REGIONAL FLOOD CONTROL DISTRICT

Mr. Oh Sang Kwon, P.E.
City of Las Vegas Department of Public Works
495 S Main Street, 5th Floor
Las Vegas, NV 89101

DISTRICT COMMENT(S): **UPDATE FOR SUMMERLIN WEST VILLAGE 27 DEBRIS BASIN AND OUTLET CCRFCD RTC#1 (DS5576E) (RFCD No. 24-14679)**

Dear Mr. Kwon:

Clark County Regional Flood Control District (District) reviewed Technical Drainage Study dated May 26, 2022, Addendum No. 1 dated November 28, 2022, Addendum No. 2 dated June 5, 2024, Addendum No. 3 dated August 7, 2024, Addendum No. 4 dated October 28, 2024, Supplement No. 1 dated February 2, 2023, Supplement No. 2 dated April 10, 2023, and Supplement No. 3 dated August 16, 2023, for above-mentioned project as submitted by ATKINSREALIS. In addition, District is in receipt of the Conditional Letter of Acceptance from City of Las Vegas Department of Public Works dated October 30, 2024.

District has the following comment(s):

1. Response to RFCD Comment #9d is noted. However, it appears that the proposed guardrail as shown on Detail 1/S2.2 and F/35 would impede the installation of the radar swing arm. Additionally, Hydrology staff does not have structural expertise for anchoring of the swing arm apparatus and the District requests modification of the guardrail to provide installation of the radar swing arm at the time of construction. The preferred location would be the low point where flows initially enter the system which appears to be at the north most 12'X6' CRB.

2. Response to RFCD Comment #9c is noted. However, there does not appear to be a terminus pull box to allow for RFCD conduit and wire to be pulled through below the maintenance access road and connect with the radar swing arm apparatus. It is noted that construction notes #20 and #21 for the pullbox and street conduit are shown on Sheet 9, and the District recommends an additional pullbox at the northmost 12'X6' RCB to connect to the radar swing arm and coordinate with Hydrology staff on pull tape so wire can be pulled to service the radar arm.

3. Response to RFCD Comment #9i is noted. However, as Hydrology staff does not have structural expertise for anchoring of the swing arm apparatus, the District requests structural calculations and details to ensure the swing arm vertical pole with 3-ft cantilever arm and the loading of approximately 30-lb radar sensor apparatus can be securely mounted to the proposed 1-ft thick wall. Note the vertical pole would need to have clearance over the proposed guardrail height so the radar can be brought inwards for connection and servicing.

4. Response to RFCD Comment #12e is noted. However, it appears there are discrepancies on the structural detail for the joint connection per 15/S2.1 and other structural details. For example, Detail 7/S2.1 appears to show a single mat of reinforcement and not anchoring to the adjacent concrete while Detail 15/S2.1 shows double mat of reinforcement and anchoring the concrete slab to cut-off wall. Provide clarification and additional details as required. Additionally, the District recommends adding joint separation callouts as shown on Detail 3/S2.1 to other proposed concrete to concrete abutments (i.e., Details 7/S2.1, 1/S2.1, 2/S2.1, etc.)

5. Response to RFCD Comment #12h is noted. However, it does not appear compaction or bedding material is specified for the embankment sections on the details to ensure constructability. The District recommends providing clarifications to details F/32, G/32, M/33, and N/33 to ensure constructability. Additionally, clarify whether the concrete slab per CN #5 specified as 6" painted at 6000 psi will include steel reinforcement as it does not appear on the structural plan set.

6. Address the following comments on the structural plan set:

   a. Revise any discrepancies on detail callouts such as the pedestrian guardrail on Sheets S1.2 and S1.3 to reference the correct Sheet(s).

   b. Verify and provide all relevant dimensions for the height and thickness to the structural plan for constructability. For example, the proposed concrete baffle blocks and wall per 13/S2.1 and 11/S2.1 do not have dimensions.

   c. Provide anchorage detail for the radar swing arm to ensure the radar apparatus and cantilever can be securely mounted to the concrete structural.

7. Address the following additional plan comments on the debris basin improvement plans:

   a. It appears the lowest point at the sediment wall is at the northmost 12'X6' RCB as shown on Sheet 12 based on wall elevations. District requests additional pullbox and adjustment of conduit linework at this northmost 12'X6' RCB location in order to service the radar arm apparatus. Additionally, callout CN #20 and #21 on Sheet 12.

   b. District recommends adding joint detail to concrete to concrete abutments for details shown on Sheet 32 and 33 or ensure structural plans provide sufficient details to cover the different proposed connections. Note Detail J/32 references the structural joint detail but other relevant details does not provide the clarification.

   c. Note Hydrology staff is in the process of updating the FTRS station details to include fall arrest protection for work on the station roof. Additional revisions may be required if FTRS changes are finalized prior to final approval of the Village 27 Debris Basin.

8. Response to RFCD Comment #16 is noted. As the Village 27 Debris Basin is scheduled to be constructed first, no structural connection detail to the upstream channel or downstream will be required. However, as the upstream and downstream channel projects are in various stages or design, review, or approval, District recommends City of Las Vegas to note any required revisions and updates to ensure structural connection to the Village 27 Debris Basin are provided by those separate projects.

9. Coordinate with the City of Las Vegas on any revisions to structural plans, details, and calculations. Any required updates to the structural approval must be provided prior to the next District submittal and concurrence review. Any updates to the Structural Approval Documentation and structural plan, details, and calculations must be provided with the next submittal for review and prior to District concurrence

10. The District requests to be invited for the final walk-through by the City of Las Vegas for the proposed improvements intended to be part of the ultimate Regional Master Planned system as shown on the latest adopted Master Planned Update, prior to acceptance of public maintenance by the City of Las Vegas.

11. Note that per District's Policies and Procedures Manual, Section VIII.D.13 Uniform Regulations for the Control of Drainage, the Lead Entity shall provide As-Built plans or record drawings to the District after completion and final inspection of such privately installed flood control facilities that have a regional flood control significance.

District's review of this project was limited to issues of Regional Flood Control Significance as defined in *Uniform Regulations for the Control of Drainage*.

The consultant must be advised to submit any revisions to the Technical Drainage Study and Improvement Plans to City of Las Vegas Department of Public Works for review/re-approval. District review of any such revisions will commence upon acceptance by City of Las Vegas Department of Public Works.

Please be aware that as additional information becomes available and/or restudies of Flood Insurance Studies are performed, information submitted by ATKINSREALIS may be superseded. Compliance with regulatory elements and design standards specified in *Uniform Regulations for the Control of Drainage* does not imply a guarantee that properties will be free from flooding or flood damage.

The District, its officials, or employees assume no liability for information, data, or conclusions presented by consulting engineers. We, therefore, make no warranties, either expressed or implied, in conducting this review.

STEVEN C. PARRISH, P.E.
General Manager/Chief Engineer

BY: Ching C. Wang
Ching C. Wang (Nov 12, 2024 11:03 PST)
Ching C. Wang, P.E.
Principal Civil Engineer

CCW:rm

c: KENNETH PETERSON, ATKINSREALIS

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