

# Transmittal Letter

**TO**

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Livonia, MI 48150

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**DATE**

October 4, 2022

**PROJECT NUMBER**

30146655

**SUBJECT**

Operation, Monitoring, and  
Maintenance Field Notes - 34940 Beacon

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**We are sending you:**

Copies	Delivery Date	Description
1	10/6/2022	Operation, monitoring, and maintenance field notes.

**Action\***

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**Comments:**

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Attached are the interim preemptive mitigation (IPM) system Operation, Monitoring, and Maintenance (OM&M) field notes. These field notes were recorded during OM&M visits at the property between March 31, 2020 and March 31, 2022. Arcadis is working with the Retro-Coat™ manufacturer to address the damage observed on the basement floor. Follow up resolution will be documented under separate cover. Please let me know if you have any questions.

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## 34940 Beacon, 2021-02-26, Full System Inspection

Created	2021-02-26 16:39:04 UTC by Seth Turner
Updated	2021-02-26 17:57:48 UTC by Andrew Banitt

### General Information

System Inspector	Seth Turner
Date	2021-02-26
Time	12:00
System Details Link	34940 Beacon
Property Address	34940 Beacon
Check Inspection(s) to be Completed	Full System Inspection
Get weather data from National Weather Service Website for your current location?	N/A
Weather	25f cloudy
Ambient Temperature	25f
Barometric Pressure	29.98
Indoor Temperature	70

### Design Components

Does the house have a basement?	Yes
Does the house have a sump?	Yes
Does the house have garage retrocoat?	No
Does the house have shed retrocoat?	No
Does the house have basement retrocoat?	Yes
Does the house have a crawlspace barrier?	No
Does the house have an inaccessible crawlspace?	No
Does the house have a water sensor?	No

### System Inspection

#### Fan

Fan(s) operating?	Yes
Are there any unusual fan noises?	No

#### Piping

Is any caulking required around pipe penetrations, slab cracks, expansion joints, or foundation walls?	No
Are piping, piping joints, and brackets intact and secure?	Yes
Is the insulation and insulation jacket damaged or missing in garage or exterior piping?	No

#### Valves

Upon arrival, are all valves in the same position as the prior visit (reference Power BI)?	Yes
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#### Drains

Do any drain seals need to be repaired or replaced? No

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### Basement

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Is water present in the basement? No

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### Sumps

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Is the sump full/evidence pump is broken? No

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Was the owner notified? No

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### Basement Retrocoat

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Is retrocoat damaged or missing? No

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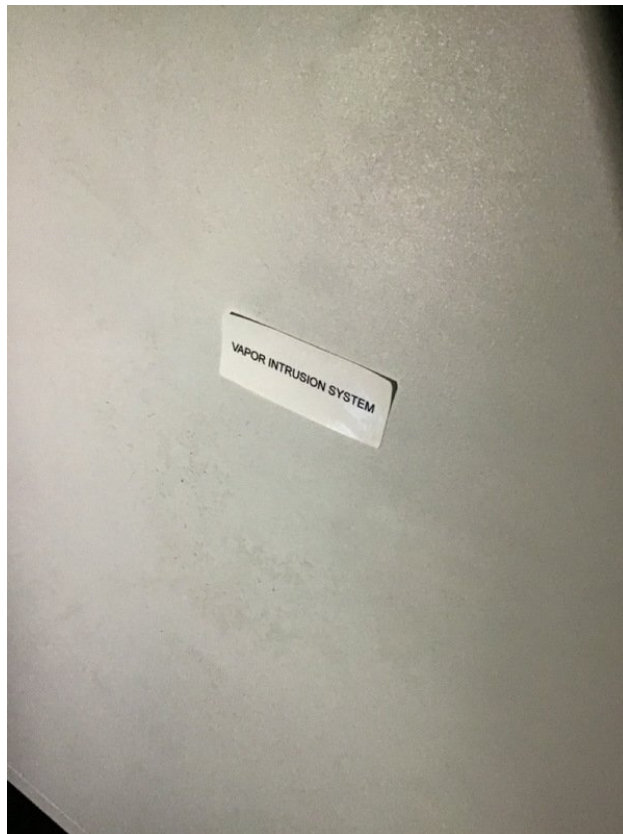
### Labels

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Are labels present at the pipe, control panel, u-tube, and breaker? Yes

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Common Label Photos



Are labels present at the sump? Yes

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Sump Label Photos



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Are labels present at the basement retrocoat? Yes

Basement Retrocoat Label Photos



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Vacuum Monitoring

Is the u-tube accurate (test with micromanometer/manometer, rezero/replace as needed)?	Yes
Is the vacuum switch accurate (test with micromanometer)?	Yes
Do any monitoring points (MP/SSMP) need to be repaired or replaced?	No
If multiple systems are present, were both inspected?	N/A

## Inspection Measurements

### Pre-Measurement Conditions

Are vacuum readings being taken under closed building conditions?	Yes
Do any monitoring points have transmitters?	No

### Measurements and Valve Positions

#### SSMP-1, 12:04, -0.395

Vacuum ID Link	34940 Beacon, SSMP-1
Vacuum ID	SSMP-1
Date	2021-02-26
Time	12:04
Vacuum Reading (in. w.c.)	-0.395
Number Vacuum Reading	-0.395

#### U-Tube Manometer, 12:05, -3.8

Vacuum ID Link	34940 Beacon, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2021-02-26
Time	12:05
Vacuum Reading (in. w.c.)	-3.8
Number Vacuum Reading	-3.8

#### SSMP-2, 12:06, -0.014

Vacuum ID Link	34940 Beacon, SSMP-2
Vacuum ID	SSMP-2
Date	2021-02-26
Time	12:06
Vacuum Reading (in. w.c.)	-0.014
Number Vacuum Reading	-0.014

#### SSMP-3, 12:10, -0.055

Vacuum ID Link	34940 Beacon, SSMP-3
Vacuum ID	SSMP-3
Date	2021-02-26
Time	12:10

Vacuum Reading (in. w.c.)	-0.055
Number Vacuum Reading	-0.055

### **MP-1, 12:11, -0.230**

Vacuum ID Link	34940 Beacon, MP-1
Vacuum ID	MP-1
Date	2021-02-26
Time	12:11
Vacuum Reading (in. w.c.)	-0.230
Number Vacuum Reading	-0.23

### **MP-1, 12:13, -0.070**

Vacuum ID Link	34940 Beacon, MP-1
Vacuum ID	MP-1
Date	2021-02-26
Time	12:13
Vacuum Reading (in. w.c.)	-0.070
Number Vacuum Reading	-0.07

### **SSMP-2, 12:24, -0.024**

Vacuum ID Link	34940 Beacon, SSMP-2
Vacuum ID	SSMP-2
Date	2021-02-26
Time	12:24
Vacuum Reading (in. w.c.)	-0.024
Number Vacuum Reading	-0.024

### **SSMP-2, 12:39, -0.025**

Vacuum ID Link	34940 Beacon, SSMP-2
Vacuum ID	SSMP-2
Date	2021-02-26
Time	12:39
Vacuum Reading (in. w.c.)	-0.025
Number Vacuum Reading	-0.025

### **SSMP-1, 12:40, -0.480**

Vacuum ID Link	34940 Beacon, SSMP-1
Vacuum ID	SSMP-1
Date	2021-02-26
Time	12:40
Vacuum Reading (in. w.c.)	-0.480
Number Vacuum Reading	-0.48

### **U-Tube Manometer, 12:40, -4.8**

Vacuum ID Link	34940 Beacon, U-Tube Manometer
Vacuum ID	U-Tube Manometer

Date	2021-02-26
Time	12:40
Vacuum Reading (in. w.c.)	-4.8
Number Vacuum Reading	-4.8

### **MP-1, 12:40, -0.095**

Vacuum ID Link	34940 Beacon, MP-1
Vacuum ID	MP-1
Date	2021-02-26
Time	12:40
Vacuum Reading (in. w.c.)	-0.095
Number Vacuum Reading	-0.095

### **SSMP-3, 12:41, -0.042**

Vacuum ID Link	34940 Beacon, SSMP-3
Vacuum ID	SSMP-3
Date	2021-02-26
Time	12:41
Vacuum Reading (in. w.c.)	-0.042
Number Vacuum Reading	-0.042

### **BV-1, 12:00, 15**

Valve ID Link	34940 Beacon, BV-1
Valve ID	BV-1
Date	2021-02-26
Time	12:00
Valve Position at Arrival (% Open)	100
Valve Position at Departure (% Open)	15

### **BV-2, 12:08, 10**

Valve ID Link	34940 Beacon, BV-2
Valve ID	BV-2
Date	2021-02-26
Time	12:08
Valve Position at Arrival (% Open)	15
Valve Position at Departure (% Open)	10

### **BV-3, 12:08, 100**

Valve ID Link	34940 Beacon, BV-3
Valve ID	BV-3
Date	2021-02-26
Time	12:08
Valve Position at Arrival (% Open)	100
Valve Position at Departure (% Open)	100
Were interim vacuum readings taken between initial and final vacuum readings?	No

## Inspection Reading Analysis

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### Manometer

Is the system manometer steady?	Yes
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### SSMP/MPs

Were any vacuum monitoring points not accessible? Please specify.	No
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Do all vacuum monitoring points meet -0.02 in w.c. threshold?	Yes
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Were any ball valve positions changed?	Yes
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Did you take final readings?	Yes
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### Alarm Testing

Sensaphone Link	N/A
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Does the vacuum switch alarm work? Test the alarm condition and verify an alarm registers.	Yes
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Does the fan disconnect alarm work? Test the alarm condition and verify an alarm registers.	Yes
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Does the transmitter alarm work? Test the alarm condition and verify an alarm registers.	N/A
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Check the alarm history on the disconnect for the fan. Was it off for any length of time?	No
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Is the cloud logging vacuum readings properly (log in to check)?	N/A
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### Repairs

#### Sample Delay

Send Sample Delay Email email body	N/A
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#### Repair Completion

Were seam repairs completed during this visit?	No
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Were system repairs completed during this visit?	Yes
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System repairs completed:	Fan cleaned
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System Repair Completion Date	2021-02-26
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System Repair Photos

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Are there outstanding repairs to be completed?	No
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**Owner/Tenant Observations**

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Have there been any changes to the fan noise level or vibration?	No
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Have any structures been built or modified that require vapor mitigation?	No
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**Engineer Notification**

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Send Inspection Completion Email	N/A
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email body

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**Engineer Notification**

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Send Inspection Completion Email - add any repairs, repair needs, or critical communications in email text	N/A
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email body

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## 34940 Beacon, 2022-02-01, Full System Inspection

Created	2022-02-01 13:14:25 UTC by Seth Turner
Updated	2022-02-01 14:29:21 UTC by Seth Turner

### General Information

System Inspector	Seth Turner
Date	2022-02-01
Time	08:14
System Details Link	34940 Beacon
Property Address	34940 Beacon
Check Inspection(s) to be Completed	Full System Inspection
Get weather data from National Weather Service Website for your current location?	N/A
Weather	25F,
Ambient Temperature	25
Barometric Pressure	29.97
Indoor Temperature	70

### Design Components

Does the house have a basement?	Yes
Does the house have a sump?	Yes
Does the house have garage retrocoat?	No
Does the house have shed retrocoat?	No
Does the house have basement retrocoat?	Yes
Does the house have a crawlspace barrier?	No
Does the house have an inaccessible crawlspace?	No
Does the house have a water sensor?	No

### System Inspection

#### Fan

Fan(s) operating?	Yes
Are there any unusual fan noises?	No

#### Piping

Is any caulking required around pipe penetrations, slab cracks, expansion joints, or foundation walls?	No
Are piping, piping joints, and brackets intact and secure?	Yes
Is the insulation and insulation jacket damaged or missing in garage or exterior piping?	No

#### Valves

Upon arrival, are all valves in the same position as the prior visit (reference Power BI)?	Yes
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#### Drains

Do any drain seals need to be repaired or replaced? No

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### Basement

Is water present in the basement? No

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### Sumps

Is the sump full/evidence pump is broken? No

Was the owner notified? No

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### Basement Retrocoat

Is retrocoat damaged or missing? Yes

Where is retrocoat damaged? Center of basement

Retrocoat damage



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### Labels

Are labels present at the pipe, control panel, u-tube, and breaker? Yes

Common Label Photos



Are labels present at the sump? Yes

Sump Label Photos



Are labels present at the basement retrocoat? Yes

Basement Retrocoat Label Photos



**Vacuum Monitoring**

Is the u-tube accurate (test with micromanometer/manometer, rezero/replace as needed)? Yes

Is the vacuum switch accurate (test with micromanometer)? Yes

Do any monitoring points (MP/SSMP) need to be repaired or replaced? No

If multiple systems are present, were both inspected? N/A

**Inspection Measurements**

**Pre-Measurement Conditions**

Are vacuum readings being taken under closed building conditions?	Yes
Do any monitoring points have transmitters?	No

## Measurements and Valve Positions

### U-Tube Manometer, 08:16, -4.9

Vacuum ID Link	34940 Beacon, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2022-02-01
Time	08:16
Vacuum Reading (in. w.c.)	-4.9
Number Vacuum Reading	-4.9

### MP-1, 08:18, -0.065

Vacuum ID Link	34940 Beacon, MP-1
Vacuum ID	MP-1
Date	2022-02-01
Time	08:18
Vacuum Reading (in. w.c.)	-0.065
Number Vacuum Reading	-0.065

### SSMP-3, 08:29, -0.028

Vacuum ID Link	34940 Beacon, SSMP-3
Vacuum ID	SSMP-3
Date	2022-02-01
Time	08:29
Vacuum Reading (in. w.c.)	-0.028
Number Vacuum Reading	-0.028

### SSMP-2, 08:29, -0.021

Vacuum ID Link	34940 Beacon, SSMP-2
Vacuum ID	SSMP-2
Date	2022-02-01
Time	08:29
Vacuum Reading (in. w.c.)	-0.021
Number Vacuum Reading	-0.021

### SSMP-1, 08:35, -0.336

Vacuum ID Link	34940 Beacon, SSMP-1
Vacuum ID	SSMP-1
Date	2022-02-01
Time	08:35
Vacuum Reading (in. w.c.)	-0.336
Number Vacuum Reading	-0.336

### U-Tube Manometer, 09:10, -4.9

Vacuum ID Link	34940 Beacon, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2022-02-01
Time	09:10
Vacuum Reading (in. w.c.)	-4.9
Number Vacuum Reading	-4.9

### **MP-1, 09:10, -0.068**

Vacuum ID Link	34940 Beacon, MP-1
Vacuum ID	MP-1
Date	2022-02-01
Time	09:10
Vacuum Reading (in. w.c.)	-0.068
Number Vacuum Reading	-0.068

### **SSMP-3, 09:10, -0.031**

Vacuum ID Link	34940 Beacon, SSMP-3
Vacuum ID	SSMP-3
Date	2022-02-01
Time	09:10
Vacuum Reading (in. w.c.)	-0.031
Number Vacuum Reading	-0.031

### **SSMP-2, 09:10, -0.025**

Vacuum ID Link	34940 Beacon, SSMP-2
Vacuum ID	SSMP-2
Date	2022-02-01
Time	09:10
Vacuum Reading (in. w.c.)	-0.025
Number Vacuum Reading	-0.025

### **SSMP-1, 09:11, -0.342**

Vacuum ID Link	34940 Beacon, SSMP-1
Vacuum ID	SSMP-1
Date	2022-02-01
Time	09:11
Vacuum Reading (in. w.c.)	-0.342
Number Vacuum Reading	-0.342

### **BV-1, 08:35, 15**

Valve ID Link	34940 Beacon, BV-1
Valve ID	BV-1
Date	2022-02-01
Time	08:35
Valve Position at Arrival (% Open)	15
Valve Position at Departure (% Open)	15

## BV-2, 08:35, 10

Valve ID Link	34940 Beacon, BV-2
Valve ID	BV-2
Date	2022-02-01
Time	08:35
Valve Position at Arrival (% Open)	10
Valve Position at Departure (% Open)	10

## BV-3, 08:35, 100

Valve ID Link	34940 Beacon, BV-3
Valve ID	BV-3
Date	2022-02-01
Time	08:35
Valve Position at Arrival (% Open)	100
Valve Position at Departure (% Open)	100
Were interim vacuum readings taken between initial and final vacuum readings?	No

## Inspection Reading Analysis

### Manometer

Is the system manometer steady?	Yes
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### SSMP/MPs

Were any vacuum monitoring points not accessible? Please specify.	No
Do all vacuum monitoring points meet -0.02 in w.c. threshold?	Yes
Were any ball valve positions changed?	No

### Alarm Testing

Sensaphone Link	N/A
Does the vacuum switch alarm work? Test the alarm condition and verify an alarm registers.	Yes
Does the fan disconnect alarm work? Test the alarm condition and verify an alarm registers.	Yes
Does the transmitter alarm work? Test the alarm condition and verify an alarm registers.	N/A
Check the alarm history on the disconnect for the fan. Was it off for any length of time?	No
Is the cloud logging vacuum readings properly (log in to check)?	N/A

### Repairs

#### Sample Delay

Send Sample Delay Email email body	N/A
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## Repair Completion

Were seam repairs completed during this visit?	No
Were system repairs completed during this visit?	No
Are there outstanding repairs to be completed?	Yes
Repair Status	Basement retrocoat.

## Owner/Tenant Observations

Have there been any changes to the fan noise level or vibration?	No
Have any structures been built or modified that require vapor mitigation?	No

## Engineer Notification

Send Inspection Completion Email	N/A
email body	

## Engineer Notification

Send Inspection Completion Email - add any repairs, repair needs, or critical communications in email text	N/A
email body	