

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: January 4, 2023
TO: Land Development Services Department of Public Works			FROM: Caitlyn Alcantara, P.E. <i>CA</i> Flood Control, Engr. Associate Department of Public Works
SUBJECT:		Drainage Study for: Carwash West Sahara	COPIES TO: Lochsa Engineering
Cross Streets:	NEC of Sahara Ave & Spanish Oaks Dr		Neil Capin
File Number:	F:\Depot\DSMemos\DS5634A.doc		Bart Anderson, P.E., DevCo
Parcel Number:	162-05-403-001		CCRFCD
Zoning Action:			
FEMA Flood Zone	YES	NO	X
Proposed Storm Drain	YES	NO	X

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Transaction #
1 st Submittal	12/13/2022	1/3/2023 Paid on 1/4/2023	See Comments Below	\$400.00	5094315: \$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 Department of Development Services concurrence.

1. Provide a copy of the zoning/planning conditions associated with this site with the next submittal to verify compliance with conditions. Flood Control will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the City Council). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.
2. 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.
3. The grading plan indicates onsite flow going towards offsite properties. Secure a notarized letter of permission from the property owner allowing the flow. This letter is required prior to final acceptance of the drainage study.
4. The finished 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). Provide a flood wall in the landscape area adjacent to Spanish Oaks Drive or equivalent adequate flood protection for the building.

5. A recent site visit and contours indicate more flow approaching El Camino Avenue and Spanish Oaks Drive than offsite basin FD1 presumes. Provide either the reference material or justification for the delineation of the offsite basin, FD1.
6. The western driveway appears to not meet the requirements of a humped driveway. It is understood that there are limitations to the grading preventing the project site from meeting the requirements of a humped driveway. Provide as much freeboard possible to provide onsite flood protection for the building while still making the entryway drivable.
7. **Sheet C4.01:** Provide a section on the western border of the project site showing the landscape of the area and a regular section of Spanish Oaks Drive.
8. **Sheet C6.01, Section D:** Cap the space between the proposed wall and the existing wall so flow, debris, or animals cannot get into the space.
9. **Sheet C6.01, Section E:** Provide a screen wall on top of the retaining wall for pedestrian safety and a ditch adjacent to the wall to direct flow away from it.
10. **Sheet C6.01:** Section A is missing the retaining wall placed along Sahara Avenue and Section B is missing the sidewalk west of the building. Check all the sections for consistency.
11. **Sheet C6.01:** Provide a range on how tall the proposed retaining walls will be.
12. **Sheet C6.01:** Show the minimum cross-slopes on all sections.
13. It is understood that there are restrictions to grading since it is developed on all sides of the project site. However, there is room to allow for more treatment with the LID BMPs. Like forcing a low point north of the proposed building or redirecting the valley gutter and providing a curb cut at either landscaping area. Provide more treatment of the water exiting the site and make sure it is to the specifications listed in the manual. This comment also applies to the landscape swale in the southern landscape, as the sloped length at 1% is too short.
14. The property line is extended north past the APN given. Clean up line work so that we can see the property line, the retaining walls, and the existing storm drain clearly.
15. Label the existing 36" storm drain in Sahara Avenue on the grading plan and label with City of Las Vegas recorded plan number. Identify all pertinent drop inlets and/or storm drain manholes.
16. Provide a Note on all Grading 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.

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
CAAAYS

T/R/S: T22S/R60E/04
AREA R-04