

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: July 1, 2024
TO: Land Development Services Department of Community Development – Building & Safety Division			FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:		Drainage Study for: Bonanza Auto Plaza	COPIES TO: Infinity Engineering
Cross Streets:	SEC of Bonanza Road & Page Street		Bonanza Auto Plaza LLC
File Number:	F:\Depot\DSMemos\DS5783A.doc		Bart Anderson, P.E., DevCo
Parcel Number:	140-32-101-016		CCRFCD
Zoning Action:	22-0428-SDR1; 22-0428-SUP1 & -SUP2		
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	6/17/2024	7/1/2024	See Comments Below	\$400.00	5811826: \$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 (**22-0428-SDR1; 22-0428-SUP1 & 22-0428-SUP2**) 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. 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.
3. 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.

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

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

4. Per the *City of Las Vegas Central Neighborhood Flood Control Master Plan*, Figure E-12, the 100-year flow in *Bonanza Road* is 1,175 cfs. Revise all drainage maps and hydraulic calculations and tables accordingly.
5. It is customary to distinguish the naming of sub-basins between existing and developed drainage conditions. For example, in the existing condition, Basin “EX-ON1” and in the developed condition, Basin “DV-ON1” etc. The subject study use the same basin names ON1a and ON1b in both the existing and developed conditions can be confusing.
6. **Page 7** of the *Study*: Sub-Chapter B (Hydraulic Analysis), there are reference for street names “*Desert Inn Road*” and “*Westwind Road*” which are seemingly typo errors. Provide better quality control of the narratives in the next submittal.
7. *Existing and Developed HEC-1 Models*: The *Clark County Regional Flood Control District Hydrologic and Drainage Design Manual’s* recommended minimum time of concentration (t_c) for urbanized areas is 5 minutes ($Tlag = 0.05$). The UD card used in the HEC-1 models for Basin OFF1 is 0.046, ie, not complying with the *Regional Flood’s* guidelines. Review and revise the values in *Standard Form 4* and all HEC-1 run accordingly in the next submittal.
8. **Developed Basin Map (DM2)**: A small portion of the subject site, Basin ON1a drains north to *Bonanza Road*. However, per the grading plans, it appears that the whole site is draining south to *Diamond Head Drive* for discharge. Address and resolve in the next submittal.
9. **Sheet GR1**: The 100-year flow depth in *Bonanza Road* is 1.5’. The driveway curb on the east side provide adequate elevation in keeping the flood flow further into the site. However, the driveway curb on the west side is too low in containing the street flood flow which is unacceptable. Raise the west driveway curb to match the east side to provide onsite flood protection.
10. As a follow-up of Comment #9, it appears that the current design will allow a major storm flow in *Bonanza Road* flooding the whole site without any stop measures during every storm event. A substantial re-design of the site grading is warranted in the next submittal.
11. **Sheet DT1**: *Detail Section 1* shows 4’ of overpaving into the adjacent property to the west. Obtain a notarized letter of permission for such construction from the adjacent property owner prior to the final approval of the subject drainage study.
12. Provide a chapter in the *Study* to address Best Management Practices (BMP) to treating runoff from the parking lot.

***** The City of Las Vegas Flood Control is standardizing the file naming of drainage studies and plans during the digitizing process. When saving the project files in the CD or thumb drive, please follow the system below:**

If drainage study only contains one combined file, use the following naming convention in Document Title:

1st Submittal DS and Plans (for first and original submittal);

2nd Submittal DS and Plans (for second submittal (addendum #1)) etc.

If drainage study contains multiple files, use the following naming convention in Document Title:

1st Submittal DS (for the report of the drainage study)

1st Submittal Plan 1 (could be the drainage condition maps)

1st Submittal Plan 2 (could be the improvement plans) etc.

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.

NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Update and accepted by the *City of Las Vegas Flood Control Section*. Additionally, final approval of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

END OF REMARKS
AYS

T/R/S: T20S/R62E/32
AREA N-32