



BID YARDAGE:
36,000 CU. YDS.
(INCLUDES 19% SHRINKAGE)

- I. GENERAL**
- No area shall be cleared without authorization from the project engineer.
 - All grading work performed shall be within a 0.3 foot tolerance of the grades shown on the grading plan.
 - A Geotechnical Engineer shall be employed by the owner and be on site during grading operations.
 - The grading contractor shall perform a complete grading and compaction operation as shown on the plan, started in those areas, or reasonably defined therefrom, all in accordance with the plans and unless so interpreted by the geotechnical engineer.
 - Before the grading begins, the Owner shall employ a competent, licensed surveyor to establish all lines and grades.
 - The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
 - Trash backfills within the road right-of-way will be water jettied and granular backfill will be used under paved areas.
 - All areas will be allowed to drain. All low points should be provided with temporary ditches.
 - A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare over the winter without being seeded and mulched. Care should be exercised to prevent soil from dumping adjacent property and siltin up existing downstream storm drainage system.
 - Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed of off-site.
 - Any existing trash and debris currently on this property must be removed and disposed of off-site.
 - Soft soil in the bottom and banks of any existing or former pond area should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.
 - No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.

II. SPECIFICATIONS

- Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds; the grubbing and removal of roots and other surface obstructions from the site; and the demolition and removal of any non-wood structures. The acceptable material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly checked prior to the placement of any fill. The Soils Engineer shall approve the staking operation.
- Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory rollers, or high speed lap-tyre drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
- The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Intermittent reports showing fill quality will be made to the Owner at regular intervals.
- The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall correct the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.

- All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted to at least 85 percent of the maximum density as determined by the Modified AASHTO T-99 Compaction Test (ASTM-D-1557). Natural slopes steeper than 1 vertical to 3 horizontal to receive fill shall have horizontal benches, cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any non-acceptable soils placed shall be removed at the Contractor's expense.
- The sequence of operation in the fill areas will be fill, compact, verify acceptable soil density, and repetition of the sequence. The acceptable moisture contents during the filling operation are those at which satisfactory dry densities can be obtained. The acceptable moisture contents during the filling operation in the remaining areas are from 2 to 8 percent above the optimum moisture control.
- The surface of the fill shall be finished so that it will not rebound water. If at the end of a day work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.

NOTE: TEMPORARY RELIEF SWALES TO BE GRADED PRIOR TO CONSTRUCTION OF STORM SEWERS.

