

DS #:

5000

APN:

126.12.310.001

PROJECT:

Skyl Canyon 11 Parcel 2.17

SUBMITTAL:

2nd

SCANNED BY/DATE:

CHECKED BY/DATE:



CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM

DATE:

July 19, 2018

TO:

Land Development Services
Department of Building & Safety

FROM:

Jennifer Shinn, P.E. 
Flood Control Engr. Associate
Department of Public Works

SUBJECT:

Drainage Study for:

Skye Canyon II Parcel 2.17

COPIES TO:

Slater-Hanifan Group, Inc.

Cross Streets:

NEC of Eagle Canyon Ave & Shaumber Rd

Ninety-Five Management, LLC

File Number:

F:\Depot\DSMemos\DS5000B.doc

Bart Anderson, P.E., DevCo

Parcel Number:

126-12-310-001

CCRFCD

Zoning Action:

TMP-72766

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	6/6/2018	6/20/2018	See Comments Below	\$400.00	496555: \$400
2 nd Submittal	07/05/2018	07/18/2018		\$400.00	497158: \$400
TOTAL FEES (LDDRS):				\$800.00	----

REMARKS:

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

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

1. **This drainage study is acceptable in concept;** however, *City of Las Vegas* will not formally accept the study until the *Clark County Regional Flood Control District* (CCRFCD) has issued a letter of concurrence. The engineer should contact the CCRFCD to confirm that they have begun their review.
2. Prior to and concurrent with the recordation of a Final Map for this site, a Petition of Vacation, such as VAC-70311, shall be recorded to eliminate the City of Las Vegas Public Sewer, Utility and Drainage Easements within Skye Canyon Parcel 2.16 in conflict with this proposed site. If VAC-70311 is not approved, then the Tentative Map TMP-72766 shall be null and void and a new Tentative map shall be submitted for review.
3. The grading plan indicates offsite grading of Lots 20-27 and 33-38. Secure a notarized letter of permission from the property owner allowing the grading. This letter is required prior to final acceptance of the drainage study.

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

jks

T/R/S: T19S/R59E/12
AREA F-12

Supplement rec'd
07/19/18

Adjacent/Perimeter Street Check										
Lot Number	Street	High TC ¹	High FL ²	Section	Flow Depth ³	Min FF ⁴	Design FF	T/C+6" Chech	Check	Solid Grout
20	Eagle Canyon Avenue	2947.72	2947.22	ECA1	0.46	2948.14	2948.0	CHECK	CHECK	Yes
21	Eagle Canyon Avenue	2950.17	2949.67	ECA1	0.46	2950.59	2950.6	CHECK	OK	Yes
22	Eagle Canyon Avenue	2952.62	2952.12	ECA1	0.46	2953.04	2953.6	OK	OK	No
23	Eagle Canyon Avenue	2955.07	2954.57	ECA1	0.46	2955.49	2957.4	OK	OK	No
24	Eagle Canyon Avenue	2957.52	2957.02	ECA1	0.46	2957.94	2961.1	OK	OK	No
25	Eagle Canyon Avenue	2959.97	2959.47	ECA1	0.46	2960.39	2965.5	OK	OK	No
67	Eagle Canyon Avenue	2962.42	2961.92	ECA1	0.46	2962.84	2970.1	OK	OK	No
68	Eagle Canyon Avenue	2964.87	2964.37	ECA1	0.46	2965.29	2973.1	OK	OK	No
69	Eagle Canyon Avenue	2969.77	2969.27	ECA1	0.46	2970.19	2977.0	OK	OK	No
70	Eagle Canyon Avenue	2972.22	2971.72	ECA1	0.46	2972.64	2978.3	OK	OK	No
71	Eagle Canyon Avenue	2974.67	2974.17	ECA1	0.46	2975.09	2979.6	OK	OK	No
72	Eagle Canyon Avenue	2977.12	2976.62	ECA1	0.46	2977.54	2981.3	OK	OK	No
73	Eagle Canyon Avenue	2982.02	2981.52	ECA1	0.46	2982.44	2983.4	OK	OK	No
74	Eagle Canyon Avenue	2984.47	2983.97	ECA1	0.46	2984.89	2985.9	OK	OK	No
75	Eagle Canyon Avenue	2986.44	2985.94	ECA1	0.46	2986.86	2988.5	OK	OK	No
76	Eagle Canyon Avenue	2991.49	2990.99	ECA1	0.46	2991.91	2992.5	OK	OK	No
77	Eagle Canyon Avenue	2996.71	2996.21	ECA1	0.46	2997.13	2995.1	CHECK	CHECK	Yes
78	Eagle Canyon Avenue	2999.15	2998.65	ECA1	0.46	2999.57	2997.4	CHECK	CHECK	Yes
79	Eagle Canyon Avenue	3001.61	3001.11	ECA1	0.46	3002.03	2999.7	CHECK	CHECK	Yes
80	Eagle Canyon Avenue	3003.83	3003.33	ECA1	0.46	3004.25	3001.2	CHECK	CHECK	Yes
81	Eagle Canyon Avenue	3005.60	3005.10	ECA1	0.46	3006.02	3002.4	CHECK	CHECK	Yes
82	Eagle Canyon Avenue	3006.90	3006.40	ECA1	0.46	3007.32	3003.8	CHECK	CHECK	Yes
83	Eagle Canyon Avenue	3007.74	3007.24	ECA1	0.46	3008.16	3005.3	CHECK	CHECK	Yes
84	Eagle Canyon Avenue	3008.36	3007.86	ECA1	0.46	3008.78	3007.1	CHECK	CHECK	Yes
85	Eagle Canyon Avenue	3008.98	3008.48	ECA1	0.46	3009.40	3009.2	CHECK	CHECK	Yes
86	Eagle Canyon Avenue	3009.68	3009.18	ECA1	0.46	3010.10	3011.0	OK	OK	No
115	Skye Paseo Ave	3003.41	3003.03	O-1c	0.42	3003.87	3006.8	OK	OK	No
125	Skye Arroyo Ave	2978.82	2978.44	O-1c	0.42	2979.28	2976.9	CHECK	CHECK	Yes
127	Skye Paseo Ave	2978.53	2978.15	O-1c	0.42	2978.99	2978.5	CHECK	CHECK	Yes
128	Skye Paseo Ave	2975.14	2974.76	O-1c	0.42	2975.60	2978.2	OK	OK	No
130	Skye Arroyo Ave	2970.81	2970.43	O-1c	0.42	2971.27	2976.0	OK	OK	No

1: High TC is the elevation at the high side of the adjacent perimeter street

2: 0.5-ft (Perimeter Streets) or 0.38' (Onsite Roadways) is subtracted from the High TC to obtain the High FL elevation

3: Flow depth is the normal depth in adjacent perimeter street

4: Min FF is the High FL plus twice the depth of flow.

TRANSMITTAL

To: Albert Sung, P.E.
City of Las Vegas
333 N. Rancho Drive
Las Vegas, NV 89106
From: Cameron Bencini, P.E.

Date: July 05, 2018
Project No.: OLY1721.000

Subject: Technical Drainage Study for Skye Canyon Parcel 2.17 - Addendum

CC: Tracy Stratton **CC:** Stanley Okey Amadi, SHG
CC: Chelsea Peltier, SHG **CC:** _____
CC: Mark Failla, SHG **CC:** _____

Transmitting Via:

- ☐ Mail
☒ Messenger / MDS
☐ Federal Express
☐ Pickup

For:

- ☒ Review & Comment
☐ Per your Request
☐ Information/File

Acknowledgement of Receipt:

- ☐ Not Required
☒ Acknowledgement Required

Received By: _____
Date: _____ **Time:** _____

Copies	Description
<u>1</u>	<u>Subject Study</u>
<u>1</u>	<u>Grading Plan, Profile and Detail Sheets</u>
<u>1</u>	<u>Stamped and Signed Standard Form 1</u>
<u>1</u>	<u>\$400 Submittal Fee from Ninety-Five Management LLC (Chk#1518)</u>
<u>1</u>	<u>CD containing PDF of submittal documents</u>

Comments:

Enclosed please find the above listed items in support of proposed improvements required for the project entitled *Skye Canyon Parcel 2.17*. The project is located on the northeast corner of Eagle Canyon Avenue and Shaumber Road.

Please contact us if there are any questions at 702-284-5300. Thanks.

Signed: _____
Cameron Bencini, P.E.
Flood Control Division

Please, notify us at (702) 284-5300 if there are any problems receiving this transmission.

**TECHNICAL DRAINAGE STUDY
ADDENDUM
Skye Canyon II Parcel 2.17
City of Las Vegas, Nevada**

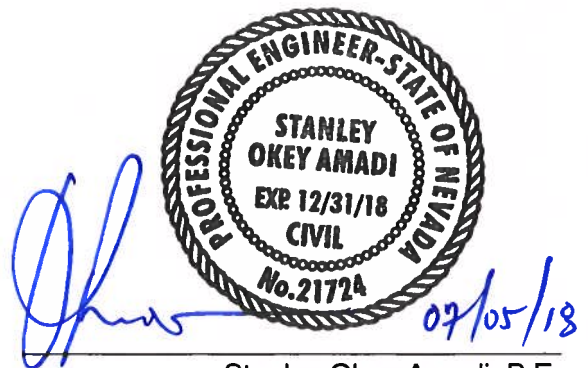
Job No.: OLY1721.000
Date: July 2018

Prepared By:

Slater Hanifan Group, Inc.
5740 S. Arville Street, Suite 216
Las Vegas, Nevada 89118
Phone: 702-284-5300 • Fax: 702-284-5399

Prepared For:

Ninety-Five Management, LLC
11411 Southern Highlands Parkway, Suite 300
Las Vegas, NV 89141
Phone: 702-220-6565 • Fax: 702-220-6566



Stanley Okey Amadi, P.E.
NV Professional Engineer No. 21724

Assisted by: Cameron Bencini, P.E

HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Skye Canyon II Parcel 2.17 - Addendum Date: July 2018
Location of Development: a) Descriptive (Cross Streets): North/South: Shaumber Road
East/West: Eagle Canyon Avenue
b) Section: 12 Township: 19 South Range: 59 East
c) APN: 126-12-310-001, 126-12-501-001, 126-12-311-001, -002, -003, -004, 005, -006, -007,
-008, -009, 126-12-711-020, -021, -022, -023 and -029

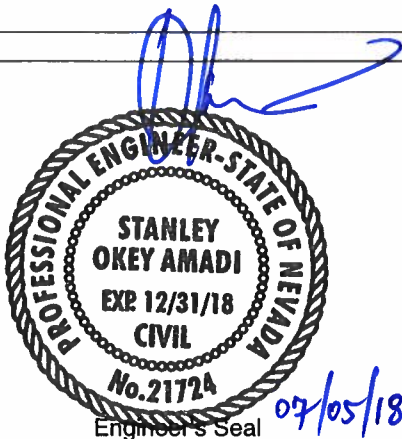
Name of Owner/Developer: KAG Development West, LLC, Ninety-Five Management, LLC & PN II, Inc
Telephone No.: 702-220-6565 Fax No.: 702-220-6566 E-mail Address: mbolduc@olympiacompanies.com
Address: 11411 Southern Highlands Parkway, Suite 300; Las Vegas, NV 89141

Contact Person – Name: Stanley Okey Amadi, P.E. Telephone No.: 702-284-5300
*E-mail Address: samadi@shg-inc.com Fax No.: 702-284-5399
Firm: Slater Hanifan Group
Address: 5740 S. Arville Street, Suite 216; Las Vegas, NV 89118

Type of Land Development/Land Disturbance Process:

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

1. Total Owned Land Area: At Site: 327.96 Acres Being Developed/Disturbed: 20.2 Acres +/-
2. Is a portion or all of the subject property located in a 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.): Single-Family Residential
5. Approximate upstream land area which drains to the subject site: 0 acre +/-
6. Has the site drainage been evaluated in the past? ☒ Yes** ☐ No If yes, please identify documentation: Master Drainage Study for Skye Canyon (SHG, DS4420), Technical Drainage Study for Skye Canyon Parcel 2.16 (DS4842C),
Technical Drainage Study for Skye Canyon Phase 2 Infrastructure (SHG, DS4739) & TDS Updates 1 thru 4
7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Runoff drains to two separate local storm
drain systems that discharges south onto Eagle Canyon Avenue and north into the existing Arroyo, respectively.
8. Briefly describe your proposed schedule for the subject project: ASAP



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.

***Newly Required Field**

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

Local Entity File No.	Revision	Date

REFERENCE: **SHG Job No. OLY1721.000**

STANDARD FORM 1

Updated 05/01/2008



OLY1721.000

June 05, 2018

Albert Sung, P.E.
Flood Control Project Engineer
City of Las Vegas Department of Public Works
333 N. Rancho Drive
Las Vegas, Nevada 89106

Subject: Addendum to the Technical Drainage Study for Skye Canyon Parcel 2.17 (CLV DS5000A)

Dear Mr. Sung:

This letter is submitted in response to comments contained in the June 20, 2018 review memorandum, regarding the above referenced project. A copy of the City of Las Vegas (CLV) Department of Public Works comment letter has been provided in Appendix A.

The comments have been individually addressed as follows:

1. **Comment:** *The site is adjacent to or crosses an existing or proposed Clark County Regional Flood Control District (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.*

Response: Noted. A copy of the drainage study and addendum will be submitted to CCRFCD for concurrence upon receipt of a conditional approval from CLV.

2. **Comment:** *All roadway and flood control facilities as proposed and approved in Skye Canyon Phase 2 Infrastructures must be substantially constructed prior to the issuance of occupancy permits.*

Response: Acknowledged.

3. **Comment:** *The subject Skye Canyon II Parcel 2.17 Technical Drainage Study will not be approved prior to the final approval of Skye Canyon – Phases 3B & 3C Infrastructure Drainage Study (DS4953A).*

Response: Per our phone coordination of June 26, 2018 with Ms. Jennifer Shinn, P.E. of CLV flood control, it was agreed that the above comment will not be applicable if it is demonstrated that the site will still be flood protected without the Skye Canyon Phases 3B & 3C improvements. Therefore, normal depth calculations for the adjacent arroyo have been provided, utilizing the combined ultimate condition flow rate ($Q_{100}=241$ cfs) in the 54" RCP storm drain proposed by the 3B & 3C improvements. The calculations indicate that the flow is contained within the arroyo with significant freeboard. However, the velocities are slightly erosive (about 7 fps). Giving the fact that the arroyo used to convey the existing condition flows in excess of 700 cfs prior to the construction of Skye Canyon Detention Basin 1, most of the conveyance area currently consist of caliche which is not expected to erode and cause migration of the wash towards the proposed improvements. Therefore, the proposed

improvements will be adequately flood protected without the 3B & 3C improvements and thus, the subject study should not be conditioned on the approval of the 3B & 3C study. The locations for the hydraulic Sections W1 & W2 within the arroyo has been indicated the revised Developed Conditions Drainage Map (Exhibit E) provided in Appendix B. Please refer to Appendix C for the normal depth calculations within the arroyo and to Appendix E for the referenced storm drain plan and profile sheet from the 3B & 3C study used to estimate the ultimate condition flowrate in the arroyo.

4. **Comment:** *Prior to and concurrent with the recordation of a Final Map for this site, a Petition of Vacation, such as VAC-70311, shall be recorded to eliminate the City of Las Vegas Public Sewer, Utility and Drainage Easements within Skye Canyon Parcel 2.16 in conflict with this proposed site. If VAC- 70311 is not approved, then the Tentative Map TMP-72766 shall be null and void and a new Tentative map shall be submitted for review.*

Response: Acknowledged.

5. **Comment:** *The grading plan indicates offsite grading of Lots 20-27 and 33-38. Secure a notarized letter of permission from the property owner allowing the grading. This letter is required prior to final acceptance of the drainage study.*

Response: Acknowledged. It is worthy to note that the downstream developer for the above referenced lots is currently in contract to acquire the subject site and is expected to close shortly. However, the process to obtain the notarized permission letter has been initiated and the letter will be provided prior to permits if deemed necessary.

6. **Comment:** *The Finish Floor table for Parcel 2.17 indicates the hydraulic section utilized for all lots was O-1c. Although O-1a and O-1c resulted in the same flow depth, the table must be revised to reflect the relevant hydraulic section for the southern lots.*

Response: Acknowledged. Please refer to Appendix D for the revised finished floor table.

7. **Comment:** *Revise the TC and FF elevations for Lots 132 and 133 in the Finish Floor table for Parcel 2.17 to match the elevations shown on the plans.*

Response: The TC and FF elevation of lots 132 and 133 have been revised to match the plans. Please refer to Appendix D for the revised finished floor table.

8. **Comment:** *Include Lots 20-25 (adjacent to Eagle Canyon Avenue) in the Adjacent/Perimeter Street Check table.*

Response: Acknowledged. Please refer to Appendix D for the revised finished floor table for Adjacent/Perimeter Street Check.

9. **Comment:** *Revise the High FL and Min FF elevations for Lot 52 in the Drainage Easements/Emergency Overflow Check table to reflect 29XX'.*

Response: Acknowledged. Please refer to Appendix D for the revised Drainage Easement/Emergency Overflow Check finished floor table.

10. **Comment:** *The following finished floors do not meet the Regional Flood Control District minimum criteria of twice the Q100 depth of flow up to 18-inches above the water surface (CCRFCD manual Section 304.4. E.1) or 6-inch minimum above the highest adjacent top of curb (CCRFCD Manual Section 1602 304.4.E. 1). The following finish floors should be revised, or alternate flood protection provided.*

LOT	FF Shown	Min.
20	2948.0	FF
21	2950.6	2950.67
77	2995.1	2997.13
78	2997.4	2999.57
79	2999.7	3002.03
80	3001.2	3004.25
81	3002.4	3006.02
82	3003.8	3007.32
83	3005.3	3008.16
84	3007.1	3008.78
85	3009.2	3009.40

Response: Per the aforementioned phone coordination of June 26, 2018, it was agreed that 3-courses of solid grouting of the adjacent perimeter wall along Eagle Canyon Avenue will be provided in lieu of raising the listed finished floor elevations. Please refer to the revised improvement plans for the pertinent detail sections with recommended solid grouting.

11. **Comment:** *Revise the note for all sections showing solid grouting for flood control to indicate "8-inch minimum solid grouted CMP block 3 courses above adjacent finish grade with all joints mortared".*

Response: Solid grouting call out on all pertinent sections are called out to comprise of a minimum 3-courses, 8" CMU block.

12. **Comment:** *Provide hydraulic section models through Common Element "C" utilizing the discharge flow from the 54" RCP. Verify the velocities and depth do not negatively affect the proposed improvements.*

Response: Acknowledged. Please refer to the response to Comment #3 above.

13. **Comment:** *Common Element "C" appears to convey offsite flows via a 54" RCP stub from Shaumber Road per DS4953. Provide a "Public Drainage Easement to be Privately Maintained by the HOA" note and show the easement on the grading plan. Public drainage easements must be recorded by separate document prior to the final acceptance of the improvement plans unless they are to be recorded by parcel or final map.*

Response: Acknowledged. The public drainage easement to be privately maintained has been called out on the revised grading plans. Please refer to Appendix F for the revised improvement plans.

14. **Comment:** *All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such on the final map.*

Response: Acknowledged. Please refer to Appendix F for the revised improvement plans.

15. **Comment:** *The proposed storm drain shall be labeled as private on the plans and profiles.*

Response: Acknowledged. Please refer to Appendix F for the revised improvement plans.

16. **Comment:** *Provide dimensions of the riprap pad at the discharge point into the northern wash on the plans.*

Response: Riprap dimensions has been provided. Please note that riprap has been extended down the slope for additional erosion protection.

17. **Comment:** *Provide details for the connection of the NDOT headwall to the concrete flume.*

Response: Acknowledged. Acknowledged. Please refer to Detail 37 on Sheet D-3.

18. **Comment:** *Revise Grading Note 2 to reference Detail 32 on Sheet D-3.*

Response: Grading Note 2 has been revised as noted. Please refer to Appendix F for the revised improvement plans.

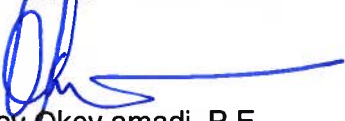
19. **Comment:** *Revise Street Section B to reflect Shaumber Road.*

Response: Street Section B has been revised as noted. Please refer to Appendix F for the revised improvement plans.

We believe that the above responses and revisions provided on the plans have adequately satisfied your concerns in the review memorandum. The revised improvement plans adopting the revisions addressed in this letter have been included in Appendix F. If you have any questions or require additional information, please do not hesitate to contact us at 702-284-5300.

Respectfully Submitted,

SLATER HANIFAN GROUP



Stanley Okey amadi, P.E.
Project Manager-Flood Control Division

cc: Mark Failla, P.E., CFM – SHG
Tracy Stratton – SHG
Jerry Slater, P.E. – SHG

APPENDIX

Appendix A CLV Comment Letter

Appendix B Revised Drainage Exhibit

Appendix C Arroyo Hydraulic Sections

Appendix D Revised Finished Floor Summary Tables

Appendix E Reference Material (3B/3C SD Profiles)

Appendix F CD of Electronic Files & Revised Improvement Plans

APPENDIX A

CLV Comment Letter

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM

DATE:

June 20, 2018

TO:

Land Development Services
Department of Building & Safety

FROM:

Jennifer Shinn, P.E. 
Flood Control Engr. Associate
Department of Public Works

SUBJECT:

Drainage Study for:

Skye Canyon II Parcel 2.17

COPIES TO:

Slater-Hanifan Group, Inc.

Cross Streets:

NEC of Eagle Canyon Ave & Shaumber Rd

Ninety-Five Management, LLC

File Number:

F:\Depot\DSMemos\DS5000A.doc

Bart Anderson, P.E., DevCo

Parcel Number:

126-12-310-001

CCRFCD

Zoning Action:

TMP-72766

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	6/6/2018	6/20/2018	See Comments Below	\$400.00	496555: \$400
TOTAL FEES (LDDRS):				\$400.00	----

REMARKS:

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

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

- The site is adjacent to or crosses an existing or proposed Clark County Regional Flood Control District (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.
- All roadway and flood control facilities as proposed and approved in Skye Canyon Phase 2 Infrastructures must be substantially constructed prior to the issuance of occupancy permits.
- The subject *Skye Canyon II Parcel 2.17 Technical Drainage Study* will not be approved prior to the final approval of *Skye Canyon – Phases 3B & 3C Infrastructure Drainage Study* (DS4953A).
- Prior to and concurrent with the recordation of a Final Map for this site, a Petition of Vacation, such as VAC-70311, shall be recorded to eliminate the City of Las Vegas Public Sewer, Utility and Drainage Easements within Skye Canyon Parcel 2.16 in conflict with this proposed site. If VAC-70311 is not approved, then the Tentative Map TMP-72766 shall be null and void and a new Tentative map shall be submitted for review.
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- The Finish Floor table for Parcel 2.17 indicates the hydraulic section utilized for all lots was O-1c. Although O-1a and O-1c resulted in the same flow depth, the table must be revised to reflect the relevant hydraulic section for the southern lots.

7. Revise the TC and FF elevations for Lots 132 and 133 in the Finish Floor table for Parcel 2.17 to match the elevations shown on the plans.
8. Include Lots 20-25 (adjacent to Eagle Canyon Avenue) in the Adjacent/Perimeter Street Check table.
9. Revise the High FL and Min FF elevations for Lot 52 in the Drainage Easements/Emergency Overflow Check table to reflect 29XX'.
10. The following finished floors do not meet the Regional Flood Control District minimum criteria of twice the Q100 depth of flow up to 18-inches above the water surface (CCRFCD manual Section 304.4.E.1) or 6-inch minimum above the highest adjacent top of curb (CCRFCD Manual Section 1602 304.4.E.1). The following finish floors should be revised or alternate flood protection provided.

LOT	FF Shown	Min. FF
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80	3001.2	3004.25
81	3002.4	3006.02
82	3003.8	3007.32
83	3005.3	3008.16
84	3007.1	3008.78
85	3009.2	3009.40

11. Revise the note for all sections showing solid grouting for flood control to indicate "8-inch minimum solid grouted CMP block 3 courses above adjacent finish grade with all joints mortared".
12. Provide hydraulic section models through Common Element "C" utilizing the discharge flow from the 54" RCP. Verify the velocities and depth do not negatively affect the proposed improvements.
13. Common Element "C" appears to convey offsite flows via a 54" RCP stub from Shaumber Road per DS4953. Provide a "Public Drainage Easement to be Privately Maintained by the HOA" note and show the easement on the grading plan. Public drainage easements must be recorded by separate document prior to the final acceptance of the improvement plans unless they are to be recorded by parcel or final map.
14. All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such on the final map.
15. The proposed storm drain shall be labeled as private on the plans and profiles.
16. Provide dimensions of the riprap pad at the discharge point into the northern wash on the plans.
17. Provide details for the connection of the NDOT headwall to the concrete flume.
18. Revise Grading Note 2 to reference Detail 32 on Sheet D-3.
19. Revise Street Section B to reflect Shaumber Road.

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

jks

T/R/S: T19S/R59E/12

AREA F-12

APPENDIX B

Revised Drainage Exhibits

APPENDIX C

Arroyo Hydraulic Sections

Worksheet for Section W1 - Natural Wash (Adj. Lot 92)

Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Channel Slope 3.00 %
Discharge 240.00 ft³/s
Section Definitions

Station (ft)	Elevation (ft)
0+00.00	2997.00
0+02.52	2987.00
0+08.30	2985.00
0+16.60	2983.00
0+24.42	2983.00
0+31.52	2982.50
0+38.62	2983.00
0+53.02	2993.00

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00.00, 2997.00)	(0+53.02, 2993.00)	0.040

Options

Current Roughness Weighted Method Pavlovskii's Method
Open Channel Weighting Method Pavlovskii's Method
Closed Channel Weighting Method Pavlovskii's Method

Results

Normal Depth 1.69 ft
Elevation Range 2982.50 to 2997.00 ft
Flow Area 33.84 ft²
Wetted Perimeter 29.25 ft
Hydraulic Radius 1.16 ft

Worksheet for Section W1 - Natural Wash (Adj. Lot 92)

Results

Top Width	28.70	ft
Normal Depth	1.69	ft
Critical Depth	1.82	ft
Critical Slope	0.02210	ft/ft
Velocity	7.09	ft/s
Velocity Head	0.78	ft
Specific Energy	2.48	ft
Froude Number	1.15	
Flow Type	Supercritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.69	ft
Critical Depth	1.82	ft
Channel Slope	3.00	%
Critical Slope	0.02210	ft/ft

Cross Section for Section W1 - Natural Wash (Adj. Lot 92)

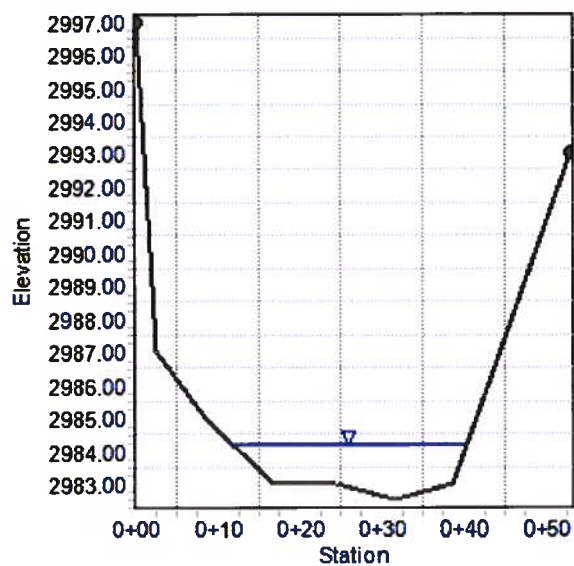
Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Channel Slope 3.00 %
Normal Depth 1.69 ft
Discharge 240.00 ft³/s

Cross Section Image



Worksheet for Section W2 - Natural Wash (Adj. Lot 96)

Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Channel Slope 2.80 %
Discharge 240.00 ft³/s
Section Definitions

Station (ft)	Elevation (ft)
0+00.00	2985.00
0+07.12	2971.00
0+10.13	2970.00
0+25.56	2970.00
0+27.42	2971.00
0+38.91	2982.00
0+54.19	2985.00
0+68.99	2986.00

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00.00, 2985.00)	(0+68.99, 2986.00)	0.040

Options

Current Roughness Weighted Method Pavlovskii's Method
Open Channel Weighting Method Pavlovskii's Method
Closed Channel Weighting Method Pavlovskii's Method

Results

Normal Depth 1.63 ft
Elevation Range 2970.00 to 2986.00 ft
Flow Area 31.02 ft²
Wetted Perimeter 22.34 ft
Hydraulic Radius 1.39 ft

Worksheet for Section W2 - Natural Wash (Adj. Lot 96)

Results

Top Width	21.28	ft
Normal Depth	1.63	ft
Critical Depth	1.76	ft
Critical Slope	0.02154	ft/ft
Velocity	7.74	ft/s
Velocity Head	0.93	ft
Specific Energy	2.56	ft
Froude Number	1.13	
Flow Type	Supercritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.63	ft
Critical Depth	1.76	ft
Channel Slope	2.80	%
Critical Slope	0.02154	ft/ft

Cross Section for Section W2 - Natural Wash (Adj. Lot 96)

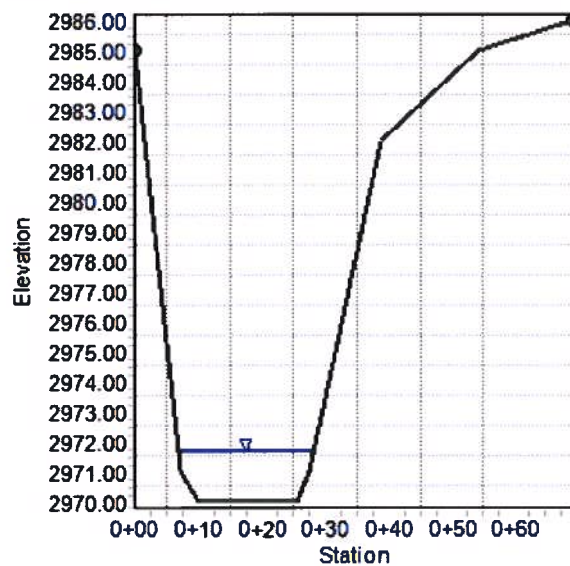
Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Channel Slope 2.80 %
Normal Depth 1.63 ft
Discharge 240.00 ft³/s

Cross Section Image



APPENDIX D

Revised Finished Floor Summary Tables

SKYE CANYON II PARCEL 2.17 - Addendum FINISH FLOOR - CITY OF LAS VEGAS JURISDICTION										
INPUT INFORMATION				FINISHED FLOORS						
Lot Number	Hydraulic Section Utilized	T/C ¹ (ft)	F/L ² (ft)	D ₁₀₀ (ft)	Flowline F.F. _{min} ³ (ft)	T/C + 6" F.F. _{min} ⁴ (ft)	F.F. _{Design} (ft)	Flowline Check	T/C + 6" Check	NOTES
67	O-1a	2968.25	2967.87	0.42	2968.71	2968.75	2970.1	OK	OK	See References on Last Sheet
68	O-1a	2971.23	2970.85	0.42	2971.69	2971.73	2973.1	OK	OK	
69	O-1a	2975.14	2974.76	0.42	2975.60	2975.64	2977.0	OK	OK	
70	O-1a	2976.40	2976.02	0.42	2976.86	2976.90	2978.3	OK	OK	
71	O-1a	2977.66	2977.28	0.42	2978.12	2978.16	2979.6	OK	OK	
72	O-1a	2979.43	2979.05	0.42	2979.89	2979.93	2981.3	OK	OK	
73	O-1a	2981.53	2981.15	0.42	2981.99	2982.03	2983.4	OK	OK	
74	O-1a	2984.06	2983.68	0.42	2984.52	2984.56	2985.9	OK	OK	
75	O-1a	2986.63	2986.25	0.42	2987.09	2987.13	2988.5	OK	OK	
76	O-1a	2990.61	2990.23	0.42	2991.07	2991.11	2992.5	OK	OK	
77	O-1a	2993.20	2992.82	0.42	2993.66	2993.70	2995.1	OK	OK	
78	O-1a	2995.55	2995.17	0.42	2996.01	2996.05	2997.4	OK	OK	
79	O-1a	2997.80	2997.42	0.42	2998.26	2998.30	2999.7	OK	OK	
80	O-1a	2999.29	2998.91	0.42	2999.75	2999.79	3001.2	OK	OK	
81	O-1a	3000.54	3000.16	0.42	3001.00	3001.04	3002.4	OK	OK	
82	O-1a	3001.92	3001.54	0.42	3002.38	3002.42	3003.8	OK	OK	
83	O-1a	3003.41	3003.03	0.42	3003.87	3003.91	3005.3	OK	OK	
84	O-1a	3005.25	3004.87	0.42	3005.71	3005.75	3007.1	OK	OK	
85	O-1a	3007.29	3006.91	0.42	3007.75	3007.79	3009.2	OK	OK	
86	O-1a	3010.00	3009.62	0.42	3010.46	3010.50	3011.0	OK	OK	
87	O-1a	3004.73	3004.35	0.42	3005.19	3005.23	3007.0	OK	OK	
88	O-1a	3004.99	3004.61	0.42	3005.45	3005.49	3007.2	OK	OK	
89	O-1a	3005.44	3005.06	0.42	3005.90	3005.94	3007.5	OK	OK	
90	O-1c	3005.44	3005.06	0.42	3005.90	3005.94	3007.5	OK	OK	
91	O-1c	3004.99	3004.61	0.42	3005.45	3005.49	3006.1	OK	OK	
92	O-1c	3003.60	3003.22	0.42	3004.06	3004.10	3005.4	OK	OK	
93	O-1c	3001.28	3000.90	0.42	3001.74	3001.78	3003.1	OK	OK	
94	O-1c	2998.19	2997.81	0.42	2998.65	2998.69	3000.1	OK	OK	
95	O-1c	2995.60	2995.22	0.42	2996.06	2996.10	2997.5	OK	OK	
96	O-1c	2992.95	2992.57	0.42	2993.41	2993.45	2994.8	OK	OK	
97	O-1c	2989.65	2989.27	0.42	2990.11	2990.15	2991.5	OK	OK	
98	O-1c	2986.65	2986.27	0.42	2987.11	2987.15	2988.6	OK	OK	
99	O-1c	2984.25	2983.87	0.42	2984.71	2984.75	2986.1	OK	OK	

**SKYE CANYON II PARCEL 2.17 - Addendum
FINISH FLOOR - CITY OF LAS VEGAS JURISDICTION**

INPUT INFORMATION					FINISHED FLOORS					NOTES
Lot Number	Hydraulic Section Utilized	T/C ¹ (ft)	F/L ² (ft)	D ₁₀₀ (ft)	Flowline F.F. _{min} ³ (ft)	T/C + 6" F.F. _{min} ⁴ (ft)	F.F. _{Design} (ft)	Flowline Check	T/C + 6" Check	See References on Last Sheet
100	O-1c	2982.05	2981.67	0.42	2982.51	2982.55	2983.9	OK	OK	See References on Last Sheet
101	O-1c	2979.85	2979.47	0.42	2980.31	2980.35	2981.7	OK	OK	
102	O-1c	2970.81	2970.43	0.42	2971.27	2971.31	2972.7	OK	OK	
103	O-1c	2965.98	2965.60	0.42	2966.44	2966.48	2967.9	OK	OK	
104	O-1c	2962.68	2962.30	0.42	2963.14	2963.18	2964.6	OK	OK	
105	O-1c	2959.90	2959.52	0.42	2960.36	2960.40	2961.8	OK	OK	
106	O-1c	2957.69	2957.31	0.42	2958.15	2958.19	2959.6	OK	OK	
107	O-1c	2955.96	2955.58	0.42	2956.42	2956.46	2957.9	OK	OK	
108	O-1c	2980.44	2980.06	0.42	2980.90	2980.94	2982.4	OK	OK	
109	O-1c	2983.47	2983.09	0.42	2983.93	2983.97	2985.4	OK	OK	
110	O-1c	2986.44	2986.06	0.42	2986.90	2986.94	2988.3	OK	OK	
111	O-1c	2989.91	2989.53	0.42	2990.37	2990.41	2991.8	OK	OK	
112	O-1c	2993.40	2993.02	0.42	2993.86	2993.90	2995.3	OK	OK	
113	O-1c	2996.78	2996.40	0.42	2997.24	2997.28	2998.7	OK	OK	
114	O-1c	2999.78	2999.40	0.42	3000.24	3000.28	3000.5	OK	OK	
115	O-1c	3004.81	3004.43	0.42	3005.27	3005.31	3006.8	OK	OK	
116	O-1c	3005.43	3005.05	0.42	3005.89	3005.93	3007.1	OK	OK	
117	O-1c	3005.43	3005.05	0.42	3005.89	3005.93	3007.1	OK	OK	
118	O-1c	3004.45	3004.07	0.42	3004.91	3004.95	3006.2	OK	OK	
119	O-1c	3002.40	3002.02	0.42	3002.86	3002.90	3004.2	OK	OK	
120	O-1c	2991.79	2991.41	0.42	2992.25	2992.29	2993.7	OK	OK	
121	O-1c	2988.25	2987.87	0.42	2988.71	2988.75	2990.2	OK	OK	
122	O-1c	2985.52	2985.14	0.42	2985.98	2986.02	2987.5	OK	OK	
123	O-1c	2983.28	2982.90	0.42	2983.74	2983.78	2985.2	OK	OK	
124	O-1c	2981.08	2980.70	0.42	2981.54	2981.58	2983.0	OK	OK	
125	O-1c	2974.07	2973.69	0.42	2974.53	2974.57	2976.9	OK	OK	
126	O-1c	2976.16	2975.78	0.42	2976.62	2976.66	2978.1	OK	OK	
127	O-1c	2976.16	2975.78	0.42	2976.62	2976.66	2978.5	OK	OK	
128	O-1c	2976.16	2975.78	0.42	2976.62	2976.66	2978.2	OK	OK	
129	O-1c	2976.16	2975.78	0.42	2976.62	2976.66	2978.1	OK	OK	
130	O-1c	2974.07	2973.69	0.42	2974.53	2974.57	2976.0	OK	OK	
131	O-1c	2963.87	2963.49	0.42	2964.33	2964.37	2965.8	OK	OK	
132	O-1c	2960.10	2959.72	0.42	2960.56	2960.60	2962.0	OK	OK	

SKYE CANYON II PARCEL 2.17 - Addendum									
FINISH FLOOR - CITY OF LAS VEGAS JURISDICTION									
INPUT INFORMATION					FINISHED FLOORS				NOTES
Lot Number	Hydraulic Section Utilized	T/C ¹ (ft)	F/L ² (ft)	D ₁₀₀ (ft)	Flowline F.F. ³ -min (ft)	T/C + 6" F.F. ⁴ -min (ft)	F.F. ⁵ -design (ft)	Flowline Check	T/C + 6" Check
133	O-1c	2957.38	2957.00	0.42	2957.84	2957.88	2959.2	OK	OK
134	O-1c	2968.03	2967.65	0.42	2968.49	2968.53	2969.9	OK	OK
135	O-1c	2970.89	2970.51	0.42	2971.35	2971.39	2972.8	OK	OK
Where: 1: Top of Curb at High Side of Lot 2: TC-0.38 (For Roll Curb), TC-0.5 (For L Curb) 3: Minimum Allowable Finished Floor Elevation above flowline elevation @ high side of lot = (2 x D ₁₀₀) + F/L 4: City of Las Vegas minimum allowable finished floor elevation = T.C. @ high side of lot + 6-inches 5: These lots have an adjacent solid grouted wall that protects the FF.									
City of Las Vegas Finished Floor Criteria: -The finished floor shall be set a vertical distance above the gutter flowline of at least twice the depth of flow in the gutter flowline up to a maximum of 18 inches above the WSEL in the street. -The finished floor shall be set a vertical distance of at least 6-inches above the highest adjacent top of curb.									

Adjacent/Perimeter Street Check									
Lot Number	Street	High TC ¹	High FL ²	Section	Flow Depth ³	Min FF ⁴	Design FF	Check	Solid Grout
20	Eagle Canyon Avenue	2947.72	2947.22	ECA1	0.46	2948.14	2948.0	CHECK	Yes
21	Eagle Canyon Avenue	2950.17	2949.67	ECA1	0.46	2950.59	2950.6	OK	No
22	Eagle Canyon Avenue	2952.62	2952.12	ECA1	0.46	2953.04	2953.6	OK	No
23	Eagle Canyon Avenue	2955.07	2954.57	ECA1	0.46	2955.49	2957.4	OK	No
24	Eagle Canyon Avenue	2957.52	2957.02	ECA1	0.46	2957.94	2961.1	OK	No
25	Eagle Canyon Avenue	2959.97	2959.47	ECA1	0.46	2960.39	2965.5	OK	No
67	Eagle Canyon Avenue	2962.42	2961.92	ECA1	0.46	2962.84	2970.1	OK	No
68	Eagle Canyon Avenue	2964.87	2964.37	ECA1	0.46	2965.29	2973.1	OK	No
69	Eagle Canyon Avenue	2969.77	2969.27	ECA1	0.46	2970.19	2977.0	OK	No
70	Eagle Canyon Avenue	2972.22	2971.72	ECA1	0.46	2972.64	2978.3	OK	No
71	Eagle Canyon Avenue	2974.67	2974.17	ECA1	0.46	2975.09	2979.6	OK	No
72	Eagle Canyon Avenue	2977.12	2976.62	ECA1	0.46	2977.54	2981.3	OK	No
73	Eagle Canyon Avenue	2982.02	2981.52	ECA1	0.46	2982.44	2983.4	OK	No
74	Eagle Canyon Avenue	2984.47	2983.97	ECA1	0.46	2984.89	2985.9	OK	No
75	Eagle Canyon Avenue	2986.44	2985.94	ECA1	0.46	2986.86	2988.5	OK	No
76	Eagle Canyon Avenue	2991.49	2990.99	ECA1	0.46	2991.91	2992.5	OK	No
77	Eagle Canyon Avenue	2996.71	2996.21	ECA1	0.46	2997.13	2995.1	CHECK	Yes
78	Eagle Canyon Avenue	2999.15	2998.65	ECA1	0.46	2999.57	2997.4	CHECK	Yes
79	Eagle Canyon Avenue	3001.61	3001.11	ECA1	0.46	3002.03	2999.7	CHECK	Yes
80	Eagle Canyon Avenue	3003.83	3003.33	ECA1	0.46	3004.25	3001.2	CHECK	Yes
81	Eagle Canyon Avenue	3005.60	3005.10	ECA1	0.46	3006.02	3002.4	CHECK	Yes
82	Eagle Canyon Avenue	3006.90	3006.40	ECA1	0.46	3007.32	3003.8	CHECK	Yes
83	Eagle Canyon Avenue	3007.74	3007.24	ECA1	0.46	3008.16	3005.3	CHECK	Yes
84	Eagle Canyon Avenue	3008.36	3007.86	ECA1	0.46	3008.78	3007.1	CHECK	Yes
85	Eagle Canyon Avenue	3008.98	3008.48	ECA1	0.46	3009.40	3009.2	CHECK	Yes
86	Eagle Canyon Avenue	3009.68	3009.18	ECA1	0.46	3010.10	3011.0	OK	No
115	Skye Paseo Ave	3003.41	3003.03	O-1c	0.42	3003.87	3006.8	OK	No
125	Skye Arroyo Ave	2978.82	2978.44	O-1c	0.42	2979.28	2976.9	CHECK	Yes
127	Skye Paseo Ave	2978.53	2978.15	O-1c	0.42	2978.99	2978.5	CHECK	Yes
128	Skye Paseo Ave	2975.14	2974.76	O-1c	0.42	2975.60	2978.2	OK	No
130	Skye Arroyo Ave	2970.81	2970.43	O-1c	0.42	2971.27	2976.0	OK	No

1: High TC is the elevation at the high side of the adjacent perimeter street

2: 0.5-ft (Perimeter Streets) or 0.38' (Onsite Roadways) is subtracted from the High TC to obtain the High FL elevation

3: Flow depth is the normal depth in adjacent perimeter street

4: Min FF is the High FL plus twice the depth of flow.

Drainage Easements / Emergency Overflow Check							
Lot Number	High FL ¹	Section	Flow Depth ²	Min FF ³	Design FF	Check	Solid Grout
51	2918.81	E-1	0.23	2920.54	2921.60	OK	No
51	2918.81	E-1 (Weir)	0.88	2921.19	2921.60	OK	No
52	2918.98	E-1	0.23	2920.71	2925.40	OK	No
52	2918.98	E-1 (Weir)	0.88	2921.36	2925.40	OK	No

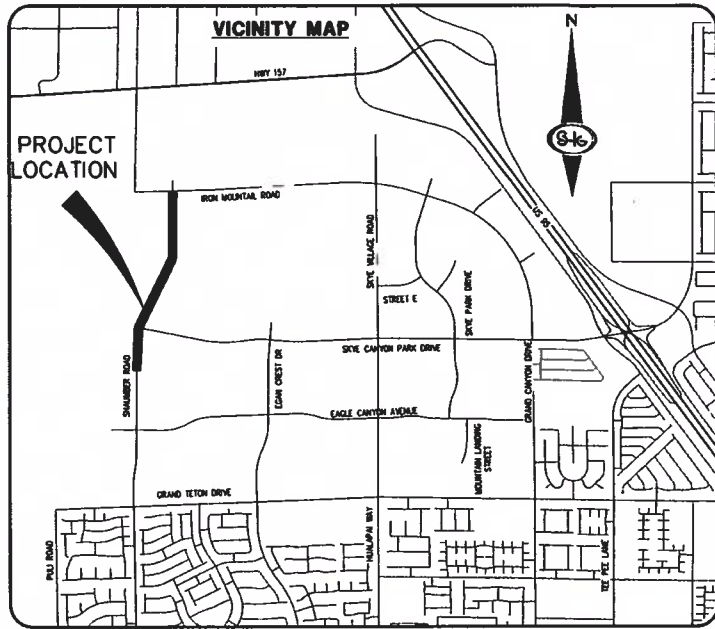
1: High TC/FL is at the high side of the drainage easement flowline or the highest TC adjacent to the easement if flow is weiring over the curb.

2: Flow depth is either normal depth or weir depth (whichever is higher).

3: Min FF is the High TC/FL plus the Flow Depth plus 18 inches.

APPENDIX E

Reference Materials (3B/3C SD Profiles)



IMPROVEMENT PLANS FOR SKYE CANYON PHASE 3B, 3C SHAUMBER ROAD SKYE CANYON PARK TO IRON MOUNTAIN RD



BENCHMARK

MONUMENT ID: USDA (1934) 19
U.S. DEPARTMENT OF AGRICULTURE BRASS DISC AT SOUTHWEST
CORNER OF U.S. 95 AND KYLE CANYON ROAD
ELEVATION = 2817.61 FEET, 858.810 METERS
NAVD 88 DATUM
PER THE CITY OF LAS VEGAS BENCHMARK BOOK -
2008 ADJUSTMENT (UPDATED 05/24/2010)

BASIS OF BEARING

NORTH 89°16'30" WEST, BEING THE BEARING OF THE SOUTH LINE OF
THE NORTHWEST QUARTER (NW1/4) OF SECTION 7, TOWNSHIP 19
SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK
COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN FILE 147, PAGE
71 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

OWNER

M F LAND LLC
% OLYMPIA COMPANIES LLC
11411 SOUTHERN HIGHLANDS
PARKWAY, SUITE 300
LAS VEGAS, NV 89141

DEVELOPER

NINETY-FIVE MANAGEMENT LLC
% OLYMPIA COMPANIES LLC
11411 SOUTHERN HIGHLANDS
PARKWAY, SUITE 300
LAS VEGAS, NV 89141
PH (702) 220-6565
FX (702) 220-6566

ENGINEER

SLATER HANIFAN GROUP
5740 S. ARVILLE STREET #216
LAS VEGAS, NV 89118
(702) 284-5300



APPROVALS

CITY ENGINEER-ALLEN E. PAVELKA PE #9029 DATE
APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS LIMITED TO THOSE
IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHT-OF-WAY, AND/OR
DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE CONSTRUCTION OF
ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR
SPECIFICATIONS EXCEPT THOSE SPECIALLY LISTED UNDER DEVIATIONS FORM
STANDARDS. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE
LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD
DRAWINGS AND SPECIFICATIONS, CLARK COUNTY AREA, NEVADA.

CHRIS KNIGHT DATE
DIRECTOR, BUILDING AND SAFETY
THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING DEPARTMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NO. XXXXX DATE:

SHEETS:
LVWD APPROVED FIRE FLOW XXXX GPM AT XX PSI RESIDUAL

APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO
OBTAINING FINAL APPROVAL FROM THE LAS VEGAS VALLEY WATER DISTRICT.

LAS VEGAS FIRE AND RESCUE DATE

NV ENERGY DATE

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

CENTRAL TELEPHONE CO, DBA CENTURYLINK DATE

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

SOUTHWEST GAS CORPORATION DATE

COX COMMUNICATIONS LAS VEGAS, INC. DATE

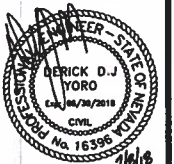
INDEX OF DRAWINGS

SHT. NO.	DWG NO.	DESCRIPTION
1	G-01	COVER SHEET
2	G-02	GENERAL NOTES
3	G-03	ABBREVIATIONS, KEYMAP, LEGEND, AND QUANTITIES
4	TY-01	ROADWAY SECTIONS
5	PP-01	CONSTRUCTION PLAN - "SR" 22+00 TO "SR" 28+00
6	PP-02	CONSTRUCTION PLAN - "SR" 28+00 TO "SR" 34+50
7	PP-03	CONSTRUCTION PLAN - "SR" 34+50 TO "SR" 40+50
8	PP-04	CONSTRUCTION PLAN - "SR" 40+50 TO "SR" 46+50
9	PP-05	CONSTRUCTION PLAN - "SR" 46+50 TO "SR" 52+50
10	PP-06	CONSTRUCTION PLAN - "SR" 52+50 TO "SR" 58+50
11	PP-07	CONSTRUCTION PLAN - "SR" 52+50 TO "SR" 58+50
12	PP-08	CONSTRUCTION PLAN - "SR" 64+50 TO "SR" 69+50
13	PP-09	CONSTRUCTION PLAN - DB OUTFALL
14	LAT-01	STORM DRAIN LATERALS I
15	LAT-02	STORM DRAIN LATERALS II
16	GR-01	GRADING SHEET I
17	GR-02	GRADING SHEET II
18	GR-03	GRADING SHEET III
19	DTL-01	STORM DRAIN DETAILS

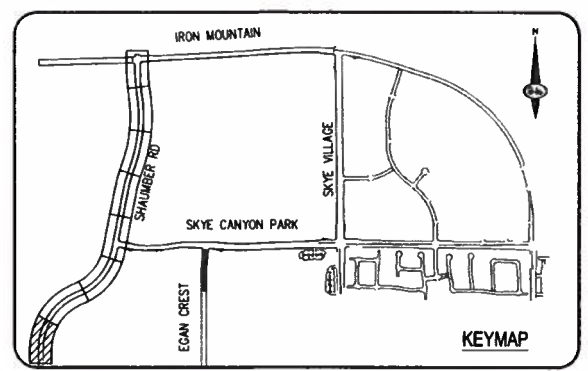
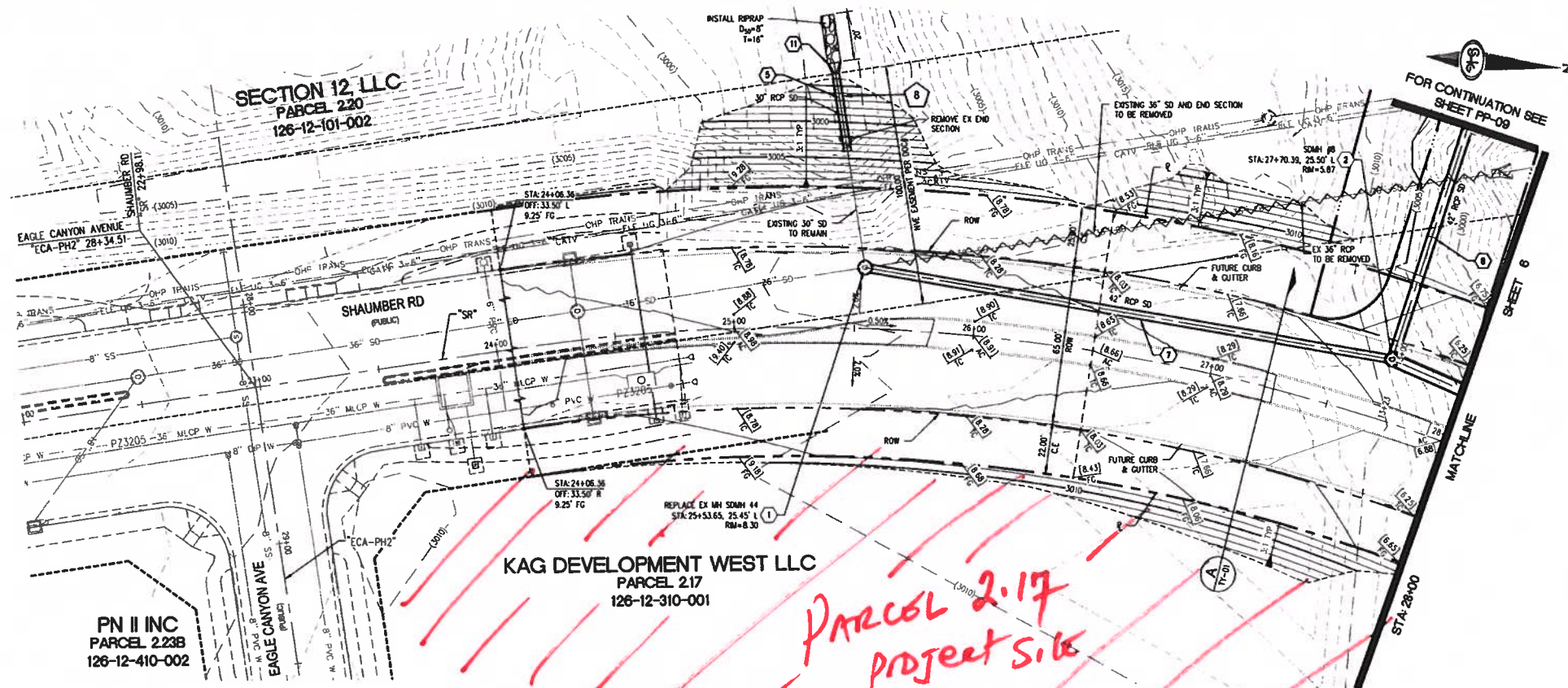
SLATER
HANIFAN
GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5309

NINETY-FIVE MANAGEMENT LLC
SKYE CANYON PHASE 3B, 3C
SHAUMBER ROAD
COVER SHEET

DATE: 2/8/18
DRAFTER: HF
DESIGNER: HF
CHECKED: DY
PROJECT NO.
OLY1609-000



G-01
SHEET 1 OF 19



- ### CONSTRUCTION NOTES
1. CONSTRUCT 1" UTACS OVER 4.5" PBS OVER 4" TYPE II AGGREGATE BASE (SEE TY SHEETS)
 2. CONSTRUCT 1" UTACS OVER 5.5" PBS OVER 6" TYPE II AGGREGATE BASE (SEE TY SHEETS)
 3. CONSTRUCT "A" TYPE ISLAND CURB (USDCCA STD. DWG. NO. 219)
 4. CONSTRUCT 1.5" TYPE CURB AND GUTTER (USDCCA STD. DWG. NO. 216)
 5. CONSTRUCT SIDEWALK RAMP (CASE 4) WITH TACTILE WARNING PANEL (USDCCA STD. DWG. NO. 235 AND DETAIL XX, SHEET XX)
 6. CONSTRUCT BUS TURN-OUT (USDCCA STD. DWG. NO. 234.1)
 7. CONSTRUCT CONCRETE SIDEWALK (USDCCA STD. DWG. 234)

- ### STORM DRAIN NOTES
1. CONSTRUCT 48" TYPE B-SD MANHOLE (USDCCA STD. DWG. NO. 405.2)
 2. CONSTRUCT 60" TYPE B MANHOLE (USDCCA STD. DWG. NO. 406.1)
 3. INSTALL 18" RCP (USDCCA STD. DWG. NO. 503.2)
 4. INSTALL 24" RCP (USDCCA STD. DWG. NO. 503.2)
 5. INSTALL 30" RCP (USDCCA STD. DWG. NO. 503.2)
 6. INSTALL 36" RCP (USDCCA STD. DWG. NO. 503.2)
 7. INSTALL 42" RCP (USDCCA STD. DWG. NO. 503.2)
 8. INSTALL 54" RCP (USDCCA STD. DWG. NO. 503.2)
 9. INSTALL 60" RCP (USDCCA STD. DWG. NO. 503.2)
 10. INSTALL 72" RCP (USDCCA STD. DWG. NO. 503.2)
 11. INSTALL 30" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 12. INSTALL 36" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 13. INSTALL 42" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 14. INSTALL 72" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 15. CONSTRUCT TYPE "CM2" DROP INLET, SIZE PER PLAN (USDCCA STD. DWG. NO. 412.1 & 421)
 16. CONSTRUCT TYPE 4 MANHOLE (NDOT STD. PLAN R-4.3.2)
 17. CONSTRUCT CONCRETE COLLAR (SEE DETAIL 1, DRAWING D-25)
 18. CONSTRUCT INTERIOR BRICK AND MORTAR PLUG PER DETAIL ON DTL-01
 19. INSTALL 24" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 20. INSTALL 54" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 21. INSTALL 66" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 22. INSTALL INTERIOR RCP TEE OUTLET WITH MEDIAN FOUNDRY BEDDING R-4350 E (SEE DETAILS SHEETS)

- ### NOTES
1. ALL RCP SHALL BE CLASS II UNLESS OTHERWISE SHOWN
 2. ALL PIPE LENGTHS ARE MEASURED ALONG PIPE CENTERLINE TO CENTER OF MANHOLE OR INSIDE EDGE OF DIT OR RCP/ICA
 3. ALL DROP INLETS SHALL INCLUDE STORM WATER MANAGEMENT STAMP AND DETAIL PER USDCCA STD. DWG. NO. 421
 4. SEE STRUCTURAL PLANS FOR ADDITIONAL STRUCTURAL DETAILS AND CONNECTIONS
 5. ALL PIPES ARE PUBLICLY MAINTAINED
 6. ADD SPECIAL INSPECTION REQUIRED FOR PIPE SEGMENTS WITH SACRIFICIAL CONCRETE
 7. DIMENSIONS ARE TO BE BACK OF CURB, FACE OF CURB, OR FACE OF MEDIAN UNLESS OTHERWISE NOTED
 8. SEE TY-SHEETS FOR TYPICAL SECTIONS
 9. SEE UT-SHEETS FOR WATER AND SEWER PLAN AND PROFILES

DROP INLET NOTE

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

LEGEND

STORM DRAIN LATERAL # (SEE LAT SHEETS)

1. I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY 05-2002 ON FILE AT THE CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

DERICK D.J. PRO
DATE: 2/8/18

NOTE: PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES, SUCH AS BUT NOT LIMITED TO, THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF VEGETATION.

APPROVED FOR CONSTRUCTION

LYVND ENGINEERING SERVICES MANAGER DATE

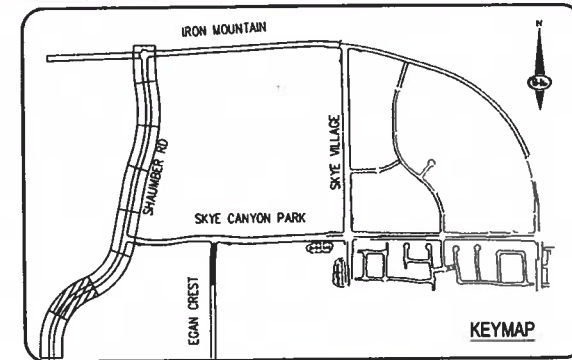
PROJECT NO. 100000

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-4300 FAX (702) 284-4300

NINETY-FIVE MANAGEMENT LLC
SKYE CANYON PHASE 3BC
SHAUMBER ROAD
CONSTRUCTION PLAN - "SR" 22+00 TO "SR" 28+00

DATE: 2/8/18
DRAFTER: HF
DESIGNER: HF
CHECKED: DY
PROJECT NO. OLY1609-000

PP-01
SHEET 5 OF 19



CONSTRUCTION NOTES

1. CONSTRUCT 1" UTACS OVER 4.5" PBS OVER 4" TYPE II AGGREGATE BASE (SEE TY SHEETS)
2. CONSTRUCT 1" UTACS OVER 5.5" PBS OVER 8" TYPE II AGGREGATE BASE (SEE TY SHEETS)
3. CONSTRUCT "A" TYPE ISLAND CURB (USDOCA STD. DWG. NO. 218)
4. CONSTRUCT "L" TYPE CURB AND GUTTER (USDOCA STD. DWG. NO. 216)
5. CONSTRUCT SIDEWALK RAMP (CASE B) WITH TACTILE WARNING PANEL (USDOCA STD. DWG. NO. 235 AND DETAIL XL SHEET XX)
6. CONSTRUCT BUS TURN-OUT (USDOCA STD. DWG. NO. 234.1)
7. CONSTRUCT CONCRETE SIDEWALK (USDOCA STD. DWG. 234)

STORM DRAIN NOTES

- 1 CONSTRUCT 48" TYPE B-SI MANHOLE (USDOCCA STD. DWG. NO. 405.2)
- 2 CONSTRUCT 60" TYPE B MANHOLE (USDOCCA STD. DWG. NO. 406.1)
- 3 INSTALL 18" RCP (USDOCCA STD. DWG. NO. 503.2)
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- 10 INSTALL 72" RCP (USDOCCA STD. DWG. NO. 503.2)
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- 18 CONSTRUCT INTERIM BRICK AND MORTAR PLUG PER DETAIL ON DTL-01
- 19 INSTALL 24" RCP END SECTION (NODOT STD. PLAN R-2.3.1)
- 20 INSTALL 54" RCP END SECTION (NODOT STD. PLAN R-2.3.1)
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- 22 INSTALL INTERIM RCP TEE OUTLET WITH MEZMAH FOUNDRY BEDVHE R-4350 E (SEE DETAILS SHEETS)

NOTES

1. ALL ROP SHALL BE CLASS II UNLESS OTHERWISE SHOWN.
2. ALL PIPE LENGTHS ARE MEASURED ALONG PIPE CENTERLINE TO CENTER OF MANHOLE OR INSIDE EDGE OF CURB OR SIDEWALK.
3. ALL DROP INLETS SHALL INCLUDE STORM WATER MANAGEMENT STAMP AND DETAIL PER USDOCA STD. DWG. NO. 421.
4. SEE ADDITIONAL PLANS FOR STRUCTURAL DETAILS AND CONNECTIONS.
5. ALL PIPES ARE PUBLICLY MAINTAINED.
6. ADD SPECIAL INSPECTION REQUIRED FOR PIPE SEGMENTS WITH SACRIFICIAL CONCRETE.
7. SIDEWALKS ARE TO BE BEACH OF CURB, FACE OF CURB, OR FACE OF MEDIAN UNLESS OTHERWISE NOTED.
8. SEE UT-SHEETS FOR TYPICAL SECTIONS.
9. SEE UT-SHEETS FOR WATER AND SEWER PLAN AND PROFILES.

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).

LEGEND
 STORM DRAIN LATERAL # (SEE LAT SHEETS)

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-XXXX ON FILE AT THE CITY OF LAS VEGAS FOR THE SUBJECT PROJECT <i>[Signature]</i> <i>2/5/06</i>	FLOOD ZONE THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE "X" (OUTSIDE THE 500-YEAR FLOOD PLAIN) ON THE FLOOD INSURANCE RATE MAP (FIRM) PANEL: 32003C1750E, DATED SEPTEMBER 27, 2002
---	--

NOTE: PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES, SUCH AS BUT NOT LIMITED TO, THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF VEGETATION.

APPROVED FOR CONSTRUCTION

LYVING ENGINEERING SERVICES MANAGER DATE

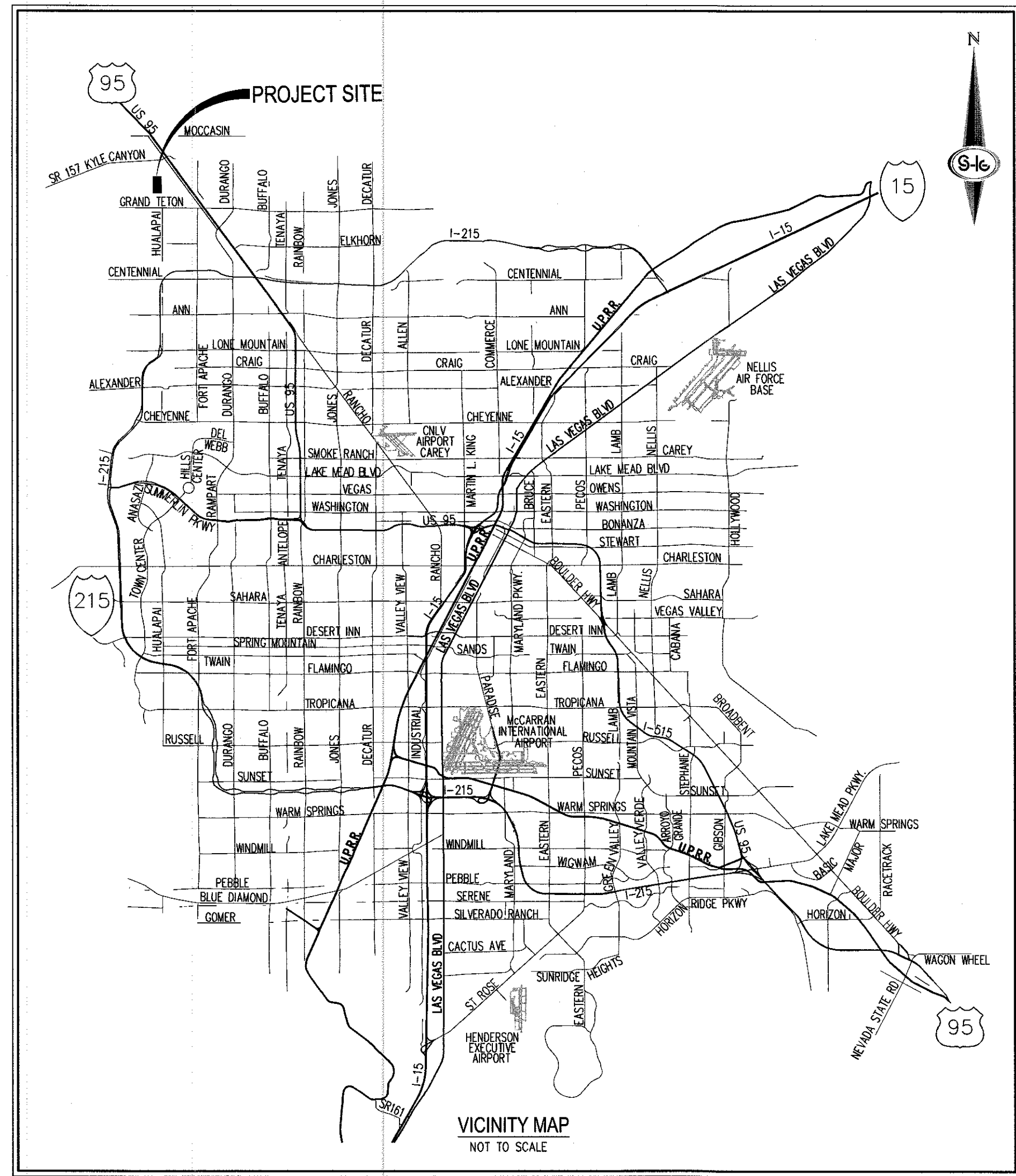
PROJECT NO. XXXXX

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APPENDIX F

CD of Electronic Files & Revised Improvement Plans



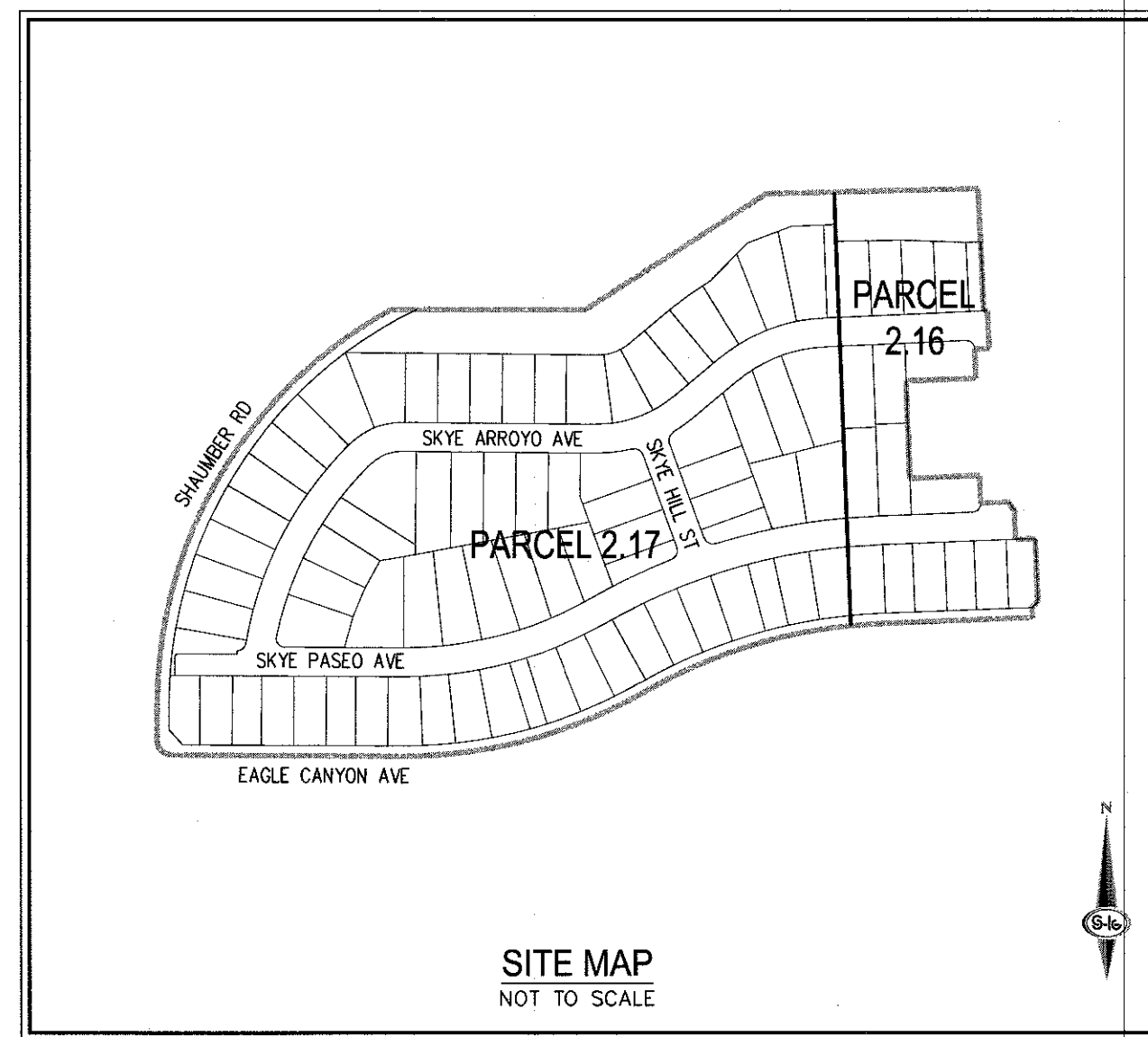
IMPROVEMENT PLANS FOR SKYE CANYON II PARCEL 2.17

A SINGLE FAMILY RESIDENTIAL SUBDIVISION OF THE SKYE CANYON MASTER-PLANNED
COMMUNITY WITHIN THE CITY OF LAS VEGAS, NEVADA

APN: 126-12-310-001, 126-12-501-001, 126-12-311-001, -002, -003, -004, 005, -006, -007, -008, -009, 126-12-711-020, -021, -022, -023, AND -029



SHEET LIST TABLE		
NO.	SHEET	TITLE
1	C-1	COVER SHEET
2	C-2	GENERAL NOTES
3	C-3	GENERAL NOTES AND QUANTITIES
4	G-1	GRADING PLAN - I
5	G-2	GRADING PLAN - II
6	G-3	GRADING PLAN - III
7	G-4	GRADING PLAN - IV
8	G-5	GRADING PLAN - V
9	G-6	GRADING PLAN - VI
10	G-7	GRADING PLAN - VII
11	D-1	STREET SECTIONS AND DETAILS
12	D-2	GRADING SECTIONS AND DETAILS - I
13	D-3	GRADING SECTIONS AND DETAILS - II
14	PP-1	PLAN AND PROFILE - I
15	PP-2	PLAN AND PROFILE - II
16	PP-3	PLAN AND PROFILE - III
17	PP-4	PLAN AND PROFILE - IV
18	PP-5	PLAN AND PROFILE - V
19	PP-6	PLAN AND PROFILE - VI
20	PP-7	PLAN AND PROFILE - VII
21	PP-8	PLAN AND PROFILE - VIII
22	PP-9	PLAN AND PROFILE - IX
23	PP-10	PLAN AND PROFILE - X

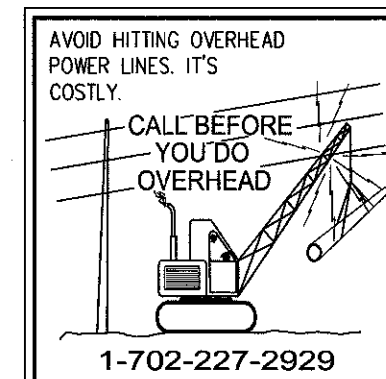


PROJECT INFORMATION	
ACREAGE (GROSS):	= 20.24 AC
ACREAGE (NET):	= 17.94 AC
DENSITY (LOTS/NET ACRE):	= 4.44 DU/NET AC
ZONING:	= T-D (R-1 STANDARDS)
TOTAL NO. OF RESIDENTIAL LOTS	= 79
TOTAL NO. OF COMMON ELEMENTS	= 10
MINIMUM LOT SIZE	= 5850 SF±
MAXIMUM LOT SIZE	= 13337 SF±
PROVIDED OPEN SPACE	= 33216 SF±
EARTHWORK SUMMARY (UNADJUSTED)	
CUT	----- CY
FILL	----- CY
NET	----- CY

GEOTECHNICAL ENGINEER
PREPARED BY: GEOTEK RESIDENTIAL, LLC
ADDRESS: 6835 S. ESCONDIDO ST., #A LAS VEGAS, NV 89119
PHONE: 702-897-1424
PROJECT NO: 02/09/2015
DATED: 02/09/2015

DEVIATIONS FROM STANDARDS
NONE

SWPPP NOTE
NOTE: ALL LAND SURFACE AREA DISTURBANCES OVER 1 ACRE REQUIRE A STORMWATER DISCHARGE PERMIT ISSUED BY THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP). A PHASED CONSTRUCTION UNIT IN A CONTIGUOUS SUBDIVISION IS CONSIDERED UNDER CONSTRUCTION UNTIL ALL STRIPPED SURFACE AREAS HAVE BEEN COVERED BY PAVING, BUILDING CONSTRUCTION OR PLANTING. A STORMWATER DISCHARGE PERMIT APPLICATION AND ASSOCIATED INFORMATION MAY BE DOWNLOADED FROM THE WEB SITE: [HTTP://WWW.STATE.NV.US/DNRC/STORMD.HTM](http://www.state.nv.us/dnrc/stormd.htm) PROJECTS THAT DISTURB MORE THAN ONE ACRE OF LAND MUST SUBMIT TO NDEP A "NOTICE OF INTENT" FOR INCLUSION UNDER STORMWATER PERMIT NO. NVR100000 ALONG WITH THE APPROPRIATE FILING FEE.



APPROVALS	
CITY ENGINEER-ALLEN PAVEKA PE, #9029	DATE
APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED OF RIGHT-OF-WAY, AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIALLY LISTED UNDER DEVIATIONS FORM STANDARDS. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, CLARK COUNTY AREA, NEVADA.	
LAS VEGAS FIRE AND RESCUE	DATE
CITY OF LAS VEGAS - PLANNING DEPARTMENT	
THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING DEPARTMENT.	
CENTRAL TELEPHONE CO. DBA CENTURYLINK	DATE
THE AFFIRED CENTURYLINK APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND / OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.	
APPROVED FOR CONSTRUCTION	
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES	
PROJECT NO. FIRST APPROVED DATE:	
LVWD APPROVED FIRE FLOW GPM AT 20 PSI RESIDUAL	
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW GPM	
SHEETS:	
APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM LAS VEGAS VALLEY WATER DISTRICT.	
NV ENERGY	DATE
NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.	
SOUTHWEST GAS CORPORATION	DATE
COX COMMUNICATIONS LAS VEGAS, INC.	DATE

OWNER	DEVELOPER	ENGINEER
K A G DEVELOPMENT WEST, LLC OLYMPIA COMPANIES 11411 SOUTHERN HIGHLANDS #300 LAS VEGAS, NV 89141 PH: 702-220-6565	NINETY FIVE MANAGEMENT, LLC 11411 SOUTHERN HIGHLANDS #300 LAS VEGAS, NV 89141 PH: 702-220-6565	SLATER HANIFAN GROUP, INC. 5740 S. ARVILLE STREET, SUITE 216 LAS VEGAS, NV 89118 PH: (702) 284-5300 FX: (702) 284-5399 CONTACT: JERRY J. SLATER

LEGAL DESCRIPTION
BEING A PORTION OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

BENCHMARK
BM 71V90 7NWS CITY OF LAS VEGAS RIVET AND ROUND PLATE IN CONCRETE CYLINDER, SOUTHEAST CORNER OF HUALAPAI WAY AND IRON MOUNTAIN ROAD.
ELEV. 2840.13 FEET (865.67 METERS) (NAVD 1988)

BASIS OF BEARINGS
SOUTH 0°34'18" EAST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., AS PER FILE 151, PAGE 14, OF SURVEYS ON FILE IN THE COUNTY RECORDER'S OFFICE.

FEMA FLOOD ZONE INFORMATION
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE 'X' (AREA OUTSIDE THE 500 YEAR FLOODPLAIN), PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.

SLATER HANIFAN GROUP

CONSULTING ENGINEERS & PLANNERS

5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118

PHONE (702) 284-5300 FAX (702) 284-5399

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT, LLC

SKYE CANYON II - PARCEL 2.17

COVER SHEET

DATE: 7/5/18

DRAFTER: DNP

DESIGNER: DNP

CHECKED: STS

PROJECT NO. OLY1721-000

PROFESSIONAL ENGINEER - SLATER

JERRY J. SLATER

Exp. 06/30/2020

CIVIL

State No. 14161

1514

C-1

SHEET 1 OF 23

STORMWATER RUNOFF MANAGEMENT

(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN TITLE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL EXPOSED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE DISTURBED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

LEGAL DESCRIPTION

BEING A PORTION OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

BENCHMARK

BM 7LV90 7NWS CITY OF LAS VEGAS BIVET AND ROUND PLATE IN CONCRETE CYLINDER, SOUTHEAST CORNER OF HUALAPAI WAY AND IRON MOUNTAIN ROAD, ELEV: 2840.13 FEET (865.67 METERS) (NAVD 1988)

BASIS OF BEARINGS

SOUTH 00°34'18" EAST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE ¼) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., AS PER FILE 151, PAGE 14, OF SURVEYS ON FILE IN THE COUNTY RECORDER'S OFFICE.

2.2 CITY OF LAS VEGAS SEWER NOTES

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

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT # _____ (REVISED 08/01/2017)

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN TO THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
2. ALL WATER SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
9. ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD APPROVED PRODUCTS LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.
14. THE INSTALLATION OF LVVWD MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

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

16. NO LEAD COMPLIANCE NOTE:
TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS GRABS SAMPLES PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

GRADING NOTES

1. INDICATED GRADES OTHER THAN T.C., F.G. & GUTTER F.L. ARE ROUGH GRADES.
2. THE ROUGH GRADING PLANS SHALL BE ON THE JOB SITE AT ALL TIMES. THE ROUGH GRADING SHALL BE FINISHED IN CONFORMANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS. THE GRADING QUANTITIES ARE BASED ON THE ELEVATION AND DETAILS SHOWN ON THE PLANS. ANY DEVIATIONS FROM THE PLANS WILL RESULT IN QUANTITY CHANGES.
3. CARE SHALL BE EXERCISED IN GRADING CORNER LOTS.
4. ROUGH PAD ELEVATIONS SHALL BE GRADED TO WITHIN 0.1' OF THE PAD ELEVATIONS SHOWN ON THE PLANS. WHEN GRADING IS COMPLETE PER THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE LOTS CAN BE INSPECTED. AT THAT TIME THE ENGINEER SHALL ALSO DECIDE IF ANY ADDITIONAL DITCHES OR BERMS ARE REQUIRED. THE CONTRACTOR IS REQUESTED NOT TO REMOVE ANY OF HIS ROUGH GRADING EQUIPMENT UNTIL THE RECEIVES GRADING APPROVAL FROM THE ENGINEER.
5. SOILS REPORT PREPARED BY GEOTEK RESIDENTIAL, LLC, PROJECT NO. 12208-LVR, DATED 02/09/2015.
6. EARTHWORK QUANTITIES (RAW):
- CUT = ###.### CUBIC YARDS
- FILL = ###.### CUBIC YARDS
A) THE ABOVE QUANTITIES DO NOT REFLECT LOSSES DUE TO SUBSIDENCE OR SHRINKAGE.
B) THE ABOVE QUANTITIES DO REFLECT USING NATIVE MATERIAL IN LIEU OF TYPE I GRAVEL BASE MATERIAL FOR STREET SECTIONS.
C) THE ABOVE QUANTITIES DO NOT REFLECT ANY EARTHWORK WHICH MAY BE REQUIRED BY THE ENGINEER TO CONSTRUCT ADDITIONAL PROTECTIVE DITCHES OR BERMS NOT SHOWN ON THESE DRAWINGS.

CITY OF LAS VEGAS FIRE AND RESCUE GENERAL NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE (UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA), LATEST ISSUE, THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA, AND OTHER APPLICABLE APPROVED STANDARDS, EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH SUBSEQUENT REPAIRS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORILY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE ONE-HALF INCH (½") ABOVE UP TO ALL CUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMP AND CROSS CUTTERS.
9. CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
10. SIDEWALK RAMP SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS MEASURED BY AN APPROVED ROUTE. [FC C102.7]
12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY 22222. REPORT #22222. APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
13. EXACT LOCATION OF ALL SANCTU LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION.
14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 CITY OF LAS VEGAS TITLE 18, APPENDIX D.
15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS CUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
16. WALL NOTES:
ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS, NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING LIDS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC., THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS. THE LOCATION SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION MAPS MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTANTIES OF ±0.09 METERS (±0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).
22. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST EDITION.
23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

2.5 CITY OF LAS VEGAS GRADING NOTES

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

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

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

UTILITY LOCATION NOTE TO CONTRACTOR

EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATIONS. CALL BEFORE YOU DIG: 1 (800) 227-2600, SOUTHWEST GAS CORPORATION. 702-400-1789 (STANDBY CONTACT NUMBER)

2.1 CITY OF LAS VEGAS GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE, THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA, AND OTHER APPLICABLE APPROVED STANDARDS, EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH SUBSEQUENT REPAIRS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORILY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE ONE-HALF INCH (½") ABOVE UP TO ALL CUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMP AND CROSS CUTTERS.
9. CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
10. SIDEWALK RAMP SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS MEASURED BY AN APPROVED ROUTE. [FC C102.7]
12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY 22222. REPORT #22222. APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
13. EXACT LOCATION OF ALL SANCTU LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION.
14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 CITY OF LAS VEGAS TITLE 18, APPENDIX D.
15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS CUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
16. WALL NOTES:
ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS, NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING LIDS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC., THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS. THE LOCATION SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION MAPS MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTANTIES OF ±0.09 METERS (±0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).
22. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST EDITION.
23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

SOUTHERN NEVADA - SOUTHWEST GAS CORPORATION GENERAL NOTES

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020
 2. THERE SHALL BE A MINIMUM HORIZONTAL AND VERTICAL CLEARANCE OF 12-INCHES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND FACILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC
 3. FOR VALVE ADJUSTMENT CONTACT 702-668-6107 48 HOURS PRIOR TO CONSTRUCTION.
 4. IN THE EVENT OF NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND/OR STRUCTURES CONTACT 702-365-2099
- CAUTION: HIGH PRESSURE GAS
- CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION

2.3 CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAD SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
4. WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
5. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE WIP CLASS B REFLECTIVE SHEETING OR APPROVED EQUAL. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE 3M SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. SCHOOL ZONE SIGNS SHALL HAVE 3M SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
7. WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC TO ENTER THE WORK AREA. THE ROAD BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
9. STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC AND AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR INSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
13. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-5442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
14. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS OTHERWISE DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKINGS AND SIGNING THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DETECTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

2.4 CITY OF LAS VEGAS STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, LATEST REVISION, AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION, AND ANY ADOPTED SPECIAL AREA STANDARDS.
2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF TRAFFIC ENGINEERING AND THE CITY ENGINEER.
3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
4. ALL STREET LIGHTING CONDUITS SHUB SHALL HAVE AT LEAST ONE GREEN #8 THW WIRE INSTALLED, AS TRACER WIRE. WHEN "EMPTY" CONDUIT IS COMPLETELY INSTALLED FROM PB TO PB, IT SHALL HAVE MINIMUM OF 2 #4 AND 1 #6 THW WIRE WITH THE ENDS TAPPED OR "SAFE OFF" PRIOR TO FINAL INSPECTION.
5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN ACCORDANCE WITH THE USD NO. 320A.
6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE USER PRIOR TO ANY PRE-FINAL INSPECTION. THE ASBUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
7. SERVICE POINT SHALL BE COORDINATED WITH MV ENERGY COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE CIVIL PLANS.
8. IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.
9. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREET LIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED, AT NO EXPENSE TO THE CITY OF LAS VEGAS, BEFORE STREETLIGHT BASES ARE INSTALLED.
10. THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
11. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO BOND RELEASE OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREET LIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE CITY OF LAS VEGAS FOR ALL NEW PUBLIC STREET LIGHTS AND/OR SERVICES INSTALLED UNDER THIS PLAN DESIGN WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEFO) AT (702) 229-6331.

DEVIATIONS FROM STANDARDS

NONE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. _____ FIRST APPROVED DATE: _____
LVVWD APPROVED FIRE FLOW _____ GPM AT 20 PSI RESIDUAL
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW _____ GPM



SLATER
HANIFAN
GROUP

CONSULTING ENGINEERS & PLANNERS

5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

NO.	DESCRIPTION	DATE	BY	APP.	DATE

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ABBREVIATIONS

AC	ASPHALTIC CONCRETE OR ACRE	FB	FIRE HYDRANT	PVC	POLYVINYL CHLORIDE
AGG	AGGREGATE BASE	FL	FLOWLINE	PM	POINT OF VERTICAL INTERSECTION
APN	ASSESSORS PARCEL NUMBER	FT	FEET OR FOOT	QTY	QUANTITY
APPROX OR ~	APPROXIMATE	FUT	FUTURE	R	RADIUS
AVE	AVENUE	GRD	GRADE OR GROUND	RCA	REINFORCED CONCRETE ARCH
@	AT	GB	GRADE BREAK OR GRADE CHANGE	RCB	REINFORCED CONCRETE BOX
BC	BEGIN CURVE OR BACK OF CURB	GV	GATE VALVE	RCP	REINFORCED CONCRETE PIPE
BCR	BEGINNING OF CURB RETURN	HOPE	HIGH DENSITY POLYETHYLENE	RD	ROAD
BHW	BOTTOM OF HEADWALL	HOA	HOME OWNERS ASSOCIATION	RDWY	ROADWAY EASEMENT
BLDG	BUILDING	HORZ	HORIZONTAL	REQD	REQUIRED
BLVD	BOULEVARD	HP	HIGH POINT	REV	REVISION
BW	BENCHMARK	HWA	HIGH WATER LEVEL	RG	ROUGH GRADE
BVC	BEGIN VERTICAL CURVE	HWL	HEADWALL	RIGHT	RIGHT
BWV	BACK WATER VALVE	HYD	HYDRAULIC OR HYDRANT	RT OR R	RIGHT OF WAY
CC	CLARK COUNTY	HYD	HYDRAULIC OR HYDRANT	S	SLOPE
CCAUSD	CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS	ID	INSIDE DIAMETER	SCH	SCHEDULE
CDTW	CLARK COUNTY PUBLIC WORKS	IN	INCH	SD	STORM DRAIN
CDRCD	CLARK COUNTY REGIONAL FLOOD DRAIN DISTRICT	INT	INTERSECTION	SDDI	STORM DRAIN DROP INLET
CDWRD	CLARK COUNTY WATER RECLAMATION DISTRICT	INV	INVERT ELEVATION	SDMH	STORM DRAIN MANHOLE
CE	COMMON ELEMENT	IP	IRON PIPE	SEC	SECTION
CLC/LC	CENTERLINE	IRG	IRRIGATION	SF	SQUARE FEET
CLR	CLEAR OR CLEARANCE	LF	LINEAR FEET	SHT	SHEET
CLSM	CONTROLLED LOW STRENGTH MATERIAL	LP	LOW POINT	SNWA	SOUTHERN NEVADA WATER AUTHORITY
CLV	CITY OF LAS VEGAS	LT OR L	LEFT	SPECS	SPECIFICATIONS
CM&C	CEMENT MORTAR LINED AND COATED	LVWID	LAS VEGAS VALLEY WATER DISTRICT	ST	STREET
CMU	CONCRETE MASONRY UNIT	MAX	MAXIMUM	SSMH	SANITARY SEWER MANHOLE
CON	CITY OF NORTH LAS VEGAS	MECH	MECHANICAL	STA	STATION
CONC	CONCRETE	MH	MANHOLE	STD	STANDARD
CT	COURT	MIN	MINIMUM	STL	STEEL OR STREET LIGHT
CY OR CU YD	CUBIC YARD	MISC	MISCELLANEOUS	SW	SIDEWALK
DCWCS	DESIGN AND CONSTRUCTION FOR WASTEWATER COLLECTION SYSTEMS	MUE	MUNICIPAL UTILITY EASEMENT	SWG	SOUTHWEST GAS
		NDOT	NEVADA DEPARTMENT OF TRANSPORTATION	SWR OR SS	SANITARY SEWER
		NPC	NEVADA POWER COMPANY	SY	SQUARE YARD
		NTS	NOT TO SCALE	TAN	TANGENT
		NUE	NONEXCLUSIVE UTILITY EASEMENT	TC	TOP OF CURB
		OC	ON CENTER	TF	TOP OF FLOOR OR TOP OF FOOTING
		OD	OUTSIDE DIAMETER OR OVERALL DIMENSION	TG	TOP OF GRATE
		OFF	OFFSET	THRU	THROUGH
		ORIG	ORIGINAL	THW	TOP OF HEADWALL
		PAE	PUBLIC OR PEDESTRIAN ACCESS EASEMENT	TP	TOP OF PIPE
		PB	PULL BOX	TW	TOP OF WALL
		PC	POINT OF CURVE	TRW	TOP OF RETAINING WALL
		PCC	POINT OF COMPOUND CURVE	TSW	TOP OF SCREEN WALL
		PCE	PUBLIC DRAINAGE EASEMENT	TYP	TYPICAL
		P' OR PL	PROPERTY LINE	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
		POB	POINT OF BEGINNING	VC	VERTICAL CURVE
		POC	POINT OF CURVATURE	VERT	VERTICAL
		POE	POINT OF ENDING	VG	VALLEY GUTTER
		PRC	POINT OF REVERSE CURVATURE	WI	WROUGHT IRON
		PRELIM	PRELIMINARY	WPZ	WATER PRESSURE ZONE
		PROP	PROPOSED	WT	WEIGHT
		PRV	PRESSURE REDUCING VALVE	WTR	WATER LINE
		PUE	PUBLIC UTILITY EASEMENT		
		PT	POINT OF TANGENT OR POINT		

SPECIAL NOTE

IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED WHICH IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CLARK COUNTY DEPT. OF PUBLIC WORKS. TEMPORARY CONSTRUCTION ITEMS INCLUDE: PAVEMENT TRANSITIONS, PROTECTIVE DITCHES AND BERMS, ROAD SIGNS AND BARRICADES, ETC.

NOTICE TO CONTRACTOR

-QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

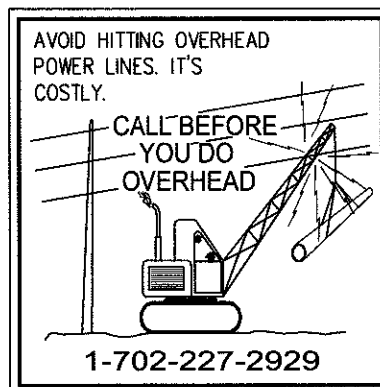
-EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATIONS. CALL BEFORE YOU DIG. (800) 227-2600

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		5' CONTOUR
		1' CONTOUR
		STRIPING
		SEWER MANHOLE
		CURB AND GUTTER
		SANITARY SEWER PIPE AND FLOW ARROW
		WATER PIPE
		WATER GATE VALVE
		FIRE HYDRANT
		WATER BLOW-OFF
		WATER LATERAL W/ METER
		SANITARY SEWER LATERAL
		STREETLIGHT
		EDGE OF PAVEMENT
		TRAFFIC SIGN
		PAD ELEVATION
		FINISHED FLOOR ELEVATION
		ELEVATION
		RETAINING WALL
		STORM DRAIN W/ MANHOLE
		EXISTING GAS GATE VALVE
		EXISTING UNKNOWN MANHOLE
		EXISTING GAS, SIZE PER PLAN
		EXISTING POWER POLE
		EXISTING TRAFFIC SIGNAL
		EXISTING WALL
		WATER PIPE FITTING
		WATER POINT OF CONNECTION
		SEWER POINT OF CONNECTION
		DAYLIGHT LINE
		STREET CENTERLINE
		RIGHT-OF-WAY
		MATCHLINE
		BOUNDARY LINE
		PHASE LINE
		PROPERTY LINE
		FLOWLINE
		SAWCUT
		CUT/FILL TRANSITION LINE
		SIDEWALK
		EX STRIPING TO BE OBLITERATED
		GRADE BREAK LINE
		REFLECTIVE RAISED PAVEMENT MARKERS
		BACK WATER VALVE
		WROUGHT IRON FENCE
		PONY WALL
		DECORATIVE PERIMETER WALL
		DECORATIVE PERIMETER
		RETAINING WALL
		PROPOSED CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
		EXISTING CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
		FUTURE CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB

QUANTITIES

	PRIVATE	PUBLIC
DRAINAGE		
1. 48" TYPE I STORM DRAIN MANHOLE	EA	3
2. 7.5' TYPE "CM2" DROP INLET	EA	2
3. 10.0' TYPE "CM2" DROP INLET	EA	-
4. 17.5' TYPE "CM2" DROP INLET	EA	2
5. 20.0' TYPE "CM2" DROP INLET	EA	2
6. 18" RCP CLASS III STORM DRAIN	LF	257
7. 24" RCP CLASS III STORM DRAIN	LF	308
8. 30" RCP CLASS IV STORM DRAIN	LF	-
9. CONCRETE FLUME	SF	88
10. RPPAP D50=6", THK=12	SF	62
11. 8" WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	1931
12. SIDEWALK UNDER DRAIN	EA	3
13. CULVERT HEADWALL PER N-DOT DETAIL R-2.5.1	EA	2
SEWER SYSTEM		
1. 4" PVC SEWER LATERAL (PRIVATE)	LF	-
2. 8" PVC SEWER PIPE (PUBLIC)	LF	-
3. STANDARD 48" SEWER MANHOLE (PUBLIC)	EA	-
4. 8" SEWER PIPE CAP	EA	-
5. BACK WATER VALVE	EA	-
6. 8" C-900 WATER QUALITY SEWER PIPE (PUBLIC)	EA	-
WATER SYSTEM		
1. FIRE HYDRANT ASSEMBLY W/6" GATE VALVE PER UDACS PLATE NO. 40	EA	-
2. 6" PVC WATER PIPE (CLASS 150)	LF	-
3. 8" PVC WATER PIPE (CLASS 150)	LF	-
4. 8" DIP WATER PIPE (CLASS 53)	LF	-
5. 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39	EA	-
6. 8" X 6" TEE PER UDACS PLATE NO. 31	EA	-
7. 8" X 8" TEE PER UDACS PLATE NO. 31	EA	-
8. 8" 5 DEGREE BEND WITH RESTRAINED JOINTS	EA	-
9. 8" 11.25 DEGREE BEND PER UDACS PLATE NO. 31	EA	-
10. 8" 22.5 DEGREE BEND PER UDACS PLATE NO. 31	EA	-
11. 8" 45 DEGREE BEND PER UDACS PLATE NO. 31	EA	-
12. 8" 90 DEGREE BEND PER UDACS PLATE NO. 31	EA	-
13. CAP AND 2" BLOW-OFF ASSEMBLY W/CAP PER UDACS PLATE NO. 36	EA	-
14. 1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 2	EA	-
15. 1" COPPER SERVICE W/ 1" METER PER UDACS PLATE NO. 4	EA	-
16. 1" COPPER SERVICE W/ 3/4" METER & 1" RPPA PER UDACS PLATE NO. 4 & 8	EA	-
STREET IMPROVEMENTS		
1. 2" A.C. PAVEMENT W/ 4" TYPE II OVER 6" TYPE I AGGREGATE BASE	SY	-
2. STANDARD 18" TYPE "L" ISLAND CURB & GUTTER W/6" TYPE I AGGREGATE BASE	LF	-
3. STANDARD 8" TYPE "A" ISLAND CURB W/6" TYPE I AGGREGATE BASE	LF	-
4. STANDARD 30" TYPE "ROLL" CURB & GUTTER W/6" TYPE I AGGREGATE BASE	LF	-
5. 4' WIDE CONCRETE SIDEWALK W/4" TYPE II AGGREGATE BASE	SF	-
6.		
7.		
TRAFFIC SIGNALS		
1. 30" STOP SIGN WITH POST (R1-1)	EA	-
2. 8" STREET NAME SIGN (D-3, BROWN W/ WHITE LETTERS)(6 POLES x 2 PER POLE=12)	EA	-
3. BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKER	EA	-
4. CROSSWALK MARKINGS	LF	-
5.		
6.		
7.		
8.		
DRY UTILITIES		
1. 100W H.P.S. LUMINAIRE STREET LIGHT W/DECORATIVE POLE	EA	-
2. 1-1/4" PVC STREET LIGHT CONDUIT WITH (2) #4 AND (1) #8 CONDUCTORS	LF	-
3. NO. 3-1/2" PULL BOX W/METAL COVER	EA	-
4. 150 AMP SERVICE PEDESTAL (IRR)	EA	-
5. 200 AMP SERVICE PEDESTAL (STLT)	EA	-
6.		



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. _____ FIRST APPROVED DATE: _____
LVWID APPROVED FIRE FLOW _____ GPM AT 20 PSI RESIDUAL
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW _____ GPM

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

CITY OF LAS VEGAS, NV

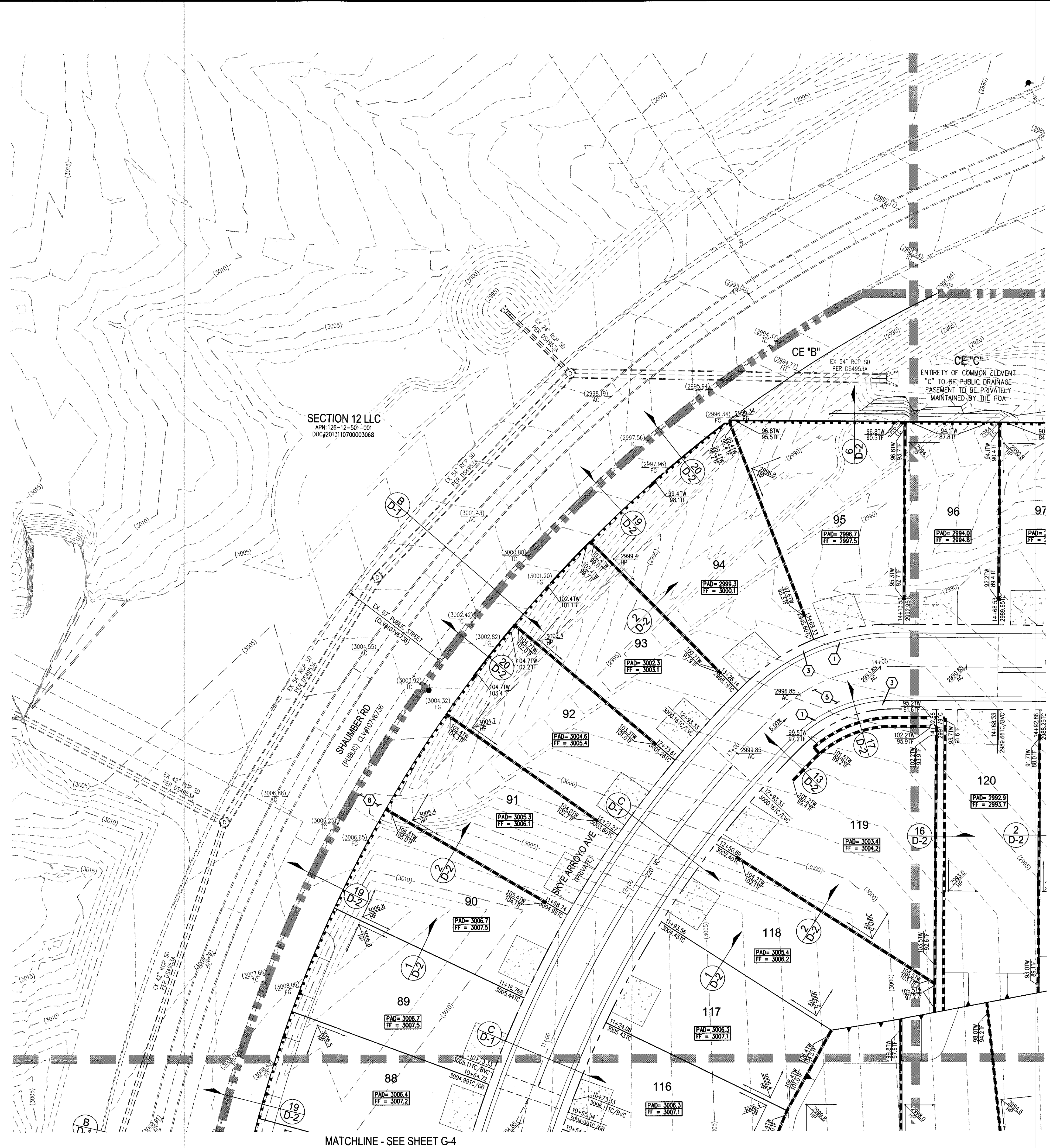
NINETY-FIVE MANAGEMENT, LLC
SKYE CANYON II - PARCEL 2.17
GENERAL NOTES AND QUANTITIES

DATE: 7/5/18
DRAFTER: DNP
DESIGNER: DNP
CHECKED: STS
PROJECT NO.
OLY1721-000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY J. SLATER
Exp. 04/24/2020
No. 14161
7-518

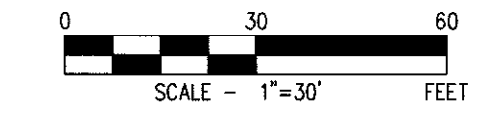
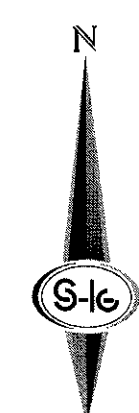
C-3
SHEET 3 OF 23

\\nas01\proj\91721\000\skye canyon parcel 2.17.dwg User: jslater Date: 7/5/2018 1:52 PM D:\nas01\proj\91721\000\skye canyon parcel 2.17.dwg User: jslater Date: 7/5/2018 1:52 PM



MATCHLINE - SEE SHEET G-4

MATCHLINE - SEE SHEET G-2



CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

SURVEY NOTE
OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR DISAPPEARED DURING CONSTRUCTION.

ELEVATION NOTE
ADD 2800 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 1801.00)

SOILS REPORT
SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED 02/09/2015

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= ### CU YDS
FILL= ### CU YDS
EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE
1) EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED LIP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES
1. FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2012, SECTION 2304.11.2.2.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
3. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
4. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
5. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
6. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
7. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
8. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLETING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
9. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

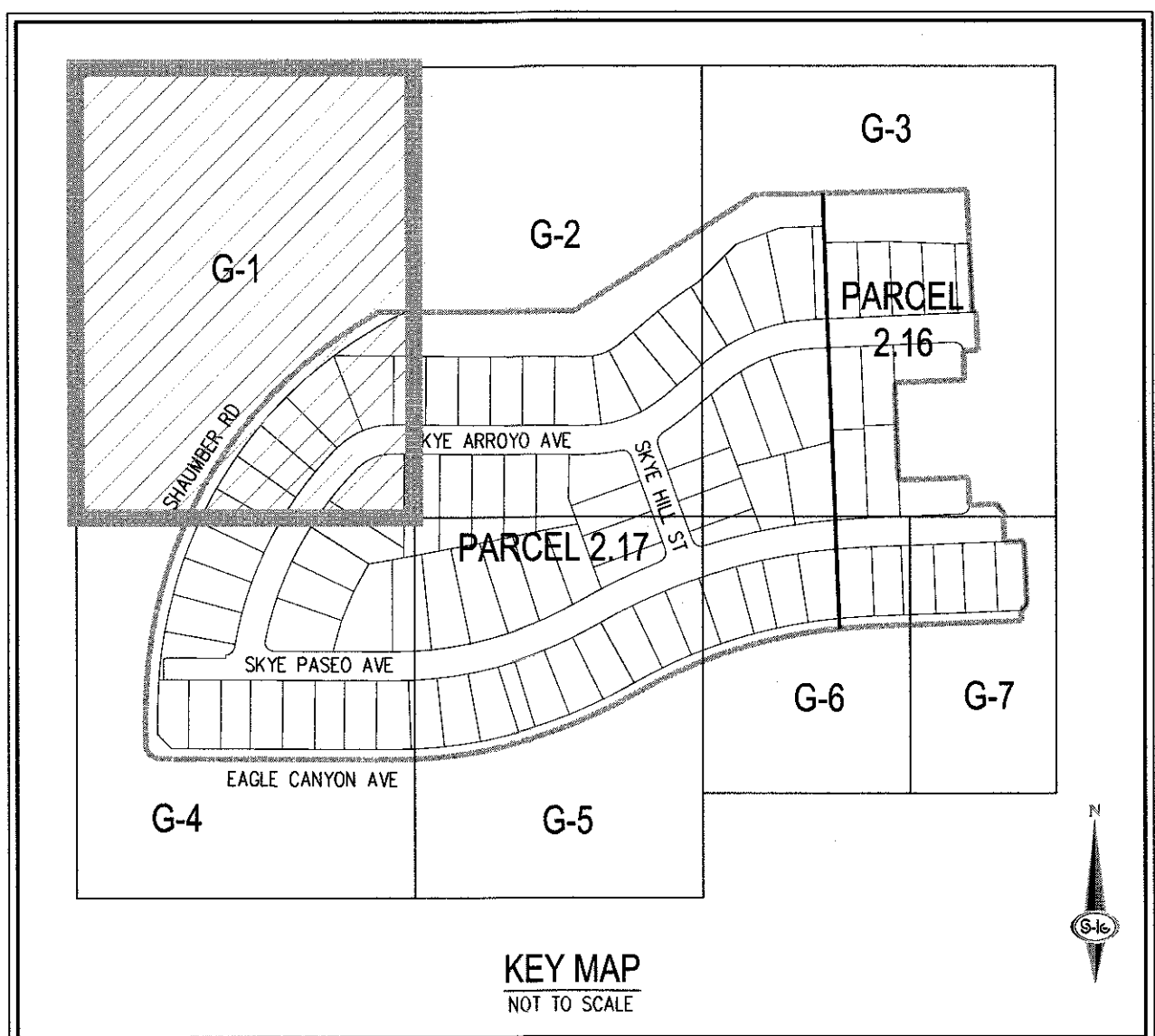
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2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
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FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE 'X' (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.

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OVERHEAD
1-702-227-2929

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AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
Call
811
OR
1-800-227-2600



GRADING NOTES
1) CONSTRUCT 30" ROLL CURB AND GUTTER PER CCAUSD NO. 217.51. CURB FLOW NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.
2) INSTALL WROUGHT IRON FENCE (FEDERATION ACCESS GATE WHERE SHOWN ON PLANS PER DETAIL 32 ON SHEET D-3)
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DRAINAGE EASEMENT NOTE
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BONDABLE DRAINAGE QUANTITIES (PRIVATE)

8" WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	1931
24" RCP CLASS III STORM DRAIN	LF	308
7.5" TYPE "CM2" DROP INLET	EA	2
17.5" TYPE "CM2" DROP INLET	EA	2
20.0" TYPE "CM2" DROP INLET	EA	2
48" TYPE I STORM DRAIN MANHOLE	EA	3
18" RCP CLASS III STORM DRAIN	LF	257
CONCRETE FLUME	SF	88
SIDEWALK UNDER DRAIN	EA	3
CULVERT HEADWALL PER N-DOT DETAIL R-2.5.1	EA	2

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY D55002 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
JERRY SLATER, P.E. 14187 DATE

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5390

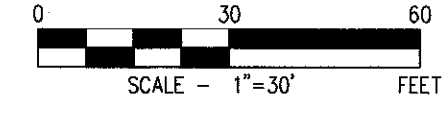
NINETY-FIVE MANAGEMENT, LLC
SKYE CANYON II - PARCEL 2.17
GRADING PLAN - I

G-1
SHEET 4 OF 23

DATE: 7/5/18
DRAFTER: DNP
DESIGNER: DNP
CHECKED: STS
PROJECT NO. OLY1721-000

JERRY SLATER
P.E. 14187
CIVIL
Professional Engineer - State of Nevada

J:\04721\000 skye canyon parcel 2.17\Draw\Improvement\1721-000-grad.dwg 7/5/2018 1:39 PM Dominic Penabaz



CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

SURVEY NOTE
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ELEVATION NOTE
ADD 2900 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 1801.00)

SOILS REPORT
SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED 02/09/2015

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EARTHWORK QUANTITIES (RAW):
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LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

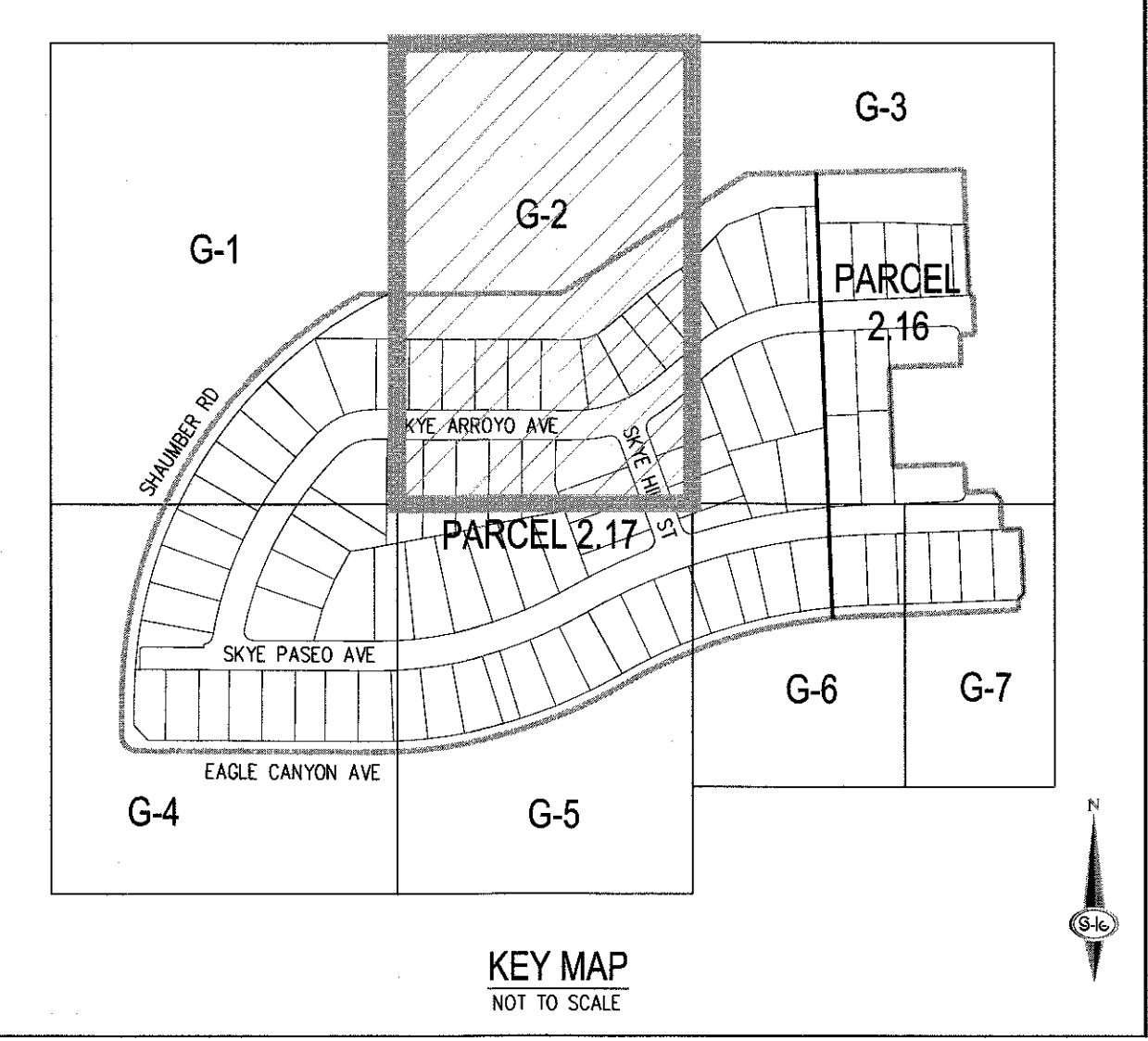
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BONDABLE DRAINAGE QUANTITIES (PRIVATE)

	SF
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7.5" TYPE "CM2" DROP INLET	EA 2
17.5" TYPE "CM2" DROP INLET	EA 2
20.0" TYPE "CM2" DROP INLET	EA 2
48" TYPE I STORM DRAIN MANHOLE	EA 3
18" RCP CLASS III STORM DRAIN	LF 257
CONCRETE FLUME	SF 88
SIDEWALK UNDER DRAIN	EA 3
CULVERT HEADWALL PER N-DOT DETAIL R-2.5.1	EA 2

FLOOD CERTIFICATION
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JERRY SLATER, P.E. 14167 DATE

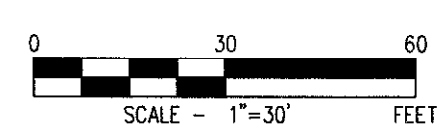
SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

NINETY-FIVE MANAGEMENT, LLC
SKYE CANYON II - PARCEL 2.17
GRADING PLAN - II

DATE: 7/5/18
DRAFTER: DNP
DESIGNER: DNP
CHECKED: STS
PROJECT NO. OLY1721-000

G-2
SHEET 5 OF 23

\\fast\1721.000\skye canyon parcel 2.17\dwg\mnc\1721-400-reduce 7/5/2018 1:52 PM Dominic Penellon



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SOILS REPORT BY GEOTECH RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED 02/09/2015

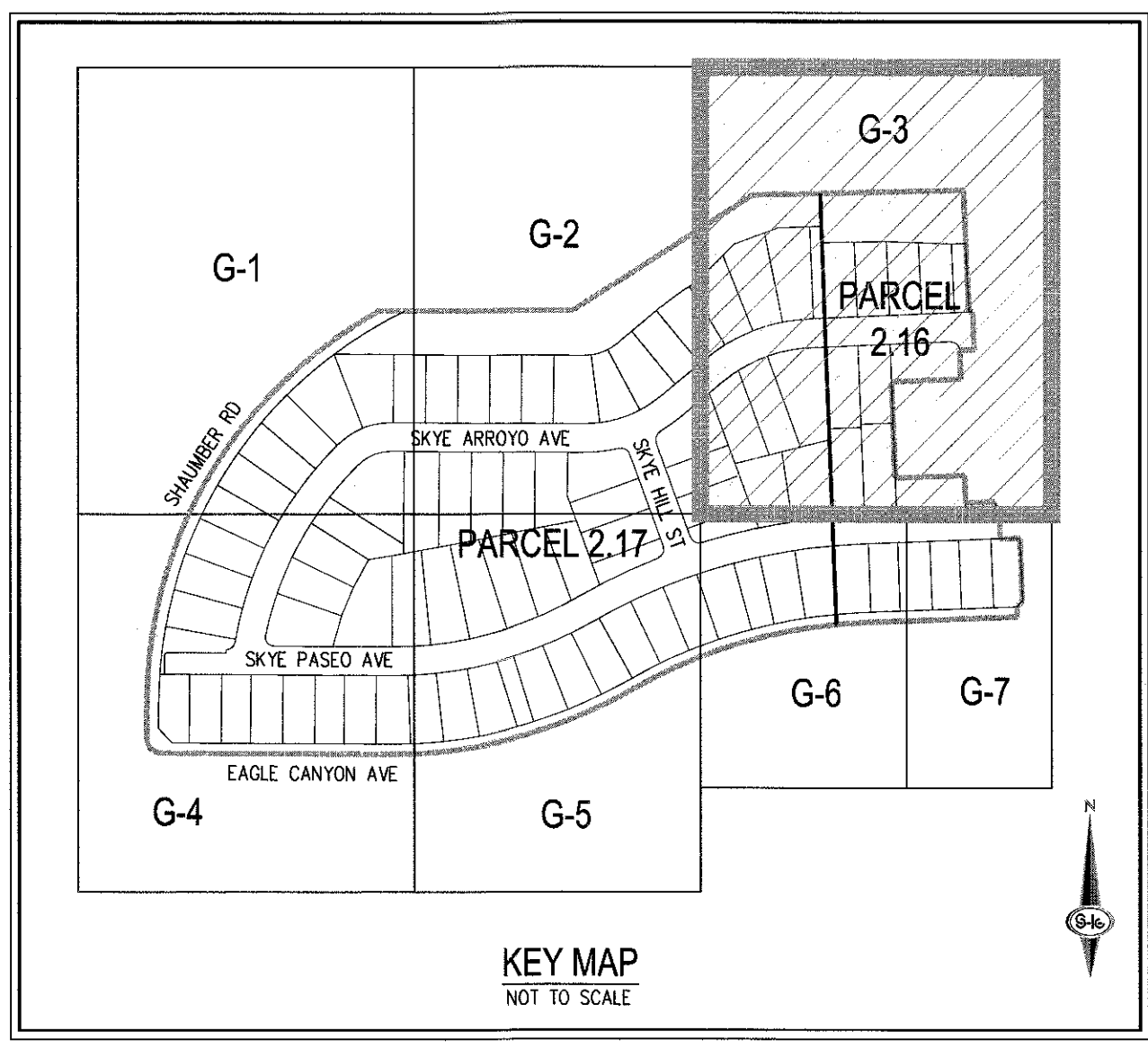
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LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
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24" RCP CLASS III STORM DRAIN	EA	2
7.5" TYPE "CM2" DROP INLET	EA	2
17.5" TYPE "CM2" DROP INLET	EA	2
20.0" TYPE "CM2" DROP INLET	EA	2
48" TYPE I STORM DRAIN MANHOLE	EA	3
18" RCP CLASS III STORM DRAIN	LF	257
CONCRETE FLUME	SF	88
SIDEWALK UNDER DRAIN	EA	3
CULVERT HEADWALL PER N-DOT DETAIL R-2.5.1	EA	2

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DSS0000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
JERRY SLATER, P.E. 14187 DATE



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

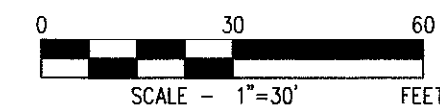
CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT, LLC
SKYE CANYON II - PARCEL 2.17
GRADING PLAN - III

DATE: 7/5/18
DRAWN: DNP
DESIGNER: DNP
CHECKED: STS
PROJECT NO.: OLY1721-000

PROFESSIONAL ENGINEER - SLATER
JERRY SLATER
Exp. 06/30/2020
CIVIL
No. 14161

G-3
SHEET 6 OF 23



CALL SOUTHWEST GAS AT 702-651-2111 FOR
STANDBY WHEN EXCAVATING OVER OR NEAR HIGH
PRESSURE GAS LINES

SURVEY NOTE

OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2900 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 1801.00)

SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED 02/09/2015

EARTHWORKS

EARTHWORK QUANTITIES (RAW)
CUT= ###.### CU YDS
FILL= ###.### CU YDS

EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED
LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED
AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE

- 1) EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
- 2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROCEDED USE OF CURBS PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES

1. FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2012, SECTION 2304.11.2.2.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
3. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
4. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
5. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
6. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
7. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
8. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES. THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLETING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
9. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE

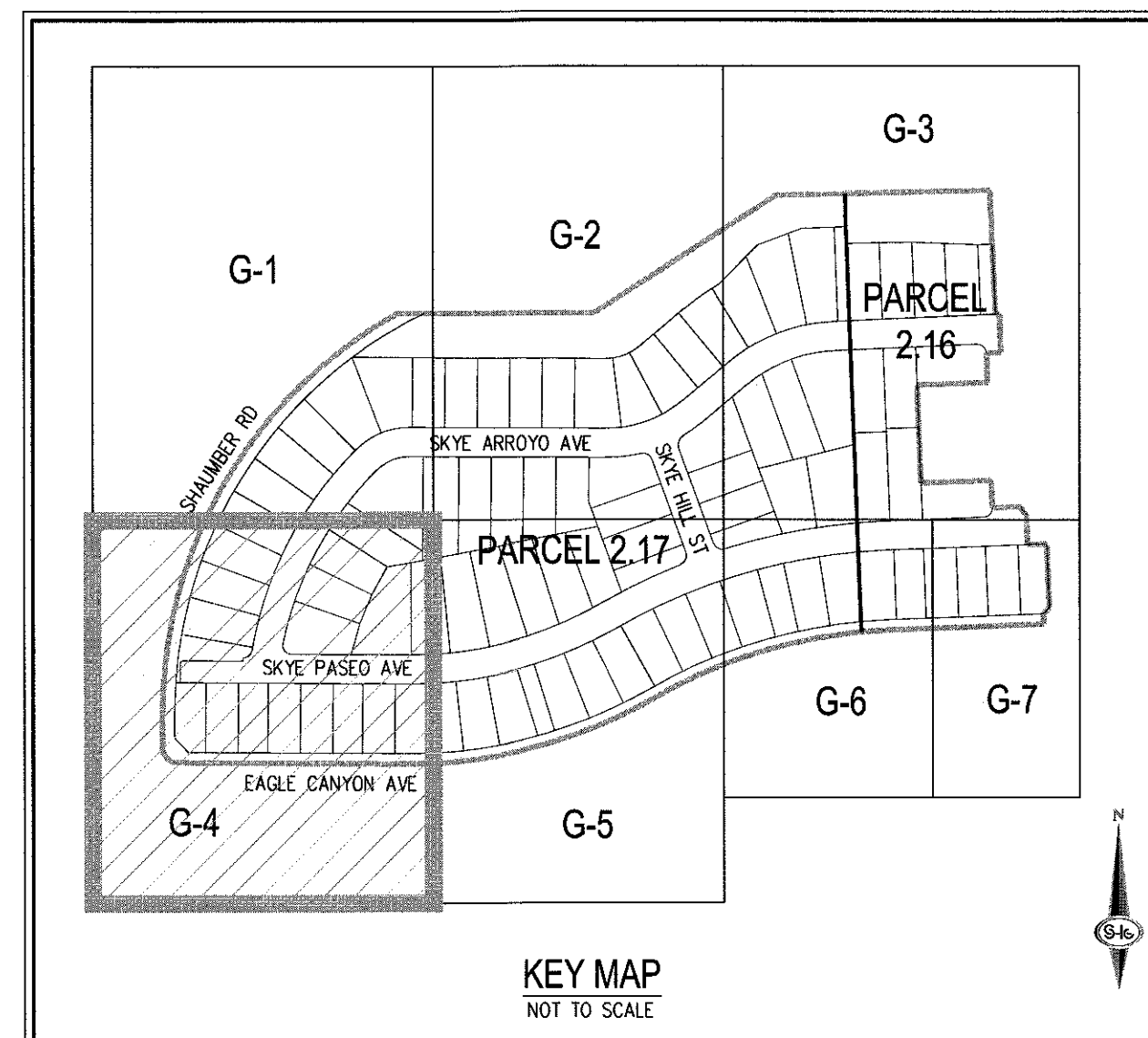
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP DESIGN MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY. WE REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NR100000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR AGENT SHALL UPDATE OR MODIFY THE CONSTRUCTION POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NR100000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE 'X' (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.



GRADING NOTES

- 1 CONSTRUCT 30" ROLL CURB AND GUTTER PER CCAUSD NO. 217.51. CURB FLOW LINES LESS THAN 0.60' DRAIN GAGE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.
- 2 INSTALL WROUGHT IRON FENCE (PEDESTRIAN ACCESS GATE WHERE SHOWN ON PLANS W/ DETAIL 32 ON SHEET D-3)
- 3 INSTALL 5" WIDE CONCRETE SIDEWALK (5" THICK OVER 6" TYPE II AGGREGATE BASE) PER CCAUSD #234
- 4 INSTALL 8'-FT CROSS GUTTER PER DETAIL 33 ON SHEET D-3
- 5 INSTALL 2" ASPHALT PAVEMENT OVER 4" TYPE II AGGREGATE BASE
- 6 CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DUMES OR EQUIVALENT CCAUSD NO. 235, CASE 1 & 235.1
- 7 INSTALL 24" WIDE GATE PER CCAUSD DWG NO. 425.S1
- 8 PERIMETER LANDSCAPE TO BE CONSTRUCTED BY MASTER DEVELOPER
- 9 INSTALL 20" WIDE GATE PER CCAUSD DWG NO. 425.S1
- 10 INSTALL 48" TYPE I SDMH PER CCAUSD #403
- 11 INSTALL 24" CLASS III RCP STORM DRAIN
- 12 INSTALL 18" CLASS III RCP STORM DRAIN
- 13 INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 AND #421 (SIZE PER PLANS)
- 14 INSTALL 48" TYPE I SDMH PER CCAUSD #403
- 15 INSTALL CULVERT HEADWALL PER N-DOT DETAIL R-2.5.1
- 16 INSTALL CONCRETE FLUME PER DETAIL 34 AND 35 ON SHEET D-3
- 17 INSTALL SIDEWALK DRAIN PER CCAUSD #236
- 18 RIP RAP 950-6" THICKNESS-12" WITH 6" FINE AGGREGATE BASE (PER SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC PER DETAIL 36 ON SHEET

DRAINAGE EASEMENT NOTE

ALL PRIVATE STREETS, DRAINAGE EASEMENTS AND COMMON LOTS ARE
PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY THE HOA

BONDABLE DRAINAGE QUANTITIES (PRIVATE)

8" WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	193
24" RCP CLASS III STORM DRAIN	LF	308
7.5" TYPE "CM2" DROP INLET	EA	2
17.5" TYPE "CM2" DROP INLET	EA	2
20.0" TYPE "CM2" DROP INLET	EA	2
48" TYPE I STORM DRAIN MANHOLE	EA	3
18" RCP CLASS III STORM DRAIN	LF	257
CONCRETE FLUME	SF	88
SIDEWALK UNDER DRAIN	EA	3
CULVERT HEADWALL PER N-DOT DETAIL R-2.51	EA	2

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS5000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

JERRY SLATER, P.E. 14167



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

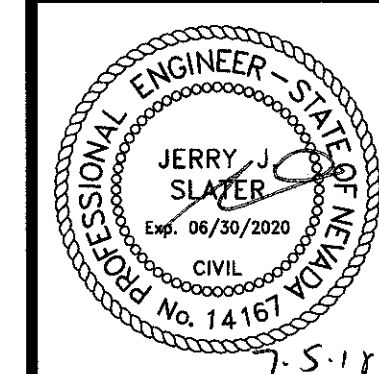
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NINETY-FIVE MANAGEMENT, LLC

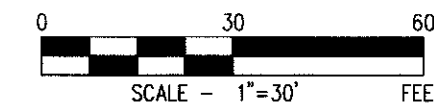
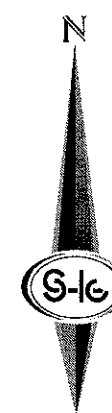
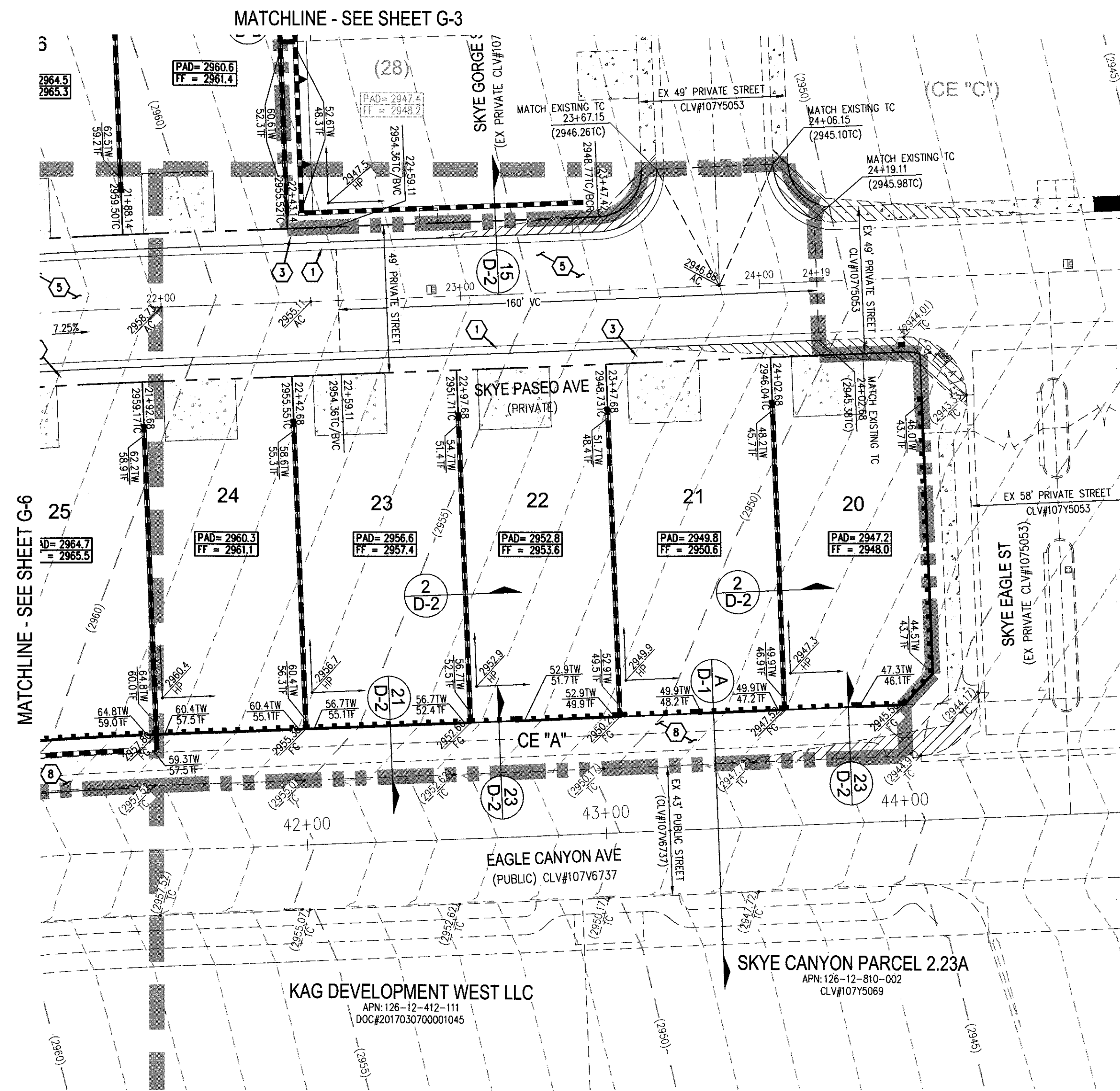
SKYE CANYON II - PARCEL 2.17

GRADING PLAN - IV

STS 1995 R 095	DATE: 7/5/18
	DRAFTER: DNP
	DESIGNER: DNP
	CHECKED: STS
	PROJECT NO. OLY1721-000



G-4
SHEET 7 OF 23



CALL SOUTHWEST GAS AT 702-651-2111 FOR
STANDBY WHEN EXCAVATING OVER OR NEAR HIGH
PRESSURE GAS LINES.

SURVEY NOTE

OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS
SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED,
DISTURBED, DESTROYED, OR OBLISCURED DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2900 TO ALL SPOT GRADES WHERE THE HUNDREDS AND
THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E.
01.00 REPRESENTS 1801.00)

SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED 02/09/2015

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT = ### CU YDS
FILL = ### CU YDS

EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED
LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED
AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE

- EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
- FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED LINE OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES

- FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2012, SECTION 2304.11.2.2.
- THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
- ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
- MAXIMUM MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
- SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
- ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
- CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
- CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLETING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
- NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

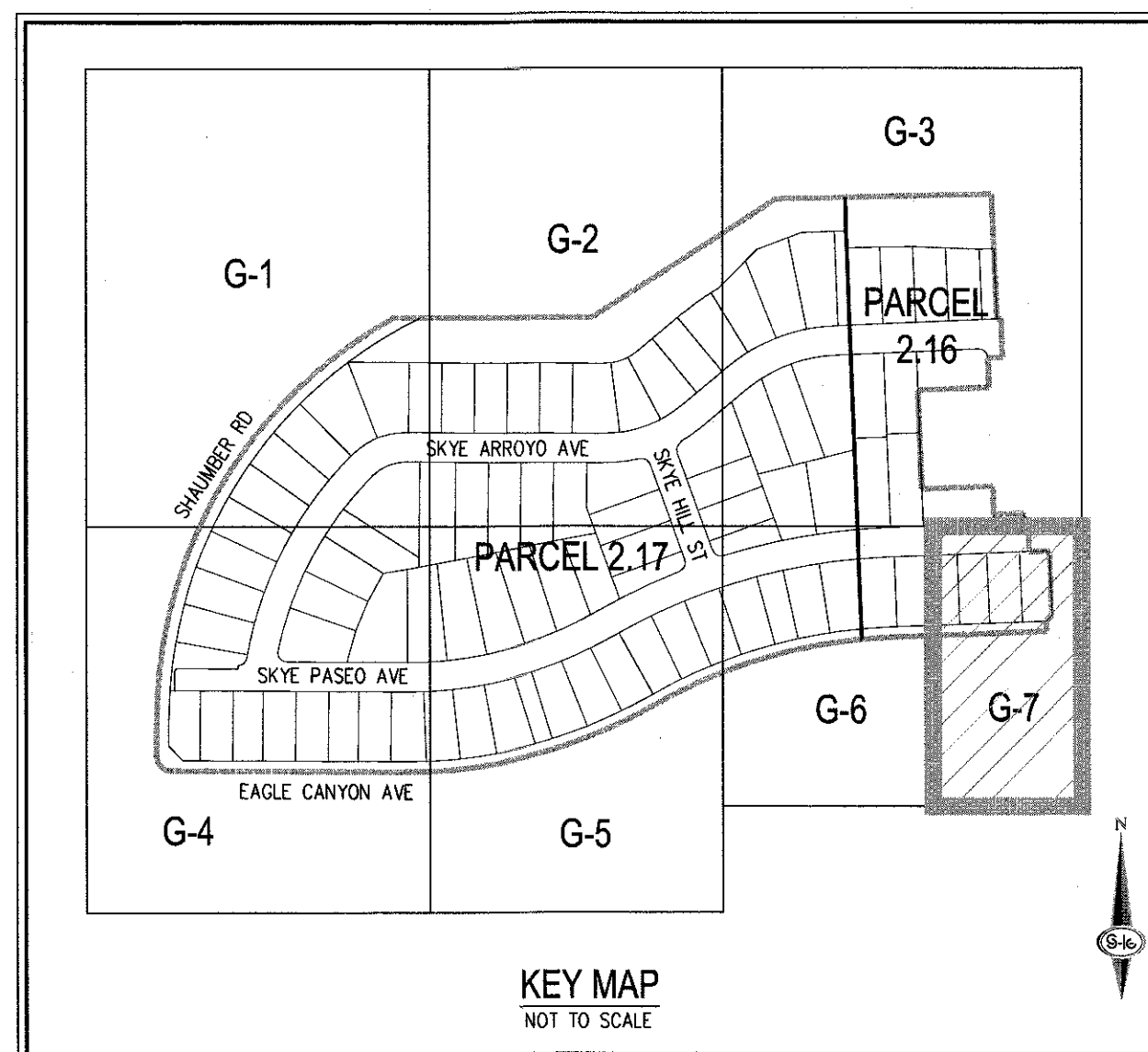
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
- ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
- TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL SWPPS WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
- ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE 'X' (UNSHADED). AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.



GRADING NOTES

- CONSTRUCT 30" ROLL CURB AND CUTTER PER CCAUSD NO. 217.S1. CURB FLOW NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.
- INSTALL WROUGHT IRON FENCE (PEDESTRIAN ACCESS GATE WHERE SHOWN ON PLANS PER DETAIL 32 ON SHEET D-3).
- INSTALL 5" WIDE CONCRETE SIDEWALK (5" THICK OVER 6" TYPE II AGGREGATE BASE) PER CCAUSD #234.
- INSTALL 8-FT CROSS CUTTER PER DETAIL 33 ON SHEET D-3.
- INSTALL 2" ASPHALT PAVEMENT OVER 4" TYPE II AGGREGATE BASE.
- CONSTRUCT SIDEWALK RAMPUS USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT CCAUSD NO. 235, CASE 1 & 235.1.
- INSTALL 24" WIDE GATE PER CCAUSD DWG NO. 425.S1.
- PERIMETER LANDSCAPE TO BE CONSTRUCTED BY MASTER DEVELOPER.
- INSTALL 20" WIDE GATE PER CCAUSD DWG NO. 425.S1.
- INSTALL 48" TYPE I SDMH PER CCAUSD #403.
- INSTALL 24" CLASS III RCP STORM DRAIN.
- INSTALL 18" CLASS III RCP STORM DRAIN.
- INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 AND #421 (SIZE PER PLANS).
- INSTALL 48" TYPE I SDMH PER CCAUSD #403.
- INSTALL CULVERT HEADWALL PER N-DOT DETAIL R-2.5.1.
- INSTALL CONCRETE FLUME PER DETAIL 34 AND 35 ON SHEET D-3.
- INSTALL SIDEWALK DRAIN PER CCAUSD #236.
- RIP RAP D50=6" THICKNESS=12" WITH 6" FINE AGGREGATE BASE (PER SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC PER DETAIL 36 ON SHEET D-3.

DRAINAGE EASEMENT NOTE

ALL PRIVATE STREETS, DRAINAGE EASEMENTS AND COMMON LOTS ARE PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY THE HOA.

BONDABLE DRAINAGE QUANTITIES (PRIVATE)

8" WIDE CONCRETE VALLEY CUTTER W/10" TYPE I AGGREGATE BASE	SF	1931
24" RCP CLASS III STORM DRAIN	LF	308
7.5" TYPE "CM2" DROP INLET	EA	2
17.5" TYPE "CM2" DROP INLET	EA	2
20.0" TYPE "CM2" DROP INLET	EA	2
48" TYPE I STORM DRAIN MANHOLE	EA	3
18" RCP CLASS III STORM DRAIN	LF	257
CONCRETE FLUME	SF	88
SIDEWALK UNDER DRAIN	EA	3
CULVERT HEADWALL PER N-DOT DETAIL R-2.5.1	EA	2

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY D550002 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

JERRY SLATER, P.E. 14187

DATE



DATE	BY	APP	DATE

DESCRIPTION	NO.

CITY OF LAS VEGAS, NV

DATE:	7/5/18
DRAFTER:	DNP
DESIGNER:	DNP
CHECKED:	STS
PROJECT NO.	OLY1721-000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY A. SLATER
Exp. 06/30/2020
CIVIL
Professional No. 14187

