

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: June 15, 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: Kyle Canyon Road & Oso Blanca Road	COPIES TO: ACG Design
Cross Streets:	SWC of Kyle Canyon Road & Oso Blanca Road	Kyle Canyon Next & Last Frontier LLC
File Number:	F:\Depot\DSMemos\DS5573A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	126-01-702-007	CCRFCDC
Zoning Action:	22-0102-TMP1; 22-0106-SDR1 & 22-0106-SUP1	NDOT
FEMA Flood Zone	YES	NO X
Proposed Storm Drain	YES	NO X

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal (Paid on 6/14/2022)	5/25/2022 & 6/14/2022	6/15/2022	See Comments Below	\$400.00	4827859: \$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 or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCDC) master planned facility. Therefore, CCRFCDC concurrence is required prior to final approval of the drainage study.

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

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

3. The project proposes to construct facilities and/or increase flows within *Nevada Department of Transportation* (NDOT) right-of-way. The engineer must contact NDOT for encroachment permit for the proposed project.

4. Provide an *Ultimate Drainage Map* that accounts for the offsite basin **OFFE** under developed condition. *Ultimate Condition* shall be the worse case condition over the *Developed Condition* and presents the highest runoff situation.
5. **DR1** and **DR2**: Explain where the $Q_{10}/Q_{25}/Q_{100}$ in *Kyle Canyon Road* and *Oso Blanca Road* are referenced from in the next submittal.
6. **DR2**: Provide *Street Flow Summary* for *Rufian Road*.
7. **Sheet C6**: Construction Note #28 proposed a Type B drop inlet which is not allowed in the *City of Las Vegas*. Revise all drop inlets to Type "C-D" Modified Drop Inlet per Standard Drawing 412.1 or Neenah Pre-cast inlets. Note that the lengths of "C-D" modified inlets are in the multiple of 2.5'. Revise all pertinent construction notes and callouts accordingly.
8. Provide a storm drain manhole in *Rufian Road* above the proposed dual-6'x3' RCB and another one at the downstream end of the box. Revise all pertinent sheets accordingly.
9. **Sheet C6**: Remove an existing 24"-RCP culvert in *Oso Blanca Road* at the proposed driveway location. Provide a note for such action.
10. **Sheet C6**: The callout for *Section Details E/C10* and *F/C10* are incorrect. Revise to **E/C11** and **F/C11**.
11. **Sheet C6 and Sheet C7**: Provide a minimum 12'-wide access ramp down to the upstream end of the proposed dual-6'x3' RCBs for maintenance purpose.
12. It is not clear where the upstream of the RCBs and the riprap pad ends. Keep the improvements in the *Rufian* right-of-way. Otherwise a public drainage easement has to be obtained from the adjacent property owner.

Show full street *Rufian Road* right-of-way on the grading plan and plan & profile sheets.
13. **Sheet C7**: The profile indicates that there is a junction structure to connect the existing and proposed dual boxes. Provide structural detail of the structure in the next submittal.
14. Dedicate the proposed 30' easement as "Public Drainage Easement with Surface to be Privately Maintained by the Property Owner". Record as such in the Subdivision Plat Map.
15. **Sheet C10**: *Section Detail A*: Clearly show that the top three courses of the retaining wall to be 8"-thickness CMU to be solid grouted or equivalent above the adjacent high grade.
16. **Sheet C11**: Apply same comment to *Section Detail G* as in Comment #12.
17. **Sheet C11**: *Section Details E and F*: Per grading plan design, there is a swale behind the curb along the south property line. Revise the details accordingly in the next submittal.
18. Provide preliminary plan and profile sheets for all proposed perimeter streets (*Kyle Canyon Road*, *Oso Blanca Road* and *Rufian Road*). Plan and profile sheets must show existing and proposed grade at centerline, but may be preliminary in all other respects. These plans are necessary to determine the effect of the proposed development on the adjacent properties.

19. 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*).
20. Provide the Stormwater Management Notes on the Improvement Plans.
21. Provide a note on the grading plan (Standard Note No. 6): 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.
22. Provide a note on the grading plan: All onsite storm drains and the associated storm drain facilities are Privately Owned and to be Privately Maintained by the owner”.

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