

THREE BRIDGES ELEMENTARY SCHOOL

DETENTION BASIN NATURALIZATION PROJECT
480 MAIN STREET, READINGTON TOWNSHIP
HUNTERDON COUNTY, NEW JERSEY
BLOCK: 4204 LOT: 5

PROJECT DESCRIPTION:

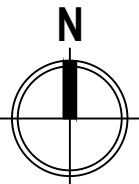
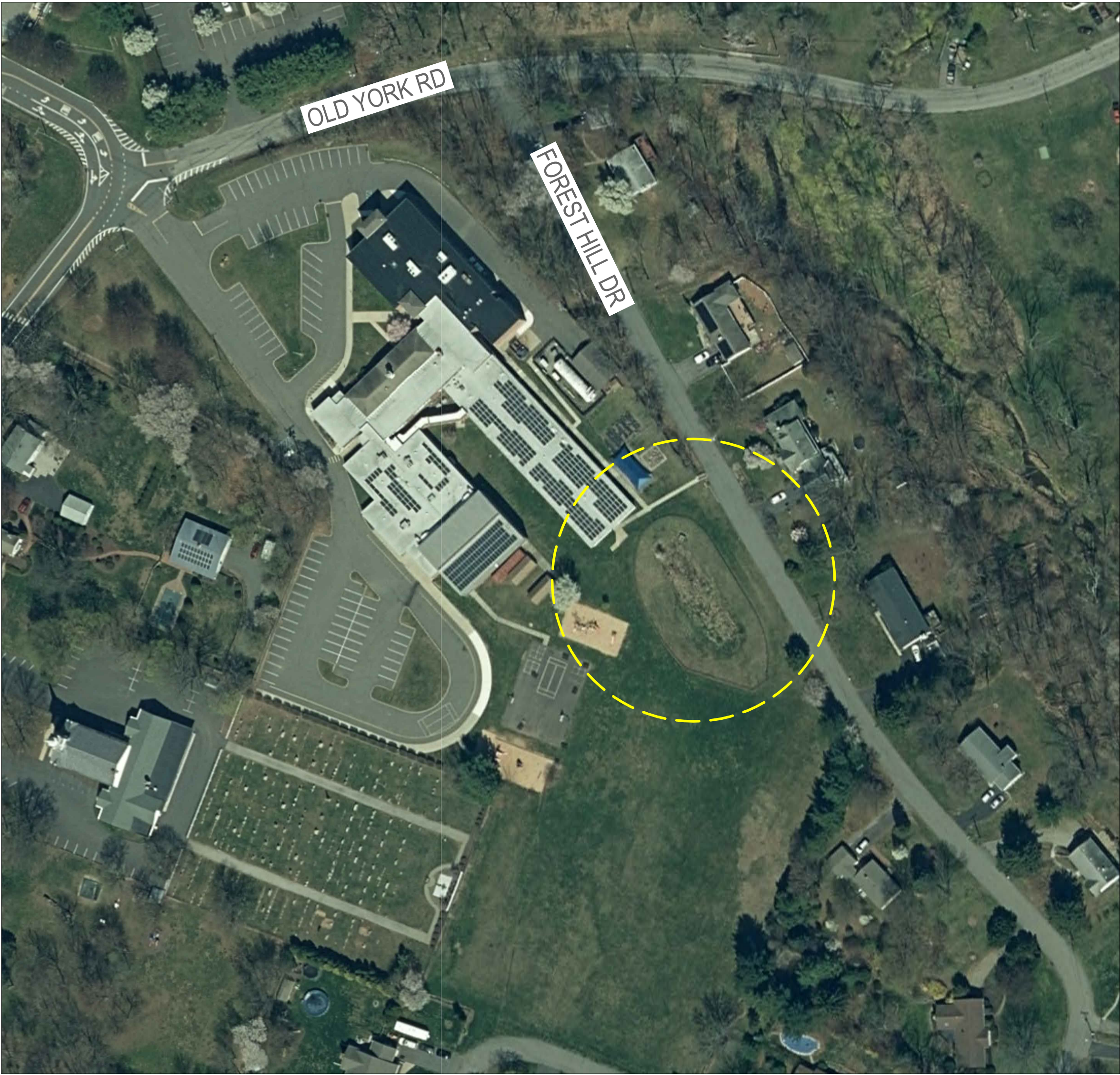
THE DETENTION BASIN AT THE SITE WILL BE CONVERTED INTO A NATURALIZED BASIN TO INCREASE BIORETENTION, TO ENHANCE ECOLOGICAL VALUE OF THE EXISTING STORMWATER MANAGEMENT SYSTEM, AND TO PROVIDE AN EDUCATIONAL OPPORTUNITY FOR THE COMMUNITY. A 4,000 SQUARE FOOT SECTION OF MAINTAINED TURF GRASS IS TO BE CONVERTED TO NATIVE HERBACEOUS PERENNIAL VEGETATION. THE PROCESS OF CONVERTING THE AREA WILL INCLUDE THE REMOVAL OF EXISTING VEGETATION THROUGH SMOTHERING AND SOLARIZATION AND THE NATURALIZATION OF VEGETATION. THE PLANTED AREA WILL BE MAINTAINED TWICE YEARLY TO ELIMINATE WOODY VEGETATION AND MAINTAIN THE AREA AS A MEADOW PLANT COMMUNITY.

FUTURE MODIFICATIONS MAY BE MADE TO THE OUTLET STRUCTURE TO FURTHER ENHANCE INFILTRATION POTENTIAL. HYDROLOGIC AND HYDRAULIC CALCULATIONS WOULD BE NEEDED TO ENSURE MINIMAL IMPACTS TO THE BASINS OVERALL FUNCTION AND TO ENSURE THE BASIN CAN DRAIN IN A SUITABLE TIME PERIOD TO AVOID STANDING WATER ISSUES.

LIST OF DRAWINGS:

SHEET NAME	TITLE
COVER	COVER SHEET
P-1	EXISTING CONDITIONS AND DEMOLITION PLAN
P-2	PROPOSED SITE PLAN
P-3	PLANTING PLAN
DT-1	SOLARIZATION AND PLANTING DETAILS

LOCATION MAP (N.T.S):



LEGEND:

EXISTING DRAINAGE AREA

EDGE OF PAVEMENT

EXISTING CENTERLINE

EXISTING FENCE

EXISTING TREELINE

EXISTING TREE/SHRUB

EXISTING BUILDING

EXISTING UTILITY POLE

EXISTING LIGHT POLE

EXISTING CATCH BASIN

EXISTING CONTOURS

EXISTING SPOT ELEVATIONS

LIMIT OF WORK

PROPERTY LINES

PROPOSED GREEN INFRASTRUCTURE

PROPOSED CONTOURS

PROPOSED SPOT ELEVATIONS

SPOT ELEVATION CODES:
BL - BUILDING LINE
CB - CATCH BASIN
EP - EDGE OF PAVEMENT
F - FENCE

GS - GROUND SHOT
MH - MANHOLE
SW - SIDEWALK
UP - UTILITY POLE

SPOT ELEVATION CODES:
G - GROUND SHOT
TOB - TOP OF BERM

CH - SWALE CHANNEL
TC - TOP OF CURB

GENERAL NOTES:

1.

SURVEY CONDUCTED BY RUTGERS COOPERATIVE EXTENSION WATER RESOURCES PROGRAM. ALL ELEVATIONS ARE RELATIVE TO THE 100.00' BENCHMARK POINT.

2.

EXISTING SOILS ARE PENN CHANNERY SILT LOAM WHICH ARE CLASSIFIED AS HYDROLOGIC SOIL GROUP C WHICH HAVE LOW INFILTRATION RATES. DEPTH TO LITHIC BEDROCK IS ESTIMATED AT 20 TO 39 INCHES BASED ON THE NRCS WEB SOIL SURVEY (websoilsurvey.sc.egov.usda.gov)

3.

ANY OVERHEAD AND UNDERGROUND UTILITIES SHOWN ARE FROM FIELD OBSERVATIONS AND ARE NOT A COMPLETE REPRESENTATION. A UTILITY MARKOUT NEEDS TO BE CONDUCTED PRIOR TO MOBILIZATION BY THOSE RESPONSIBLE FOR EXCAVATION. NJ ONE CALL: 811 OR 800-272-1000

PLAN REVISIONS		
REV. DATE	REV. SUMMARY	REV. SHEETS
6/16/2022	Rev. per 5/19/22 & 5/23/22 comments.	COVER, P1-4, DT-1
6/22/2022	REV. PER COMMENTS	COVER, P1-4, DT-1

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HUNTERDON COUNTY, NJ

14 COLLEGE FARM ROAD, NEW BRUNSWICK, NJ

CHRISTOPHER C. OBROPTA, Ph.D., P.E.
PROFESSIONAL ENGINEER - NJ LICENSE # 37532

DATE 06/22/2022

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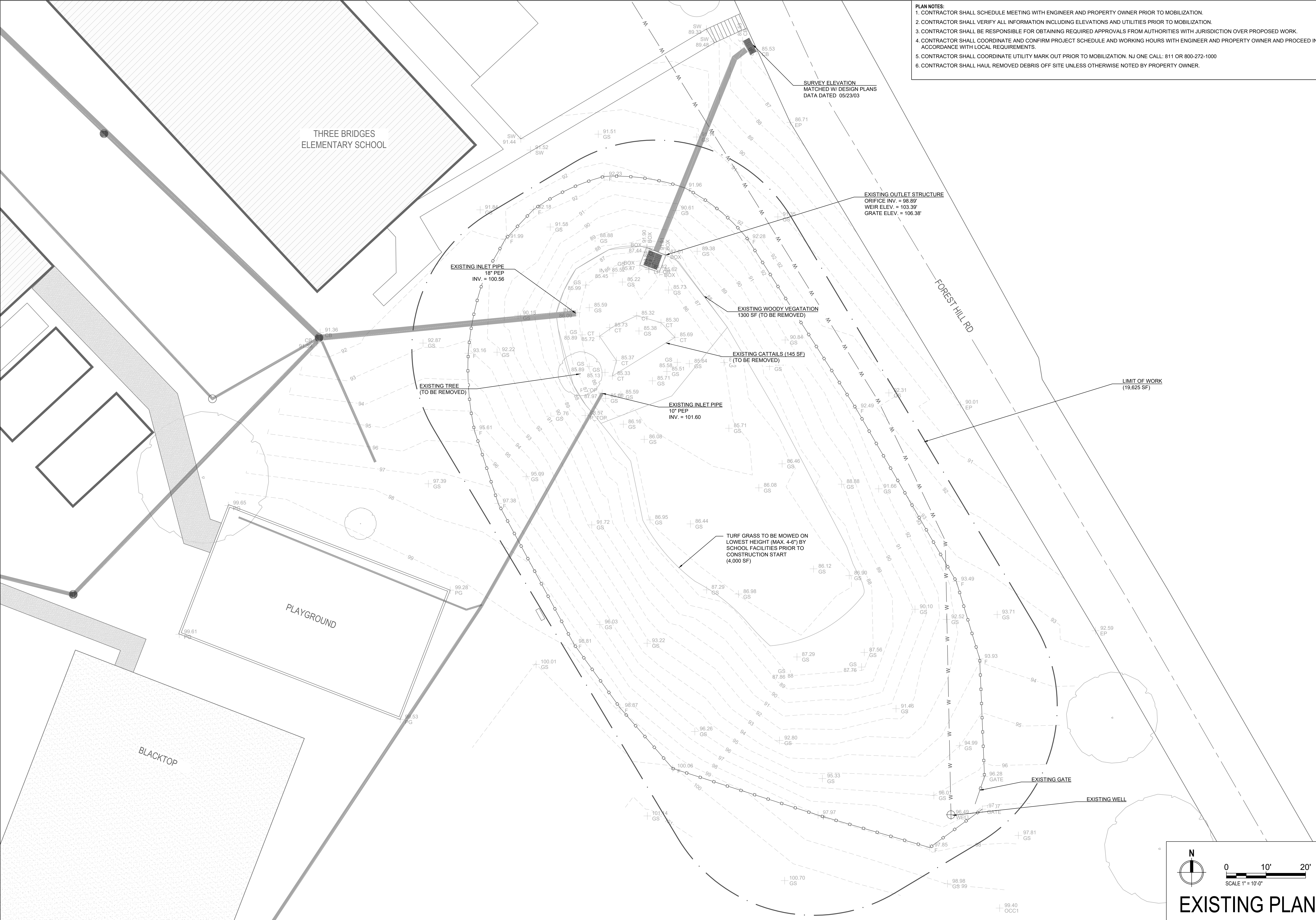
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DATE
06/22/2022

SHEET NAME

COVER



- PLAN NOTES:**
1. CONTRACTOR SHALL SCHEDULE MEETING WITH ENGINEER AND PROPERTY OWNER PRIOR TO MOBILIZATION.
 2. CONTRACTOR SHALL VERIFY ALL INFORMATION INCLUDING ELEVATIONS AND UTILITIES PRIOR TO MOBILIZATION.
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING REQUIRED APPROVALS FROM AUTHORITIES WITH JURISDICTION OVER PROPOSED WORK.
 4. CONTRACTOR SHALL COORDINATE AND CONFIRM PROJECT SCHEDULE AND WORKING HOURS WITH ENGINEER AND PROPERTY OWNER AND PROCEED IN ACCORDANCE WITH LOCAL REQUIREMENTS.
 5. CONTRACTOR SHALL COORDINATE UTILITY MARK OUT PRIOR TO MOBILIZATION. NJ ONE CALL: 811 OR 800-272-1000
 6. CONTRACTOR SHALL HAUL REMOVED DEBRIS OFF SITE UNLESS OTHERWISE NOTED BY PROPERTY OWNER.

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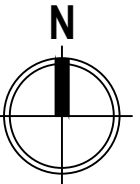


RUTGERS
New Jersey Agricultural
Experiment Station

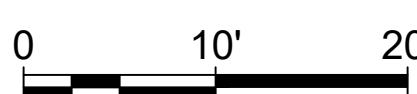
14 COLLEGE FARM ROAD, NEW BRUNSWICK, NJ

SHEET NAME
P-1

EXISTING CONDITIONS AND DEMOLITION PLAN



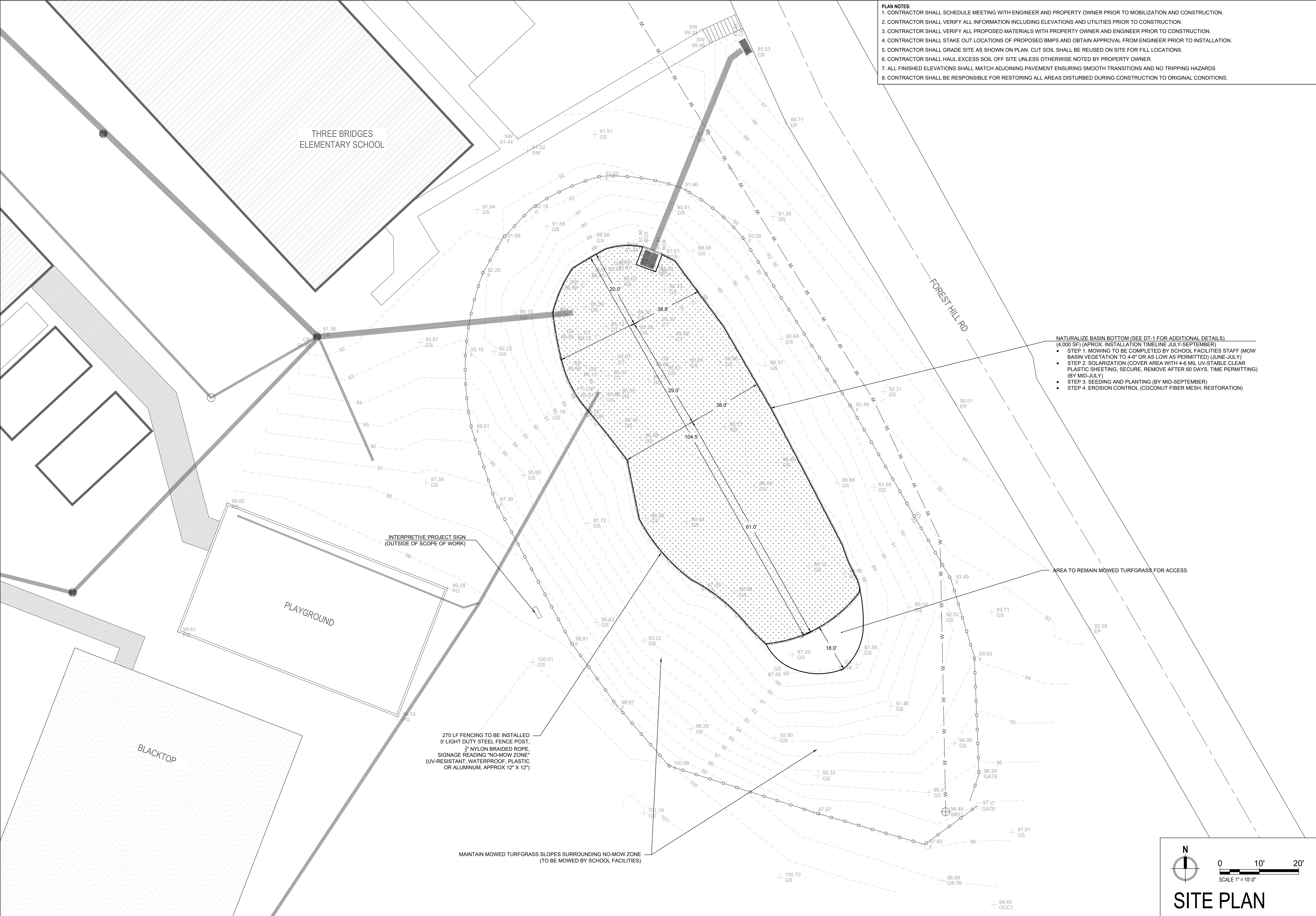
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0 10' 20'

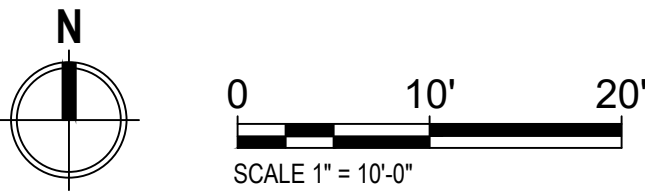
SCALE 1" = 10'-0"

EXISTING PLAN



- PLAN NOTES:**
1. CONTRACTOR SHALL SCHEDULE MEETING WITH ENGINEER AND PROPERTY OWNER PRIOR TO MOBILIZATION AND CONSTRUCTION.
 2. CONTRACTOR SHALL VERIFY ALL INFORMATION INCLUDING ELEVATIONS AND UTILITIES PRIOR TO CONSTRUCTION.
 3. CONTRACTOR SHALL VERIFY ALL PROPOSED MATERIALS WITH PROPERTY OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
 4. CONTRACTOR SHALL STAKE OUT LOCATIONS OF PROPOSED BMPs AND OBTAIN APPROVAL FROM ENGINEER PRIOR TO INSTALLATION.
 5. CONTRACTOR SHALL GRADE SITE AS SHOWN ON PLAN. CUT SOIL SHALL BE REUSED ON SITE FOR FILL LOCATIONS.
 6. CONTRACTOR SHALL HAUL EXCESS SOIL OFF SITE UNLESS OTHERWISE NOTED BY PROPERTY OWNER.
 7. ALL FINISHED ELEVATIONS SHALL MATCH ADJOINING PAVEMENT ENSURING SMOOTH TRANSITIONS AND NO TRIPPING HAZARDS
 8. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL AREAS DISTURBED DURING CONSTRUCTION TO ORIGINAL CONDITIONS.

- NATURALIZE BASIN BOTTOM (SEE DT-1 FOR ADDITIONAL DETAILS)**
(4,000 SF) (APPROX. INSTALLATION TIMELINE JULY-SEPTEMBER)
- STEP 1: MOWING TO BE COMPLETED BY SCHOOL FACILITIES STAFF (MOW BASIN VEGETATION TO 4-6" OR AS LOW AS PERMITTED) (JUNE-JULY)
 - STEP 2: SOLARIZATION (COVER AREA WITH 4-6 MIL UV-STABLE CLEAR PLASTIC SHEETING, SECURE, REMOVE AFTER 60 DAYS, TIME PERMITTING) (BY MID-JULY)
 - STEP 3: SEEDING AND PLANTING (BY MID-SEPTEMBER)
 - STEP 4: EROSION CONTROL (COCONUT FIBER MESH, RESTORATION)



SITE PLAN

CHRISTOPHER C. OBROPTA, Ph.D., P.E.
PROFESSIONAL ENGINEER - NJ LICENSE # 37532

Christopher C. Obropta

DRAWN: MAL, CHECKED: CP, APPROVED: COO, DATE: 06/22/2022

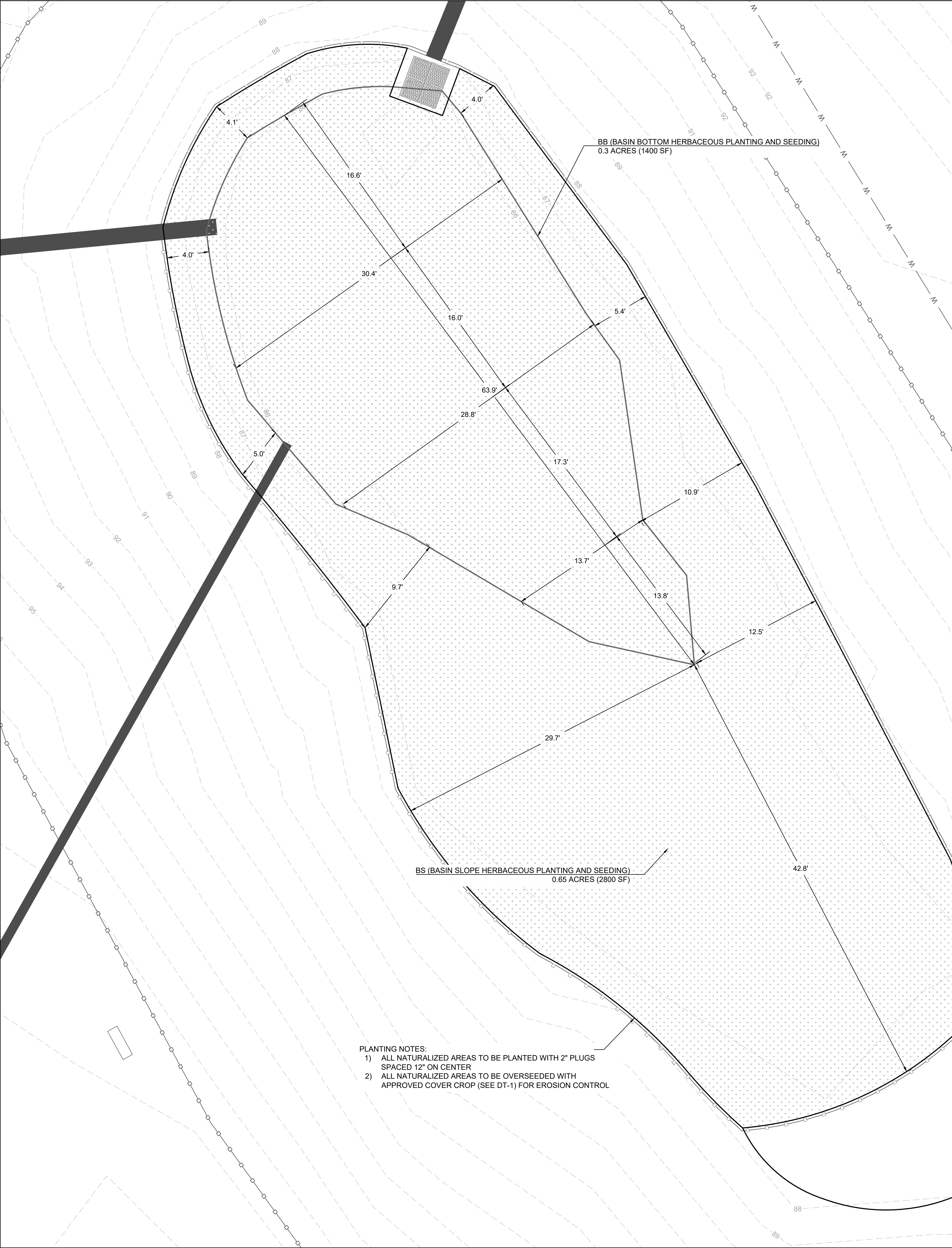
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RUTGERS
New Jersey Agricultural
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14 COLLEGE FARM ROAD, NEW BRUNSWICK, NJ



- PLANTING NOTES:
- 1) ALL NATURALIZED AREAS TO BE PLANTED WITH 2" PLUGS SPACED 12" ON CENTER
 - 2) ALL NATURALIZED AREAS TO BE OVERSEEDED WITH APPROVED COVER CROP (SEE DT-1) FOR EROSION CONTROL

PLANTING SCHEDULE					
PLANT SPECIES				QUANTITY	SIZE
TYPE	KEY	BOTANICAL NAME	COMMON NAME		
DETENTION BASIN NATURALIZATION					
PERENNIALS	BB	<i>Asclepias incarnata</i>	SWAMP MILKWEED	100	2" PLUG
	BS	<i>Clamagrostis canadensis</i>	BLUEJOINT GRASS	100	2" PLUG
	BB	<i>Carex crinita</i>	FRINGED SEDGE	100	2" PLUG
	BB	<i>Carex stricta</i>	TUSSOCK SEDGE	150	2" PLUG
	BS	<i>Conoclinium coelestinum</i>	BLUE MISTFLOWER	100	2" PLUG
	BS	<i>Elymus virginicus</i>	VIRGINIA WILD-RYE	150	2" PLUG
	BB	<i>Eupatorium purpureum</i>	PURPLE JOE-PYE	100	2" PLUG
	BS	<i>Helenium autumnale</i>	COMMON SNEEZEWEED	150	2" PLUG
	BB	<i>Iris versicolor</i>	BLUEFLAG IRIS	150	2" PLUG
	BB	<i>Juncus effesus</i>	SOFT RUSH	150	2" PLUG
	BS	<i>Liatris spicata</i>	DENSE BLAZING STAR	100	2" PLUG
	BS	<i>Monarda didyma</i>	SCARLET BEEBALM	100	2" PLUG
	BS	<i>Monarda fistulosa</i>	WILD BERGAMOT	100	2" PLUG
	BB	<i>Schoenoplectus atrovirens</i>	GREEN BULRUSH	100	2" PLUG
	BB	<i>Solidago sempervirens</i>	SEASIDE GOLDENROD	100	2" PLUG
	BS	<i>Symphyotrichum novae-angliae</i>	NEW ENGLAND ASTER	100	2" PLUG
	BS	<i>Verbena hastata</i>	BLUE VERVAIN	50	2" PLUG
	BB	<i>Vernonia noveboracensis</i>	NEW YORK IRONWEED	50	2" PLUG
BS	<i>Zizia aurea</i>	GOLDEN ALEXANDER	50	2" PLUG	
SEED	BB	<i>Basin Bottom Mix</i>	PINELANDS NURSERY (OR APPROVED EQUIVALENT)	APPLICATION RATE: 15 LB/ACRE (4.5 lb)	
	BS	<i>Basin Slope Mix</i>	PINELANDS NURSERY (OR APPROVED EQUIVALENT)	APPLICATION RATE: 20 LB/ACRE (9.75 lb)	

N

05'10'

SCALE 1" = 5'-0"

PLANTING PLAN

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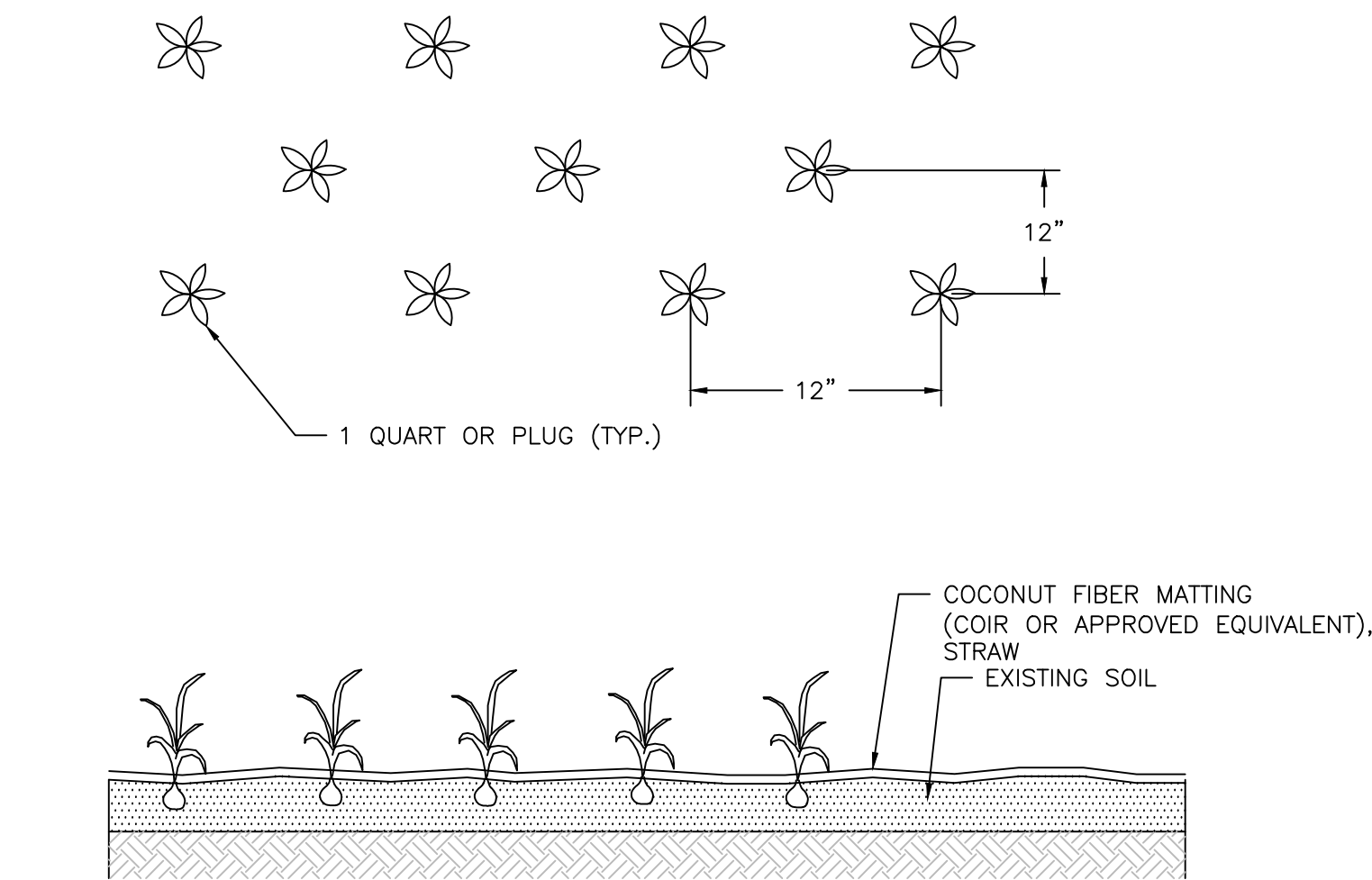
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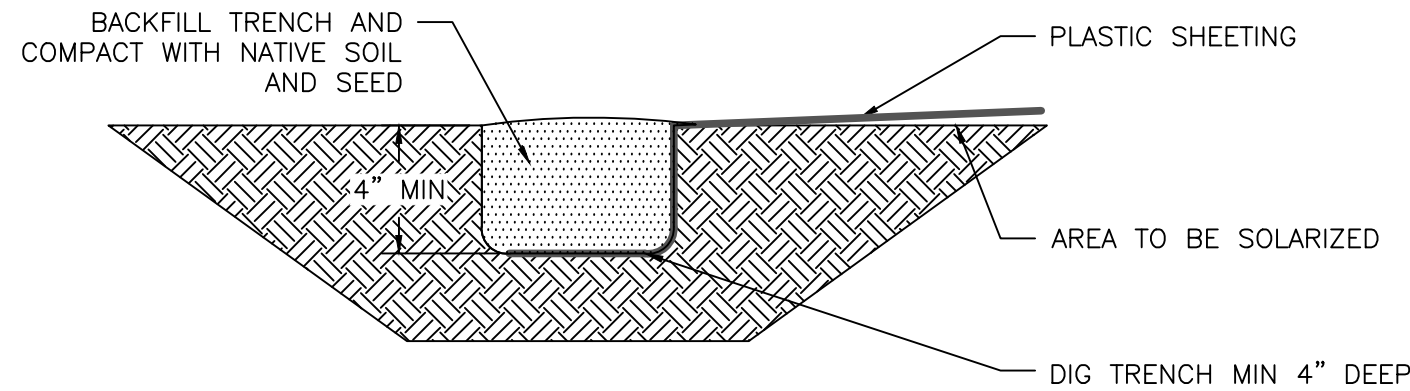
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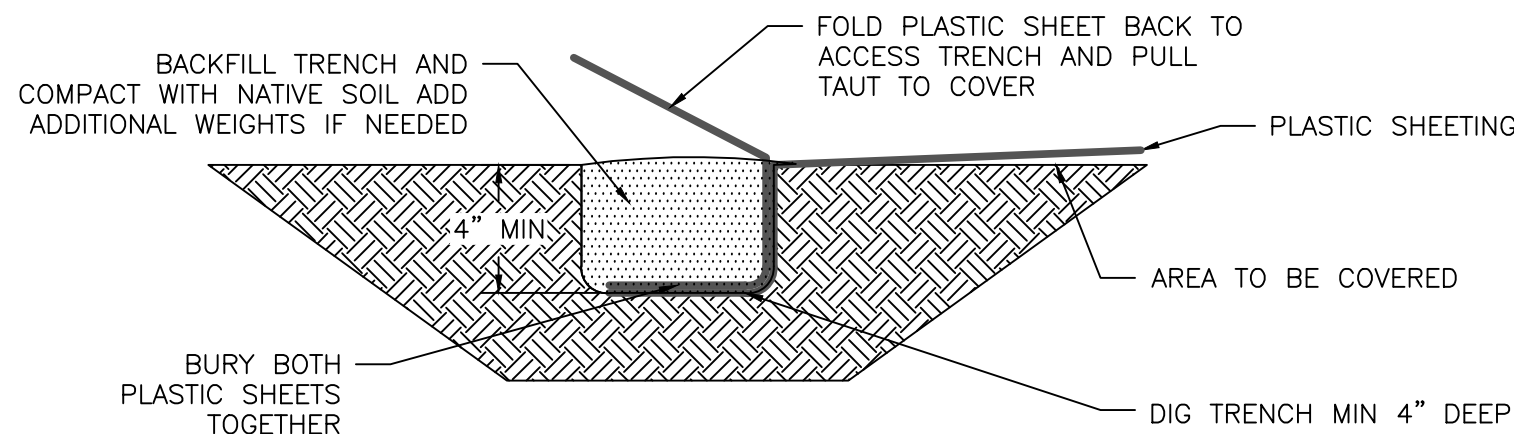
P-3



1 HERBACEOUS PLUG PLANTING DETAIL
DT-1 N.T.S.



2 PLASTIC SHEETING EDGE TRENCH DETAIL
DT-1 N.T.S.



3 PLASTIC SHEETING SEAM TRENCH DETAIL
DT-1 N.T.S.

GENERAL CONSTRUCTION NOTES:

1. REFER TO SITE PLAN FOR ALL ELEVATIONS, INVERTS, DIMENSIONS, AND SHAPE OF THE PROJECT.
2. ALL WORK MUST MEET THE STANDARDS OF THE ENGINEER BEFORE PAYMENT. ADDITIONAL WORK AND TESTING WILL BE NECESSARY IF STANDARDS ARE NOT SUFFICED.
3. THE APPROVAL OF MATERIALS SHALL BE DONE BY THE PROJECT ENGINEER/LANDSCAPE ARCHITECT.
4. THE CONTRACTOR SHALL HAVE A PRE-CONSTRUCTION MEETING WITH THE PROJECT ENGINEER PRIOR TO ANY WORK ON SITE.
5. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PRIOR TO MOBILIZATION INCLUDING ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY FIELD CONDITIONS DIFFER MATERIALLY FROM THOSE REPRESENTED ON THESE DRAWINGS AND THE SPECIFICATIONS OR IF, IN THE CONTRACTOR'S OPINION, SAID CONDITIONS CONFLICT WITH THE DESIGNS SHOWN HEREON.
7. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019 OR LATEST VERSION.
8. THE CONTRACTOR SHALL AVOID DISTURBING EXISTING AREAS OUTSIDE SPECIFIED LIMIT OF WORK. ANY DISTURBANCE TO SIDEWALKS, LANDSCAPED VEGETATION, AND TREES MUST BE COORDINATED WITH THE PROPERTY OWNER.
9. THE CONTRACTOR IS TO RESTORE ALL DISTURBED AREAS OUTSIDE PROPOSED CHANGES TO ORIGINAL CONDITIONS AFTER INSTALLATION.
10. THE CONTRACTOR SHALL HAVE ALL UTILITIES MARKED BEFORE ANY EXCAVATION. IF ANY UTILITIES INTERFERE WITH THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
11. THE CONTRACTOR SHALL ESTABLISH ALL ELEVATIONS AND LINES AS SHOWN IN THE SITE PLAN FOR REVIEW BY THE ENGINEER BEFORE ANY CONSTRUCTION BEGINS.
12. THE CONTRACTOR SHALL AVOID OVER COMPACTING THE EXISTING MATERIALS IN ORDER TO AVOID POOR INFILTRATION OR SHORT LIFETIME OF THE SYSTEM.
13. THE CONTRACTOR SHALL VERIFY THAT THE SUBGRADE IS CONSISTENT WITH LINE, GRADE, AND ELEVATIONS AS INDICATED IN THE SITE PLAN. ANY AREAS SHOWING EROSION OR POTENTIAL PONDING SHALL BE REGRADED BEFORE SUBBASE INSTALLATION.
14. THE CONTRACTOR SHALL DISCUSS ANY MODIFICATIONS TO THE PROJECT WITH THE ENGINEER AND PROPERTY OWNER BEFORE ACTION IS TAKEN.
15. THE CONTRACTOR SHALL EXCAVATE TO THE ELEVATIONS ON THE SITE PLAN AND DISPOSE OF ANY EXCESS MATERIALS.

DETENTION BASIN RETROFIT NATURALIZATION CONSTRUCTION NOTES:

1. SOLARIZATION PROCEDURE (ADAPTED FROM: XERCES SOCIETY FOR INVERTEBRATE CONSERVATION "ORGANIC SITE PREPARATION FOR WILDFLOWER ESTABLISHMENT")
 - 1.A. SOLARIZATION PROCEDURE SHALL START IN EARLY TO LATE SPRING (APPROX. MID-JUNE) AND CONTINUE THROUGH AT LEAST EARLY FALL (APPROX. MID-SEPTEMBER).
 - 1.B. MOW SITE TO 4-6" OR ON LOWEST SETTING AND REMOVE ALL WOODY VEGETATION PRIOR TO LAYING PLASTIC.
 - 1.C. DIG TRENCH AT LEAST 4" DEEP AROUND PERIMETER OF THE AREA TO BE COVERED IN PLASTIC
 - 1.D. REMOVE ANY OBJECTS OR ROCKS THAT MAY PUNCTURE THE PLASTIC
 - 1.E. SOIL SHOULD NOT BE DRY, WATER THE SITE IF SOIL IS EXCESSIVELY DRY.
 - 1.F. LAY 4-6 MIL UV-STABLE CLEAR PLASTIC (USED HIGH TUNNEL PLASTIC SUITABLE IF AVAILABLE) TAUT
 - 1.G. PLACE EDGE OF PLASTIC SHEET IN TRENCH (STEP 1.C.) AND PLACE SHEETING EDGES INTO TRENCH TO PREVENT AIRFLOW BETWEEN THE PLASTIC AND GROUND. WEIGH DOWN PLASTIC AS NEEDED TO PREVENT WIND LIFT TEMPORARILY.
 - 1.H. BACKFILL TRENCH AND COMPACT SOIL TO PREVENT AIRFLOW BETWEEN THE PLASTIC AND GROUND.
 - 1.I. SEED ALL EXPOSED SOIL WITH QUICK GROWING ANNUAL COVER CROP SEED (GRAIN OATS, GRAIN RYE, ANNUAL RYE, OR APPROVED EQUIVALENT) AT SUPPLIERS RECOMMENDED APPLICATION RATE FOR SOIL EROSION CONTROL
 - 1.J. SEAL SEAMS WITH GREENHOUSE REPAIR TAPE OR BURY ADJOINING SHEETS IN A SINGLE TRENCH.
 - 1.K. INSPECT PLASTIC ONCE EVERY TWO WEEKS FOR RIPS OR PUNCTURES AND USE GREENHOUSE REPAIR TAPE TO PATCH DAMAGE.
 - 1.L. MOW THE PERIMETER OF THE PLASTIC TO CONTROL WEEDS IN SURROUND AREA.
 - 1.M. IN EARLY TO LATE FALL, REMOVE THE PLASTIC CAREFULLY TAKING CARE TO PREVENT ADJACENT WEED SEEDS FROM ENTERING THE AREA. THIS SHOULD BE DONE AS LATE INTO THE SEASON AS POSSIBLE TO AVOID WEEDS ENTERING THE AREA.
 - 1.N. REMOVE ANY REMAINING LIVE PERENNIAL WEEDS BY HAND.
 - 1.O. PROCEED TO PLANTING IN THE FALL.
2. SEEDING
 - 2.A. USE RAKE OR TURF ROLLER TO SMOOTH SEEDING AREA. AVOID DISTURBING ANYTHING BELOW THE FIRST INCH OF SOIL.
 - 2.B. MIX SEED (LISTED IN TABLE ON PAGE P-3) WITH A BROADCASTING SUCH AS COARSE SAND OR VERMICULITE. COMBINE APPROXIMATELY 4 PARTS BROADCASTING AGENT WITH 1 PART SEED.
 - 2.C. BROADCAST SEED AT RATES (TABLE ON PAGE P-3) BY FIRST IN ROWS BACK AND FORTH AND THEN IN PERPENDICULAR ROWS AGAIN TO ENSURE EVEN COVERAGE OF SEEDS.
 - 2.D. BROADCAST COVER CROP SEED (GRAIN OATS, GRAIN RYE, ANNUAL RYE, OR APPROVED EQUIVALENT) AT SUPPLIERS RECOMMENDED APPLICATION RATE, USING THE METHOD DESCRIBED IN 2.C.
 - 2.E. USE A LAWN ROLLER, CULTIPACKER, OR SIMILAR DEVICE TO PUSH THE SEEDS INTO THE SOIL TO ENHANCE SEED-TO-SOIL CONTACT
 - 2.F. APPLY SEED-FREE STRAW FOR SEED PROTECTION.
 - 2.G. INSTALL COIR 400 GRAM COCONUT FIBER MATTING OVER SEEDED AREA AND SECURE WITH LANDSCAPE STAPLES AS REQUIRED.
 - 2.H. PLANT PLUGS IF APPLICABLE THROUGH COIR MATTING MAKING SMALL SLITS WHERE NECESSARY
 - 2.I. WATER PLANTINGS FOLLOWING INSTALLATION

3. MAINTENANCE (TO BE COMPLETED BY PROPERTY OWNER OR DESIGNEE)
 - 3.A. 0-6 WEEKS AFTER INSTALLATION:
 - 3.A.1. RESUME REGULAR MOWING OF THE BASIN SLOPES AND UP TO THE PERIMETER OF THE NATURALIZED AREA
 - 3.A.2. WATER PLANTINGS WEEKLY
 - 3.A.3. CONFIRM THAT THE COVER CROP HAS GERMINATED AND IS PROVIDING EROSION CONTROL
 - 3.A.4. OBSERVE NATURALIZED AREA FOR NON-DESIRABLE AGGRESSIVE WEED GROWTH AND REMOVE IF NECESSARY
 - 3.B. 2-6 MONTHS AFTER INSTALLATION (FIRST WINTER):
 - 3.B.1. CONTINUE TO MONITOR AND REMOVE INVASIVE WEED GROWTH
 - 3.C. 6-12 MONTHS AFTER INSTALLATION (ANNUAL LONG-TERM MAINTENANCE)
 - 3.C.1. RESUME REGULAR MOWING OF THE BASIN SLOPES AND UP TO THE PERIMETER OF THE NATURALIZED AREA
 - 3.C.2. SPRING MAINTENANCE: MOW OR TRIM ALL PLANTED AREAS TO 6-8" HEIGHT, REMOVE LOOSE PLANT MATERIAL, DEBRIS, AND TRASH
 - 3.C.3. ENSURE INLET/OUTLET STRUCTURES ARE CLEAR OF TRASH, PLANT MATERIAL, AND DEBRIS, AND ARE FUNCTIONAL
 - 3.C.4. SUMMER MAINTENANCE: OBSERVE NATURALIZED AREA FOR NON-DESIRABLE AGGRESSIVE WEED GROWTH AND REMOVE IF NECESSARY, REMOVE DEBRIS AND TRASH.
 - 3.C.5. FALL/WINTER MAINTENANCE: REMOVE LOOSE PLANT MATERIAL, DEBRIS, AND TRASH. ALLOW PERENNIAL PLANT MATERIALS TO REMAIN OVER WINTER (REMOVE ONLY IF NECESSARY FOR OUTLET STRUCTURE PERFORMANCE).

PLANTING AND LANDSCAPING CONSTRUCTION NOTES:

1. THE LANDSCAPE ARCHITECT OR ENGINEER SHALL INSPECT ALL PLANTING AREAS BEFORE ANY TOPSOILING OR PLANTING IS BEGUN TO ENSURE THAT ADEQUATE DRAINAGE EXISTS. IF ANY AREAS TO BE LANDSCAPED SHOW EVIDENCE OF POOR DRAINAGE, THE LANDSCAPE ARCHITECT SHALL NOTIFY THE OWNER IMMEDIATELY FOR CORRECTIVE ACTION.
2. THE LANDSCAPE ARCHITECT OR ENGINEER SHALL APPROVE ALL PLANT MATERIAL AND STAKED PLANT LOCATIONS PRIOR TO INSTALLATION.
3. ALL PLANT MATERIALS SHALL CONFIRM TO THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD FOR NURSERY STOCK (LATEST EDITION)
4. ALL PLANT MATERIAL SHALL BE AS SPECIFIED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS AND COMMENTS NOTED ON THE DRAWINGS.
5. SEED ALL TURF LAWN AREAS WITH TURF TYPE FALL FESCUE AND PERENNIAL RYEGRASS BLEND (LOFTS - SUMMER STRESS MIX II OR APPROVED EQUIVALENT). INSTALL AT A RATE OF 350 LBS. PER ACRE PER MANUFACTURERS SPECIFICATIONS.
6. ANY UNDISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN 10 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE REQUIRED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR SHALL BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE SEEDED AND MULCHED WITH A PERMANENT SEED MIXTURE AND MULCH.
7. DIVERSIONS, CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.
8. GRADED AREAS SHALL BE TEMPORARILY SEEDED AND MULCHED IMMEDIATELY FOLLOWING EARTH MOVING PROCEDURES. TEMPORARY SEED SHALL BE ANNUAL RYE GRASS APPLIED AT A RATE OF 3 LBS. PER 1000 SQ. FT.
9. AFTER SEEDING, HAY OR STRAW MULCH MUST BE APPLIED AT A RATE OF AT LEAST 3.0 TONS PER ACRE. MULCH SHALL BE ANCHORED BY EITHER CRIMPING WITH A COULTER IMPLEMENT, OR BY STAPLING BIODEGRADABLE NETTING TO THE SURFACE.
10. SITE PREPARATION TO UPLAND AREAS: APPLY 1 TON OF AGRICULTURAL-GRADE LIMESTONE PER ACRE PLUS 10-20-10 FERTILIZER AT THE RATE OF 500 LB. PER ACRE. WORK IN WHERE POSSIBLE. SEEDING OF DISTURBED UPLAND AREAS (BEYOND LIMITS OF RIPARIAN ENHANCEMENT AREA) TO BE DONE USING MIX OF FINE FESCUE AT 35 LBS/ACRE (PURE LIVE SEED) PLUS PERENNIAL RYEGRASS AT 15 LBS/ACRE (PURE LIVE SEED).
11. ESTABLISH PERMANENT SEEDING AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETE. PERMANENT SEEDING SHALL BE SEED MIXTURE SPECIFIED.
12. NATIVE SHRUBS, TREES, HERBACEOUS PLANTS, AND SEED ARE AVAILABLE AT PINELANDS NURSERY AND SUPPLY, PLEASANT RUN NURSERY, OR PREFERRED SUPPLIER.

CHRISTOPHER C. OBROPTA, Ph.D., P.E.
PROFESSIONAL ENGINEER - NJ LICENSE # 97532

Christopher C. Obropta

DATE 06/22/22

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06/22/2022

PLAN REVISIONS	DESCRIPTION	DATE
No.	1	6/22/2022
ADDED PLASTIC SHEETING DETAILS		

THREE BRIDGES ELEMNTARY SCHOOL
DETENTION BASIN NATURALIZATION PROJECT
480 MAIN STREET, READINGTON TOWNSHIP
HUNTERDON COUNTY, NJ

SOLARIZATION AND PLANTING DETAILS



14 COLLEGE FARM ROAD, NEW BRUNSWICK NJ

SHEET NAME
DT-1