



MEETING AGENDA

Henderson Creek MDP and FHAD

Progress Meeting #2

Date : April 28, 2020
Location : Virtual Meeting
Distributions : Agenda

Attendees :

<u>NAME</u>	<u>ORGANIZATION</u>	<u>EMAIL</u>
Dave Skuodas	MHFD	dskuodas@udfcd.org
Drew Roberts	MHFD	droberts@udfcd.org
Brent Soderlin	Commerce City	bsoderlin@c3gov.com
Russell Nelson	Adams County	rnelson@adcogov.org
Alan Leak	RESPEC	alan.leak@respec.com
Jen Winters	RESPEC	jennifer.winters@respec.com
Rachel Grafman	RESPEC	rachel.grafman@respec.com

1) Introductions

The meeting was opened with introductions.

2) Purpose

The purpose of the meeting was to discuss the preliminary results for the Ragweed Drain baseline hydrology and the results of the proposed Reunion Village 9 development detention. Alan Leak (RESPEC) opened the meeting by providing the group with an overview of the preliminary land use updates to Ragweed and displaying the baseline hydrology map before discussing the changes from the 2004 OSP and peak flows at major design points.

3) Review of Ragweed Hydrology

Dave Skoudas (MHFD) shared that planned Reunion Village 9 Ponds F and F5 are not intended as regional detention and should be disregarded from the proposed conditions SWMM model. He also discussed that the peak flows generated by RESPEC's existing and future conditions SWMM models indicate that existing Pond B in the Turnberry development does not reduce peak flows and that RESPEC should evaluate if the pond has any impact on hydrograph timing throughout Ragweed. If Pond B does not have an impact on hydrograph timing, then it will be removed from the baseline hydrology analysis. Dave also noted that Turnberry Pond B likely overtops Highway 2 and this area should be reviewed during the alternatives phase of the MDP. Another area to be reviewed for possible regional detention during the alternatives phase include the area upstream up I-76, which is owned by Commerce City.



The group discussed the discrepancy in the subcatchment delineation southeast of the intersection of 104th Avenue and Potomac Street between RESPEC's analysis and JR Engineering's analysis for Reunion Village 9. It appears from the LiDAR as though the water in the area drains west along 104th, however it's possible that there is a crossing along 104th that directs water to the north. Brent Soderlin (Commerce City) to review city data to verify if there is existing infrastructure in this area.

Jen Winters (RESPEC) explained the differences in peak flows from the 2004 OSP to the 2020 MDP as an update to discussions in the prior progress meeting. RESPEC determined the changes in peak flows were influenced by changes in land use and the SWMM routing used in the 2004 model. The prior model used a series of diversions and overflows that may have caused increased attenuation to flows. Unclear the intent of that modeling methodology, but it may have been to model a small, water quality event.

The Reunion 9 ponds were designed to reduce peak flows to 50% of historic rates. In order to provide a deeper understanding of peak flows in the area and validate this design decision, Dave requested that RESPEC run a natural conditions model with a 2% impervious land use throughout the watershed and compare the results

Crossings at major roads in the watershed are nonexistent or largely undersized. Key crossings to be reviewed by RESPEC in the alternatives phase include 120th Avenue, Highway 85, I-76, Highway 2 and 104th Avenue. Brent to provide RESPEC with plans from recent improvements constructed along 104th Avenue to verify Henderson Creek crossing with the O'Brian canal and Dave to provide RESPEC with recent report from JR Engineering that includes the final design configuration for stormwater routing.

4) Next Steps and Schedule

- RESPEC to provide Henderson Creek Baseline Hydrology draft report with full watershed CUHP and SWMM to MHFD for review by 5/8/2020.
- MHFD to review draft report and data by 5/29/2020.
- Progress meeting to be scheduled for early June with project sponsors and RESPEC. Developers to be invited if major design flaw or disagreement found between MDP and planned development peak flows.
- FHAD to be started by RESPEC before continuing to alternatives phase; FHAD floodplain analysis will inform the alternatives.
- The group discussed a planned detention pond located upstream of Highway 2 in the Turnberry South development (Pond A). There is a desire to analyze the impacts of that pond in the near future rather than waiting for the alternatives phase to begin. Dave will provide RESPEC with the latest design report for the pond. Time permitting - RESPEC will add to the preliminary alternatives analysis (with Reunion Village 9 detention) and provide results in the baseline hydrology report being submitted on 5/8. Time not permitting – RESPEC will analyze in the near future under a separate phase of the project.

5) Action Items

- RESPEC to amend SWMM model to remove JR ponds F and F5 from Ragweed drain.



- RESPEC to run a natural conditions SWMM model with 2% imperviousness for entire watershed.
- RESPEC to evaluate changes in peak flows with and without Turnberry Pond B; if reasonable, then remove Pond B from baseline hydrology.
- Commerce City to review area southeast of 104th Ave and Potomac Street for existing infrastructure.
- Commerce City to share data related to 104th Ave improvements.
- MHFD to share latest Reunion Village 9 plans.
- MHFD to share plans and drainage report for Turnberry pond located east of Highway 2 along Henderson Creek (Pond A). RESPEC to review and add to preliminary alternatives analysis along with Reunion Village 9. Time permitting – the Turnberry Pond A will be added to the preliminary alternatives review in the baseline hydrology report to be submitted on 5/8/2020. Otherwise, analysis to be performed in upcoming phase concurrent with FHAD.