

CITY OF LAS VEGAS		DATE:
INTER-OFFICE MEMORANDUM		February 28, 2019
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:
	Wasden Elementary School	Atkins
Cross Streets:	SEQ of Campbell Drive & Palomino Lane	School Board of Trustees c/o Real Property Management
File Number:	F:\Depot\DSMemos\DS5097A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	139-32-405-006	
Zoning Action:	SDR-75121; VAR-75119 & VAR-75120	
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	2/6/2019	2/20/2019 & 2/28/2019	See Comments Below	\$400.00	503000: \$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. Provide a copy of the zoning/planning conditions associated with this site (**SDR-75121; VAR-75119 & VAR-75120**) 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 re vised and resubmitted.
2. Provide the McCarran Area Rainfall Map, and all other tables provided by the *Clark County Regional Flood Control District* to confirm all design storm criteria used.
3. Provide the soils survey and curve number calculations used so that the curve number values may be confirmed.
4. Address if there is any emergency overflow path for the proposed courtyard. For example on **Sheet C3.03** on the west side of **East Classroom Building**, a DI at 95.90 TG appears to have to overcome a 96.40 highpoint at the gate if the DI is totally clogged. This is equal to the proposed finished floor elevation which will cause flooding damage to the building.
5. **Sheet C3.01:** The configuration of the onsite north storm drain system does not match the one shown on the *Master Drainage Plan* or the grading plan (Sheet C3.03). Review and revise accordingly.

6. **"Proposed Onsite Stormwater Facility Plan"** and **"Master Drainage Plan"** both bear the same plan identity: namely **Sheet C3.01?**. Correct in the next submittal.
7. **Sheet C3.02** and **Sheet C3.04**: Identify an existing public drainage easement adjacent to the west of the school site originated from the *Midtown Modern LLC* parcel. Label with recorded document number or final map number on the grading plans.
8. **Sheet C3.03**: The discharge point of the east storm drain system appears to be at the swale along the eastern boundary of the school site. However, per Storm Drain Construction Note #10, Detail 15 on Sheet C6.04, the direction of flow in the storm drains are towards the driveway instead of into the swale, ie, in the opposite direction. Address and resolve in the next submittal.
9. The grading plans show section details such as A/29 or E/28 which indicates that the corresponding details will be found in Sheet 28 or Sheet 29. However, the sheet numbering system doesn't appear to have pure numbers at all. The numbering system is *Sheet Cx.xx* rather than 1, 2, 3 etc. Review and revise accordingly in the next submittal.
10. All grading plans must be wet stamped and signed by the engineer.
11. Provide Finished Floor Elevations for all adjacent properties.
12. For parking lot LID and storm water quality, the engineer must provide calculations (per *Section 1500 of the CCRFCD Hydrologic Criteria and Drainage Design Manual*) to justify that the length, width and depth of the landscape swales are meeting the design guidelines in an effective disconnected impervious areas layout.
13. The following finish floors do not meet the Regional Flood Control District minimum criteria of twice the Q_{100} 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.

TC	FF shown	Min FF
2096.80'	2096.60'	2097.30'

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
WSP/AYS

T/R/S: T20S/R61E/32
AREA M-32