

SECTION 32 91 19 – LANDSCAPE GRADING**PART 1 - GENERAL**

1.01 SUMMARY

- A. Section Includes
 - 1. Final grade topsoil for finish landscaping.
- B. Related Sections:
 - 1. Section 31 22 13 - Rough Grading: Rough grading of site.
 - 2. Section 31 23 16 - Excavation
 - 3. Section 32 92 00 – Turf and Grasses.

1.02 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Materials Source: Submit name of imported materials source.
- C. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.03 QUALITY ASSURANCE

- A. Furnish each topsoil material from single source throughout the Work.

PART 2 - PRODUCTS

2.01 TOPSOIL

- A. Topsoil: Fertile, agricultural soil, typical for locality, capable of sustaining vigorous plant growth, taken from drained site; free of subsoil, clay or impurities, plants, weeds and roots. Friable loam, sand loam, or clay loam which will hold a ball when squeezed with the hand, but which will crumble shortly after being released.
- B. Having a pH of between 6.0 and 7.0; containing not less than 1.5% nor more than 10% organic matter as determined by AASHTO T194; magnesium to exceed 100 units; phosphorus to exceed 150 units; potassium to exceed 120 units; soluble salts/conductivity not to exceed 900 ppm/0.9 mmhos/cm in soil.
- C. Free of clods, grass, roots, or other debris harmful to plant growth.
- D. Free of pests, pest larvae, and matter toxic to plants.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify building and trench backfilling have been properly completed.
- B. Verify substrate base has been contoured and compacted.

3.02 PREPARATION

- A. Protect landscaping and other features remaining as final Work.
- B. Protect existing structures, fences, sidewalks, utilities, paving, land, curbs.

3.03 PREPARATION OF SUBGRADE

- A. Eliminate uneven areas and low spots.
- B. Remove debris, roots, branches, stones, in excess of 2 inch in size. Remove contaminated subsoil.
- C. Scarify surface to depth of 6 inches where topsoil is scheduled. Scarify in areas where equipment used for hauling and spreading topsoil has compacted subsoil.

3.04 PLACING TOPSOIL

- A. Limit preparation to areas that will be planted in immediate future. Any prepared areas not immediately planted must be re-prepared.
- B. Place topsoil in areas where seeding and planting is required to thickness as scheduled. Place topsoil during dry weather.
- C. Fine grade topsoil to eliminate rough or low areas, to a smooth even surface, uniformly fine texture. Maintain profiles and contour of subgrade without the formation of water pockets.
- D. Roll, rake, and drag lawn areas, remove ridges and fill depressions, as required to meet finish grades. Remove stones and extraneous matter and objects larger than 1" in any dimension and dispose.
- E. Remove roots, weeds, rocks, and foreign material while spreading.
- F. Manually spread topsoil close to plant material, building, etc to prevent damage.
- G. Lightly compact or Roll placed topsoil.
- H. Remove surplus subsoil and topsoil from site.
- I. Leave stockpile area and site clean and raked, ready to receive landscaping.

J. Do not place topsoil when the subgrade is frozen, excessively wet, or extremely dry.

K. Do not handle topsoil when frozen or muddy.

3.05 TOLERANCES

A. Top of Topsoil: Plus or minus 1/2 inch.

3.06 PROTECTION OF INSTALLED WORK

A. Prohibit construction traffic over topsoil.

3.07 SCHEDULES

A. Compacted topsoil thicknesses:

1. Seeded Grass: 6 inches.
2. Sod: 4 inches.
3. Shrub Beds: 18 inches.
4. Flower Beds: 12 inches.

END OF SECTION