

Tennessee Valley Authority
Regulatory Submittal for Kingston Fossil Plant

Documents submitted:
Revised Cenosphere Collection Area Consolidation Work Plan

Date submitted
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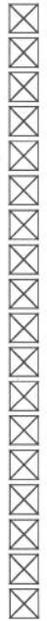
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Cenospheres Collection Area Consolidation Work Plan

1.0 Purpose of Work

The objective of this work plan is to describe the construction activities required to consolidate the cenosphere collection areas (5) into two areas that are more easily maintained and to renovate the area presently occupied by the existing cenosphere collection area into a staging, lay down area.

2.0 Design Components

The plan is to excavate the existing ash and cenospheres from the five collection areas and haul this material to an ash storage area, and to construct two new cenosphere collection areas, with structural features similar to the existing, one, south east of the present collection areas at the intersection of the divider dike and dike C, the other near the midpoint of the divider dike on the ash pond side. The new pits will have rip rap reinforced discharge points to prevent sidewall erosion. Pits will have elevated sides to prevent fill from rain fall runoff. Gravel shall be placed where vehicles are to be positioned for unloading. In addition the work plan covers the reshaping of the area presently occupied by the cenosphere collection areas. Additional fill material for filling the old collection areas and the dike area will either be bottom ash, stone or clay material.

The two new locations will provide a comparable volume to the existing areas and are to be equipped with drain pipes there by eliminating a pumping function. The under flow will go into the ash pond. The removal of the current collection area would create additional room along the road and ash pond for staging and lay down.

During the excavation of the existing collection areas care will be taken so not to excavate below the bottom of the pit and avoid impacting the pond dike. The preparation of the collection area on the north side of the divider dike involves removing the existing geo tube and the majority of its contents, reshaping the bottom surface for drainage, and rebuilding the dikes (with material from the geo tube) around the geo tube location. There is to be essentially no net change in loading to the divider dike with this modification. The new collection area will occupy the same foot print as the geo tube. The preparation of the collection area at the intersection of the Divider Dike and Dike C will involve placing a berm about three feet high inside the Ash Pond footprint with material primarily from the pond. The net load change to the dikes due to this pond construction will be minor. There will be no excavation into the existing dikes for the construction of the new collection areas or the reshaping of the existing (old) collection areas.

3.0 Construction Management

The construction process will incorporate ash removal, dike construction and conventional grading (cutting, filling, shaping). Activities will involve excavators, hauling equipment, other support equipment

4.0 Schedule

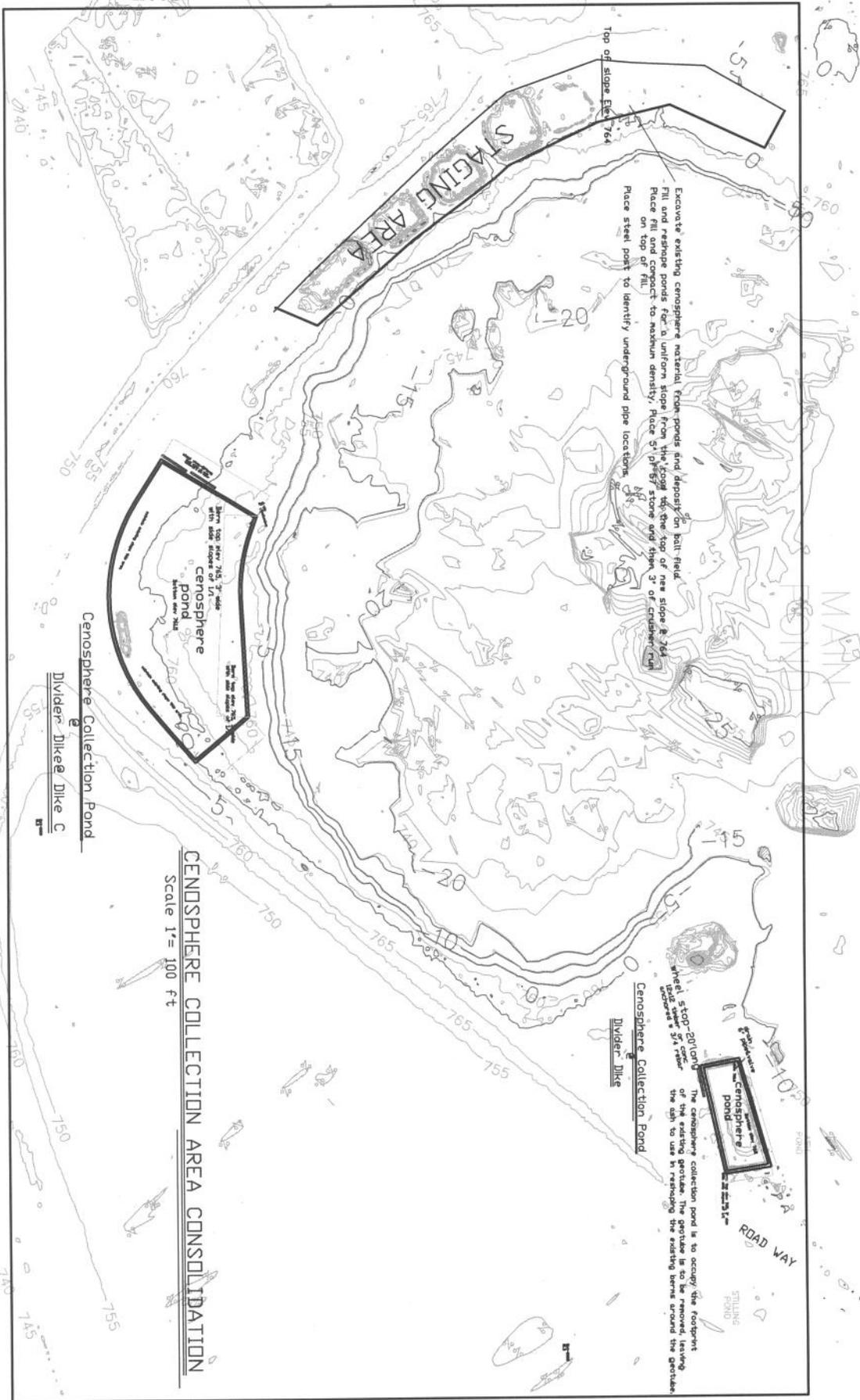
The construction could be accomplished 4 to 5 days and could be scheduled as convenient to other work being formed. It is anticipated that work will start once the work plan is approved.

5.0 Waste Management

The only waste anticipated to be generated by this construction is ash and cenospheres which would be disposed of in the storage area.

6.0 Health and Safety

All construction activities will be done in accordance with site wide Health and Safety Plan.



Excavate existing cenosphere material from ponds and deposit on ball field. Fill and reshape ponds for a uniform slope from the foot to the top of new slope @ 2:1. Place on top of fill. Place steel pipe to identify underground pipe locations.

The cenosphere collection pond is to occupy the footprint of the existing geotank. The geotank is to be removed, leaving the ash to use in reshaping the existing berms around the geotank.

CENOSPHERE COLLECTION AREA CONSOLIDATION

Scale 1" = 100 ft.

Cenosphere Collection Pond

Divider Dike

Dike C

STAGING AREA

Top of slope Elev. 764

Cenosphere Collection Pond

Divider Dike

ROAD WAY

STILLING POND

Cenosphere pond

Cenosphere pond

Divider Dike

Dike C

Cenosphere Collection Pond

Divider Dike

Dike C