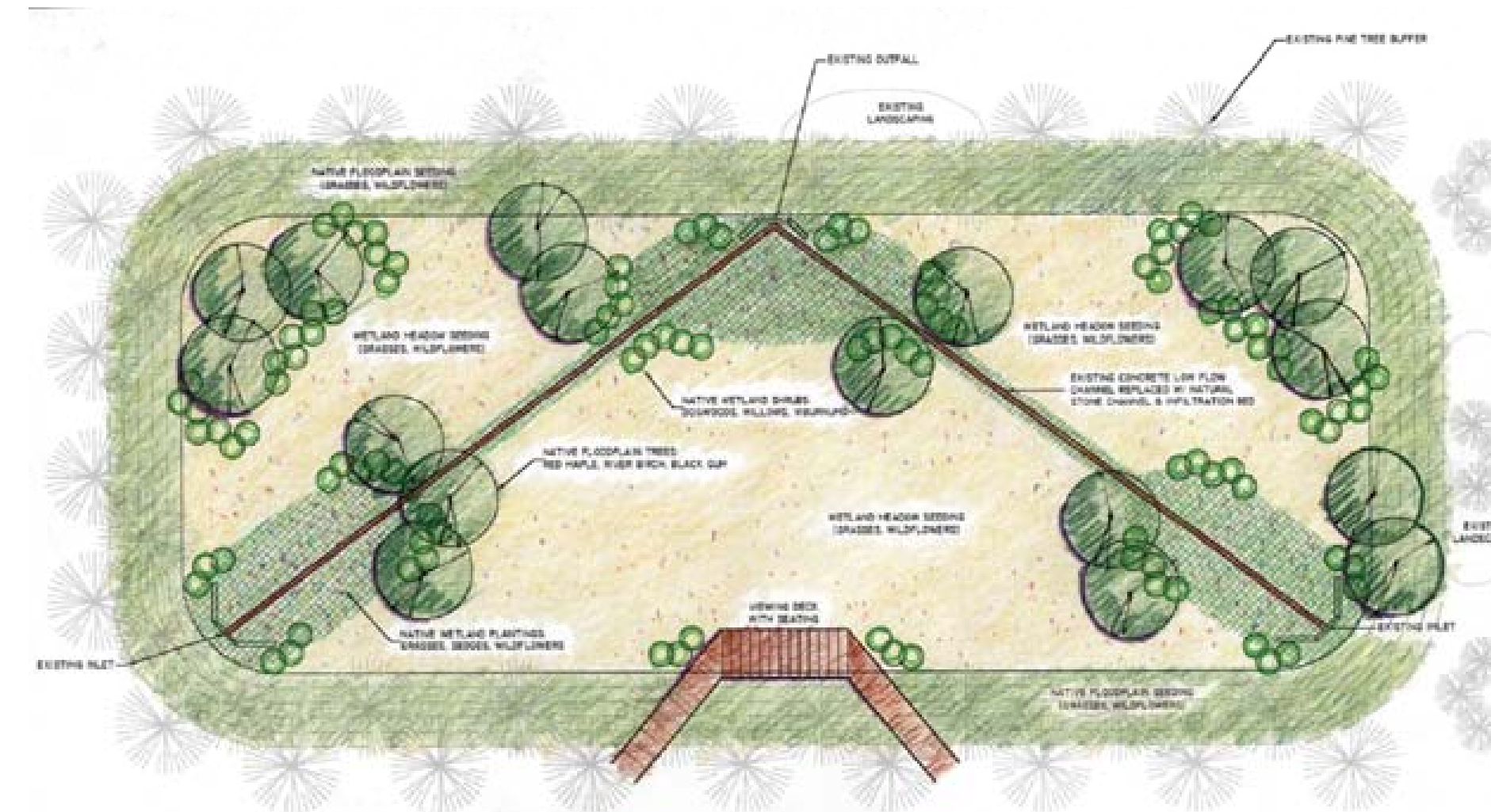




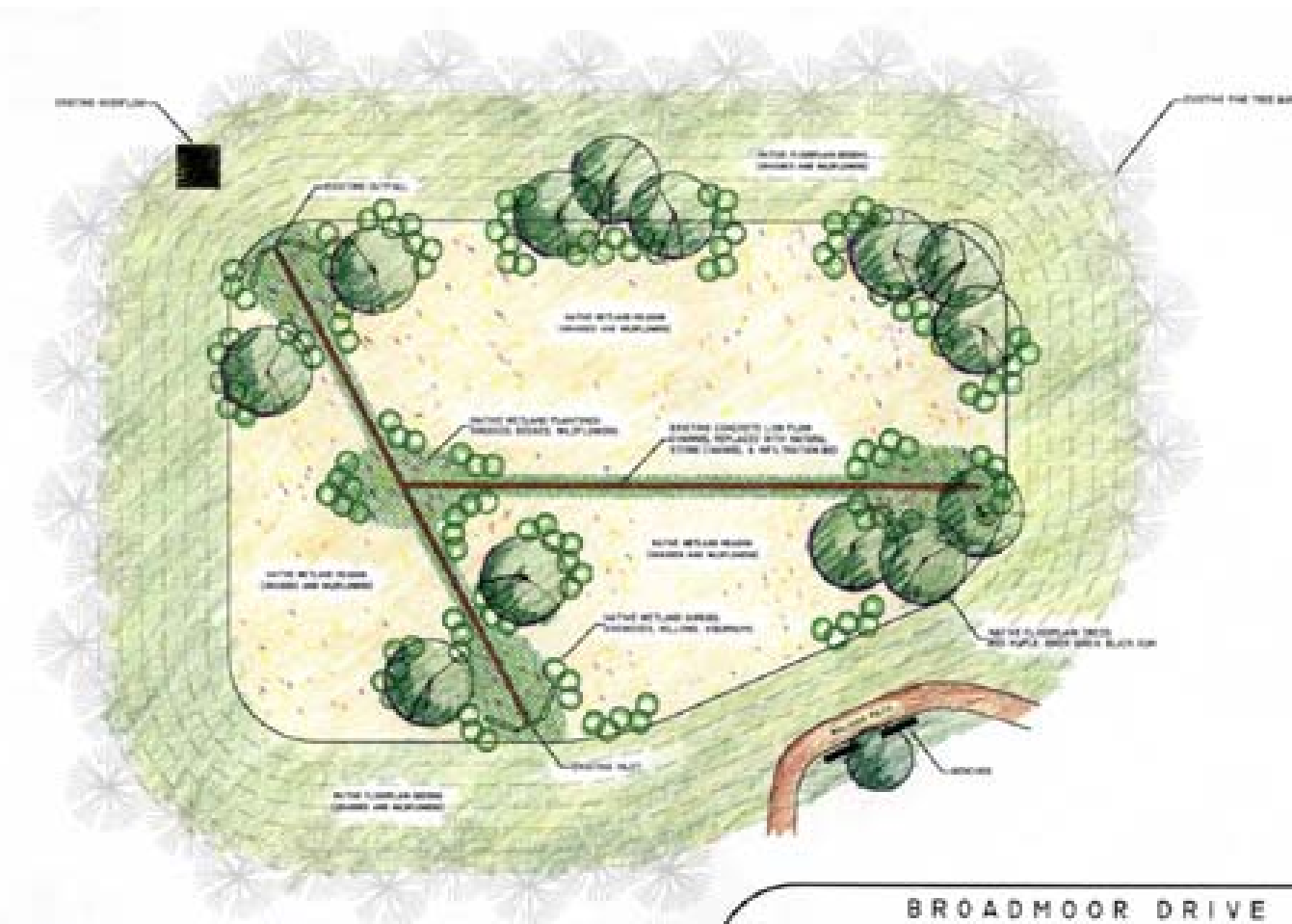
MILL STREET BASIN (NEAR MIDDLETON ROAD)



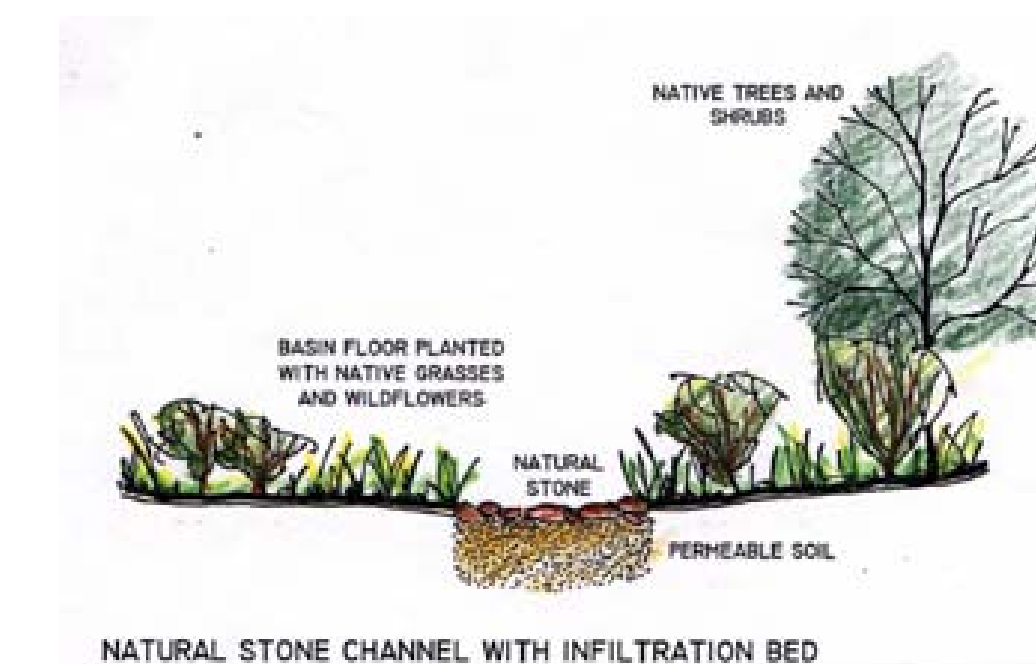
MILL STREET BASIN (ACROSS JAMIE DRIVE)



MILL STREET BASIN (ACROSS JAMIE DRIVE)



MILL STREET BASIN (NEAR MIDDLETON ROAD)



NATURAL STONE CHANNEL WITH INFILTRATION BED

NOTES:

1. THE TWO CONCEPT DRAWINGS ABOVE ARE FROM AN EARLIER PROPOSAL FROM TRC OMNI WHICH RCE FEELS COULD BE A GOOD DEMONSTRATION PROJECT.
2. THE GOAL OF THIS PROJECT IS TWO NATURALIZE THE TWO EXISTING DETENTION BASINS OFF OF MILL STREET. THIS DETENTION BASINS ARE EXCELLENT EXAMPLES FOR NATURALIZATION. THE BASINS FREQUENTLY HAVE STANDING WATER IN THROUGHOUT THE YEAR AND REQUIRE REGULAR MOWING. NATURALIZATION WILL INCLUDE THE REMOVAL OF A LOW FLOW CONCRETE CHANNEL, REPLANTING THE BASIN WITH NATIVE PLANTS AND NOT MOWING THE SITE TO ALLOW THE BASINS TO BECOME SMALL ECOSYSTEMS.
3. THE LOW FLOW CONCRETE CHANNEL PREVENTS STORMWATER RUNOFF FROM INFILTRATING AND CAN PROVIDE MOSQUITO BREEDING HABITAT IF PROPER MAINTENANCE IS NOT PERFORMED TO REMOVE ACCUMULATED SEDIMENT. REMOVING THE LOW FLOW CONCRETE CHANNEL AND REPLACING IT WITH A NATURAL STONE CHANNEL AND AN INFILTRATION BED IT MAXIMIZES THE POTENTIAL FOR GROUNDWATER RECHARGE AND TREATMENT OF THE STORMWATER AND ELIMINATES THE POTENTIAL CREATION OF MOSQUITO BREEDING HABITAT DUE TO UNMAINTAINED LOW FLOW CHANNELS.
4. DURING A SITE VISIT TO THE BASINS, THE BASIN NEAR JAMIE DRIVE WAS SEEN WITH FLOWING WATER COMING OUT OF ONE OF THE INLET PIPES YET IT HAD NOT RAINED FOR OVER THREE DAYS. RCE RECOMMENDS THAT WITH THE NATURALIZATION OF THESE BASINS, AN INVESTIGATION IN WHERE THE FLOWING WATER IS COMING FROM OCCUR AS WELL.

SUGGESTED PLANT LIST

PLANT NAME	SCIENTIFIC NAME
CARDINAL FLOWER	LOBELIA CARDINALIS
SOFT RUSH	JUNCUS EFFUSUS
FRINGED SEDGE	CAREX CRINITA
TUSsock SEDGE	CAREX STRICTA
FOX SEDGE	CAREX VULPINOIDEA
VIRGINIA WILD-RYE	ELYMUS VIRGINICUS
SWITCHGRASS	PANICUM VIRGATUM
WOOL GRASS	SCIRPUS CYPERINUS
FLOWERING DOGWOOD	CORNUS FLORIDA
RIVER BIRCH	BETULA NIGRA

VEGETATION FOR THE SIDE SLOPE AND BOTTOM OF THE SWALE SHALL BE SEEDED WITH "RETENTION BASIN FLOOR SEEDING LOW MAINTENANCE GRASS-LIKE SPECIES" FROM ERNST CONSERVATION SEEDS.

CHRISTOPHER C. OBROPTA, Ph.D., P.E.  
PROFESSIONAL ENGINEER - NJ LICENSE # 37632

DESIGNED BY: SPW CCO  
CHECKED BY: CCO  
APPROVED BY: CCO

MILESTONE 4 OF REGIONAL STORMWATER MANAGEMENT PLAN FOR THE POMPESTON CREEK  
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
MILL STREET, MOORSETOWN, NJ  
DETENTION BASIN RETROFIT

RUTGERS  
New Jersey Agricultural Experiment Station  
WATER RESOURCES PROGRAM  
14 COLLEGE FARM ROAD  
NEW BRUNSWICK, NJ 08901

JOB NO.	CONCEPT SHEET #
POMP	6
NO.	TOTAL
6	12

DRAFT