

CITY OF LAS VEGAS			DATE:
INTER-OFFICE MEMORANDUM			December 12, 2022
TO: Land Development Services Department of Building & Safety		FROM: Caitlyn Alcantara, P.E. <i>CA</i> Flood Control, Engr. Associate Department of Public Works	
SUBJECT:	Drainage Study for:		COPIES TO:
	Kyle Canyon Gateway Unit 1		Westwood Professional Services
Cross Streets:	Michelli Crest Way and Kyle Canyon Road		TriPointe Homes Nevada, INC.
File Number:	F:\Depot\DSMemos\DS05460G.doc		Bart Anderson, P.E., DevCo
Parcel Number:	126-01-701-004, -005, 126-01-601-012, -013		CCRFCD
Zoning Action:	20-0373-TMP1, 20-0373-SDR1		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	6/2/2021	6/21/2021		\$400.00	4318194: \$400
2 nd Submittal	7/12/2021	7/12/2021	Conditionally Approved	\$400.00	4367962: \$400
3 rd Submittal	9/22/2021 & 10/25/2021	11/10/2021	Conditionally Approved	\$100.00	4460660: \$100
4 th Submittal	11/18/2021	11/18/2021	CCRFCD Concurrence	N/C	N/C
5 th Submittal	12/8/2021	12/22/2021	Conditionally Approved	\$100.00	
6 th Submittal	10/24/2022	11/7/2022	Conditionally Approved	\$100.00	5012967: \$100
7 th Submittal	11/28/2022	12/12/2022	See Comments Below	\$100.00	5051657: \$100
			TOTAL FEES (LDDRS):	\$900.00	----

REMARKS:

7th Submittal: Update #4 to address the improvements in Kyle Canyon Road

6th Submittal: Update #3 to revise lots for common elements per coordination with CLV

5th Submittal: Update #2 to revise the drainage easement and temporary channel at the eastern end of Arrow Range Avenue.

4th Submittal: CCRFCD Concurrence

3rd Submittal: Update #1 to address NDOT and CLV Traffic Comments for Kyle Canyon Gateway Offsite Roadway

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.
	is conditionally approved subject to NDOT concurrence.

1. Update **Exhibit F** to reflect the revised Basin Boundary for P-KYLE that extended the Kyle Canyon Roadway improvements from Alpine Ridge to Oso Blanca. Update the hydrology to include the added area between the eastern boundary of P-KYLE and Oso Blanca Road. The provided flows for Basin P-KYLE appear to be low and need to be revised to reflect the roadway improvements. Flood Control believes that based upon the roadway section, a CN-value of 93.9 is appropriate

versus the 89 shown. Justify the roadway CN values used in the calculations. This information will also be evaluated with the Drainage Study Update for Kyle Canyon Gateway Unit #1 (DS5460). HEC-1 is acceptable however NDOT requirements also apply to their roadways.

NDOT reminded the City that, Per Section 3.2.2.1 of the NDOT Drainage Manual, spread and inlet capacity calculations should be performed using the rational method (noting that NDOT does not accept the modified rational method) for the roadway impacts. Provide updated calculations that meet the NDOT requirements and discuss the impacts per NDOT spread criteria. Provide storm drain and inlet calculations based upon the revised flow information.

2. 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. NDOT concurrence is required.
3. It was determined by CCRFCD and CLV that an Amendment to the CCRFCD Master Plan Update is not required at this time.
4. The grading plan indicates offsite grading. Secure a notarized letter of permission from the property owner to the east allowing the grading. It was indicated in the 2nd submittal that coordination between Tri-Pointe and KB Homes to allow drainage to surface flow at DE1 will be included with the permission to grade letter. This letter is required prior to final acceptance of the drainage study.
5. The project proposes to build a temporary drainage facilities on the adjacent offsite parcel. Prior to final plan approval the developer must complete a maintenance and liability agreement for the interim drainage improvements (off-site berms or channels) and post a minimum maintenance bond of \$50,000 or 50-percent of the construction cost for the improvements, whichever is greater. The engineer must submit an estimate of the quantities for constructing the facility and an exhibit that adequately shows the location and limits of the drainage facility to City of Las Vegas Flood Control for approval. Once the drainage study is conditionally approved, the engineer should contact the City's Land Development Section (229-6371) to begin the agreement process.

Public Drainage Easements to be privately maintained by the Developer, including maintenance access, must be provided to all temporary drainage facilities.

In order for the maintenance bond to be released in the future, a drainage update / letter will be required to justify that the offsite berms / channels are no longer necessary and can be removed.

6. Provide Section Detail 23/D-3.
7. Revise Through-Lot Drain to match Uniform Standard Drawing No. 425.S1 for CE-R and drainage easement at the eastern end of Arrow Range Avenue. Add Bollard and revise wrought iron fence/gate to match standard drawing.

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
PBJ/JKS/CAA

T/R/S: T19S/R59E/S1
AREA F-01