

CITY OF LAS VEGAS		DATE:
INTER-OFFICE MEMORANDUM		June 7, 2023
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for:	COPIES TO:
Skye Canyon Parcel 5.06 - Phase 3		Westwood
Cross Streets:	SWC of Sheep Mountain Parkway & Iron Mountain Road	Century Communities of Nevada, LLC
File Number:	F:\Depot\DSMemos\DS5676A.doc	Bart Anderson, P.E.; DevCo
Parcel Number:	126-12-101-004	CCRFCD
Zoning Action:	22-0412-TMP1	
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	5/12/2023	6/7/2023	See Comments Below	\$400.00	5273290: \$400
TOTAL FEES (LDDRS):				\$400.00	----

REMARKS:

Per 22-0412-TMP1: No permits shall be issued for this site and no Final Maps for this site shall record until all remaining Master Developer Infrastructure identified in the Skye Canyon Development Agreement is constructed or guaranteed to the satisfaction of the Director of Public Works.

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.

- No permits shall be issued for this site and Final Maps for this site shall record until all remaining Master Developer infrastructure identified in the ***Skye Canyon Development Agreement*** is constructed or guaranteed to the satisfaction of the **Director of the Public Works Department**.
- The study assumes the storm drain infrastructure proposed by the *Technical Drainage Study for Iron Mountain* is in place. Substantial completion of the Iron Mountain infrastructure facilities is required prior to approval of the improvement plans for this study.
- The study assumes the storm drain infrastructure proposed by the *Technical Drainage Studies for Skye Canyon Parcel 5.06 Phase 1* are in place and functioning. Substantial completion of the *Skye Canyon Parcel 5.06 Phase 1 Infrastructure* facilities is required prior to residential occupancy permits.

4. 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.

Please note that effective March 15, 2019, the CCRFCD adopted new requirements for drainage study concurrence submittal. Follow the link below for specific guidance.

<http://gustfront.ccrfcd.org/LandDev/LandDev.aspx>

5. **Phase 3B** and **3C** are provided, in a logical sense, is there a Phase 3A?
6. **Ultimate Condition Drainage Map:** Include *Hydraulic Sections 1-1** and *1-8** in the *100-Year Street Flow Summary Table*.
7. **Ultimate Condition Drainage Map:** *Basin ON3* has a total flow of 103cfs, but the prorated basins sum to a total of 108cfs. Address the discrepancy.
8. **Ultimate Condition Drainage Map:** *100-Year Street Flow Summary Table:* Section IDs 2-1, 2-2, 3-2, 3-3, and 3-6 Q_{100} do not match/add up properly according to the referenced subbasins. The sections provided are all included in the reference, all updated flows will require new depth and velocity calculations.
9. **Phase 3B: Sheet G-1 and Sheet G-2:** Regarding the houses adjacent to *Royal Meridian Street*, per the footprint of the houses shown on the plans, it appears that the west wall of the houses could be too close to the footing of the retaining wall. Consider offset the west wall to provide a better clearance. Review and address in the next submittal.
10. **Phase 3B: Sheet D-1:** Show the house on the pad in *Detail Sections 7/D-1* and *8/D-1* and clearly label the distance between the house and the retaining wall.
11. **Phase 3B: Sheet G-1:** *Detail Section 8/D-1* shows an enclosed strip of 5'-wide no-man zone. Explain what function this strip of land serves in the next submittal. Also address who is responsible for the maintenance of this no-man zone.
12. **Phase 3B: Sheet D-1: Wall Section 4:** Revise to show that the solid grout portion is above the "high side" of the finish grade.
13. **Phase 3B: Sheet D-1:** All the *Wall Sections* show slopes directed away from swale flow lines and going toward to pads. Shouldn't be the slope arrows pointing to the swale instead?
14. **Phase 3C: Sheet G-1:** *Construction Note #16* is shown on the plan, but not included in the *Construction Notes* list.
15. **Phase 3C:** Provide more detailed grading, flow lines shown within the *Grading Details* are not shown on plan view. For example, it is unclear for Lots 174-177, how the common area drainage is being conveyed into the street. Review and clarify for all other clusters of lots as well in the next submittal.
16. **Phase 3C: Sheet D-2:** In the 3-Plex and 4-Plex Lot Grading details, it is not clear how the drainage pipe starts and ends.
 - Provide a minimum 8"x8" grate inlet with a 1'-concrete apron around the grate at the upstream end of the drainage pipe.
 - Clarify how the drainage pipe ends: daylight or through the street curb? If daylight, need a detail for pipe outlet.
 - Minimum storm drain size is 4"-diameter. Provide hydraulic calculation to justify pipe sizing capacity.
 - Provide a wall opening (minimum 2-blocks) at each lot for emergency overflow in case the drainage pipe is broken or plugged.

17. **Phase 3B and 3C: Sheet C-1:** Update all plans to include the “CLV#####” shown calling out all existing inlets and storm drain.

18. Provide the note below as *Standard Note No. 6* to the “*Stormwater Runoff Management*” notes column on the *General Notes Sheet C-1* of **Phase 3B** and **Phase 3C** set of plans:

Post-Construction BMPs (PCBMPs) / Control Measures noted on the Grading Plans are mandatory permanent regulatory stormwater pollution controls. These PCBMPs must be installed per the approved plans and must be permanently maintained.

19. The following finish 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	GFF shown	Min FF
28	3007.6	3007.84
34	3005.6	3005.85
40	3002.9	3003.45
58	2995.4	2996.27

LOT	FF shown	Min FF
28	3008.1	3008.27
58	2995.9	2996.35
59	2995.9	2996.35
70	2999.5	2999.97

As an alternate each lot must be discussed in the drainage study, shown to be flood protected, and any necessary flood improvements shown on the grading plan.

NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the Nevada Division of Environmental Protection a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

END OF REMARKS
HDR/AYS

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