ITEMS AND STATEMENTS

ITEMS

1. One complete set of plans, and five (5) copies of plan entitled Soil Erosion & Sediment Control.

2. Soil Erosion & Sediment Control Title.

3. Existing and Proposed Contours at 2' intervals. They must be legible and consistently labeled.

4. Stabilized Construction Entrance, delineated on the plan, with supportive detail & narrative indicating maintenance.

5. Dust Control. Methods of controlling dust and soil blowing must be included as part of the plan.

6. Temporary and Permanent Seeding specifications, including lime, fertilizer, seed, mulching material, types and rates of application.

7. North arrow.

8. Soil information and identification of site soil types.

9. Location of present and proposed drains and culverts with their discharge capacities, velocities, and supporting calculations in accordance with the New Jersey Standards for Soil Erosion & Sediment Control.

10. Delineation of any areas subject to flooding from the 100 year storm must be delineated and included as part of the submission.

11. Delineation of Wetlands (NJSA 13:B-1, et seq.). If not applicable, state that fact on the plan.

12. All areas subject to stream encroachment regulations must be delineated on the plan. If not applicable, state fact on the plan.

13. Engineer's signature and seal.

14. Delineation of the limit of disturbance for construction activities, including any proposed off site disturbance.

15. Sequence of development, including the installation and maintenance of site specific erosion control practices, and the estimated duration of each activity for each phase of construction. Note that stormwater basins must be constructed and stabilized during the early stages of development.

16. Sediment barriers with installation detail.

17. Inlet protection with installation detail.

18. Project locator, preferably on a U.S.G.S. Quad map.

19. Location and accurate delineation of all streams, channels, water bodies, and other natural features within and adjacent to the project area.

20. Plan delineation and supporting documentation for all structural soil erosion methods including calculations, site-specific cross sections and profiles of each structure.

21. Permanent vegetative seeding specification must be site specific and appropriate to the intended usage. The Cumberland District requires that the rate of application be a minimum of 4.0 pounds total seed per 1000 square feet, this is equivalent to a rate of 175 total pounds of seed per acre. If hydroseeding will be the method of application, the seed rate should be increased by 25%. Hydroseeded areas must still receive straw mulch and tack.

22. A stormwater drainage plan, with the areas delineated on the plan that correspond with the drainage calculations. Use arrows to indicate the direction of flow.

23. All supporting hydrologic calculations and hydraulic design.

- [] Pipe flow network analysis.
- [] Conduit outlet protection, 25 year design storm.
- [] Grassed waterway, 10 year design storm.
- [] Stormwater basins, 2 & 10 year design storm, routing
 - through the basin with stage-storage-discharge data.
- [] Documentation that basins will dewater within 10 days.

24. Submit a typical lot plan, noting grading, stone tire cleaning driveway, silt fence, drainage swales, soil stockpiles, and all other appropriate erosion control measures.

25. Plan delineation and supportive details of the following soil erosion structures and measures:

- [] Inlet protection
 [] Construction entrance
- [] Silt fence
- [] Diversions
- [] Conduit outlet protection [] Dewatering filters
- [] Berms with stone wicks [] Slope protection struc.

26. Please provide a copy of the Pinelands Commission Certificate of Filing.

27. Stormwater management basin emergency spillway structure designs should include permanent structural armament, such as rock rip rap, concrete or synthetic erosion control matting.

28. If there are any off-site improvements being planned for this project, please specify the improvements and delineate the improvements on the soil erosion and sediment control plan.

29. Mulching specification: Salt hay or small grain straw applied at a rate of 70 to 90 lbs./1000 sq. ft. to be applied according to the <u>New Jersey Standards</u>. Mulch shall be secured by approved methods, (liquid mulch binder, crimping, peg & twine).

30. For large projects, (soil disturbance in excess of 15 acres), thought and consideration for erosion control that would limit the overall amount of land disturbed concurrently.

31. For a residential or commercial development, after curbs and utilities are installed, either a 20' vegetative filter strip or curbside sediment barriers should be established. This feature should be detailed, delineated, and specified on the plan.

32. Completion of the Detention Basin Data Base Summary Form if the development proposes a stormwater management basin. The analysis should include delineation of the watershed(s) that drain to each basin on a copy of the U.S.G.S. Quad map.

33. At a minimum, silt fence should be reinforced by means of either wooden snow fence with steel pickets or welded wire fence, minimum 14 gauge, with rectangular openings no larger than 6" x 6", supported by steel pickets.

34. Box and stone collar inlet protection should be utilized at all critical low points. Silt sacks may be used as an acceptable substitute.

35. A pre-developed topographic drainage area map, scale appropriate to the scope of the project, clearly showing flow paths, times of concentration, subarea analyses which contribute discharge to the point of interest, and identification of drainage areas with the corresponding calculations package.

36. A post developed topographic drainage area map, scale appropriate to the scope of the project. The schematic should clearly identify the cumulative subareas connected to the basin or point(s) of site discharge. The identification and analysis must provide delineation of the flow paths, times of concentration, and amounts of pervious & impervious areas connected to the basin/point of discharge, as separate entities.

37. If the disturbed area will be 5 acres or more, the following requirement must be addressed; The proposed soil disturbing activity for this site is in excess of the minimum threshold set forth by the Statewide Stormwater Permitting Program. Therefore, a Request for General Permit Authorization (R.F.A.) for Stormwater Discharge Associated with Construction Activity is required.

38. Section 4.7 of the <u>Standards</u> states that "Where infiltration basins are proposed, the existence of a stable condition at the emergency discharge area must be provided, and for offsite stability analysis it must be assumed that infiltration will not reduce the peak runoff for a 10 year storm." In order to accomplish this, the rate and velocity of runoff through the basin spillway must be determined for the 10 year storm assuming that the basin is completely full. The flow path should be delineated on the plans. Any necessary conduit outlet protection or other structures must be delineated and detailed.

39. Section 4.14 of the <u>Standards</u> states "there shall be no overfall from the end of the apron to the receiving channel." Please provide a stable flow path by extending the pipe, headwall and outlet protection out to the stream. If this solution is not feasible, the District may be able to accept the current discharge point if the routed 10 year peak discharge is sufficiently reduced and a scour hole is designed for outlet protection. If this alternative becomes necessary, please add a note to the plans which states that any erosion between the scour hole and the receiving waters will be repaired immediately.

STATEMENTS

1. All applicable erosion and sediment control practices shall be in place prior to any grading operation and/or installation of proposed structures or utilities.

2. Soil erosion and sediment control practices on the plan shall be constructed in accordnace with the Standards for Soil Erosion and Sediment Control in New Jersey.

3. All applicable erosion and sediment control practices shall be left in place until construction is completed and/or the area is stabilized.

4. Any disturbed area that will be left exposed for more than sixty (60) days and not subject to construction traffic shall immediately receive a temporary seeding and fertilization in accordance with the <u>New Jersey Standards</u> and application rates shall be included in the narrative. If the season prohibits temporary seeding, the disturbed areas will be mulched with salt hay or equivalent and anchored in accordance with the <u>New</u> <u>Jersey Standards</u> (i.e. peg and twine, mulch matting or liquid mulch binder).

5. All critical areas subject to erosion will receive a temporary seeding in combination with straw mulch at a rate of 2 tons per acre, according to the <u>New Jersey Standards</u> immediately following rough grading.

6. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.

7. All soil erosion and sedimentation structures will be inspected and maintained on a regular basis and after every storm event.

8. Soil stockpiles are not to be located within fifty (50) feet of a floodplain, slope, roadway or drainage facility. The base of all stockpiles should be protected by a hay bale barrier or sediment fence. Proposed locations must be delineated on the plan.

9. A crushed stone, tire cleaning pad will be installed wherever a construction entrance exists. The rip-rap pad must be 100 feet in length and the stone must be 1.5 - 4" in size, placed 12" thick and the full width of the entrance. It should be underlain with a suitable synthetic filter fabric and maintained. (The structure must be delineated and detail included on the plans.)

10. If a stone construction entrance is to be used as an exit on to a major highway, a thirty (30) foot paved transition area shall be installed. 11. All driveways must be stabilized with 2 1/2'' crushed stone or subbase prior to individual lot construction.

12. Paved roadways must be kept clean at all times.

13. All catch basin inlets will be protected during construction (filter details appear on plan).

14. All storm drainage outlets will be stabilized, as required, before the discharge points become operational.

15. All dewatering operations must discharge directly into a sediment filtration device. The sediment filter must be capable of filtering the sediment and be placed so as not to cause erosion of the downstream area. Details and maintenance of the device must be included on the plans. Field placement and use of the structure must be approved by the District Erosion Control Inspector prior to commencement of dewatering activities.

16. The Cumberland/Salem Soil Conservation District shall be notified, in writing, 72 hours prior to any land disturbance.

17. Soil having a pH of 4.0 or less or containing iron sulphide must be covered with a minimum of 12 inches of soil having a pH of 5.0 or more before seedbed preparation.

18. It shall be the responsibility of the developer to provide confirmation of lime, fertilizer and seed application rates at the request of the Cumberland/Salem Soil Conservation District.

19. NJSA 4:24-39, et seq., requires that no Certificate of Occupancy be issued before all the provisions of the certified soil erosion and sediment control plan have been complied with for permanent measures. All site work for the project must be completed prior to the District issuing a report of compliance as a prerequisite to the issuance of a Certificate of Occupancy by the municipality.

20. NJSA 4:24-39, et seq., requires that upon permanent site stabilization and completion of construction the contractor shall apply to the Soil Conservation District for a final compliance inspection to check that all the provisions of the certified soil erosion and sediment control plan have been complied with for permanent measures.

21. Offsite sediment disturbance may require additional control measures to be determined by the erosion control inspector.

22. A copy of the certified Soil Erosion and Sediment Control Plan must be maintained on the project site during construction.

23. Any conveyance of this project prior to its completion will transfer full responsibility for compliance with the certified plan to all subsequent owners.

24. Immediately after the completion of stripping and stockpiling of topsoil, seed the stockpile with annual rye grass. Stabilize topsoil stockpiles with straw mulch for protection if the season does not permit the application and establishment of temporary seeding.

25. Any changes to the site plan will require the submission of a revised Soil Erosion and Sediment Control Plan to the Cumerland/Salem Soil Conservation District. The revised plan must be in accordance with the current <u>New Jersey Standards for</u> <u>Soil Erosion and Sediment Control</u>.

26. Maximum side slopes of all exposed surfaces shall not be constructed steeper than 3:1 unless otherwise approved by the District.

27. The Soil Erosion Inspector may require additional soil erosion measures to be installed, as directed by the District Inspector.