

DS #: 4431

APN: 126-24-410-002

PROJECT: Providence POD 307 - Phase 2 - Update

SUBMITTAL: 6<sup>th</sup>

SCANNED BY/DATE:

CHECKED BY/DATE:





<b>CITY OF LAS VEGAS</b>		<b>DATE:</b>
<b>INTER-OFFICE MEMORANDUM</b>		December 17, 2012
<b>TO:</b> Land Development Services Department of Public Works		<b>FROM:</b> Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
<b>SUBJECT:</b> Drainage Study for: <b>Providence POD 307 – Phase 2 - Update</b>		<b>COPIES TO:</b> Slater Hanifan Group
<b>Cross Streets:</b>	NWC Centennial Pkwy. & Shaumber Road	Pardee Homes of Nevada
<b>File Number:</b>	F:\Depot\DSMemos\DS4431G.doc	Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	126-24-410-002	CCRFCD
<b>Zoning Action:</b>	TMP-38575 & WVR-38578	
<b>FEMA Flood Zone</b>	YES	NO <b>X</b>
<b>Proposed Storm Drain</b>	YES	NO <b>X</b>

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Transaction #
1 <sup>st</sup> Submittal	7/15/2010	7/28/2010	Not Approved	\$400.00	148851: \$400
2 <sup>nd</sup> Submittal	9/10/2010	9/24/2010	Conditional Approval	\$400.00	153300: \$400
CCRFCD	10/22/2010	10/26/2010	Concurrence Recv'd	N/C	N/C
3 <sup>rd</sup> Submittal	10/27/2011	11/3/2011	Approved	\$100.00	264896: \$100
4 <sup>th</sup> Submittal	2/13/2012	2/23/2012	Approved	\$100.00	274195: \$100
5 <sup>th</sup> Submittal	4/26/2012	5/2/2012	Approved	\$100.00	281760: \$100
6 <sup>th</sup> Submittal	12/4/2012	12/17/2012	See Comments Below	\$100.00	303919: \$100
<b>TOTAL FEES (LDDRS):</b>				<b>\$1,200.00</b>	<b>----</b>

**REMARKS:**

**6<sup>th</sup> Submittal: Update to revise the Finish Floor Elevation fo Lot 1 (Phase 2) from 2949.9 to 2949.2**

5<sup>th</sup> Submittal: Update to revise the Finish Floor Elevation of Lot 64 (Phase 1) from 2941.5 to 2940.5

4<sup>th</sup> Submittal: Update to revise the Finish Floor Elevation of Lot 9 (Phase 2) from 2972.6 to 2972.3

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

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

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

**NOTE:** Any proposed public drainage easement(s) within a residential subdivision must also be dedicated as a "COMMON LOT" to be owned and to be privately maintained by the Homeowners Association.

**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.

**In an effort to increase administrative efficiency, the City of Las Vegas Public Works Department requires all soil reports, drainage studies and traffic impact analysis submittals to be accompanied by an electronic copy of the submittal. Electronic documents must be submitted with one original hard copy of the study. Electronic documents should be on a universal computer-readable digital output replicating your submittal to be used for archival or display purposes. This may be more than one file if necessary. An Indexed Portable Document Format (PDF) or Print Ready CAD file formats with a minimum of 300dpi are the desired formats, but provided it is a high quality digitized replication of the submittal, other formats may be acceptable. If figures are in color, they must be scanned in color and saved as a separate file. The new submittal requirement is effective on July 1, 2011. If there are any questions regarding these new requirements, please contact Robert Welch in the Flood Section at (702) 229-2177 or Rick Schroder in Traffic Engineering at (702) 229-6327.**

**END OF REMARKS**  
ays

T/R/S: T19S/R59E/24  
AREA F-24

\*\*\*\*\*  
 \*\*\* FAX TX REPORT \*\*\*  
 \*\*\*\*\*

TRANSMISSION OK

JOB NO. 0494  
 DESTINATION ADDRESS 2845399  
 PSWD/SUBADDRESS  
 DESTINATION ID  
 ST. TIME 12/17 17:03  
 USAGE T 00' 37  
 PGS. 2  
 RESULT OK

<b>CITY OF LAS VEGAS</b>		<b>DATE:</b>
<b>INTER-OFFICE MEMORANDUM</b>		December 17, 2012
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**NOTE:** Any future changes to the proposed design (or design assumptions) as outlined in the approved

PAR1002-002

December 3, 2012

Albert Sung  
City of Las Vegas  
Flood Control Department  
333 S. Rancho Drive  
Las Vegas, NV 89101

Redd: 12/4/12  
DS 4431-4  
F-24  
\$100

**SUBJECT: Providence POD 307 Phase 2 – Lot 1 FFE Adjustment**

On behalf of our client Pardee Homes, we respectfully submit this drainage study supplement to address the Finished Floor Elevation (FFE) on Lot 1. The retaining wall adjacent to the lot on the south and east was built at an elevation that does not accommodate lot drainage as shown per approved plans. The lot needs to be lowered approximately 0.7' to accommodate proper lot grading and drainage.

By reducing the FFE by 0.7', the FFE (2949.2) remains at least 6 inches above the highest adjacent top of curb elevation (2948.7).

Should you have any questions or require additional information, please call me at 284-5300.

Sincerely,

**Slater Hanifan Group, Inc.**



Kirby Adams, PE  
Project Manager

HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL  
**DRAINAGE STUDY INFORMATION FORM**

Name of Development: Providence Pod 307 Phase 2 – Update Date: December 2012  
 Location of Development: a) Descriptive (Cross Streets): North/South: Shaumber Road  
East/West: Centennial Parkway  
 b) Section: 24 Township: 19 S Range: 59 E  
 c) APN: 126-24-410-002

Name of Owner: Pardee Homes of Nevada  
 Telephone No.: (702) 614-1400 Fax No.: (702) 873-6881 E-mail Address: jim.jordano@pardeehomes.com  
 Address: 650 White Drive Suite 100, Las Vegas, NV 89119

Contact Person – Name: Kylie Rowbury, P.E. Telephone No.: (702) 284-5300  
 \*E-mail Address: krowbury@shg-inc.com Fax No.: (702) 284-5399  
 Firm: Slater Hanifan Group  
 Address: 5740 S. Arville Street, Suite 216, Las Vegas, NV 89131

Type of Land Development/Land Disturbance Process:

<input type="checkbox"/>	Rezoning	<input checked="" type="checkbox"/>	Subdivision Map	<input type="checkbox"/>	Clearing and grading Only
<input type="checkbox"/>	Parcel Map	<input type="checkbox"/>	Planned Unit Development	<input type="checkbox"/>	Other (Please specify below)
<input type="checkbox"/>	Large Parcel Map	<input type="checkbox"/>	Building Permit	<input type="checkbox"/>	

1. Total Owned Land Area: At Site: 17 ± Acres Being Developed/Disturbed: All

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

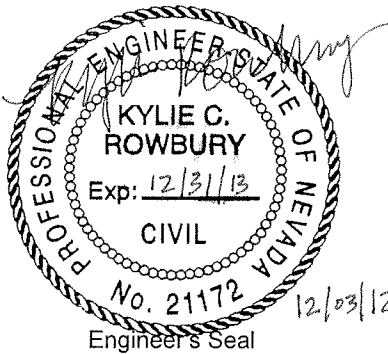
4. Proposed type of development (Residential, Commercial, Etc.): Residential

5. Approximate upstream land area which drains to the subject site: 160 ± Acres

6. Has the site drainage been evaluated in the past?  Yes\*\*  No If yes, please identify documentation: Cliffs Edge Master Drainage Study, Cliffs Edge Infrastructure Phase II  
Technical Drainage Study for Providence Pod 307 Phase 1 and Phase 2

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Centennial Parkway at the southeast corner of the proposed site

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: STANDARD FORM 1

**TRANSMITTAL**

**To:** Albert Sung, P.E. **Date:** December 4, 2012

City of Las Vegas **Project No.:** PAR1002.002  
333 N. Rancho Drive  
Las Vegas, NV 89106

**From:** Kylie Rowbury, P.E.

**Subject:** Providence Pod 307 (Phase 2) – Drainage Supplement for Lot 1 FFE Adjustment

**CC:** File **CC:** \_\_\_\_\_  
**CC:** \_\_\_\_\_ **CC:** \_\_\_\_\_  
**CC:** \_\_\_\_\_ **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: \_\_\_\_\_

<u>Copies</u>	<u>Description</u>
<u>1</u>	<u>24" x 36" Bond Copy – Improvement Plan</u>
<u>1</u>	<u>Justification Letter in regards to Lot 1 FFE Adjustment</u>
<u>1</u>	<u>Drainage Study Information Form</u>
<u>1</u>	<u>Check Fee in the amount of \$ 100.00 (SHG Check# 31916)</u>

**Comments:**

Signed:   
Talita Clark, Processor



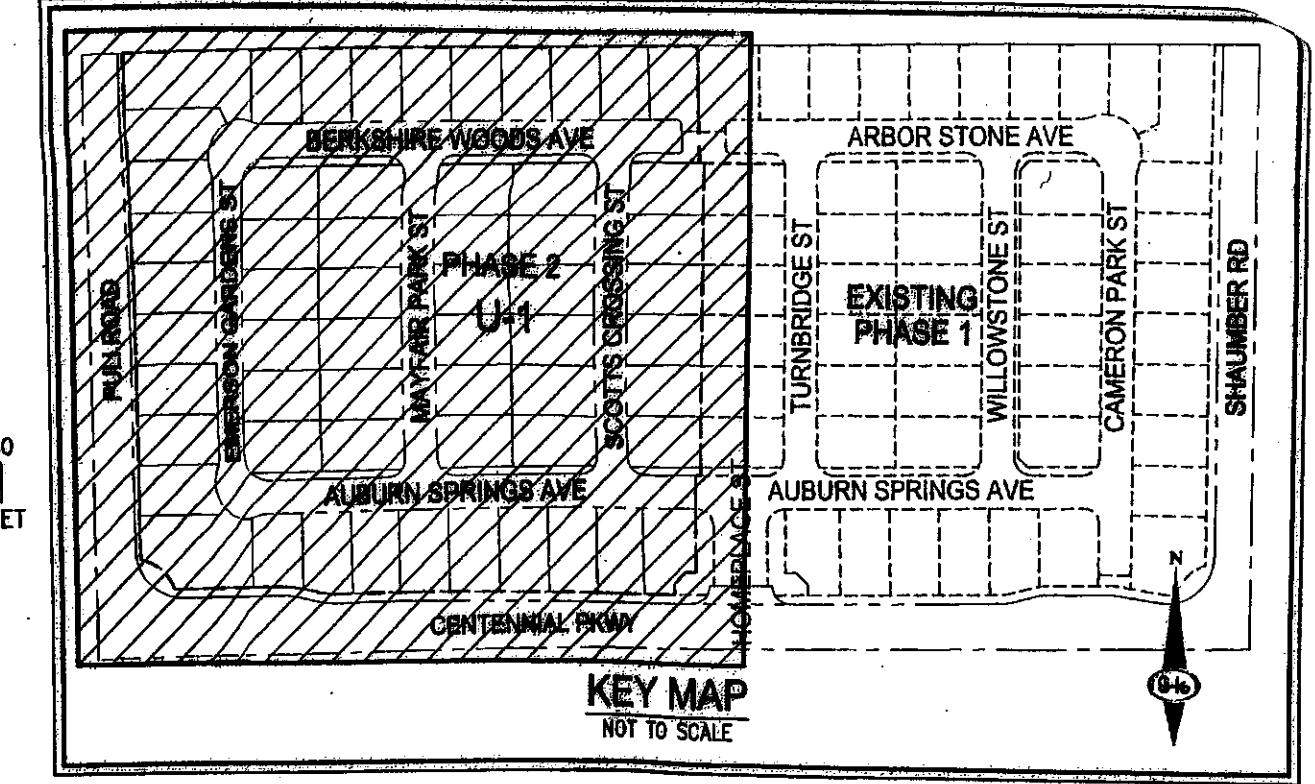
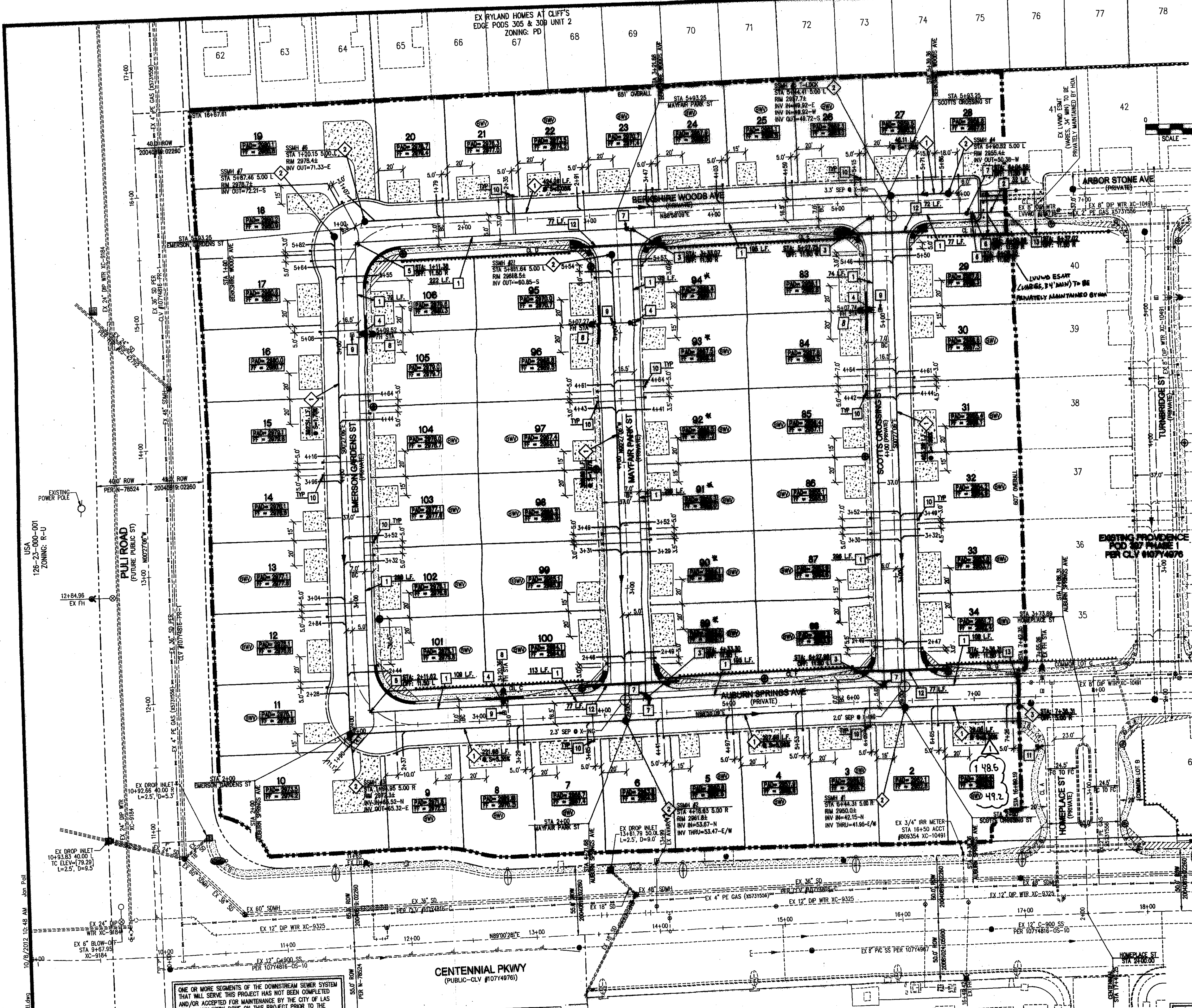
OrderTrackingID: 2006.120412

<b>OrderTrackingID</b>	2006.120412 <sup>18</sup>	<b>Ref#</b>	par1002.002
<b>Ordered By</b>	Talita Clark	<b>Ref#2</b>	
<b>Phone</b>	(702) 284-5300	<b>Ref#3</b>	
<b>RoundTrip</b>	<input checked="" type="checkbox"/> YES	<b>Ref#4</b>	
<b>Spec Instr</b>		<b>Pieces</b>	0
<b>Order Date</b>	12/04/2012 [15:18]	<b>Weight</b>	0.00
<b>Pickup Date</b>	12/04/2012 [15:20 - 16:00]	<b>Service</b>	RUSH
<b>Delivery Date</b>	12/04/2012 [16:20 - 16:50]	<b>Vehicle</b>	Car

Pickup	Delivery
<b>Slater Hanifan Group</b> <b>5740 S Arville St #216</b> <b>Las Vegas, NV 89118</b> Contact: <u>Chelsea Peltier</u> Phone: <u>(702) 284-5300</u> Spec Instr: taking providence pod 307 ph 2 drainage supplement FFE to lot 1 adjustment	<b>City of Las Vegas- Flood Control Department</b> <b>333 N Rancho Dr</b> <b>Las Vegas, NV 89106</b> Contact: <u>albert sung</u> Phone: _____ Spec Instr: _____

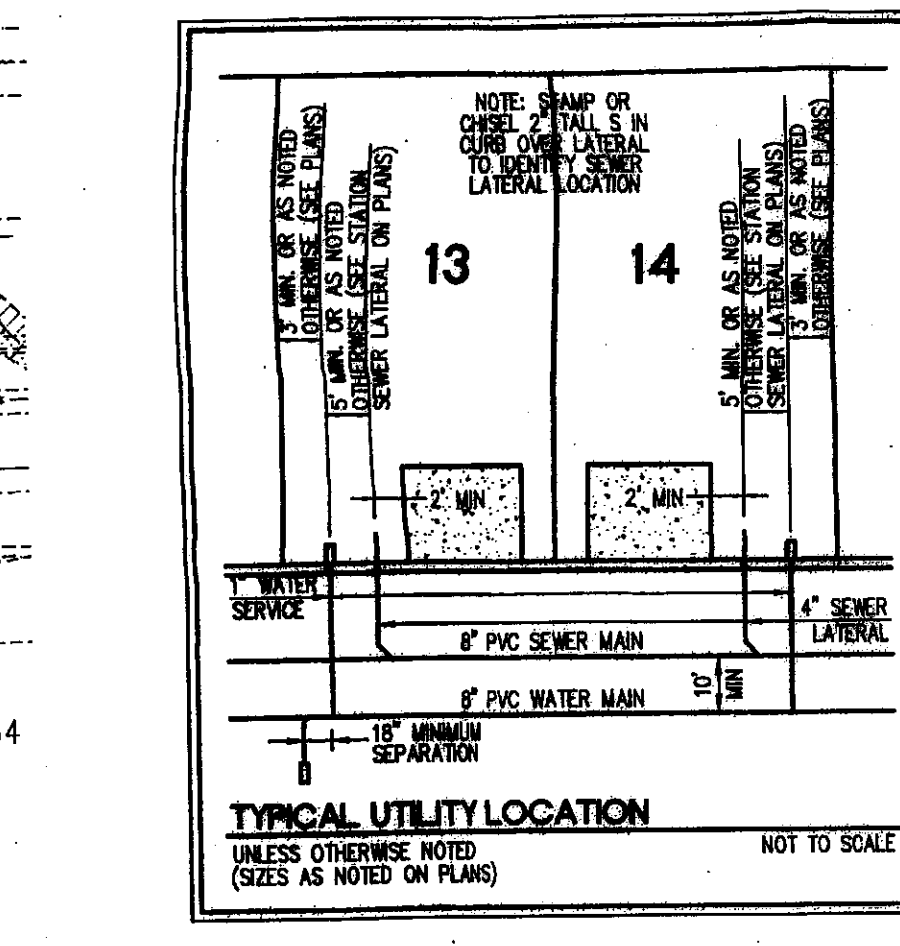
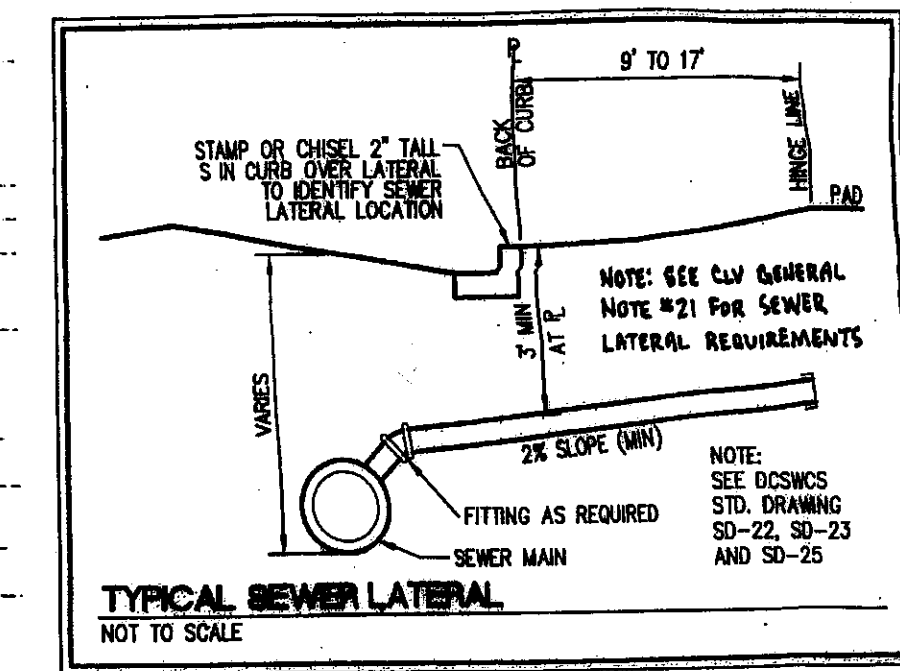
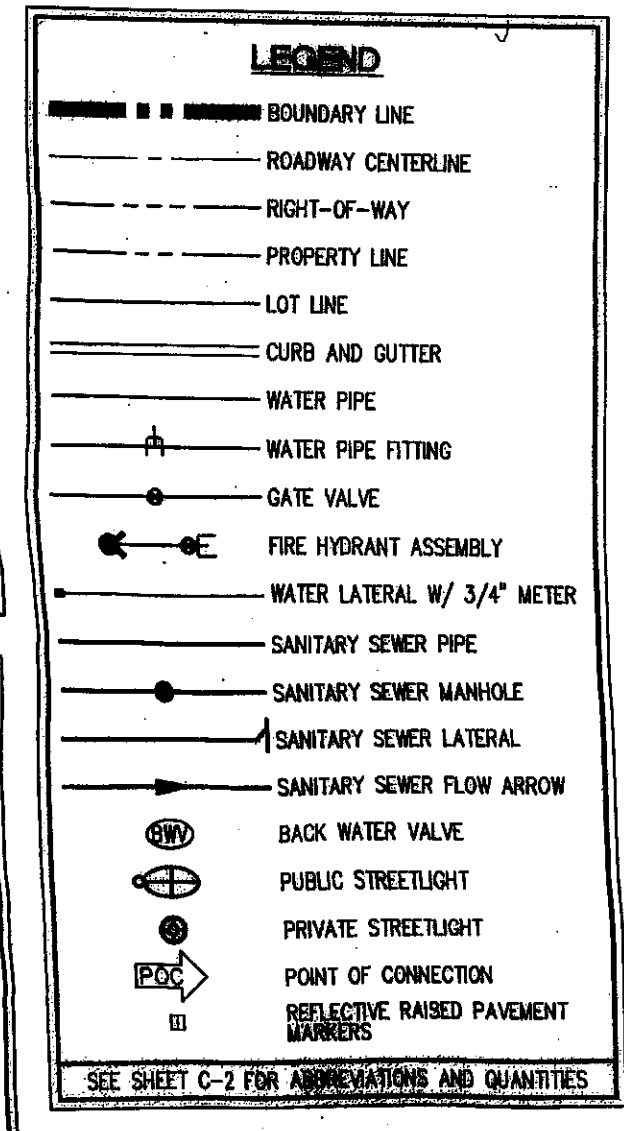
Delivery Signature X.	Time	Driver#	Pickup Time
Roundtrip Signature X.	Time	Name	

**ACCELERATED DELIVERY**  
702-966-5700



**GENERAL NOTES**

- REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS), UNDER CLARK COUNTY'S JURISDICTION THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITIES TO CLARK COUNTY'S SATISFACTION. ALL MATERIAL USED SHALL MEET CLARK COUNTY'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT.
- IN THE EVENT THAT THE TRAFFIC SIGNAL, CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HIRE AN INCH LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 623.6(1).2.
- ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.2.2 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM WATER CROSSINGS AND CLEARANCES.
- THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.
- FITTINGS SHALL NOT FALL UNDER CURBS, GUTTERS OR SIDEWALK.
- ALL PRIVATE STREETS ARE PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY THE HOA.



- WATER NOTES**
- 8" PVC WATER PIPE (CLASS 150)
  - 8" DP WATER PIPE (CLASS 53)
  - 8" x 6" TEE PER UDACS PLATE NO. 31
  - 8" x 6" TEE PER UDACS PLATE NO. 31
  - 90 DEGREE BEND PER UDACS PLATE NO. 31
  - 45 DEGREE BEND PER UDACS PLATE NO. 31
  - GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 36
  - FIRE HYDRANT ASSEMBLY W/ 3/4" GATE VALVE PER UDACS PLATE NO. 40 (SEE DETAIL A SHEET U-1)
  - INSTALL BLUE REFLECTIVE RAISED PAVEMENT MARKERS
  - EX 1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 30
  - EX 1" COPPER SERVICE W/ 3/4" IRRIGATION METER AND 1" RPPA PER CLV #4040
  - INSTALL 2" IRRIGATION SLEEVES
  - REMOVE GAP AND BLOW-OFF PER UDACS PLATE NO. 36, AND CONNECT TO EX MAIN
- SEWER NOTES**
- 8" PVC SANITARY SEWER PIPE (PUBLIC)
  - 48" MANHOLE PRE-CAST SANITARY SEWER
  - FIELD VERIFY AND CONNECT TO EX STUB
- SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES
- \* THESE LOTS TO INSTALL C-100 WATER QUALITY SEWER LATERAL WITH 6" MIN. VERTICAL SEPARATION PER UDACS 2.12.03B2.

**WATER MAIN JOINT DEFLECTION (PVC 4" - 24")**

PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02.

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

**ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS**

58 UNITS X 250 GPD/UNIT = 14,500 GPD  
 TOTAL AVERAGE CONTRIBUTION = 14,500 GPD = 0.0145 MGD  
 TOTAL PEAK FLOW = 0.0145 MGD X 3.5 (PEAK FACTOR) = 0.0508 MGD

Call before you Dig  
 Avoid cutting underground utility lines. It's costly.  
 Call  
**811**  
 1-800-227-2800  
 AND  
 CLARK COUNTY TRAFFIC OPERATIONS  
 1-702-455-7644

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY.  
 Call before you do Underground  
 1-702-455-7611  
 CLARK COUNTY TRAFFIC OPERATIONS  
 1-702-432-6300  
 LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

APPROVAL  
 [Signature]  
 CLV FIRE DEPARTMENT  
 DATE: 10/8/12

APPROVED FOR CONSTRUCTION  
 [Signature]  
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER  
 PROJECT NO. 10328  
 DATE: 10/12/12  
 LWWD APPROVED FIRE FLOW: 1,500 GPM AT 20 PSI RESIDUAL

RELEASED FOR:  
 [Signature]  
 PARADE HOMES OF NEVADA  
 DATE: 11-15-12

part of drainage study #4431-4 which was approved on 12/4/12 and 12/17/12 Page 2  
 H #44782  
 10744976-2

**SLAT HAN GR S-I-G CONSULTING ENGINEERS & ARCHITECTS**  
 5748 S. ARVILLE STREET, SUITE 100, LAS VEGAS, NV 89148  
 PHONE: (702) 284-5888

CITY OF LAS VEGAS, NV

**Parade Homes**  
 PROVIDENCE POD 307 PHASE 2  
 UTILITY PLAN

DATE: 10/8/12  
 DRAFTER: JDP  
 DESIGNER: JDP  
 CHECKED: JLH  
 PROJECT NO. PAR1002-002

APPROVED FOR CONSTRUCTION  
 [Signature]  
 PARADE HOMES OF NEVADA  
 DATE: 11-15-12

part of drainage study #4431-4 which was approved on 12/4/12 and 12/17/12 Page 2  
 H #44782  
 10744976-2

**SEWER CONNECTION NOTE**

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

**BENCHMARK**

CITY OF LAS VEGAS BENCHMARK OLYMPIANWB BEING A RIVET AND PLATE IN TOP OF CURB AT NORTHEAST CORNER OF FORT APACHE AND CANYON LAKES APARTMENTS ENTRANCE. NAVD88 ELEVATION OF 7282.85 FEET.

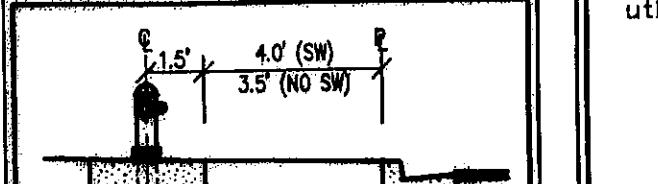
**DISCLAIMER NOTE**

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 COMMENSAL 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.

**FIRE FLOW CALCULATIONS**

FIRE FLOW REQUIREMENT IS 1,500 GALLON PER MINUTE AT 20 PSI RESIDUAL PRESSURE.

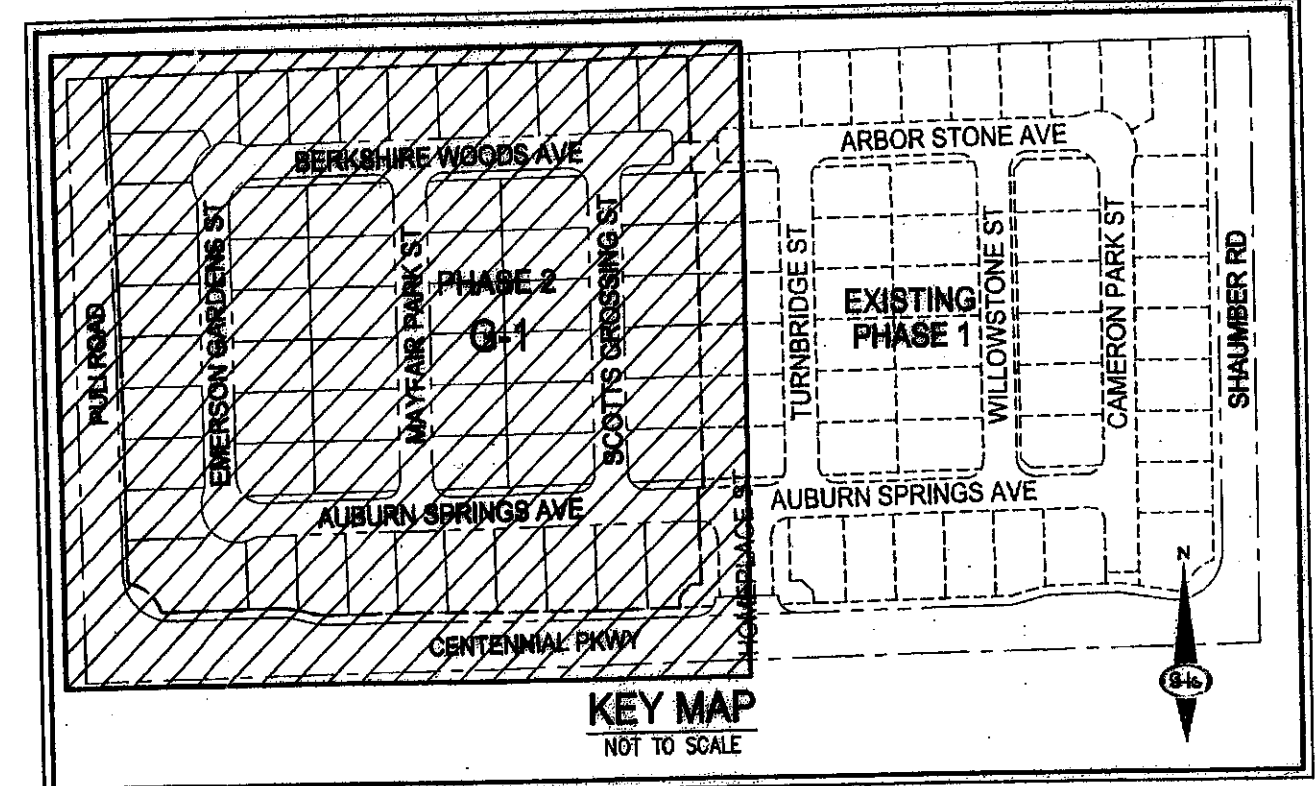
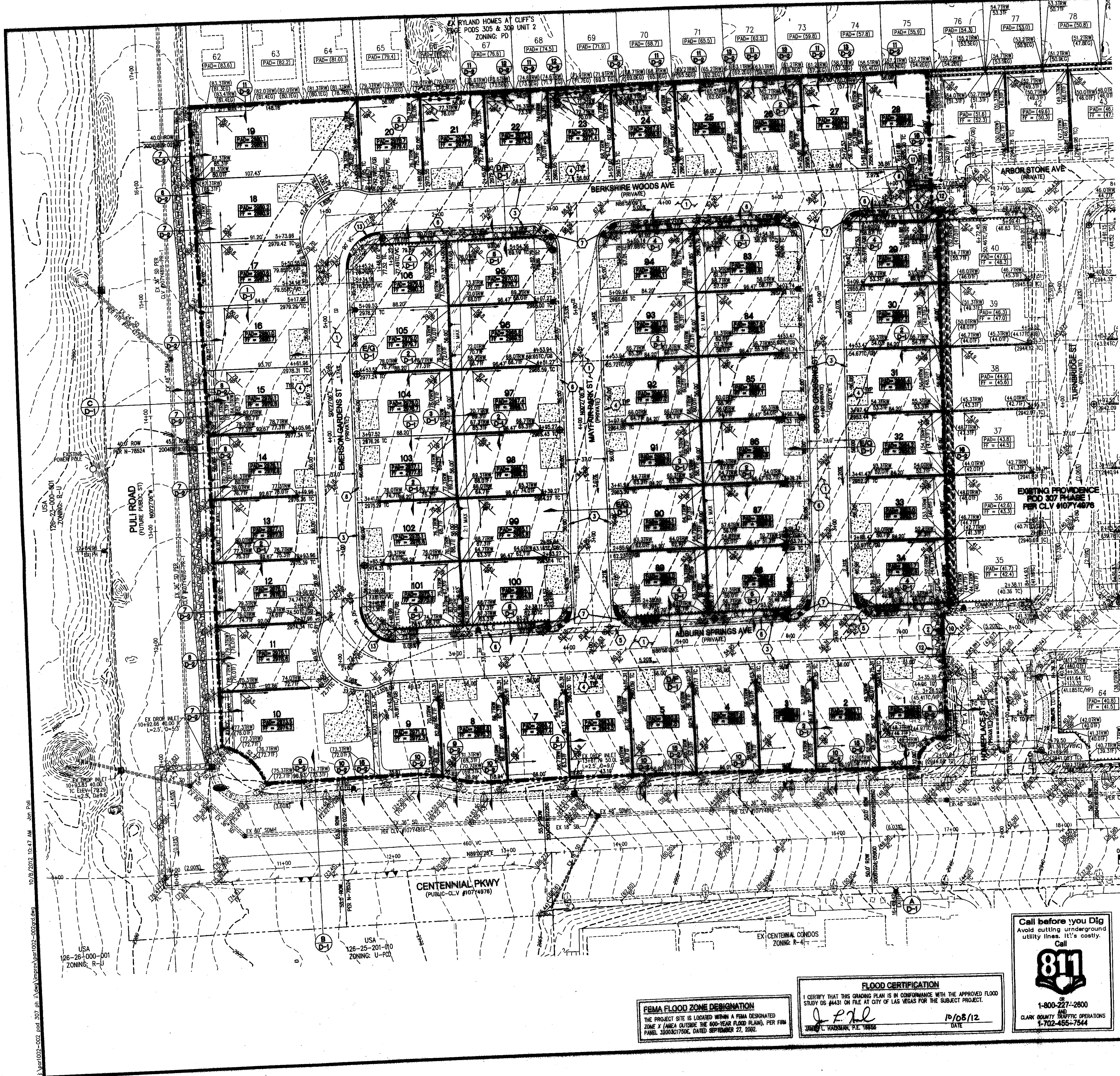
USE/OCCUPANCY: SINGLE FAMILY  
 TYPE OF CONSTRUCTION (IBC): TYPE V  
 AUTOMATIC FIRE SPRINKLERS: NO  
 SQUARE FOOTAGE: 2,600  
 LARGEST AREA BETWEEN 4 HOUR WALLS: N/A  
 BUILDING HEIGHT: 2  
 NO. OF STORIES INCLUDING BASEMENT: 2  
 HIGH PRESS. OVERHEAD STORAGE: NO  
 NO. OF HORIZONTALS INSTALLED: 4



USA 126-23-000-001 ZONING: R-U

USA 126-26-000-001 ZONING: R-U

10/9/2012 10:48 AM Jen Pal



**LEGEND**

- BOUNDARY LINE
- ROADWAY CENTERLINE
- RIGHT-OF-WAY
- PROPERTY LINE
- EASEMENT LINE
- CURB AND GUTTER
- EXISTING CURB AND GUTTER
- FUTURE CURB AND GUTTER
- GRADE BREAK LINE
- FLOWLINE
- EDGE OF PAVEMENT (EP)
- PROPOSED ELEVATION
- EXISTING ELEVATION
- FUTURE ELEVATION
- EXISTING CONTOUR (5-FT)
- EXISTING CONTOUR (1-FT)
- PROPOSED PAD AND FINISHED FLOOR ELEVATION
- EXISTING PAD ELEVATION
- PRIVATE STREETLIGHT
- EXISTING STREETLIGHT
- PROPOSED FIRE HYDRANT ASSEMBLY
- EXISTING FIRE HYDRANT ASSEMBLY
- SIGHT VISIBILITY ZONE
- WROUGHT IRON FENCE
- PONY WALL
- RETAINING WALL
- DECORATIVE PERIMETER WALL
- DECORATIVE PERIMETER RETAINING WALL

**GENERAL NOTES**

- FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2006, SECTION 2303.0.
- 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.
- 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 CURBS DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE RESPONSIBLE FOR VERIFYING LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR/REPLACE FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION.
- 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.
- PRIVATE STREETS ARE PUBLIC UTILITY EASEMENTS, PUBLIC SEWER EASEMENTS AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY THE HOA.

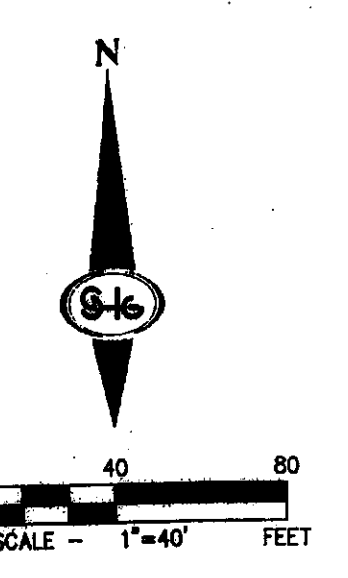
**DISCLAIMER NOTE**

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.

- GRADING NOTES**
- CONSTRUCT 2" AG PAVEMENT WITH 4" TYPE II AGGREGATE BASE.
  - CANVIT AND MATCH EXISTING IMPROVEMENTS PER CAUSD NO. 803AF & 508BT.
  - CONSTRUCT "L" TYPE CURB AND GUTTER PER CAUSD NO. 218.
  - CONSTRUCT RESIDENTIAL DRAINWAY PER CAUSD NO. 223. (WHERE NO SIDEWALK EXISTS THE DRAINWAY INTO DEPRESSION).
  - CONSTRUCT 6" CROSS GUTTER PER CAUSD NO. 228.
  - CONSTRUCT 4" WIDE SIDEWALK PER CAUSD NO. 234.
  - CONSTRUCT SIDEWALK RAMPS USING ABOVE TRUNCATED CONE CURB EQUIVALENT PER CAUSD NO. 235. USE CASE 1 & 2 & 3 W/1:2 TRANSITIONS (SEE PP SHEETS FOR DIMENSIONS).
  - PUBLIC DRAINAGE, EMBT AND LIVING EMBT TO BE PRIVATELY MAINTAINED BY HOA (SEE DETAIL 21 ON SHEET D-2).
  - INSTALL REMOVABLE BOLLARDS PER DETAIL 20 ON SHEET D-2.
  - FIELD VERIFY AND TIE INTO EXISTING CURB AND GUTTER.
  - INSTALL 3.0' CONCRETE CHANNEL PER DETAIL 14 ON SHEET D-2.
  - REMOVE EXISTING RIP RAP PAD.
  - CONSTRUCT "L" TYPE CURB AND GUTTER WITH RED CONCRETE PER CAUSD NO. 216.
- SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES

**PUBLIC DRAINAGE QUANTITIES**

6" WIDE CONCRETE VALLEY GUTTER	SF	1,208
<b>DRAINAGE EASEMENT QUANTITIES</b>		
REMOVABLE BOLLARDS	EA	4
3.0' CONCRETE CHANNEL	SF	81



**RELEASED FOR:**

*[Signature]* 11-15-12  
 PARDEE HOMES OF NEVADA DATE

**BENCHMARK**

CITY OF LAS VEGAS BENCHMARK GLV10558888 BEING A RIVET AND PLATE IN TOP OF CURB AT NORTHEAST CORNER OF FORT APACHE AND CANTON LAKES APARTMENTS ENTRANCE. NAVD83 ELEVATION OF 2792.83 FEET.

**BASIS OF BEARING**

NORTH 89°47'47" EAST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SE 1/4) OF SECTION 6, TOWNSHIP 21 SOUTH, RANGE 60 EAST, M.D.M. ALSO BEING THE CENTERLINE OF "SARAH AVENUE", AS SHOWN BY MAP THEREOF IN FILE 88, PAGE 11 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

This grading plan is part of drainage study #4431-4 which was received on 12/4/12 and approved on 12/7/12. Page 1 of 2 SHEET 3 OF 12

10749976-2

**SLATER HANFAN S-I-G CONSULTING ENGINEERS & PLANNERS**  
 4740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118  
 PHONE: (702) 284-5500 FAX: (702) 284-5399

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**Pardee Homes**  
 PROVIDENCE POD 307 PHASE 2  
 GRADING PLAN

**RELEASED FOR:**  BO  CONSTRUCTION

DATE: 10/8/12  
 DRAFTER: JDP  
 DESIGNER: JDP  
 CHECKED: JLH  
 PROJECT NO. PAR1002-002

**JAMES L. HACKMAN**  
 CIVIL ENGINEER - STATE OF NEVADA  
 Exp. 04/30/13  
 10/8/12

**FEMA FLOOD ZONE DESIGNATION**

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD PLAIN), PER FIRM PANEL 338030795C, DATED SEPTEMBER 27, 2002.

**FLOOD CERTIFICATION**

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED FLOOD STUDY DS #4431 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

*[Signature]* 10/08/12  
 JAMES L. HACKMAN, P.E. 10850 DATE

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

**811**  
 1-800-227-2800  
 CLARK COUNTY TRAFFIC OPERATIONS  
 1-702-455-7544

Avoid hitting underground traffic signal systems and street light system conduits. It's costly.

Call before you do UnderGround  
 1-702-455-7811  
 CLARK COUNTY TRAFFIC OPERATIONS  
 1-702-432-6300  
 LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM  
 1-702-227-2829

Avoid hitting overhead power lines. It's costly.

CALL BEFORE YOU DO OVERHEAD  
 1-702-227-2829

USA 126-25-1000-001 ZONING: R-U

USA 126-25-201-010 ZONING: U-PD

10/8/2012 10:47 AM Job File: I:\Users\james.hackman\Documents\1002-002\grad.dwg