ENGINEER:

The purpose of the plan is to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the purpose is to promote the establishment of vegetation on exposed soil.

Table 8.1: Permanent Seeding

<table>
<thead>
<tr>
<th>Plant Species</th>
<th>Seed Mix Ratio</th>
<th>Recommended Seed Rate (lbs/1000 sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cool-Season Grasses</td>
<td>75% Bluegrass, 25% Fescue</td>
<td>1 lb</td>
</tr>
<tr>
<td>Warm-Season Grasses</td>
<td>50% Bermuda, 50% Bahia</td>
<td>2 lb</td>
</tr>
<tr>
<td>Cool-Season Fescue</td>
<td>100% Tall Fescue</td>
<td>3 lb</td>
</tr>
</tbody>
</table>

Note: Seed rates listed above are for temporary seeding, when planted alone. When used in mixtures, adjustments are typically not needed.

Table 8.2: Temporary Seeding for Site Stabilization

<table>
<thead>
<tr>
<th>Plant Species</th>
<th>Seed Mix Ratio</th>
<th>Recommended Seed Rate (lbs/1000 sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm-Season Grasses</td>
<td>50% Bermuda, 50% Bahia</td>
<td>0.5 lb</td>
</tr>
<tr>
<td>Cool-Season Fescue</td>
<td>100% Tall Fescue</td>
<td>1 lb</td>
</tr>
</tbody>
</table>

Note: Seed rates listed above are for temporary seeding, when planted alone. When used in mixtures, adjustments are typically not needed.

Table 8.3: Site-Specific Seeding

<table>
<thead>
<tr>
<th>Plant Species</th>
<th>Seed Mix Ratio</th>
<th>Recommended Seed Rate (lbs/1000 sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cool-Season Grasses</td>
<td>75% Bluegrass, 25% Fescue</td>
<td>1 lb</td>
</tr>
<tr>
<td>Warm-Season Grasses</td>
<td>50% Bermuda, 50% Bahia</td>
<td>2 lb</td>
</tr>
<tr>
<td>Cool-Season Fescue</td>
<td>100% Tall Fescue</td>
<td>3 lb</td>
</tr>
</tbody>
</table>

Note: Seed rates listed above are for permanent seeding, when planted alone. When used in mixtures, adjustments are typically not needed.

Note: Engineered soil will be placed on site to be in conformance with the requirements of the plan. All materials must be ground limestone (hydrated or burnt lime may be substituted). Fertilizers must be uniform in composition, free flowing and suitable for accurate measurement.

Note: Mulch materials (in order of preference) shall be used. The stockpile area must be subjected to re-testing by a recognized seed laboratory. All seed used must have results of a soil test for establishment of vegetation on exposed soil. Once excavation has begun, the operation should be continuous from grubbing through the first planting.

Note: Plant growth will be observed at least once a week for the first eight weeks, and then at least once a month for the remainder of the season. This includes at least one observation per month during the dormant season. The plan must be approved by the inspection agency before the start of construction.

Note: All temporary control structures are to be monitored, and any damage to the landscape shall be repaired immediately. All temporary control structures shall be maintained in good working order.

Note: The construction fence shall be imbricated at 25' minimum intervals, with lower ends curled uphill. The fence shall be maintained in place until the initial approval by the inspection agency is made. Other related provisions of this plan and are to be in conformance with the requirements of the plan.
APPROVED: DEPARTMENT OF PUBLIC WORKS

EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

"I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE

CHIEF, BUREAU OF HIGHWAYS

1 ST 6

ST-2

ST 4

NO.

SCIENTIFIC NAME

(uercus rubrn

uercus rubro

uercus rubra

uercus alba

-O

-OAK 31"

34.5·

33.5"

32.5"

DATE

Good

Good

Good

Good

TO BE REMOVED

TO REMAIN

TO REMAIN

TO REMAIN

TO REMAIN

NOTES

280'LF. OF PROPOSED FENCE (R1-1)

STOP SIGN

THE SPECIMEN TREE TO BE REMOVED SHALL BE REPLACED WITH THE SPECIMEN TREE TO BE PLANTED BETWEEN THE PRIVATE ACCESS EASEMENT FOR THE TREVERTON ROAD, LOT 1 AND THE ABIDING SAVIOR LUTHERAN CHURCH.

THE FLOODPLAIN SHALL BE ADEQUATELY OFFSET (PRIVATE)

THE PUBLIC SEWER LINE CONNECTION.

THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR ANY NEEDED LANDSCAPE REPLACEMENTS.
LANDSCAPE NOTES:
1. All plantings shall be reflective of the architectural character of the residence and shall be in harmony with the overall landscaping for the subdivision.
2. The site plan shall include the placement of trees and shrubs to enhance the visual appearance of the community and to provide a sense of privacy.
3. Tree and shrub plantings shall be designed to complement the overall landscape plan and shall be placed in a manner that will not create a visual barrier or obstruction.
4. All plantings shall be maintained in a manner that will enhance the visual appeal of the subdivision.
5. All plantings shall be designed to provide a pleasant and attractive environment for the residents.
6. All plantings shall be designed to provide a sense of privacy and security.
7. All plantings shall be designed to provide a sense of harmony and balance.
8. All plantings shall be designed to provide a sense of unity and coherence.
9. All plantings shall be designed to provide a sense of proportion and scale.
10. All plantings shall be designed to provide a sense of rhythm and flow.
11. All plantings shall be designed to provide a sense of rhythm and flow.
12. All plantings shall be designed to provide a sense of rhythm and flow.
13. All plantings shall be designed to provide a sense of rhythm and flow.
14. All plantings shall be designed to provide a sense of rhythm and flow.
15. All plantings shall be designed to provide a sense of rhythm and flow.
16. All plantings shall be designed to provide a sense of rhythm and flow.
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18. All plantings shall be designed to provide a sense of rhythm and flow.
19. All plantings shall be designed to provide a sense of rhythm and flow.
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23. All plantings shall be designed to provide a sense of rhythm and flow.
24. All plantings shall be designed to provide a sense of rhythm and flow.
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30. All plantings shall be designed to provide a sense of rhythm and flow.
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32. All plantings shall be designed to provide a sense of rhythm and flow.
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35. All plantings shall be designed to provide a sense of rhythm and flow.
36. All plantings shall be designed to provide a sense of rhythm and flow.
37. All plantings shall be designed to provide a sense of rhythm and flow.
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42. All plantings shall be designed to provide a sense of rhythm and flow.
43. All plantings shall be designed to provide a sense of rhythm and flow.
44. All plantings shall be designed to provide a sense of rhythm and flow.
45. All plantings shall be designed to provide a sense of rhythm and flow.
46. All plantings shall be designed to provide a sense of rhythm and flow.
47. All plantings shall be designed to provide a sense of rhythm and flow.
48. All plantings shall be designed to provide a sense of rhythm and flow.
49. All plantings shall be designed to provide a sense of rhythm and flow.
50. All plantings shall be designed to provide a sense of rhythm and flow.
5. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR

4 STONE LEVEL SPREADER DETAIL

DRYWELL INVERT MINIMUM 4' FROM

2 10702 Hidden Ridge Drive 420 420 33.3 5.33 5.33 5.00 56.8

1 10700 Hidden Ridge Drive 430 430 57.9 5.42 5.42 5.00 58.7

HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.

NOT TO SCALE

DRYWELL (M-5)

BLOCK SPLASH 12" TO 4" PERFORATED

Iris versicolor Blue Water Iris perennial herbaceous plant quart bulb 113

PLANT N.A. ME COMMON NAME TYPE SIZE QUANTITY

NON-WOVEN SURFACE WRAPPED TWICE IN 1/4"

PROFESSIONAL CERTIFICATION:

E.

ATTACH MIN. 40# PIPE ANCHOR

PERFORATED PVC IMPACT PLASTIC THAT WILL WITHSTAND ULTRA-VIOLET

OUTFALL LOCATION & MINIMUM SLOPE. SEE

OBSERVATION WELL DETAIL

OBSERVATION WELL & C/O

FILTER BED

ATRIUM

PVC SOLID PVC (SCHED 40)

(3/8" TO 3/4")

or HDPE).

REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE

SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.

THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH

ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREA OF

CONC.

MATERIALS AND SPECIFICATIONS FOR (M-6) MICRO-BIORETENTION

TO MEET ASTM 615-60 AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER

MSHA MIX NO. 3; N/A ON-SITE TESTING OF POURED-IN-PLACE CONC. REQUIRED; 2B

& COMPOST (35-40%)

• Gravel - The gravel layer (No. 57 stone preferred) shall be at least 3" thick above and below the

gravel layer. The gravel layer shall be 2" thick at the pond edge.

• Filter Bed - This layer shall be a uniform mix of sand and topsoil.

• Topsoil - The topsoil shall be a 6" deep layer installed on top of the filter bed layer.

• Underdrain - The underdrain shall be located directly beneath the topsoil layer. The underdrain shall be made of ¾" perforated PVC or HDPE. The underdrain shall be connected to the outfall piping system at least every 1000 square feet.

When backfilling the bioretention system, use a primary tilling and grading method to ensure the proper compaction of the material. Compaction can be alleviated at the base of the bioretention facility by using a primary tilling and grading method. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass, and other undesirable weeds. The planting soil shall be uniformly spread and compacted to ensure proper compaction. The planting soil shall be covered with a 3" layer of mulch to prevent the growth of weeds.

The use of non-native plant species is not recommended. Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

1. Plant Selection

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

2. Planting

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

3. Maintenance

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

4. Stormwater Management

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

5. Construction

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

6. Landscaping

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

7. Displays

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

8. References

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

9. Acknowledgments

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

10. Conclusion

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

11. Appendix

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

12. Bibliography

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

13. Appendix

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.

14. Appendix

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.3.
### Soils Description

**Surface Elev:**

**Contract No.:**

**Date Started:** 1/10/2018

**Date Finished:**

**Water Table:**

---

<table>
<thead>
<tr>
<th>STRATA DEPTH SAMPLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-13'</td>
<td>END OF SOIL BORING AT 13 FEET</td>
</tr>
<tr>
<td></td>
<td>Same as soil sample S-1, moisture content 12.6%, &quot;ML&quot;</td>
</tr>
<tr>
<td></td>
<td>Same as soil sample S-3, moisture content 11.4%, &quot;SM&quot;</td>
</tr>
<tr>
<td>4-5-7-9</td>
<td>Brown silty sand, moist, medium dense, moisture content 12.9%, as soil sample S-3, moisture content 12.8%, &quot;SM&quot;</td>
</tr>
</tbody>
</table>

---

**Boring Location:**

**Job No.:**

**PLAT #20652-53**

**SOIL BORING LOGS**

### Soil Boring Logs

**KPM SCALE:** 1"

<table>
<thead>
<tr>
<th>Sample</th>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1</td>
<td>3'</td>
<td>Light brownish gray sandy silt.</td>
</tr>
<tr>
<td>HSI.</td>
<td>5.0</td>
<td>Brown sandy silt, moist, medium dense, moisture content 14.1%, Same as soil sample S-3, moisture content 12.8%, &quot;SM&quot;</td>
</tr>
<tr>
<td>AS-2</td>
<td>5.0</td>
<td>Brown silty sand, moist, medium dense, moisture content 12.5%, &quot;SM&quot;</td>
</tr>
<tr>
<td>S-3</td>
<td>5.0</td>
<td>Same as soil sample S-1, moisture content 12.6%, &quot;ML&quot;</td>
</tr>
<tr>
<td>S-4</td>
<td>5.0</td>
<td>Same as soil sample S-3, moisture content 11.4%, &quot;SM&quot;</td>
</tr>
<tr>
<td>S-5</td>
<td>5.0</td>
<td>Light brownish gray sandy silt.</td>
</tr>
<tr>
<td>S-6</td>
<td>5.0</td>
<td>Brown sandy silt, moist, medium dense, moisture content 14.1%, Same as soil sample S-3, moisture content 12.8%, &quot;SM&quot;</td>
</tr>
<tr>
<td>S-7</td>
<td>5.0</td>
<td>Brown silty sand, moist, medium dense, moisture content 12.5%, &quot;SM&quot;</td>
</tr>
</tbody>
</table>

---

**Legend:**

- S-3 Light brownish gray sandy silt.
- S-4 Same as soil sample S-1, "ML"