CITY OF LAS VEGAS **INTER-OFFICE MEMORANDUM**				**DATE:** **January 24, 2022**
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 West Village 29 - Phase 2 Infrastructure				GCW, Inc.
Cross Streets:	Grand Park Blvd & Far Hills Ave			Howard Hughes Company, LLC
File Number:	F:\Depot\DSMemos\DS5532A.doc			Bart Anderson, P.E., DevCo
Parcel Number:	137-27-101-004 and 137-28-601-001			
Zoning Action:	N/A			
FEMA Flood Zone	YES	NO **X**		
Proposed Storm Drain	YES **X**	NO		

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal	12/15/2021	1/24/2022	See Comments Below	$400.00	4575066: $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. The subject project is based on the premise that the upstream *Park Drift Drive* is at a minimum rough graded to provide hydrologic cutoff and flood protection and the downstream *Far Hills Avenue (east of Sky Vista Drive)* and *Sky Vista Drive* and the associated storm drain facilities are in place for flood flow perpetuation. The subject drainage study will not be finally approved prior to the posting of the construction bonds of the above stated projects.
2. The project proposes to build temporary drainage facilities, ie, berms/swales along the sides of *Grand Park Boulevard, Street A* and between future parcels for interim flood protection. Prior to final plan approval the developer must complete a maintenance and liability agreement for the interim drainage improvements (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.

   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.

3. All storm drain inlets that are more than 10' deep require a special structural detail and calculations. Submit structural design and calculations to *City Building & Safety Department* for review and approval prior to the final approval of the drainage study.
4. Per **Sheet LP5**, SDMH#1 is 22.68' deep which is more than the standard maximum of 18' per *Uniform Standard Drawings* guideline. Submit structural design and calculations to *City Building & Safety Department* for review and approval prior to the final approval of the drainage study.
5. **Figure 5**: The existing grading shows what appears to be a berm in Parcel J2 and an existing culvert under a bridge deck west of GP3-1. Provide the reference showing these as existing features.
6. Confirm basin delineation of GP3-1. It appears that the high point of GP3-1 is to be at the center of the bridge deck which will expand the area of GP3-1. Revise all hydrologic and subsequent hydraulic calculations accordingly.
7. **Figure 5:** The calculated flow depth for *Hydraulic Section 10* is 0.34 but is shown to be 0.38 on Figure 5. Revise for consistency.
8. Basin J is 17.9 acres and 44 cfs but is prorated into 2 basins J-1 and J-2 which sum to 19.5 acres and 48 cfs. Address and resolve in the next submittal.
9. Basin V29 COS13 was not included in the flows on Figure 5 for either section 5 or 6.
10. Along *Street A* the distance between proposed inlets SDDI #11 and SDDI #12 and SDDI#7 and SDDI#8 is about 1,300ft without any drop inlets in-between. A roadway inlet is required every 600 feet for nuisance flow, additional inlets will be required to address this.
11. **Sheet PP4:** SDDI#7 and SDDI#8 call out *Profile 4/LP5* which is indeed the profile for SDDI#9 and SDDI#10 on **Sheet LP5**. Revise and double check for all other lateral profiles callout accordingly.
12. **Sheet GD3**: Label the existing headwalls and the RCBs with *City of Las Vegas* recorded drawing number on the plan.
13. Explain in the next submittal why some of the storm drain pipes use C905 material.
14. All interim flood control facilities such as but not limited to berms/ditches and temporary sump are privately owned and to be privately maintained by the *Howard Hughes Company.* Provide a note as such on the grading plans.

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
HDR/AYS

T/R/S: T20S/R59E/27&28
AREA K-27