

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: June 29, 2022
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:
		Kyle Canyon Gateway – Unit 2	Westwood
Cross Streets:	SWC of Oso Blanca Road & Trails End Ave.		Tri-Pointe Homes
File Number:	F:\Depot\DSMemos\DS5577A.doc		Bart Anderson, P.E., DevCo
Parcel Number:	126-01-501-006 & 126-01-501-007		CCPW
Zoning Action:	22-0027-TMP1; 22-0027-SDR1; 22-0027-VAC1 & 22-0027-VAR1		NDOT
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	5/31/2022	6/28/2022	See Comments Below	\$400.00	4809471: \$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.

1. Sites with a grade difference of 2 feet above or below existing are required to have approval from the *City Planning and Development Department*. The engineer must submit copies of the grading plans and detail sheet with a letter justifying the grade difference to the *City Planning Department* (229-6301). The engineer must provide Planning approval with the next submittal.
2. The site is adjacent to the jurisdiction of Clark County to the east. The engineer must coordinate with *Clark County Public Works Department* (CCPW) and incorporate any concerns for boundary conditions along the east border. CCPW concurrence is required prior to final approval of the subject study.
3. The project proposes to construct facilities and/or increase flows within *Nevada Department of Transportation* (NDOT) right-of-way. The engineer must obtain drainage concurrence from NDOT prior to the final approval of the subject drainage study.
4. **Page 5** of the *Study*: Second paragraph of Sub-chapter 3.2 (Discussion of Existing Condition): It was stated that, quote “A flow split occurs near the intersection of *Kyle Canyon Road* and *Nickelson Street* where offsite flow” -end quote.

Nickelson Street cannot be located anywhere on any hydrologic maps or grading plan sheets! Identify the street in the next submittal.

5. The drainage study did not address a major issue: The downstream existing US95 culverts (6'x3' RCBs) are 50-year facilities. Address in the next submittal what will happen when 100-year storm event hits, ie, how the Q₁₀₀ flow overtop the freeway and impact the *Sunstone* master community adjacent to the east of the US95.
6. The proposed drainage easements convey substantial flow. Upgrade the thickness in all drainage easements from 4"-concrete to 6". Revise all pertinent section details, construction notes and plans accordingly.
7. **Sheet G-1:** Provide a storm drain manhole at the downstream end of the proposed 60"-RCP.
8. **Sheet G-2:** Provide paving transition at the east end of *Trails End Avenue*.
9. **Sheet G-3:** Provide headwall at each of the proposed 54"-RCP and 60"-RCP in the sump locations.
10. **Sheet G-3:** The proposed sump pit in *Michelli Crest Way* encroaches into the adjacent property. Obtain a public drainage easement from the adjacent property owner for the encroachment and future maintenance purposes. The public drainage easement must be granted and recorded prior to the final approval of the improvement plans.
11. **Sheet G-3:** Provide maintenance access to the storm drains and headwalls in the two sump locations.
12. **Sheet G-3:** Provide junction structure at SDMH #2, SDMH #4 and SDMH #6. The required juncture structures require details and structural calculations to be reviewed by the *City of Las Vegas Building & Safety Department*. Approval by the *Building Department* must be obtained prior to the final approval of the subject drainage study.
13. **Sheet G-4:** At the east end of *Mulberry Crest Avenue*, drainage at both sides of the curb return will probably jump the R-curb instead of make a 90-degree turn and get to the proposed inlet. It is recommended to begin the transition from R-curb to L-curb at least twenty feet upstream.
14. **Sheet G-5:** The proposed sump pit at the southwest corner of *Rocky Avenue* and *McKinster Road* encroaches into private property. Obtain a public drainage easement from the property owner. Provide maintenance access. The public drainage easement must be granted and recorded prior to the final approval of the improvement plans.
15. **Sheet D-1: Section Detail 1:** The 100-year flow depth in the channel is 1.96'. Revise the label of the flood wall from "3.2' MAX" to "3.5' MIN".
16. **Sheet D-1:** Revise all details pertaining to drainage easement from 4"-thickness concrete to 6"-thickness.
17. **Sheet PP-4: Lateral III (Plan & Profile View):** Per *Section Detail 1/D-1*, there is a side wall along the east boundary, however, this wall is not shown in the *Profile View*. Review and resolve in the next submittal.
18. **Sheet PP-7:** The *Plan & Profile* proposed concentrated discharge at three locations. The developer/engineer must obtain a notarized letter of acknowledgment from the two adjacent property owners (*VFR-Southwest Desert Equities* and *New Era Global Investment LLC*) prior to the final approval of the subject drainage study.
19. All special structures and mainline storm drain connection require details and structural calculations to be reviewed by the *City of Las Vegas Building & Safety Department*. Approval by the *Building Department* must be obtained prior to the final approval of the subject drainage study.

20. The required juncture structures shall be reviewed for maintenance and access concerns. The engineer must submit a separate set of improvement plans to *City of Las Vegas Streets & Sanitation Department* for their review. *CLV Streets & Sanitation* approval must be obtained prior to drainage study approval.
21. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.
22. Private streets must be public drainage easements. Provide a note on the grading plans "Note: All private streets are P.U.E., Public Sewer Easements and Public Drainage Easements to be privately maintained by the HOA".
23. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.
24. 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 in the final map.
25. Add a note in all pertinent sheets for the construction of all storm drain drop inlets per a newly adopted USDCCA Drawing No. 421 (*Stormwater Quality Management Stamp and Sign Detail*).

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
AYS

T/R/S: T19S/R59E/01
AREA F-01