

# BHI Project Kickoff Meeting Agenda

**Date:** November 28, 2022

**BHI Project Name:** Valverde OSP

## 1. Introduction of Meeting Participants & Project Team

### a. Roles and Responsibilities

<b>Project Team &amp; Roles</b>					<i>*Attendance at Meeting:</i> <input checked="" type="checkbox"/>
<b>Name</b>		<b>Project Responsibilities</b>	<b>Name</b>		<b>Project Responsibilities</b>
<i>Kyle Donovan</i>	<input checked="" type="checkbox"/>	<i>MHFD – Southwest Watershed Manager</i>	<i>Rifka Wine</i>	<input checked="" type="checkbox"/>	<i>BHI Project Manager</i>
<i>Brooke Seymour</i>	<input checked="" type="checkbox"/>	<i>MHFD – Planning and Floodplain Management Director</i>	<i>Craig Hoover</i>	<input checked="" type="checkbox"/>	<i>BHI PIC</i>
<i>Morgan Lynch</i>	<input checked="" type="checkbox"/>	<i>City and County of Denver – Engineering Specialist, Local Sponsor</i>	<i>Caroline Ogg</i>	<input checked="" type="checkbox"/>	<i>BHI Drainage Engineer</i>
<i>Chris Best</i>	<input checked="" type="checkbox"/>	<i>City and County of Denver – Sr. Engineer</i>	<i>Thomas Blackman</i>	<input checked="" type="checkbox"/>	<i>City and County of Denver – Engineering Supervisor</i>
<i>Kevin Lewis</i>	<input checked="" type="checkbox"/>	<i>City and County of Denver – Sr. WW Operations Engineer</i>			
<i>Jeremy Hamer</i>	<input checked="" type="checkbox"/>	<i>City and County of Denver – Floodplain Administrator</i>			
<i>Kimberley Pirri</i>	<input checked="" type="checkbox"/>	<i>City and County of Denver – Sr. Floodplain Engineer</i>			

### b. Roles of Sub-consultants with Point(s) of Contact

None

### c. Client Contact Information and Protocol

MHFD – Kyle Donovan – primary POC

### d. Other Key Team Members with Point(s) of Contact

City and County of Denver – Morgan Lynch – copy correspondence to Morgan and she will get it to the appropriate staff at City and County of Denver (CCD)

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- e. Other agencies/stakeholders

## 2. Project Objectives and Goals

- a. Baseline Hydrology Scope:

The ultimate goal is to complete an OSP for the Valverde area to:

- Update Denver SDMP to include the following:
  - 2020 LiDAR (BHI to compare 2014 to 2020 and identify differences, there are issues with 2020 LiDAR so we may want to stick with 2014 LiDAR since the watershed was fully developed in 2014). Follow up with MHFD and CCD once done with comparison of data sets.
  - Studies and projects that have been completed since
  - 2020 Building Footprints
  - Current or imminent projects
  - NOAA14
  - Model efficiency
- Evaluate existing studies and be mindful of their original intent
  - Any known issues?
- Identify drainage system deficiencies, specifically where flooding is in excess of 1 ft

- b. Coming downstream (future tasks):

- Identify and plan upgrades to the existing stormwater system facilities and propose new improvements
- Develop improvement alternatives to meet the drainage/flooding criteria
- Conceptual design
- Prioritize stormwater projects

## 3. Scope Overview

- a. Project Planning and Management

1. Monthly Progress Meetings – 1<sup>st</sup> Wednesday of each month
  - i. Progress reports/check-ins
  - ii. Review meeting with sponsors at the end of each phase
2. Public Outreach and Meetings
  - i. One public meeting during alternatives analysis phase (none during Baseline Hydrology phase)
  - i. Website Planning Study Page

- b. Survey, Site Visits, and Existing Conditions Inspection and Review

1. Existing Resources
  - i. Reports
    1. 2D Stormwater Modeling and GIS Data Standards (4/19/2022)
    2. Storm Drainage Master Plan (October 2019)

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3. Valverde 2D memo (3/22/2019)
  4. Mississippi Gulch Remnant PIA FLO-2D modeling memo (3/17/2014)
    - a. South Quivas Street and West Mosier Place Future Inlet – is this structure already built/still proposed/rejected? – appears to have been constructed in 2016 based on aerial imagery.
  5. Sanderson Gulch MDP (2013)
  6. Sanderson Gulch FHAD (2013)
  7. Sanderson Gulch MDP (2014)
  8. Record drawings for General Storm – Valverde (12/14/2020)
  9. Construction drawings for Gray’s Peak General Storm (10/14/2020)
  10. Construction drawings for Kentucky Avenue and Irving Street Park and Intersection Improvements (10/26/2021)
  11. 2015 UDFCD draft rain-on-grid technical guidelines. Is there a final version?
  12. MHFD has an ongoing FHAD for the South Platte that we should use for river WSEL’s for boundary conditions, using 10-year storm
  13. Two LOMRs for Sanderson Gulch
  14. Known areas of flooding.
    - a. CCD provided 311 flooding complaints – would like BHI to overlay with hydraulic model flooding areas
    - b. CCD masterplan also has identified significant flooding locations (“starred areas”)
    - c. Kevin Lewis can provide additional information regarding starred areas. Per Brooke would like to include this information. Morgan would like to see all of this on map, so that our work can “plug and play” into their upcoming overall drainage master plan.
    - d. Per Jeremy Hamer – Mississippi Gulch at Navajo – Mississippi Gulch is technically part of Sanderson Gulch watershed but flooding from Mississippi Gulch impacts Valverde.
    - e. CCD to provide Mississippi Gulch Remanent PIA model
- ii. Models
1. Valverde FLO-2D model (3/18/2019)
- ii. Surveys
- iii. GIS
1. Denver storm drain infrastructure

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- 2. Denver 2020 building footprints
- iv. Data Requests
  - 1. 2020 LiDAR – received 11/18/2022
- v. Site investigation 12/1/2022  
Following site visit BHI to make recommendations to MHFD for information to be surveyed. MHFD will acquire survey data (separate from BHI contract)
- c. Phase 1 – Baseline Hydrology
  - 1. Hydrologic studies
    - i. Update FLO-2D model to include 2020 LiDAR (if determined appropriate after comparing to 2014 LiDAR), NOAA14 per 2022 CCD guidelines
    - ii. Add Record drawings for General Storm – Valverde (12/14/2020)
    - iii. Add Construction drawings for Gray’s Peak General Storm (10/14/2020)
    - iv. Add Construction drawings for Kentucky Avenue and Irving Street Park and Intersection Improvements (10/26/2021)
    - v. Update to reflect Mississippi Gulch Remnant flows
  - 2. Draft Report
    - i. Format – similar to 2019 SDMP? Or similar to standard MHFD OSPs? MHFD is okay with it being more aligned with CCD standards, as long as all the typical OSP checklist items are covered.
  - 3. Review Meeting
- d. Phase 2 – Alternative Analysis
- e. Phase 3 – Conceptual Design
- f. Project Schedule
  - 1. Attached – Draft baseline hydrology report January 26, 2023

## 4. Project Execution

### a. Immediate action items

- 1. Project kickoff meeting – today’s meeting
- 2. Prepare project work plan
  - i. Updated schedule
- 3. Design study criteria
  - i. Maximum 1 ft flooding in any streets
- 4. Assumptions

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- i. Exclude storm drains with diameter less than 48" unless they are deemed a critical system – check 2019 SDMP and use same threshold, Jeremy thinks it was 36". Kevin Lewis recommends 36" because there are some significant flooding areas with SD's this small.
- ii. The existing FLO-2D area from the 2019 Memo will be sufficient to assess the street flooding

## 5. Existing Resources

- i. Drainage reports
- ii. Development Plans
- iii. GIS files

## **b. Action Items within next month**

### BHI

- a. Review additional information from CCD/MHFD
- b. Site visit
- c. Work on baseline hydrology report

### CCD

- a. Provide 311 photos as requested to project team
- b. Provide Mississippi Gulch Remnant PIA FLO-2D model to project team

### MHFD

- a. Provide South Platte FHAD Hydraulic Model

## **5. Questions**

- 6. Recap/Summary** - High priority watershed for CCD. CCD will be bringing on a Public Participation consultant to get the public involved. CCD Globeville Masterplan is a good example. Should include Spanish, Vietnamese and Mandarin speaking (potentially other languages also meet thresholds for translation)