AGREEMENT FOR STORM WATER SYSTEM MAINTENANCE

This Agreement is made on <u>Avg. 27, 2015</u> by Walton & Adams, LLC., a Michigan Limited Liability Company of 2995 Walton Blvd, Rochester Hills, MI 48309 ("Developer"), and the CITY OF ROCHESTER HILLS (the "City"), whose address is 1000 Rochester Hills Drive, Rochester Hills, MI 48309.

WHEREAS, Developer owns and proposes to develop the Property described in attached Exhibit A; and

WHEREAS, the proposed development of the Property will alter the natural flow of surface and storm water drainage; and

WHEREAS, Developer has proposed, and the City has approved, a storm water drainage and detention system (the "System") comprised of storm water detention and water quality treatment facilities and devices, pumping system, storm sewer pipe, catch basins, manholes, end-sections, ditches, swales, open water courses and rip-rap, for the Property as described and depicted in the Storm Water System Plan attached as Exhibit B; and

WHEREAS, the parties will benefit from the proper operation, use and maintenance of the system and enter into this agreement to provide for the same.

THEREFORE, the parties agree:

1. Use of the System:

Components of the System, including any and all water conveyance, detention and water quality treatment facilities and devices, pumping s tern, storm sewer pipe, catch basins, manholes, end-sections, ditches, swales, open water courses and riprap, shall be used solely for the purpose of conveying, detaining and treating storm and surface drainage on the property until such time as: (i) The City determines and notifies Developer or Developer's successors, grantees or assigns, in writing, that it is no longer necessary to convey, detain or treat the storm and surface drainage; and (ii) An adequate alternative for conveying, detaining and treating storm and surface drainage has been provided which is acceptable to the City and which includes the granting of any easements to the City or third parties as may be required or necessary for the alternative drainage system.

2. Maintenance:

- a. Developer shall be responsible for the proper maintenance, repair and replacement of the System and all parts thereof as detailed in the Maintenance Plan attached as Exhibit C.
- b. Proper maintenance of the System shall include, but is not limited to: (i) Removing accumulated sediment, trash and debris from the detention basin and at inlet pipes; (ii) Managing deleterious vegetative growth; (iii) Maintaining storm sewer, structures, end-sections and safety features; (iv) Controlling the effects of erosion; (v) Inspection and cleaning of the water quality treatment device; (vi) Inspection of inlet and outlet pipes for structural integrity; (vii) Inspection and replacement of riprap at inlet pipes; (viii) Inspection and cleaning of the storm sewer and catch basins upstream from the detention basin; (ix) Inspection and replacement of stone around the outlet pipe; and (vi) Any other maintenance that is reasonable and necessary to facilitate and continue the proper operation and use of the System.

3. Action by City:

If, at any time, Developer or Developer's successors, grantees or assigns neglect or fail to properly maintain the System or any part thereof, the City may notify Developer or Developer's successors, grantees or assigns. The notice shall be in writing and shall list and describe maintenance deficiencies and demand that they be corrected within thirty (30) days.

The notice shall further specify a date and place for a hearing to be held at least fourteen (14) days after the date of the notice before the City Council, or such other board or official as the City Council may designate. At the hearing, the City Council (or other designated board or official) may affirm or

modify the list and description of maintenance deficiencies and, for good cause shown, may extend the time for the deficiencies to be corrected.

Thereafter, if the maintenance deficiencies are not corrected within the time allowed, the City may undertake the necessary corrective actions, and the City may maintain the System for up to one (1) year. Such maintenance of the System by the City shall not be construed to be a trespass or a taking of the Property, nor shall the City's actions vest in the public any right to enter or use the Property. Thereafter, if Developer or Developer's successors, grantees or assigns do not properly maintain the System, the City may, after providing similar written notice, schedule and hold another hearing to determine whether the City should maintain the System for another year, and subject to a similar notice, hearing and determination in subsequent years.

In the event the City determines an emergency condition caused by or relating to the System threatens the public health, safety or general welfare, the City shall have the right to immediately and without notice enter the Property and undertake appropriate corrective action.

4. Charges:

The City shall charge to the current owner of the Property the cost of maintenance or other corrective action undertaken by the City under this agreement, plus a ten percent (10%) administrative fee. If not timely paid, the City may place the charges on the City's tax roll, which charges shall be a lien on the real property and shall be collectable and enforceable in the same manner general property taxes are collected and enforced.

5. Notice:

Any notices required under this agreement shall be sent by certified mail to the address for each party set forth below, or to such other addresses as such party may notify the other parties in writing:

To Walton & Adams, LLC.:

Attention: Sean Awdish 2995 Walton Blvd. Rochester Hills, MI 48309

To the City:

City Clerk City of Rochester Hills 1000 Rochester Hills Drive Rochester Hills, MI 48309

6. Successors and Assigns:

This shall assigns bind and inure to the benefit of the parties and their respective successors, grantees, and assigns. The benefits, burdens, rights, obligations, and responsibilities hereunder shall run with the land and shall bind all current and future owners of the Property and any divisions thereof.

7. Recording of Agreement:

This agreement shall be recorded at the Oakland County Register of Deeds.

Walton & Adams, LLC.

By: Sean Awdish It's: Member

CITY OF ROCHESTER HILLS

By: Bryan K. Barnett, Mayor

By: Tina Barton, City Clerk

STATE OF MICHIGAN COUNTY OF OAKLAND	
This agreement was acknowledged before	me on <u>Ανδυςτ 27</u> , 20 <u>15</u> ,
by SGAN AWDISH ,w	tho is the MEMBER
of NALTON & ADAMS LLC	a Michigan Limited Liability Company, on behalf of
the Company.	
	OAKLAND County, Michigan
М	y commission expires:
STATE OF MICHIGAN COUNTY OF OAKLAND This agreement was acknowledged before me Mayor, and Tina Barton, City Clerk, of the City	JANET L DEIRMENGIAN Notary Public - Michigan Oakland County My Commission Expires Jul 3, 2019 Acting in the County of DAKLAND on, by Bryan K. Barnett of Rochester Hills, on behalf of the City.
Drafted By:	
Sean Hwaish	
Sean Awdish 2132 Bel Aire West Bloomfield, MI 48323	
-	, notary public County, Michigan
M	ly commission expires:

When Recorded Return to: Clerks Dept. City of Rochester Hills 1000 Rochester Hills Drive Rochester Hills, MI 48309

John Steran Approved 9/1/15

Exhibit A

LEGAL DESCRIPTION:

PART OF THE NORTHWEST 1/4 OF SECTION 17, T3N., R11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS BEGINNING AT A POINT LOCATED DISTANT S 0° 14'40" E, 140.00 FEET & EAST, 60.00 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 17; THENCE EAST, 200.00 FEET; THENCE S 0° 14'40" E, 200.00 FEET; THENCE WEST, 200.00 FEET; THENCE N 0° 14'40" W, 200.00 FEET TO THE POINT OF BEGINNING. PARCEL CONTAINS 0.92 ACRES OF LAND.

#15-17-102-003

Mike Taunt

ISSUED FOR: REV'D BY: ISSUED FOR: REV'D BY: ngineering)ulak CIVIL ENGINEERING

4031 Coolidge Highway Troy, MI 48098

DESIGN PLANNING S Phone: (248) 885-8431

Fax: (248) 885-8432 Email: SujakEngineering@Comcast.net

DRAWN BY JOB No. DATE 8/20/2015 SHEET No. 10f1 SCALE 1"=40"

DESCRIPTION Legal Description 2995 Walton Blvd, Rochester Hills MI

Teon C. Sujak, P.E. No. 046896

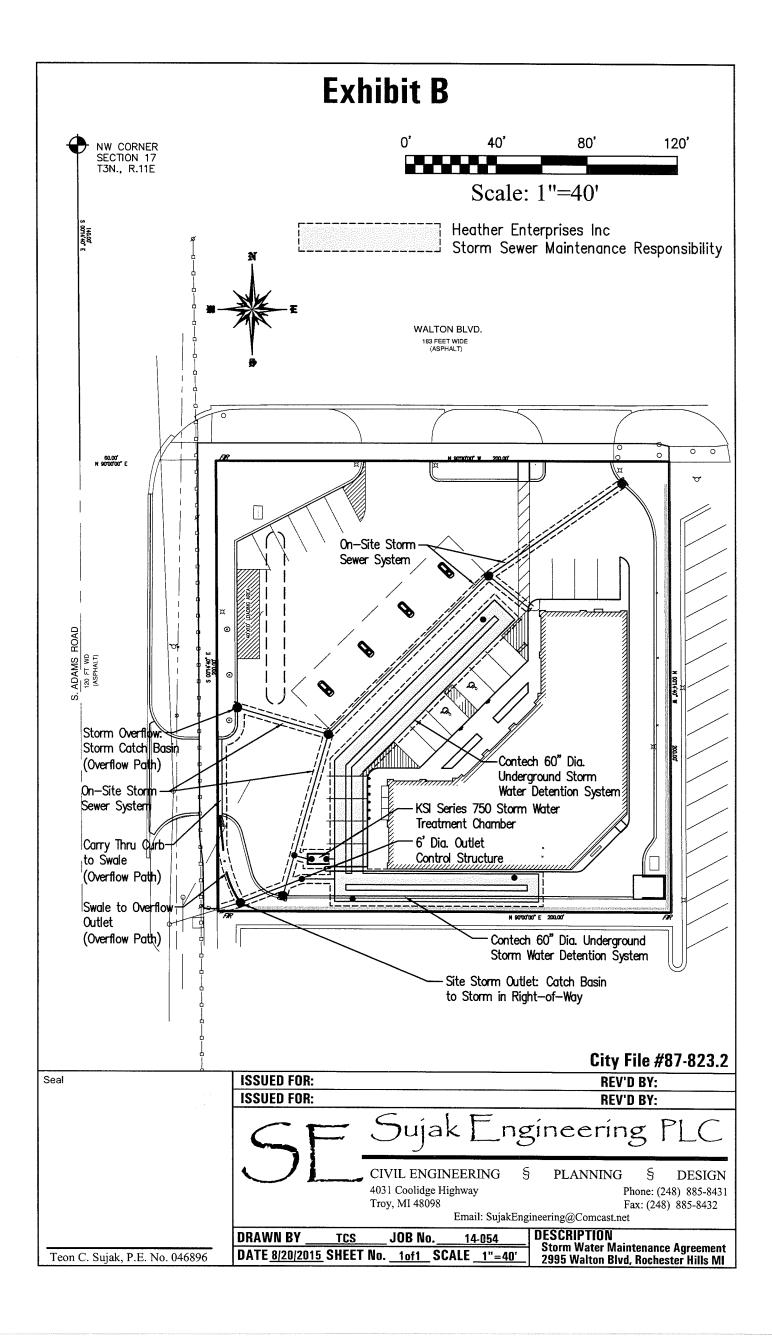


EXHIBIT 'C'

OPERATIONS AND MAINTENANCE MANUAL STORMWATER MAINTENANCE PLAN

HEATHER ENTERPRISES INC 2995 WALTON BOULEVARD ROCHESTER HILLS, MICHIGAN

PRELIMINARY COPY

PROPERTY OWNER:

Heather Enterprises Inc 2995 Walton Boulevard Rochester Hills, MI, 48309 Phone: (248) 330-6121 Contact: Mr. Sean Awdish

Prepared By: Sujak Engineering PLC 4031 Coolidge Hwy Troy, MI 48098 Phone: (248) 885-8431 Contact: Teon C. Sujak, P.E.

OPERATION AND MAINTENANCE MANUAL

INTRODUCTION:

This manual identifies the ownership, operation and maintenance responsibilities for all stormwater management systems including the underground detention basin, underground storm sewer system, and mechanical pre-treatment device as incorporated into and detailed on the approved Construction Plans as prepared by Sujak Egnineerging PLC. In order to comply with the local best management practices (BMP) and requirements, this manual should serve as a minimum performance standard. This manual should be retained intact and read in its entirety by all parties responsible for the operations and maintenance of the on-site BMP's.

OWNER:

Mr. Sean Awdish, Heather Enterprises Inc 2995 Walton Boulevard Rochester Hills, Michigan, 48309 Phone: (248) 330-6121

PROPERTY INFORMATION:

This Operations and Maintenance Manual covers the storm water systems located at the following subject property:

LEGAL DESCRIPTION:

PART OF THE NORTHWEST 1/4 OF SECTION 17, T3N., R11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS BEGINNING AT A POINT LOCATED DISTANT S 0° 14'40" E, 140.00 FEET & EAST, 60.00 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 17; THENCE EAST, 200.00 FEET; THENCE S 0° 14'40" E, 200.00 FEET; THENCE WEST, 200.00 FEET; THENCE N 0° 14'40" W, 200.00 FEET TO THE POINT OF BEGINNING. PARCEL CONTAINS 0.92 ACRES OF LAND.

STORMWATER MAINTENANCE EXHIBIT:

Exhibit 'B' of the Storm Water Maintenance Agreement is the Storm Water System Plan which provides a clear presentation of all components of the storm water system. This system is subject to the long-term operation and maintenance responsibilities detailed in this manual. The system includes:

- Storm sewer pipes
- Storm sewer structures (manholes, inlets, catch basins etc.)
- Underground Detention Basin (Contech 60" Diameter Pipes)
- Pre-Treatment Device (KSI Series 750)

INSPECTIONS:

The frequency of system inspections outlined in the manual and attached exhibits should be considered the minimum, if no events warrant additional inspections. The frequency of inspections should be fine-tuned over time as system specific conditions are better known and the rate at which certain maintenance operations need to be performed is better understood. Maintenance Inspection Checklists are provided for each of the BMP's in this system. Inspections should be performed by personnel responsible for maintenance and may need to be certified for confined space entry, depending on the component being inspected. Operation of the underground detention basin, outlet control structures and pre-treatment device may need to be inspected by a practicing civil engineer familiar with their operation. Records of all routine inspections and any work performed on the system for maintenance, repair or replacement should be maintained by the owner and kept for a minimum of ten (10) years. A copy of all records should be provided to the City of Rochester Hills Engineering Division. The records should include this manual, all inspection sheets, approved construction plans and as-built documents, a maintenance log of work performed to the system and contact information for the system inspector, civil engineer, geotechnical engineer and contractor involved with the system.

STORM WATER SYSTEMS MAINTENANCE:

Regular inspection and maintenance of BMP's are necessary if these facilities are to consistently perform up to expectations. Stormwater systems are expected to perform quality and quantity control functions as long as the land use they serve exists. Failure to maintain these systems can create the following adverse impacts:

- Increased pollutants to surrounding surface water features
- Potential loss of life or property resulting from catastrophic failure of the facility
- Aesthetic or nuisance conditions, such as mosquitoes or reduced property values due to a degraded facility appearance.

Most of these impacts can be avoided through proper and timely inspection and maintenance. A major concern associated with these impacts is the general public's expectations related to the quality of life provided, in part, by construction of these systems. Inadequate maintenance means the general public may have a false sense of security. The most common cause of stormwater system failure is the lack of adequate and proper operation, inspection, maintenance and management.

Good design and construction can reduce subsequent maintenance needs and costs, but they cannot eliminate the need for maintenance altogether. Maintenance requires a long term commitment of time, money, personnel and equipment. Monitoring the overall performance of the stormwater management system is a major aspect of any maintenance program.

The maintenance responsibilities for these systems lie with the current property owner and transfer with the property in perpetuity. If maintenance of the system is not performed, the City of Rochester Hills reserves the right to enter the property and

perform all necessary work at the property owners' cost. Refer to the Agreement for-Storm Water System Maintenance for additional details.

General Maintenance Items:

Parking Lot Sweeping:

Routine sweeping of all paved surfaces provides a more attractive appearance and removes accumulations of sediment and trash that tend to migrate into stormwater management systems during rainfall events. Parking lot sweeping should be performed quarterly or as necessary to limit sediment and trash build-up.

Grass Mowing and Maintenance:

Mowing requirements at a facility should be designed to the specific site conditions, grass types and seasonal variations in climate. Grassed areas require periodic fertilizing, dethatching and soil conditioning in order to maintain healthy growth. Provisions will need to be made to reseed and reestablish grass cover in areas damaged by sediment accumulation, stormwater flow, erosion or other causes. Dead turf will need to be replaced after being discovered. Inspection of the grass areas and other landscaping features should be made annually.

Trash and Debris Removal:

Removal of trash and debris from all areas of the property should be performed monthly. Removal of these items will prevent damage to vegetated areas and eliminate their potential to inhibit the operation of any of the stormwater management systems. Sediment, debris and trash that are removed and collected should be disposed of according to local, State and Federal regulations at suitable disposal and/or recycling centers.

Stormwater System Maintenance Items:

The following narratives give an overview of the maintenance requirements of the different components of the stormwater system. The inspection checklists attached to this report offer a more complete listing of what should be inspected, when inspection should occur and the likely frequency of maintenance activities.

Storm Sewer and Structures:

Catch basins, inlets, manholes and sewer pipes should be inspected to check for sediment accumulation and clogging, floatable debris, dead vegetation etc. The structures and sewers should also be observed during a wet weather event to ensure their proper operation. Accumulated sediment and debris should be removed on an annual basis or as needed based on observed conditions. Structural repairs or maintenance should occur as needed based on observed conditions such as cracks, spalling, joint failure, leakage, misalignment or settlement of structures.

Stormwater Pre-Treatment Device (KSI Series 750):

Refer to the attached maintenance manual from the manufacturer for all inspection and maintenance requirements for the KSI structure,

Detention Outlet Control Structure and Overflow Structure:

Both the outlet control and overflow structures and connecting pipes should be inspected for sediment accumulation, floatable debris, trash and any other foreign matter that may impede flow or restrict the devices from working properly. The outlet control system should be inspected during a wet weather event to ensure all components are functioning properly.

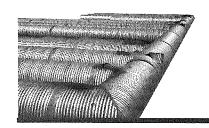
Maintenance will include the removal of any debris, trash or sediment from the structures and/or pipe, inspection & cleaning of restrictor holes of the interior wall of the outlet control structure and removal of debris from the structure.

<u>Underground Detention Basin:</u>

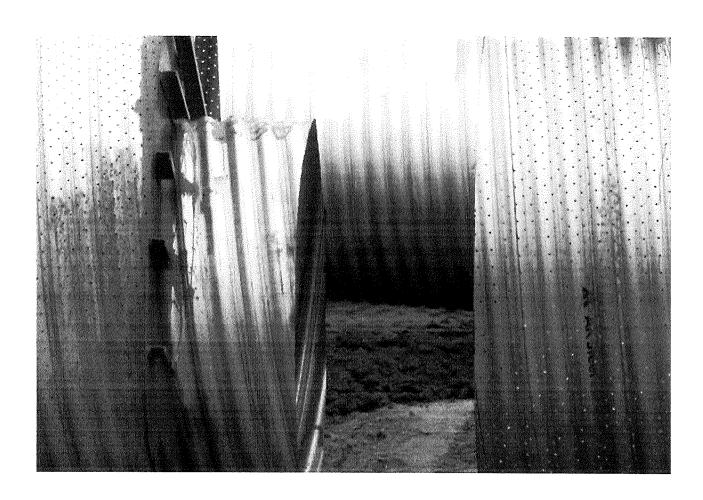
The inlet pipes to the basins should be inspected for structural integrity (pipes cracked, broken, spalled) and that the grates are free from debris. The area around and immediately downstream of the inlet pipes should be inspected for sediment build-up, erosion and the riprap should be inspected for integrity and sedimentation. Maintenance of the inlet pipes would include removal of any sediment build-up and debris, repair or replacement of any components that are in need of attention.

The underground detention basin should be inspected during a wet weather event to ensure all aspects of the basin are functioning correctly. A civil engineer should be retained if problems are thought to exist or if the inspection personnel are not familiar with the operating conditions of the basins.





Contech® CMP Detention & Infiltration Maintenance Guide





Contech® CMP Detention

Maintenance

Underground storm water detention and retention systems should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size or configuration of the system.

Inspection

Inspection is the key to effective maintenance and is easily performed. CONTECH recommends ongoing quarterly inspections of the accumulated sediment. Sediment deposition and transport may vary from year to year and quarterly inspections will help insure that systems are cleaned out at the appropriate time. Inspections should be performed more often in the winter months in climates where sanding operations may lead to rapid accumulations, or in equipment washdown areas. It is very useful to keep a record of each inspection. A sample inspection log is included for your use.

Systems should be cleaned when inspection reveals that accumulated sediment or trash is clogging the discharge orifice.

CONTECH suggests that all systems be designed with an access/inspection manhole situated at or near the inlet and the outlet orifice. Should it be necessary to get inside the system to perform maintenance activities, all appropriate precautions regarding confined space entry and OSHA regulations should be followed.

Cleaning

Maintaining an underground detention or retention system is easiest when there is no flow entering the system. For this reason, it is a good idea to schedule the cleanout during dry weather.

Accumulated sediment and trash can typically be evacuated through the manhole over the outlet orifice. If maintenance is not performed as recommended, sediment and trash may accumulate in front of the outlet orifice. Manhole covers should be securely seated following cleaning activities.

Inspection & Maintenance Log Sample Template

-	" Diameter	System	Locat	Location: Anywhere, USA					
Date	Date Depth of Accumulated Sediment Trash			Maintenance Personnel	Comments				
12/01/10	2"	None	Removed Sediment	B. Johnson	Installed				
03/01/11	1.	Some	Removed Sediment and Trash	R Johnson					
06/01/11	0"	None	None						
09/01/11	0"	Heavy	Removed Trash	S. Riley					
12/01/11	1"	None	Removed Sediment	S. Riley					
04/01/12	0"	None	None	S. Riley					
04/15/01	2	Some	Removed Sediment and Trash	ACE Environmental Services					
			OL						
	2								



Support

Drawings and specifications are available at www.ContechES.com.

Site-specific support is available from our engineers.

ENGINEERED SOLUTIONS 800.338.1122 www.ContechES.com

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Contech Engineered Solutions LLC provides site solutions for the civil engineering industry. Contech's portfolio includes bridges, drainage, sanitary sewer, stormwater, earth stabilization and wastewater treament products. For information, visit www.ContechES.com or call 800.338.1122.

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Kennedy Solutions, Inc.

2111 Sage Lake Road Prescott, MI 48756 Phone: (989) 873-5280

Fax: (248) 375-8144 Email: sales@kennedysolutionsinc.com

Specializing in Storm Water Management and NPDES Phase II BMP's

KSI STORM WATER TREATMENT CHAMBER

OPERATIONS
AND
MAINTENANCE
INFORMATION

KSI Storm Water Treatment Chamber

Introduction

The KSI unit is an important and effective component of your storm sewer system and proper operation and maintenance is vital to its compliance with pollution control requirements.

The KSI unit is capable of capturing a wide range of organic and in-organic solids and pollutants.

Operations

The KSI unit is a non-mechanical self-operating system and will function any time there is flow in the sewer system.

Inspection

Access to the unit is achieved through two manhole access covers; they allow for the inspection and clean out of each zone of the unit. The unit should be periodically inspected to determine the amount of accumulated pollutants and to ensure that the cleanout frequency is adequate to handle the predicted pollutant load being processed by the unit.

New installations shall be inspected once a month for the first three months, then semi or annually thereafter or as conditions warrant. The visual inspection should ascertain that the unit is functioning properly and to measure the amount of solids that have accumulated in both zones. This can be done with a calibrated dipstick. This information should be recorded in a log and kept.

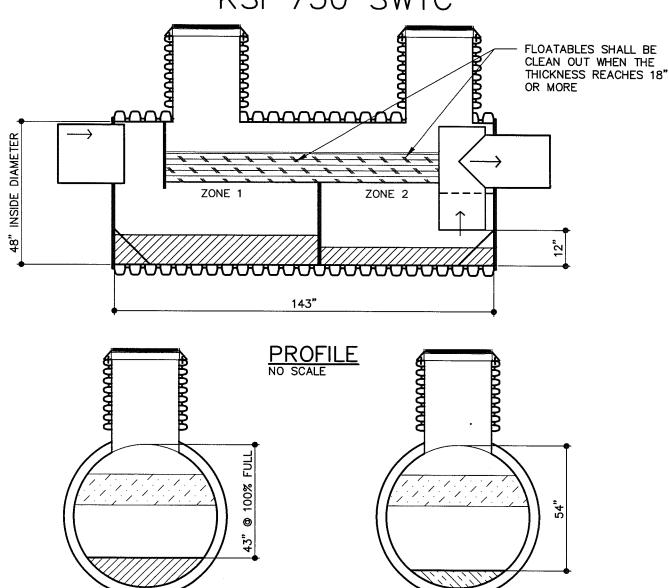
Clean Out & Maintenance

The frequency of cleaning the unit will depend upon the environment it was installed in. Cleanouts and preventative maintenance schedules will be determined based on operating experience unless precise pollutant loadings have been determined.

A vactor truck is recommended for cleanout of the unit. Disposal of material from the unit should be in accordance with the local municipality's requirements.

MAINTENANCE DIAGRAM

KSI 750 SWTC



NO SCALE ZONE 1

ZONE 1 IS 100% FULL AT 42" FROM CROWN OF 48" DIA. CHAMBER.
ZONE 1 IS 50% FULL AT 44" FROM CROWN OF 48" DIA. CHAMBER.
ZONE 1 IS 25% FULL AT 46" FROM CROWN OF 48" CHAMBER.

END VIEW ZONE 2

ZONE 2 IS 100% FULL AT 45" FROM CROWN OF 48" DIA. CHAMBER.
ZONE 2 IS 50% FULL AT 46" FROM CROWN OF 48" DIA. CHAMBER.
ZONE 2 IS 25% FULL AT 47" FROM CROWN OF 48" CHAMBER.

KENNEDY SOLUTIONS, INC. 2111 Sage Lake Road Prescott, MI 48756 Ph: 800-699-4046 Fx: 248-375-8144

DESIGN BY: AG	RK	DATE: 10-10-10	1 OF 1	AZCI
MANUF. APPROVAL BY:	•	SCALE: NTS	SHEET NO.	
DRAWING NO 750	SWT	MAINTEN	ANCF _v 1	

KSI INSPECTION MAITENANCE LOG

OWNER:

ADDRESS:	OWNER REPRESENTATIVE:	PHONE:	INSTALLATION:	MODEL:	SITE LOCTION:	INSTALLATION DATE:	

	The second secon
.;;	
INSEPECTIONS	
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		_	_	_	 	_	 	 	 _	_
	ACTION TAKEN									
ZONE 2	DEPTH TO FLOATABLES DEPTH TO FLOATABLES SEDIMENT DEPTH SEDIMENT DEPTH (INCHES) (INCHES)									
ZO	DEPTH TO SEDIMENT (INCHES)									
ZONE 1	FLOATABLES DEPTH (INCHES)									
0Z	DEPTH TO SEDIMENT (INCHES)									
	DATE									
	INSPECTOR									

NOTE: DEPTH IS MEASURED FROM THE CROWN OF THE TANK TO THE SEDIMENT SEE MAINTENANCE DIAGRAM

	Schedule	Annually & After Major Events	As Required	Annually	Annually	Annually		Annually or As Required	Annually		As Needed	As Needed	
	UDS Detention	System	×	×	×	×			×		×	×	
	Outiflow Control UDS Detention	Structure X	×	×	×	×			×		×		
		reatment Unit	X (1)	×	×	×			×		×	×	
	Catch Basin	Inlet Castings		×	×	×			×		×	×	
	ver Catch Basin	sduuns ×	×	×	×	×			×		×	×	
	ent Storm Sewer	Systems X	×			×			×		×	×	
	Pavement	×	×			1		×	×		×	×	
Maintenance & Inspections Schedule 2995 Walton Boulevard Date/Time of Inspection:	Maintenance Activities	MONITORING & INSPECTIONS Inspect for Sediment Accumulation	Removal of Sediment Accumulation	Inspection for Floatables & Debris	Cleaning of Floatables & Debris	Inspect Storm Sewer During Wet Weather To verify proper operation	PREVENTATIVE MAINTANANCE	Sweeping Parking Lots	Keep records of all inspections and maintenance activities and report to owner	REMEDIAL ACTIONS	Structural Repairs	Make Adjustments/Repairs to Verify Functionality	Note No. 1 - Treatment system to be cleaned per Manufacturer's Recommendations
Seal	ISSUEI		-									1111	City File #87-823.2 REV'D BY:
	ISSUEI)		-	CIV 4031	VIL EN 1 Coolid y, MI 48	GIN ge Hig 098	EER ghway	ING	§	P	LAN	REV'D BY: Ering PL NNING § DESIGN Phone: (248) 885-8431 Fax: (248) 885-8432 comcast.net
Teon C. Sujak, P.E. No. 046896	DRAWN DATE 8/			CS EET		JOB N 1of1		14	-054 None)ES(CRIP	PTION on & Maintenance Schedule alton Blvd, Rochester Hills MI