Town of Knightdale Required ESC Plan Maintenance Notes

Insert the following text block on to the first erosion and sediment control device detail sheets.

1. Provide a plan detail, construction specifications, and specific maintenance requirements for all proposed sediment and erosion control structures included on the plan. Recommend placing maintenance requirements with the associated construction detail.
2. Maintenance and/or clean out, is necessary anytime the device is at 50% capacity. All sediment storage measures will remain on site and functional until all grading and final landscaping of the project is complete.
3. As designated by NCDEQ NCG01 permitting, self-inspections for erosion and sedimentation control measures are to be performed at least once every seven calendar days and within 24 hours of every rain event of 1 inch or greater. Any needed repairs shall be made immediately to maintain measures as designed.
4. Provide the minimum maintenance standards as specified below:

SURVEYOR FLAGS/TAPE/STAKES:

- Replace identifiers if damaged or knocked down during development.
- Ensure key environmental and/or cultural resources maintain identifiers.
- Colors should adhere to the APWA Uniform Color Code. Use accepted survey symbols and ensure operators understand designations. Utility line owners/operators shall identify the designating firm.

PERMITS/NCGO1 INSPECTIONS BOX:

- Confirm box is securely fashions to a post or wall in a visible location in proximity to the construction entrance.
- Maintain relevant identification on the exterior of the box.
- Ensure paper documents remain dry / legible (lamination, ticket holders, binders, etc.)
- Replace any missing documents immediately. Consider placing ties or fasteners if necessary.

RAIN GUAGE:

- Check and remove any items from the rain funnel and the debris filter (e.g., dust, bugs and other debris).
- Open the rain gauge and remove any foreign objects.
- Perform routine maintenance as specified by the manufacturer.
- Check that the gauge is not being obstructed from rain capture and is level before and after reassembly.

TREE PROTECTION FENCE:

- Prune any damaged trees. (If) damage to protected trees occurs, repair any damage to the crown, trunk, or root system immediately.
- Repair roots by cutting off the damaged areas and painting them with tree paint. Spread peat moss or moist topsoil over exposed roots.
- Repair damage to bark by trimming around the damaged area, taper the cut to provide drainage and paint with tree paint.
- Cut off all damaged tree limbs above the tree collar at the trunk or main branch. Use three separate cuts to avoid peeling bark from healthy areas of the tree.

SILT FENCE:

- Should the fabric of a sediment fence collapse, tear, decompose, or become ineffective, replace it promptly.
- Remove sediment deposits as necessary to provide adequate storage volume for the next rain and reduce pressure on the fence. Take care to avoid undermining the fence during cleanouts.
- Remove all fencing materials and unstable sediment deposits and bring the area to grade and stabilize it after the contributing drainage area has been properly stabilized.

SILT FENCE OUTLET:

- Freshen stone when sediment accumulation exceeds 6 inches.
- Keep mesh free of debris to provide adequate flow and replace stone as needed to facilitate de-watering.

CONSTRUCTION ENTRANCE:

- Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2-inch stone.
- Immediately remove all objectionable materials spilled, washed, or tracked onto public roadways.

SKIMMER:

- Confirm skimmer is functional, installed in the correct orientation and has mobility to float on top of the water column.
- Ensure rock pad stabilization is present under the skimmer.
- Repair any structural deficiencies (e.g., orifice disk, flex hose connection, vent functioning, cracked PVC)

SEDIMENT BASIN

- Basin requires maintenance when the inlet zone (1st quadrant) has been filled with sediment.
- Baffle material shall be maintained in good condition for the life of the pond until removal or conversion.

SEDIMENT BASIN / ROLLED EROSION CONTROL PRODUCT:

- Inspect initial channel anchoring has been installed correctly, confirm segments are rolled in correct orientation.
- Any areas that are damaged or not in close contact with the ground shall be repaired and stapled.
- Monitor and repair the RECP as necessary until ground cover is established.

BASIN CONVEYANCES / SLOPE DRAIN / RIP-RAP LINED CHANEL

- Any erosion of the slope, berm or outlet should be repaired immediately to prevent head cutting back into the slope.
- Conveyance should be refreshed if pore space has been compromised. Clogged drains should be flushed out or replaced.
- Additional performance measures may be required at conveyance entrance to slow water entering the basin.

FILTER BAG / DEWATERING ACTIVITIES

- Ensure the dewatering pad is in a good stabilized condition.
- Prior to use inspect bags for any defects. Ensure pump hoe is secure and a floating intake is being used (when possible).

- Follow all manufacturer recommendations for inspection and maintenance guidelines. Replace when trapped sediment has accumulated to 50% of the bag capacity or in accordance with the manufacturer's recommendations.

TEMPORARY DIVERSION DITCHES / ROLLED EROSION CONTROL PRODUCT:

- Any areas that are damaged or not in close contact with the ground shall be repaired and stapled.
- Monitor and repair the RECP as necessary until ground cover is established.

WITH WATTLES / SILT SOCKS

- Remove sediment accumulation behind measure as necessary to prevent damage to channel vegetation.
- Replace wattle/sock if clogged or torn. Reinstall per detail if damaged or dislodged.
- If ponding becomes excessive, replace with a larger diameter wattle/sock or a different measure.

WITH CHECK DAMS

- Remove sediment accumulation behind measure as necessary to prevent damage to channel vegetation.
- Check for erosion, piping, rock displacement, and correct stone sizes. Repair immediately.
- Confirm weir present and located at the center of the device.

INLET PROTECTIONS (PIPE / YARD / DROP / CURB)

- Inspect inlet protection and remove sediment after each rain event.
- Keep free of debris to provide adequate flow and if present replace stone as needed to facilitate de-watering.