

8. All sediment removed from BMPs shall be disposed of in the manner described on the on-site E&S Plan.

9. Sediment taken from any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.

10. Until the site is stabilized, all erosion and sediment BMPs shall be maintained properly, including all erosion and sediment control measures, during all construction activities, event and in a weekly basis. All prevention and remedial maintenance work, including clean out, repair, replacement, regrading, reseeding, remulching and renaturing must be performed immediately. If the E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required.

11. Areas which are to be topsoiled shall be maintained to a minimum depth of 3 to 5 inches. Compacted soils should be scarified to 6 to 12 inches along contour wherever possible prior to seeding. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outcrops shall have a minimum of 2 inches of topsoil.

12. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. All intended to support buildings, structures and conduits, etc. shall be compacted in accordance with local requirements or codes.

13. All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness.

14. All pumping of water from any work area shall be over vegetated vegetate areas.

15. An area shall be considered to have achieved final stabilization when it has a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements.

16. If earth disturbance activities are to cease for more than 4 days, the operator shall stabilize disturbed areas using best management practices, which must be applied. Disturbed areas which are not at finished grade and which will not be restabilized within 1 year must be stabilized in accordance with temporary vegetative stabilization. Disturbed areas which are at finished grade or which will not be restabilized within 1 year must be stabilized with permanent vegetative stabilization.

17. Erosion control blankets are recommended to be installed on all slopes 3:1 or greater.

18. The operator shall remove from the site, recycle, or dispose of all building materials and wastes in accordance with the PADEP's solid waste management regulations at 22 Pa. Code 2601 et seq., and 2871.1 et seq. The contractor shall not illegally bury, dump, or discharge any building material or wastes at the site.

19. The Contractor is responsible for ensuring that any material brought on site is clean fill. Form FP-001 Must be retained by the property owner for any fill material affected by a spill or release of a regulated substance but qualifying as clean fill due to analytical testing.

20. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills.

21. Frozen materials or s offt, mucky, or highly compressible materials shall not be incorporated into fills.

22. Fill shall not be placed on saturated or frozen surfaces.

23. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification or subsurface drain or other approved method.

24. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated. Seeded within 50 feet of a surface water, or otherwise shown on the plan drawings, shall be blanketed according to the standards of this plan.

25. Immediately after earth disturbance activities cease in any area or subarea of the project, the contractor shall stabilize all disturbed areas using non-germinating materials, mulch or protective rockacking shall be applied as described for the areas in finished grade, which will be restabilized within 1 year, may be stabilized in accordance with the temporary stabilization specifications. Those areas which will not be restabilized within 1 year shall be stabilized in accordance with the permanent stabilization specifications.

26. Permanent stabilization is defined as a minimum uniform, perennial 70% vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated erosion. Cut and fill slopes shall be capable of resisting future failure due to slumping, sliding, or other movements.

27. E&S BMPs shall remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Department.

28. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Department for an inspection prior to removal/conversion of the E&S BMPs.

29. After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed or converted to permanent post construction stormwater management BMPs. Areas disturbed during removal or conversion of the BMPs shall be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal/conversions are to be done during the germinating season.

30. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Department to schedule a final inspection.

31. Clean Fill - Uncontaminated, non-water soluble, non-decomposable, inert, solid material. This includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. It does not include materials placed in or on the surface waters unless otherwise authorized, melted asphalt, or asphalt that has been processed for re-use.

32. Environmental Due Diligence - Regarding clean fill. Investigative techniques, including but not limited to, visual inspection properties, electronic data base sources, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits.

16. Apply temporary and permanent seeding to areas that have been disturbed for the installation of the channel. Apply permanent stabilization measures immediately to any disturbed area where work has reached final grade.

MAINTENANCE AND INSPECTION PROCEDURES

The current water level in the quarry is at approximately 95 ft. The quarry may need to be lowered to 90 ft.

The current water level in the quarry is approximately 15 m. The quarry may need to be lowered in a safe and controlled manner for the installation of the weir outlet.

The lower tier of the channel is sized for a higher flow rate than the current pump capacity. The existing discharge line may be directed into the completed channel where it meets Primrose Creek while the remaining channel and outlet is constructed.

Dewatering Sequence
The contractor may propose an alternative to pumping plan and sequence to lower the quarry water level in a safe and controlled manner to allow for installation of the quarry outlet.

1. The existing dewatering pipe condition is unknown but is currently used for dewatering. A second temporary overland discharge pipe from the pump location at the quarry to the proposed discharge point may be installed to facilitate pumping.
2. The recommended temporary pipe is 12-inch HDPE and shall discharge to the lower tier channel.
3. Provide air bridges or protective soil cover for the piping at anticipated construction crossings, otherwise the temporary piping may be placed at grade.
4. Mobilize and setup the active pumping system including:

- d. Fuel storage containment system in accordance with an appropriate spill prevention, detection and countermeasures plan.

A circular seal for the Commonwealth of Massachusetts Professional Engineers. The outer ring contains the text "COMMONWEALTH OF MASSACHUSETTS" at the top and "PROFESSIONAL ENGINEER" at the bottom. The center contains "JOHN R. PATTERSON" at the top and "PE" at the bottom. Below "JOHN R. PATTERSON" is the number "0055679".

	SUBMITTED BY:
	Heather Trexler, PG, Project Manager TETRA TECH, INC.
APPROVED BY:	

Project Manager	DATE:	PLOT DATE:
	12/01/2023	12/01/2023
	DRAWN BY:	CHECKED BY:
	JNB	HT
ACAD FILE NAME:		

SONLE:

QUARRY DISCHARGE OUTLET PROJECT
NEW HOPE CRUSHED STONE & LIME CO.

QUARRY DISCHARGE OUTLET PROJECT
NEW HOPE CRUSHED STONE & LIME CO.

2014

BUCKS COUNTY
DRAWING NUMBER: