



**STORM WATER FACILITY AGREEMENT**

THIS AGREEMENT, is made and entered into this 23 day of MAY, 2023 by and between AFEW1, LLC (hereinafter referred to as "Owner", and American Fork City (hereinafter referred to as the "City"), a Municipal Corporation.

**RECITALS**

**WHEREAS**, the Owner desires to improve, develop or redevelop real property located at approximately 1100 WEST AND 450 SOUTH in American Fork City, Utah County, State of Utah (hereinafter referred to as the "Property"), which is more particularly described in Exhibit A attached hereto;

**WHEREAS**, said development requires the installation and maintenance of storm water facilities (hereinafter referred to as "Facilities") to be constructed according to designs and plans approved by the City;

**WHEREAS**, the Owner, for and in behalf of its administrators, executors, successors, heirs, or assigns, including any homeowners association, recognizes and agrees that the health, safety, and welfare of the citizens of the City require that the Facilities be constructed and adequately maintained on the Property throughout the life of the development; and

**NOW, THEREFORE**, in consideration of the foregoing, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

**SECTION 1  
FACILITIES**

Facilities include all storm water detention and control structures, flood control devices, or other improvements, which may include, but is not limited to all pipes, channels, or other structures and infrastructure built to convey storm water to the Facilities, as well as all structures, improvements, and vegetation provided to control the quantity and quality of the storm water which are required by the City in the site plan attached hereto as Exhibit B.

**SECTION 2  
FACILITIES CONSTRUCTION**

The Owner shall, at its sole cost and expense, construct the Facilities in accordance with the plans and specifications for the development approved by the City. Owner understands and agrees that modifications may be needed to make the system work properly after the Facilities are installed and agrees to make modifications and adjustments as may be necessary and required by the City.

ENT 36044:2023 Pg 1 of 38  
**ANDREA ALLEN**  
**UTAH COUNTY RECORDER**  
2023 Jun 05 2:10 pm FEE 0.00 BY TM  
RECORDED FOR AMERICAN FORK CITY

Approved as to form:  
Attorney for American Fork City

### SECTION 3 MAINTENANCE

The Owner shall, at its sole cost and expense, adequately maintain the Facilities in good working condition acceptable to the City and in accordance with the schedule of long term maintenance activities agreed to by the parties and attached hereto as Exhibit C. Adequate maintenance is herein defined as follows: 1) keeping the Facilities in good working condition so that the Facilities are performing their design functions, 2) performing facility inspections and repairs as may be needed, and 3) replacing and/or modifying portions, or all of the system, as may be needed to maintain the intended function of the facility.

### SECTION 4 EASEMENT

The Owner hereby grants permission to the City, its authorized agents, and employees to enter upon the Property and to inspect the Facilities whenever the City deems it necessary. Whenever possible, the City shall provide notice prior to entry. Inspections by the City shall be conducted in a reasonable manner and at reasonable times, as determined appropriate by the City. The purpose of the inspection shall be to determine and ensure that the Facilities are being adequately maintained, are continuing to perform in an adequate manner, and are in compliance with all laws, regulations, and approved plans and specifications. The Owner hereby grants a twenty-five (25) foot access easement in favor of the City with the midpoint of the easement lying over the midpoint of the Facilities identified in the attached plan. This easement shall be limited in scope to allow only those actions which are necessary to allow the City to inspect, ensure adequate maintenance, and to cause any repairs to be made that the City deems necessary. This easement shall include, but is not be limited to, prohibiting the construction of structures or improvements that would impact or obstruct the intended purposes of the Facilities or restrict the ability of the Owner or the City to inspect, maintain, or repair the Facilities.

### SECTION 5 FAILURE TO MAINTAIN FACILITIES

In the event the Owner fails to maintain the Facilities in good working order acceptable to the City and in accordance with the maintenance schedule incorporated in this Agreement, the City, in addition to any other remedies provided by State or City code, may, with due notice as provided in Section 6, enter the property and take whatever steps it deems necessary to return the Facilities to good working order. This provision shall not be construed to allow the City to erect any structure of a permanent nature on the property that is not included in the plans and specifications for the development, or other agreement between the parties. It is expressly understood and agreed that the City is under no obligation to maintain or repair the Facilities. The decision to maintain or repair the Facilities shall be at the City's sole discretion and in no event shall this Agreement be construed to impose any such obligation on the City or to create any liability for the City refusing to undertake such a duty.

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Attorney for American Fork City

**SECTION 6  
NOTICE OF DEFICIENCIES**

If the City finds that the Facilities contain any defects or are not being maintained adequately, the City shall provide Owner written notice of the defects or deficiencies and provide Owner with a reasonable time, as determined by the City, to cure such defects or deficiencies.

**SECTION 7  
RECOUPMENT OF COSTS**

In the event the City performs work of any nature pursuant to the Agreement, or expends any funds in the performance of said work for labor, use of equipment, supplies, materials, and the like, the Owner shall reimburse the City within thirty (30) days of receipt thereof for all the costs incurred by the City. If not paid within the prescribed time period, the City shall be entitled to record a lien against the real property in the amount of such costs. The actions described in this section are in addition to and not in lieu of any and all legal remedies available to the City as a result of the Owner's failure to maintain the Facilities.

**SECTION 8  
LIMITATION OF LIABILITIES**

It is the sole intent of this Agreement to insure the proper construction and maintenance of the Facilities by the Owner. As the Facilities are not part of the City's Storm Water Collection System, this agreement does not create or extend any rights to immunity or liability protections provided by law to municipalities. This Agreement shall not be deemed to create or affect any additional liability of any party for damage alleged to result from or caused by storm water runoff, or to constitute a waiver of any immunity provided to the City through the Utah State Code or Constitution.

**SECTION 9  
SEDIMENT ACCUMULATION**

Adequate maintenance shall include control of sediment accumulation resulting from the normal operation of the Facilities. The Owner will make accommodations for the removal and appropriate disposal of all accumulated sediments.

**SECTION 10  
REQUIREMENTS AND STANDARDS**

The Parties agree to follow and comply with all requirements applicable to storm water detention and control facilities as by the Utah Department of Environmental Quality, Division of Water Quality, including the Small MS4 General UPDES Permit requirements, and by the City ordinances and Storm Water Management Plan as existing at the time of executing this agreement and as may be amended from time to time. The parties agree that these requirements and regulations are incorporated herein by this reference and that this agreement shall be deemed

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Attorney for American Fork City

automatically amended to incorporate any and all changes and amendments made thereto after the signing of this agreement.

#### SECTION 11 INSPECTIONS

The Owner shall perform an annual inspection of the Facilities. The City may require more frequent inspections should it have reason to believe that such inspections are necessary. All inspections shall be conducted by a qualified inspector and the results shall be reported to the City. The purpose of the inspection and reporting is to assure safe and proper functioning of the Facilities, including but not limited to, the structural improvements, berms, outlet structure, pond areas, access roads, vegetation, landscaping, etc. All annual inspection reports shall be submitted to the City Public Works Department no later than September 1 of any given year and shall be on the Maintenance Inspection Report attached hereto as Exhibit D.

#### SECTION 12 INDEMNITY

The Owner indemnifies and holds harmless the City and its authorized agents and employees for any and all damages, accidents, casualties, occurrences or claims which might arise or be asserted against the City from the construction, presence, existence or maintenance of the facility or facilities by the Owner. In the event a claim is asserted against the City, its authorized agents or employees, the City shall promptly notify the Owner and the Owner shall defend at its own expense any suit based on such claim. If any judgment or claims against the City, its authorized agents or employees shall be allowed, the Owner shall pay for all costs and expenses in connection herewith.

#### SECTION 13 COVENANT RUNNING WITH THE LAND

This Agreement shall be recorded at the Utah County Recorder's Office and shall constitute a covenant running with the land and shall be binding on the Owner, its administrators, executors, heirs, assigns and any other successors in interest, including any homeowners association.

#### SECTION 14 REMEDIES

This Agreement may be enforced by proceedings at law or in equity by or against the parties hereto and their respective successors in interest. Any rights or remedies contained in this Agreement shall be in addition, and non-exclusive, to any rights existing under the Utah Code or that may exist under the common law.

Approved as to form:  
Attorney for American Fork City

SECTION 15  
ATTORNEYS FEES

If any party retains, consults, or uses an attorney because of any breach, default, or failure to perform as required by this Agreement, the non-breaching/defaulting party shall be entitled to reasonable attorney's fees incurred before litigation is filed. In the event that any litigation is commenced to enforce or interpret this Agreement the prevailing party shall be entitled to its attorneys fees, expert witness expenses, and litigation related expenses, including but not limited to court costs.

SECTION 16  
THIRD PARTY BENEFICIARIES

This Agreement shall be binding upon and inure solely to the benefit of the parties herein and is not intended to create contractual rights in any third party.

SECTION 17  
NO PARTNERSHIP

Nothing contained in this Agreement shall be deemed to create any form of a partnership or joint-venture between the City and Owner.

SECTION 18  
UTAH LAW AND VENUE

This Agreement shall be interpreted pursuant to the laws of the State of Utah. Any and all suits for any claims or for any and every breach or dispute arising out of this Agreement shall be maintained in the appropriate court of competent jurisdiction in Utah County, Utah.

SECTION 19  
INTEGRATED AGREEMENT

This Agreement sets forth the entire agreement of the parties and supersedes all prior agreements, whether written or oral, that exists between the parties regarding the subject matter of this Agreement.

SECTION 20  
SEVERABILITY

The provisions of this agreement shall be severable and if any phrase, clause, sentence or provision is declared unconstitutional, or the applicability thereof to the, its successors and assigns, is held invalid, the remainder of this Covenant shall not be affected thereby.

Approved as to form:  
Attorney for American Fork City

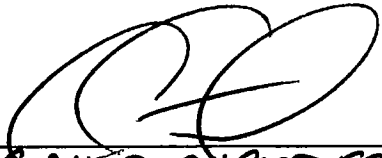
SECTION 21  
AMENDMENTS

Except as expressly provided elsewhere in this Agreement, no provision of this Agreement may not be modified except in writing agreed to by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates set forth below.

OWNER

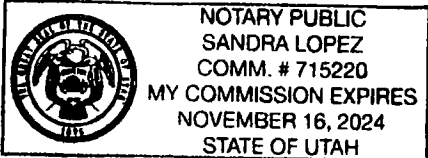
Date: MAY 23<sup>RD</sup>, 2023.

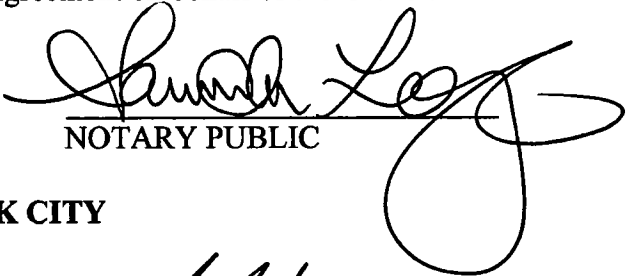
  
By: CHAD CHRISTOFFERSON  
Its: MANAGER

NOTARIZATION

STATE OF UTAH            )  
  ):SS  
COUNTY OF UTAH        )

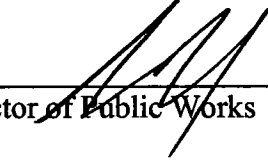
The above Agreement was executed on this 23<sup>rd</sup> day of MAY, 2023 by CHAD CHRISTOFFERSON, for and on behalf of A FEW 1, LLC, the Owner identified in the above signed Agreement. In executing this Agreement, the signer did swear before me that he is duly authorized to sign the agreement on behalf of the Owner.



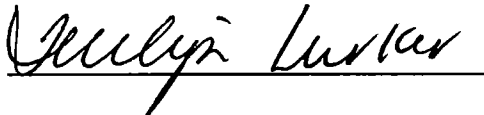
  
NOTARY PUBLIC

AMERICAN FORK CITY

Date: June 1, 2023.

  
Director of Public Works

ATTEST:





Approved as to form:  
Attorney for American Fork City

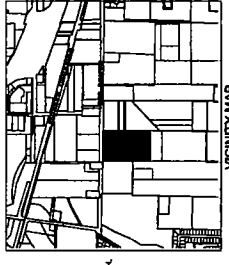
**EXHIBIT A**  
**EDGEWATER TOWNHOMES AT AMERICAN**  
**FORK PHASE 2 BOUNDARY**

Beginning at a point which is South 89°53'29" East along the section line 426.31 feet and South 2800.40 feet from the Northwest corner of Section 22, Township 5 South, Range 1 East, Salt Lake Base and Meridian; thence S 89°06'00" E 53.00 feet to a point of curvature; thence along an arc 23.59 feet to the right, having a radius of 15.00 feet, the chord bears N 45°57'19" E 21.23 feet to a point on the southern right of way line of 350 South; thence S 88°56'04" E 570.12 feet to a point of curvature; thence along an arc 31.37 feet to the right, having a radius of 20.00 feet, the chord bears S 43°59'45" E 28.25 feet more or less to the western right of way line of 1100 West; thence along said right of way the following five (5) calls: 1) S 0°56'33" W 140.54 feet; 2) along an arc 114.04 feet to the right, having a radius of 710.50 feet, the chord bears S 5°32'27" W 113.92 feet; 3) S 10°08'21" W 120.25 feet; 4) along an arc 126.73 feet to the left, having a radius of 789.50 feet, the chord bears S 5°32'27" W 126.59 feet; 5) S 0°56'33" W 9.86 feet to a point of curvature; thence along an arc 31.45 feet to the right, having a radius of 20.00 feet, the chord bears S 46°00'15" W 28.31 feet; thence S 0°50'57" W 60.49 feet more or less to the southern right of way line of 450 South; thence N 88°56'04" W 531.16 feet to a point of curvature; thence along an arc 23.61 feet to the left, having a radius of 15.00 feet, the chord bears S 45°58'58" W 21.24 feet; thence N 89°06'00" W 53.00 feet; thence N 0°54'00" E 609.42 feet to the POINT OF BEGINNING.

Area = 8.931 Acres



NO.	DATE	BY	DESCRIPTION



VICINITY MAP

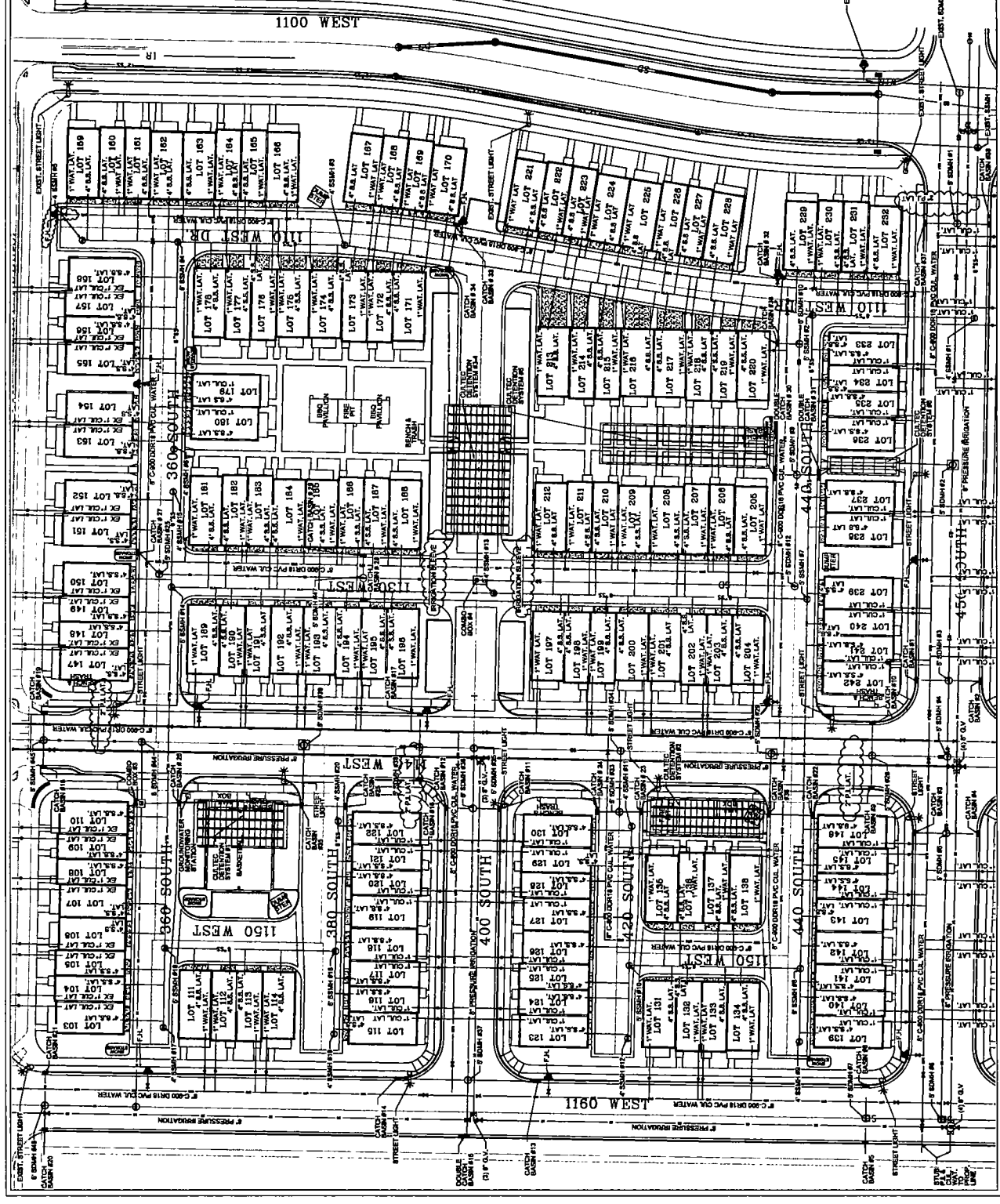
SCALE (FEET): 0 30 60 90 120

- LEGEND**
- EXISTING GAS LINE
  - - - EXISTING BURIED ELECTRICAL
  - - - EXISTING WATER LINE
  - NEW 6" CSDO DIB PVC CUMULY WATER LINE
  - - - EXISTING PRESSURIZED IRRIGATION LINE
  - - - NEW 8" CSDO JUPPLE PRESSURIZED IRRIGATION LINE
  - - - NEW 8" CSDO PVC SANITARY SEWER PIPE
  - - - EXISTING STORM DRAIN PIPE
  - - - NEW 8" CSDO PVC SANITARY SEWER PIPE
  - - - NEW 8" CSDO STORM DRAIN PIPE
  - - - NEW 8" CSDO ROOF DRAIN LATERAL
  - - - NEW 2" SANI SENSE LATERAL
  - - - NEW CUMULY WATER LATERAL
  - - - NEW PRESSURE IRRIGATION LATERAL
  - (LR) EXISTING ELECTRICAL JUNCTION BOX
  - (RD) ROOF DRAIN
  - (SM) EXISTING STORM DRAIN MANHOLE
  - (SN) NEW STORM DRAIN MANHOLE
  - (SD) EXISTING SLOW OFF
  - (S) EXISTING SLOW OFF
  - (L) LIGHT POLE
  - (C) EXISTING CATCH BASIN
  - (L) EXISTING TELEPHONE PNEUMATIC
  - (W) WATER VALVE
  - (F) EXISTING FIRE HYDRANT
  - (N) NEW FIRE HYDRANT
  - (W) WATER METER
  - (S) STREET SIGN
  - (SM) EAST SENSE MANHOLE
  - (SN) NEW SENSE MANHOLE
  - RIG TRANSFORMER
  - MAIN SWITCH BOX
  - GAS METERS
  - ELECTRICAL METERS

NOTE: ALL VERTICAL SEPARATIONS OF IF REQUIRED FOR ALL SANITARY SEWER AND WATER LINE CROSSINGS. TO BE HUNG AND SECURED TO THE EXISTING STRUCTURE.

811  
440-884-111  
Know what's below.  
Call before you dig.

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Long Term Stormwater Management Plan (LTSMP)

Exhibit 2

Long Term Stormwater Management Plan  
for:

AFEW1 Edgewater Townhomes, Phase 2

350 South 1100 West

American Fork, UT 84003

AWolf Construction

5255 West 11000 North, Suite 125

Highland, UT 84003

Jared Wolfgramm

801-592-4570

awolfconst@gmail.com

## Long Term Stormwater Management Plan (LTSMP)

### Introduction

This Long Term Stormwater Management Plan (LTSMP) is being implemented in order to protect water quality. Post construction Stormwater controls are required to be installed and maintained under the Utah Pollution Discharge Elimination System and the Clean Water Act to keep water clean. Installing post construction controls will prevent the discharge of pollutants into the local streams, rivers, and lakes. In recent years, contaminated Stormwater from various construction sites and commercial facilities has been polluting water bodies throughout the state of Utah. By properly installing and maintaining post construction Stormwater controls pollutants will be contained and water quality will be improved.

This management plan is designed to prevent pollutants from entering the storm drain system and polluting our waters. This facility is responsible for ensuring that any water discharged from the facility is free of harmful pollutants, thereby assisting in the health and protection of waters in our community. This plan will address Stormwater controls at this facility. These controls will be monitored, maintained, and improved if needed to prevent pollutants from being discharged from this facility into the storm drain system or local waters. Additionally, the patrons or employees of this facility will be trained or made aware of the aforementioned issues and controls.

The Utah Lake is impaired. The aim of the LTSMP is to address these impairments as well as other potential pollutants that may be generated at this property.

### General Site Use and Description

The AFEW1 Edgewater Townhomes is a single-family housing development consisting of 140 units, exterior parking areas, landscaped common areas and playground, pavillion, and play field. This facility is used for single-family housing, including tenant leisure and parking.

### TRAINING

Ensure that all employees and maintenance contractors know and understand the SOPs specifically written to manage the property. Report any variances to the LTSMP contact listed on the Facility Map. File all training records in Exhibit C.

### RECORDKEEPING

Maintain records of operation activities in accordance with SOPs. File all recordkeeping documents in Appendix A.

Mail a copy of the record to the city stormwater division annually.

## Long Term Stormwater Management Plan (LTSMP)

### Facility Maps

Include the overview of the facility with the location of all Long Term Stormwater BMPs

Long Term Stormwater Management Plan (LTSMP)

**Long Term Stormwater BMP Details**

Include all details of the Long Term Stormwater BMPs

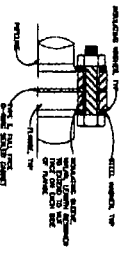


1. Prepare necessary equipment and materials, and make electrical connections to pipe as required by Division 31.
2. Obtain approval from the Engineer for the proposed installation.
3. Obtain approval from the Engineer for the proposed installation.
4. Obtain approval from the Engineer for the proposed installation.
5. Obtain approval from the Engineer for the proposed installation.
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8. Obtain approval from the Engineer for the proposed installation.
9. Obtain approval from the Engineer for the proposed installation.
10. Obtain approval from the Engineer for the proposed installation.

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
1	ANODES		
2	WIRING		
3	TEST STATION		
4	FLUSHMOUNT		

1. Test each anode wiring joint after assembly with a CATS Electrode Readout (ER) reader. Make or repair any wiring joints that do not meet the minimum requirements. Connect the anode wiring to the test station and verify the continuity of the wiring.
2. Obtain approval from the Engineer for the proposed installation.
3. Obtain approval from the Engineer for the proposed installation.
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9. Obtain approval from the Engineer for the proposed installation.
10. Obtain approval from the Engineer for the proposed installation.

FIGURE 1 - INSULATING FLANGE (WHERE NECESSARY)



1. Obtain approval from the Engineer for the proposed installation.
2. Obtain approval from the Engineer for the proposed installation.
3. Obtain approval from the Engineer for the proposed installation.
4. Obtain approval from the Engineer for the proposed installation.
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10. Obtain approval from the Engineer for the proposed installation.

FIGURE 2 - ANODE INSTALLATION - TYPICAL



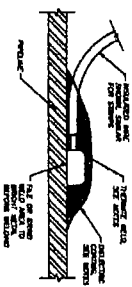
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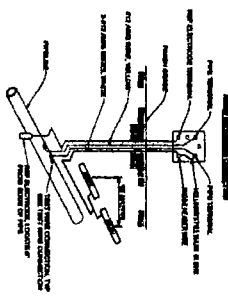
END OF SECTION

FIGURE 3 - TERMINATE WELD CONNECTION



1. Obtain approval from the Engineer for the proposed installation.
2. Obtain approval from the Engineer for the proposed installation.
3. Obtain approval from the Engineer for the proposed installation.
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10. Obtain approval from the Engineer for the proposed installation.

FIGURE 4 - ANODE GROUNDED CONNECTION



1. Obtain approval from the Engineer for the proposed installation.
2. Obtain approval from the Engineer for the proposed installation.
3. Obtain approval from the Engineer for the proposed installation.
4. Obtain approval from the Engineer for the proposed installation.
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6. Obtain approval from the Engineer for the proposed installation.
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9. Obtain approval from the Engineer for the proposed installation.
10. Obtain approval from the Engineer for the proposed installation.



APPENDIX 1: ULTRAVIOLET SENSITIVE ANODE, TYPE 300S SPECIFICATION SHEET  
 Ultraking High Potential Magnesium Anode for Cathodic Protection with Improved Core  
 Ultraking Anode Series or available battery products

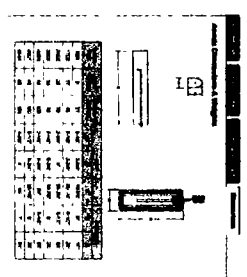


FIGURE 5 - TEST STATION FLUSHMOUNT

FIGURE 6 - TEST STATION WIRING DIAGRAM

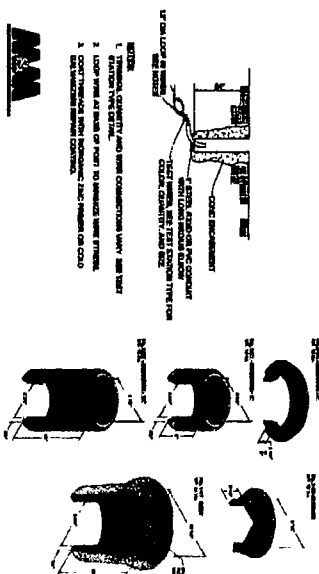
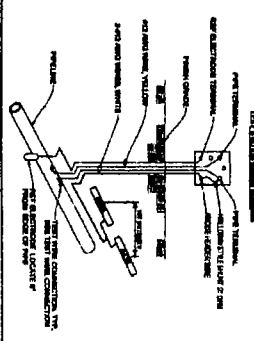


FIGURE 6 - TEST STATION WIRING DIAGRAM



Long Term Stormwater Management Plan (LTSMP)

**SOPs: Facility Long Term Stormwater BMPs Information**

SOPs are necessary to operate and maintain the property in order to control and prevent pollutants from contaminating water resources.

Include descriptions of the Long Term Stormwater SOPs

## **Pavement Maintenance Operations**

### **General:**

These SOPs are not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in these SOPs.

### **1. Purpose and Selection:**

- a) Reduce stormwater pollution by sweeping and removing pollutants that will be carried to City stormwater systems during stormwater runoff or by non-stormwater runoff.
- b) The sweeper is intended for removing material that collect on pavements by use and the natural degradation of pavements, ie. material that collect, drop from vehicles and the natural erosion and breaking up of pavements.

### **2. Regular Procedure:**

- a) Remain aware of debris and sweep minor debris is needed by hand.
- b) Generally sweeping machinery should be used during autumn when leaf fall is heavy and early spring after winter thaw. Sometimes sweeping machinery will be necessary when accumulations are spread over a large area of the pavement.
- c) Manage outside activities that leave waste or drain pollutants to our pavements. This involves outside functions including but not limited to: Yard sales, yard storage, fund raisers, etc. Do not allow car wash fund raiser or other activities that allow detergents or other pollutants to be washed into the storm drain systems. Residents are allowed to wash their own cars.

### **4. Disposal Procedure:**

- a) Service contractor dispose at licensed facilities
- b) Dispose of hand collected material in dumpster

### **5. Training:**

- a) Annually and at hire

## Landscape Maintenance Operations

### General:

This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

**Rule: Prevent any solids, liquids or any light weight material from being carried away from the construction or maintenance envelop by wind or water.**

### 1. Application:

- a) This SOP should provide sufficient direction for many of the general landscaping operations, e.g., fertilizer and pesticide applications, mowing, weeding, tree trimming, digging, sprinkler repairs, varying landscape cover management, etc.

### 2. Maintenance Procedure:

- a) Grooming
  - Lawn Mowing – Immediately following operation sweep or blow clippings onto vegetated ground. It is not permitted to blow onto streets or paved areas where runoff could carry away clipping and fertilizers into storm drain systems.
  - Fertilizer Operation – Prevent overspray. Sweep or blow fertilizer onto vegetated ground immediately following operation.
  - Pesticide Operations – Prevent overspray, use spot treatment, sweep or blow dry pesticide onto vegetated ground immediately following pesticide operations.
- b) Remove or contain all erodible or loose material prior forecast wind and precipitation events, before any non-stormwater will pass through and over the project site and at end of work period. Light weight debris and landscape materials can require immediately attention when wind expected.
- c) Landscape project materials and waste can usually be contained or controlled by operational best management practices.
  - Operational; including but not limited to:
    - Strategic staging of materials eliminating exposure, such as not staging on pavement
    - Avoiding multiple day staging of landscaping backfill and spoil on pavements
    - Haul off spoil as generated or daily – dispose waste at the North Pointe Solid Waste Special Service District
    - Scheduling work when weather forecasts are clear.
    -



**d) Cleanup:**

- Use dry cleanup methods, e.g. square nose shovel and broom and it is usually sufficient when no more material can be swept onto the square nosed shovel.
- Power blowing tools

**3. Waste Disposal:**

- a) Dispose of waste according to General Waste Management SOP (see SOP below), unless superseded by specific SOPs for the operation.

**4. Equipment:**

- a) Tools sufficient for proper containment of pollutants and cleanup.
- b) Push broom and square blade shovel should be a minimum.

**5. Training:**

- a) Annually and at hire
- b) Landscape Service Contractors must have equal or better SOPs.

## Waste Management Operations

### General:

This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

### 1. Application:

- a) This SOP is intended for all Staff, intended for the proper disposal of common everyday waste.

### 2. Waste Collection Devices (Exposed units):

- a) The site contains 2 types of waste management containers.
  - 6yd dumpster with lid
  - Receptacles with lids

### 3. Waste Disposal Restrictions for all waste Scheduled for the North Pointe Solid Waste Special Service District:

- a) Generally, most waste generated at this property, and waste from spill and clean-up operations can be disposed in our dumpsters under the conditions listed in this SOP. Unless other disposal requirements are specifically identified by the product SDS or otherwise specified in other SOPs.
- b) Know the facility disposal requirements and restrictions. It should not be assumed that all waste disposed in collection devices will be disposed at the North Pointe Solid Waste Special Service District.
- c) Review North Pointe Solid Waste Special Service District regulations for additional restrictions and understand what waste is prohibited in the North Pointe Solid Waste Special Service District. Ensure the SDS and North Pointe Solid Waste Special Service District Landfill regulations are not contradictory.

Generally, the waste prohibited by the North Pointe Solid Waste Special Service District is:

- Liquid:
  - paint
  - pesticides/fertilizers
  - oil (all types)
  - antifreeze

## Long Term Stormwater Management Plan (LTSMMP)

- batteries
- liquid chemicals
- etc.

*(Generally, all the above hazardous waste when involved in minor spill cleanup operations can be disposed in covered dumpsters and our waste bays, if the liquid is contained in absorbent material, e.g. sand, dirt, loose absorbent, pads, booms etc., and transformed or dried such that it will not drip. This is not intended for wholesale disposal of out dated or spent liquid hazardous waste. When disposal of out dated or spent liquid is needed or for questions of how to dispose of other waste, contact the Utah County Health Department for instructions and locations, (801) 851-3000.*

#### 4. Waste Disposal Required for North Pointe Solid Waste Special Service District or other:

- a) Generally, for waste not accepted by the North Pointe Solid Waste Special Service District. Follow SDS for disposal requirements. Review North Pointe Solid Waste Special Service District regulations for additional restrictions and understand what waste is prohibited in the North Pointe Solid Waste Special Service District. Ensure the SDS and North Pointe Solid Waste Special Service District regulations are not contradictory  
General rules are:
  - Get approval prior to delivery.
  - Transport waste in secure leak proof containers that are clearly labeled.
- b) Lookup and follow disposal procedures for disposal of waste at other EPA approved sites, the North Pointe Solid Waste Special Service District is a good resource, (801) 225-8538

#### 5. General Staff Maintenance Practices:

- a) Prevent dumpsters and receptacles from becoming a pollution source by:
  1. Closing lids
  2. Reposition tipped receptacles upright.
  3. Report full or leaking and unsecured dumpsters and receptacles to the company provider or repair it in house. Determine source liquids and prevent it.
  4. Report any eminent pollutant hazard related to dumpsters and receptacles to the owner.

#### 6. Training:

- a) Annually and at hire

## **Storm Drain Maintenance Operations**

### **General:**

These SOPs are not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in these SOPs.

### **1. Procedure:**

- a) Inspect for need:
  - 1. Schedule cleaning for boxes and pipe that contain 2" or more of sediment and debris.
  - 2. Remove debris by vacuum with North Pointe Solid Waste Special Service District operated machinery.
  - 3. When accumulations are mostly floating debris this material can be removed with a net.
  - 4. Inspect standing water for mosquito larvae and contact the Utah County Health Department - Mosquito Abatement when necessary.

### **2. Disposal Procedure:**

- a) Dispose of waste collected by machinery at regulated facilities.
- b) Floating materials and floating absorbent materials may be disposed in dumpster when dried out. Dry dirt and slurry may also be disposed in the dumpster.
- c) Disposal of hazardous waste
  - 1. Dispose of hazardous waste at regulated disposal facilities, see Waste Management and Spill Control SOP
- d) Disposal of waste collected from sanitary sewer device at regulated facilities.

### **3. Training:**

- a) Annually and at hire

## **Pavement Washing Operations**

### **General:**

These SOPs are not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in these SOPs.

### **1. Procedure:**

- a) Prevent waste fluids and any detergents if used from entering storm drain system. The following methods are acceptable for this operation.
  - Dam the inlet using a boom material that seals itself to the pavement and pick up the wastewater with shop-vacuum or absorbent materials.
  - Collect wastewater with shop-vacuum simultaneous with the washing operation.
  - Collect wastewater with vacuum truck or trailer simultaneous with the washing operation.
- b) This procedure must not be used to clean the initial spills. First apply the Spill Containment and cleanup SOP.

### **2. Disposal Procedure:**

- a) Small volumes can usually be drained to the local sanitary sewer. Contact the Timpanogos Special Service District.
- b) Large volumes must be disposed at regulated facilities.

### **2. Pavement Cleaning Frequency:**

- a) There is no regular pavement washing regimen. Pavement washing is determined by conditions that warrant it, including but not limited to: prevention of slick or other hazardous conditions or restore acceptable appearance of pavements. Apartment management will educate residents so they understand their responsibilities for spills that occur ie: how and when to report spills, and the resources available for their use to clean up spills such as a spill kit on site.

### **3. Training:**

- a) Annually and at hire

## **Snow and Ice Removal Management**

### **General:**

This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

### **1. Application:**

- a) Parking and sidewalk winter management operations.

### **2. De-Icing Procedure:**

- a) Do not store or allow salt or equivalent compounds and chemicals to be stored on outside paved surfaces.
- b) Minimize salt use by varying salt amounts relative to hazard potential.
- c) Sweep excessive piles left by the spreader on parking lots and sidewalks. Dispose of excess per the Waste Management Operations SOP above.
- d) Watch forecast and adjust salt amounts when warm ups are expected the same day.
- e) Determine best sites for snow storage and notify the snow removal contractor where these sites are.
- f) Inspect snow storage sites immediately after snow melt has occurred for any debris and pollutants that need to be cleaned up per the Waste Management Operations SOP above.
- g) Do not push snow into public streets.

### **3. Training:**

- a) Annually and at hire.
- b) Require snow and ice service contractors to follow the stronger between this SOP and their company SOPs.

## General Construction Maintenance

### General:

This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

**Rule: Prevent any solids, \*liquids or any light weight material from being carried away from the construction or maintenance envelop by wind or water.**

**\*liquids - including culinary water and irrigation water that are polluted with material that will damage the environment.**

### 1. Application:

- a) This SOP should provide sufficient direction for many of the general operations, e.g., building maintenance, curb/sidewalk/flatwork, overlay/patching, landscape renovations, misc. maintenance/repairs, etc.

### 2. Construction Procedure:

- a) Remove or contain all erodible or loose material prior forecast wind and precipitation events or before non-stormwater will pass through the project site. For light weight debris maintenance can require immediately attention for wind events and many times daily maintenance or as needed for precipitation or non-stormwater events.
- b) Project materials and waste can be contained or controlled by operational or structural best management practices.
  - Operational; including but not limited to:
    - Strategic staging of materials eliminating exposure, such as not staging on pavement
    - Avoiding multiple day staging of backfill and spoil
    - Haul off spoil as generated or daily
    - Schedule work during clear forecast
  - Structural; including but not limited to:
    - Inlet protection, e.g. wattles, filter fabric, drop inlet bags, boards, planks
    - Gutter dams, e.g. wattles, sandbags, dirt dams
    - Boundary containment, e.g. wattles, silt fence
    - Dust control, e.g. water hose,

## Long Term Stormwater Management Plan (LTSMP)

- Waste control, e.g. construction solid or liquid waste containment, dumpster, receptacles
- c) Inspection often to insure the structural best management practices are in good operating condition and at least prior to the workday end. Promptly repair damaged best management practices achieving effective containment.
- d) Cleanup:
  - Use dry cleanup methods, e.g. square nose shove and broom.
  - Wet methods are allowed if wastewater is prevented from entering the stormwater system, e.g. wet/dry vacuum, disposal to our landscaped areas.
- e) Cleanup Standard:
  - When a broom and a square nosed shovel cannot pick any appreciable amount of material.

**3. Waste Disposal:**

- a) Dispose of waste according to General Waste Management SOP, unless superseded by specific SOPs for the operation.
- b) Never discharge waste material to storm drains

**4. Equipment:**

- a) Tools sufficient for proper containment of pollutants and cleanup.
- b) Push broom and square blade shovel should be a minimum.

**5. Training:**

- b) Annually and at hire.



## Spill Control

### General:

This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

### 1. Rational:

- a) All properties are susceptible to spills whether it is a result of operations or by customers. Insufficient response, inadequate containment materials and improper spill cleanup methods will result in pollutants in our waterways. Once the pollutants reach our storm drain system, or even the detention pond, they are difficult and expensive to remove.

### 2. Containment Procedure:

- a) Priority is to dam and contain flowing spills.
- b) Use spill kits booms if available or use any material available; including but not limited to, nearby sand, dirt, landscaping materials, etc.
- c) Hazardous or unknown waste material spills
  1. Critical Emergency constitutes large quantities of flowing uncontained liquid that will affect areas with people or reach storm drain systems. Generally, burst or tipped tanks. Call HAZMAT, DWQ, Utah County Health Department, American Fork City.
  2. Minor Emergency constitutes a spill that has reached a storm drain but is no longer flowing. Call Utah County Health Department, American Fork City
  3. Spills that are contained on the surface and do not meet the criteria for Critical and minor emergencies may be managed by the responsible implementation of this SOP.
  4. Contact Numbers:  
 HAZMAT - 911  
 DWQ – 801-231-1769, 801-536-4123  
 Utah County Health Department – 801-851-3000  
 American Fork City – 801-763-3040

### 3. Cleanup Procedure:

- a) NEVER WASH SPILLS TO THE STORM DRAIN SYSTEMS.
- b) Clean per SDS requirements but generally most spills can be cleaned up according to the following:

## Long Term Stormwater Management Plan (LTSMP)

- Absorb liquid spills with spill kit absorbent material, sand or dirt until liquid is sufficiently converted to solid material.
- Remove immediately using dry cleanup methods, e.g. broom and shovel, or vacuum operations.
- Cleanup with water and detergents may also be necessary depending on the spilled material. However, the waste from this operation must be vacuumed or effectively picked up by dry methods. See Pavement Washing SOP.
- Repeat process when residue material remains.
- Notify employees where spill kits are located on site.

**4. DISPOSAL:**

- a) Follow SDS requirements but usually most spills can be disposed per the following b. & c.
- b) Generally, most spills absorbed into solid forms can be disposed to the dumpster and receptacles. Follow Waste Management SOP.
- c) Generally Liquid waste from surface cleansing processes may be disposed to the sanitary sewer system after the following conditions have been met:
  - Dry cleanup methods have been used to remove the bulk of the spill and disposed per the Waste Management SOP.
  - The liquid waste amounts are small and diluted with water. This is intended for spill cleanup waste only and never for the disposal of unused or spent liquids.

**5. Documentation:**

- a) Document all spills in Appendix C.

**6. SDS sheets:**

- a) SDS Manual is filed in break room.

**7. Materials:**

- a) Generally, sand or dirt will work for most clean-up operations and for containment. However, it is the responsibility of the owner to select the absorbent materials and cleanup methods that are required by the SDS Manuals for chemicals used by the company.

**8. Training:**

- a) Annually and at hire.

Long Term Storm Water Management Plan (LTSMP)

**Exhibit C: Inspections/Maintenance**

Inspection documentation will be located in Appendix A

The Owner listed below will be responsible for the inspections and maintenance. Owner Company:

HOA/TBD

Owner Address: 5255 West 11000 North, Suite 125

Highland, UT 84003

Owner Contact Person: HOA/TBD

Title: Project Manager

Telephone Number: 8014200704

Email: gchristofferson13@gmail.com

1. Long Term Stormwater BMPs need to be inspected by a qualified person during installation to ensure the control is properly installed. This will be performed by a qualified person from the City or the design engineer.

List below the schedule for inspections of each of the BMPs listed in Exhibit B:

Long Term Stormwater Management Plan (LTSMP)

List of BMPs

Winter Snow and Ice Controls and Salt Storage

Mulches and Soils

Mowing and Trimming

Leaves – Autumn Cleanup

Fertilizer

Storm Inlets

Roof Drains

HVAC

UIC

Describe the inspection and maintenance schedule

Weekly during winter months, and once annually in the spring during cleanup (after termination of snow conditions)

Twice Annually

Walkthrough and cleanup following regular maintenance

Once annually, in the fall (prior to cold weather conditions)

Walkthrough and cleanup following each application

Twice Annually

Twice Annually

Twice Annually

Twice Annually

Parking Lots Cleaning and Weekly walk-through and twice annual comprehensive Maintenance

Trash and Debris

Twice Annually

Long Term Stormwater Management Plan (LTSMP)

Inspection Report

Site Name:		Date of Evaluation					
Site Address:							
FACILITY CONTACT INFORMATION							
	NAMES		PHONE		E- MAIL ADDRESS		
SITE CONTACT:							
INSPECTOR CONTACT:							
Controls Inspected:							
Business Type (Circle One): Commercial, HOA, Public Institution, Industrial							
Are SOP's for Stormwater Post Construction Inspections implemented and available for review? Circle Answer				YES NO			
Orifice Required for site YES Circle Answers		NO		Orifice Size: Hooded outlet cover (snout) Required for site YES NO			
Items Inspected	Checked		Maintenance Required?		Is there excessive accumulation?		Observations and Remarks
	Yes	No	Yes	No	Yes	No	
1. Site Drawings							(Current site drawings, i.e. LTSMP updated with any changes)
2. Operator Awareness for LTSMP							(Is there an active LTSMP available and does the operator have access to this Plan?)
3. Documentation							(Is there documentation which demonstrates maintenance and compliance with LTSMP, etc.?)
4. Dumping Evidence							(Is there evidence of stains, piles, or smells near waterways or inlets, etc.?)
5. Spill Evidence							
6. General Site Exposure							(Is there existing stockpiles, uncovered unmaintained equipment, etc.?)
7. Other Pollution Sources							
8. Stormwater Storage condition and capacity (detention/retention ponds)							
9. Inlets and catch basins							
10. Conveyance System							
11. Manholes							
12. Parking/Pavement							
13. Waste Collection							
14. Landscaping							
15. Pre-Treatment devices							
16. Sumps							
17. Flow Control devices							
18. Flood Control Storage							
19. Surface LID Systems							
20. Site Specific SOP Items							
21. Other							
Notes:							
Print Name:				Date:			
Signature:				Title or Position			

Long Term Stormwater Management Plan (LTSMP)

**BMP Measurement Log**

These logs are for BMPs that depend on measurement for cleanout and for Stormwater capacity.

<u>Control Name and Number</u>	<u>Date</u>	<u>Inspection Method</u>	<u>Result</u>

## Long Term Stormwater Management Plan (LTSMP)

## Common Pollutants from Stormwater Discharges

<b>Pollutants</b>	<b>Sources</b>	<b>Consequences of Pollutant</b>
<b>Sediment</b>	Erosion or soils that are not stabilized.	Destruction of aquatic habitat for fish and plants, transportation of attached oils, nutrients and other chemical contamination, increased flooding. Sediment can transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter.
<b>Nutrients (Phosphorus, Nitrogen Potassium, Ammonia)</b>	Fertilizers; Plant Debris (grass clippings, leaves); Animal Waste; Sediment	Harmful algal blooms, reduced oxygen in the water, changes in water chemistry and pH. Nutrients can result in excessive or accelerated growth of vegetation, resulting in impaired use of water in lakes and other receiving waters.
<b>Hydrocarbons (Petroleum Products, Benzene, Toluene, Ethyl benzene, Xylene)</b>	Oils; Gasoline; Diesel Fuel; Antifreeze; Plant and Animal Oils;	These pollutants are toxic to humans and wildlife at very low levels. Carcinogenic. Teratogenic.
<b>Heavy Metals</b>	Manufacturing; Industrial Wastes; Vehicles and Equipment; Storage; Batteries; Paints	Metals including lead, zinc, cadmium, copper, chromium and nickel are commonly found in storm water. Metals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic
<b>Toxic Chemicals (Chlorides) - including Pesticides &amp; Herbicides, Detergents, Soaps</b>	Industrial Chemicals; Pesticides; Herbicides; Detergents; Soaps;	Chemicals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic.
<b>Trash, Debris, Solids</b>	Wastes	Aesthetically unpleasant. Risk of decay product toxicity. Risk of aquatic animal entrapment or ingestion and death.
<b>Pathogens - Bacteria and Viruses</b>	Animal Waste; Human Waste	Human health risks due to disease and toxic contamination of aquatic life.
<b>Salt</b>	Salt Piles; Car Washing; Snow Removal	Salt can infiltrate into groundwater and contaminate it. Vegetation is damage or killed by salt causing oxygen to be taken out of the water. Aquatic life can be killed or have stunted growth due to salt. Salt also traps food and nutrients preventing fish and animal life from accessing those nutrients
<b>Temperature (Thermal Pollution)</b>	Industrial Waste Water; Removal of Vegetation near streams; lack of vegetation surrounding roads and parking lots	High water temperatures can kill or harm cold water fish. This occurs by slowing of metabolism in fish which causes malnutrition; oxygen depletion in the water; forced migration of the aquatic life

**Amendment Log**

Date	Description of the Amendment	LTSMP Section	Amendment Prepared by

**Training Log**

Date	Description of the Training	Attendees Name

Long Term Stormwater Management Plan (LTSMP)

**Exhibit D: Annual report**

Site Name:		Annual Report for Dates:		
Site Address:				
Facility Contact Information				
	NAME and MAILING ADDRESS	Phone	E- MAIL ADDRESS	
SITE CONTACT:				
INSPECTOR CONTACT:				
Inspection Dates:				
1 <sup>st</sup> Inspection	2 <sup>nd</sup> Inspection	3 <sup>rd</sup> Inspection	4 <sup>th</sup> Inspection	5 <sup>th</sup> Inspection
Pollutants Found:	Found During Inspection #:	How were Pollutants controlled/disposed?		
Are Controls Functioning Properly?		Yes	No	
Notes:				
Print Name:			Date:	
Signature:			Title or Position	
*Include Training Logs and Inspection Reports with Annual Report when submitting.				



# STORMWATER MANAGEMENT SOLUTIONS



FOR CULTEC STORMWATER MANAGEMENT SYSTEMS

**Published by****CULTEC, Inc.**

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January 2020

*These instructions are for single-layer traffic applications only. For multi-layer applications, contact CULTEC.  
All illustrations and photos shown herein are examples of typical situations. Be sure to follow the engineer's drawings.  
Actual designs may vary.*

*This manual contains guidelines recommended by CULTEC, Inc. and may be used in conjunction with, but not to supersede, local regulations or regulatory authorities. OSHA Guidelines must be followed when inspecting or cleaning any structure.*

## Introduction

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The CULTEC Subsurface Stormwater Management System is a high-density polyethylene (HDPE) chamber system arranged in parallel rows surrounded by washed stone. The CULTEC chambers create arch-shaped voids within the washed stone to provide stormwater detention, retention, infiltration, and reclamation. Filter fabric is placed between the native soil and stone interface to prevent the intrusion of fines into the system. In order to minimize the amount of sediment which may enter the CULTEC system, a sediment collection device (stormwater pretreatment device) is recommended upstream from the CULTEC chamber system. Examples of pretreatment devices include, but are not limited to, an appropriately sized catch basin with sump, pretreatment catchment device, oil grit separator, or baffled distribution box. Manufactured pretreatment devices may also be used in accordance with CULTEC chambers. Installation, operation, and maintenance of these devices shall be in accordance with manufacturer's recommendations. Almost all of the sediment entering the stormwater management system will be collected within the pretreatment device.

Best Management Practices allow for the maintenance of the preliminary collection systems prior to feeding the CULTEC chambers. The pretreatment structures shall be inspected for any debris that will restrict inlet flow rates. Outfall structures, if any, such as outlet control must also be inspected for any obstructions that would restrict outlet flow rates. OSHA Guidelines must be followed when inspecting or cleaning any structure.

## Operation and Maintenance Requirements

### I. Operation

CULTEC stormwater management systems shall be operated to receive only stormwater run-off in accordance with applicable local regulations. CULTEC subsurface stormwater management chambers operate at peak performance when installed in series with pretreatment. Pretreatment of suspended solids is superior to treatment of solids once they have been introduced into the system. The use of pretreatment is adequate as long as the structure is maintained and the site remains stable with finished impervious surfaces such as parking lots, walkways, and pervious areas are properly maintained. If there is to be an unstable condition, such as improvements to buildings or parking areas, all proper silt control measures shall be implemented according to local regulations.

### II. Inspection and Maintenance Options

**A.** The CULTEC system may be equipped with an inspection port located on the inlet row. The inspection port is a circular cast box placed in a rectangular concrete collar. When the lid is removed, a 6-inch (150 mm) pipe with a screw-in plug will be exposed. Remove the plug. This will provide access to the CULTEC Chamber row below. From the surface, through this access, the sediment may be measured at this location. A stadia rod may be used to measure the depth of sediment if any in this row. If the depth of sediment is in excess of 3 inches (76 mm), then this row should be cleaned with high pressure water through a culvert cleaning nozzle. This would be carried out through an upstream manhole or through the CULTEC StormFilter Unit (or other pretreatment device). CCTV inspection of this row can be deployed through this access port to determine if any sediment has accumulated in the inlet row.

**B.** If the CULTEC bed is not equipped with an inspection port, then access to the inlet row will be through an upstream manhole or the CULTEC StormFilter.

#### 1. Manhole Access

This inspection should only be carried out by persons trained in confined space entry and sewer inspection services. After the manhole cover has been removed a gas detector must be lowered into the manhole to ensure that there are not high concentrations of toxic gases present. The inspector should be lowered into the manhole with the proper safety equipment as per OSHA requirements. The inspector may be able to observe sediment from this location. If this is not possible, the inspector will need to deploy a CCTV robot to permit viewing of the sediment.

**2. StormFilter Access**

Remove the manhole cover to allow access to the unit. Typically a 30-inch (750 mm) pipe is used as a riser from the StormFilter to the surface. As in the case with manhole access, this access point requires a technician trained in confined space entry with proper gas detection equipment. This individual must be equipped with the proper safety equipment for entry into the StormFilter. The technician will be lowered onto the StormFilter unit. The hatch on the unit must be removed. Inside the unit are two filters which may be removed according to StormFilter maintenance guidelines. Once these filters are removed the inspector can enter the StormFilter unit to launch the CCTV camera robot.

- C. The inlet row of the CULTEC system is placed on a polyethylene liner to prevent scouring of the washed stone beneath this row. This also facilitates the flushing of this row with high pressure water through a culvert cleaning nozzle. The nozzle is deployed through a manhole or the StormFilter and extended to the end of the row. The water is turned on and the inlet row is back-flushed into the manhole or StormFilter. This water is to be removed from the manhole or StormFilter using a vacuum truck.

### III. Maintenance Guidelines

The following guidelines shall be adhered to for the operation and maintenance of the CULTEC stormwater management system:

- A. The owner shall keep a maintenance log which shall include details of any events which would have an effect on the system's operational capacity.
- B. The operation and maintenance procedure shall be reviewed periodically and changed to meet site conditions.
- C. Maintenance of the stormwater management system shall be performed by qualified workers and shall follow applicable occupational health and safety requirements.
- D. Debris removed from the stormwater management system shall be disposed of in accordance with applicable laws and regulations.

### IV. Suggested Maintenance Schedules

**A. Minor Maintenance**

The following suggested schedule shall be followed for routine maintenance during the regular operation of the stormwater system:

Frequency	Action
Monthly in first year	Check inlets and outlets for clogging and remove any debris, as required.
Spring and Fall	Check inlets and outlets for clogging and remove any debris, as required.
One year after commissioning and every third year following	Check inlets and outlets for clogging and remove any debris, as required.

**B. Major Maintenance**

The following suggested maintenance schedule shall be followed to maintain the performance of the CULTEC stormwater management chambers. Additional work may be necessary due to insufficient performance and other issues that might be found during the inspection of the stormwater management chambers. (See table on next page)

	Frequency	Action
Inlets and Outlets	Every 3 years	<ul style="list-style-type: none"> <li>Obtain documentation that the inlets, outlets and vents have been cleaned and will function as intended.</li> </ul>
	Spring and Fall	<ul style="list-style-type: none"> <li>Check inlet and outlets for clogging and remove any debris as required.</li> </ul>
CULTEC Stormwater Chambers	2 years after commissioning	<ul style="list-style-type: none"> <li>Inspect the interior of the stormwater management chambers through inspection port for deficiencies using CCTV or comparable technique.</li> <li>Obtain documentation that the stormwater management chambers and feed connectors will function as anticipated.</li> </ul>
	9 years after commissioning every 9 years following	<ul style="list-style-type: none"> <li>Clean stormwater management chambers and feed connectors of any debris.</li> <li>Inspect the interior of the stormwater management structures for deficiencies using CCTV or comparable technique.</li> <li>Obtain documentation that the stormwater management chambers and feed connectors have been cleaned and will function as intended.</li> </ul>
	45 years after commissioning	<ul style="list-style-type: none"> <li>Clean stormwater management chambers and feed connectors of any debris.</li> <li>Determine the remaining life expectancy of the stormwater management chambers and recommended schedule and actions to rehabilitate the stormwater management chambers as required.</li> <li>Inspect the interior of the stormwater management chambers for deficiencies using CCTV or comparable technique.</li> <li>Replace or restore the stormwater management chambers in accordance with the schedule determined at the 45-year inspection.</li> <li>Attain the appropriate approvals as required.</li> <li>Establish a new operation and maintenance schedule.</li> </ul>
Surrounding Site	Monthly in 1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Check for depressions in areas over and surrounding the stormwater management system.</li> </ul>
	Spring and Fall	<ul style="list-style-type: none"> <li>Check for depressions in areas over and surrounding the stormwater management system.</li> </ul>
	Yearly	<ul style="list-style-type: none"> <li>Confirm that no unauthorized modifications have been performed to the site.</li> </ul>

For additional information concerning the maintenance of CULTEC Subsurface Stormwater Management Chambers, please contact CULTEC, Inc. at 1-800-428-5832.

Exhibit D

Facility Operation and Maintenance Inspection Report for Storm Drain Facilities

Inspector Name: .....		Subdivision Name: .....			
Inspection Date: .....		Address: .....			
Frequency of inspection	<input type="checkbox"/> Weekly	<input type="checkbox"/> Monthly		<input type="checkbox"/> Quarterly	<input type="checkbox"/> Annual
Item Inspected	Checked		Maintenance		Observations and Remarks
	Yes	No	Req'd	Not Req'd	
<b>Pond Facilities</b>					
1	Landscaping maintenance				
2	Remove sedimentation				
3	Remove debris				
4	Repair side slopes				
5	Repair rip-rap protection				
6	Repair control structure				
7	Cleaning of outfall				
8	Removal of floatable debris				
9	Maintenance of inlets				
10	Maintenance of outlets				
<b>Storm drain system</b>					
1	Remove sediment from catch basins				
2	Cleaning storm drain pipes				
3	Maintenance of drainage swales				
4	Remove sediment from manholes				
5	Remove sediment from sumps				
6	Repair oil/ water separator				
7	Repair sand filters				
<b>Parking lot and roads maintenance</b>					
1	Sweeping of parking lot				
2	Sweeping of streets				
3	Cleaning of garbage enclosure				
4	Cleaning of non-hazardous spills				
5	Managing fertilizer use				
6	Managing pesticide use				
7	Removal of grass after lawn mowing				

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information provided is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

BY: ..... Date: .....  
 Site Inspector

Approved as to form:  
 Attorney for American Fork City