

# **MEMORANDUM**

TO: Christopher Smith, PADEP

DATE: 02/01/2021 (REVISED 2/12/2021)

FROM: Shiny Mathew, JMT

PROJECT: Adelphia Gateway Project - Phase 1

JMT JOB NO.: 18-00672-06a

RE: Major Amendment – Memo of Changes

The following notes the revisions included in the Major Amendment for Adelphia Gateway Project, Phase 1.

**Quakertown Compressor Station:** Proposed impervious coverage increased from 0.326 AC to 0.390 AC (+0.064 AC) due to addition of equipment buildings and concrete pads. The footprint of the PCSM BMP was revised due to conflict with proposed equipment buildings. The limit of disturbance (LOD) increased from 4.15 AC to 6.93 AC (+2.78 AC) due to additional and revised temporary workspaces adjacent to the Quakertown Compressor Station.

**Skippack Pike Meter Station:** The LOD increased from 0.267 AC to 0.365 AC (+0.098 AC). The LOD was increased to extend the driveway access to Skippack Pike. The entire LOD will be restored to existing conditions.

**Schulkyill River Blowdown:** The LOD increased from 0.931 AC to 1.454 AC (+0.523 AC). The LOD was increased to shift the access along the existing Schulykill River Trail, from Cromby Blowdown to the valve site. The entire LOD will be restored to existing conditions.

**Cromby Blowdown:** The LOD increased from 0.137 AC to 0.385 AC (+0.248 AC). The LOD was increased to extend for site access along a gravel drive. The entire LOD will be restored to existing conditions.

**French Creek Blowdown:** The LOD was increased from 0.588 AC to 0.640 AC (+0.052 ac). The LOD was increased to provide site access from a driveway off the cul-de-sac of Powder Mill Drive. The entire LOD will be restored to existing conditions.

**Main Line Valve 2:** The LOD increased from 0.084 AC to 0.117 AC (+0.033 AC). The LOD was increased to extend the site for access. The entire LOD will be restored to existing conditions.

**Chester Creek Blowdown:** The LOD increased from 0.094 AC to 0.526 AC (+0.432 AC). The LOD was increased to extend the site access along a gravel drive. The entire LOD will be restored to existing conditions.

**Transco Meter Station:** Proposed impervious coverage increased from 0.10 AC to 0.15 AC (+0.05 AC) due to addition of several equipment buildings and concrete pads. The footprint of the



PCSM BMP was revised due to conflict with proposed equipment buildings. The LOD increased from 0.859 AC to 1.088 AC (+0.229 AC) due to the realignment of the outfall pipe and additional workspace required for the tap from Ridge Rd and along Fed Ex Drive.

**Marcus Hook Compressor Station:** Proposed impervious coverage increased from 1.16 AC to 1.22 AC (+0.06 AC) due to addition of several equipment buildings and concrete pads. The limit of disturbance (LOD) increased from 6.24 AC to 6.34 AC (+0.10 AC) due to the replacement of curbing along Ridge Road.

All revised documents are highlighted to note the changes since the approved plans and reports. Please also refer to the summary of changes below:

### Erosion and Sediment Control Plan and Post Construction Stormwater Management Plan

### T-1 (Cover Sheet)

- Two (2) additional sheets have been added: ES-13A (Erosion & Sedimentation Control Plan, Chester Creek Blowdown) and ES-18A (Erosion & Sedimentation Control Plan, Cromby Blowdown). Sheets were added due to revised/expanded limit of disturbances.
- ES-16 (Erosion and Sediment Control Plan, French Creek Blowdown) was added back into the set due to the increased LOD.

## E-1 (Existing Conditions & Demolition Plan, Marcus Hook Compressor Station)

 The block wall along the property line and along Ridge Road will be removed. Note this was included in a redlined field change approved by Michelle Wheeler at Delaware County Conversation District on November 13, 2020.

#### S-1 (Proposed Site Plan, Marcus Hook Compressor Station)

 Additional piping, concrete pads and pavement driveway limits proposed within the LOD. Future expansion of transformer pad noted.

## S-2 (Proposed Site Plan, Transco Meter Station)

 Additional piping, concrete pads and buildings, and paved driveway limits proposed within the LOD. Fence limit updated. BMP footprint modified.

### S-3 (Proposed Site Plan, Quakertown Compressor Station)

- Additional piping, concrete pads and buildings proposed within the LOD. Limits of fencing extended. BMP footprint modified.
- Wetland delineation updated.

### S-4 (Proposed Site Plan, Quakertown Compressor Station)

 Additional piping, concrete pads and buildings proposed within the LOD. Limits of fencing extended.



### PCSM-7 (Post Construction Stormwater Management Plan Details, Sheet 2 of 3)

Jellyfish membrane filtration device detail removed, relocated to PCSM-7A.

### PCSM-7A (Post Construction Stormwater Management Plan Details, Sheet 3 of 3)

• Standard details added per manufacturer specifications. Jellyfish Peak Diversion Structure and Jellyfish 4'x8' Surface Inlet are specified at Quakertown Compressor Station, see PCSM-14. Jellyfish 4'x4' Surface Inlet are specified at Transco Meter Station, see PCSM-10.

## PCSM-8 (Post Construction Stormwater Management Plan, Marcus Hook Compressor Station)

- Revised LOD shape and area callout.
- Additional piping, concrete pads and pavement driveway limits proposed within the LOD. No changes to BMP.
- Future expansion of transformer pad noted. Note 5 added to reference additional impervious to be added in future site improvements. The stormwater management design takes into account this additional impervious coverage.
- Note 2 was updated to note that Naaman's Creek is siltation impaired.

## PCSM-9 (Post Construction Stormwater Management Plan, Marcus Hook Compressor Station)

Water surface elevations for the storm events updated.

#### PCSM-10 (Post Construction Stormwater Management Plan, Transco Meter Station)

- Additional piping, concrete pads and buildings, and paved driveway limits proposed within the LOD. Fence limit updated.
- Revised LOD shape and area callout.
- Revised soil amendment and soil restoration shape and area callout. This is reflected in the WQ calculations.
- BMP footprint modified due to conflict with adjacent building and additional impervious area within BMP drainage area. BMP footprint was reconfigured and increased in size from 4,170 SF to 4,385 SF. Note, this revision has been carried through to the model, calculations, and reports.
- Storage volume for the proposed BMP was updated to reflect Worksheet 5 and HydroCAD output.
- Jellyfish Peak Diversion Structure and Jellyfish 4'x8' Surface Inlet specified per manufacturer's details. This ensure proper sizing of structures based the peak rates through the structure. Callouts updated.
- Note 2 was updated to note that Naaman's Creek is siltation impaired.
- Orientation of the outfall pipe and level spreader was revised, with an increased soil amendment and restoration area.
- Site restoration area was added.

## PCSM-11 (Post Construction Stormwater Management Plan, Transco Meter Station)

- Additional piping, concrete pads and buildings, and paved driveway limits proposed within the LOD. Fence limit updated.
- Revised LOD shape and area callout.
- Revised soil amendment and soil restoration shape and area callout. This is reflected in the WQ calculations.



- BMP footprint modified due to conflict with adjacent building and additional impervious area within BMP drainage area. BMP footprint was reconfigured and increased in size from 4,170 SF to 4,385 SF. Note, this revision has been carried through to the model, calculations, and reports.
- Bed size and module count callout updated for the proposed BMP was updated.
- Jellyfish Peak Diversion Structure and Jellyfish 4'x8' Surface Inlet specified per manufacturer's details. This ensures proper sizing of structures based the peak rates through the structure. Callouts updated.
- Orientation of the outfall pipe and level spreader was revised, with an increased soil amendment and restoration area.
- Site restoration area was added.

#### PCSM-12 (Post Construction Stormwater Management Plan, Transco Meter Station)

• Water surface elevations for the storm events updated.

## PCSM-13 (Post Construction Stormwater Management Plan, Quakertown Compressor Station)

• Revised LOD shape and area callout.

## PCSM-14 (Post Construction Stormwater Management Plan, Quakertown Compressor Station)

- Revised LOD shape and area callout.
- Note added that the contractor shall not clear the existing trees within the westernmost limit of disturbance.
- BMP footprint modified due to conflict with adjacent RTU building. BMP footprint decreased from 3,816 SF to 3,755 SF. Note, this revision has been carried through to the model, calculations, and reports.
- Additional piping, concrete pads and equipment buildings proposed within the LOD.
- Standard MH-1 moved to the east to avoid conflict with proposed mechanical piping. Pipe length from MH-1 to Jellyfish structure updated.
- Jellyfish Peak Diversion Structure and Jellyfish 4'x8' Surface Inlet specified per manufacturer's details. This ensures proper sizing of structures based the peak rates through the structure. Callouts updated.
- Storage volume for the proposed non-vegetated MRC BMP was updated to reflect Worksheet 5 and HydroCAD output.

## PCSM-15 (Post Construction Stormwater Management Plan, Quakertown Compressor Station)

Revised LOD shape and area callout.

## PCSM-16 (Post Construction Stormwater Management Plan, Quakertown Compressor Station)

- BMP footprint modified due to conflict with adjacent RTU building. Bed size decreased from 3,816 SF to 3,755 SF. Module counts updated to reflect the current design.
- Jellyfish Peak Diversion Structure and Jellyfish 4'x8' Surface Inlet specified per manufacturer's details. This ensure proper sizing of structures based the peak rates through the structure. Callouts updated.
- Water surface elevations for the storm events updated.

#### ES-10 (Erosion and Sediment Control Plan, Marcus Hook Compressor Station)



- Revised LOD shape and area callout.
- Additional piping, concrete pads and pavement driveway limits proposed within the LOD.
- Temporary driveway apron, temporary chain link fence and gate, and rock construction added.
   Note this was included in a redlined field change approved by Michelle Wheeler at Delaware County Conversation District on November 13, 2020.
- FRAC tank added to be used for water/wastewater containment purposes.
- Note 2 was updated to note that Naaman's Creek is siltation impaired.

### ES-11 (Erosion and Sediment Control Plan, Transco Meter Station)

- Additional piping, concrete pads and buildings, and paved driveway limits proposed within the LOD. Fence limit updated. BMP footprint modified.
- Revised LOD shape and area callout.
- FRAC tank added to be used for water/wastewater containment purposes.
- Note 2 was updated to note that Naaman's Creek is siltation impaired.

## ES-13 (Erosion and Sediment Control Plan, Chester Creek Blowdown)

- Additional Sheet added to show the full limits of the LOD.
- Revised LOD shape and area callout.

## ES-13A (Erosion and Sediment Control Plan, Chester Creek Blowdown)

- Additional Sheet added to show the full limits of the LOD.
- FRAC tank added to be used for water/wastewater containment purposes.
- Revised location of the rock construction entrance.

#### ES-15 (Erosion and Sediment Control Plan, Main Line Valve 2)

- Rock construction entrance shifted to the South.
- Revised LOD shape and area callout.
- FRAC tank added to be used for water/wastewater containment purposes.

## ES-16 (Erosion and Sediment Control Plan, French Creek Blowdown)

Revised LOD shape and area callout. Area added for alternate contractor access.

## ES-17 (Erosion and Sediment Control Plan, French Creek Blowdown)

- Revised LOD shape and area callout.
- Rock construction entrance replaced with FOD trackout control matting.
- FRAC tank added to be used for water/wastewater containment purposes.
- Existing wall around the valve has been revised as "to be removed"

# ES-18 (Erosion and Sediment Control Plan, Cromby Blowdown)

- Additional Sheet added to show the full limits of the LOD.
- Revised LOD shape.

## ES-18A (Erosion and Sediment Control Plan, Cromby Blowdown)



- Additional Sheet added to show the full limits of the LOD.
- FRAC tank added to be used for water/wastewater containment purposes.
- Revised location of the rock construction entrance and proposed stockpile.

# ES-19 (Erosion and Sediment Control Plan, Schuylkill River Blowdown)

Revised LOD shape and area callout.

#### ES-20 (Erosion and Sediment Control Plan, Schuylkill River Blowdown)

- Revised LOD shape and area callout.
- Rock construction entrance relocated and revised to specify a self-contained portable wheel
  wash.
- Proposed stockpile relocated and timber matting revised.
- Proposed valve revised to a proposed pipe replacement.

## ES-22 (Erosion and Sediment Control Plan, Skippack Pike Valve Tap)

- Revised LOD shape and area callout.
- Revised alignment for the wood matting.
- Temporary driveway apron added.
- FRAC tank added to be used for water/wastewater containment purposes.

## ES-24 (Erosion and Sediment Control Plan, Quakertown Compressor Station)

Revised LOD shape and area callout.

## ES-25 (Erosion and Sediment Control Plan, Quakertown Compressor Station)

- Revised LOD shape and area callout.
- Note added that the contractor shall not clear the existing trees within the westernmost limit of disturbance.
- Protecting fencing added.
- Revisions to compost filter sock based on LOD updates.
- BMP footprint modified due to conflict with adjacent RTU building. BMP footprint decreased from 3,816 SF to 3,755 SF.
- Additional piping, concrete pads and buildings proposed within the LOD.
- Standard MH-1 moved to the east to avoid conflict with proposed mechanical piping.
- Jellyfish Peak Diversion Structure and Jellyfish 4'x8' Surface Inlet specified per manufacturer's details. This ensure proper sizing of structures based the peak rates through the structure.
- Storage volume for the proposed non-vegetated MRC BMP was updated to reflect Worksheet 5 and HydroCAD output.

#### ES-26 (Erosion and Sediment Control Plan, Quakertown Compressor Station)

- Revised LOD shape and area callout. Several areas noted as areas of disturbance for landscaping purposes only.
- Temporary driveway apron added to accommodate truck access into the site.
- Rock construction entrance with self-contained portable wheel wash specified.
- Timber matting added.



- Temporary pipe culvert at the driveway entrance was extended and increased from 15" RCP to 18" RCP.
- FRAC tank added to be used for water/wastewater containment purposes.

## **Post Construction Stormwater Management Report**

Please note that all reference data for the nine (9) sites being revised within this major amendment are included in the report. Any revisions are highlighted in the report and noted below. References for the four (4) sites not included in this major amendment have been removed from the report.

#### Narrative

- Page 2-4: Project description updated to outline the site revisions and change to site
   I ODs
- Page 5-6, Tables III-1, III-3 & III-5: Soil data updated due to significant LOD revisions at Quakertown Compressor Station, Schuylkill River Blowdown and French Creek Blowdown.
- Page 8 and Table VI: Receiving surface waters classifications updated. Naaman's Creek was revised to note siltation-impaired waters.
- Page 12, Table VIII-2: Runoff Volume Summary updated.
- o Page 12: Updated the % treated by the water quality BMPs at Transco Meter Station.
- Page 13, Table VIII-3 & VIII-4: Water Quality Summary tables updated for Quakertown and Marcus Hook Compressor Stations.
- o Page 14-15, Table IX-1, IX-2 & IX-3: Peak Rate summaries updated.

## Appendix B

 Web soil survey reports were updated for Quakertown Compressor Station, Schuylkill River Blowdown and French Creek Blowdown.

## Appendix C

 Pre and Post Drainage Area Maps updated. LOD increased resulting in revised drainage areas, volume of runoff and rate of runoff.

### Appendix D.1

Worksheet 4, 5, 12 and 13 as result of cover and LOD changes noted on the design plans.

# • Appendix D.2

- Runoff CN computations updated as result of cover and LOD changes noted on the design plans.
- HydroCAD model updated.
- MRC worksheets updated.

#### **Erosion and Sediment Control Report**

Please note that all reference data for the nine (9) sites being revised within this major amendment are included in the report. Any revisions are highlighted in the report and noted below. References for the four (4) sites not included in this major amendment have been removed from the report.

#### Narrative

- Page 2-4: Project description updated to outline the site revisions and change to site LODs.
- Page 5-6, Tables III-1, III-3 & III-5: Soil data updated due to significant LOD revisions at Quakertown Compressor Station, Schuylkill River Blowdown and French Creek Blowdown.
- Page 9, Table V-2: Runoff Volume Summary updated.
- Page 9: Updated the % treated by the water quality BMPs at Transco Meter Station.



- Page 10, Table V-3 & V-4: Water Quality Summary tables updated for Quakertown and Marcus Hook Compressor Stations.
- Page 11-12, Table V-4. V-5 & V-6: Peak Rate summaries updated.
- Appendix B
  - Web soil survey reports were updated for Quakertown Compressor Station, Schuylkill River Blowdown and French Creek Blowdown.
- Appendix C
  - Compost filter sock calculations updated for Quakertown Compressor Station and Transco Meter Station.