

Engineering has reviewed the plans for the NHRMC Critical Support Facility project submitted February 19, 2020 and have the following comments:

**Stormwater Management Permit Application Form**

1. IV. Project Information; #13:
  - a. Impervious pavement should be 75,167sf.
  - b. Total Impervious Area should be 498,210sf.
  - c. Percent Impervious Area should be 31.92%.
  - d. However, since the site is without an SCM, this section could be left blank. Let me know if you would like me to replace this page with the same sheet with no entries.
2. Submittal Requirements:
  - a. Submit a detailed narrative that explains the scope of this project.
  - b. Submit a USGS map Identifying the site location.
  - c. Submit an updated page 5 with added initials.

**Stormwater Calculations**

3. Line 25 (SW tabulations) Culvert #3: 18" dia. pipe is not consistent with 24" dia. pipe in plan view on sheet C3.1.
4. Quantify each drainage inlet area for Phase II on the Drainage Area Plan. I can't verify drainage areas in the Storm Tabulations.
5. It would appear that DA-34 is actually divided into two drainage areas. Please show it divided.
6. Show which roof drainage areas drain to which roof drain system. The current roof drainage area exhibit is very difficult to follow.

**Plans**

7. C3.1:
  - a. Add the roof drain inverts to JB-37 (18.70') and JB-38 (18.99').
  - b. Need to provide spot grades on both sides of the proposed 23<sup>rd</sup> Street sidewalk to demonstrate compliance with city's cross and longitudinal slope requirements.
  - c. 23<sup>rd</sup> Street sidewalk must be shifted to avoid manholes, guy wires, fire hydrants, etc. per the city's technical standards .
  - d. Show the existing driveways and culverts removed with the ditch grading in its place.
  - e. There needs to be a 12-inch shoulder between the edge of the 23<sup>rd</sup> Street sidewalk and the ditch slope. Add a typical cross-section to the plan set to specify this.

Please submit one complete set of plans, stormwater application, calculations and all other supporting documentation to Engineering for additional review. Please call or email if there are any questions.

Thank you.