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 <u>ACM ALF VIII JV Sub II LLC</u> (Developer) AND 4-Way Ranch Metropolitan District No. 2, (Metro District) a Colorado corporation and political subdivision. 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 <u>Waterbury Filings 1 & 2</u>; 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 <u>Exhibit A</u> attached hereto and incorporated herein by this reference; and
- C. WHEREAS, Developer desires to plat and develop on the Property a land use to be known as <u>Waterbury Filings 1 & 2</u> 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 land use; and
- E. WHEREAS, Chapter 8, Section 8.4.5 of the El Paso County <u>Land Development Code</u>, 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 <u>Drainage Criteria Manual</u> 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 land use <u>3</u> detention basin/stormwater quality BMP(s) (Pond 1, Pond 2 and Pond 3) and Runoff Reduction in the form of Grass Buffers 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 will be platted as <u>Tract B for Pond 1 in Waterbury Filings 1 & 2</u>, the attached easement in Exhibit B for <u>Pond 2 & 3 and Lots 40 and 42 for Grass Buffers in Waterbury Filings 1 & 2</u>, 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 with the duties of operating, maintaining and repairing the detention basin/BMP(s) and Grass Buffers on the Property described in <u>Exhibit B</u>; and
- L. WHEREAS, it is the County's experience that developers historically have not properly cleaned and otherwise not properly maintained and repaired these detention basins/BMPs, and that these detention basins/BMPs and Grass Buffers, 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 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) and Grass Buffers serving this land use due to the Developer's failure to meet its obligations to do the same; and
- N. WHEREAS, the County conditions approval of this land use on the Developer's promise to so construct the detention basin/BMP(s) and Grass Buffers, and further conditions approval on the Developer'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 land use; and
- O. WHEREAS, the County could condition land use 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 promises contained herein; and
- P. WHEREAS, the County, in order to secure performance of the promises contained herein, conditions approval of this land use 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

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. <u>Covenants Running with the Land</u>: Developer agrees that this entire Agreement and the performance thereof shall become a covenant running with the land, which land is legally described in <u>Exhibit A</u> attached hereto, and that this entire Agreement and the performance thereof shall be binding upon itself and its successors and assigns.
- 3. <u>Construction</u>: Developer shall construct on that portion of the Property described in Exhibit B attached hereto and incorporated herein by this reference, 3 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-year period will commence to run on the date the Erosion and Stormwater Quality Control Permit (ESQCP) is issued. Rough grading of the detention basin/BMP(s) must be completed and inspected by the El Paso County Development Services 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 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. <u>Maintenance</u>: The Developer 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 their 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. <u>Creation of Easement</u>: Developer hereby grants the County a non-exclusive perpetual easement upon and across that portion of the Property described in <u>Exhibit A</u>. The purpose of the easement is to allow the County 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. <u>County's Rights and Obligations</u>: 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 and its 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 agrees and covenants, for itself and its 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. <u>Contingencies of Subdivision Approval</u>: Developer's and the Metro Districts 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 B for Pond 1 in Waterbury Filings 1 & 2, the attached easement in Exhibit B for Pond 2 & 3 and Lots 40 and 42 for Grass Buffers in Waterbury Filings 1 & 2, from the Developer to the Metro District (which will include a reservation of easement in favor of the County for purposed of accessing, inspecting, cleaning, maintaining, and repairing the detention basins/BMPs and the Grass Buffers, 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 basins/ BMPs and Grass Buffers.
- 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. <u>Indemnification and Hold Harmless:</u> To the extent authorized by law, Developer agrees, for itself and its 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. <u>Severability:</u> 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. <u>Third Parties:</u> 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, or their respective successors and assigns, because of any breach hereof or because of any terms, covenants, agreements or conditions contained herein.
- be suspected or identified as solid waste or petroleum products, hazardous substances or hazardous materials (collectively referred to herein as "hazardous materials"), the Developer 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, but not the County, shall be responsible and liable as the owner, generator, and/or transporter of said solid waste or hazardous materials.
- 14. <u>Applicable Law and Venue</u>: 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 Three (3) if the Recitals set forth above is recorded ad 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 for Pond 1 in Waterbury Filings 1 & 2, the attached easement in Exhibit B for Pond 2 & 3 and Lots 40 and 42 for Grass Buffers in Waterbury Filings 1 & 2 from Developer to Metro District.

IN WITNESS WHEREOF, the Parties affix their signatures below.
Executed this
The foregoing instrument was acknowledged before me this 54 day of Agust, 2029, by Andrew R. Klien, ACM ALF VIII JV Sub II LLC
Witness my hand and official seal. My commission expires: SAMUEL GOTTSEGEN Notary Public State of Colorado Notary ID # 20244027871 My €ommission Expires 07-24-2028
Notary Public
Executed this day of, 20, by:
BOARD OF COUNTY COMMISSIONERS OF EL PASO COUNTY, COLORADO
By: Meggan Herington, Executive Director El Paso County Planning and Community Development Authorized signatory pursuant to LDC
Attest:
County Clerk and Recorder
The foregoing instrument was acknowledged before me this day of, 20, by, Executive Director of the El Paso County Planning and Community Development Department, as Attested to by, County Clerk and Recorder.
Witness my hand and official seal.

My commission expires:		
	Notary Public	
Approved as to Content and Form:		
Assistant County Attorney		





October 4, 2022 Job No. 2117-00 Page 1 of 4

EXHIBIT A

LEGAL DESCRIPTION: DRAINAGE EASEMENT

A TRACT OF LAND BEING A PORTION OF SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 12 SOUTH, RANGE 64 WEST OF THE 6TH P.M., EL PASO COUNTY, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BASIS OF BEARINGS: THE NORTH LINE OF SAID SECTION 28, BEING

MONUMENTED AT EACH END BY A 3-1/4"

ALUMINUM SURVEYOR'S CAP STAMPED "PSINC LS 30087" AND ASSUMED TO BEAR S89°47'04"E, A

DISTANCE OF 5,285.07 FEET.

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 28; THENCE S02°57'46"E, A DISTANCE OF 3,337.73 FEET TO THE POINT OF BEGINNING; THENCE S84°07'01"E, A DISTANCE OF 223.34 FEET; THENCE S87°26'34"E, A DISTANCE OF 63.00 FEET; THENCE S71°11'29"E, A DISTANCE OF 45.82 FEET; THENCE S41°52'53"E, A DISTANCE OF 75.23 FEET; THENCE S74°50'57"E, A DISTANCE OF 62.49 FEET; THENCE N67°40'48"E, A DISTANCE OF 348.71 FEET; THENCE S55°11'30"E, A DISTANCE OF 76.51 FEET; THENCE S58°10'15"E, A DISTANCE OF 66.71 FEET; THENCE N86°27'21"E, A DISTANCE OF 119.28 FEET; THENCE S42°56'20"E, A DISTANCE OF 115.28 FEET; THENCE S16°59'38"E, A DISTANCE OF 63.32 FEET; THENCE N89°33'41"E, A DISTANCE OF 159.38 FEET; THENCE S00°26'19"E, A DISTANCE OF 177.59 FEET TO A POINT OF CURVE; THENCE ON THE ARC OF A CURVE TO THE RIGHT HAVING A DELTA OF 23°33'23", A RADIUS OF 60.00 FEET; A DISTANCE OF 24.67 FEET TO A POINT OF REVERSE CURVE; THENCE ON THE ARC OF A CURVE TO THE LEFT HAVING A DELTA OF 137°06'47", A RADIUS OF 60.00 FEET, A DISTANCE OF 143.58 FEET TO A POINT OF REVERSE CURVE; THENCE ON THE ARC OF A CURVE TO THE RIGHT HAVING A DELTA OF 23°33'23", A RADIUS OF 60.00 FEET, A DISTANCE OF 24.67 FEET TO A POINT OF TANGENT; THENCE N89°33'41"E, A DISTANCE OF 175.53 FEET; THENCE S00°27'02"E, A DISTANCE OF 359.89 FEET; THENCE S89°34'31"W, A DISTANCE OF 190.82 FEET; THENCE S13°38'53"W, A DISTANCE OF 3.14 FEET TO A POINT OF CURVE; THENCE ON THE ARC OF A CURVE TO THE RIGHT HAVING A DELTA OF 46°12'58", A RADIUS OF 86.00 FEET, A DISTANCE OF 69.37 FEET TO A POINT OF TANGENT; THENCE S59°51'51"W, A DISTANCE OF 101.46 FEET; THENCE S20°39'14"E, A DISTANCE OF 58.91 FEET; THENCE S09°14'55"E, A DISTANCE OF 110.75 FEET; THENCE S02°57'19"W, A DISTANCE OF 100.46 FEET; THENCE S07°47'21"E, A DISTANCE OF 78.59 FEET; THENCE S36°18'58"E, A DISTANCE OF 88.66 FEET; THENCE S51°35'49"E, A DISTANCE OF 89.32 FEET; THENCE S71°01'21"E, A DISTANCE OF 284.32 FEET; THENCE S89°12'53"E, A DISTANCE OF 331.51 FEET; THENCE N17°37'46"W, A DISTANCE OF 69.69 FEET; THENCE N70°29'01"W, A DISTANCE OF 141.15 FEET; THENCE N12°30'37"E, A DISTANCE OF 30.23 FEET; THENCE N39°58'03"W, A DISTANCE OF 55.21 FEET; THENCE N47°33'57"E, A DISTANCE OF 192.45 FEET; THENCE N86°51'25"E, A DISTANCE OF 167.64 FEET; THENCE S24°23'26"E, A DISTANCE OF 50.77 FEET; THENCE S17°37'46"E, A DISTANCE OF 294.28 FEET TO A POINT ON THE NORTHERLY BOUNDARY OF A SPECIAL WARRANTY DEED RECORDED AT RECEPTION NO. 208025323 OF THE RECORDS OF SAID EL PASO COUNTY; THENCE ON SAID NORTHERLY BOUNDARY THE FOLLOWING FIFTEEN (15) COURSES:

- 1. N90°00'00"W, A DISTANCE OF 36.51 FEET;
- 2. S81°21'20"W, A DISTANCE OF 79.00 FEET;
- 3. S69°17'32"W, A DISTANCE OF 67.16 FEET;
- S62°43'20"W, A DISTANCE OF 59.22 FEET;
- 5. S80°50'46"W, A DISTANCE OF 53.31 FEET;
- 6. N72°21'55"W, A DISTANCE OF 39.19 FEET;





October 4, 2022 Job No. 2117-00 Page 2 of 4

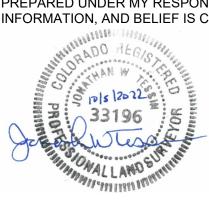
- 7. N65°00'13"W, A DISTANCE OF 28.10 FEET;
- 8. N80°32'47"W, A DISTANCE OF 61.96 FEET;
- N88°09'15"W, A DISTANCE OF 52.66 FEET;
- 10. S82°46'11"W, A DISTANCE OF 108.65 FEET;
- 11. N61°19'38"W, A DISTANCE OF 141.06 FEET;
- 12. N80°48'35"W. A DISTANCE OF 101.84 FEET:
- 13. N64°09'57"W. A DISTANCE OF 94.87 FEET:
- 14. N47°17'41"W, A DISTANCE OF 86.33 FEET;
- 15. N33°21'54"W, A DISTANCE OF 38.41 FEET;

THENCE N21°00'38"W, A DISTANCE OF 85.08 FEET; THENCE N16°26'35"W, A DISTANCE OF 114.20 FEET; THENCE N19°54'11"W, A DISTANCE OF 51.22 FEET; THENCE N22°21'31"W, A DISTANCE OF 66.20 FEET; THENCE N25°07'25"W, A DISTANCE OF 66.02 FEET; THENCE N27°50'37"W, A DISTANCE OF 65.16 FEET, THENCE N16°07'17"W, A DISTANCE OF 73.88 FEET; THENCE N16°09'50"W, A DISTANCE OF 50.00 FEET; THENCE N17°29'03"W, A DISTANCE OF 124.83 FEET; THENCE N03°18'02"E, A DISTANCE OF 205.74 FEET; THENCE N19°08'47"W, A DISTANCE OF 73.79 FEET; THENCE N21°08'32"W, A DISTANCE OF 89.56 FEET; THENCE N30°56'30"W, A DISTANCE OF 81.87 FEET; THENCE N34°05'25"W, A DISTANCE OF 72.65 FEET; THENCE N41°02'14"W, A DISTANCE OF 144.45 FEET TO A POINT ON CURVE; THENCE ON THE ARC OF A CURVE TO THE RIGHT, WHOSE CENTER BEARS N40°58'40"W, HAVING A DELTA OF 08°00'18", A RADIUS OF 1,225.00 FEET, A DISTANCE OF 171.15 FEET TO A POINT ON CURVE; THENCE N32°58'22"W, A DISTANCE OF 124.73 FEET; THENCE S58°57'56"W, A DISTANCE OF 65.28 FEET; THENCE S62°03'54"W, A DISTANCE OF 62.85 FEET; THENCE S65°20'20"W, A DISTANCE OF 62.85 FEET; THENCE N54°30'12"W, A DISTANCE OF 127.59 FEET; THENCE N49°30'51"W, A DISTANCE OF 62.29 FEET; THENCE S46°16'35"W, A DISTANCE OF 59.47 FEET; THENCE S72°34'31"W, A DISTANCE OF 64.44 FEET; THENCE N71°47'57"W, A DISTANCE OF 205.75 FEET; THENCE N23°23'58"E, A DISTANCE OF 63.18 FEET TO THE POINT OF BEGINNING.

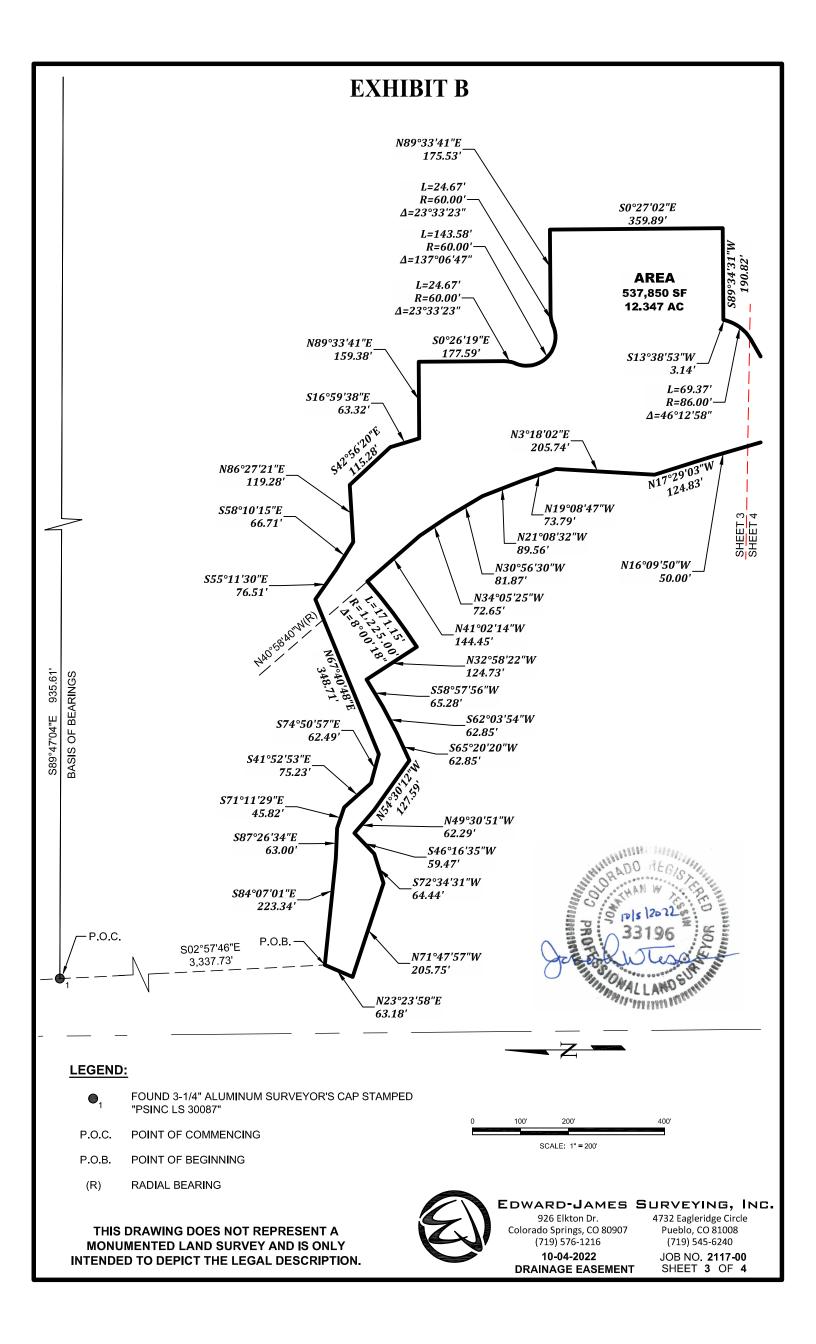
CONTAINING A CALCULATED AREA OF 537,850 SQUARE FEET OR 12.347 ACRES, MORE OR LESS.

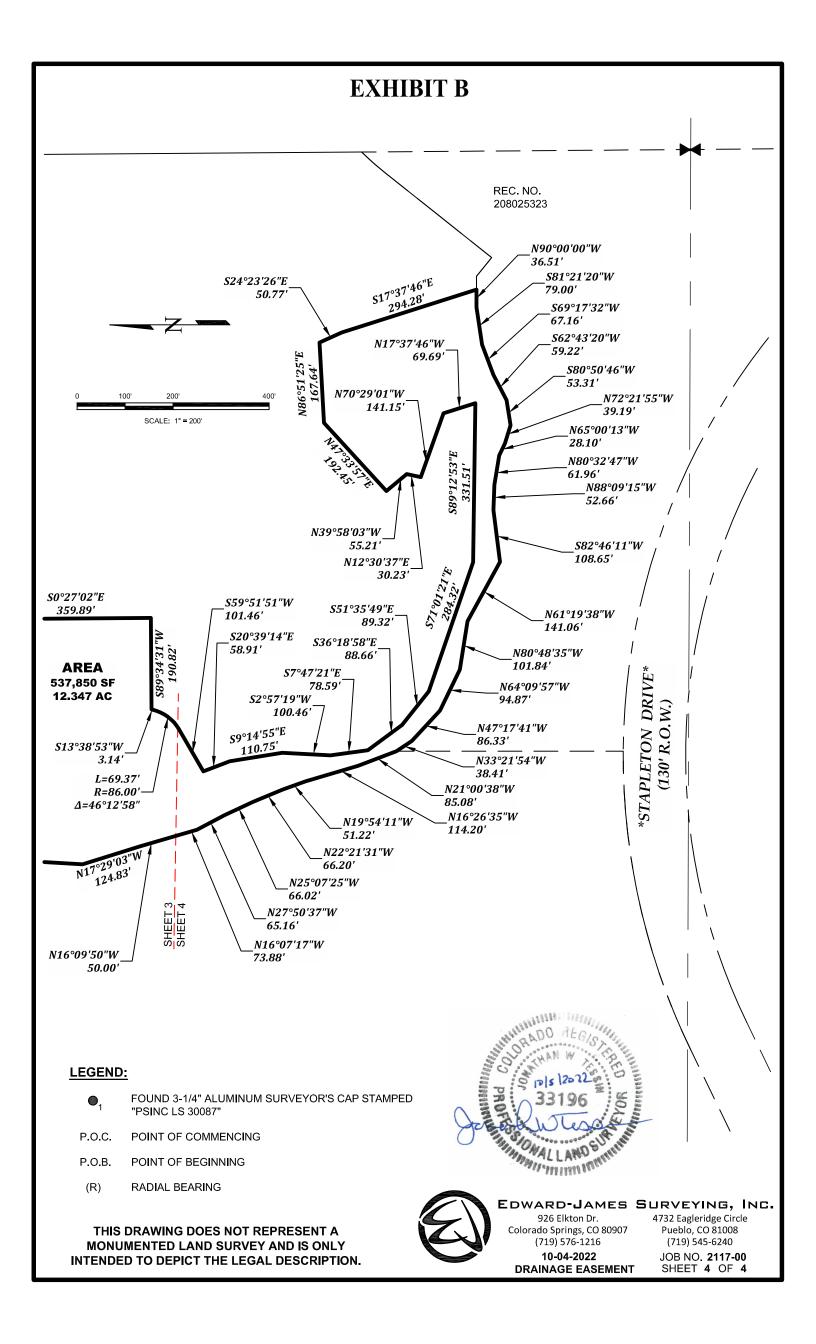
LEGAL DESCRIPTION STATEMENT

I, JONATHAN W. TESSIN, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION WAS PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION, AND BELIEF IS CORRECT.



JONATHAN W. TESSIN, PROFESSIONAL LAND SURVEYOR COLORADO PLS NO. 33196 FOR AND ON BEHALF OF EDWARD-JAMES SURVEYING, INC.





Waterbury Filing No. 1 & 2 Operations and Maintenance Manual Extended Detention Basin, Diversion Swale E-E & Grass Buffers

County Job No. PUDSP-21-005

Extended detention basins have low to moderate maintenance requirements. Routine and non-routine maintenance is necessary to assure performance, enhance aesthetics, and protect structural integrity. Dry basins can result in nuisance complaints if not properly designed or maintained. Bio-degradable pesticides may be required to limit insect problems. Frequent debris removal and grass-mowing can reduce aesthetic complaints. If a shallow wetland or marshy area is included, mosquito breeding and nuisance odors could occur if the water becomes stagnant.

c/o WHITE BEAR ANKELE TANAKA & WALDRON Attorneys at Law 2154 E. Commons Ave., Suite 2000 Centennial, CO 80122 303-858-1800

1. Waterbury Filing No. 1 & 2 Extended Detention Basins, Diversion Swale E-E & Grass Buffers Maintained by 4-Way Ranch Metropolitan District.

There are 3 Extended Detention Basin on the Waterbury Filing No. 1 & 2_property that 4-Way joint Ventures owns and maintains. The following are details of this detention basin. Attached to this manual is a map showing the detention basin location.

Extended Detention Basin Pond 1– Extended Detention Basin with WQCV. This full spectrum detention basin will be built in 2022. The final drainage report for Waterbury Filing No. 1 & 2 covers the drainage calculations for this pond.

Extended Detention Basin Pond 2– Extended Detention Basin with WQCV. This full spectrum detention basin will be built in 2022. The final drainage report for Waterbury Filing No. 1 & 2 covers the drainage calculations for this pond.

Extended Detention Basin Pond 3– Extended Detention Basin with WQCV. This full spectrum detention basin will be built in 2022. The final drainage report for Waterbury Filing No. 1 & 2 covers the drainage calculations for this pond.

Diversion Swale E-E- This Swale will be built in 2022. The final drainage report for Waterbury Filing No. 1 & 2 covers the drainage calculations for this swale.

Grasse Buffer- These Grass Buffers will be used as Receiving Pervious Areas and built in 2022. The final drainage report for Waterbury Filing No. 1 & 2 covers the Runoff Reduction calculations for these Receiving Pervious Areas (RPA).

2. Access

The Extended Detention Basin Pond 1can be accessed from the Saybrook Road. There is a gravel access ramp on the east corner of the Extended Detention Basin.

The Extended Detention Basin Pond 2 & 3 can be accessed from the end of Sunken Meadow Drive with a maintenance road to both. There is a gravel access ramp on the east corner of the Extended Detention Basin 3.

The Swale E-E can be accessed from the end of Megansett Way Public ROW with a maintenance road to both. There is a temporary access at the end of the roadway.

The Grass Buffers (Receiving Pervious Area RPA) can be accessed through the homeowner's yard

3. Inspections

mspection and Frequency	
Annually inspect detention basin to insure that the basin continues to function a initially intended. The annual inspection should evaluate the forebay, pond side slean flow channel, the spillway condition, the depth of sediment in the forebay, outlet structure, trash rack, downstream channel, and the condition of the downstream fathe pond. A site survey will be the best indication of excessive sediment buildup a degradation of the spillway. In addition, an inspection of the vegetation on the bere inside the detention area and the downstream face of the spillway should be cond any bare areas should be noted and repaired using native grasses. Any sloughing erosion of the embankment should be noted and repaired. Items to record will incleany items inspected and the mowing frequency of the vegetation on the facility.	opes, ace of nd m, ucted J or
□ Just before annual storm seasons (that is, April and May) and following significate rainfall events, inspect for litter and debris that may plug outlets. Of notable importable inspections should also include the water quality orifice plate and trash rack to be ensure plugging has not occurred.	ance,
☐ A baseline survey should be performed at the time of construction and comparison surveys conducted every ten to twenty years after to monitor overall performance pond. Results of inspections should be recorded and kept at a central location for review and recording by the district.	

Inspection Personnel

A qualified engineer, surveyor, or certified storm water inspector should conduct inspections of the facility.

4.0 Operations

No specific operating instructions are required.

5.0 Maintenance

Maintenance of the Extended Detention Basin shall be in accordance with the guidelines included in Table EDB-1, below.

Table EDB-1				
Required Action	Maintenance Objective	Frequency of Action		
Lawn mowing and lawn care	Occasional mowing to limit unwanted vegetation. Maintain irrigated turf grass as 2 to 4 inches tall and nonirrigated native turf grasses at 4 to 6 inches.	Routine – Depending on aesthetic requirements.		
Debris and litter removal	Remove debris and litter from the entire pond to minimize outlet clogging and improve aesthetics. Outlet structure trash racks should be clear of any blockage.	Routine – Including just before annual storm seasons (that is, April and May) and following significant rainfall events.		
Erosion and sediment control	Repair and revegetate eroded areas in the basin and channels.	Nonroutine – Periodic and repair as necessary based on inspection.		
Structural	Repair pond inlets, outlets, forebays, low flow channel liners, and energy dissipators whenever damage is discovered.	Nonroutine – Repair as needed based on regular inspections.		
Inspections	Inspect basins to insure that the basin continues to function as initially intended. Examine the outlet for clogging, erosion, slumping, excessive sedimentation levels, overgrowth, embankment and spillway integrity, and	Routine – Annual inspection of hydraulic and structural facilities. Also check for obvious problems during routine maintenance visits, especially for plugging of outlets.		

	damage to any structural element.	
Nuisance control	Address odor, insects, and overgrowth issues associated with stagnant or standing water in the bottom zone.	Nonroutine – Handle as necessary per inspection or local complaints.
Sediment removal	Remove accumulated sediment from the forebay, micro-pool, and the bottom of the basin.	Nonroutine – Performed when sediment accumulation occupies 20 percent of the WQCV. This may vary considerably, but expect to do this every 10 to 20 years, as necessary per inspection if no construction activities take place in the tributary watershed. More often if they do. The forebay and the micro-pool will require more frequent cleanout than other areas of the basin, say every 1 or 2 years.

Maintenance of the Grass Buffers and Swales (Receiving Pervious Areas & Diversion Swale) shall be in accordance with the guidelines included in Table RPA-1, below.

Table RPA-1		
Required Action	Maintenance Objective	Frequency of Action
Inspection	Check for sediment accumulation and rill and gully development. Inspect vegetation for uniform coverage.	Routine – at least twice annually for uniform cover and traffic impacts.
Debris and litter removal	Remove litter and debris to prevent rill and gully development from preferential flow paths around accumulated debris, enhance aesthetics, and prevent	Routine This should be done as needed based on inspection, but no less than two times per year.

	floatables from being washed offsite.	
Aeration	Aeration is done by punching holes in the ground using an aerator with hollow punches that pull the soil cores or "plugs" from the ground. Holes should be at least 2 inches deep and no more than 4 inches apart.	Routine – Should be performed at least once per year when the ground is not frozen.
Mowing	When starting from seed, mow native/drought-tolerant grasses only when required to deter weeds during the first three years. Following this period mowing of native/drought tolerant grass may stop or be reduced to maintain a length of no less than six inches.	Routine – Mowing of manicured grasses may vary from as frequently as weekly during the summer, to no mowing during the winter.
Added Fertilizer, Herbicide, and Pesticide Application	Use the minimum amount of biodegradable nontoxic fertilizers and herbicides needed to establish and maintain dense vegetation cover that is reasonably free of weeds. Fertilizer application may be significantly reduced or eliminated by the use of mulch-mowers, as opposed to bagging and removing clippings. To keep clippings out of receiving waters, maintain a 25-foot buffer adjacent to open water areas where clippings are bagged. Hand-pull the weeds in areas with limited weed problems.	Nonroutine – Frequency of fertilizer, herbicide, and pesticide application should be on an asneeded basis only and should decrease following establishment of vegetation.
Sediment removal	For Grass Buffers: Using a shovel, remove sediment	Nonroutine – Remove sediment as needed based

at the interface between the impervious area and buffer

For Grass Swales: Remove accumulated sediment near culverts and in channels to maintain flow capacity. Spot replace the grass areas as necessary.

on inspection. Frequency depends on site-specific conditions. For planning purposes, it can be estimated that 3 to 10% of the swale length or buffer interface length will require sediment removal on an annual basis. Reseed and/or patch damage areas in buffer, sideslopes and/or channel to maintain healthy vegetative cover. Over time, and depending on pollutant load, portion of butter/sale may need to be rehabilitated due to sediment deposition. Periodic sediment removal will reduce the frequency of revegetation required. Expect turf replacement for the buffer interface area every 10 to 20 years.

Irrigation Schedule and Maintenance

Check for broken sprinkler heads and repair them, as needed. Do not overwater. Signs of overwatering and/or broken sprinkler heads may include soggy areas and unevenly distributed areas of lush growth. Completely drain and blowout the irrigation system before the first winter freeze each year. Upon reactivation of the irrigation system in the spring, inspect all components and replace damaged parts, as needed.

Adjust irrigation schedules throughout the growing season to provide the proper irrigation application rate to maintain healthy vegetation. Less irrigation is typically needed in early summer and fall, with more irrigation needed during July and August. Native grass should not require irrigation after establishment, except during prolonged dry periods when supplemental, temporary irrigation may aid in maintaining healthy vegetation cover.

EXHIBIT D

Open Drainage Channel Inspections, Operations and Maintenance (O&M) Routine maintenance of the open drainage channel system consists of litter and debris pickup,

vegetation management, erosion control, and sediment removal when necessary. Removal of excessive shrubs and trees is required to ensure that the channel will flow in conformance with the original design. Mowing and vegetation management shall be performed with care to ensure that soils remain stable and not to cause erosion. Noxious weed management shall be performed as necessary and as required under project approval conditions. All dead trees and trees growing in the flowline of a structure such as a bridge or culvert shall be removed.

Removal of sediment shall be performed with the use of equipment such as a skid steer, backhoe, and front-end loader. The removed materials shall be hauled to an acceptable landfill site unless otherwise legally permitted to be utilized elsewhere. Materials are not to be stored onsite. Equipment shall utilize the designated access roads and shall not be used in a manner to cause damage to adjacent vegetated and stable areas to the extent possible. If drainage channels contain wetlands many activities, including maintenance, may be subject to regulation and permitting.

Erosion control and restoration work such as side slope reconstruction, revegetation, riprap installation, and other stabilization methods will require the use of heavy equipment.

Maintaining altered watercourses is a minimum requirement of the National Flood Insurance Program (NFIP). In fact, failure to maintain such watercourses may result in a revision to the community's Flood Insurance Rate Map (FIRM). If a stream is altered after the community's FIRM is published, the NFIP requires the community to ensure that the channel's carrying capacity is not adversely altered. This is required in 44 CFR 60.3(b)(7) of the Federal Emergency Management Agency's (FEMA's) NFIP regulations.

Table 1 - General Channel Maintenance Guidelines

Activity	Maintenance Action	Frequency of Action
Mowing, vegetation management, and lawn care	Occasional mowing to limit unwanted vegetation. Maintain irrigated turf grass as 2 to 4 inches tall and non-irrigated native grasses at 4 to 6 inches tall.	Routine – depending on aesthetic requirements.
Debris and litter removal	Remove debris and litter from the entire channel to improve flow characteristics and aesthetics. Dispose of as appropriate.	Routine – including annual, prestorm season (April and May) and following significant rainfall events.
Erosion and sediment control	Repair and revegetate eroded areas in the channel.	Non-routine –as necessary based on inspection.
Structural	Repair inflow structures, low flow channel linings, and energy dissipation structures as needed.	Non-routine – repair as needed based on regular inspections.
Inspections	Inspect channel to ensure continued function as initially intended. Check for erosion, slumping, excessive sedimentation, overgrowth, embankment and inflow integrity, and damage to any structural elements. Report any illicit discharge immediately.	Routine – annual inspection of hydraulic and structural facilities. Also check for obvious problems during routine maintenance visits.
Nuisance control	Address odor, insects, and other issues associated with stagnant or standing water.	Non-routine –as necessary per inspection or complaint.
Sediment removal	Remove accumulated sediment from the channel bottom.	Non-routine –as necessary per inspection.

Routine Maintenance Activities

The majority of this work consists of scheduled mowing, litter and debris pickups for the drainage channel during the growing season. It also includes activities such as weed control. These activities normally will be performed numerous times during the year. These items typically do not require any prior correspondence with EPC, however, completed inspection and maintenance forms shall be retained and submitted to EPC for each inspection and maintenance upon request. The Routine Maintenance Activities are summarized below, and further described in the following sections.

Table 2 – Summary of Routine Maintenance Activities

Activity	Maintenance Action	Look for:	Minimum Frequency
Mowing	2"-4" irrigated grass height; 4-6" natural grass height	Excessive grass height/aesthetics	Routine – twice annually
Litter / Debris Removal	Remove and dispose of litter and debris	Litter / debris in drainage channel	Routine – twice annually
Woody growth control / weed removal	Treat w/herbicide or hand pull	Noxious weeds, undesirable vegetation	Routine – minimum twice annually

Properly dispose of litter and debris materials at an approved landfill or recycling facility. It should be noted that major debris removal may require other regulatory permits prior to completing the work.

Noxious weeds and other unwanted vegetation must be treated as needed throughout the drainage channel. This activity can be performed either through mechanical means (mowing/pulling) or with herbicide. Consultation with the County Environmental Division is recommended prior to the use of herbicide. Herbicides should be utilized sparingly and as a last resort. All herbicide applications should be in accordance with the manufacturer's recommendations.

Minor Maintenance Activities

This work consists of a variety of isolated or small-scale maintenance/operational problems. Most of this work can be completed by a small crew, hand tools, and small equipment. These items may require prior approval from EPC depending on the scope of work. Completed inspection and maintenance forms shall be retained for each inspection and maintenance period. In the event that the drainage channel needs to be dewatered, care should be given to ensure sediment, filter material and other pollutants are not discharged. The appropriate permits shall be obtained prior to any dewatering activity.

Table 3 – Summary of Minor Maintenance Activities

Activity	Maintenance Action	Look for:	Minimum Frequency
Sediment/Pollutant Removal	Remove and dispose of accumulated sediment from the channel bottom.	Minor sediment and pollution build-up in channel bottom; potential decrease in channel flow rate	Non-routine – as needed based on inspection.
Erosion Repair	Repair eroded areas and revegetate; address cause.	Rills/gullies on sides of channel	Non-routine – as needed, based on inspection.

Major Maintenance Activities

This work consists of larger maintenance/operational problems and failures within the stormwater drainage facilities. This work will likely require approval from EPC Engineering to ensure the proper maintenance is performed. This work requires that Engineering Staff review the original design and construction drawings to assess the situation and necessary maintenance activities. This work may also require more specialized maintenance equipment, design plans/details, surveying, and assistance through private contractors and consultants. In the event that the drainage channel needs to be dewatered, care should be given to ensure sediment, filter material and other pollutants are not discharged. The appropriate permits shall be obtained prior to any dewatering activity.

Table 4 – Summary of Major Maintenance Activities

Activity	Maintenance Action	Look for:	Minimum Frequency
Major Sediment / Pollutant Removal	Remove and dispose of sediment. Repair vegetation as necessary	Large quantities of sediment in the channel and reduced conveyance rate/capacity	Non-routine –as necessary based on inspection.
Major Erosion Repair	Repair erosion – find cause of problem and address to avoid future erosion	Severe erosion including gullies, excessive soil displacement, unusual areas of settlement, holes	Non-routine –as necessary based on inspection.
Structural Repair	Structural repair to restore portions of the channel to its original design	Deterioration and/or damage to structural components – broken concrete, damaged pipe, drop/check structures or dissipators	Non-routine –as necessary based on inspection.
Drainage Channel Rebuild	Contact EPC Engineering	Overall channel failure	Non-routine –as needed due to complete failure of drainage channel

Inspection Procedures

Periodic inspections of drainage channels and associated stormwater control measures in developed areas are needed in every community to prevent the accumulation of debris deposited by storms, dumping, or natural processes. Inspections must be conducted at least once each year and after each storm that could adversely impact the drainage system. Inspections are also needed in response to citizen complaints.

Conduct annual visual inspections during the dry season to determine if there are problem inlets where sediment/trash or other pollutants accumulate. Inspection and maintenance records should be used to determine problem areas that may need to be checked more often. Appropriate action must be taken after an inspection identifies the need for maintenance or cleaning.

The attached form includes the typical information necessary for and during an inspection. Similar forms or electronic record keeping may be utilized if all relevant information is recorded. The entity responsible for channel maintenance is required to submit the periodic inspection reports upon request by County Staff. Inspections involving decisions about structural issues shall be signed by a licensed professional engineer.

Inspections of inflow structures including detention spillways and water quality outlet pipes discharging to the channel shall be coordinated with channel inspections.

Illicit discharges such as dumping of home goods or garbage, appliances, yard wastes, paint spills, abandoned oil containers and other pollutants shall be immediately reported to EPC Staff and other agencies as appropriate. Reference El Paso County Ordinance No. 07-01, as amended. EPC recommends that the responsible entity encourage public reporting of improper waste disposal by posting "No Dumping" signs, neighborhood notices, and/or social media when available, with contact information to report violations.

Wetlands

If drainage channels contain wetlands many activities, including maintenance, may be subject to regulation and permitting. The responsible maintenance entity shall maintain wetlands vegetation as appropriate and in consultation with the proper authorities including the U.S. Army Corps of Engineers when applicable. The responsible maintenance entity shall ensure proper training / licensing of contractors and staff to minimize the potential for damages to the wetlands.

All applicable safety and environmental considerations with regards to the application of any pesticides or herbicides shall be verified. It is also strongly encouraged that the responsible entity employ or consult a wetlands specialist or certified arborist with the ability to identify invasive/exotic species. Due to the sensitive nature of using chemicals near water bodies, a written Quality Assurance/Quality Control (QA/QC) plan shall be implemented.

Employees shall be trained in accordance with any local, state, and federal regulations and laws prior to any application of chemicals. A copy of the QA/QC plan must be submitted to the County Environmental Division prior to any chemical applications. In addition to the QA/QC plan, copies of the Safety Data Sheets (SDS) for all the chemicals being used shall be provided upon request.

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972.

Section 404 - establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. CWA Section 404(b)(1) Guidelines – U.S. Environmental Protection Agency (EPA) (Although they are called "guidelines," these criteria are established in regulations (40 CFR Part 230) and are legally binding.)

https://www.epa.gov/cwa-404/clean-water-laws-regulations-and-executive-orders-related-section-404

Open Drainage Channel Inspection Report Form

Date:	Inspector:			
Type of inspection: Post-Storm	Complaint	Routine		
Location: (Identify stream or basin problem. Provide sketch as needed	d.)			
Type of problem: Litter Minor Recommended maintenance:	Obstruction	Structural	_ Illicit Discharge**	
Is equipment needed? If s	o, list equipment nee	eded:		
Date: Work order description:				
State permit(s) needed?	Work order nu	mber:		
Date:	Crew chie	ef:		
Maintenance performed:				
Inspected by:				

Use other side for additional recommendations for this site.

**Report illicit discharges to the County and appropriate agencies.