

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: November 13, 2023		
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:		
Summerlin Village 29 COS-3/COS-4 Wash Improvements - Update			GCW, Inc.		
Cross Streets:	Sky Vista and Alta		Howard Hughes Company, LLC		
File Number:	F:\Depot\DSMemos\DS5510E.doc		Bart Anderson, P.E., DevCo		
Parcel Number:	137-28-601-001		CCRFC		
Zoning Action:	N/A				
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	10/13/2021	12/3/2021	Not Approved	\$400.00	4493527: \$400
2 nd Submittal	3/22/2022	4/29/2022	Not Approved	\$400.00	4698979: \$400
3 rd Submittal	5/12/2022	6/3/2022	Conditional Approval	\$400.00	4785195: \$400
CCRFC	8/11/2022	8/24/2022	Concurrence Recv'd	N/C	N/C
4 th Submittal	10/24/2023	11/13/2023	See Comments Below	\$100.00	5493944: \$100
TOTAL FEES (LDDRS):				\$1,300.00	----

REMARKS:

4th Submittal: Update #1 to raise the invert of a 24"-RCP outlet at the proposed channel

The Drainage Study for the subject project has been reviewed and:

X	is approved subject to conformance to all City standards and the following conditions:
	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.

The following Studies provide a coordinated approach to the Parcel Names, Parcel Boundaries, Areas, CN values, Hydrology, and Facility Hydraulics to show a seamless transition between multiple and separate Master Drainage Studies for Summerlin Village Development. DS 5388 and DS 5410 are now Updating the Master Plan for the Summerlin West Planning Area (SWPA) and these studies supersede that portion of the SWPA in this area.

DS 5225 – Summerlin Detention Basin #5 Modifications

DS 5388 – Master Drainage Study – Summerlin West Villages 27, 30A & 31 for Tributary Area of the Grand Park Detention Basin

DS 5410 – Master Drainage Study – Summerlin West V29

Flood Control acknowledges that overall flow impacts to the Summerlin Village 29 COS-3/COS-4 Wash Improvements have been set based upon the DS 5225; Summerlin Detention Basin #5 Modifications and with DS 5410; Master Drainage Study – Summerlin West V29.

The following conditions must be satisfied prior to the final approval of the improvement plans:

1. The Plans show coordinated improvements between the Park Drift Trail drainage improvements (DS5517) and the COS 3/4 Wash improvements. Note that the ultimate RCB facility connection into the COS 3/4 Wash will require showing a transition structure at the wash/bridge connection point.
2. The project proposes to build temporary drainage facilities such as interim swales, berms, sump pits along both sides of the proposed *Wash Improvements*. Prior to final plan approval the developer must complete a maintenance and liability agreement for the interim drainage improvements 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.

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

3. Prior to the adoption as a regional facility by the *City of Las Vegas*, City Council and the final inspection and acceptance by the *City of Las Vegas Public Works Department*, the proposed *Village 29 COS-3 / COS-4 Wash Improvements* shall remain a private facility owned and maintained by the master developer. The maintenance responsibilities for the COS Wash shall be spelled out in the Maintenance Agreement.
4. The channel velocities are excessive and are above 25 fps. The provided Structural Plans show the minimum 6,000-psi concrete with 2" sacrificial concrete to account for the high velocity impacts. However, it is not clear that the 2" sacrificial concrete is in addition to the design section. Section B/S6 shows a 6" slab thickness (the CCRFCD minimum thickness) and with the additional 2" sacrificial concrete the thickness should be 8". Review the S-Sheets to verify that the 2" sacrificial concrete is added to the section dimensions. A Special Construction Note must be added to the Structural Plans, Grading Plans and the Plan and Profile Sheets that calls out the special construction requirement for the additional sacrificial concrete. Show the limits of the 2" sacrificial concrete on the Profile Sheets. The Structural Details and Sections need to show the increased concrete thickness accounting for the additional 2" sacrificial concrete. Review and revise the plans and structural details accordingly. Special Inspection is required. Update the Structural Plans prior to final acceptance of the drainage study.
5. The construction of expansion joints on recent projects has shown the need for Continuous Special Inspection of the joints. Include all expansion joints into the Special Inspection Matrix on Sheet S1.
6. All proposed improvements associated with *Village 29 COS-3 / COS-4 Wash Improvements* shall be bonded and inspected. This project, as an MPU facility, shall require that the inspection personnel be approved by the City. This project shall require Special Inspection. Coordinate the requirements of and the Agreements needed for Special Inspection with the Building Department.
7. The proposed Gabion system also requires Special Inspection. Coordinate the requirements of the Gabion Special Inspection with the Building Department.

8. Revise the 14' x 8' RCB profile on Sheet PP3B to reflect cut-off wall at the entry and exit of the COS-4 Box Culvert. See the cut-off wall detail on S6.

***** 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, conditional acceptance 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/PBJ

T/R/S: T20S/R59E/28
AREA K-28