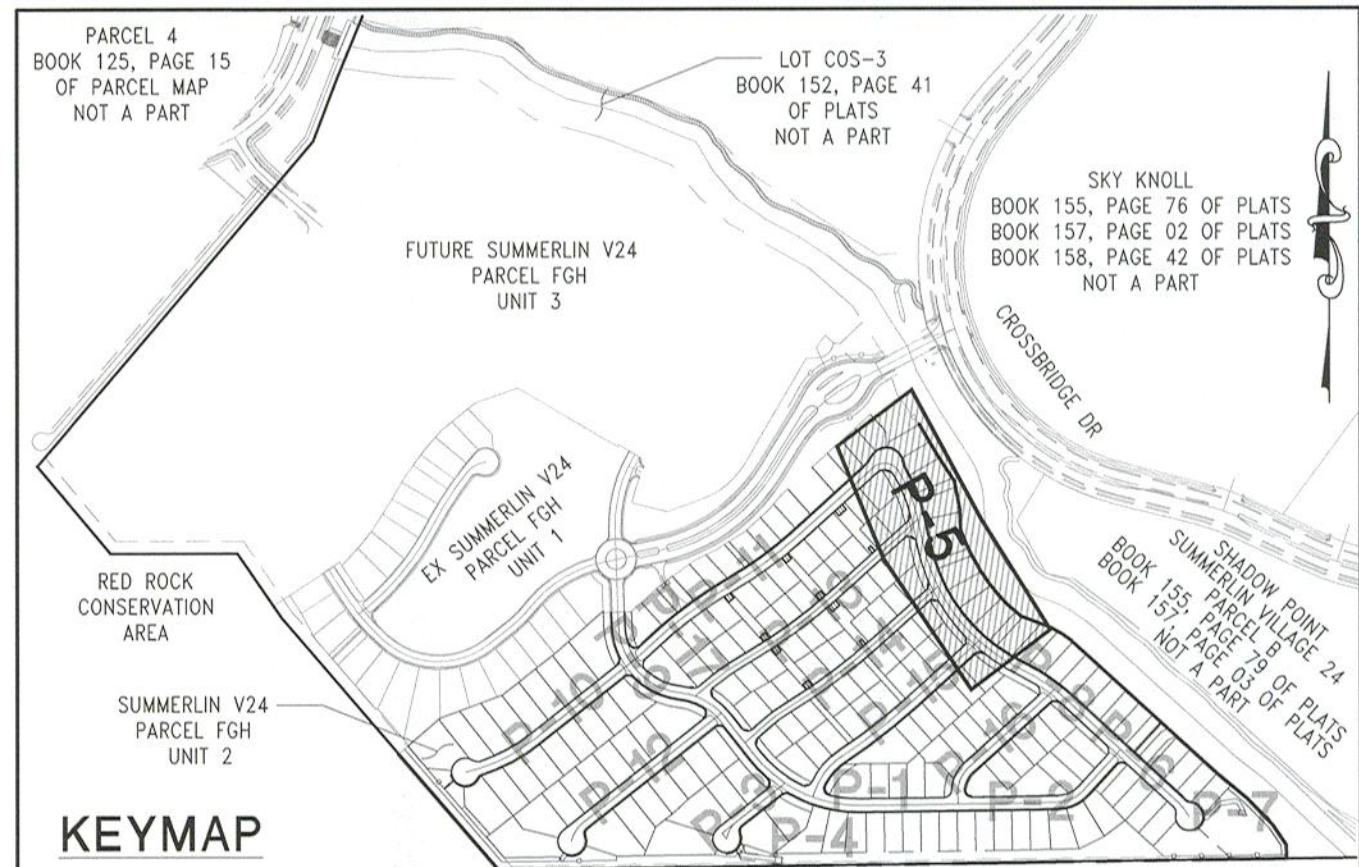
SEWER CONSTRUCTION NOTES

1. INSTALL 48" STANDARD MANHOLE WITH WATERTIGHT JOINTS (PER DCSWCS STD. No. SD-1, SD-3, SD-4, SD-5) WITH SINGLE 24" LID.
2. INSTALL 4" SEWER LATERAL (PER DCSWCS STD. No. SD-17, SD-20 & SD-23).
3. LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
4. REMOVE EXISTING CAP WITH THRUST BLOCK AND CONNECT TO EXISTING SEWER STUB.
5. EXISTING 4" SEWER LATERAL PER UNIT 1 TO BE PROTECTED AND REMAIN IN PLACE.
6. INSTALL 4" C900 SEWER LATERAL (PER DCSWCS STD. No. SD-17, SD-21 & SD-23).

CURVE TABLE						
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A"	"B"
C6	21°25'03"	100.00'	37.38'	18.91'	-	-
C7	141°15'53"	49.00'	120.81'	139.39'	-	-
C8	18°26'03"	100.00'	32.17'	16.23'	-	-
C9	18°09'53"	428.79'	135.94'	68.55'	-	-
C10	51°50'02"	495.69'	448.43'	240.87'	-	-
C41	27°08'47"	30.50'	14.45'	7.36'	-	-
C42	18°08'32"	390.79'	123.74'	62.39'	-	-
C43	62°13'41"	20.00'	21.72'	12.07'	-	-
C54	71°25'10"	20.00'	24.93'	14.38'	-	-
C55	10°59'50"	533.69'	102.44'	51.38'	-	-
C56	90°00'00"	20.00'	31.42'	20.00'	-	-
C64	88°57'54"	20.00'	31.05'	19.64'	-	-
C65	12°47'50"	533.69'	119.20'	59.85'	-	-
C66	88°57'54"	20.00'	31.05'	19.64'	-	-
C76	80°09'54"	20.00'	27.98'	16.83'	4.5'	15'

CONSTRUCTION NOTES

1. CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1.
2. CONSTRUCT 24" R' CURB PER CCAUSD #217.3 S1.
3. CONSTRUCT 8" MODIFIED (R' CURB) CROSS GUTTER PER SUMMERLIN IMPROVEMENT STD DWG #S-64.
4. CONSTRUCT 4" SIDEWALK PER CCAUSD #234.
5. 5" THICK WHEN ADJACENT TO R' CURB.
6. CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE III). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS.
7. CONSTRUCT 12' ACCESS ROAD PER DETAIL 90 ON SHEET D-5.
8. CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE III). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS.
9. CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE.
10. CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES.
11. 2% MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS.
12. CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421.
13. CONSTRUCT 15" (5 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421.
14. CONSTRUCT 17.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421.
15. CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421.
16. EXISTING FIRE EMERGENCY CRASH GATE.
17. INSTALL 8' LONG 7" WIDE RIP RAP D50=6" THICKNESS=16".
18. REMOVE EXISTING RIP RAP.
19. INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238.
20. INSTALL 4-INCH WIDE WHITE PAINTED STRIPE.
21. TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB.
22. CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219.
23. 4' WIDE / VARIED LENGTH LANDSCAPE ROCK D50=6", THICKNESS=12".
24. SEE GRADING SHEETS FOR LIMITS.
25. CONSTRUCT HEADWALL PER DETAIL 90 ON SHEET D-1.
26. ALL EXPOSED DRAINAGE HEADWALLS ARE TO BE STAINED CONCRETE TO BLEND INTO LANDSCAPE.
27. CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421.
28. CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1.

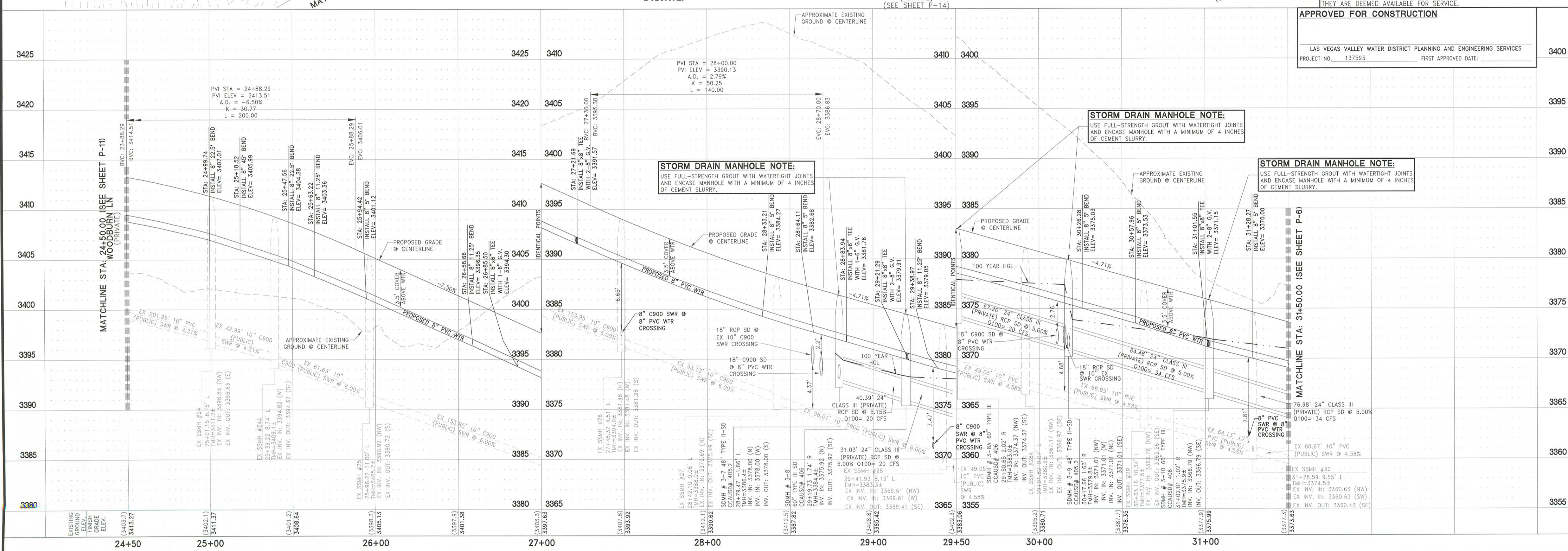


HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

DROP INLET NOTE

WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE:
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).

PRIMROSE GROVE LN (PRIVATE)



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. 137593 FIRST APPROVED DATE: _____

DATE	DESCRIPTION	BY	REV
December 02, 2020			
HORIZ. SCALE: 1"=30'			
VERT. SCALE: 1"=5'			
DRAWN BY: SC			
DESIGNED BY: AW			
CHECKED BY: C2			
APPROVED BY: C2			
PROJECT #:			3040.0057

LENNAR
9275 W. RUSSELL RD SUITE 400, LAS VEGAS, NV 89148
PHONE: (702) 736-9100 FAX: (702) 736-9200

RCI ENGINEERING
500 SOUTH RANCHO DRIVE, SUITE 17, LAS VEGAS, NV 89106
MAIN: 702.453.0800 FAX: 702.453.0801

SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 2
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
PRIMROSE GROVE LN STA: 24+50.00-31+50.00
CITY OF LAS VEGAS
Nevada

DATE: 12-2-20
DRAWING
P-5
SHT 41 OF 67
CLV DRAWING NUMBER 10715142
CLV PROJECT # 120-01456

DISCLAIMER NOTE:

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Call 811
1-800-642-2444

FAST
Call before you UnderGround
1-702-432-5300

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

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 7LV09 345W6
RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE
SOUTHEAST CORNER OF DESERT MOON RD. AND SKY
VISTA DR.
ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS

NORTH 05°59'55" WEST, BEING THE BEARING OF THE
WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE
59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY,
NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN THE
CLARK COUNTY, NEVADA RECORDER'S OFFICE IN BOOK
135, PAGE 71 OF PLATS.

SEWER CONSTRUCTION NOTES

- 1) INSTALL 48" STANDARD MANHOLE WITH WATERTIGHT JOINTS (PER DCSWS STD. No. SD-1, SD-3, SD-4, SD-5) WITH SINGLE 24" LID
- 2) INSTALL 4" SEWER LATERAL (PER DCSWS STD No. SD-17, SD-20 & SD-23)
- 3) LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
- 4) REMOVE EXISTING CAP WITH THRUST BLOCK AND CONNECT TO EXISTING SEWER STUB
- 5) EXISTING 4" SEWER LATERAL PER UNIT 1 TO BE PROTECTED AND REMAIN IN PLACE
- 6) INSTALL 4" C900 SEWER LATERAL (PER DCSWS STD No. SD-17, SD-21 & SD-23)

CONSTRUCTION NOTES

- 1) CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET D-1
- 2) CONSTRUCT 24" "R" CURB PER CCAUSD #217.3 S1
- 3) CONSTRUCT 8" MODIFIED ("R" CURB) CROSS GUTTER PER SUMMERLIN IMPROVEMENT STD DWG #5-034
- 4) CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- 5) 75" THICK WHEN ADJACENT TO "R" CURB
- 6) CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE I) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- 7) CONSTRUCT 12" ACCESS ROAD PER DETAIL 90 ON SHEET D-5
- 8) CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE II) SEE PLAN AND PROFILE SHEET CURVE TABLES FOR "A" AND "B" DIMENSIONS
- 9) CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- 10) CONSTRUCT 6' HIGH WROUGHT IRON FENCE AND/OR GATES
- 11) 2% MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS
- 12) CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- 13) CONSTRUCT 15" (5 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- 14) CONSTRUCT 17.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- 15) CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- 16) EXISTING FIRE EMERGENCY CRASH GATE
- 17) INSTALL 8" LONG 7" WIDE RIP RAP D50= 8"
- 18) THICKNESS 16"
- 19) REMOVE EXISTING RIP RAP
- 20) INSTALL PRECAST BUMPER BLOCK PER CCAUSD No.238

- 19) INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- 20) 0" CURB
- 21) TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- 22) CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 23) 4" WIDE / VARIOUS LENGTH LANDSCAPE ROCK D50=6", THICKNESS=12"
- 24) SEE GRADING SHEETS FOR LIMITS
- 25) CONSTRUCT HEADWALL PER NDOT DWG. NO. R-2.5.1 (ALL EXPOSED DRAINAGE HEADWALLS ARE TO BE STAINED CONCRETE TO BLEND INTO LANDSCAPE)
- 26) CONSTRUCT 22.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- 27) CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

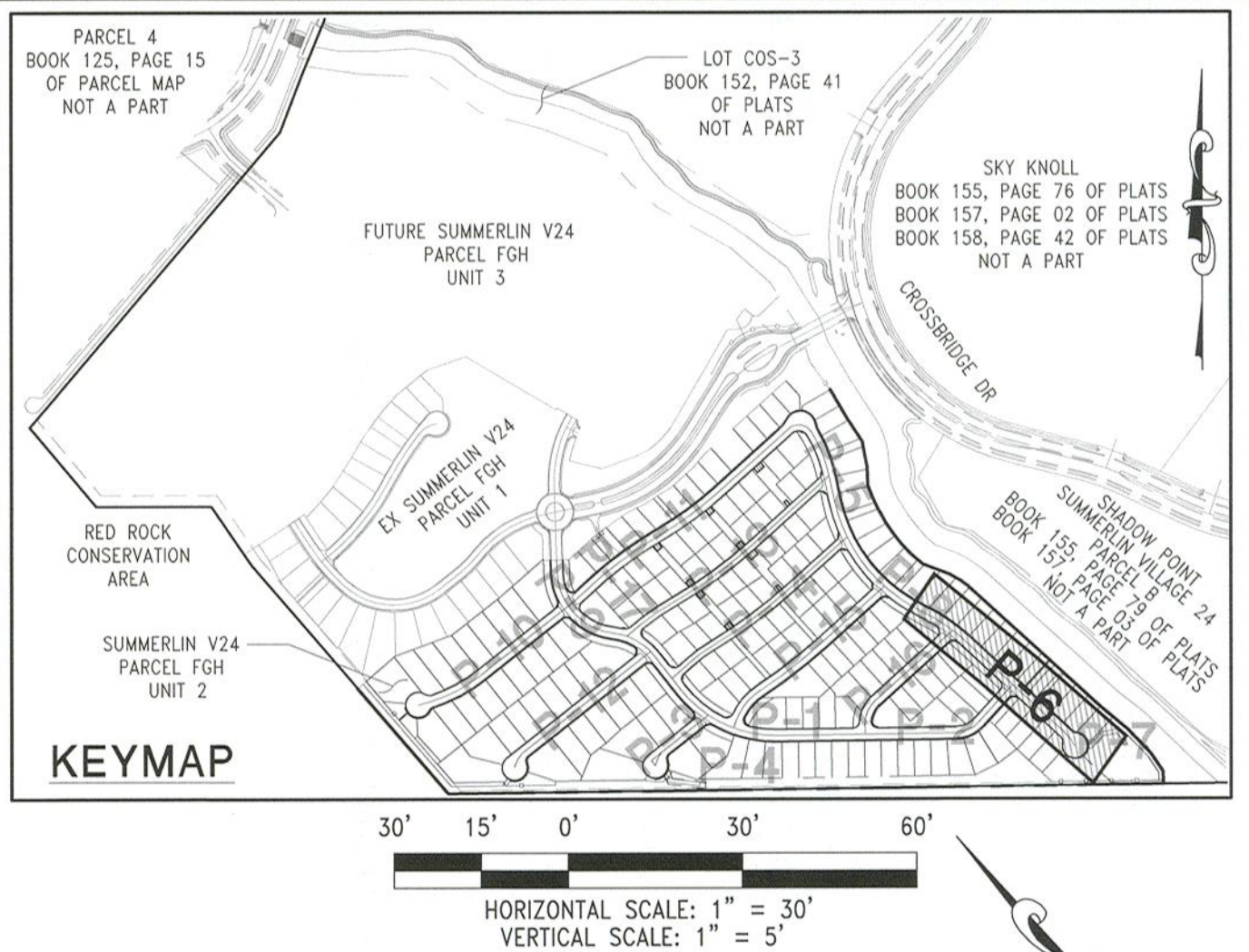
DROP INLET NOTE

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DEPTH OF COVER DURING CONSTRUCTION

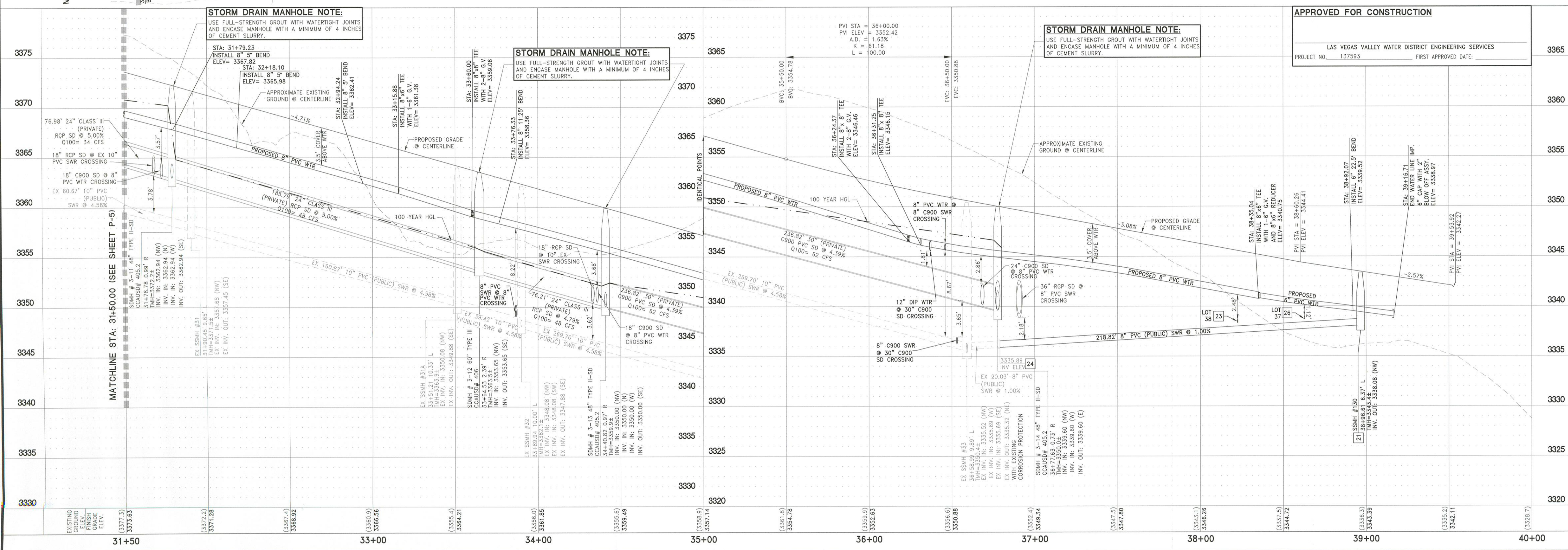
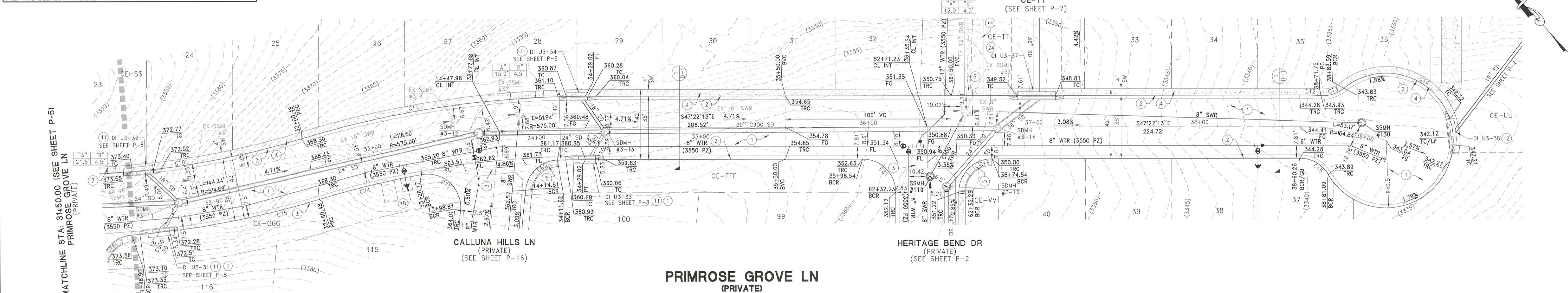
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

CURVE TABLE					
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A" "B"
C10	51°50'02"	495.69'	448.43'	240.87'	- -
C11	16°47'40"	594.00'	174.11'	87.68'	- -
C12	3°56'29"	182.03'	12.52'	6.26'	- -
C13	42°56'02"	20.00'	14.99'	7.86'	- -
C14	139°49'57"	40.50'	98.84'	110.77'	- -
C15	59°43'34"	20.00'	20.85'	11.48'	- -
C16	90°00'00"	20.00'	31.42'	20.00'	4.5' 12'
C73	91°04'08"	20.00'	31.79'	20.38'	- -
C74	6°32'43"	556.00'	63.52'	31.79'	- -
C75	12°25'16"	533.69'	115.70'	58.08'	- -
C76	80°09'54"	20.00'	27.98'	16.83'	4.5' 15
C81	90°00'00"	20.00'	31.42'	20.00'	- -
C82	82°48'15"	20.00'	28.90'	17.63'	4.5' 15'



SEWER CONNECTION NOTE

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



APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 137593 FIRST APPROVED DATE:

DATE: December 02, 2020
HORIZ. SCALE: 1"=30'
VERT. SCALE: 1"=5'
DRAWN BY: SC
DESIGNED BY: AW
CHECKED BY: CZ
APPROVED BY: CZ
PROJECT #:

LENNAR
9275 W. RUSSELL RD SUITE 400, LAS VEGAS, NV 89148
PHONE: (702) 736-9100 FAX: (702) 736-9200

RCI ENGINEERING
300 SOUTH RANCHO DRIVE, SUITE 17, LAS VEGAS, NV 89106
MAIN: 702.453.0800 FAX: 702.453.0801

IMPROVEMENT PLANS FOR
SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 2
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
PLAN AND PROFILE
PRIMROSE GROVE LN STA: 31+50.00-40+00.00
CITY OF LAS VEGAS

DATE: 12-2-20
DRAWING
P-6
SHT 42 OF 67
CLV DRAWING NUMBER
10715142
CLV PROJECT # L20-01456

DISCLAIMER NOTE:

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Call before you Dig

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BENCHMARK
CITY OF LAS VEGAS BENCHMARK 7LV09 345W6
RIVET AND ROUND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON RD. AND SKY VISTA DR.
ELEVATION = 1011.422 METERS (NAVD '88)
ELEVATION = 3318.31 US SURVEY FEET (NAVD '88)

BASIS OF BEARINGS
NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN THE CLARK COUNTY, NEVADA RECORDER'S OFFICE IN BOOK 135, PAGE 71 OF PLATS.

SEWER CONSTRUCTION NOTES
21. INSTALL 48" STANDARD MANHOLE WITH WATERTIGHT JOINTS (PER DCSWCS STD. No. SD-1, SD-3, SD-4, SD-5) WITH SINGLE 24" LID.
22. INSTALL 4" SEWER LATERAL (PER DCSWCS STD No. SD-17, SD-20 & SD-23).
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24. REMOVE EXISTING CAP WITH THRUST BLOCK AND CONNECT TO EXISTING SEWER STUB.
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- CONSTRUCT AC PAVEMENT PER DETAILS 1 THRU 3 ON SHEET S-1.
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- CONSTRUCT 8" MODIFIED (R' CURB) CROSS GUTTER PER SUMMERLIN IMPROVEMENT STD DWG #S-64
- CONSTRUCT 4" SIDEWALK PER CCAUSD #234
- 5" THICK WHEN ADJACENT TO R' CURB
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- CONSTRUCT 12" ACCESS ROAD PER DETAIL 90 ON SHEET D-5
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- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES
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- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- 3" TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4" WIDE VARYED LENGTH LANDSCAPE ROCK D50=6", THICKNESS=12"
- SEE GRADING SHEETS FOR LIMITS
- CONSTRUCT HEADWALL PER NDOT DWG. No. R-25.1
- ALL EXPOSED DRAINAGE HEADWALLS ARE TO BE STAINED CONCRETE TO BLEND INTO LANDSCAPE
- CONSTRUCT 22.5" (8 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
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DROP INLET NOTE
WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE:
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30' 15' 0' 30' 60'
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

CURVE TABLE						
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A"	"B"
C16	90°00'00"	20.00'	31.42'	20.00'	4.5'	12'
C81	90°00'00"	20.00'	31.42'	20.00'	-	-

KEYMAP

PRIMROSE GROVE LN (PRIVATE)
(SEE SHEET P-6)

HERITAGE BEND DR (PRIVATE)
(SEE SHEET P-2)

STORM DRAIN CE-TT (PUBLIC)

HERITAGE BEND DR (PRIVATE)
(SEE SHEET P-2)

INLET #35 AND #36

PRIMROSE GROVE LN (PRIVATE)
(SEE SHEET P-6)

12" WATER CE-TT (PUBLIC)

DATE: December 02, 2020
HORIZ. SCALE: 1"=30'
VERT. SCALE: 1"=5'
DRAWN BY: SC
DESIGNED BY: AW
CHECKED BY: CZ
APPROVED BY: CZ
PROJECT #: 3040.0057

LENNAR®

9275 W. RUSSELL RD SUITE 400, LAS VEGAS, NV 89148
PHONE: (702) 736-9100 FAX: (702) 736-9200

RCI ENGINEERING

500 SOUTH RAMPAGE DRIVE, SUITE 100, LAS VEGAS, NV 89106
MAIN: 702.453.0800 FAX: 702.453.0801

IMPROVEMENT PLANS FOR

SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 2
A SINGLE FAMILY RESIDENTIAL SUBDIVISION

PLAN AND PROFILE
STORM DRAIN CE-TT AND STORM DRAIN CE-UU

NOVEMBER 2020

DATE: 12-2-20

P-7

SHT 43 OF 67
CLV DRAWING NUMBER 10775142
CLV PROJECT # 120-01456

C:\3040_LEVR\0057_Summerlin\103_CIVIL_IPS\Unit 2\50007_P-07.dwg gisera 12/02/20 8:16am

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SYSTEM OF TRANSPORTATION

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YOU DO
OVERHEAD**

1-702-227-2929

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CITY OF LAS VEGAS BENCHMARK 7LV09 34SW6
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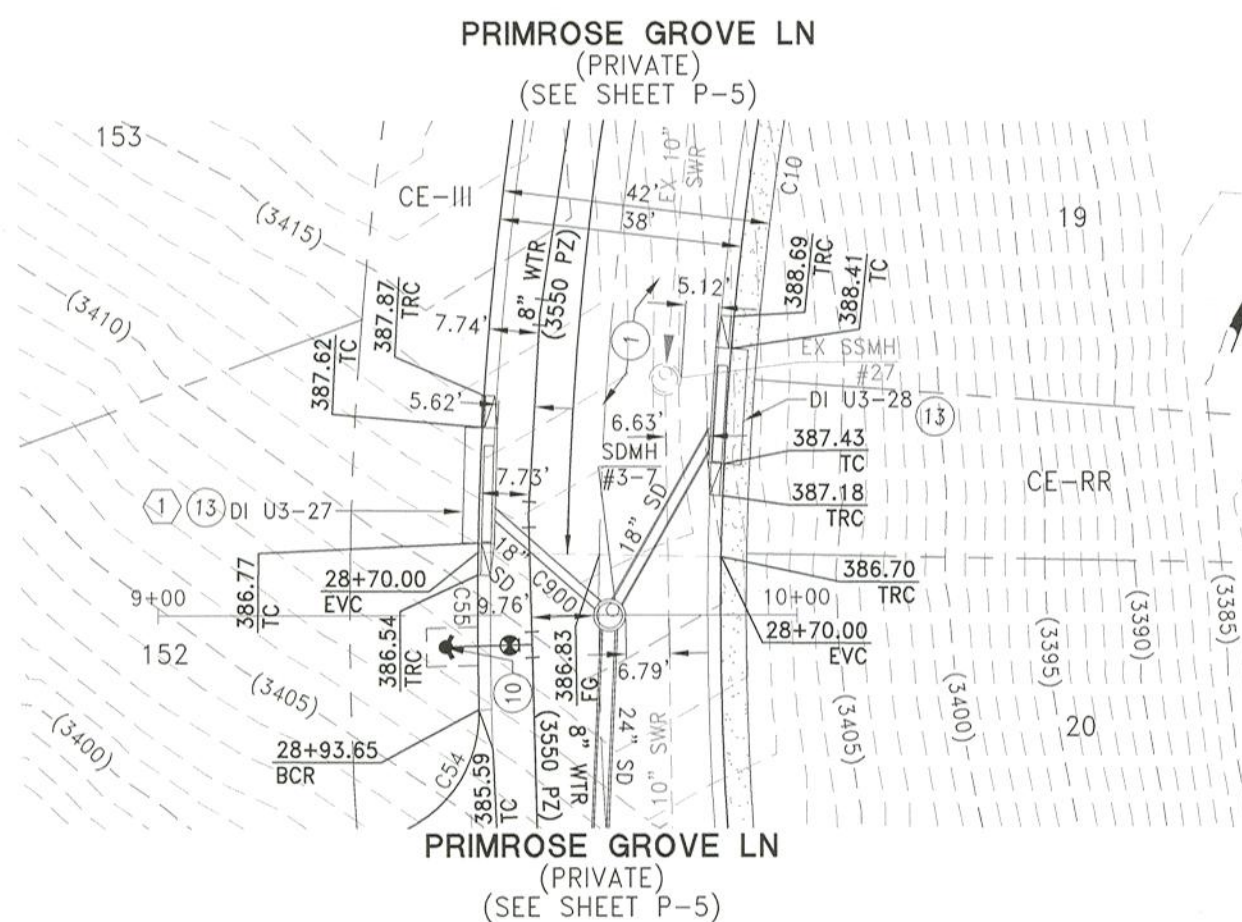
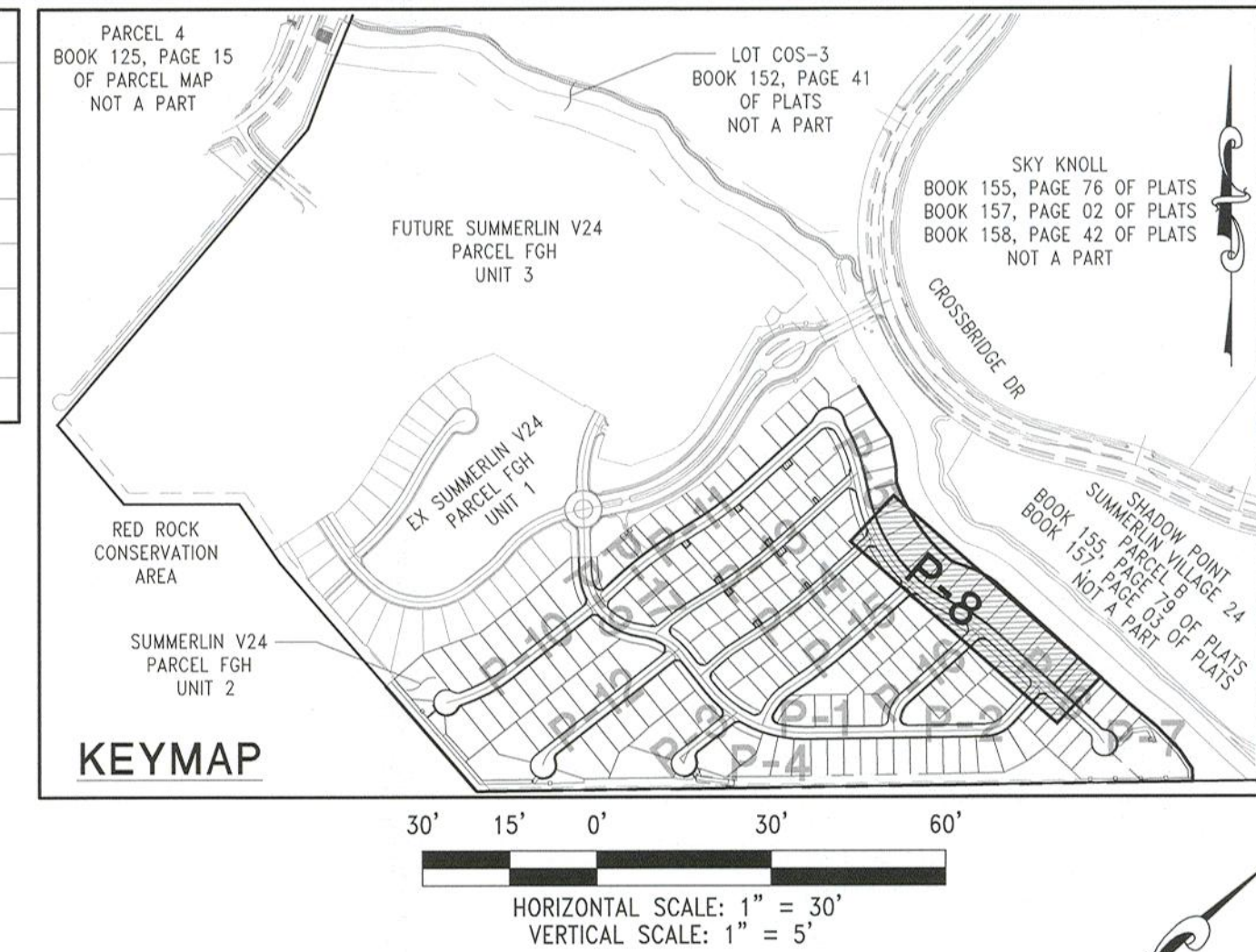
DEPTH OF COVER DURING CONSTRUCTION

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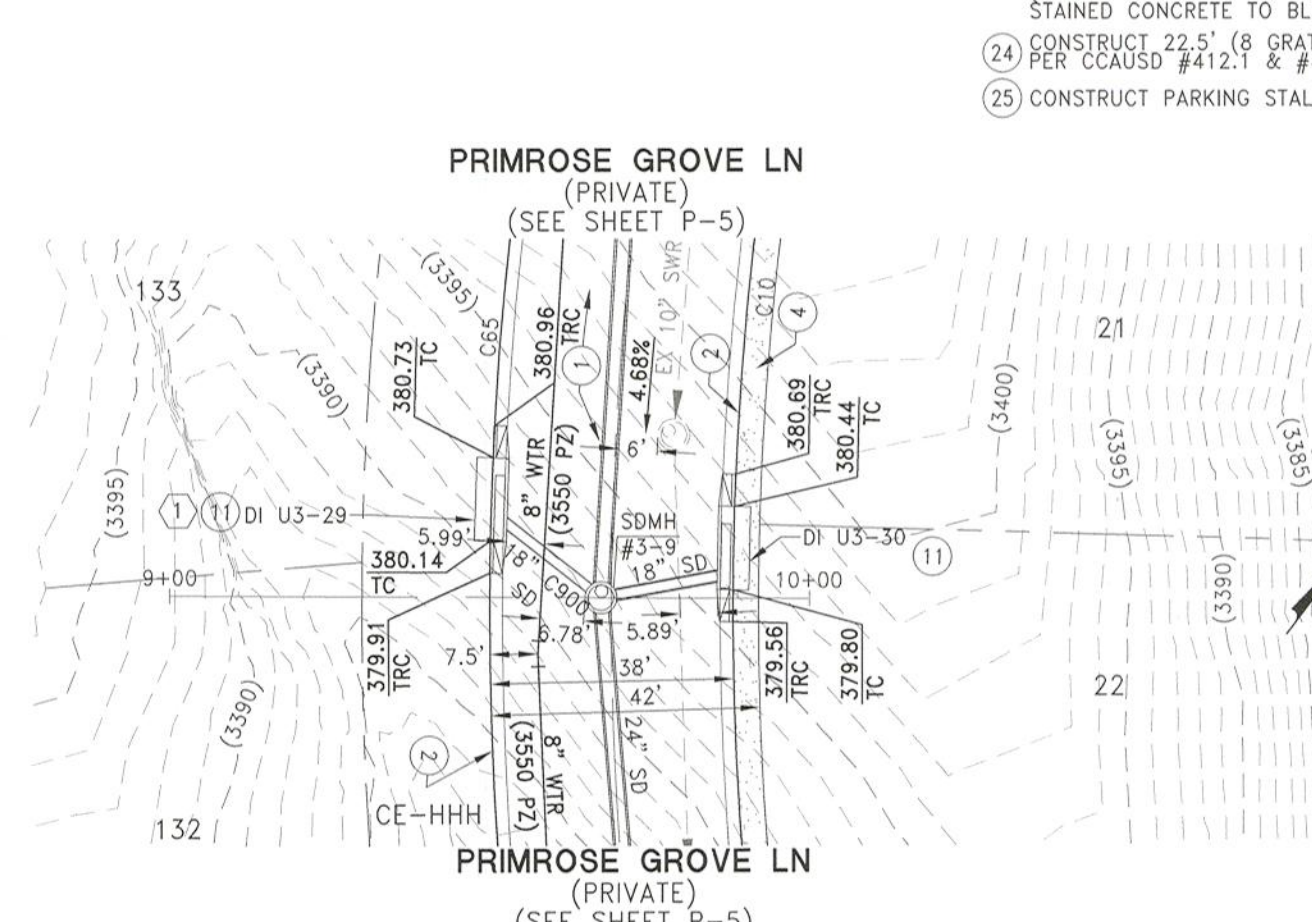
CONSTRUCTION NOTES

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- CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD #235 (CASE I). SEE PLAN AND PROFILE SHEET CURVE TABLES FOR 'A' AND 'B' DIMENSIONS
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- CONSTRUCT 5' WIDE PEDESTRIAN ACCESS GATE
- CONSTRUCT 6" HIGH WROUGHT IRON FENCE AND/OR GATES
- 3% MAX GRADING ADJACENT TO FIRE HYDRANT PER PUBLIC FIRE HYDRANT INSTALLATION DETAIL ON UTILITY SHEETS
- CONSTRUCT 12.5" (4 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 15" (5 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 17.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT 20" (7 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- EXISTING FIRE EMERGENCY CRASH GATE
- INSTALL 8" LONG 7" WIDE RIP RAP D50= 8" THICKNESS= 16"
- REMOVE EXISTING RIP RAP
- INSTALL PRECAST BUMPER BLOCK PER CCAUSD NO.238
- INSTALL 4-INCH WIDE WHITE PAINTED STRIPE
- 3" TRANSITION FROM TOP OF "A" TYPE ISLAND CURB TO TOP OF CURB
- CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219
- 4" WIDE VARIED LENGTH LANDSCAPE ROCK D50=6", THICKNESS=12"
- SEE GRADING SHEETS FOR LIMITS
- CONSTRUCT HEADWALL PER NDOT DWG. NO. R-2.5.1 (ALL EXPOSED DRAINAGE HEADWALLS ARE TO BE STAINED CONCRETE TO BLEND INTO LANDSCAPE)
- CONSTRUCT 22.5" (6 GRATES) TYPE CM2 DROP INLET PER CCAUSD #412.1 & #421
- CONSTRUCT PARKING STALL PER DETAIL 19 ON SHEET D-1

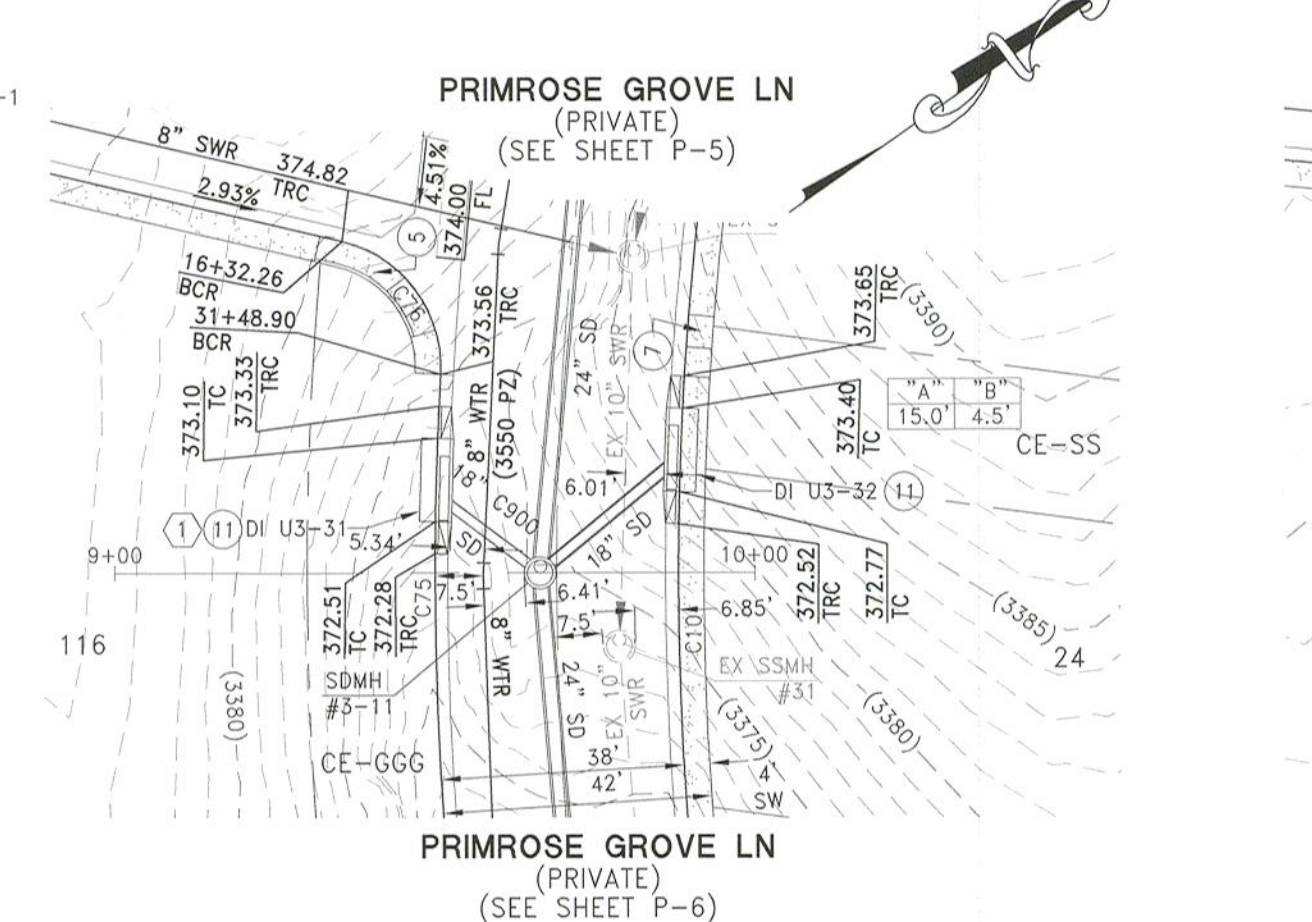
CURVE TABLE					
CURVE #	DELTA	RADIUS	LENGTH	TANGENT	"A" "B"
C10	51°50'02"	495.69'	448.43'	240.87'	-- --
C54	71°25'10"	20.00'	24.93'	14.38'	-- --
C55	10°59'50"	533.69'	102.44'	51.38'	-- --
C65	12°47'50"	533.69'	119.20'	59.85'	-- --
C75	12°25'16"	533.69'	115.70'	58.08'	-- --
C76	80°09'54"	20.00'	27.98'	16.83'	4.5' 15'
C82	82°48'15"	20.00'	28.90'	17.63'	4.5' 15'



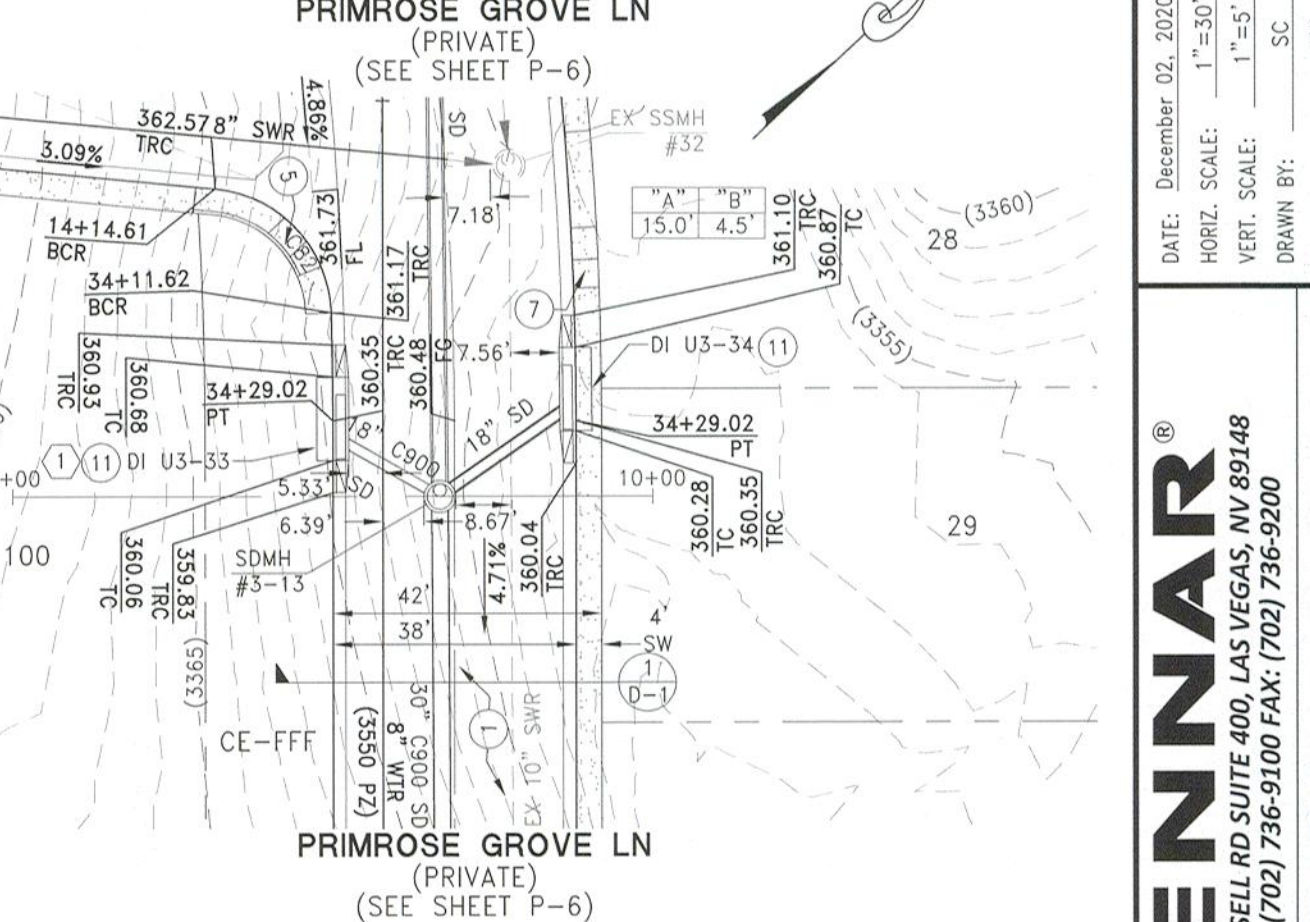
INLET #27 & #28
(PRIVATE)



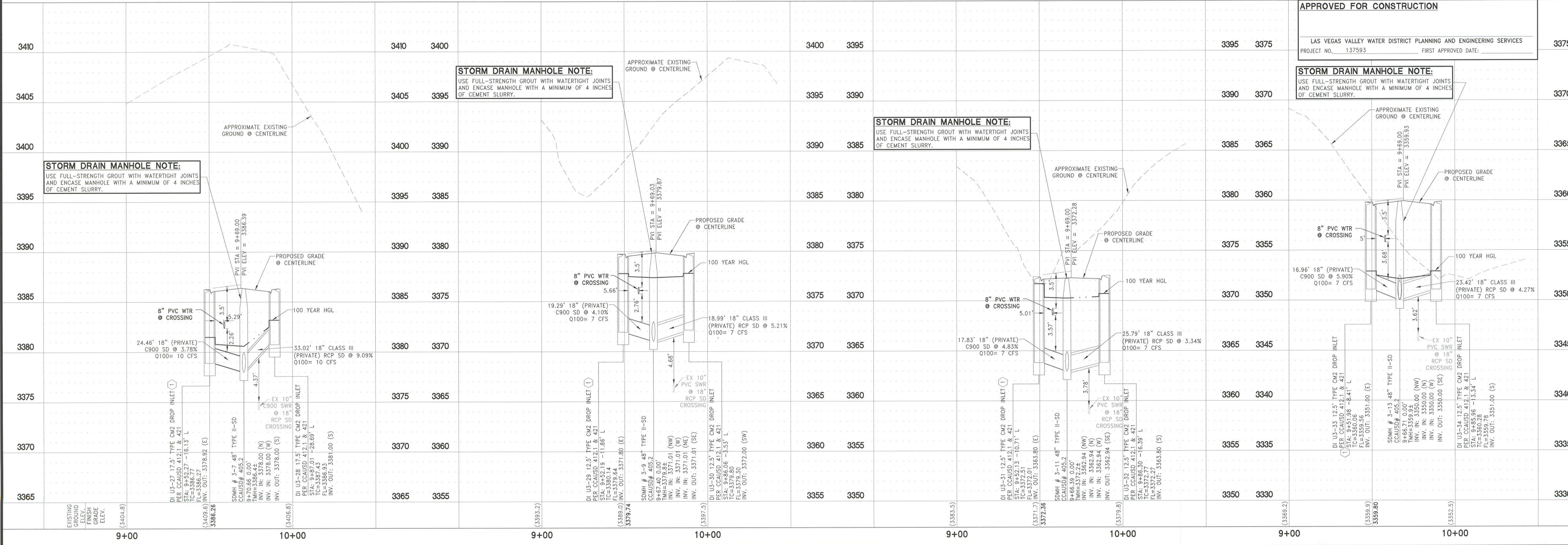
INLET #29 & #30
(PRIVATE)



INLET #31 & #32
(PRIVATE)



INLET #33 & #34
(PRIVATE)



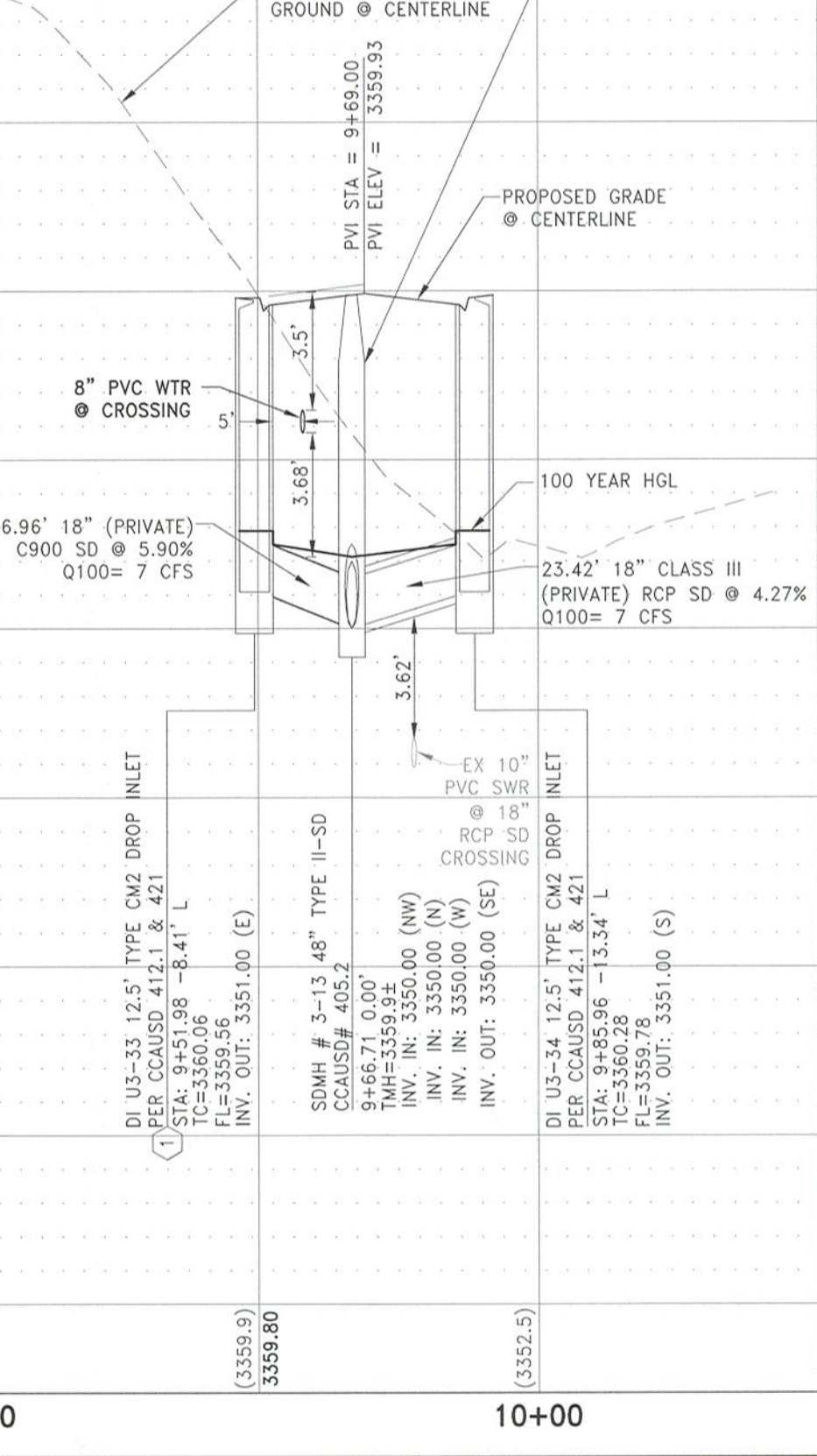
APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 137593 FIRST APPROVED DATE:

STORM DRAIN MANHOLE NOTE:

USE FULL-STRENGTH GROUT WITH WATERTIGHT JOINTS AND ENCASE MANHOLE WITH A MINIMUM OF 4 INCHES OF CEMENT SLURRY.



DATE: December 02, 2020
HORIZ. SCALE: 1"=30'
VERT. SCALE: 1"=5'
DRAWN BY: SC
DESIGNED BY: AW
CHECKED BY: CZ
APPROVED BY: CZ
PROJECT #: 3040.0057

LENNAR

9275 W. RUSSELL RD SUITE 400, LAS VEGAS, NV 89148
PHONE: (702) 736-9100 FAX: (702) 736-9200

RCI ENGINEERING

500 SOUTH RANCHO DRIVE, SUITE 171, LAS VEGAS, NV 89106
PHONE: (702) 453-0800 FAX: (702) 453-0801

IMPROVEMENT PLANS FOR

SUMMERLIN VILLAGE 24 PARCEL FGH UNIT 2

A SINGLE FAMILY RESIDENTIAL SUBDIVISION

PLAN AND PROFILE

INLET #27, #28, #29, #30, # 31, #32, #33 AND & 34

CITY OF LAS VEGAS

DATE: 12-2-20

DRAWING

P-8

SHT 44 OF 67

CLV DRAWING NUMBER 10715142

CLV PROJECT # L20-01456

C:\3040-LENNAR\0057-Summerlin\103_CIVIL\1PS\UNIT 2\0002_P-08.dwg gislerro 12/02/20 8:12am