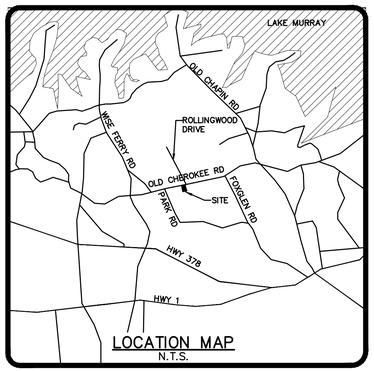
HARMONY HILLS COMMERCIAL DEVELOPMENT
HARMONY HILLS STORAGE
MAJOR MODIFICATION 4
COUNTY OF LEXINGTON, SOUTH CAROLINA



LOCATION MAP
N.T.S.

PREPARED BY

HB Engineering
SITE DEVELOPMENT CONSULTANTS

720 OLD CHEROKEE ROAD
LEXINGTON, SOUTH CAROLINA 29072
803-957-7027 FAX 877-728-0808

JUNE 8, 2023

OWNER:	HARMONY HILLS DEVELOPMENT, LLC 955 OLD CHEROKEE ROAD LEXINGTON, SC 29072 PH: 803-359-9545 CONTACT: ROBERT P. WILKINGS, JR. EMAIL: rwilkins@svrealty.com
ENGINEER:	HB ENGINEERING, INC. 720 OLD CHEROKEE ROAD LEXINGTON, SC 29072 PH: 803-957-7027 ext 302 CONTACT: MIKE RAY EMAIL: mikeayhb@gmail.com
TMS#:	004200-09-131
TOTAL AREA:	11.0 AC.
DISTURBED AREA:	4.8 AC.

DRAWING INDEX

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Applicant's Certification

"I (We) hereby certify that all clearing, grading, construction, and/or development will be done pursuant to this plan and I (we) are responsible for the land disturbance and related maintenance thereof. Lexington County authorities will be allowed to enter the project site for the purpose of on-site inspections.

2/16/22
Date

Owner/Person Financially Responsible

Designer's Certification

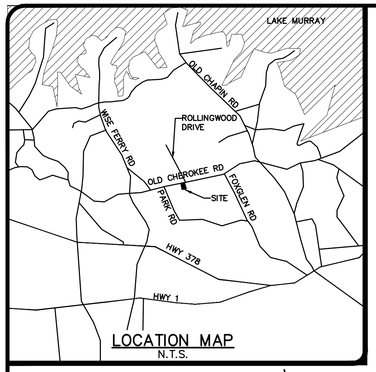
"I hereby certify that this plan is designed to contain soil on the property concerned to the maximum extent, to provide for the protection of the property and the proposed improvements thereon from the effects of flooding, to provide for the control of the runoff from the property, and that all the provisions for sediment control and storm drainage are in accordance with the Stormwater Management and Sediment Control Ordinance for Lexington County, South Carolina."

2/16/22
Date

Signature

23546
S.C. Registration Number (Professional Engineer)

19147



LOCATION MAP
N.T.S.

LINE NO.	LENGTH	BEARING
L1	19.23	S29°55'3"E
L2	19.65	S14°35'7"W
L3	28.31	S29°54'32"E
L4	25.81	S29°54'32"E
L5	30.28	S57°21'16"E
L6	11.35	S30°13'51"E
L7	6.28	N39°53'33"W
L8	56.55	N39°53'33"W
L9	2.82	N65°45'19"W
L10	21.19	N34°26'14"W
L11	25.13	N34°26'14"W
L12	18.74	N39°53'33"W
L13	15.70	N64°45'58"E
L14	12.80	N15°18'37"W
L15	60.91	N15°18'37"W
L16	23.17	N64°45'58"E
L17	29.85	S65°45'19"E
L18	26.37	N23°38'9"W
L19	24.79	N24°32'27"W

NOTES:

1) HARMONY HILLS STORAGE, 2.163 ACRES TOTAL, 9 COMMERCIAL LOTS CONTAINING 2.010 ACRES AND 0.153 ACRE RESERVED AREA.
2) THE WATER PROVIDER IS JOINT MUNICIPAL WATER AND SEWER COMISSION, PO BOX 2555, LEXINGTON, SC 29071 (803) 785-3234
3) SEWER PROVIDER IS THE TOWN OF LEXINGTON, 111 MAIDEN LANE, LEXINGTON, SC 29072 803-951-4646
4) A GENERAL UTILITY EASEMENT IS RESERVED TO THE DEVELOPER 10' ALONG ROAD RIGHT OF WAY LINES, REAR PROPERTY LINES, AND EXTERIOR PROPERTY LINES, AND 5' EITHER SIDE OF INTERIOR LOT LINES.
5) LEXINGTON COUNTY MINIMUM BUILDING SETBACKS ARE 10' ALONG ROAD RIGHTS OF WAY AND 5' ALONG REAR, SIDE AND SUBDIVISION PERIMETER LINES. THE DEVELOPER WAIVES THE INTERIOR SIDE LOT LINE SETBACKS TO 5'. ADDITIONAL SETBACKS MAY BE DEFINED IN DEEDS & RESTRICTIONS.
6) ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM "FLOOD INSURANCE RATE MAP" #45063C0120 J DATED JULY 5, 2018 THE PROPERTY SHOWN HEREON LIES IN AN UNSHADED ZONE "X".
7) LOT CONFIGURATION, ROAD NAMES, EASEMENT LOCATION & WIDTHS TAKEN FROM ENGINEERING PLANS. EASEMENTS ARE APPROXIMATE AS SHOWN AND ARE TO BE CENTERED ON UTILITIES AS CONSTRUCTED.
8) SIDEWALKS SHALL NOT BE MAINTAINED BY LEXINGTON COUNTY OR THE TOWN OF LEXINGTON.
9) REGARDLESS OF MINIMUM BUILDING SETBACKS, NO STRUCTURE OR RELATED MECHANICAL EQUIPMENT SHALL ENCROACH UPON ANY DESIGNATED EASEMENT WITHOUT THE EXPRESS WRITTEN CONSENT OF THE EASEMENT HOLDER.
10) STORM DRAINAGE EASEMENTS ARE CENTERED ON THE STORM DRAINAGE FEATURE.
12) CORNERS IN CENTER OF PAVED ACCESS EASEMENT ARE MAGNETIC NAILS, OTHER CORNERS NOT IDENTIFIED ARE NEW 5/8" REBAR.
13) A PORTION OF CURRENT TMS 004200-09-131

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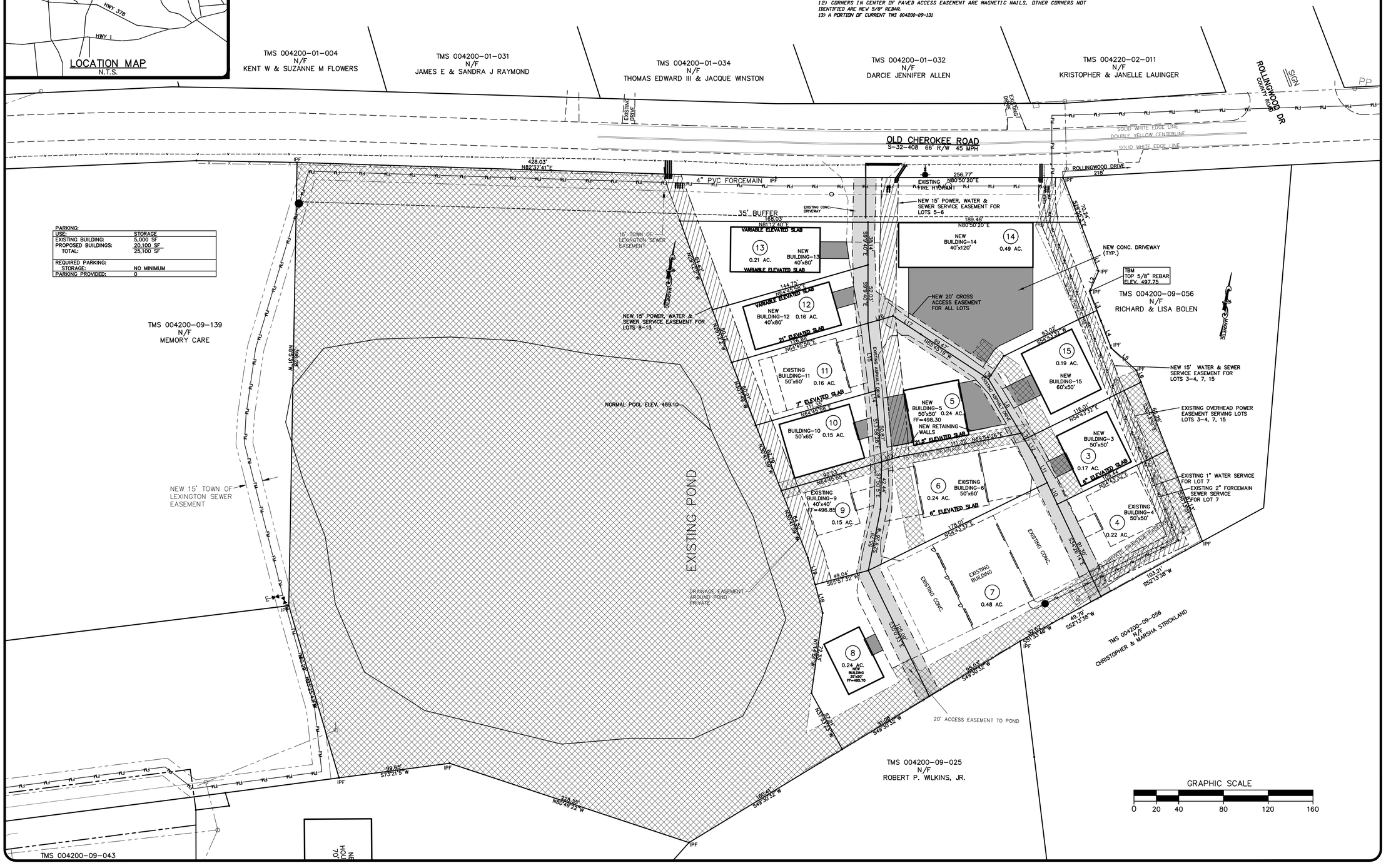

PARKING:	
USE:	STORAGE
EXISTING BUILDING:	5,000 SF
PROPOSED BUILDINGS:	20,100 SF
TOTAL:	25,100 SF
REQUIRED PARKING:	
STORAGE:	NO MINIMUM
PARKING PROVIDED:	0

SOUTH CAROLINA HB ENGINEERING, INC. No. C01663 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 23546 G. MICHAEL RAY

HB Engineering
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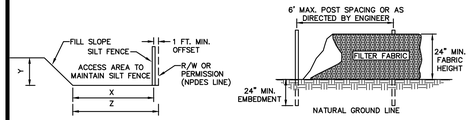
HARMONY HILLS COMMERCIAL DEV.
HARMONY HILLS STORAGE

MAJOR MODIFICATION 4
LEXINGTON COUNTY, SC

No.	Date	Revision

Sheet Title:
SITE PLAN

Drawn by:	MR
Designed by:	MR
Checked by:	MR
Scale:	1"=40'
Project No.	19147
Date:	6/08/2023
Sheet	C1
of	6
Drawing No.	



NOTES:

1. SILT FENCE CHECKS MUST BE LOCATED EVERY 100 FT. MAXIMUM AND AT LOW POINTS. FILTER FABRICS SHALL CONFORM TO SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

2. STEEL POST MAY BE USED. POSTS SHALL BE A MINIMUM OF 5 FEET LONG AND INSTALLED TO A MINIMUM DEPTH OF 24 INCHES WITH NO MORE THAN 3 FEET OF THE POST ABOVE GROUND. AT LEAST 1 TO 2 INCHES OF THE POSTS SHALL EXTEND ABOVE THE TOP OF THE FABRIC. POST SPACING WILL BE A MAXIMUM OF 6 FEET ON CENTER WHICH DOES NOT REQUIRE WIRE BACKING UNLESS DIRECTED BY ENGINEER.

3. STEEL POSTS SHALL BE 5 FEET AND WEIGH A MINIMUM OF 1.25 POUNDS PER FOOT AND HAVE PROJECTIONS FOR FASTENING THE FABRIC TO THE POST. STEEL POSTS SHALL ALSO HAVE A SOIL PLATE WELDED NEAR THE BOTTOM OF THE POST.

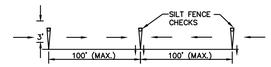
4. SILT SHALL BE REMOVED AND DISPOSED OF WHEN SILT ACCUMULATES TO 1/3 THE HEIGHT OF THE FENCE. MAINTENANCE OF SILT FENCE WILL BE MEASURED AND PAID FOR BY THE ITEM OF SILT BASIN.

5. THE PAY ITEMS SHALL BE: SILT FENCE _____ L.F.
SILT BASIN _____ C.Y.

HEIGHT OF FILL (Y) IN FEET	FILL SLOPE	MINIMUM SILT FENCE OFFSET FROM TOE OF SLOPE (X) IN FEET	MINIMUM RIGHT OF WAY OFFSET FROM TOE OF SLOPE (NPDES LINE) (Z) IN FEET	CHECK LENGTH IN FEET**
<6	2:1 4:1 6:1	2	3	2
6–10	2:1	12*	13*	5
	4:1 6:1	3	4	6
>10	2:1	12*	13*	5
	4:1 6:1	4	5	4

* THESES MINIMUM OFFSETS MAY BE REDUCED WHEN CURB AND GUTTER OR SOME OTHER FEATURE REDUCES THE FLOW OF WATER DOWN THE SLOPE. THE SMALL OFFSETS OF EACH GROUP OF HEIGHT OF FILL CANNOT BE REDUCED.

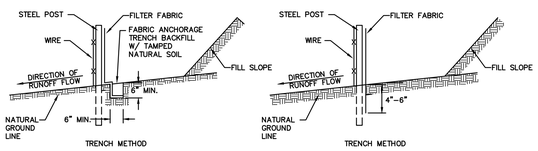
** SILT FENCE CHECKS WILL HAVE A MAXIMUM LENGTH OF FIVE (5) FEET OR UNTIL THEY TIE BACK INTO THE SLOPE.



SILT FENCE CHECKS

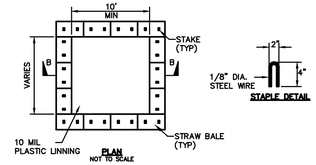
NOTES:
1. TYPICAL SILT FENCE APPLICATIONS REQUIRE 24 INCHES OF THE FABRIC TO BE ABOVE GROUND. WHEN NEEDED, THE HEIGHT OF SILT FENCE FABRIC ABOVE THE GROUND MAY BE GREATER THAN 24". SEE PLANS FOR APPLICATION OF HIGHER SILT FENCE, PAY ITMES AND INSTALLATION METHODS.

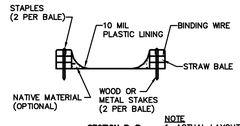
2. IN TIDAL AREAS, SILT FENCE EXTRA HEIGHT MAY BE REQUIRED. THE LENGTH OF POST WILL BE TWICE THE EXPOSED POST HEIGHT MAY BE REQUIRED. THE LENGTH OF POST WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING AND BURIED DEPTHS WILL REMAIN AS SHOWN HEREON. EXTRA HEIGHT FABRIC WILL BE 4, 5, OR 6 FEET TOTAL WIDTH.



NOTE:
THE FABRIC SHALL BE BURIED REGARDLESS, IF PLACED PNEUMATICALLY OR BY HAND WITH A TRENCHER. BOTH METHODS SHOWN HERE ON.

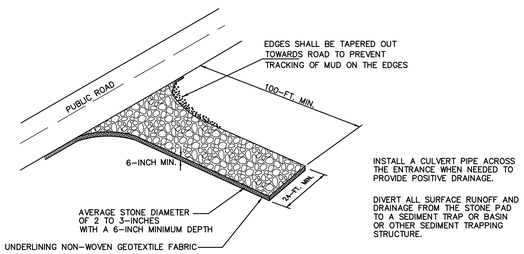
TEMPORARY SILT FENCE
NOT TO SCALE





NOTE
1. ACTUAL LAYOUT DETERMINED IN FIELD.

TEMPORARY CONCRETE WASHOUT
N.T.S.



INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.

DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN OR OTHER SEDIMENT TRAPPING STRUCTURE.

STABILIZED CONSTRUCTION ENTRANCE

When and Where to Use It

Stabilized construction entrances should be used at all points where traffic will be leaving a construction site and moving directly onto a public road.

Important Considerations

If washing is used, provisions must be made to intercept the wash water and trap the sediment before it is corried offsite. Washdown facilities shall be required as directed by SCDHEC as needed. Washdown areas in general must be established with crushed gravel and drain into a sediment trap or sediment basin. Construction entrances should be used in conjunction with the stabilization of construction roads to reduce the amount of mud picked up by vehicles.

Installation:

Remove all vegetation and any objectionable material from the foundation area.

Divert all surface runoff and drainage from stones to a sediment trap or basin.

Install a non-woven geotextile fabric prior to placing any stone.

Install a culvert pipe across the entrance when needed to provide positive drainage.

The entrance shall consist of 1-inch to 3-inch D50 stone placed at a minimum depth of 6-inches.

Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.

The edges of the entrance shall be tapered out towards the road to prevent tracking of mud at the edge of the entrance.

STABILIZED CONSTRUCTION ENTRANCE

Inspection and Maintenance:

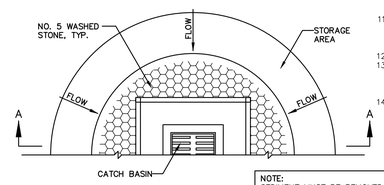
Inspect construction entrances every seven (7) calendar days and within 24-hours after each rainfall event that produces ½-inches or more of precipitation, or after heavy use. Check for mud and sediment buildup and pad integrity. Make daily inspections during periods of wet weather. Maintenance is required more frequently in wet weather conditions. Reshape the stone pad as needed for drainage and runoff control.

Wash or replace stones as needed and as directed by the inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce mud being carried off-site by vehicles. Frequent washing will extend the useful life of stone.

Immediately remove mud and sediment tracked or washed onto public roads by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.

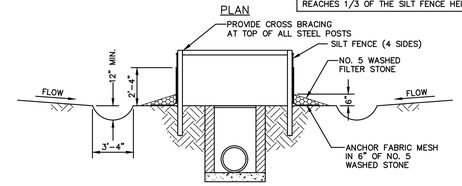
Repair any broken pavement immediately.

TEMPORARY GRAVEL CONSTRUCTION EXIT
NOT TO SCALE



NOTE:
SEDIMENT MUST BE REMOVED WHEN IT REACHES 1/3 OF THE SILT FENCE HEIGHT.

PLAN

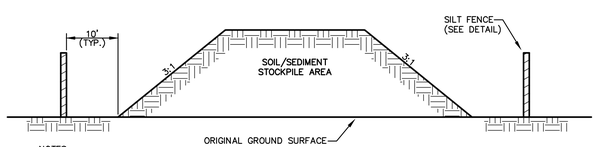


SECTION A–A

NOTES:

1. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
3. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
4. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

TEMPORARY CATCH BASIN INLET PROTECTION
NOT TO SCALE



NOTES:

1. SILT FENCE TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE, OR IF STOCKPILE AREA IS LOCATED ON/NEAR A SLOP THE SILT FENCE IS TO EXTEND ALONG CONTOURS OF THE DOWN GRADIENT AREA.
2. IF STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, TEMPORARY STABILIZATION MEASURES MUST BE IMPLEMENTED.
3. SILT FENCE SHALL BE MAINTAINED UNTIL STOCKPILE AREA HAS EITHER BEEN REMOVE OR PERMANENTLY STABILIZED.
4. THE KEY TO FUNCTIONAL TEMPORARY STOCKPILE AREAS IS WEEKLY INSPECTIONS, ROUTINE MAINTENACE, AND REGULAR SEDIMENT REMOVAL.

TEMPORARY STOCKPILE DETAIL
N.T.S.

Temporary Seeding - Upstate

Species	lbs./ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Browntop Millet (Alone)	40												
Browntop Millet (Mix)	10												
Rye Grain (Alone)	56												
Rye Grain (Mix)	10												
Rye Grass (Alone)	50												
Rye Grass (Mix)	8												
For Steep Slopes/Cut Slopes													
Weeping Lovegrass (Alone)	4												
Weeping Lovegrass (Mix)	2												

NOTES

1. ALL ELEVATIONS ARE BASED ON MEAN SEA LEVEL DATUM.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION OF ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS.
3. THE CONTRACTOR SHALL NOTIFY THE UNDERGROUND UTILITY LOCATION SERVICE AT LEAST 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
4. ALL AREAS DISTURBED BY CONSTRUCTION (NOT COVERED BY PAVEMENT, BUILDINGS OR OTHER STRUCTURES) SHALL BE FINE GRADED AND GRASSED IN ACCORDANCE WITH THE SPECIFICATIONS.
5. ALL SUITABLE EXCESS SOILS EXCLUDING TOP SOIL SHALL BE STOCKPILED AS DIRECTED BY THE ENGINEER AND COMPACTED IN 8" LAYERS TO 90% MAXIMUM DRY DENSITY.
6. TOP SOIL SHALL BE STOCKPILED SEPARATELY AS DIRECTED BY THE ENGINEER.
7. ALL AREAS OF STOCKPILING SHALL HAVE POSITIVE DRAINAGE AND SHALL BE GRASSED PER SPECIFICATIONS.
8. ALL STORM DRAIN PIPING SHALL BE CLASS III UNLESS OTHERWISE NOTED.

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TMS#:	004200–09–131
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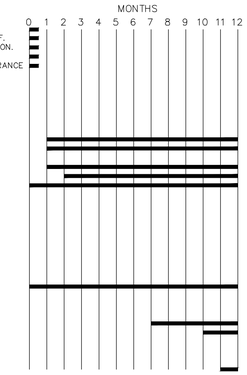
CONSTRUCTION SEQUENCE

1. OBTAIN NPDES COVERAGE FROM LEXINGTON COUNTY AND SCDHEC.
2. SCHEDULE PRE–CONSTRUCTION MEETING WITH LEXINGTON COUNTY STORMWATER STAFF.
3. NOTIFY LEXINGTON COUNTY STORMWATER STAFF 48 PRIOR TO BEGINNING CONSTRUCTION.
4. FLAG INITIAL CLEARING LIMITS.
5. INSTALL AND MAINTAIN SILT FENCES, CONTROL DEVICES, GRAVEL CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
6. CLEAR REMAINED OF DISTURBANCE AREA (AREAS REQUIRING SILTATION MEASURES).
7. LOCATE AREAS FOR STOCKPILING OF TOPSOIL AND EXCAVATED MATERIALS FOR LATER USE AND INSTALL SILT FENCES ON DOWNSLOPES OF THESE AREAS.
8. REMOVE TOPSOIL AND PLACE IN IDENTIFIED AREA (GRADING OPERATIONS).
9. BEGIN BUILDING AND SIDEWALK CONSTRUCTION.
10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
    A) WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OF FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRATICAL.
    B) WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
11. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY (7) DAYS. IF SITE INSPECTIONS IDENTIFY BMPs THAT ARE DAMAGED OR ARE NOT OPERATING EFFECTIVELY, MAINTENANCE MUST BE PERFORMED AS SOON AS PRACTICAL OR AS REASONABLY POSSIBLE.
12. FINAL GRADING, GRASSING AND LANDSCAPING.
13. EROSION CONTROL MEASURES AND SEDIMENTATION TO BE REMOVED AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED.
14. FILE NOT WITH LEXINGTON COUNTY AND SCDHEC ONCE SITE IS STABILIZED.



SEDIMENT AND EROSION CONTROL NOTES:

1. IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
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    B) WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY NINE (9) CALENDAR DAYS. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF INDENTIFICATION.
4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATRUES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN, IN ACCORDANCE WITH S.C REG. 72–300 ET SEQ. AND SCR100000.
8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
9. ALL WATERS OF THE (WoS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50–FOOT BUFFER CANNOT BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WoS. A 10–FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WoS.
10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES FO FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
11. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
12. INITIATE STABILIZATION MEASURES OF ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND –DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING,WHEEL WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPs (SEDIMENT BASIN, FILTER BAG, ETC.).
16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
    – WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
    – WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
    – FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
    – SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY NINE (9) CALENDAR DAYS AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
18. IF EXISTING BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/ OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPs MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
19. A PRE–CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON–SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON–LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON–SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

SEEDING SCHEDULE

FROM MAY 1 – AUGUST 31

1 LB. BROWNTOPMILLET
2 LBS. HULLED BERMUDA
25 LBS. 10–10–10 FERTILIZER
75 LBS. LIMESTONE

OR

1 LB. BROWNTOPMILLET
1 LB. HULLED BERMUDA
*2 LBS. BAHIA GRASS
25 LBS. 10–10–10 FERTILIZER
75 LBS. LIMESTONE

OR

DEEP SANDY SOILS

2 LBS. BROWNTOPMILLET
*3 LBS. BAHIA GRASS
25 LBS. 10–10–10 FERTILIZER
75 LBS. LIMESTONE

FROM SEPT. 1 – APRIL 30

2 LBS. ANNUAL RYE GRASS
1/2 LB. HULLED BERMUDA
1–1/2 LBS. UNHULLED BERMUDA
25 LBS. 10–10–10 FERTILIZER
75 LBS. LIMESTONE

OR

2 LBS. ANNUAL RYE GRASS
1/2 LB. HULLED BERMUDA
1 LB. UNHULLED BERMUDA
*2 LBS. BAHIA GRASS
25 LBS. 10–10–10 FERTILIZER
75 LBS. LIMESTONE

OR

1 LB. ANNUAL RYE GRASS
**3 LBS. FESCUE GRASS
25 LBS. 10–10–10 FERTILIZER
75 LBS. LIMESTONE

OR

DEEP SANDY SOILS

1 LB. UNHULLED BERMUDA
2 LBS. RYE GRASS OR
2 LBS. GRAIN RYE
*2 LBS. BAHIA GRASS
25 LBS. 10–10–10 FERTILIZER
75 LBS. LIMESTONE

ALL QUANTITIES OF GRASS LISTED ABOVE ARE PER 1,000 SQUARE FEET

* AROUND OFFICE BUILDINGS AND WITHIN SUBDIVISIONS, USE 4 TO 6 OUNCES OF CENTIPEDE GRASS IN LIEU OF BAHIA GRASS OR IN COMBINATION WITH BERMUDA GRASS.

** FOR SOILS WITH CLAY SUBSOIL. DO NOT PLANT IN SANDY SOILS.

NOTES:

1. ON ALL VEGETATED SWALES OR DITCHES WITH SIDE SLOPES (CUT OR FILL) STEEPER THAN 2:1 ADD 4 TO 6 OZS. /1,000 SQUARE FEET OF WEEPING LOVE GRASS SEED TO ANY OF THE ABOVE MIXTURES.
2. SWALE AND DITCH BOTTOMS SHOULD BE DOUBLE SEEDED. ALSO ALL SIDE SLOPES STEEPER THAN 2:1 SHALL BE HYDROSEEDED.
3. ALL SLOPES STEEPER THAN 2:1 SHALL BE HYDROSEEDED.
4. GROWTH OF RYE GRASS IN EARLY SPRING MUST BE SUPPRESSED TO PREVENT RYE FROM CHOKING OUT PERMANENT GRASS SUCH AS BERMUDA, BAHIA OR FESCUE.
5. PRIOR TO FINAL INSPECTION DISTURBED AREAS NOT COVERED BY PAVEMENT OR BUILDINGS SHALL HAVE AN ESTABLISHED STAND OF PERMANENT VEGETATION

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION HB ENGINEERING, INC. No. C01663

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 23546 G. MICHAEL RAY

HB Engineering
SITE DEVELOPMENT CONSULTANTS
720 OLD CHEROKEE ROAD
LEXINGTON, SOUTH CAROLINA 29072
803–957–7027 FAX 877–728–0808

HARMONY HILLS COMMERCIAL DEV.
HARMONY HILLS STORAGE

MAJOR MODIFICATION 4
LEXINGTON COUNTY, SC

No.	Date	Revision

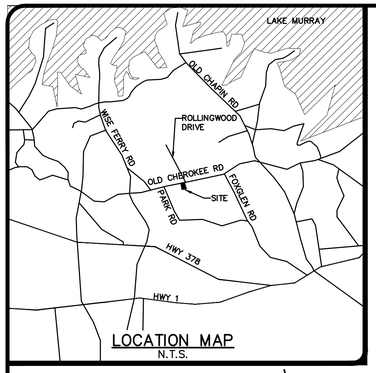
Sheet Title:
NOTES & DETAILS

Drawn by:	MR
Designed by:	MR
Checked by:	MR
Scale:	AS SHOWN
Project No.	19147
Date:	6/08/2023

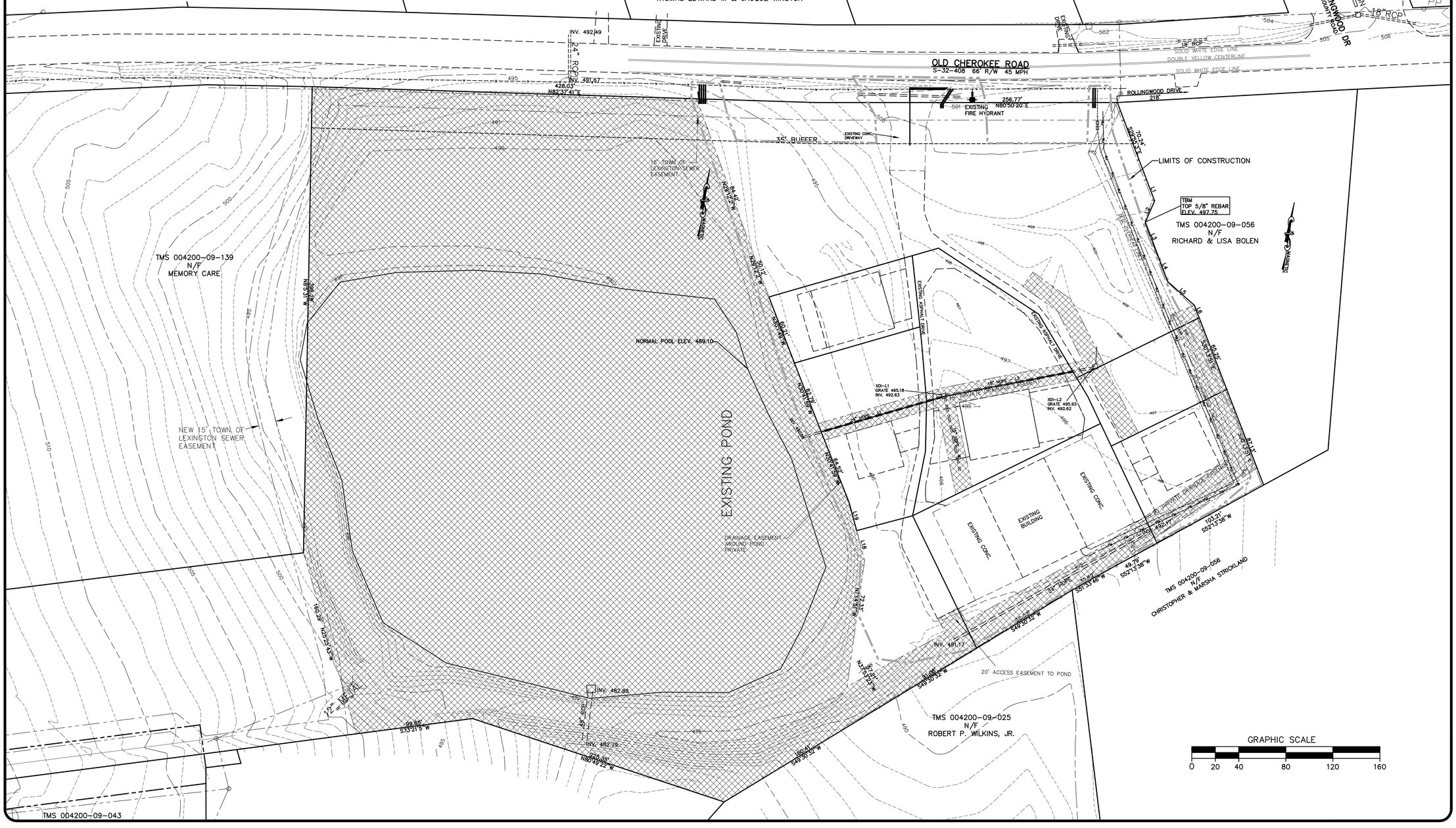
Sheet C2 of 6

Drawing No.

OWNER:	HARMONY HILLS DEVELOPMENT, LLC 955 OLD CHEROKEE ROAD LEXINGTON, SC 29072 PH: 803-359-9545 CONTACT: ROBERT P. WILKINGS, JR. EMAIL: rwilkins@svrealty.com
ENGINEER:	HB ENGINEERING, INC. 720 OLD CHEROKEE ROAD LEXINGTON, SC 29072 PH: 803-957-7027 ext 302 CONTACT: MIKE RAY EMAIL: mikerayhb@gmail.com
TMS#:	004200-09-131
TOTAL AREA:	11.0 AC.
DISTURBED AREA:	4.8 AC.



LOCATION MAP
N.T.S.



HB ENGINEERING, INC.
No. C01663
SOUTH CAROLINA
CERTIFICATE OF AUTHORIZATION

LICENSED PROFESSIONAL ENGINEER
No. 23546
G. MICHAEL RAY
SOUTH CAROLINA

HB Engineering
SITE DEVELOPMENT CONSULTANTS
720 OLD CHEROKEE ROAD
LEXINGTON, SOUTH CAROLINA 29072
803-957-7027 FAX 877-728-0808

HARMONY HILLS COMMERCIAL DEV.
HARMONY HILLS STORAGE
MAJOR MODIFICATION 4
LEXINGTON COUNTY, SC

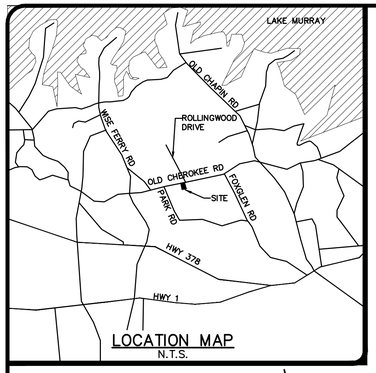
No.	Date	Revision

Sheet Title:
EXISTING CONDITIONS PLAN

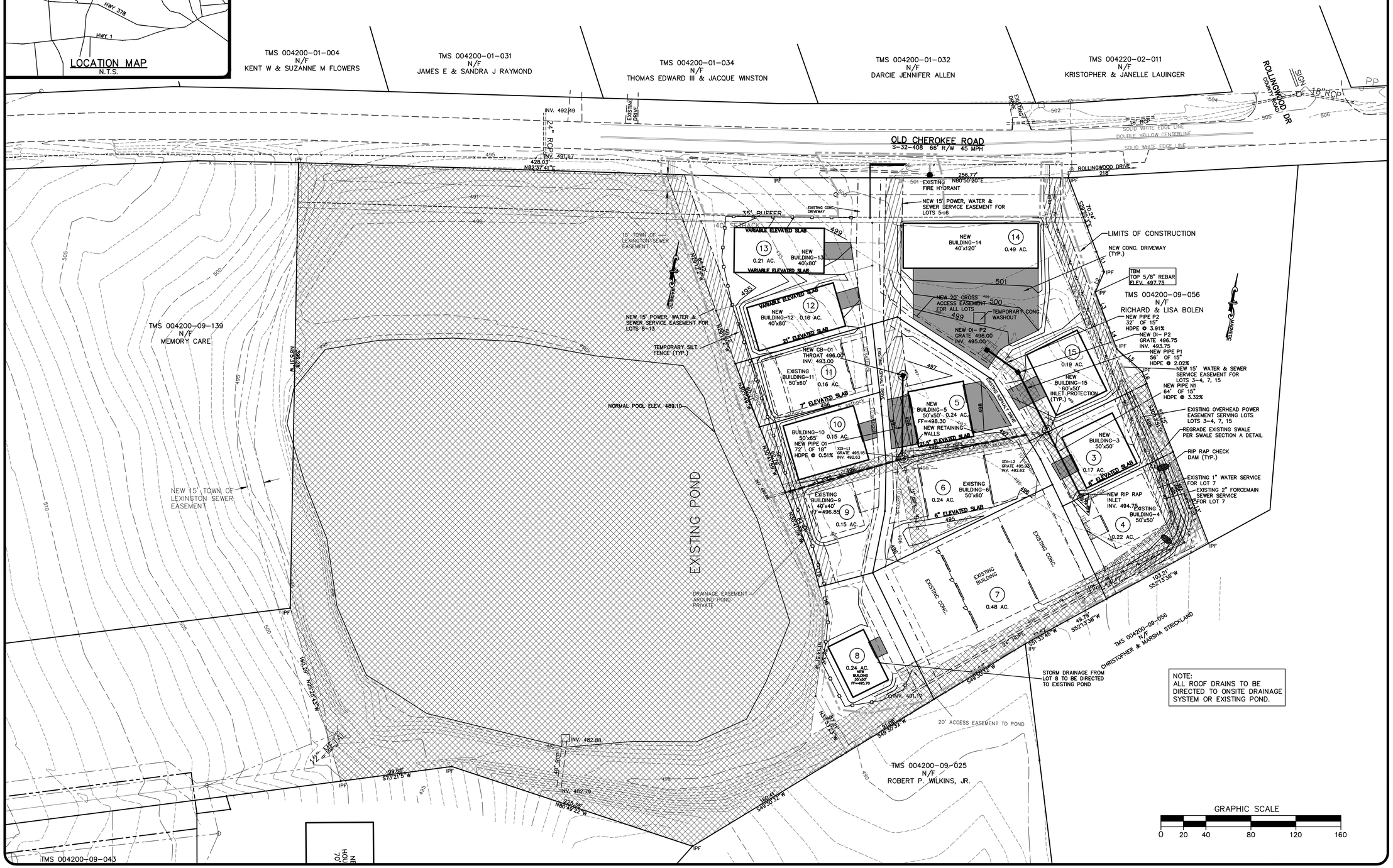
Drawn by:	MR
Designed by:	MR
Checked by:	MR
Scale:	1"=40'
Project No.	19147
Date:	6/08/2023

Sheet **C3** of 6
Drawing No.

OWNER:	HARMONY HILLS DEVELOPMENT, LLC 955 OLD CHEROKEE ROAD LEXINGTON, SC 29072 PH: 803-359-9545 CONTACT: ROBERT P. WILKINGS, JR. EMAIL: rwilkins@svrealty.com
ENGINEER:	HB ENGINEERING, INC. 720 OLD CHEROKEE ROAD LEXINGTON, SC 29072 PH: 803-957-7027 ext 302 CONTACT: MIKE RAY EMAIL: mikerayhb@gmail.com
TMS#:	004200-09-131
TOTAL AREA:	11.0 AC.
DISTURBED AREA:	4.8 AC.



LOCATION MAP
N.T.S.



NOTE:
ALL ROOF DRAINS TO BE DIRECTED TO ONSITE DRAINAGE SYSTEM OR EXISTING POND.

SOUTH CAROLINA
HB ENGINEERING, INC.
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CERTIFICATE OF AUTHORIZATION

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LICENSED PROFESSIONAL ENGINEER
No. 23546
G. MICHAEL RAY

HB Engineering
SITE DEVELOPMENT CONSULTANTS
720 OLD CHEROKEE ROAD
LEXINGTON, SOUTH CAROLINA 29072
803-957-7027 FAX 877-728-0808

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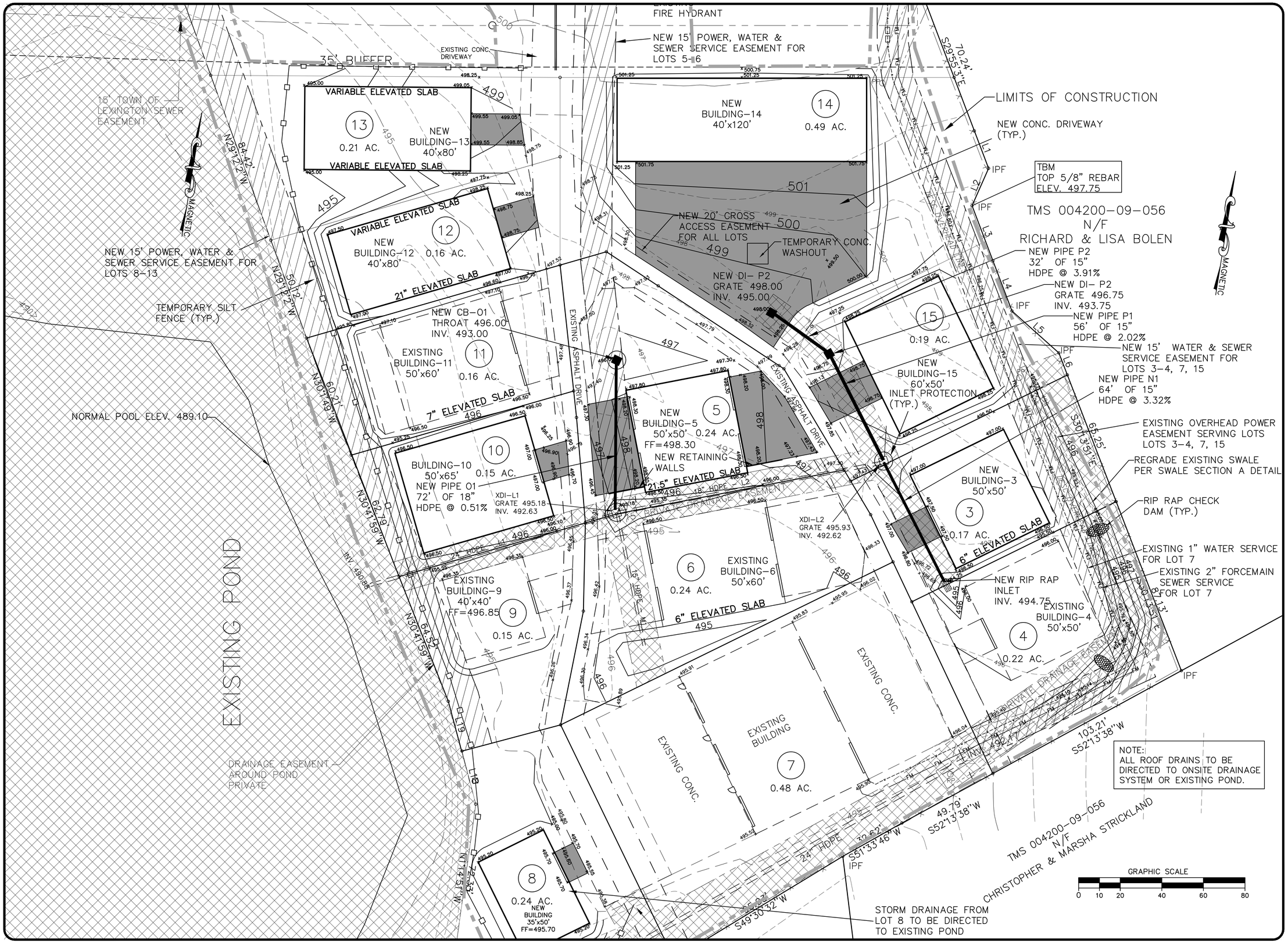
HARMONY HILLS STOARGE

MAJOR MODIFICATION 4
LEXINGTON COUNTY, SC

No.	Date	Revision

Sheet Title:
OVERALL GRADING, DRAINAGE & EROSION CONTROL PLAN

Drawn by:	MR
Designed by:	MR
Checked by:	MR
Scale:	1"=40'
Project No.	19147
Date:	6/08/2023
Sheet	C4
of	6
Drawing No.	



HB ENGINEERING, INC. No. C01663 — SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION

LICENSED PROFESSIONAL ENGINEER — SOUTH CAROLINA No. 23546 — G. MICHAEL R.

HB Engineering
SITE DEVELOPMENT CONSULTANTS
720 OLD CHEROKEE ROAD
LEXINGTON, SOUTH CAROLINA 29072
803-957-7027 FAX 877-728-0808

HARMONY HILLS COMMERCIAL DEV.
HARMONY HILLS STOARGE
MAJOR MODIFICATION 4
LEXINGTON COUNTY, SC

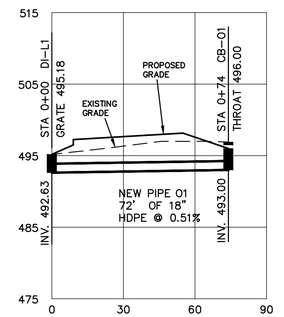
No.	Date	Revision

Sheet Title:
20 SCALE GRADING, DRAINAGE & EROSION CONTROL PLAN

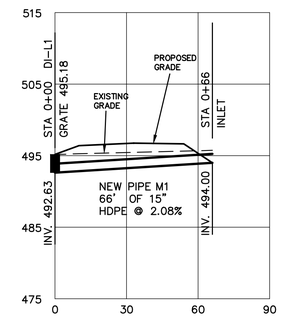
Drawn by:	MR
Designed by:	MR
Checked by:	MR
Scale:	1"=20'
Project No.	19147
Date:	6/08/2023

Sheet **C5** of 6

Drawing No.



DRAINAGE PROFILE – LINE O
SCALE; HOR: 1"=30', VER: 1"=10'



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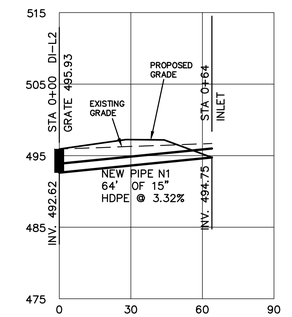

DRAINAGE PROFILE – LINE N
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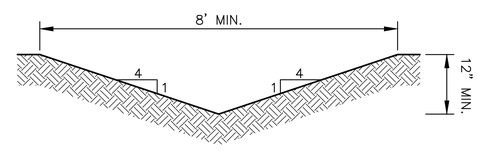
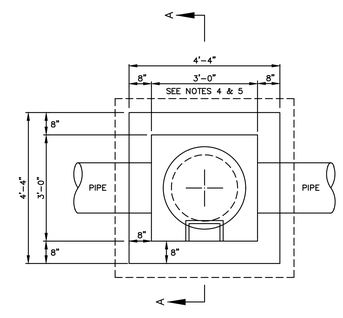
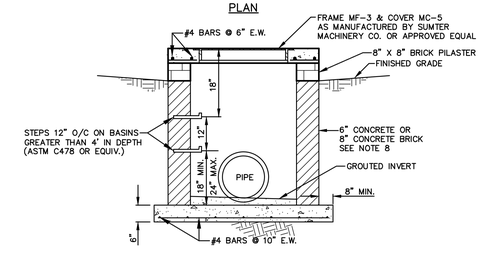


SECTION

SWALE – SECTION A
NOT TO SCALE



PLAN

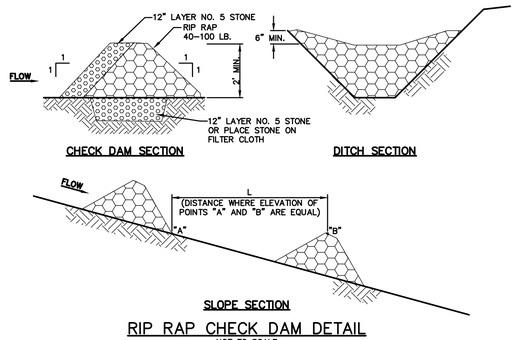


SECTION A–A

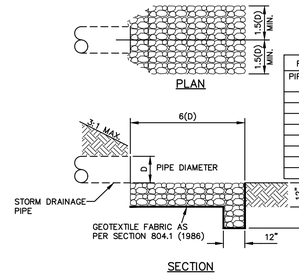
NOTES:

1. ALL CONCRETE SHALL BE 3,000 PSI.
2. ENDS OF ALL PIPES SHALL BE FLUSH WITH INSIDE WALL.
3. ALL STEEL BARS SHALL BE PLACED 1–1/2" CLEAR FROM BOTTOM AND SIDES OF SLAB.
4. FOR PIPES UP TO 24" I.D. USE 3'–0" x 3'–0" BOX.
5. FOR PIPES OVER 24" I.D. BOX INSIDE DIMENSIONS SHALL BE PIPE O.D. + 6" EACH SIDE OF PIPE.
6. ALL STEPS SHALL PROTRUDE 4" FROM THE INSIDE FACE OF STRUCTURE WALL.
7. CONCRETE BRICK WALLS SHALL HAVE A 1/4" MORTAR COAT ON INSIDE SURFACE.
8. WALL THICKNESS IS TO BE 12" IF BOX DEPTH EXCEEDS 12'–0".
9. ALL MATERIALS AND CONSTRUCTION ARE TO COMPLY WITH SECTION 720 OF THE SCDHPT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
10. REINFORCED CONCRETE MAY BE SUBSTITUTED FOR BRICK WALLS. REINFORCING TO BE #4 BARS @ 12" E.W.

CATCH BASIN (TYPE 9)
NOT TO SCALE



RIP RAP CHECK DAM DETAIL
NOT TO SCALE



RIP RAP SIZING	
PIPE DIA. (IN)	D50 (IN.)
12	6
15	6
18	6
24	9
30	9
36	9
42	12
48	12

RIP–RAP APRON
NOT TO SCALE

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803–957–7027 FAX 877–728–0808

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HARMONY HILLS STORAGE

MAJOR MODIFICATION 4
LEXINGTON COUNTY, SC

No.	Date	Revision

Sheet Title:
DRAINAGE PROFILES AND DETAILS

Drawn by:	MR
Designed by:	MR
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Project No.	19147
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Sheet C6 of 6

Drawing No.