- 1. <u>PROVIDE PROTECTION</u> FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO AND DURING.
- 2. DIMENSIONS:
  - WIDTH: 18" MINIMUM
  - DEPTH OF PLANTER (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION): 12"
  - SLOPE OF PLANTER: 0.5% OR LESS
- 3. SETBACKS.
  - PLANTERS MUST BE MINIMUM OF 5 FEET FROM PROPERTY LINE.
- 4. OVERFLOW:
  - INLET ELEVATION MUST ALLOW FOR 2" OF FREEBOARD, MINIMUM.
  - PROTECT FROM DEBRIS AND SEDIMENT WITH STRAINER OR GRATE.
  - SIZE OVERFLOW FOR THE 50—YEAR DESIGN STORM. IDENTIFY OVERFLOW ROUTE IN THE STORMWATER MANAGEMENT PLAN.
- 5. PIPING:
  - PERFORATED UNDERDRAIN PIPING: SHALL BE ABS SCH. 40, DUCTILE IRON, OR PVC SCH.40, 6" MINIMUM DIAMETER. PVC NOT ALLOWED ABOVE GROUND.
- 6. DRAIN ROCK:
  - SIZE FOR FLOW-THROUGH PLANTER: 1 1/2" 3/4" WASHED
  - DEPTH: 12" MINIMUM
- 7. SEPARATION BETWEEN DRAIN ROCK AND GROWING MEDIUM SHALL BE WITH FILTER FABRIC.
- 8. GROWING MEDIUM:
  - DEPTH: 18" MINIMUM
  - FACILITY SURFACE AREA MAY BE REDUCED BY 20% WHEN GROWING MEDIA DEPTH IS INCREASED TO 30" OR MORE.
- 9. VEGETATION: FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX H.
- 10.PLANTER FOUNDATION AND WALLS:
  - MATERIALS SHALL BE 4" REINFORCED CONCRETE, OR OTHER DURABLE MATERIAL.
    CONCRETE WALLS SHALL BE INCLUDED ON FOUNDATION PLANS.

  - INSTALL INVERTED CURB AS NEEDED BETWEEN PLANTER AND ROAD SUBGRADE.
  - WALL HEIGHTS GREATER THAN 24" ABOVE GRADE REQUIRE HANDRAIL.
- 11.WATERPROOF LINER (IF REQUIRED):
  - LINER SHALL BE 30 MIL PVC OR EQUIVALENT, FOR FLOW THROUGH FACILITIES.
  - A WATERPROOF LINER IS NOT REQUIRED IF THE FOUNDATION OR WALL MATERIAL IS WATERPROOF REINFORCED CONCRETE OR APPROVED EQUAL.
- 12.INSTALL SPLASH PAD TO TRANSITION FROM INLET TO GROWING MEDIUM. SEE DETAIL 007

#### TREATMENT PLANTER **REVISIONS** BOX BY NONE Marion ountu CREATION DATE: REVISION DATE: SHFFT 001 00/00/0000 00/00/0000 N.T.S

MARION COUNTY DEPARTMENT OF PUBLIC WORKS

1:45

2022/06/08

- 1. PROVIDE PROTECTION FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, DURING AND AFTER CONSTRUCTION.
- 2. DIMENSIONS:

1:45

2022/06/08

PLOTTED:

DETAILS.DWG

NON-CIP\STORMWATERSTANDARDSUPDATE\CAD\DRAFTING\

G:\ENGINEERING\PROJECTCENTRAL\PROJECTS,

- WIDTH: 30" MINIMUM
- DEPTH OF PLANTER (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION): 12"
- SLOPE OF PLANTER: 0.5% OR LESS
- 3. <u>SETBACKS</u>.
  - PLANTERS MUST BE MINIMUM OF 5 FEET FROM PROPERTY LINE.
- 4. OVERFLOW:
  - OVERFLOW ELEVATION MUST ALLOW FOR 12" OF FREEBOARD, MINIMUM.
  - SIZE OVERFLOW FOR THE 50—YEAR DESIGN STORM. IDENTIFY OVERFLOW ROUTE IN THE STORMWATER MANAGEMENT PLAN.
- 5. DRAIN ROCK:
  - SIZE: 1 1/2" 3/4" WASHED
  - DEPTH: 28" MINIMUM
- 6. SEPARATION BETWEEN DRAIN ROCK AND GROWING MEDIUM SHALL BE WITH FILTER FABRIC.
- 7. **GROWING MEDIUM:**
- DEPTH: 18" MINIMUM

  8. <u>VEGETATION:</u> FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX H.
- 9. PLANTER WALLS:
  - MATERIALS SHALL BE CONCRETE OR OTHER DURABLE MATERIAL.
  - CONCRETE WALLS SHALL BE INCLUDED ON FOUNDATION PLANS.
  - INSTALL INVERTED CURB AS NEEDED BETWEEN PLANTERS AND ROAD SUBGRADE.
  - WALL HEIGHTS GREATER THAN 24" ABOVE GRADE REQUIRE HANDRAIL.
- 10.WATERPROOF LINER:
  - LINER SHALL BE 30 MIL PVC OR EQUIVALENT.
  - A WATERPROOF LINER IS NOT REQUIRED IF THE WALL MATERIAL IS WATERPROOF REINFORCED CONCRETE OR APPROVED EQUAL.
- 11.INSTALL SPLASH PAD TO TRANSITION FROM INLET TO GROWING MEDIUM. SEE DETAIL 007

#### INFILTRATION PLANTER **REVISIONS** BOX BY NONE Marion

ountu

MARION COUNTY DEPARTMENT OF PUBLIC WORKS

- 1. <u>PROVIDE PROTECTION</u> FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, AND DURING CONSTRUCTION. UNLESS REQUIRED BY SITE CONDITIONS, UNLINED RAIN GARDENS ARE PREFERRED TO MAXIMIZE ONSITE INFILTRATION.
- 2. DIMENSIONS:

DETAILS.DWG

NON-CIP\STORMWATERSTANDARDSUPDATE\CAD\DRAFTING\STORMWATER

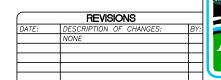
G:\ENGINEERING\PROJECTCENTRAL\PROJECTS,

- DEPTH OF BASIN (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION): 12"
- FLAT BOTTOM WIDTH: 18" MINIMUM
- SIDE SLOPES OF BASIN: 3:1 MAXIMUM
- SLOPE OF RAIN GARDEN: 0.5% OR LESS
- 3. SETBACKS:
  - FILTRATION RAIN GARDEN MUST BE 10' FROM FOUNDATIONS AND 5' FROM PROPERTY LINES UNLESS APPROVED BY BUILDING OFFICIAL.
- 4. OVERFLOW:
  - OVERFLOW REQUIRED. INLET ELEVATION MUST ALLOW FOR 2" OF FREEBOARD, MINIMUM.
  - PROTECT FROM DEBRIS AND SEDIMENT WITH STRAINER OR GRATE.
  - SIZE OVERFLOW FOR THE 50-YEAR DESIGN STORM. IDENTIFY OVERFLOW ROUTE IN THE STORMWATER MANAGEMENT PLAN.
- 5. PIPING:
  - PERFORATED UNDERDRAIN PIPING: SHALL BE ABS SCH. 40, DUCTILE IRON, OR PVC SCH.40. MINIMUM DIAMETER IS 6".
- 6. DRAIN ROCK:
  - SIZE: 1 1/2" to 3/4"-0 WASHED
  - DEPTH: 18" MINIMUM
- 7. <u>SEPARATION</u> BETWEEN DRAIN ROCK AND GROWING MEDIUM SHALL BE WITH FILTER FABRIC.
- 8. GROWING MEDIUM:
  - DEPTH: 18" MINIMUM
  - FACILITY SURFACE AREA MAY BE REDUCED BY 20% WHEN GROWING MEDIA DEPTH IS INCREASED TO 30" OR MORE.
- 9. VEGETATION: FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX H.
- 10.WATERPROOF LINER (IF REQUIRED): SHALL BE 30 MIL PVC OR EQUIVALENT.
- 11 INSTALL SPLASH PAD TO TRANSITION FROM INLETS TO GROWING MEDIUM. SEE DETAIL 007.

# MARION COUNTY DEPARTMENT OF PUBLIC WORKS

CREATION DATE:

00/00/0000



TREATMENT	RAIN	GARDEN

SHEET: 003

N.T.S

REVISION DATE:

00/00/0000

79

Marion Countu

2022/06/08

PLOTTED:

DETAILS.DWG

STANDARD

NON-CIP\STORMWATERSTANDARDSUPDATE\CAD\DRAFTING\STORMWATER

G:\ENGINEERING\PROJECTCENTRAL\PROJECTS,

- 1. <u>PROVIDE PROTECTION</u> FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, DURING AND AFTER CONSTRUCTION.
- 2. DIMENSIONS:
  - DEPTH OF BASIN (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION): 12"
  - FLAT BOTTOM WIDTH: 3' MINIMUM
  - SIDE SLOPES OF BASIN: 3:1 MAXIMUM
  - SLOPE OF RAIN GARDEN: 0.5% OR LESS
- 3. SETBACKS:
  - INFILTRATION RAIN GARDEN MUST BE 10' FROM FOUNDATIONS AND 5' FROM PROPERTY LINES.
- . OVERFLOW
- SIZE OVERFLOW FOR THE 50-YEAR DESIGN STORM. IDENTIFY OVERFLOW ROUTE IN THE STORMWATER MANAGEMENT PLAN.
- 5. DRAIN ROCK:
  - SIZE: 1 1/2" TO 3/4"- WASHED
  - DEPTH: 18"
- 6. <u>SEPARATION</u> BETWEEN DRAIN ROCK AND GROWING MEDIUM SHALL BE WITH FILTER FABRIC.
- 7. **GROWING MEDIUM:** 
  - DEPTH: 18" MINIMUM
- 8. <u>VEGETATION:</u> FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX H.
- 9. INSTALL SPLASH PAD TO TRANSITION FROM INLETS TO GROWING MEDIUM. SEE DETAIL 007

**REVISIONS** 

MARION COUNTY DEPARTMENT OF PUBLIC WORKS



INFILTRATION RAIN GARDEN

 CREATION DATE:
 REVISION DATE:
 SCALE:
 SHEET:

 00/00/0000
 00/00/0000
 N.T.S
 004

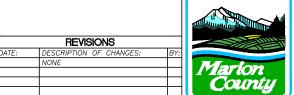
2022/06/08

PLOTTED:

DETAILS.DWG

NON-CIP\STORMWATERSTANDARDSUPDATE\CAD\DRAFTING\STORMWATER

- 1. PROVIDE PROTECTION FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, AND DURING CONSTRUCTION. UNLESS REQUIRED BY SITE CONDITIONS, UNLINED SWALES ARE PREFERRED TO ALLOW MAXIMUM INFILTRATION.
- 2. DIMENSIONS:
  - DEPTH OF SWALE (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION): 6"
  - LONGITUDINAL SLOPE OF SWALE: NO LESS THAN 0.3% AND NO MORE THAN 6.0%. INSTALL CHECK DAM IF OVER 4.0%. SEE NOTE 12.
  - FLAT BOTTOM WIDTH: 2' MINIMUM
  - SIDE SLOPES OF SWALE: 3:1 MAXIMUM
- 3. SETBACKS:
  - · FILTRATION SWALES MUST BE 10' FROM FOUNDATIONS AND 5' FROM PROPERTY LINES UNLESS APPROVED BY BUILDING OFFICIAL.
- 4. OVERFLOW:
  - INLET ELEVATION MUST ALLOW FOR 6" OF FREEBOARD, MINIMUM.
  - PROTECT FROM DEBRIS AND SEDIMENT WITH STRAINER OR GRATE.
  - SIZE OVERFLOW FOR THE 50-YEAR DESIGN STORM. IDENTIFY OVERFLOW ROUTE IN THE STORMWATER MANAGEMENT PLAN.
- 5. PIPING:
  - PERFORATED UNDERDRAIN PIPING: SHALL BE ABS SCH. 40, DUCTILE IRON, OR PVC SCH.40. MINIMUM DIAMETER IS 6". PVC NOT ALLOWED ABOVE GROUND.
  - OVERFLOW PIPING: SHALL BE ABS SCH. 40, DUCTILE IRON, OR PVC SCH. 40 AND SHALL NOT BE PERFORATED. MINIMUM DIAMETER IS 6". PVC NOT ALLOWED ABOVE GROUND.
- 6. DRAIN ROCK (IF REQUIRED):
  - SIZE: 1 1/2" 3/4" WASHED
  - DEPTH: 12"
- 7. SEPARATION BETWEEN DRAIN ROCK AND GROWING MEDIUM SHALL BE WITH FILTER FABRIC.
- 8. GROWING MEDIUM:
  - 12" MINIMUM
- 9. <u>VEGETATION:</u> FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX H.
- 10.WATERPROOF LINER (IF REQUIRED): SHALL BE 30 MIL PVC OR EQUIVALENT.
- 11.<u>INSTALL SPLASH PAD</u> TO TRANSITION FROM INLETS TO GROWING MEDIUM. SEE DETAIL 007 12<u>.CHECK DAMS:</u> SHALL BE REQUIRED FOR OVER 4% SLOPE, SHALL BE SPACED AT A MAXIMUM 2—FOOT ELEVATION INTERVALS. MAINTAIN 4 - 10 INCH DEEP ROCK CHECK DAMS AT DESIGN INTERVALS. INTERMEDIATE FLOW SPREADERS SHALL BE INSTALLED AT A MINIMUM 50-FT INTERVALS.



## MARION COUNTY DEPARTMENT OF PUBLIC WORKS

## TREATMENT BIOFILTRATION SWALE

CREATION DATE: REVISION DATE: SHFFT 005 00/00/0000 00/00/0000 N.T.S

1:45

2022/06/08

PLOTTED:

DETAILS.DWG

STANDARD

NON-CIP\STORMWATERSTANDARDSUPDATE\CAD\DRAFTING\STORMWATER

G:\ENGINEERING\PROJECTCENTRAL\PROJECTS,

- 1. <u>PROVIDE PROTECTION</u> FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, DURING AND AFTER CONSTRUCTION.
- 2. DIMENSIONS:
  - DEPTH OF SWALE (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION): 6"
  - LONGITUDINAL SLOPE OF SWALE: 0.5% TO 6.0%
  - FLAT BOTTOM WIDTH: 2'
  - SIDE SLOPES OF SWALE: 3:1 MAXIMUM
- 3. SETBACKS:
- INFILTRATION VEGETATED SWALES MUST BE 10' FROM FOUNDATIONS AND 5' FROM PROPERTY LINES.
- 4. OVERFLOW:
  - SIZE OVERFLOW FOR THE 50-YEAR DESIGN STORM. IDENTIFY OVERFLOW ROUTE IN THE STORMWATER MANAGEMENT PLAN.
- 5. DRAIN ROCK (IF REQUIRED):
  - SIZE: 1 1/2" 3/4"- WASHED
  - DEPTH: 12"
- 6. <u>SEPARATION</u> BETWEEN DRAIN ROCK AND GROWING MEDIUM SHALL BE WITH FILTER FABRIC.

**REVISIONS** 

NONE

- 7. **GROWING MEDIUM:** 
  - 12" MINIMUM
- 8. <u>VEGETATION:</u> FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX H.
- 9. <u>SPLASH PAD</u> TO TRANSITION FROM INLETS TO GROWING MEDIUM. SEE DETAIL 007
- 10.CHECK DAMS: REQUIRED FOR OVER 4% SLOPE, SHALL BE SPACED AT A MAXIMUM 2—FOOT ELEVATION INTERVALS.

  MAINTAIN 4 10 INCH DEEP ROCK CHECK DAMS AT DESIGN INTERVALS. INTERMEDIATE FLOW SPREADERS SHALL BE INSTALLED AT A MINIMUM 50—FOOT INTERVALS.

MARION COUNTY DEPARTMENT OF PUBLIC WORKS

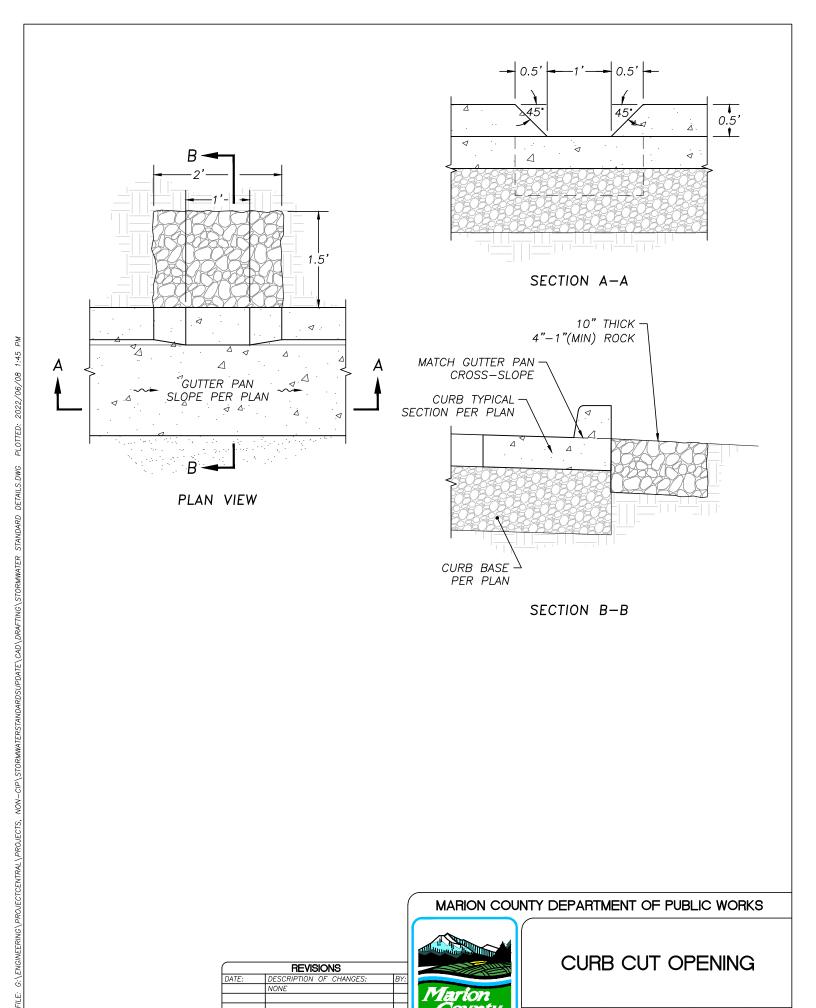


INFILTRATION
BIOFILTRATION SWALE

 CREATION DATE:
 REVISION DATE:
 SCALE:
 SHEET:

 00/00/0000
 00/00/0000
 N.T.S
 006

BY



ountu

CREATION DATE:

00/00/0000

REVISION DATE:

00/00/0000

SHEET: 007

N.T.S