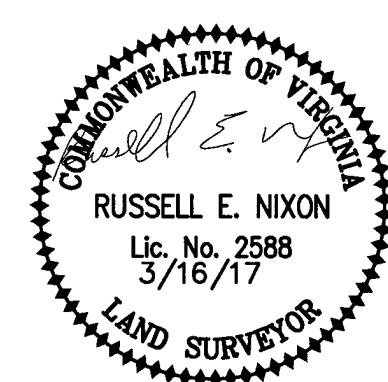
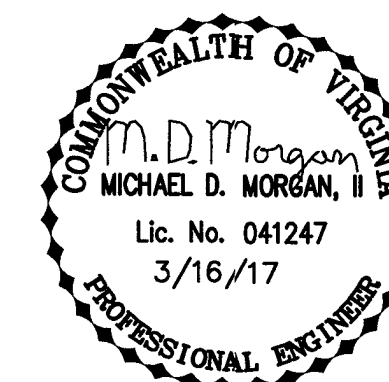


PARCEL A IS TREATING WATER QUALITY FOR THE DEVELOPMENT AS SHOWN FOR BOTH PARCELS. TWO CDS UNITS (STRUCTURE 8 AND 10) TREAT THE RECEIVED RUNOFF PRIOR TO ENTRY INTO THE UNDERGROUND DETENTION SYSTEM. THE REMAINING QUALITY TREATMENT IS OFFSITE VIA THE PURCHASE OF NUTRIENT CREDITS FROM THE ROANOKE RIVER BASIN NUTRIENT CREDIT BANK.

QUANTITY FOR THE BULK GRADED PARCEL B AND FOR THE DEVELOPED PARCEL A IS TREATED VIA THE UNDERGROUND DETENTION SYSTEM. WHEN PARCEL B IS EVER DEVELOPED IT WILL REQUIRE ITS OWN TREATMENT FOR QUALITY AND QUANTITY AND THE CARWASH LOT WILL SIMPLY BE OVERDETAINED FOR QUANTITY AS A RESULT.

ALL STORM WATER TREATMENT AS PROPOSED IS ON PARCEL A.

THE DEVELOPMENT AS SHOWN DOES NOT SIGNIFICANTLY INCREASE THE RUNOFF FROM THE SITE EVEN BEFORE THE DETENTION. THE SITE IS CURRENTLY MOSTLY GRASSED WITH STEEP SLOPES THAT DRAIN TOWARDS ORANGE AVENUE WITH NO TREATMENT. THIS PROJECT WILL FLATTEN THE SLOPES SIGNIFICANTLY TO AN AVERAGE OF 3% AND WILL DETAIN THE STORM WATER PRIOR TO RELEASE. THIS PROJECT ALSO REESTABLISHES AND IMPROVES THE ROADSIDE DITCH ALONG ORANGE AVENUE AND REPLACES THE OFFSITE CULVERT IN THE RIGHT-OF-WAY WHICH HAS NOT BEEN MAINTAINED. THE CULVERT HAD TO BE DUG UP TO EVEN SURVEY IT FOR THIS PROJECT. THE CULVERT WILL BE REPLACED AND SIZED PROPERLY FOR THE RECEIVING FLOW WITH 15" USED AS A MINIMUM SIZE REGARDLESS OF FLOW. ANY LOCALIZED FLOODING THAT MAY HAVE OCCURRED ALONG THIS SECTION OF ORANGE AVENUE SHOULD BE ELIMINATED WITH THE IMPROVEMENTS FROM THIS PROJECT.



<p>SURVEYED FOR:</p> <p>Nixon Land Surveying, L.L.C. 1083C Airport Road Lynchburg, VA 24502 Phone: (434) 237-3800 Fax: (434) 237-0699 Email: ran@nixonllc.com WWW.NIXONLLC.COM</p>	<p>VIAMAC, LLC STORM WATER MANAGEMENT PLAN FOR 3675 & 3765 ORANGE AVENUE CAR WASH CITY OF ROANOKE, VIRGINIA</p> <p>COMM. NO.: 20111158 SCALE: 1"=30' SHEET: 8 OF 19</p> <p>REVISED: 3/16/17 DATE: 11/21/16 CHK. BY: MDM DRW. BY: NME</p>
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