

MONITORING MANHOLE AGREEMENT

This Monitoring Manhole Agreement ("Agreement") is made and entered into this 12th day of December, 2024, by and between Northville Services and Holdings LLC, a Michigan limited liability company ("Grantor"), with an address of 1268 M36, Pinckney, MI 48169, and the Village of Pinckney, a Michigan municipal corporation ("Grantee"), with an address of 220 S. Howell Street, Pinckney, MI 48169.

RECITALS

WHEREAS, Grantor is the owner of the real property located at 1268 M36, Pinckney, MI 48169, identified by the Parcel Identification Numbers 4714-23-400-007 and 4714-23-400-008 ("Property");

WHEREAS, the Village of Pinckney desires to access certain manholes located on the Property for the purpose of monitoring and maintaining the public sewer system;

NOW, THEREFORE, for and in consideration of the mutual promises contained herein, the parties hereto agree as follows:

1. Grant of Easement

Grantor hereby grants to Grantee, its employees, agents, contractors, and personnel, an easement and right of access over and across the Property for the purpose of accessing the manholes located on the Property for the purposes of monitoring, inspection, maintenance, and repairs related to the public sewer system (the "Easement"). The Easement area shall include the approach to the manhole, in addition to the thirty (30) feet around the manhole. Grantee may access the manhole structures by any reasonable path to the manhole locations within the Easement area.

2. Rights and Duties of the Village of Pinckney

The Grantee, its agents, employees, contractors, and personnel shall have the right to enter the Property for the purpose of monitoring, inspecting, and maintaining the manholes located on the Property. Such access shall be limited to the easement area described in Section 1 of this Agreement, except as may be necessary for the purpose of repairing the manhole infrastructure.

Grantee agrees to take all reasonable steps to minimize disruption to the Property and surrounding areas while conducting any activities under this Agreement. The Grantee shall repair any damage to the Property caused by its actions as a result of this Agreement at Grantee's expense.

3. Term of Agreement

This Agreement shall be effective as of the date of execution by both parties and shall continue in full force and effect unless terminated by either party with a written notice to the other party at least thirty (30) days prior to the desired termination date. Termination of this Agreement shall not affect any accrued rights or obligations prior to termination.

4. Access to Property

Grantee agrees to provide Grantor with reasonable prior notice of any intended access to the Property for the purpose of performing the activities outlined in this Agreement. Access may be requested during normal business hours unless an emergency arises that requires immediate access.

5. Indemnity and Insurance

Grantee shall indemnify, defend, and hold harmless Grantor, its officers, employees, agents, and contractors from any and all claims, damages, losses, and expenses arising out of or in connection with the Grantee's use of the Easement, including but not limited to, personal injury or property damage.

Grantee shall maintain at its own cost and expense, during the term of this Agreement, liability insurance, with limits adequate to cover any potential claims arising from activities related to this Agreement, including coverage for any damage to the Property caused by Grantee's activities.

6. Legal Description of the Property

The legal description of the Property shall be provided by Grantor in Exhibit B, attached hereto. The legal descriptions for the parcels identified by Parcel Identification Numbers 4714-23-400-007 and 4714-23-400-008 shall be as follows:

7. Exhibit A – Manhole Structures Map

A map showing the general location of the manhole structures on the Property is attached hereto as Exhibit A and is incorporated into this Agreement by reference.

8. Miscellaneous Provisions

(a) **Governing Law.** This Agreement shall be governed by, and construed in accordance with, the laws of the State of Michigan.

(b) **Amendments.** This Agreement may be amended only by written instrument executed by both parties.

(c) **Assignment.** Neither party shall assign its rights or obligations under this Agreement without the prior written consent of the other party, except that Grantee may assign its rights under this Agreement to any successor municipal or governmental entity.

(d) **Severability.** If any provision of this Agreement is determined to be invalid or unenforceable, the remainder of the Agreement shall remain in full force and effect.

(e) **Entire Agreement.** This Agreement constitutes the entire understanding between the parties with respect to the subject matter herein and supersedes all prior oral or written understandings, agreements, or representations.

IN WITNESS WHEREOF, the parties hereto have executed this Monitoring Manhole Agreement as of the date first above written.

(e) **Entire Agreement.** This Agreement constitutes the entire understanding between the parties with respect to the subject matter herein and supersedes all prior oral or written understandings, agreements, or representations.

IN WITNESS WHEREOF, the parties hereto have executed this Monitoring Manhole Agreement as of the date first above written.

NORTHVILLE SERVICES AND HOLDINGS LLC

Name: Marco Lytwyn

Title: Owner

Date: 12/12/2024



VILLAGE OF PINCKNEY

Name: _____

Title: _____

Date: _____

EXHIBIT A

(Attach map showing manhole locations)

EXHIBIT B

(Insert legal descriptions of parcels 4714-23-400-007 and 4714-23-400-008)



Exhibit A

Elevation	Depth (ft)	Area (sq)		Volume (cf)		Volume (cu ft)	
		Basin	Total	Basin	Total	Basin	Total
854		2,503					
853	1.00	1,541	2,164	0	3,004	0	3,004
852	1.00	1,350	1,539	0	1,466	0	1,466
851	1.00	730	978	0	489	0	489
850	1.00	253	489	0	0	0	0

DETENTION POND VOLUME

Project: ESSENCE - PINCKNEY / 2268 E M-36
 Infiltration rate = 0.02 in/hr
 Dry Pond Design? No

Surface Type A (ft) C A/C
 Pavement 0.50 0.05 0.38
 Impervious 0.50 0.05 0.38
 Total 1.00 0.10 0.76

Water Quality Control - Retention Volume
 $V_{ret} = A \times C \times 8.34$
 $V_{ret} = 1.00 \times 0.10 \times 8.34 = 0.834$ cu ft

Channel Protection Volume Control
 $V_{cp} = A \times C \times 8.34$
 $V_{cp} = 1.00 \times 0.10 \times 8.34 = 0.834$ cu ft

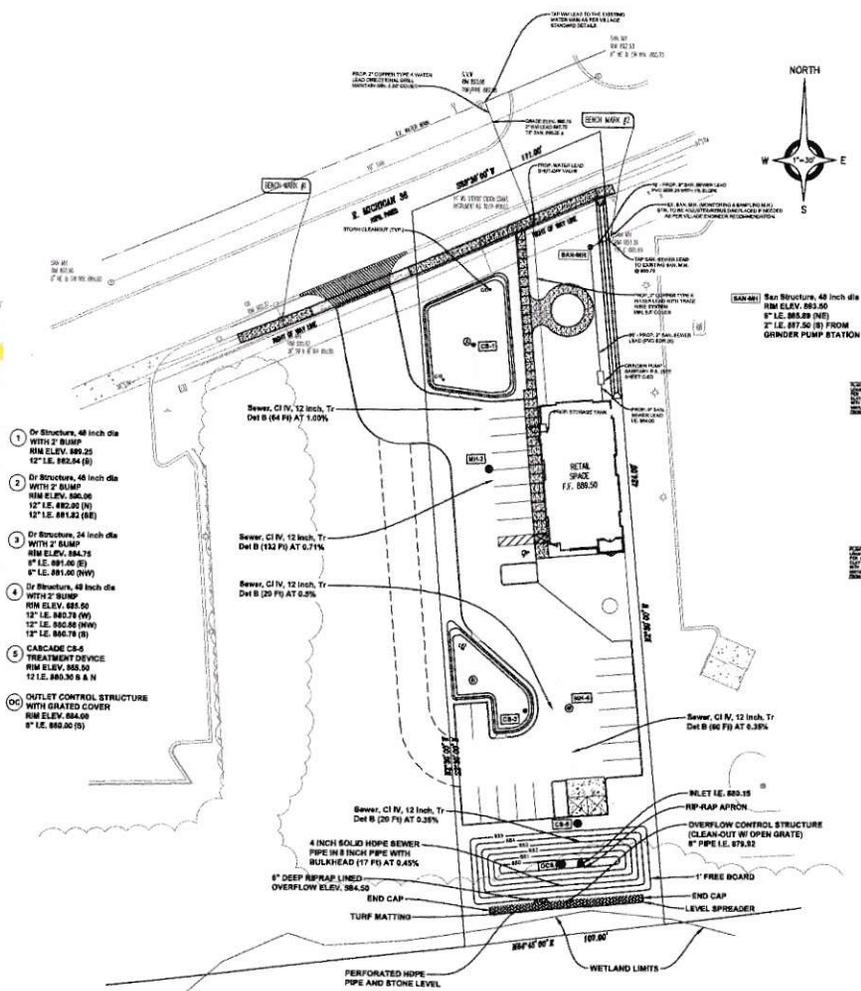
Flood Control
 $V_{fc} = A \times C \times 8.34$
 $V_{fc} = 1.00 \times 0.10 \times 8.34 = 0.834$ cu ft

100-YEAR PEAK INFLOW RATE
 $Q = C \times I \times A$
 $Q = 0.76 \times 1.00 \times 1.00 = 0.76$ cfs

100-YEAR PEAK INFLOW RATE
 $Q = C \times I \times A$
 $Q = 0.76 \times 1.00 \times 1.00 = 0.76$ cfs

TIME OF CONCENTRATION CALCULATIONS
 $T_c = 1.49 \times L^{0.76} \times S^{-0.105}$
 $T_c = 1.49 \times 100^{0.76} \times 0.001^{-0.105} = 1.47$ min

100-YEAR DETENTION BASIN SIZE
 $V = Q \times T_c$
 $V = 0.76 \times 1.47 = 1.11$ cu ft



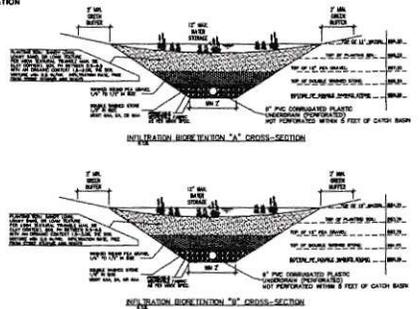
- Or Structure, 48 inch dia WITH 2' BUMP RIM ELEV. 882.25 12" I.E. 882.84 (S)
- Or Structure, 48 inch dia WITH 2' BUMP RIM ELEV. 886.00 12" I.E. 882.20 (N) 8" I.E. 881.24 (SE)
- Or Structure, 24 inch dia WITH 2' BUMP RIM ELEV. 884.75 12" I.E. 881.00 (S) 8" I.E. 891.00 (NW)
- Or Structure, 48 inch dia WITH 2' BUMP RIM ELEV. 885.50 12" I.E. 880.75 (W) 12" I.E. 886.75 (E) CASCADE CS-5
- TREATMENT DEVICE RIM ELEV. 885.50 12" I.E. 880.50 (S & N)
- OUTLET CONTROL STRUCTURE WITH GATED COVER RIM ELEV. 884.00 8" I.E. 880.50 (S)

SYSTEM "A" BIORETENTION (RAIN GARDEN)
PROVIDED VOLUME BY RAIN GARDEN

ELEVATION (FT)	AREA (SQ FT)	HEIGHT (FT)	VOIDS RATIO	VOLUME (CU FT)
880.00	2683	0	0%	0
879.00	2678	1	100%	2678
885.00	2185	3	33%	2106
TOTAL RAIN GARDEN VOLUME (C.F.)				4784

SYSTEM "B" BIORETENTION (RAIN GARDEN)
PROVIDED VOLUME BY RAIN GARDEN

ELEVATION (FT)	AREA (SQ FT)	HEIGHT (FT)	VOIDS RATIO	VOLUME (CU FT)
884.75	1422	0.00	0.00	0.00
883.75	1537	1.00	1.00	1537.00
880.75	885	3.00	0.30	807.75
TOTAL RAIN GARDEN VOLUME (C.F.)				3224



AREA CALCULATED FOR STORAGE CALCULATIONS INCLUDE LOT AREA (25,887.11' x 7,678.11' FOR THE DRIVEWAY APPROACH & EMERGENCY DRIVE)

CURRENT SITE DISCHARGE IN ENTIRETY TO SOUTHERLY PARCEL
 $Q = C \times I \times A = 0.25 \times 6.31 \times (3987/43560) = 1.44$ CFS

WE WILL LIMIT THE SITE RUNOFF FROM THE OUTLET CONTROL STRUCTURE TO 0.15 CFS.

TREATMENT STRUCTURE FLOW DESIGN = $C \times I \times A \times (97/(T_c+30))$
 $= 0.72 \times (97/(15+30)) \times 1.09 = 1.69$ CFS

CASCADE SEPARATOR CS-5 SIZING FLOW = 2.13 CFS

NOTES:

THE PROPOSED DRAINAGE SYSTEM SHALL BE OWNED AND PROPERLY MAINTAINED BY THE PROPERTY OWNER.

RIP-RAP APPROX WITH MINIMUM OF 10 S.Y. OF 6" MINIMUM DIAMETER ANGULAR STONE PLACED OVER KEYED-IN GEOTEXTILE FABRIC.

THE PROPOSED DETENTION BASIN SHOULD INCLUDE A 6" DEEP RIP-RAP LINED OVERFLOW SPILLWAY SET AT AN ELEVATION 6 INCHES ABOVE THE BASIN'S DESIGN HIGH WATER ELEVATION.

THE PROPOSED DETENTION BASIN BOTTOM SHOULD HAVE A MINIMUM 0.5% SLOPE TOWARD ITS OUTLET.

DEVELOPER SHALL CLEAN AND TELEVIEW CONDITION OF EXISTING SANITARY MANHOLE BEFORE AND AFTER CONSTRUCTION TO ENSURE CONNECTION IS SOUND AND NO DAMAGE HAS BEEN DONE.

SANITARY CONNECTIONS SHALL BE FIELD COURED; INSTALLED TO A WATER TIGHT CONDITION; EXTERNAL DROP PIPES INSTALLED IF THE SERVICE LEAD INVERT IS GREATER THAN 24 INCHES ABOVE THE MAIN SEWER FLOW LINE; AND THE FLOW CHANNELS SHARPED TO ASSURE SMOOTH HYDRAULIC FLOWS.

UTILIZE VILLAGE STANDARD DETAILS AS SHOWN IN THE TECHNICAL STANDARDS.

11/27/24 SITE PLAN SUBMITTAL

MARK DATE DESCRIPTION

CS ENGINEERING
 35890 MONTEREY DRIVE
 CLINTON TOWNSHIP, MI 48035
 586-615-4120

COPYRIGHT
 DUPLICATION STRICTLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF CONSULTANT.

I hereby certify that this plan and specification was prepared by me or under my direct supervision and that I am a duly registered Architect or Engineer under the laws of the State of Michigan by my hand and seal.

Carlo Santa

STATE OF MICHIGAN
 CARLO SANTA
 ENGINEER
 No. 0201028164
 PROFESSIONAL LICENSE

ESSENCE PINCKNEY

811
 CALL BEFORE YOU DIG
 SAFE DIGGING PRACTICES

SHEET TITLE
UTILITIES PLAN

SCALE
 1" = 30'

SHEET No.
C-05



