**SPP00330 (01-01-21) *(This section may requires SPP01030, 01040 & 02350.)***

### Section 00330 - Earthwork

Comply with section 00330 of the Standard Construction Specifications modified as follows:

***(Use the following subsection .03 for "Embankment Basis" projects, modified to exclude any excavation bid items. [For example: Ditch, Foundation, or Toe Trench Excavation])***

**00330.03 Basis of Performance** - Perform all earthwork under this Section except for \_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the embankment basis.

***(Use the following subsection .03 for "Excavation Basis" projects, modified to exclude any embankment bid items. [For example: Stone Embankment])***

**00330.03 Basis of Performance -** Perform all earthwork under this Section except for \_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the excavation basis.

***(Designer Note; use the following subsection when project requires wetland soil restoration. Also include SPP1030 & SPP1040)***

Add the following as a new paragraph to the end of this subsection.

**00330.10 Selected Materials -** Select earth fill material for wetlands shall be obtained from borrow areas specified in the Contract Documents and may include soil types with index properties similar to the in-situ wetland material.

***(Use the following paragraph if you have water mains in close proximity to any Work)***

**00330.40(c) Avoidance and Correction of Detrimental Operations** - Add the following:

Do not allow any construction equipment to run on the subgrade within 5 feet of any water mainline or hydrant line where it has less than 2 feet of cover.

***(Use the following subsection when soil restoration is required over compacted areas.)***

**00330.40(d) Over-compacting** - Avoid over-compacting earth fill to growth-limiting bulk densities – compaction of placed material should approximate adjacent in situ soil conditions to support vegetation establishment. Compaction should be 100 psi or less. If over 100 psi (using a penetrometer), decompaction using combination of ripper shanks and a subsoiler will be used in all areas. Contractor shall de-compact soils driven on by vehicles and equipment

***(Use the following subsection .41(a)(9) on excavation projects which include Section 00331 - Subgrade Stabilization.)***

**00330.41(a)(9) Excavation Below Grade** - Delete (9)(c) of this section, that begins "Unstable Subgrade…".

***(Use the following subsection .42(c)(3) on projects when directed by the erosion control designer.)***

**00330.42(c)(3) Embankment Slope Protection** - Add the following paragraph:

Construct the outer 12 inches of embankments with suitable materials to establish slope stabilization through permanent seeding. If suitable material is not available, provide suitable materials from a Contractor-provided source which conforms to the requirements of section 00330.11 or section 00330.13 and provides favorable conditions for germination of seed and growth of grass.

***(Use the following subsection .43(a) when constructing pervious or permeable pavement to remove the “skin” that forms when the subgrade is compacted by steel wheel rollers.)***

**00330.43(a) General** - Add the following to the end of this subsection.

After compacting the subgrade, lightly rake to roughen the surface. Restrict heavy equipment travel and other soil compacting activities to within the grading limits and ingress/egress routes to the maximum extent feasible.

***(Use the following paragraph if you have water mains in close proximity to any Work)***

**00330.43(a) General** – Add the following paragraph to the end of this subsection.

Do not operate pneumatic-tired vehicles on the road subgrade or use compaction equipment in vibratory mode where the Work is within 5 feet of any water mainline and the cover from subgrade to top of pipe is less than 2 feet.

***(Use the following subsection when soil restoration is required over compacted areas.)***

Add the following subsection

**00330.48 Soil Restoration:**

Contractor shall meet with the Owner on-site prior to moving equipment on-site or beginning any work to ensure that all parties understand the locations of or potential impacts to sensitive areas or species and the measurements that shall be taken to protect them. Soil restoration is required as shown and or severely disturbed areas. Soil shall be considered severely disturbed if grade was lowered more than 14 inches or soil was compacted in lifts or by equipment, regardless of the final grade.

Soil Restoration shall be performed only at times when local weather and other conditions are favorable to the preparation of soil and the germination and growth of grass seed.

Soil Restoration shall occur after site disturbance and decompaction is complete, including all vehicle and equipment trafficking, but before placement of topsoil. Once Soil Restoration is complete, all traffic, equipment and material storage on treated areas is prohibited with the exception of foot traffic for the purposes of planting, seeding or mulching.

Remove all foreign materials resulting from construction operations, including oil drippings, stone, gravel, and other construction materials from the existing soil surface. Vegetation debris or 1” diameter and large existing stones shall be stockpiled for use as habitat features.

Apply compost to the Soil Restoration area as specified in the Contract Documents and according to subsection 01040.48.

**00330.80 Measurement –** Replace the first paragraph with the following:

The quantities of seeding, soil, and associated work performed under this section will be measured as “Soil Restoration”.

Add the following bullet to the end of the list:

* **Soil Restoration** will be measured on the ground surface area by acre, square yard or square foot.

***(Use the following subsection .81 when doing sidewalk work in addition to roadwork. Do not use subsection if there is no roadwork excavation.)***

**00330.81 Excavation Basis Measurement** - The quantities of excavation are:

 **Item** **Estimated Quantities**

Roadwork

Sidewalks

***(Use the following subsection .90 where Soil Restoration is needed)***

Add the following to the following pay item to the end of the list:

**00330.90 Payment**

 **Pay Item Unit of Measurement**

(m)Soil Restoration Acre, SY, or SF

Add the following to the end of this section:

For item (m), there will be no separate payment for site decompaction, ripper and subsoiler.

***(Use the following subsection .91(d) on excavation projects that include Section 00331 - Subgrade Stabilization.)***

**00330.91(d) General Excavation** - Delete the bullet that begins "Includes unsuitable material…".

***(See 00330.80 instructions above on when to use 00330.92.)***

**00330.92 Kinds of Incidental Earthwork** - Add the following bullet to the end of this subsection:

* **Driveway and Road Approaches** - Earthwork outside the neat lines as shown on the Typical Sections, necessary to construct driveways and road approaches.

***(Use the following subsection .94 on embankment projects that include Section 00331 - Subgrade Stabilization.)***

**00330.94 Embankment Basis Payment** - Delete the paragraph that begins "Excavation of unsuitable…".