



SF. 21-21

**PRIVATE DETENTION BASIN /  
STORMWATER QUALITY BEST MANAGEMENT PRACTICE  
MAINTENANCE AGREEMENT AND EASEMENT**

This PRIVATE DETENTION BASIN / STORMWATER QUALITY BEST MANAGEMENT PRACTICE MAINTENANCE AGREEMENT AND EASEMENT (Agreement) is made by and between EL PASO COUNTY by and through THE BOARD OF COUNTY COMMISSIONERS OF EL PASO COUNTY, COLORADO (Board or County) and **TIMBERRIDGE DEVELOPMENT GROUP, LLC** (Developer) and **THE RETREAT METROPOLITAN DISTRICT NO. 1** (Metro District), a quasi-municipal corporation and political subdivision of the State of Colorado. The above may occasionally be referred to herein singularly as "Party" and collectively as "Parties."

Recitals

A. WHEREAS, the District provides various municipal services to certain real property in El Paso County, Colorado referred to as **THE RETREAT AT TIMBERRIDGE**; and

B. WHEREAS, Developer is the owner of certain real estate (the Property or Subdivision) in El Paso County, Colorado, which Property is legally described in Exhibit A attached hereto and incorporated herein by this reference; and

C. WHEREAS, Developer desires to plat and develop on the Property a subdivision to be known as **THE RETREAT AT TIMBERRIDGE FILING NO. 2**; and

D. WHEREAS, the development of this Property will substantially increase the volume of water runoff and will decrease the quality of the stormwater runoff from the Property, and, therefore, it is in the best interest of public health, safety and welfare for the County to condition approval of this subdivision on Developer's promise to construct adequate drainage, water runoff control facilities, and stormwater quality structural Best Management Practices ("BMPs") for the subdivision; and

E. WHEREAS, Chapter 8, Section 8.4.5 of the El Paso County Land Development Code, as periodically amended, promulgated pursuant to Section 30-28-133(1), Colorado Revised Statutes (C.R.S.), requires the County to condition approval of all subdivisions on a developer's promise to so construct adequate drainage, water runoff control facilities, and BMPs in subdivisions; and

F. WHEREAS, the Drainage Criteria Manual, Volume 2, as amended by Appendix I of the El Paso County Engineering Criteria Manual (ECM), as each may be periodically amended, promulgated pursuant to the County's Colorado Discharge Permit System General Permit (MS4 Permit) as required by Phase II of the National Pollutant Discharge Elimination System (NPDES), which MS4 Permit requires that the County take measures to protect the quality of stormwater from sediment and other contaminants, requires subdividers, developers, landowners, and owners of facilities located in the County's rights-of-way or easements to provide adequate permanent stormwater quality BMPs with new development or significant redevelopment; and

G. WHEREAS, Section 2.9 of the El Paso County Drainage Criteria Manual provides for a developer's promise to maintain a subdivision's drainage facilities in the event the County does not assume such responsibility; and

H. WHEREAS, developers in El Paso County have historically chosen water runoff detention basins as a means to provide adequate drainage and water runoff control in subdivisions, which basins, while effective, are less expensive for developers to construct than other methods of providing drainage and water runoff control; and

I. WHEREAS, Developer desires to construct for the subdivision **ONE (1)** detention basin/stormwater quality BMP(s) (“detention basin/BMP(s)”) as the means for providing adequate drainage and stormwater runoff control and to meet requirements of the County’s MS4 Permit, and to provide for operating, cleaning, maintaining and repairing such detention basin/BMP(s); and

J. WHEREAS, Developer desires to construct the detention basin/BMP(s) on property that is or will be platted as **TRACT A, and within public drainage easements in LOTS 4, 5, 7, 10 and 11**, as indicated on the final plat of the subdivision, and as set forth on Exhibit B attached hereto; and

K. WHEREAS, Developer shall be charged with the duty of constructing the detention basin/BMP(s) and the Metro District shall be charged with the duties of operating, maintaining and repairing the detention basin/BMP(s) on the Property described in Exhibit B; and

L. WHEREAS, it is the County’s experience that subdivision developers and property owners historically have not properly cleaned and otherwise not properly maintained and repaired these detention basins/BMPs, and that these detention basins/BMPs, when not so properly cleaned, maintained, and repaired, threaten the public health, safety and welfare; and

M. WHEREAS, the County, in order to protect the public health, safety and welfare, has historically expended valuable and limited public resources to so properly clean, maintain, and repair these detention basins/BMPs when developers and property owners have failed in their responsibilities, and therefore, the County desires the means to recover its costs incurred in the event the burden falls on the County to so clean, maintain and repair the detention basin/BMP(s) serving this Subdivision due to the Developer’s or the Metro District’s failure to meet its obligations to do the same; and

N. WHEREAS, the County conditions approval of this Subdivision on the Developer’s promise to so construct the detention basin/BMP(s), and further conditions approval on the Metro District’s promise to reimburse the County in the event the burden falls upon the County to so clean, maintain and/or repair the detention basin/BMP(s) serving this Subdivision; and

O. WHEREAS, the County could condition subdivision approval on the Developer’s promise to construct a different and more expensive drainage, water runoff control system and BMPs than those proposed herein, which more expensive system would not create the possibility of the burden of cleaning, maintenance and repair expenses falling on the County; however, the County is willing to forego such right upon the performance of Developer’s and the Metro District’s promises contained herein; and

P. WHEREAS, the County, in order to secure performance of the promises contained herein, conditions approval of this Subdivision upon the Developer’s grant herein of a perpetual Easement over a portion of the Property for the purpose of allowing the County to periodically access, inspect, and, when so necessary, to clean, maintain and/or repair the detention basin/BMP(s); and

Q. WHEREAS, Pursuant to Colorado Constitution, Article XIV, Section 18(2) and Section 29-1-203, Colorado Revised Statutes, governmental entities may cooperate and contract with each other to provide any function, services, or facilities lawfully authorized to each.

### Agreement

NOW, THEREFORE, in consideration of the mutual promises contained herein, the sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Incorporation of Recitals: The Parties incorporate the Recitals above into this Agreement.

2. Covenants Running with the Land: Developer and the Metro District agree that this entire Agreement and the performance thereof shall become a covenant running with the land, which land is legally described in Exhibit A attached hereto, and that this entire Agreement and the performance thereof shall be binding upon themselves, and their respective successors and assigns.

3. Construction: Developer shall construct on that portion of the Property described in Exhibit B attached hereto and incorporated herein by this reference, **ONE (1)** detention basin/BMP(s). Developer shall not commence construction of the detention basin/BMP(s) until the El Paso County Planning and Community Development Department (PCD) has approved in writing the plans and specifications for the detention basin/BMP(s) and this Agreement has been signed by all Parties and returned to the PCD. Developer shall complete construction of the detention basin/BMP(s) in substantial compliance with the County-approved plans and specifications for the detention basin/BMP(s). Failure to meet these requirements shall be a material breach of this Agreement, and shall entitle the County to pursue any remedies available to it at law or in equity to enforce the same. Construction of the detention basin/BMP(s) shall be substantially completed within one (1) year (defined as 365 days), which one (1) year period will commence to run on the date the approved plat of this Subdivision is recorded in the records of the El Paso County Clerk and Recorder. Rough grading of the detention basin/BMP(s) must be completed and inspected by the El Paso County Planning and Community Development Department prior to commencing road construction.

In the event construction is not substantially completed within the one (1) year period, then the County may exercise its discretion to complete the project, and shall have the right to seek reimbursement from the Developer and its respective successors and assigns, for its actual costs and expenses incurred in the process of completing construction. The term "actual costs and expenses" shall be liberally construed in favor of the County, and shall include, but shall not be limited to, labor costs, tool and equipment costs, supply costs, and engineering and design costs, regardless of whether the County uses its own personnel, tools, equipment and supplies, etc. to correct the matter. In the event the County initiates any litigation or engages the services of legal counsel in order to enforce the Provisions arising herein, the County shall be entitled to its damages and costs, including reasonable attorney fees, regardless of whether the County contracts with outside legal counsel or utilizes in-house legal counsel for the same.

4. Maintenance: The Metro District agrees for itself and its successors and assigns, that it will regularly and routinely inspect, clean and maintain the detention basin/BMP(s), and otherwise keep the same in good repair, all at its own cost and expense. No trees or shrubs that will impair the structural

integrity of the detention basin/BMP(s) shall be planted or allowed to grow on the detention basin/BMP(s).

5. Creation of Easement: Developer hereby grants the County and the Metro District a non-exclusive perpetual easement upon and across that portion of the Property described in Exhibit B. The purpose of the easement is to allow the County and the Metro District to access, inspect, clean, repair and maintain the detention basin/BMP(s); however, the creation of the easement does not expressly or implicitly impose on the County a duty to so inspect, clean, repair or maintain the detention basin/BMP(s).

6. County's Rights and Obligations: Any time the County determines, in the sole exercise of its discretion, that the detention basin/BMP(s) is not properly cleaned, maintained and/or otherwise kept in good repair, the County shall give reasonable notice to the Developer, the Metro District and their respective successors and assigns, that the detention basin/BMP(s) needs to be cleaned, maintained and/or otherwise repaired. The notice shall provide a reasonable time to correct the problem(s). Should the responsible parties fail to correct the specified problem(s), the County may enter upon the Property to so correct the specified problem(s). Notice shall be effective to the above by the County's deposit of the same into the regular United States mail, postage pre-paid. Notwithstanding the foregoing, this Agreement does not expressly or implicitly impose on the County a duty to so inspect, clean, repair or maintain the detention basin/BMP(s).

7. Reimbursement of County's Costs / Covenant Running With the Land: The Developer and the Metro District agree and covenant, for themselves, their respective successors and assigns, that they will reimburse the County for its costs and expenses incurred in the process of completing construction of, cleaning, maintaining, and/or repairing the detention basin/BMP(s) pursuant to the provisions of this Agreement.

The term "actual costs and expenses" shall be liberally construed in favor of the County, and shall include, but shall not be limited to, labor costs, tools and equipment costs, supply costs, and engineering and design costs, regardless of whether the County uses its own personnel, tools, equipment and supplies, etc. to correct the matter. In the event the County initiates any litigation or engages the services of legal counsel in order to enforce the provisions arising herein, the County shall be entitled to its damages and costs, including reasonable attorney's fees, regardless of whether the County contracts with outside legal counsel or utilizes in-house legal counsel for the same.

8. Contingencies of Subdivision Approval: Developer's and the Metro District's execution of this Agreement is a condition of subdivision approval. Additional conditions of this Agreement include, but are not limited to, the following:

- a. Conveyance of **TRACT A, and public drainage easements in LOTS 4, 5, 7, 10 and 11**, as indicated on the final plat of the subdivision, from Developer to the Metro District (which will include a reservation of easement in favor of the County for purposes of accessing, inspecting, cleaning, maintaining, and repairing the detention basin/BMP(s)), and recording of the Deed for the same; and
- b. A copy of the Covenants of the Subdivision, if applicable, establishing that the Metro District is obligated to inspect, clean, maintain, and repair the detention basin/BMP(s).

The County shall have the right, in the sole exercise of its discretion, to approve or disapprove any documentation submitted to it under the conditions of this Paragraph, including but not limited to, any separate agreement or amendment, if applicable, identifying any specific maintenance responsibilities not addressed herein. The County's rejection of any documentation submitted hereunder shall mean that the appropriate condition of this Agreement has not been fulfilled.

9. Agreement Monitored by El Paso County Planning and Community Development Department and/or El Paso County Department of Public Works: Any and all actions and decisions to be made hereunder by the County shall be made by the Director of the El Paso County Planning and Community Development Department and/or the Director of the El Paso County Department of Public Works. Accordingly, any and all documents, submissions, plan approvals, inspections, etc. shall be submitted to and shall be made by the Director of the Planning and Community Development Department and/or the Director of the El Paso County Department of Public Works.

10. Indemnification and Hold Harmless: To the extent authorized by law, Developer and the Metro District agree, for themselves, their respective successors and assigns, that they will indemnify, defend, and hold the County harmless from any and all loss, costs, damage, injury, liability, claim, lien, demand, action and causes of action whatsoever, whether at law or in equity, arising from or related to their respective intentional or negligent acts, errors or omissions or that of their agents, officers, servants, employees, invitees and licensees in the construction, operation, inspection, cleaning (including analyzing and disposing of any solid or hazardous wastes as defined by State and/or Federal environmental laws and regulations), maintenance, and repair of the detention basin/BMP(s), and such obligation arising under this Paragraph shall be joint and several. Nothing in this Paragraph shall be deemed to waive or otherwise limit the defense available to the County pursuant to the Colorado Governmental Immunity Act, Sections 24-10-101, *et seq.* C.R.S., or as otherwise provided by law.

11. Severability: In the event any Court of competent jurisdiction declares any part of this Agreement to be unenforceable, such declaration shall not affect the enforceability of the remaining parts of this Agreement.

12. Third Parties: This Agreement does not and shall not be deemed to confer upon or grant to any third party any right to claim damages or to bring any lawsuit, action or other proceeding against either the County, the Developer, the Metro District, or their respective successors and assigns, because of any breach hereof or because of any terms, covenants, agreements or conditions contained herein.

13. Solid Waste or Hazardous Materials: Should any refuse from the detention basin/BMP(s) be suspected or identified as solid waste or petroleum products, hazardous substances or hazardous materials (collectively referred to herein as "hazardous materials"), the Developer and the Metro District shall take all necessary and proper steps to characterize the solid waste or hazardous materials and properly dispose of it in accordance with applicable State and/or Federal environmental laws and regulations, including, but not limited to, the following: Solid Wastes Disposal Sites and Facilities Acts, §§ 30-20-100.5 – 30-20-119, C.R.S., Colorado Regulations Pertaining to Solid Waste Disposal Sites and Facilities, 6 C.C.R. 1007-2, *et seq.*, Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992k, and Federal Solid Waste Regulations 40 CFR Ch. I. The County shall not be responsible or liable for identifying, characterizing, cleaning up, or disposing of such solid waste or hazardous materials. Notwithstanding the previous sentence, should any refuse cleaned up and disposed of by the County be determined to be solid waste or hazardous materials, the Developer and the Metro District, but not the County, shall be

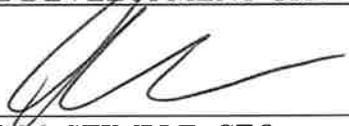
responsible and liable as the owner, generator, and/or transporter of said solid waste or hazardous materials.

14. Applicable Law and Venue: The laws, rules, and regulations of the State of Colorado and El Paso County shall be applicable in the enforcement, interpretation, and execution of this Agreement, except that Federal law may be applicable regarding solid waste or hazardous materials. Venue shall be in the El Paso County District Court.

15. Limitation on Developer's Obligation and Liability: The obligation and liability of the Developer hereunder shall only continue until such time as the Final Plat as described in Paragraph C of the Recitals set forth above is recorded and the Developer completes the construction of the detention basin/BMP(s) and transfers all applicable maintenance and operation responsibilities to the Metro District. By execution of this Agreement, the Metro District agrees to accept all responsibilities and to perform all duties assigned to it, including those of the Developer, as specified herein, upon transfer of **TRACT B, and public drainage easements in LOTS 4, 5, 7, and 10** from Developer to the Metro District.

IN WITNESS WHEREOF, the Parties affix their signatures below.

Executed this 15<sup>th</sup> day of September, 2022, by:  
TIMBERRIDGE DEVELOPMENT GROUP, LLC

By:   
DOUGLAS M. STIMPLE, CEO

The foregoing instrument was acknowledged before me this 15<sup>th</sup> day of September, 2022, by DOUGLAS M. STIMPLE, CEO, TIMBERRIDGE DEVELOPMENT GROUP, LLC.

Witness my hand and official seal.

My commission expires: 12-02-2025

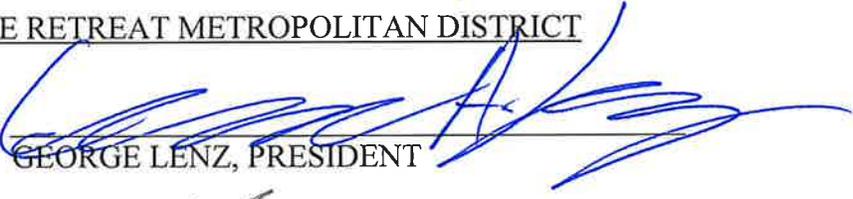
Christine R. Wise

Notary Public



Executed this 15<sup>th</sup> day of September, 2022, by:

THE RETREAT METROPOLITAN DISTRICT

By:   
GEORGE LENZ, PRESIDENT

Attest:  
By:   
DOUGLAS M. STIMPLE, SECRETARY

The foregoing instrument was acknowledged before me this 15<sup>th</sup> day of September, 2022, by GEORGE LENZ, PRESIDENT, and DOUGLAS M. STIMPLE, SECRETARY, The Retreat Metropolitan District.

Witness my hand and official seal.

My commission expires: 12-02-2025



  
Notary Public

Executed this 15<sup>th</sup> day of September, 2022, by:

BOARD OF COUNTY COMMISSIONERS  
OF EL PASO COUNTY, COLORADO

By: 

Kevin Mastin, Interim Executive Director  
El Paso County Planning and Community Development Department  
Authorized signatory pursuant to LDC

The foregoing instrument was acknowledged before me this 15<sup>th</sup> day of September, 2022, by Kevin Mastin, Executive Director of El Paso County Planning and Community Development Department.

Witness my hand and official seal.

My commission expires: 1/13/2026

  
Notary Public

Approved as to Content and Form:

  
Assistant County Attorney

KELLY M. HILLS  
Notary Public  
State of Colorado  
Notary ID # 20014033687  
My Commission Expires 01-13-2026

Exhibit A

LEGAL DESCRIPTION:

TWO (2) PARCELS OF LAND BEING A PORTION OF SECTIONS 27 AND 28, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BASIS OF BEARINGS: THE SOUTH LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BEING MONUMENTED AT THE WEST END WHICH IS THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 28, BY A 3-1/4" ALUMINUM SURVEYORS CAP STAMPED "ESI PLS 10376, 2006" AND AT THE EAST END, WHICH IS A 30' WITNESS CORNER TO THE EAST OF THE EAST QUARTER CORNER OF SAID SECTION 28, BY A 3-1/4" ALUMINUM SURVEYORS CAP STAMPED "ESI 10376, 2006", IS ASSUMED TO BEAR S89°08'28"W A DISTANCE OF 1356.68 FEET.

**PARCEL A**

COMMENCING AT THE NORTHWEST CORNER OF RETREAT AT TIMBERRIDGE FILING NO. 1 RECORDED UNDER RECEPTION NO. 220714653, EL PASO COUNTY, COLORADO, SAID POINT BEING ALSO ON THE EASTERLY RIGHT OF WAY LINE OF VOLMER ROAD AS RECORDED IN BOOK 2678 AT PAGE 430, SAID POINT BEING THE POINT OF BEGINNING;

THENCE N21°41'10"E, ON THE EASTERLY RIGHT OF WAY LINE OF SAID VOLMER ROAD, A DISTANCE OF 657.86 FEET;  
THENCE S68°18'50"E, A DISTANCE OF 40.00 FEET;  
THENCE S46°30'00"E, A DISTANCE OF 243.59 FEET TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT WHOSE CENTER BEARS S46°30'00"E, HAVING A DELTA OF 114°51'36", A RADIUS OF 60.00 FEET AND A DISTANCE OF 120.28 FEET TO A POINT ON CURVE;  
THENCE N12°00'00"E, A DISTANCE OF 307.77 FEET;  
THENCE S78°00'00"E, A DISTANCE OF 490.00 FEET;  
THENCE S12°00'00"W, A DISTANCE OF 183.00 FEET;  
THENCE N90°00'00"E, A DISTANCE OF 378.68 FEET;  
THENCE S86°05'18"E, A DISTANCE OF 253.40 FEET;  
THENCE S00°00'00"E, A DISTANCE OF 208.46 FEET;  
THENCE S41°00'00"E, A DISTANCE OF 256.15 FEET;  
THENCE S16°19'41"E, A DISTANCE OF 155.30 FEET;  
THENCE S03°30'00"W, A DISTANCE OF 107.28 FEET;  
THENCE S17°19'01"W, A DISTANCE OF 103.72 FEET;  
THENCE S18°00'00"W, A DISTANCE OF 100.00 FEET;  
THENCE S19°43'22"W, A DISTANCE OF 95.70 FEET;  
THENCE S27°50'00"W, A DISTANCE OF 94.45 FEET;  
THENCE S35°37'50"W, A DISTANCE OF 108.98 FEET;  
THENCE S36°37'30"W, A DISTANCE OF 200.00 FEET;  
THENCE S53°22'30"E, A DISTANCE OF 150.00 FEET;  
THENCE S36°37'30"W, A DISTANCE OF 10.00 FEET TO THE NORTHWESTERLY CORNER OF SAID RETREAT AT TIMBERRIDGE FILING NO. 1;

THENCE ON THE BOUNDARY OF SAID RETREAT AT TIMBERRIDGE FILING NO. 1 THE FOLLOWING TWELVE (12) COURSES:

1. S36°37'30"W, A DISTANCE OF 263.98 FEET TO A POINT OF CURVE;
2. ON THE ARC OF A CURVE TO THE LEFT HAVING A DELTA OF 12°37'30", A RADIUS OF 525.00 FEET AND A DISTANCE OF 115.68 FEET TO A POINT ON CURVE;
3. N66°00'00"W, A DISTANCE OF 197.47 FEET;
4. N35°00'00"W, A DISTANCE OF 230.09 FEET;
5. N05°00'00"W, A DISTANCE OF 55.08 FEET;
6. N85°00'00"E, A DISTANCE OF 184.29 FEET;
7. N04°30'10"W, A DISTANCE OF 243.01 FEET;
8. N90°00'00"W, A DISTANCE OF 424.49 FEET;
9. N54°48'53"W, A DISTANCE OF 205.37 FEET;
10. N66°30'00"W, A DISTANCE OF 255.51 FEET TO A POINT ON CURVE;
11. ON THE ARC OF A CURVE TO THE RIGHT WHOSE CENTER BEARS S66°30'00"E, HAVING A DELTA OF 09°20'00", A RADIUS OF 770.00 FEET AND A DISTANCE OF 125.43 FEET TO A POINT ON CURVE;
12. N57°10'00"W, A DISTANCE OF 661.28 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 45.715 ACRES.

**PARCEL B**

COMMENCING AT THE SOUTHEAST CORNER OF RETREAT AT TIMBERRIDGE FILING NO. 1 RECORDED UNDER RECEPTION NO. 220714653, EL PASO COUNTY, COLORADO, SAID POINT BEING THE POINT OF BEGINNING;

THENCE ON THE BOUNDARY OF SAID RETREAT AT TIMBERRIDGE FILING NO. 1 THE FOLLOWING FOURTEEN (14) COURSES:

1. N02°25'00"W, A DISTANCE OF 18.66 FEET TO A POINT OF CURVE;
2. ON THE ARC OF A CURVE TO THE RIGHT HAVING A DELTA OF 01°30'30", A RADIUS OF 1025.00 FEET AND A DISTANCE OF 26.98 FEET TO A POINT OF TANGENT;
3. N00°54'30"W, A DISTANCE OF 154.28 FEET;
4. S89°05'30"W, A DISTANCE OF 150.00 FEET;
5. N00°54'30"W, A DISTANCE OF 175.00 FEET;
6. N05°04'00"W, A DISTANCE OF 416.10 FEET;
7. N89°05'30"E, A DISTANCE OF 145.17 FEET;
8. S88°03'59"E, A DISTANCE OF 85.10 FEET;
9. N89°05'30"E, A DISTANCE OF 160.00 FEET;
10. N00°54'30"W, A DISTANCE OF 720.00 FEET;
11. N06°02'18"E, A DISTANCE OF 136.13 FEET TO A POINT ON CURVE;
12. ON THE ARC OF A CURVE TO THE RIGHT WHOSE CENTER BEARS N06°02'18"E, HAVING A DELTA OF 05°02'42", A RADIUS OF 725.00 FEET AND A DISTANCE OF 63.84 FEET TO A POINT ON CURVE;
13. N11°05'00"E, A DISTANCE OF 147.40 FEET;
14. N71°41'17"W, A DISTANCE OF 87.90 FEET;

THENCE N19°50'00"E, A DISTANCE OF 225.69 FEET;

THENCE N05°57'53"E, A DISTANCE OF 241.74 FEET;

THENCE N89°05'30"E, A DISTANCE OF 150.00 FEET;

THENCE N00°54'30"W, A DISTANCE OF 28.43 FEET TO A POINT OF CURVE;

THENCE ON THE ARC OF CURVE TO THE RIGHT HAVING A DELTA OF 83°24'30", A RADIUS OF 55.00 FEET AND A DISTANCE OF 80.07 FEET TO A POINT ON CURVE;

THENCE N07°30'00"W, A DISTANCE OF 198.00 FEET;

THENCE S77°00'00"E, A DISTANCE OF 251.41 FEET;

THENCE S00°54'30"E, A DISTANCE OF 2478.00 FEET TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 27 TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE S87°35'00"W, ON SAID SOUTH LINE OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 27, A DISTANCE OF 639.38 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 30.114 ACRES.

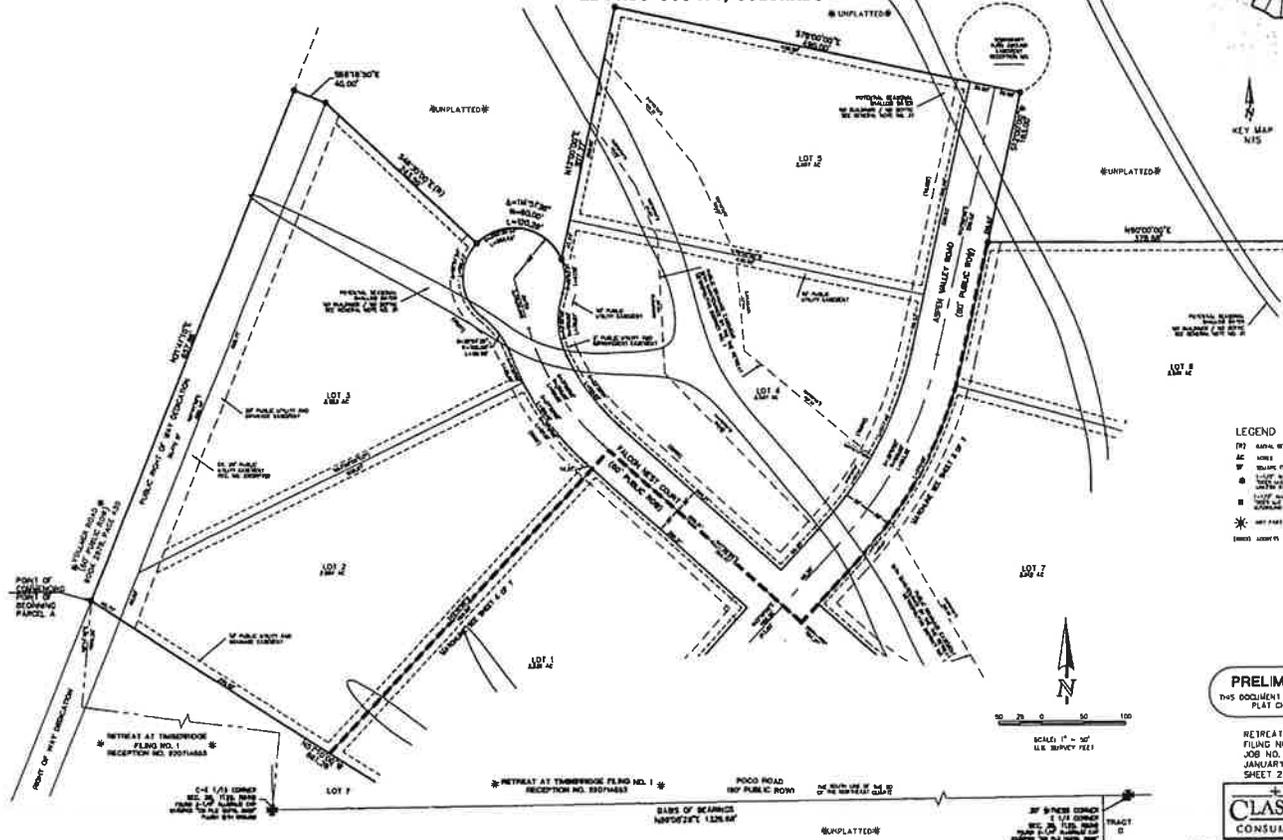
**CONTAINING A TOTAL CALCULATED AREA OF 75.829 ACRES.**

Exhibit B

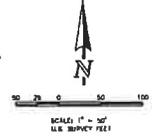
TRACT A and LOTS 4, 5, 7, 10 and 11, Retreat at TimberRidge Filing No. 2.



**RETREAT AT TIMBERRIDGE FILING NO. 2**  
 A PORTION OF SECTIONS 27 AND 28,  
 TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN,  
 EL PASO COUNTY, COLORADO



- LEGEND**
- DTY BOUNDARY
  - AC AREA
  - W/ BOUNDARY
  - POINT OF COMMENCEMENT OF STRIP
  - POINT OF DISCONTINUITY OF STRIP
  - POINT OF COMMENCEMENT OF STRIP
  - POINT OF DISCONTINUITY OF STRIP
  - POINT OF COMMENCEMENT OF STRIP
  - POINT OF DISCONTINUITY OF STRIP



**PRELIMINARY**  
 THIS DOCUMENT HAS NOT BEEN  
 PLAT CHECKED

RETREAT AT TIMBERRIDGE  
 FILING NO. 2  
 JOB NO. 1185.20  
 JANUARY 4, 2021  
 SHEET 2 OF 7



ALL RIGHTS RESERVED  
 11/18/2021 10:00 AM  
 PCD FILE NO. 17-21-021





Standard Operation Procedures  
for  
Inspection and Maintenance  
of  
Extended Detention Basin(s)

**Retreat at TimberRidge**

**Filing No. 2**

Owner:  
TIMBERRIDGE DEVELOPMENT GROUP, LLLC  
2138 Flying Horse Club Drive  
Colorado Springs, CO 80921  
719-592-9333  
Contact: Loren Moreland

El Paso County Department of Public Works  
3275 Akers Drive  
Colorado Springs, CO 80922

[dotweb@elpasoco.com](mailto:dotweb@elpasoco.com)  
719-520-6900

## Introduction

This plan addresses operation and maintenance of public detention / water quality facilities (**Pond 3**) constructed as part of the **Retreat at TimberRidge Filing No 2** development project. This facility is located due south of Lot 9 at the west end of Falcon Nest Court. (**EPC PCD project number: SF-21-021**). **The plat number of Retreat at TimberRidge Filing No 2 is SF-21-021.**

## Background

The State of Colorado Department of Public Health and Environment, Water Quality Control Division (CDPHE), has implemented federal regulations within the State of Colorado through permitting, and has included El Paso County as one of numerous Municipal Separate Storm Sewer Systems (MS4s) required to be permitted in compliance with National Pollutant Discharge Elimination System (NPDES) Phase 2 Regulations, as defined within Colorado's Phase 2 Municipal Guidance.

NPDES Phase 2 MS4s stormwater discharges are covered under a general permit under the Colorado Discharge Permit System (CDPS) under Regulation 61, and as a minimum require the MS4's operator (e.g., El Paso County) to develop, implement, and enforce a stormwater management program to reduce the discharge of pollutants to the maximum extent practicable to protect water quality requirements of the Colorado Water Quality Control Act, Colorado Code of Regulations [CCR] 61.8(11)(a)(i).

This Stormwater Facilities Operation and Maintenance Plan (O&M Plan) is for the private detention facility (**Pond 3**) constructed as part of the development project referenced above and as required by "The Retreat at TimberRidge MDDP", approved March 2018.

## Associated Agreements

The Subdivision Improvements Agreement (SIA) for the development required the developer to complete the Pond 3 private improvements as itemized in the associated Financial Assurance Estimate (FAE).

The SIA and FAE require as-built plans and certification of completion of the detention facilities in general conformance with the approved construction drawings.

A separate O&M Manual for this subdivision will cover the Sand Creek channel improvements as required and presented on the Construction Drawings approved by El Paso County.

## Funding for and Organization of Facility Operation and Maintenance

The Retreat Metropolitan District No. 1 will be responsible for operations and maintenance of the Pond 3 detention facilities upon acceptance of the facilities.

## Site and Facilities Description

Retreat at TimberRidge Filing No. 2 has a total acreage of 75.829 acres located in Sections 27 & 28, Township 12 South, Range 65 West of the Sixth Principal Meridian in the County of El Paso, and State of Colorado. This site is bounded on the north by undeveloped future TimberRidge property (Residential use), on the south and east by undeveloped future Sterling Ranch property (Residential use) and to the west by Vollmer Road. The property is zoned PUD. 90 single family residential lots and associated public roadway are planned within this plat. 12 of the planned lots west of Sand Creek will be 2.5 Ac. min. in size with rural public roads. No overlot grading will take place on these lots, only grading for the public roadway and proposed on-site EDB (Pond 3) within Tract A. The 78 planned lots east of Sand Creek will consist of urban lots (12,000 SF min. in size) and the majority of these lots will be overlot graded along with the public urban roadways and drain to the existing on-site EDB (Pond 2) constructed with Filing No. 1.

The site access for this facility is directly off the west end of Falcon Nest Court, down the lot line between lots 9 and 10 within a 30' public drainage easement to Tract A. A 16' wide access ramp along the west side of the pond is then used for direct access to the facility.

The emergency overflow spillway is located also located along the west side of the facility with an elevation of 7207.00 and topo of embankment at 7209.00. It is designed as a 35' wide overflow weir with 4:1 side slopes, buried rip-rap and concrete cut-off wall. Any emergency overtopping is conveyed directly into Sand Creek.

This facility has a 48" RCP storm pipe that outlets into a 25'x16' concrete forebay with 18" high walls and required concrete impact structures. A 6.75" notch at the end of the forebay releases the trickle flows into a 24" wide, 6" depth concrete trickle channel at 1.3% slope. The flows are conveyed towards the outlet structure. The outlet structure contains an integrated 30" deep micropool and a 10'x4' concrete outlet box with a orifice plate containing 3 holes spaced 20" apart. The top two holes are 1-9/32" dia. with the bottom hole being 1-1/4" dia. The water quality invert at the bottom hole is at elevation 7199.50 with top of box at 7204.50. A 30" RCP outlet pipe releases flows directly into Sand Creek.

There is 7.31 ac. that is not able to be captured and routed to one of the permanent EDB's. However, Runoff Reduction practices are required and provided in the 25' rear setbacks of the following lots: 13, 14, 21-27 and 43-60 within these specific basins. Reference the following Runoff Reduction Calculations and Treatment Map for these areas. These calculations show that an 87% WQCV Reduction is provided, which meets El Paso County standards. The Metro District will ensure that the plat note requirement of no impervious areas in the setbacks is met and that these areas remain vegetated through covenant enforcement.

**Design Procedure Form: Runoff Reduction**

UD-BMP (Version 3.07, March 2018)

Sheet 1 of 1

Designer: Marc A. Whorton, P.E.  
 Company: Classic Consulting  
 Date: March 17, 2022  
 Project: Retreat at TimberRidge Filling No. 2  
 Location: BASINS NOT TRIBUTARY TO PERMANENT SWQ FACILITY

**SITE INFORMATION (User Input in Blue Cells)**

WQCV Rainfall Depth: 0.53 inches  
 Depth of Average Runoff Producing Storm,  $d_r$ : 0.42 inches (for Watersheds Outside of the Denver Region, Figure 3-1 in USDCM Vol. 3)

Area Type	UIA:RPA	UIA:RPA	UIA:RPA	UIA:RPA	UIA:RPA	UIA:RPA					
Area ID	Basin E1	Basin H1	Basin W	Basin V	Basin K	Basin L					
Downstream Design Point ID	SC	SC	DP-15	DP-15	Sed. Basin	Sed. Basin					
Downstream BMP Type	None	None	None	None	None	None					
DCIA (ft <sup>2</sup> )	--	--	--	--	--	--					
UIA (ft <sup>2</sup> )	28,800	17,675	46,890	59,560	52,250	16,480					
RPA (ft <sup>2</sup> )	26,200	5,060	14,420	20,200	11,800	6,240					
SPA (ft <sup>2</sup> )	--	--	--	--	--	--					
HSG A (%)	0%	0%	0%	0%	0%	0%					
HSG B (%)	100%	100%	100%	100%	100%	100%					
HSG C/D (%)	0%	0%	0%	0%	0%	0%					
Average Slope of RPA (ft/ft)	0.018	0.020	0.020	0.030	0.040	0.040					
UIA RPA Interface Width (ft)	30.00	200.00	550.00	1000.00	450.00	200.00					

**CALCULATED RUNOFF RESULTS**

Area ID	Basin E1	Basin H1	Basin W	Basin V	Basin K	Basin L					
UIA RPA Area (ft <sup>2</sup> )	55,000	22,735	61,310	79,760	64,050	22,720					
L / W Ratio	16.00	0.57	0.20	0.08	0.32	0.57					
UIA / Area	0.5236	0.7774	0.7648	0.7467	0.8158	0.7254					
Runoff (in)	0.00	0.08	0.05	0.02	0.12	0.01					
Runoff (ft <sup>3</sup> )	0	145	253	138	659	11					
Runoff Reduction (ft <sup>3</sup> )	1032	489	1427	1996	1213	580					

**CALCULATED WQCV RESULTS**

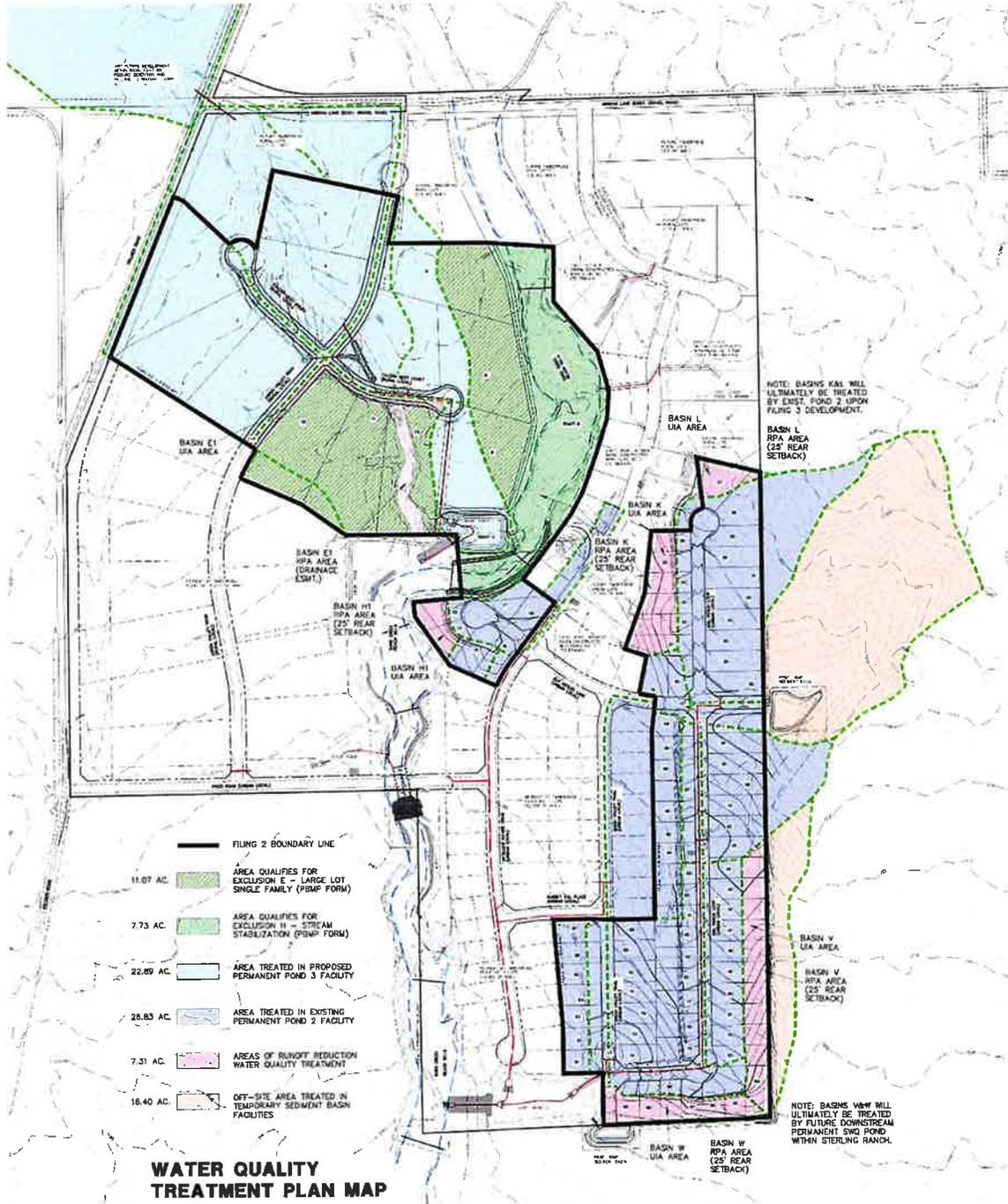
Area ID	Basin E1	Basin H1	Basin W	Basin V	Basin K	Basin L					
WQCV (ft <sup>3</sup> )	1172	719	1908	2424	2126	671					
WQCV Reduction (ft <sup>3</sup> )	1172	575	1655	2286	1467	860					
WQCV Reduction (%)	100%	80%	87%	94%	69%	98%					
Untreated WQCV (ft <sup>3</sup> )	0	145	253	138	659	11					

**CALCULATED DESIGN POINT RESULTS (sums results from all columns with the same Downstream Design Point ID)**

Downstream Design Point ID	SC	DP-15	Sed. Basin								
DCIA (ft <sup>2</sup> )	0	0	0								
UIA (ft <sup>2</sup> )	46,475	106,450	68,730								
RPA (ft <sup>2</sup> )	31,260	34,620	18,040								
SPA (ft <sup>2</sup> )	0	0	0								
Total Area (ft <sup>2</sup> )	77,735	141,070	86,770								
Total Impervious Area (ft <sup>2</sup> )	46,475	106,450	68,730								
WQCV (ft <sup>3</sup> )	1,891	4,332	2,797								
WQCV Reduction (ft <sup>3</sup> )	1,747	3,941	2,127								
WQCV Reduction (%)	92%	91%	76%								
Untreated WQCV (ft <sup>3</sup> )	145	391	670								

**CALCULATED SITE RESULTS (sums results from all columns in worksheet)**

Total Area (ft <sup>2</sup> )	305,575
Total Impervious Area (ft <sup>2</sup> )	221,655
WQCV (ft <sup>3</sup> )	9,021
WQCV Reduction (ft <sup>3</sup> )	7,815
WQCV Reduction (%)	87%
Untreated WQCV (ft <sup>3</sup> )	1,205



## **Extended Detention Basin (EDB) Description**

The subsections below describe general EDB operations and maintenance.

### **EDB-1 GENERAL EDB CONCEPT**

Extended Detention Basins (EDBs) are one of the most common types of permanent stormwater control measures utilized within the Front Range of Colorado. An EDB is a sedimentation basin designed to “extend” the runoff detention time, but to drain completely sometime after stormwater runoff ends. An EDB’s drain time for the water quality portion of the facility is typically 40 hours. The basins are considered to be “dry” because the majority of the basin is designed not to have a significant permanent pool of water remaining between runoff events.

EDBs are an adaptation of a detention basin used for flood control, with the primary difference being the addition of forebays, micropools and a slow release outlet design. Forebays are shallow concrete “pans” located at the inflow points to the basin and are provided to facilitate sediment removal within a contained area prior to releasing into the pond. The forebays collect and briefly hold stormwater runoff resulting in a process called sedimentation, dropping sediment out of the stormwater. The stormwater is then routed from the forebay into the concrete trickle channel and upper basin, the large grassy portion of the basin. The EDB includes an outlet structure that extends the drain time of frequently occurring runoff events to facilitate pollutant removal. An EDB also includes a small micropool just upstream of the outlet structure or built into the outlet structure. The micropool is designed to hold a small amount of water to keep sediment and floatables from blocking the outlet orifices.

### **EDB-2 INSPECTING EXTENDED DETENTION BASINS (EDBs)**

#### **EDB-2.1 Access and Easements**

Inspection and maintenance personnel may utilize the attached stormwater facility map containing the location(s) of the access points and maintenance easements of the EDB(s) within this development.

#### **EDB-2.2 Stormwater Management Facilities Locations**

Inspection and maintenance personnel may utilize the attached stormwater facility map located in containing the location(s) of the EDB(s) within this development.

#### **EDB-2.3 Extended Detention Basin (EDB) Features**

EDBs have a number of features that are designed to serve a particular function. Many times the proper function of one feature depends on another. For example, if a forebay is not properly maintained, it could negatively affect the performance of a downstream feature (trickle channel, micropool, etc.).

Therefore, it is critical that each feature of the EDB is properly inspected and maintained to ensure that the overall facility functions as it was intended. Below is a list and description of the most common features within an EDB and the corresponding maintenance inspection items that can be anticipated:

**Table EDB-1: Typical Inspection & Maintenance Requirements Matrix**

EDB Features	Sediment Removal	Mowing/ Weed Control	Trash & Debris Removal	Erosion	Over-grown Vegetation Removal	Standing Water (mosquito/ algae control)	Structure Repair
Inflow Points (outfalls)	X		X	X			X
Forebays	X		X				X
Low-Flow Channel	X		X	X	X		X
Bottom Stage	X	X	X	X	X	X	
Micropool	X		X		X	X	X
Outlet Works	X		X				X
Emergency Spillway			X	X	X		X
Upper Stage			X	X			
Embankment		X		X	X		

**EDB-2.3.1 Inflow Points**

Inflow Points or Outfalls into EDBs are the point source of the stormwater discharge into the facility. An inflow point is commonly a storm sewer pipe with a flared end section that discharges into the EDB. In some instances, an inflow point could be a drainage channel or ditch that flows into the facility.

An energy dissipater (riprap or hard armor protection) is typically immediately downstream of the discharge point into the EDB to protect from erosion. In some cases, the storm sewer outfall can have a toe- wall or cut-off wall immediately below the structure to prevent undercutting of the outfall from erosion.

*The typical maintenance items that are found with inflow points are as follows:*

*a. Riprap Displaced* – Many times, because the repeated impact/force of water, the riprap can shift and settle. If any portion of the riprap apron appears to have settled, soil is present between the riprap, or the riprap has shifted, maintenance may be required to ensure future erosion is prevented.

*b. Erosion Present/Outfall Undercut* – In some situations, the energy dissipater may not have been sized, constructed, or maintained appropriately and erosion has occurred. Any erosion within the vicinity of the inflow point will require maintenance to prevent damage to the structure(s) and sediment transport within the facility.

*c. Sediment Accumulation* – Because of the turbulence in the water created by the energy dissipater, sediment often deposits immediately downstream of the inflow point. To prevent a loss in hydraulic performance of the upstream infrastructure, sediment that accumulates in this area must be removed in a timely manner.

*d. Structural Damage* – Structural damage can occur at any time during the life of the facility. Typically, for an inflow, the structural damage occurs to the pipe flared end section (concrete or steel). Structural damage can lead to additional operating problems with the facility, including loss of hydraulic performance.

*e. Woody Growth/Weeds Present* – Undesirable vegetation can grow in and around the inflow area to an EDB that can significantly affect the performance of the drainage facilities discharging into the facility. This type of vegetation includes trees (typically cottonwoods) and dense areas of shrubs (willows). If woody vegetation is

not routinely mowed/removed, the growth can cause debris/sediment to accumulate, resulting in blockage of the discharge. Also, tree roots can cause damage to the structural components of the inflow. Routine maintenance is essential for trees (removing a small tree/sapling is much cheaper and “quieter” than a mature tree). In addition, noxious weeds growing in the facility can result in the loss of desirable native vegetation and impact adjacent open spaces/land.

#### EDB-2.3.2 Forebay

A forebay is a solid surface (pad), typically constructed of concrete, immediately downstream of the inflow point. The forebay is designed to capture larger particles and trash to prevent them from entering the main portion of the EDB. The solid surface is designed to facilitate mechanical sediment removal (via a skid steer or shovel). The forebay typically includes a small diameter discharge pipe or weir on the downstream end, which is designed to drain the forebay in a specified period of time to promote sedimentation. Forebays vary in size and depth depending on the design and site constraints.

*The typical maintenance items that are found with forebays are as follows:*

- a. Sediment/Debris Accumulation* – Because this feature of the EDB is designed to provide the initial sedimentation, debris and sediment frequently accumulate in this area. If the sediment and debris is not removed from the forebay on a regular basis, it can significantly affect the function of other features within the EDB. Routine sediment removal from the forebay can significantly reduce the need for dredging of the main portion of the EDB using specialized equipment (long reach excavators). Routine removal of sediment from the forebay can substantially decrease the long-term sediment removal costs of an EDB.
- b. Concrete Cracking/Failing* – The forebay is primarily constructed of concrete, which cracks, spalls, and settles. Damage to the forebay can result in decreased performance and impact maintenance efforts.
- c. Drain Pipe/Weir Clogged* – Many times the drainpipe or weir can be clogged with debris, and prevent the forebay from draining properly. If standing water is present in the forebay (and there is not a base flow), the forebay is most likely not draining properly. This can result in a decrease in performance and create potential nuisances with stagnant water (mosquitoes).
- d. Weir/Drain Pipe Damaged* – Routine maintenance activities, vandalism, or age may cause the weir or drain pipe in the forebay to become damaged. Weirs are typically constructed of concrete, which cracks and spalls. The drainpipe is typically constructed with plastic, which can fracture.

#### EDB-2.3.3 Trickle Channel (Low-Flow)

The trickle channel conveys stormwater from the forebay to the micro- pool of the EDB. The trickle channel is typically made of concrete.

However, grass lined (riprap sides protected) is also common and can provide for an additional means of water quality within the EDB. The trickle channel is typically 6-9 inches in depth and can vary in width.

*The typical maintenance items that are found with trickle channels are as follows:*

- a. Sediment/Debris Accumulation* – Trickle channels are typically designed with a relatively flat slope that can promote sedimentation and the collection of debris. Also, if a trickle channel is grass lined it can accumulate sediment and debris at a much quicker rate. Routine removal of accumulated sediment and debris is essential in preventing flows from circumventing the trickle channel and affecting

the dry storage portion of the pond.

*b. Concrete/Riprap Damage* – Concrete can crack, spall, and settle and must be repaired to ensure proper function of the trickle channel. Riprap can also shift over time and must be replaced/repaired as necessary.

*c. Woody Growth/Weeds Present* – Because of the constant moisture in the area surrounding the trickle channel, woody growth (cottonwoods/willows) can become a problem. Trees and dense shrub type vegetation can affect the capacity of the trickle channel and can allow flows to circumvent the feature.

*d. Erosion Outside of Channel* – In larger precipitation events, the trickle channel capacity will likely be exceeded. This can result in erosion immediately adjacent to the trickle channel and must be repaired to prevent further damage to the structural components of the EDB.

#### EDB-2.3.4 Bottom Stage (Initial Surge)

The bottom stage is at least 4 inches deeper than the upper stage and is located directly in front of the outlet works structure, and typically above the permanent water surface of the micropool and the invert of the trickle channel. The bottom stage is designed to store the smaller runoff events, assists in keeping the majority of the basin bottom dry resulting in easier maintenance operations, and enhances the facility's pollutant removal capabilities. This area of the EDB may develop wetland vegetation.

*The typical maintenance items that are found with the bottom stage are as follows:*

*a. Sediment/Debris Accumulation* – The micropool can frequently accumulate sediment and debris. This material must be removed to maintain pond volume and proper function of the outlet structure.

*b. Woody Growth/Weeds Present* – Because of the constant moisture in the soil surrounding the micropool, woody growth (cottonwoods/willows) can create operational problems for the EDB. If woody vegetation is not routinely mowed/removed, the growth can cause debris/sediment to accumulate outside of the micropool, which can cause problems with other EDB features. Also, tree roots can cause damage to the structural components of the outlet works. Routine management is essential for trees (removing a small tree/sapling is much cheaper and less disruptive than removing a mature tree).

*c. Bank Erosion* – The micropool is usually a couple feet deeper than the other areas of the ponds. Erosion can be caused by water dropping into the micropool if adequate protection/armor is not present. Erosion in this area must be mitigated to prevent sediment transport and other EDB feature damage.

*d. Mosquitoes/Algae Treatment* – Nuisance created by stagnant water can result from improper maintenance/treatment of the micropool. Mosquito larvae can be laid by adult mosquitoes within the permanent pool. Also, aquatic vegetation that grows in shallow pools of water can decompose causing foul odors. Chemical/mechanical treatment of the micropool may be necessary to reduce these impacts to adjacent homeowners.

*e. Petroleum/Chemical Sheen* – Many indicators of illicit discharges into the storm sewer systems will be present in the micropool area of the EDB. These indicators can include sheens, odors, discolored soil, and dead vegetation. If it is suspected that an illicit discharge has occurred, contact County Stormwater immediately. Proper removal/mitigation of contaminated soils and water in the EDB is necessary to minimize any environmental impacts downstream.

#### EDB-2.3.5 Micropool

The micropool is a concrete or grouted boulder walled structure directly in front of the outlet works. At a minimum, the micropool is 2.5 feet deep and is designed to hold water. The micropool is critical in the proper function of the EDB; it allows suspended sediment to be deposited at the bottom of the micropool and prevents these sediments from being deposited in front of the outlet works causing clogging of the outlet structure, which results in marshy areas within the top and bottom stages.

*The typical maintenance items that are found with micropools are as follows:*

- a. *Sediment/Debris Accumulation* – The micropool can frequently accumulate sediment and debris. This material must be removed to maintain pond volume and proper function of the outlet structure.
- b. *Woody Growth/Weeds Present* – Because of the constant moisture in the soil surrounding the micropool, woody growth (cottonwoods/willows) can create operational problems for the EDB. If woody vegetation is not routinely mowed/removed, the growth can cause debris/sediment to accumulate outside of the micropool, which can cause problems with other EDB features. Also, treeroots can cause damage to the structural components of the outlet works. Routine management is essential for trees (removing a small tree/sapling is much cheaper and less disruptive than removing a mature tree).
- c. *Mosquitoes/Algae Treatment* – Nuisance created by stagnant water can result from improper maintenance/treatment of the micropool. Mosquito larvae can be laid by adult mosquitoes within the permanent pool. Also, aquatic vegetation that grows in shallow pools of water can decompose causing foul odors. Chemical/mechanical treatment of the micropool may be necessary to reduce these impacts to adjacent homeowners.
- d. *Petroleum/Chemical Sheen* – Many indicators of illicit discharges into the storm sewer systems will be present in the micropool area of the EDB. These indicators can include sheens, odors, discolored soil, and dead vegetation. If it is suspected that an illicit discharge has occurred, contact the supervisor immediately. Proper removal of contaminated soils and water in the EDB is necessary to minimize any environmental impacts downstream.

#### EDB-2.3.6 Outlet Works

The outlet works is the feature that drains the EDB in specified release rates and periods of time. The outlet works is typically constructed of reinforced concrete into the embankment of the EDB. The concrete structure typically has steel orifice plates anchored/embedded into it to control stormwater release rates. The larger openings for flood control on the outlet structure typically have trash racks over them to prevent clogging. The water quality orifice plate with small diameter holes will typically have a well screen covering it to prevent smaller materials from clogging it. The outlet structure is the single-most important feature in the EDB operation. Proper inspection and maintenance of the outlet works is essential in ensuring the long-term operation of the EDB.

*The typical maintenance items that are found with the outlet works are as follows:*

- a. *Trash Rack/Well Screen Clogged* – Floatable material that enters the EDB will most likely make its way to the outlet structure. This material is trapped against the trash racks and well screens on the outlet structure (which is why they are there). This material must be removed on a routine basis to ensure the outlet structure drains in the specified design period.
- b. *Structural Damage* – The outlet structure is primarily constructed of concrete, which can crack, spall, and settle. The steel trash racks and well screens are also