



PROGRESS MEETING MINUTES

Brantner Gulch MDP and FHAD
Wednesday, November 20, 2019
11:00 am - 1:00 pm at Olsson

| Name | Company | E-mail |
|---------------|--------------------------|--|
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The meeting was held to discuss the MDP and FHAD modeling in several areas where construction is in progress or unknown. This summary is intended to reflect the key points raised, issues for further consideration, and action items resulting from the discussions. The non-bold items comprised the meeting agenda. The items in bold resulted from the discussions.

- 1) Hydrology
 - a) Status
 - i) **Final hydrology will be completed and included with FHAD submittal.**
 - b) Tailwater
 - i) **Tailwater analysis determined that there was not enough of an impact to include in the modeling. Detailed evaluation beyond the scope of a master plan would be needed to determine exact locations where tailwater could impact the discharge rating curves.**

- 2) SPR Trib 6 – Timberleaf (NOT CONSTRUCTED)
 - a) The proposed Timberleaf Residential subdivision on the west side of Yosemite Street will be extending the existing storm sewer stub and improving the drainageway to the northwest.
 - i) **Thornton has not approved the floodplain permit. Construction timing is unknown. For the FHAD, the existing conditions will be modeled using 2013 LiDAR. Both stems will be modeled to the northern side of 136th avenue**
 - ii) **The Fairgrounds channel to the southwest will also be impacted by future development, in part with the development, and the rest as a fee in lieu project. Construction timing is unknown, so this portion will also be modeled using existing 2013 LiDAR.**
 - b) Stamped plans 09/30/2019 - these plans have not been released for construction yet, but are very close
 - i) **MHFD has updated plans, however there do not seem to be any changes to the proposed channel.**
 - c) Yosemite pipe (CONSTRUCTED, AS-BUILTS UNKNOWN)

- i) The pipe within Yosemite Street does not have capacity for the 500-year storm event
 - ii) Bypass pipe - low flow bypass pipe from the Riverdale Road intersection down to the Brantner Gulch box culverts
 - (1) The low flow pipe will be included in the hydraulic model.**
 - (2) Thornton will see if they have, or can obtain, the storm drain system hydraulic models for this area and will provide them to Olsson. Olsson will review the models to determine if as-built survey of the overflow path along Yosemite is necessary for the 500-year floodplain. Olsson will provide a scope and fee for as-built overland survey, if deemed necessary.**
 - (3) Olsson will prepare a scope and fee to survey the as-built condition of the storm drain system.**
- 3) Pheasants Run – Amber Creek (SOUTH OF 134TH CONSTRUCTED, 134TH TO 136TH NOT CONSTRUCTED)
- a) 134TH – 136TH: Stamped plans 08-07-2019 – 54-inch pipe
 - i) **A 54-inch pipe is planned, but has not been constructed, as the floodplain permit has not been approved yet. Thornton is waiting for a floodplain assurance letter to be signed, and then once that is done, the permit will be issued. The FHAD model will start on the downstream side of the pipe under Quebec. The MDP existing conditions model will extend to north of 136th Avenue using the 2013 LiDAR, without the proposed pipe.**
 - b) Drainage report shows as-constructed elevations for pipe under Quebec. As-builts available
 - i) **The existing pipe is undersized and results in a hydraulic grade line above the elevation of the sump in 134th Avenue when considering fully developed land use with no detention. The City of Thornton will require the development to keep the hydraulic grade line below the road elevation. Olsson will highlight this condition in the MDP.**
 - c) The detention basin NW of 134th & Quebec may not be its final configuration, and is not an “in-line” basin. The detention basin will discharge to the trunk line, not vice-versa. Thornton working through final comments on the FDP, and once issued, the construction will likely happen quickly; probably before the FHAD is finalized.
- 4) Quails Way – Amber Creek (STORM SYSTEM CONSTRUCTED)
- a) Stamped plans 08-28-2017
 - b) All storm sewer and detention pond infrastructure have been constructed. Individual home sites within the western portion of the Amber Creek Phase 4 area may still be under construction (Magnolia Ct, Magnolia St, 135h Ave) but all overlot grading should be complete. The Phase 4 area drains to the south and discharges into Detention Pond C which is just southeast of the Monaco Court cul-de-sac.
 - i) **The MDP will include existing floodplain limits from 136th Avenue to 137th Avenue, so data is available for future development. The MDP will then reference the development for the remainder of Quails Way Tributary**
 - ii) **The FHAD will not include Quails Way Tributary.**
- 5) Brantner Gulch – Riverdale Road crossing (CONSTRUCTED)
- a) Have record drawings, but no as-built topography or as-built HEC-RAS model

- i) **This project was built per plan. Olsson will use the design contours and supplement with as-built elevations in this area. MHFD will provide proposed contours in AutoCAD format, if possible. The culverts were blocked out intentionally and will be modeled as such.**
 - b) Survey?
 - i) **No survey will be needed.**
- 6) Brantner Gulch – Creekside Village
 - a) Have 08/17/18 plans – status?
 - i) **A CLOMR for the Creekside Village improvements has been completed. Construction timing is unknown. The improvements will not be incorporated into the model. The FHAD model will utilize LiDAR in this area.**
- 7) Other
 - a) Northglenn: Karl's Farm
 - i) **Northglenn would like to see the model extended as far as Irma Street. The model is currently set up to extend to the west side of Washington Street.**
 - b) Horizons Tributary
 - i) **Two new 100-year trail crossings will be constructed in the near future. MHFD will provide proposed construction plans and the new crossings will be incorporated into the draft model based on design information. Once as-built information is available, the model input will be updated.**
 - c) Fairgrounds Tributary
 - i) **Olsson will confirm the hydrology within the Gleneagle development is up to date and the hydraulics incorporate the existing crossings.**
 - d) 128th Street
 - i) **Plans to update the 128th street crossing will not be incorporated into the FHAD. The culverts currently being constructed do not convey the 100-year event, and Thornton is working to get additional conveyance in this area.**

Action Items:

Thornton:

- 1) **Provide hydraulic model for the Yosemite Street pipe along SPR Tributary 6.**

MHFD:

- 1) **Provide most up to date construction drawings for Timberleaf development.**
- 2) **Provide Horizon Tributary Trail Crossing Plans – Complete**

Olsson:

- 1) Evaluate Yosemite Street storm drain system to see if overland model will be needed.**
- 2) Prepare scope and fee for survey of Yosemite Street storm drain system and possibly the overland path.**

Please contact Olsson at 303-237-2072 with changes or questions regarding these meeting minutes. These minutes will be considered final unless comments are received within seven days of distribution. Although comments will be incorporated, as appropriate, only major revisions will be redistributed.

**Minutes prepared by: Hannah Pring
cc: Attendees, Russ Nelson, File**