Ford Motor Company

# Interim Response Activity Report – 34940 Beacon Street

## Retro-Coat™ Delamination Completion Report

June 13, 2025

# Interim Response Activity Report – 34940 Beacon Street

## Retro-Coat™ Delamination Completion Report

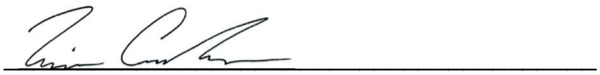
Consent Decree No 2:1712372-GAD-RSW

June 13, 2025

**Prepared By:**
Arcadis of Michigan, LLC
28550 Cabot Drive, Suite 500
Novi, MI 48377
United States
Phone: 248 994 2240

**Prepared For:**
Mr. Erik Gurshaw
EGLE Warren District Office
27700 Donald Court
Warren, Michigan 48092-2793

**Our Ref:**
30251157



Quinn Carnahan
Project Environmental Engineer

Matthew Williams *PE,CDT*
Principal Environmental Engineer

Kris Hinskey
Certified Project Manager II

# Contents



# Figures



# Appendices

# Acronyms and Abbreviations

| | |
|---|---|
| EGLE | Environment, Great Lakes, and Energy |
| FSM | Foundation Systems of Michigan |
| GLWA | Great Lakes Water Authority |
| IPM | Interim preemptive mitigation |
| IRA | Interim Response Activity |
| LTP | Livonia Transmission Plant |
| P&ID | Piping and instrumentation diagram |
| PVC | Polyvinyl chloride |
| ResAP | Response Activity Plan |
| SSD | Sub slab depressurization |

# Executive Summary

Arcadis of Michigan, LLC (Arcadis) has prepared this Interim Response Activity (IRA) Report to document activities completed as part of the Response Activity Plan-Revised Interim Response Activity (ResAP-Revised IRA) related to 34940 Beacon Street in accordance with the Consent Decree filed by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) on July 27, 2017 (Number: 2:1712372-GAD-RSW).

In order to resolve delamination of the Retro-Coat™ applied to the basement floor of the home located at 34940 Beacon Street in Livonia, Michigan 48150 a series of construction activities were completed which included the installation of the following:

- a new sub floor drainage system,
- a new sump,
- two new sump pumps, and
- activated carbon treatment prior to discharge.

The previous application of Retro-Coat™ was removed from the basement floor and re-applied to restore the functionality of the interim preemptive mitigation system. A maintenance and monitoring schedule is also included.

On behalf of Ford Motor Company (Ford), this Interim Response Activity (IRA) Report has been prepared by Arcadis of Michigan, LLC (Arcadis) for activities completed at 34940 Beacon Avenue (Property), a residential property located east of the Livonia Transmission Plant (LTP). This IRA Report complies with the following Response Activity Plan (ResAP) and EGLE approval letter dated January 3, 2025:

- Response Activity Plan-Revised Interim Response Activity Plan – 34940 Beacon Street Retro-Coat™ Delamination, dated December 9, 2024
- Notice of Conditional Approval of Response Activity Plan-Revised Interim Response Activity Plan – for 34940 Beacon Street, dated January 3, 2025

All work outlined below was completed in accordance with the approved ResAP for IRA.

# 1 Interim Preemptive Mitigation System Updates

The primary objective of the ResAP is to resolve Retro-Coat™ delamination identified in the basement of the home located at the Property. Retro-Coat™ was previously applied to the floor of the basement to mitigate the potential for vapor intrusion at the home during interim preemptive mitigation system implementation in 2019. During subsequent inspections and monitoring, the Retro-Coat™ coating was observed to be delaminating from the concrete basement floor. Attempts to re-apply and repair the Retro-Coat™ have been unsuccessful to date due to hydrostatic pressure from groundwater against the underside of the basement floor.

Following additional evaluation, the root cause of the moisture issues causing the delamination was identified to be a plugged sub-floor drainage system that was inadequately dewatering groundwater and moisture away from the basement floor. Therefore, the following scope of work was proposed in the ResAP:

- Installation of a new sub floor dewatering system along the perimeter interior walls directed to a new sump,
- Carbon treatment prior to discharge to the sanitary sewer,
- Reapplication of new Retro-Coat™, and
- Quarterly operations, maintenance, and monitoring compliance visit.

## 1.1 Basement Perimeter Drainage System Details

Construction of the basement perimeter drainage system began on March 17, 2025, and was completed on March 26, 2025. Foundation Systems of Michigan (FSM) installed the perimeter drainage system and updated sump equipment. Prior to mobilization, FSM acquired the necessary building and plumbing permits from the City of Livonia. The City of Livonia provided a variance from code requirements to allow for the discharge connection of the sump basin to remain connected to the sanitary sewer as previously installed. Copies of the permits are included in **Attachment 1**. In addition, Arcadis also confirmed with the Great Lakes Water Authority (GLWA) that no special discharge permit would be required as part of this sump discharge. The correspondence provided by the GLWA is provided in **Attachment 1**. Photographs of the installed system components are included in **Attachment 2**. Details regarding the installation of the perimeter drainage system are provided below:

- A trench approximately 12-inches wide and up to 12-inches deep was made in the basement concrete floor around the entire perimeter of the basement. The existing perimeter drainage pipe and sub-slab

material was removed for the installation of the stone drainage bed consisting of 2-inch minimum diameter MDOT 6A aggregate.

- Four-inch diameter perforated plastic drainage pipe with filter sock was installed in the aggregate adjacent to the existing foundation. The four-inch diameter pipe was sloped to the sump basin for drainage.
- Six cleanouts were installed through the floor to allow for access to the drainage pipe for inspection and routine maintenance.
- The existing sump basin was replaced with the Elite 365 Sump Basin, a larger two-part sump basin which contains two sump pumps and a battery powered backup pump for dewatering capabilities. The basin has 3/8-inch diameter perforations around the perimeter of the basin for dewatering capabilities and inlet knockouts for connecting the perimeter drainage pipe.
- The sump basin was fitted with the Elite 365 Sump Lid. The removable and sealed sump lid is fitted with rubber grommets for the two discharge pipes and the two electrical cords powering the sump pumps.
- Two Glentronic ST1033 1/3 HP sump pumps and one Glentronics Pro Series 1850 backup battery powered sump pump were installed in the sump basin. Each of the sump pumps were connected to 1-1/2-inch schedule 40 polyvinyl chloride (PVC) discharge pipes. A check valve was installed on each discharge pipe.
- The sub slab depressurization (SSD) system piping was connected to the sump basin below the concrete floor through an inlet pipe knockout on the side of the sump basin. The SSD system will ventilate the sump basin and the perimeter drainage pipe.
- Concrete was poured over the newly constructed perimeter drainage system and was finished flush with the existing floor.

Attached **Figure 1** and **Figure 2** are as-built drawings with details of the perimeter drainage system. The piping and instrumentation diagram (P&ID) of the perimeter drainage system and sump discharge piping installed within the basement are provided on **Figure 3**.

## 1.2 Retro-Coat™ Application

Buckeye Elm Contracting, LLC (Buckeye) mobilized to the Property on April 23, 2025 to begin removing the delaminated floor coating application and re-installing Retro-Coat™ to the basement floor. Buckeye is a certified applicator for Retro-Coat™ through the manufacturer, Land Science. Additional details regarding the Retro-Coat™ installation are provided below:

- Existing Retro-Coat™ floor coating was removed utilizing a mechanical floor grinder with an attached HEPA vacuum dust collection system. A hand-held grinding tool with dust collection shroud and HEPA vacuum was used where the mechanical floor grinder was not able to fit or to completely remove the Retro-Coat™. The removal of the previous Retro-Coat began on April 23, 2025 and was completed on May 2, 2025.
- Two applications of the manufacturer recommended Primer MV were applied to the concrete floor on May 6 and May 7, 2025. Each application was measured using a wet film thickness gauge and confirmed to be a minimum of 10 mills thick.

- Two applications of the manufacturer recommended Retro-Coat™ were applied to the concrete floor on May 8 and May 9, 2025. Each application was measured using a wet film thickness gauge and confirmed to be a minimum of 10 mills thick.

On May 1, 2025 an update on the construction schedule was provided to EGLE to explain that additional time would be required to properly prepare the basement floor for Retro-Coat™ application. Removal of existing Retro-Coat™ was scheduled to be removed in one day. The process was more difficult than the contractor anticipated and took place over the course of 8 business days. Application of the Retro-Coat™ was completed on May 9, 2025, approximately one week beyond the schedule outlined in the ResAP. As-built **Figure 1** and **Figure 2** contain details for the Retro-Coat™ installed in the basement.

## 1.3 Basement Treatment System Details

Etchen Commercial Plumbing (Etchen) supported the installation of the sump pump discharge treatment components. Etchen is a licensed residential plumber. Additional details regarding the basement treatment system installation are provided below:

- Treatment system piping consists of 1-1/2-inch Schedule 40 PVC pipe connecting the sump pumps to the main sanitary pipe in the northeast corner of the basement.
- A Pentair Big Blue sediment filter was installed downstream of where the two sump pump discharge pipes combine.
- An Aqua Science 12-inch x 52-inch tank was filled with AquaSorb® granular activated carbon. The carbon tank was fitted with a Fleck filter head assembly and bypass valve. The carbon filter is installed between the sediment filter and sanitary discharge connection.
- Three Pasco 0-15 PSI pressure gauges were installed to monitor the pressure across the sediment filter and the carbon tank. One pressure gauge was installed on the inlet to the sediment filter. Two pressure gauges were installed on the carbon tank filter head - one on the inlet port and one on the outlet port.
- Three ¼-inch brass ball valves were installed at each of the three pressure gauges for collection of a water sample.
- Two 1-1/2-inch diameter flexible rubber water discharge hoses with camlock fittings connect the carbon tank to the PVC discharge piping.
- A 1-1/2-inch globe valve was installed downstream of the carbon tank immediately before the wye connection to the 4-inch diameter schedule 40 PVC main sanitary sewer pipe in the basement.
- A spare Aqua Science 12-inch x 52-inch tank filled with AquaSorb® granular activated carbon is prepared and available to be swapped in.

The piping, hoses, and carbon tank were installed on May 15, 2025, thus completing the installation of the treatment system. As-built **Figure 1** and **Figure 2** include details for the basement treatment system. The P&ID drawings of the treatment system and piping installed within the basement are provided on **Figure 3**.

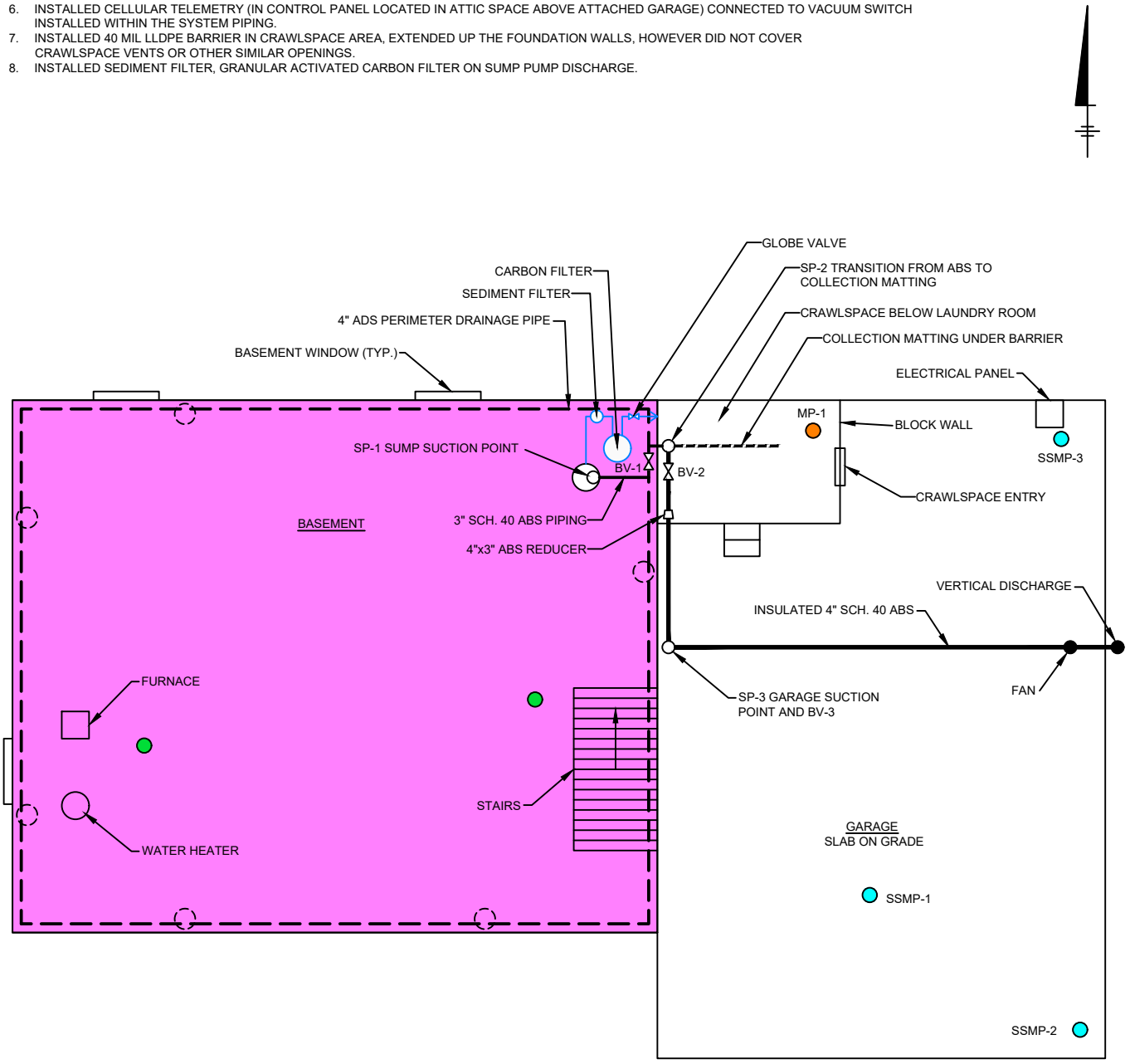
# 2 Proposed Schedule

Future operations and maintenance inspections and performance monitoring will be completed in accordance with the ResAP IRA and conditional approval letter. Monthly inspections of the Retro-Coat™ will be conducted for the first three months, and quarterly inspections will be completed thereafter for the first year. Quarterly inspections will incorporate the performance monitoring sump sampling and operations and maintenance inspections documented in the ResAP IRA. The quarterly update mitigation letters will summarize the results of the sampling events and maintenance inspections.

# Figures

**NOTES:**

1. EXISTING SUMP AND PERIMETER DRAINAGE PIPE REPLACED WITH NEW SUMP, NEW SUMP PUMP WITH BACKUP, AND NEW PERIMETER DRAINAGE PIPE.
2. INSTALLED AMG FORCE FAN INSIDE GARAGE ATTIC.
3. SEALED BASEMENT WALLS AND FLOORS WITH RETROCOAT. EXISTING PAINT REMOVED FROM WALLS AND BACKER ROD INSERTED AROUND THE SLAB PERIMETER AND SEALED WITH SIKAFLEX PRIOR TO APPLYING RETROCOAT.
4. SEALED EXPOSED BLOCK TOPS IN THE CRAWLSPACE.
5. SEALED CRACKS IN GARAGE FLOOR AND PERIMETER JOINTS WHERE PRESENT WITH POLYURETHANE CAULKING.
6. INSTALLED CELLULAR TELEMETRY (IN CONTROL PANEL LOCATED IN ATTIC SPACE ABOVE ATTACHED GARAGE) CONNECTED TO VACUUM SWITCH INSTALLED WITHIN THE SYSTEM PIPING.
7. INSTALLED 40 MIL LLDPE BARRIER IN CRAWLSPACE AREA, EXTENDED UP THE FOUNDATION WALLS, HOWEVER DID NOT COVER CRAWLSPACE VENTS OR OTHER SIMILAR OPENINGS.
8. INSTALLED SEDIMENT FILTER, GRANULAR ACTIVATED CARBON FILTER ON SUMP PUMP DISCHARGE.




**LEGEND:**

- MONITORING POINT INSTALLED THROUGH BARRIER (MP)
- ONE WAY VALVE INSTALLED IN EXISTING FLOOR DRAINS
- SUB SLAB MONITORING POINT (SSMP)
- SUCTION POINT (SP)
- BALL VALVE (BV)
- RETRO-COAT™ FLOOR
- PERIMETER SUBFLOOR DRAIN
- CLEANOUT
- SUMP DISCHARGE
- VAPOR CONVEYANCE PIPE

NOT TO SCALE

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

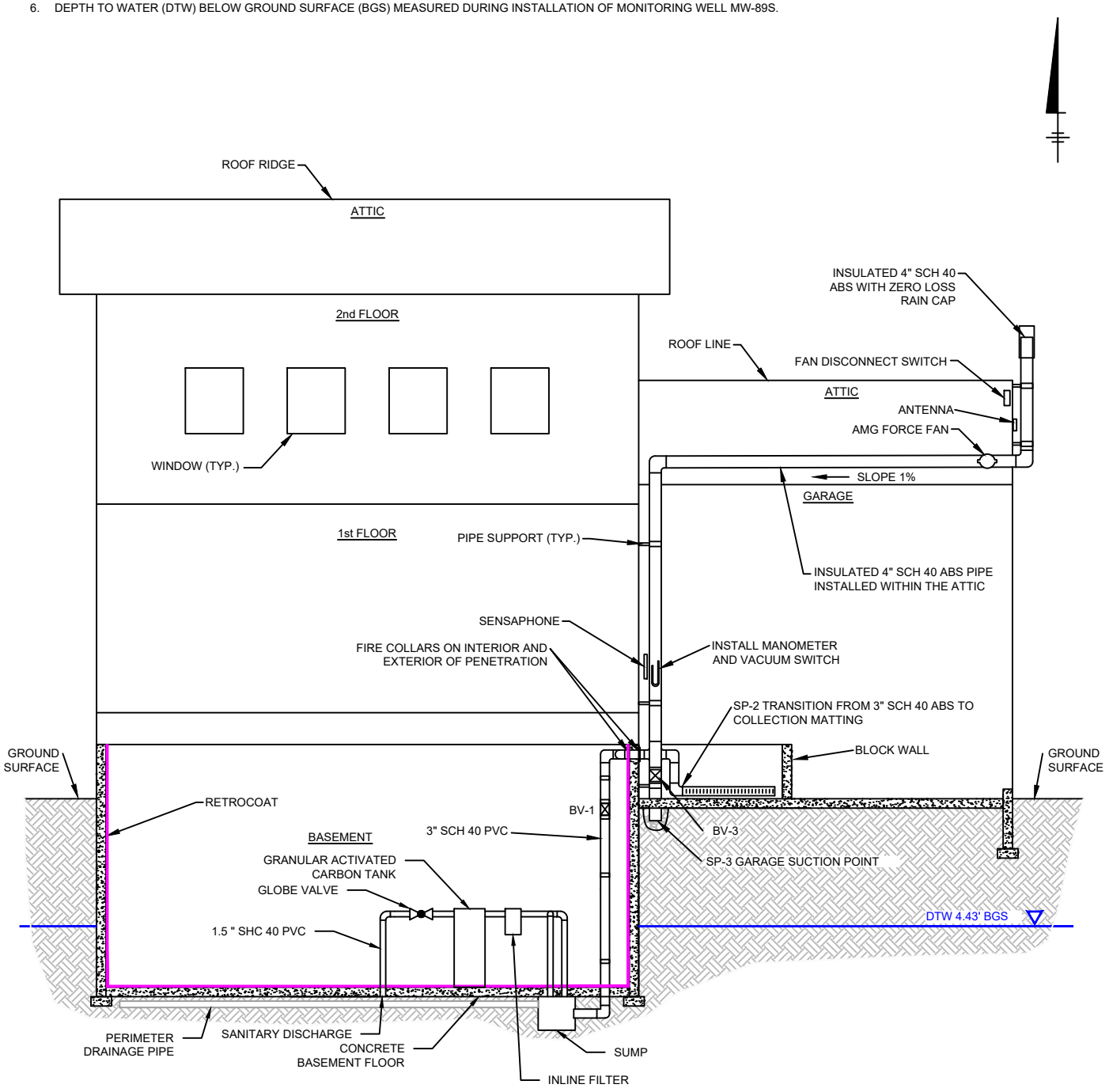
# 34940 BEACON STREET MITIGATION SYSTEM INSTALLATION DETAILS - BASEMENT

ARCADIS

FIGURE
1

**NOTES:**

1. INSTALLED DISCHARGE 20' FROM OR 3' ABOVE ANY WINDOW, AIR INTAKE OR VENTS.
2. INSTALLED INSULATION AND JACKETING ON ALL PIPING WITHIN THE GARAGE, ATTIC, AND THE EXTERIOR DISCHARGE PIPING.
3. INSTALLED PIPE SUPPORTS LOCATED NEAR DISCHARGE, EVERY 8 FEET ON VERTICAL PIPING AND EVERY 4 FEET ON HORIZONTAL PIPING.
4. PLACE LABEL ON SYSTEM PIPING INDICATING OPERATING VACUUM LEVEL, ON BREAKER PANEL INDICATING BREAKER POWERING THE FAN, ON THE CONTROL BOX. PLACE A LABEL ON THE SYSTEM PIPING NEAR THE DISCHARGE POINT INDICATING THE PIPING CONTAINS VOLATILE ORGANIC COMPOUNDS. LABELED AREAS THAT HAVE BEEN SEALED AS PART OF THE MITIGATION SYSTEM INCLUDING BASEMENT AND CRAWLSPACE.
5. FIRE COLLARS WERE INSTALLED ON EACH SIDE OF THE GARAGE WALL PENETRATION.
6. DEPTH TO WATER (DTW) BELOW GROUND SURFACE (BGS) MEASURED DURING INSTALLATION OF MONITORING WELL MW-89S.



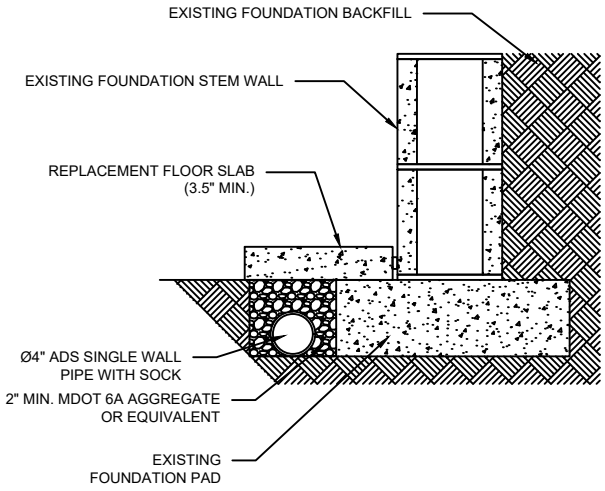

NOT TO SCALE

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

# 34940 BEACON STREET MITIGATION SYSTEM INSTALLATION DETAILS - BASEMENT PROFILE

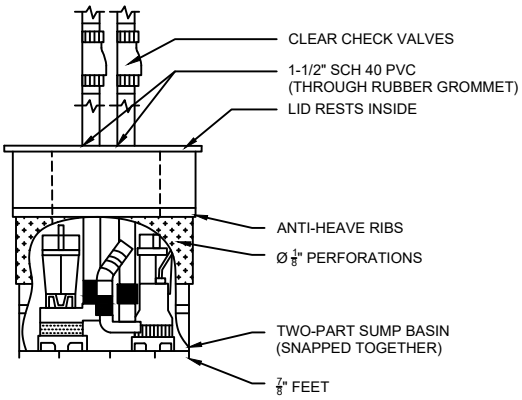
ARCADIS

FIGURE
2



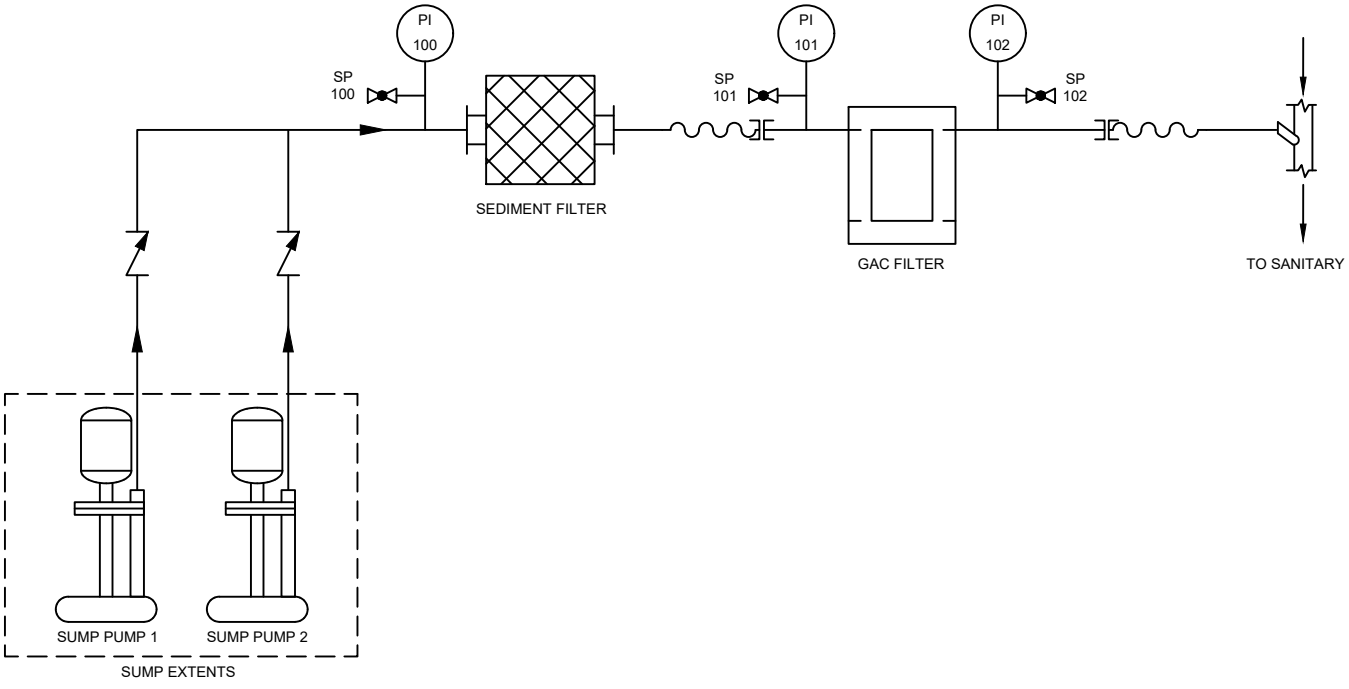

**DRAINAGE SYSTEM - SECTION VIEW**

NOT TO SCALE




**SUMP BASIN**

NOT TO SCALE




**LEGEND:**

| | |
|---|---|
| GAC | GRANULAR ACTIVATED CARBON |
| PI | PRESSURE INDICATOR |
| SP | SAMPLE PORT |

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

# PIPING AND INSTRUMENTATION DIAGRAM AND DETAILS

ARCADIS

FIGURE
**3**

# Appendix

Appendix A - Permits

Inspection Department
33000 Civic Center Drive
Livonia, MI 48154
(734) 466-2580

# City of Livonia

www.livonia.gov

"Request An Inspection" Link from Inspection Department Website Page

# Res - Addition/Alt/Repair

**Permit No:** PB25-0472

**Email:** PERMITS@DRYMICH.COM

**Res - Addition/Alt/Repair**

**Location** 34940 BEACON

111 01 0049 001

LIVONIA 48150

**Contractor/Applicant**

FOUNDATION SYSTEMS OF MICHIGAN INC

ROBERT D ATCHISON

32985 SCHOOLCRAFT

Livonia MI 48150

Ph# (734) 838 0257

**Owner**

RAY JULIAN / KESLEY BENITO

34940 BEACON

LIVONIA MI 48150

**Issued:** 03/10/25

**Const value** 14,300

**Zoning:** R-U-F **Sec. No.** SW 28

**Bond:**

**Type of Construction:** 5B

**Use Group:** R-3 **PLAN:**

**Zoning Grant:**

**Planning Commission:**

**Council Resolution:**

**Water/Sewer:**

**Reviewed By:** ZWINKLER

**Issued By:** cgalperin

**Work Description:** REPLACE DEWATERING SYSTEM AS PREVIOUSLY INSTALLED USING EXISTING SEWER TAP. IF NEW TAP IS NEEDED AN ENGINEERING PERMIT WILL BE REQUIRED. OPEN TRENCH & PLUMBING INSPECTION REQUIRED.

**Stipulations:**

| Permit Item | Work Type | Fee Basis | Item Total |
|---|---|---|---|
| A. Valuation | Certificate | 14,300.00 | $185.00 |
| Administration Fee | Admin | 1.00 | $45.00 |
| C. Building Code/Plan Review | Plan Review | 185.00 | $41.00 |

**Fee Total:** $271.00

**Amount Paid:** $271.00

**Balance Due:** **$0.00**

Jerome A. Hanna
Building Official

**Three (3) Days Before You Dig.**

**Call Miss dig: 1-800-482-7171**

**Minimum permit fee $40.00 - Not including Administration Fee**

THIS PERMIT CONVEYS NO RIGHT TO OCCUPY ANY STREET, ALLEY, SIDEWALK, OR ANY PART THEREOF, EITHER TEMPORARILY OR PERMANENTLY.

## UNLAWFUL TO OCCUPY PREMISES WITHOUT CERTIFICATE OF OCCUPANCY

**ALL permits, in addition to CODE requirement compliance, must also conform to and comply with any additional requirements imposed by (but not limited to) any and all City of Livonia Zoning or Code requirements, Planning Commission Resolutions, Council Resolutions, Building Code Board of Appeals conditions and grants, Zoning Board of Appeals conditions and Grants, Court Consent Decree conditions, PRDA conditions and approvals, Engineering conditions and approvals, County and State Conditions and approvals; non-compliance with any of the aforementioned may result in a Certificate of Occupancy and/or Zoning Compliance Certificate NOT being granted.**

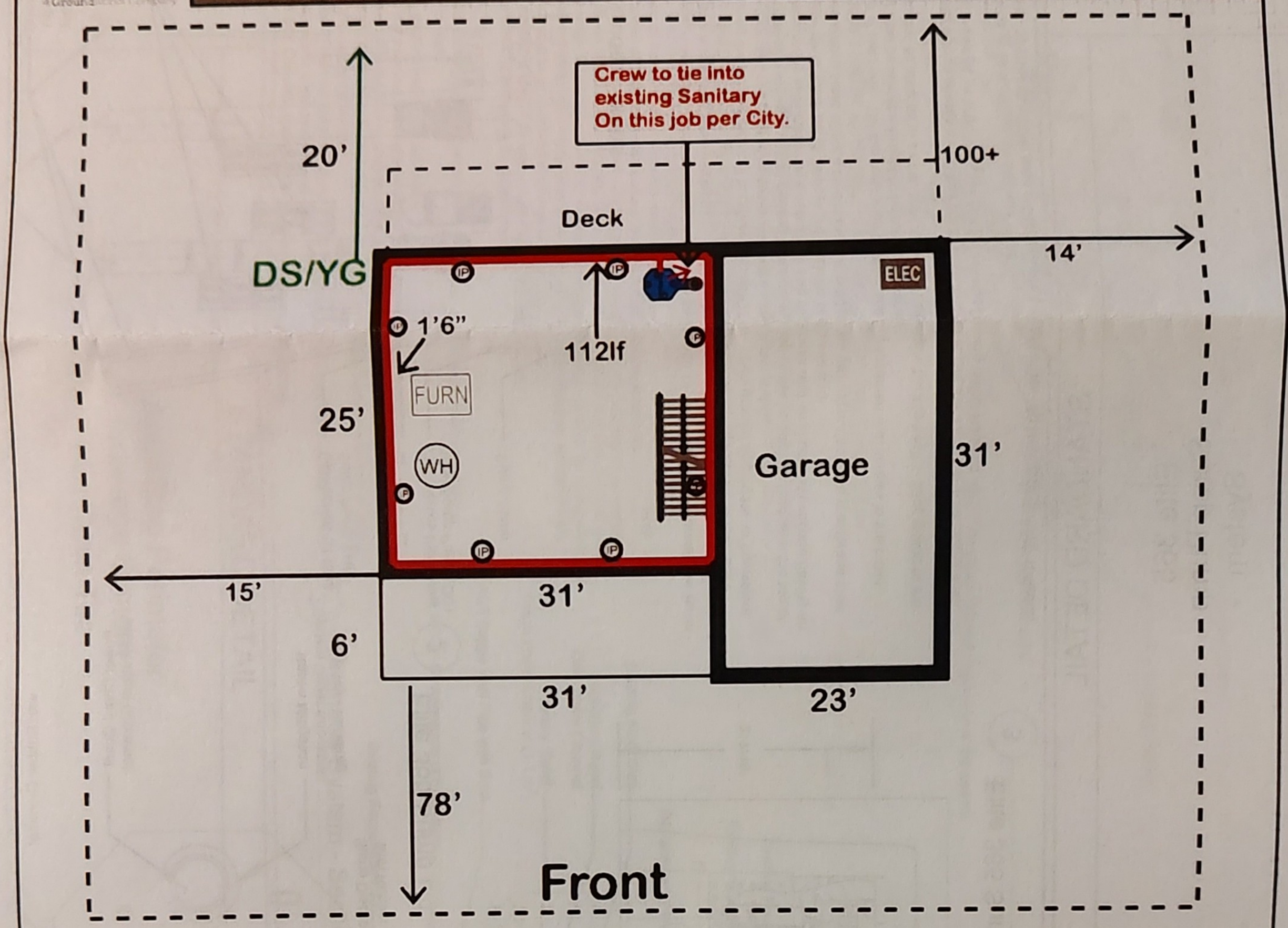
I agree this permit is only for the work described, and does not grant permission for additional or related work which requires separate permits. I understand that this permit will expire, and become null and void if work is not started within 180 days, or if work is suspended or abandoned for a period of 180 days at any time after work has commenced and that I am responsible for assuring all required inspections are requested in conformance with the applicable code. I hereby certify that the proposed work is authorized by the owner, and that I am authorized by the owner to make this application as his authorized agent. I agree to conform to all applicable laws of the State of Michigan and the local jurisdiction. All information on the permit application is accurate to the best of my knowledge. Payment of permit fee constitutes acceptance of the above terms. Payment of permit fee constitutes acceptance of the above terms.

**State Mandated Codes Apply to all Construction in the City of Livonia**

DRAWINGS

Inspector: Mark Goff
Name Phone # 734-744-8906
Email: MGoff@DryMich.com

Name:Quinn Carahan
Phone #585-662-4023
Customer #341980 Date:11/07/24
34940 Beacon Street, Livonia, Mi 48150




Wall Type:Poured
*Basement Height:7'8"*

**Customer Duties**

Include: move all personal items 5ft from walls. To re-Attach radon discharge line from sump discharge Plumbed stub-out.

**KEY**

ELEC = Electrical Panel

FURN = Furnace

WH = Water Heater

= Aquastop Basement Gutter

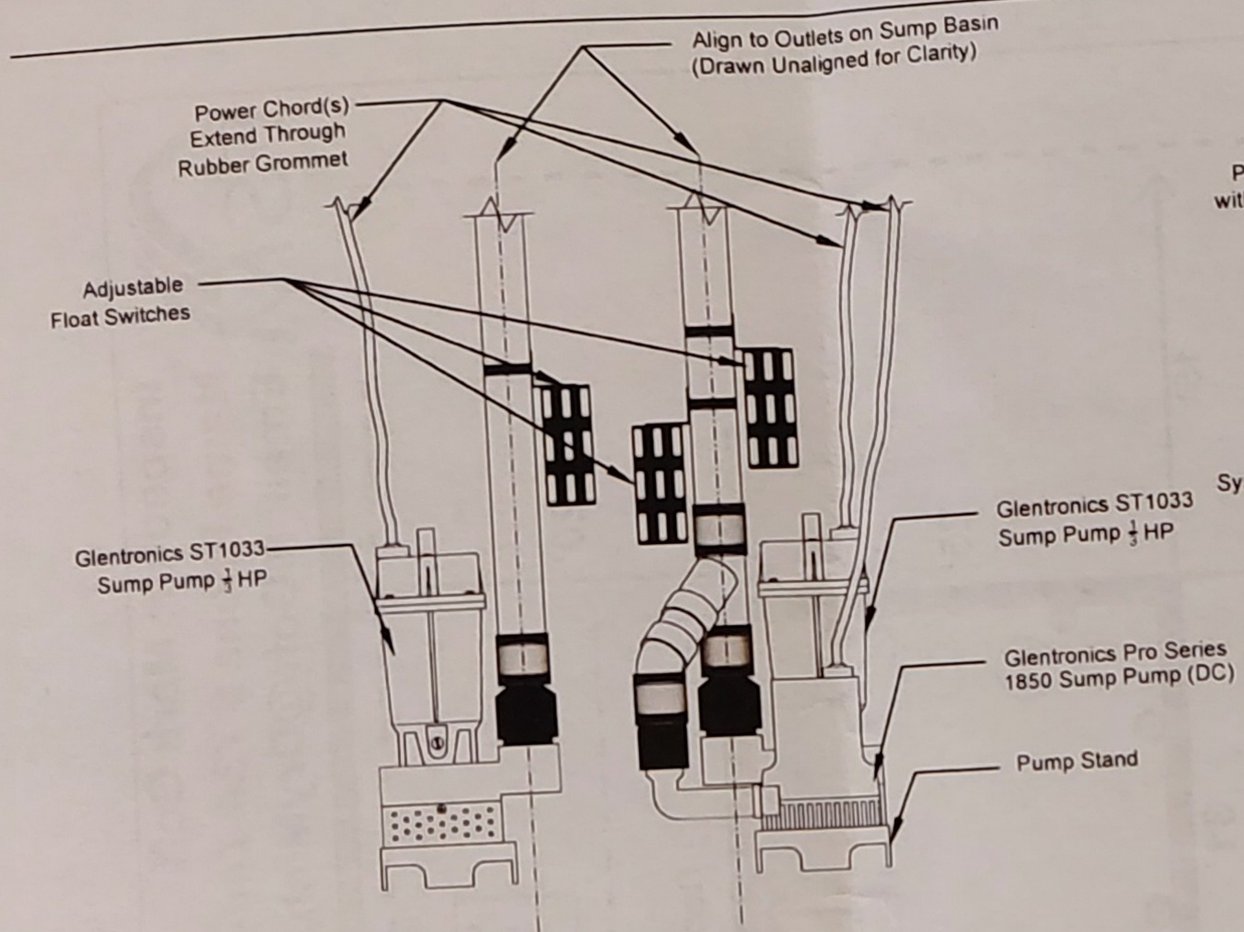
= AquaStop Single Sump

= 4" PVC Stub Out for Radon

IP = Inspection Port

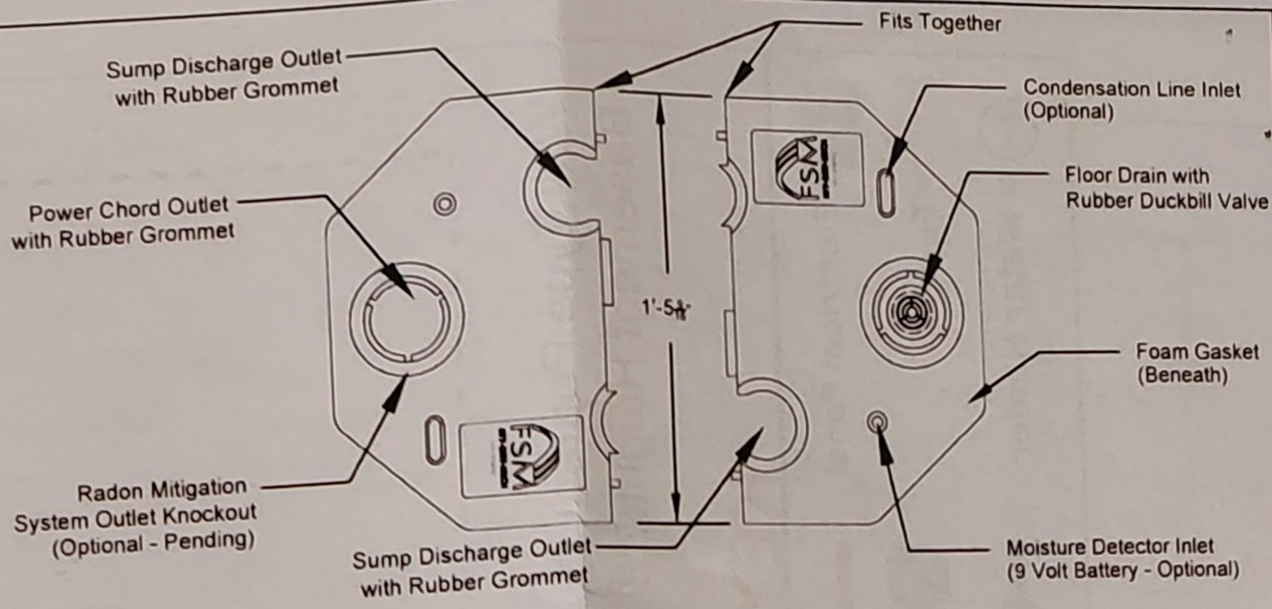
DS/YG = Downspout/YardGuard

Groundworks.



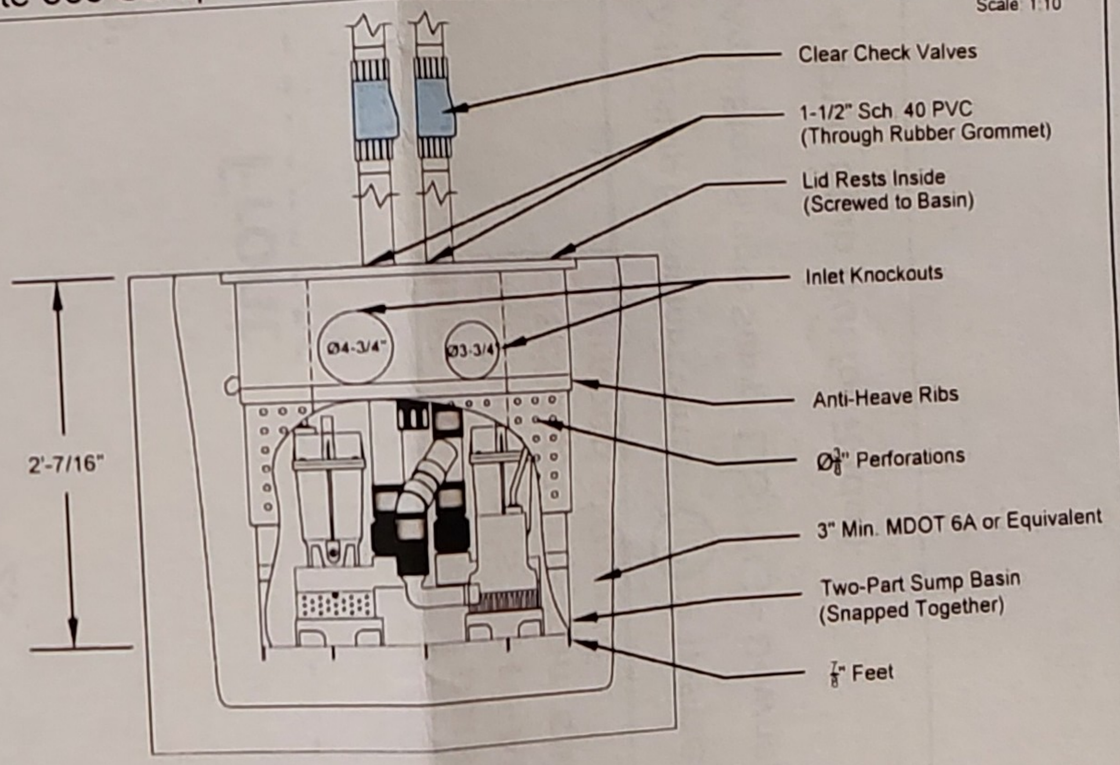

## 1 Elite 365 Sump Pumps

Scale 1:10




## 2 Elite 365 Sump Lid

Scale 1:10




## 3 Elite 365 Sump Basin

Scale: 1:16

General Notes:

1. For sump basin installations in soil conditions consisting of primarily sand, silt, or a combination thereof, the basin excavation shall be lined with a non-woven geotextile fabric.
2. All sump basin excavations shall have 3" (min.) of MDOT 6A open-graded aggregate, or equivalent, at their base.
3. The annular cavity surrounding the sump basin shall backfilled with MDOT 6A open-graded aggregate, or equivalent, and shall have a minimum thickness of 3" extending outward from the sump basin walls.
4. Where the sump basin is installed in areas having an existing floor slab, the top of the lid shall be flush with the top of the floor slab. Replacement concrete shall match the exisitng floor slab thickness and shall consist concrete having an unconfined compressive strength of 2,500 psi @ 28-days (HS Quikrete or equivalent)
5. Where the sump basin is installed in areas where a membrane is applied to the ground surface, the membrane shall be tucked into the top of the lid.
6. The sump lid is constructed of two parts. The two parts snap together and are fastened with screws to the basin.
7. Protrusions through the lid shall be sealed with tight-fitting rubber grommets.
8. A 120 amp battery backup shall be installed in a water-tight housing. The battery backup shall provide power to the tertiary DC pump.
9. Discharge lines shall be fitted with an accessible full-flow check valve located above the sump basin lid. Sump lines and fittings shall be the same size as, or larger than, the pump discharge tapping (MRC P3303.1.4)

Pump Notes:

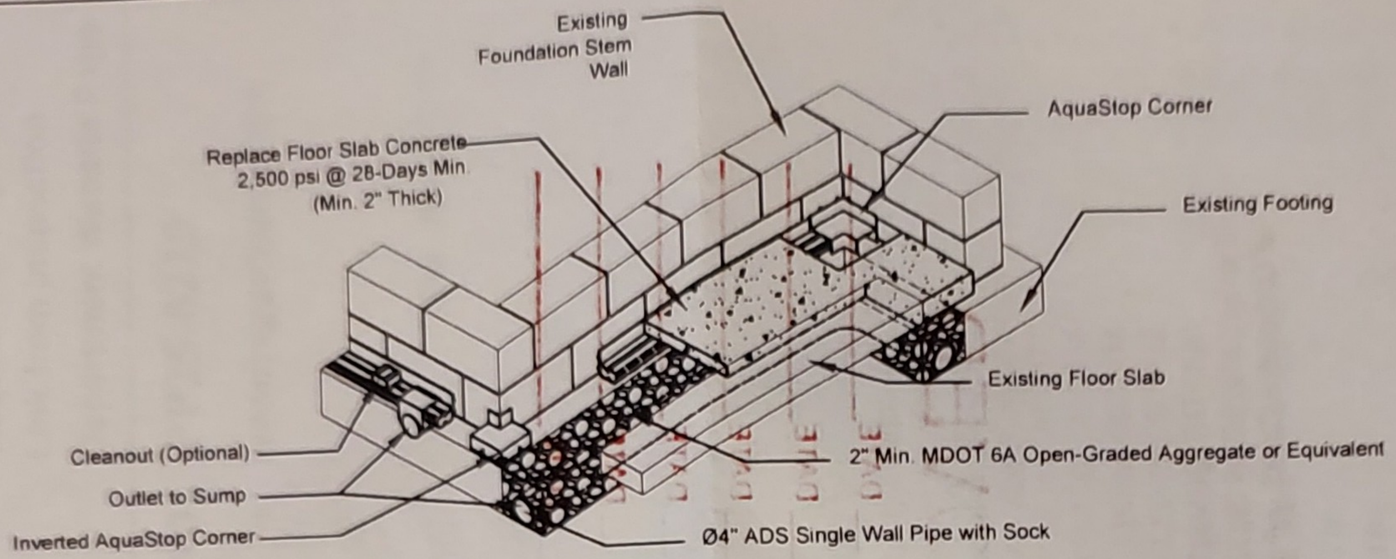
1. Glentronics ST1033 - 46 GPM @ 10-foot head (29-foot max.) - 3.8 Amp draw
2. Glentronics Pro Series 1850 - 35 GPM @ 10-foot head (16-foot max.) - 12 Amp draw - 60 Hour Run-time @ 10% duty

# STANDARD DETAIL

# Elite 365 Sump Pump System



| | |
|---|---|
| Date: | 6/20/2023 |
| Drawn: | AL |
| Version: | R1 |
| Paper Size: | 8.5"x11" |




## 1 AquaStop Perimeter Drainage System - Conceptual View

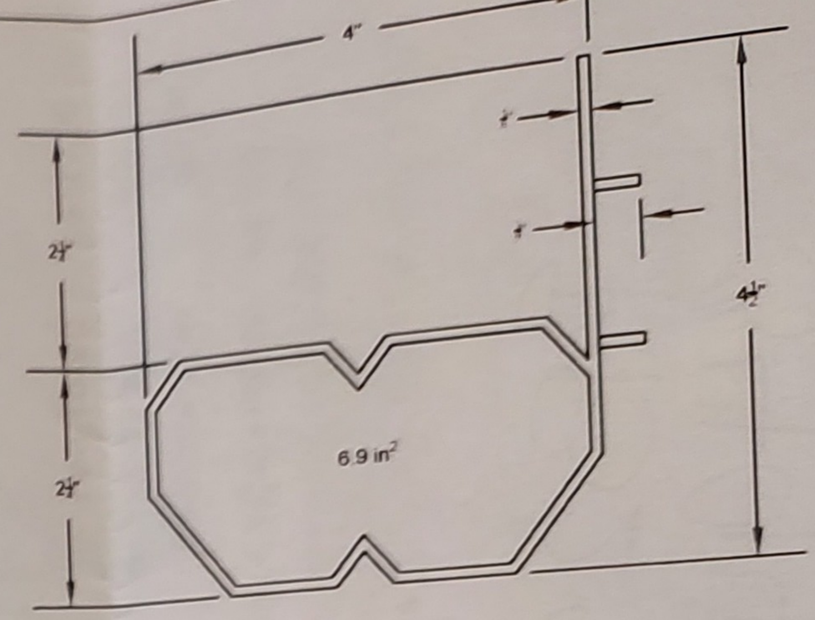
Scale: 1:40

General Notes:

1. The installation of the AquaStop drainage system shall adhere to all applicable local and state building codes and ordinances. Alternative drainage system details may be required for projects zoned as other than residential.
2. The AquaStap drainage system is a PVC product manufactured in 10-foot lengths. Outlets, corners, fasteners, and cleanouts are constructed of the same PVC. Corner cleanouts are available; however, are not depicted in this drawing set.
3. AquaStop shall function to collect water along the full-length of the constructed system and shall be installed at the connection of the foundation stem-wall and footing.
4. Sump outlets shall be located at 150-foot intervals along the length of the drainage system.
5. Sections of drainage channel shall be butt-jointed. Connection for straight joints or 90 degree corners shall consist of tight-fitting snap-on fasteners. For rounded walls, corners that are not 90 degrees, or other joints where the prefabricated snap-on fasteners do not fit, sections of the draining channel shall be butt-jointed and the joint between the two sections of draining channel shall be taped with water resistant adhesive tape.
6. Outletted water shall discharge to an approved discharge location (e.g. sump pit).
7. Backfill aggregate shall consist of MDOT 6A open-graded aggregate or equivalent.
8. Placed concrete shall consist of 2,500 psi @ 28-days or better.

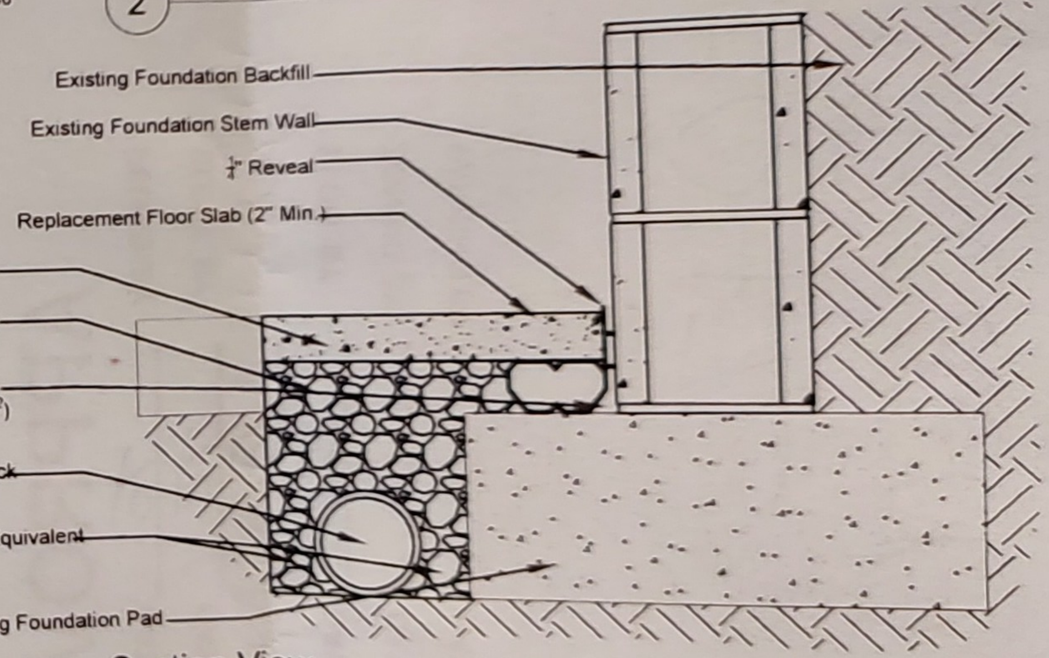
Construction Sequence:

1. Remove approximately 12" of existing concrete slab in front of interior of foundation stem wall leaving rough edge on face of floor slab.
2. Drill two (2) Ø½" holes in existing masonry block at 8" O.C..
3. Place drainage system flush with foundation stem wall and flush with top of foundation footing. Fasten sections of drainage system with tight-fitting snap-on fasteners.
4. Excavate area for placement of drain tile in front of footing. Drain tile should be flush with bottom of footing.
5. Connect outlets to approved discharge location.
6. Backfill remaining excavation beneath top of discharge channel with MDOT 6A open-graded aggregate or equivalent. Cover aggregate with 6 mil plastic barrier.
7. Place floor slab concrete mix. Concrete shall have a minimum thickness of 2 inches.




## 2 AquaStop - Section View

Scale: 1:2




## 3 Drainage System - Section View

Scale: 1:10

# STANDARD DETAIL

## AquaStop Perimeter Drainage System with Drain Tile



| | |
|---|---|
| Date: | 6/20/2023 |
| Drawn: | TMS |
| Version: | R1 |
| Paper Size: | 8.5"x11" |

NOTE: All construction in Livonia must
meet the minimum zoning requirements of
Ordinance ~~#543~~. Livonia Zoning Ordinance
This includes Technical Codes as follows:

MICHIGAN RESIDENTIAL CODE 2015
MICHIGAN BUILDING CODE 2015
MICHIGAN PLUMBING CODE 2021
MICHIGAN ELECTRIC CODE 2023 NEC
MICHIGAN MECHANICAL CODE 2021

That are adopted by the Livonia Code
of Ordinance ~~#262~~ #3160

APPROVED

PLUMB. BY To DATE Code
ELECT. BY To DATE Code
HEAT BY To DATE Code
BLDG. BY ZW DATE 3/10/25
ZONING BY — DATE —
PARKING BY — DATE —

PB25-0472
34940 Beacon

Inspection Department
33000 Civic Center Drive
Livonia, MI 48154
(734) 466-2580

# City of Livonia

www.livonia.gov

"Request An Inspection"
Link from Inspection
Department Website Page

# Plumbing

## Permit No: PP25-0219

**PLUMBING**

**Email:** PERMITS@DRYMICH.COM

**Location** 34940 BEACON
111 01 0049 001
LIVONIA 48150

**Contractor/Applicant**
FOUNDATION SYSTEMS OF MICHIGAN INC
JEFFREY A HUNTER
32985 SCHOOLCRAFT
Livonia MI 48150
Ph# (734) 838 0257

**Owner**
RAY JULIAN / KESLEY BENITO
34940 BEACON
LIVONIA MI 48150

**Issued:** 03/05/25
**Const value** 0
**Zoning:** R-U-F **Sec. No.** SW 28
**Bond:**
**Type of Construction:**
**Use Group:** **PLAN:**
**Zoning Grant:**
**Planning Commission:**
**Council Resolution:**
**Water/Sewer:**
**Reviewed By:**
**Issued By:** SBOWLES

**Work Description:** PB25-0472 ADD 1 YARD GUARD EXTENTION ON GUTTER DOWN SPOUT TO PULL WATER AWAY FROM HOME. INSTALL 112' BASEMENT WATERPROOFING, 1 SUMP PUMP TYING IN TO INTERIOR SANITARY WITH 8 INSPECTION PORTS IN SYSTEM.

**Stipulations:**

| Permit Item | Work Type | Fee Basis | Item Total |
|---|---|---|---|
| 20 Subsoil Drain | Standard Item | 1.00 | $30.00 |
| 21 Sump/Intercepter | Standard Item | 1.00 | $12.00 |
| 34 Cap Off | Standard Item | 1.00 | $30.00 |
| Administration Fee | Admin | 1.00 | $45.00 |

**Fee Total:** $117.00
**Amount Paid:** $117.00
**Balance Due:** **$0.00**

**Jerome A. Hanna**
**Building Official**

**Three (3) Days Before You Dig.**
**Call Miss dig: 1-800-482-7171**

**Minimum permit fee $40.00 - Not including Administration Fee**

THIS PERMIT CONVEYS NO RIGHT TO OCCUPY ANY STREET, ALLEY, SIDEWALK, OR ANY PART THEREOF, EITHER TEMPORARILY OR PERMANENTLY.

## UNLAWFUL TO OCCUPY PREMISES WITHOUT CERTIFICATE OF OCCUPANCY

**ALL permits, in addition to CODE requirement compliance, must also conform to and comply with any additional requirements imposed by (but not limited to) any and all City of Livonia Zoning or Code requirements, Planning Commission Resolutions, Council Resolutions, Building Code Board of Appeals conditions and grants, Zoning Board of Appeals conditions and Grants, Court Consent Decree conditions, PRDA conditions and approvals, Engineering conditions and approvals, County and State Conditions and approvals; non-compliance with any of the aforementioned may result in a Certificate of Occupancy and/or Zoning Compliance Certificate NOT being granted.**

I agree this permit is only for the work described, and does not grant permission for additional or related work which requires separate permits. I understand that this permit will expire, and become null and void if work is not started within 180 days, or if work is suspended or abandoned for a period of 180 days at any time after work has commenced and that I am responsible for assuring all required inspections are requested in conformance with the applicable code. I hereby certify that the proposed work is authorized by the owner, and that I am authorized by the owner to make this application as his authorized agent. I agree to conform to all applicable laws of the State of Michigan and the local jurisdiction. All information on the permit application is accurate to the best of my knowledge. Payment of permit fee constitutes acceptance of the above terms. Payment of permit fee constitutes acceptance of the above terms.

**State Mandated Codes Apply to all Construction in the City of Livonia**

## Williams, Matthew

**From:** Rosam George <Rosam.George@glwater.org>
**Sent:** Friday, January 17, 2025 7:48 AM
**To:** Williams, Matthew
**Cc:** Pinter, Chuck (C.H.); Hinskey, Kristoffer; Meckley, Megan
**Subject:** RE: Permit Inquiry



Hi Matthew,

GLWA has reviewed the January 13, 2024 email and the request to discharge from 34940 Beacon, Livonia property as described in the email.

GLWA has no objections and hereby grants authorization to maintain discharge as it is currently configured.

Should there be any changes in this arrangement, please let GLWA know.

Thank You.

---

**From:** Williams, Matthew <Matthew.Williams@arcadis.com>
**Sent:** Monday, January 13, 2025 1:42 PM
**To:** Rosam George <Rosam.George@glwater.org>; Tessy Jose <Tessy.Jose@glwater.org>
**Cc:** Pinter, Chuck (C.H.) <cpinter@ford.com>; Hinskey, Kristoffer <Kristoffer.Hinskey@arcadis.com>; Meckley, Megan <Megan.Meckley@arcadis.com>
**Subject:** Permit Inquiry



**Hi Rosam and Tessy,**

**Arcadis supports Ford at their Livonia Transmission Plant and we have worked with both of you related to their GLWA permit (006-27510-IU). This inquiry is not related to that permit but is site related so we wanted to reach out to you first because of your familiarity with the site.**

**Arcadis installed and operates vapor intrusion mitigation systems in some residential homes to the east of the plant on behalf of Ford. The systems are operating due to proximity to a chlorinated VOC plume in the groundwater. https://fordlivoniabostonbeaconproject.com/**

**We have worked with EGLE throughout the installation and evaluation of the systems, and there is one property that EGLE requested we reach out to GLWA about. The home at 34940 Beacon, Livonia, MI 48150 has a vapor mitigation system which requires some updates, and part of the work will involve replacing the sump, sump pump, and sub floor drainage pipe in the basement. Currently the drainage system is plugged and requires updates to make it functional. The vapor mitigation system relies on the drainage system dewatering properly, which is why we have proposed the modifications. The sump pump currently discharges to the homeowner's sanitary drain. We are proposing to keep this discharge connection as part of the system updates. EGLE has commented that they do not want the pump to**

**discharge to the ground surface or a dry well in the yard because of potential for moving impacted groundwater within the area. Arcadis has reached out to the City of Livonia, as we know that the discharge does not meet standard code requirements. Due to the nature of the project and the fact that maintaining the sump pump configuration in kind accommodates EGLE's preference, the City of Livonia has indicated that they would allow the discharge to the sanitary sewer to remain. Arcadis has proposed to install granular activated carbon filtration on the pump discharge to minimize the potential for any contamination in sump water.**

**Per the attached correspondence, we are reaching out to GLWA to request authorization to maintain the discharge as it is currently configured. Please let us know if there are alternate contacts we should be reaching out to and if you have any questions.**

**Matthew Williams PE, CDT**
**Principal Environmental Engineer**
**Arcadis of Michigan, LLC.**
**28550 Cabot Drive, Suite 500 | Novi, MI | 48377 | USA**
**T +1 248 994 2279**
**M +1 989 859 6645**
**www.arcadis.com**

**Professional Registration / PE-MI, 6201059274**

# Appendix

Appendix B - Photo Log

## Project Photographs

34940 Beacon
Ford LTP
Livonia, MI

**Photo:** # 1

**Date:**

3/20/2025

**Description:**

Sub-floor perimeter drainage pipe and cleanouts installed in basement. Report any damage to the cleanouts to Arcadis.

**Location:**

Basement.

**Photo:** # 2

**Date:**

3/20/2025

**Description:**

Sub-floor perimeter drainage pipe and cleanouts installed in basement. Report any damage to the cleanouts to Arcadis.

**Location:**

Basement.

## Project Photographs

34940 Beacon
Ford LTP
Livonia, MI

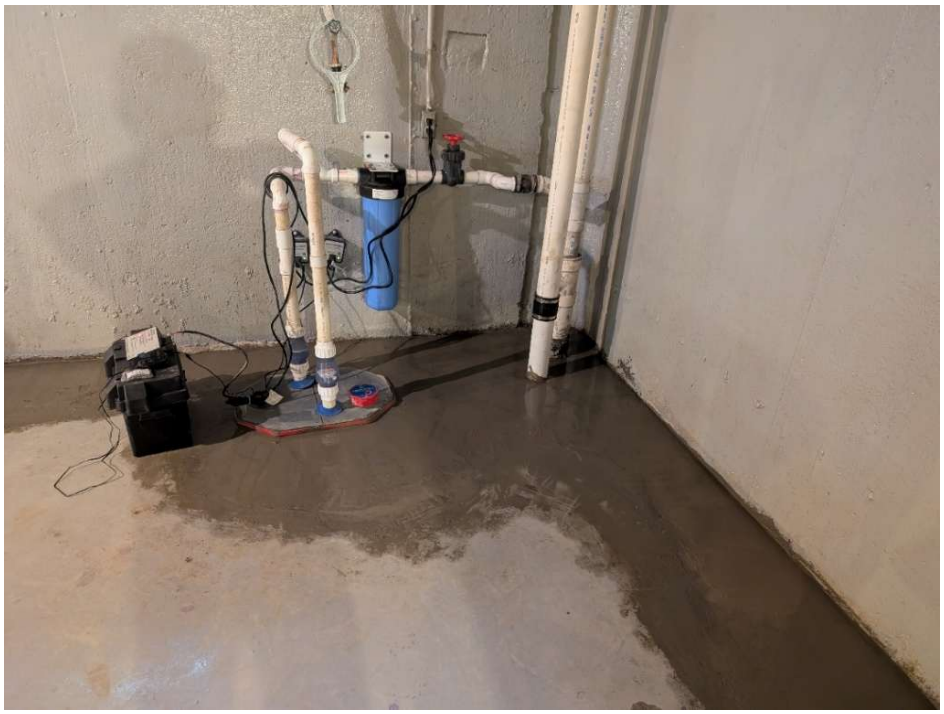


**Photo:** # 3

**Date:**

3/25/2025

**Description:**

Concrete poured over the sub-floor perimeter drainage pipe at the sump basin. Report any damage to the sump basin to Arcadis.

**Location:**

Basement.

**Photo:** # 4

**Date:**

3/25/2025

**Description:**

Concrete poured over the sub-floor perimeter drainage pipe along the north and west walls. Report any damage to the cleanouts to Arcadis.

**Location:**

Basement.

## Project Photographs

34940 Beacon
Ford LTP
Livonia, MI

**Photo:** # 5

**Date:**
5/7/2025
**Description:**
Primer MV floor application in basement.
**Location:**
Basement

**Photo:** # 6

**Date:**
5/8/2025
**Description:**
Retro-Coat™ floor application in basement. Notify Arcadis if coating damage is observed.
**Location:**
Basement

## Project Photographs

34940 Beacon
Ford LTP
Livonia, MI

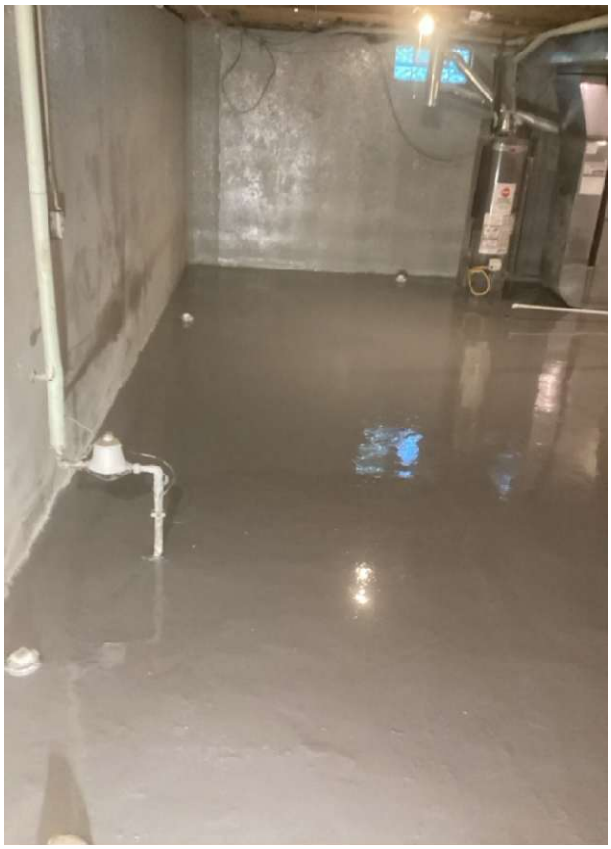


**Photo:** # 7

**Date:**
5/9/2025
**Description:**
Retro-Coat™ floor application in basement. Notify Arcadis if coating damage is observed.
**Location:**
Basement

**Photo:** # 8

**Date:**
5/15/2025
**Description:**
Sump pump discharge filter and activated carbon filter vessel. Notify Arcadis if signs of plugging are observed.
**Location:**
Basement

## Project Photographs

34940 Beacon
Ford LTP
Livonia, MI

**Photo:** # 9

**Date:**

5/15/2025

**Description:**

Pressure gauges, sample ports, and control valves on the activated carbon filter vessel. Report any damage to Arcadis.

**Location:**

Basement

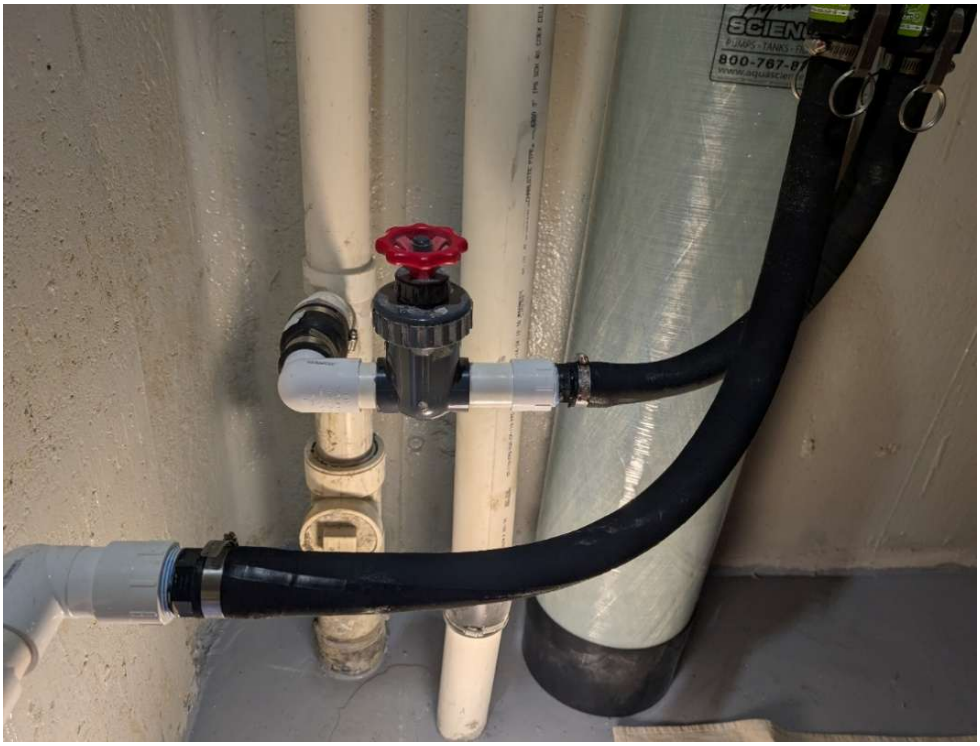


**Photo:** # 10

**Date:**

5/15/2025

**Description:**

Flow control valve on the sump pump discharge. Report any damage to Arcadis.

**Location:**

Basement

Arcadis of Michigan, LLC
28550 Cabot Drive, Suite 500
Novi, MI 48377
United States
Phone: 248 994 2240
Fax:
www.arcadis.com