

EROSION CONTROL NARRATIVE

Coastal Express Car Wash plans to develop a 1.5 acre (66,670.5 SF) tract of land located on US Highway 17 business in Charlotte, North Carolina. The project area will include most of the tract and have an approximate impervious area of 37,181 SF. This amount includes parking areas and building. The site is currently undeveloped.

The impervious area will consist of a 24,443 SF for asphalt parking and driveways, 1,208 SF of concrete sidewalk and a 1,530 SF building. There is also a 10,000 SF allocation listed as future. The runoff from the impervious areas will be allowed to sheet flow along the surface of the asphalt and directed to a catchment area. It will then be directed to an open throat yard inlet and then to a shared onsite stormwater pond. The pond will be shared with the project adjacent to this project and is described below. This yields a total BUA of 37,181 SF. The ratio of BUA to total project area, therefore, is 55.8%.

The project does not drain to SA waters.

Stormwater runoff from the BUA will "surface" flow to the stormwater collection system via curb cuts and then to a catchment structure with an open throat yard inlet. The runoff will then flow via underground culvert to an onsite stormwater pond designed in compliance with North Carolina stormwater regulations. The pond will not serve as a sediment basin during construction.

Discharge from the pond will eventually flow into the Sluiceway Run, which is located in the Lumber River Basin. It is classified as S.C.HQW and its index number is 10-2(7.5).

Soils on the site consist of approximately 70% of the eastern portion of the site and 40% Lo on the eastern portion of the site. BaB (Barnstable) is a silty loam with 2% to 8% slopes and is well drained. Lo (Leon) is a fine sand with 0% to 5% slopes and is poorly drained.

Temporary erosion control features installed will include temporary sediment basin, sediment fencing, temporary linings of open channels during construction, stone check dams if required, sod for slope stabilization, and construction entrance.

TEMPORARY SEEDING SCHEDULE

THE CONTRACTOR MAY USE METHODS AND SCHEDULES SHOWN BELOW; HOWEVER, IT IS RECOMMENDED THAT THE CONTRACTOR CONSULT A SPECIALIST WITH ATTENTION GIVEN TO SITE SPECIFIC CONDITIONS.

WINTER AND EARLY SPRING

TYPE	RATE (lb./acre)
RYE (GRAIN)	120
ANNUAL LESPEDEZA (KOBÉ IN PIEDMONT AND COASTAL PLAIN)	50

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURE LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

SUMMER

TYPE	RATE (lb./acre)
GERMAN MILLET	40

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURE LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

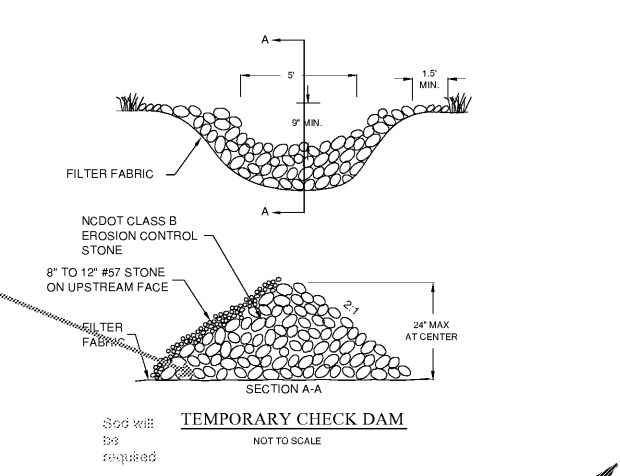
FALL

TYPE	RATE (lb./acre)
GERMAN MILLET	120

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURE LIMESTONE AND 1000 LB/ACRE 10-10-10 FERTILIZER

MULCH WITH STRAW AT THE RATE OF 4000 LB/ACRE.

THE CONTRACTOR SHALL START A REGULAR MAINTENANCE SCHEDULE AS OUTLINED IN THE MAINTENANCE PLAN.



- MAINTENANCE PLAN**
- Check all erosion and sediment control practices for stability and operation following every runoff-producing rain event, but in no case less than once every week. Any needed repairs shall be made immediately to maintain all practices as designed.
 - Sediment in the stormwater pond (sediment basin) shall be cleaned out before the sediment reaches the 19.0' elevation. Place sediment that is removed in the designated disposal area.
 - Sediment shall be removed behind the sediment fences before it reaches a level 1' deep at the fence. The fences shall be repaired as necessary to maintain a functioning barrier until all upstream areas are stabilized.
 - Check grass-lined channels after every rainfall. Immediately make repairs to unstable banks and account for the channel bottom. Remove all significant sediment accumulation to maintain the designed carrying capacity. Maintain grass in a healthy, vigorous condition at all times.
 - All seeded areas shall be fertilized, reseeded, and mulched as necessary to maintain a vigorous, dense vegetated cover.
 - Temporary check dams shall be kept in place until all areas upstream are stabilized.

- CONSTRUCTION SEQUENCE**
- At least 48 hours prior to beginning construction, contact the Land Quality Section (LQS) in the Wilmington Regional NCDENR office at (910) 754-2415 to obtain a permit number 910-754-8029. Meet with LQS representative(s) and/or the Engineer on-site at their request for a permit construction.
 - Install the construction entrance.
 - Locate alignments for sediment fencing, clear alignments, and install fencing.
 - Install stormwater 42" stormwater pipes and structures.
 - Re-align existing stormwater ditch as shown on plans.
 - Stake out and construct the stormwater "PRE/POST" pond that will serve as a sediment trap during construction. Construct the emergency spillway that will serve as the outlet during construction. Set the bottom surface elevation at 17.0' and cap the inlet of the discharge pipe.
 - Install the outlet protection measures downstream of the pond outlet pipe.
 - Stake out alignments for the vegetated swales, construct the swales, apply seed and fertilizer, and place temporary liners as called out on the plans.
 - Install check dams within the swales as shown on the plans.
 - Grade the site.
 - Apply the gravel to the travel surfaces.
 - Install landscaping features per approved landscaping plan.
 - Apply grass, fertilizer, and mulch to all areas that are to remain natural (except for landscaped areas).
 - Construct the buildings.
 - Once all natural areas are stabilized, remove all sediment from the pond, establish a bottom elevation of 9.0', and remove the cap from the outlet pipe.

PERMANENT SEEDING SCHEDULE

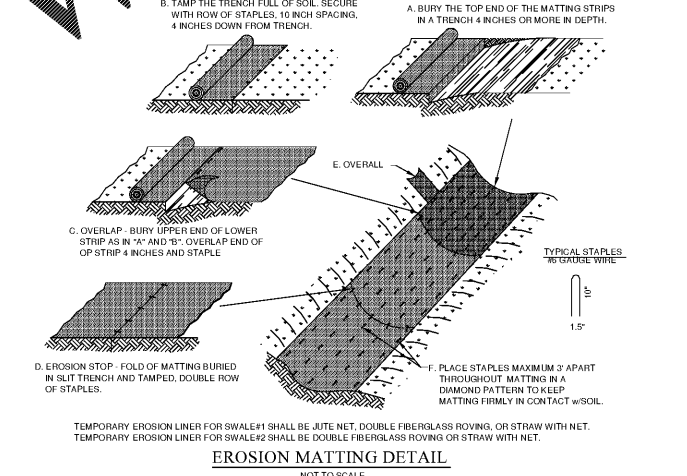
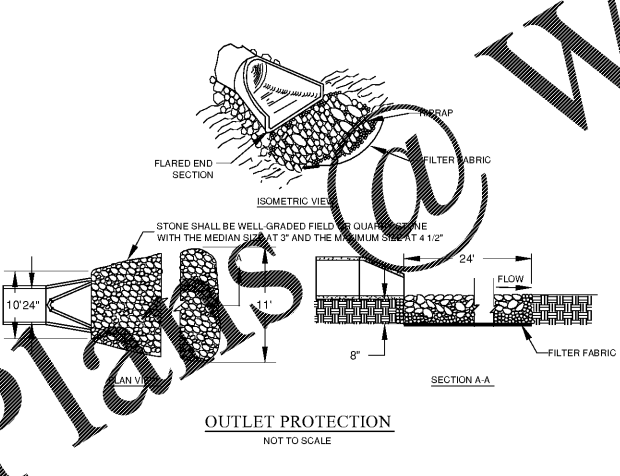
ALL DISTURBED AREAS SHALL BE STABILIZED WITH A PERMANENT VEGETATIVE COVER ACCORDING TO THE REQUIREMENTS LISTED IN THE NPDES STABILIZATION TABLE SHOWN ON THESE PLANS. THE CONTRACTOR MAY USE METHODS AND SCHEDULES SHOWN BELOW; HOWEVER, IT IS RECOMMENDED THAT THE CONTRACTOR CONSULT A SPECIALIST WITH ATTENTION GIVEN TO SITE SPECIFIC CONDITIONS.

A. CULTIVATE AREA TO A DEPTH OF 5".
 B. APPLY AGRICULTURAL LIME AT THE RATE OF 4000 LBS. PER ACRE.
 C. APPLY 10-20-20 COMMERCIAL FERTILIZER AT THE RATE OF 500 LBS PER ACRE.
 D. SOW GRASS SEEDS AT THE FOLLOWING RATES:

KIND	RATE PER ACRE
COMMON BERMUDA GRASS (UNHULLED)	20 LBS.
COMMON BERMUDA GRASS (HULLED)	12 LBS.
PENSACOLA BAHIA GRASS	50 LBS.
KOREAN LESPEDEZA	25 LBS.
TALL FESCUE	30 LBS.

E. MULCH WITH STRAW AT THE RATE OF 3250 TO 4350 LBS PER ACRE.

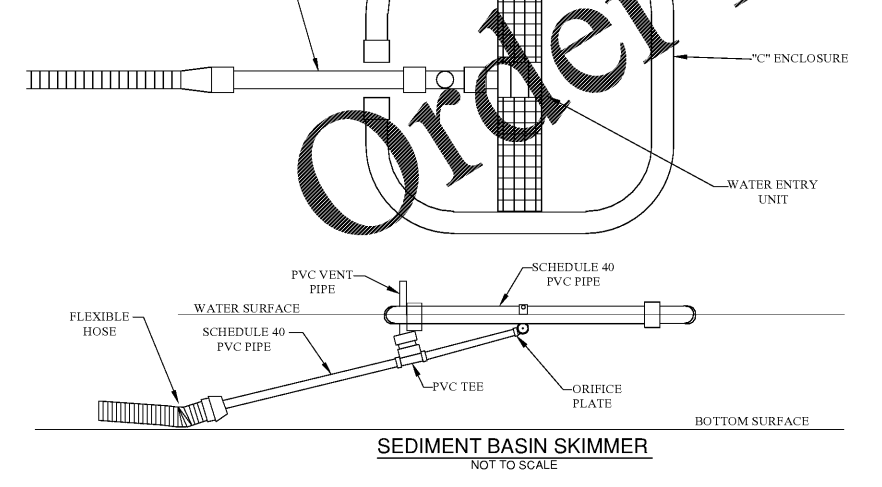
AS THE PROJECT AREA IS BEING OPENED UP AND THE EROSION CONTROL MEASURES INSTALLED, THE CONTRACTOR SHALL START A REGULAR MAINTENANCE SCHEDULE AS OUTLINED IN THE MAINTENANCE PLAN.



EROSION CONTROL GENERAL NOTES

THE ATTACHED PLANS AND SPECIFICATIONS GIVE THE REQUIREMENTS FOR EROSION CONTROL MEASURES. SILT FENCE IS LOCATED IN KEY AREAS AROUND THE SITE AS NOTED ON THE PLANS. A GRAVEL CONSTRUCTION ENTRANCE WILL BE CONSTRUCTED AT THE LOCATION INDICATED ON THE PLANS. THE GRADING CONTRACTOR WILL PROVIDE THE MAINTENANCE FOR THE EROSION CONTROL MEASURES.

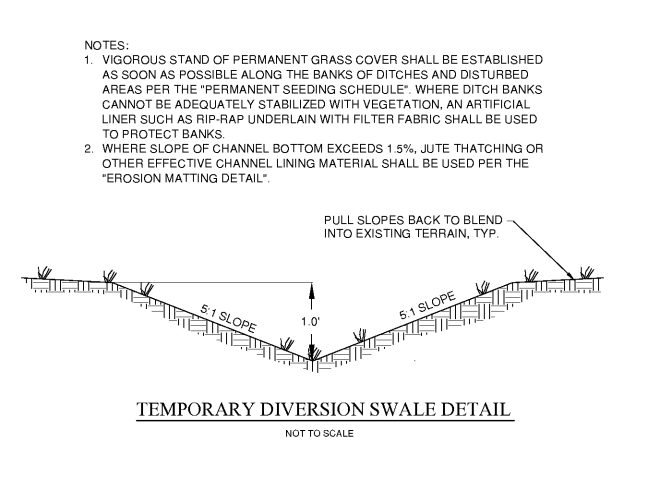
- ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN COMPLIANCE WITH THE SEDIMENTATION POLLUTION CONTROL ACT OF 1973.
- ALL LAND DISTURBING ACTIVITIES ARE TO BE PLANNED AND CONDUCTED TO LIMIT EXPOSURE TO THE SHORTEST FEASIBLE TIME.
- ALL DISTURBED AREAS SHALL BE STABILIZED BY A PERMANENT GROUND COVER WITHIN 15 DAYS FOR SLOPES AND 30 DAYS FOR ALL OTHER AREAS.
- AS SOON AS ALL AREAS ARE PERMANENTLY STABILIZED, ALL PERMANENT MEASURES HAVE BEEN INSTALLED, AND FINAL APPROVAL IS RECEIVED FROM THE LAND QUALITY SECTION, THE TEMPORARY MEASURES MAY BE REMOVED.
- OVER THE LIFE OF THE PROJECT, THE OWNER SHALL MAKE PERIODIC INSPECTIONS TO EVALUATE THE SUCCESS IN CONTROLLING EROSION OF SOILS TO OFF-SITE AREAS. IF AREAS ARE FOUND WHERE EROSION IS TAKING PLACE, THE OWNER SHALL TAKE THE NECESSARY MEASURES TO REMEDY THE SITUATION.



TEMPORARY SEDIMENT BASIN TABLE OF VALUES

TOP LENGTH (TL) FT	TOP WIDTH (TW) FT	BOTTOM LENGTH (BL) FT	BOTTOM WIDTH (BW) FT	DEPTH (D) FT	SIDE SLOPE (S) H:V	SEDIMENT STORAGE PROVIDED (CF)	ENTRANCE TO FIRST BAFFLE (Baf 1) FT	1st BAFFLE TO 2nd BAFFLE (Baf 2) FT	2nd BAFFLE TO 3rd BAFFLE (Baf 3) FT	OUTLET WEIR LENGTH FT
142	47	127	32	1.5	3	10857	35	70	105	11

TEMPORARY SEDIMENT BASIN
NOT TO SCALE



Revisions

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SEDIMENTATION/EROSION CONTROL DETAILS FOR COOK OUT SHALLOTTE, NORTH CAROLINA

PRELIMINARY FOR APPROVAL

THIS PLAN IS NOT ISSUED FOR CONSTRUCTION WITHOUT AFFIXED CORPORATE SEAL

DATE: 4/1/19
 SCALE: AS SHOWN
 DRAWN BY: JCR
 CHECKED BY: ARLRETROR

SEAL
 38864
 4-1-2019
 CHRISTIAN RUSSELL

C9.0

ECES PROJECT NO. 2043