

Facility/Project Name Tyco Fire Products LP	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name HW-01
Facility License, Permit or Monitoring No. BRRTS # 02-38-000011	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. 45° 5' 48.20363" Long. 87° 36' 43.44661" or	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID 438039470	St. Plane 2585163.08842 ft. N. -16240.95184 ft. E. S/C/N	Date Well Installed 12 / 14 / 2020 m m d d y y y y
Type of Well Well Code 27 / he	Section Location of Waste/Source NW 1/4 of SW 1/4 of Sec. 5, T. 30 N, R. 24 <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm Brent Fleming
Distance from Waste/ Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____
Enf. Stds. Apply <input type="checkbox"/>		Ellingson - DTD

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B. Well casing, top elevation _____ 585.5 ft. MSL	2. Protective cover pipe:
C. Land surface elevation _____ 587 ft. MSL	a. Inside diameter: _____ in.
D. Surface seal, bottom _____ ft. MSL or _____ ft.	b. Length: _____ ft.
	c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/>
	d. Additional protection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: Steel and Concrete Vault
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Asphalt around vault Other <input checked="" type="checkbox"/>
13. Sieve analysis performed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Other <input type="checkbox"/>
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Duck bill, rockmaster bit Other <input checked="" type="checkbox"/>	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input checked="" type="checkbox"/> 03 None <input type="checkbox"/> 99	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft <sup>3</sup>
17. Source of water (attach analysis, if required): Potable / City Water	8. Filter pack material: Manufacturer, product name & mesh size a. Native b. Volume added _____ ft <sup>3</sup>
E. Bentonite seal, top _____ ft. MSL or _____ ft.	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 4-inch DR11 HDPE Other <input checked="" type="checkbox"/>
F. Fine sand, top _____ ft. MSL or _____ ft.	10. Screen material: 4-inch DR11 HDPE a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
G. Filter pack, top _____ ft. MSL or _____ ft.	b. Manufacturer _____ c. Slot size: 0.010 in. d. Slotted length: 200 ft.
H. Screen joint, top _____ 578 ft. MSL or _____ 9.0 ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
I. Well bottom _____ 567 ft. MSL or _____ 20 ft.	
J. Filter pack, bottom _____ ft. MSL or _____ ft.	
K. Borehole, bottom _____ 567 ft. MSL or _____ 20 ft.	
L. Borehole, diameter _____ 6.5 in.	
M. O.D. well casing _____ 4.20 in.	
N. I.D. well casing _____ 4.00 in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature:  Firm: Endpoint Solutions Corp.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name Tyco Fire Products LP	County Name Marinette	Well Name HW-01	
Facility License, Permit or Monitoring Number BRRTS #02-38-000011	County Code 38	Wis. Unique Well Number _____	DNR Well ID Number _____

1. Can this well be purged dry?  Yes  No

2. Well development method

- surged with bailer and bailed  41
- surged with bailer and pumped  61
- surged with block and bailed  42
- surged with block and pumped  62
- surged with block, bailed and pumped  70
- compressed air  20
- bailed only  10
- pumped only  51
- pumped slowly  50
- Other \_\_\_\_\_

3. Time spent developing well \_\_\_\_\_ 180 min.

4. Depth of well (from top of well casing) \_\_\_\_\_ 20 ft.

5. Inside diameter of well \_\_\_\_\_ 4 in.

6. Volume of water in filter pack and well casing \_\_\_\_\_ 350 gal.

7. Volume of water removed from well \_\_\_\_\_ 750 gal.

8. Volume of water added (if any) \_\_\_\_\_ 500 gal.

9. Source of water added Potable / City Water

10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. _____ 24.65 ft.	_____ 28.14 ft.
Date	b. <u>12</u> / <u>19</u> / <u>2020</u>	<u>4</u> / <u>6</u> / <u>2021</u>
Time	c. <u>2</u> : <u>30</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>10</u> : <u>30</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.

12. Sediment in well bottom \_\_\_\_\_ 0 inches

13. Water clarity

Clear <input type="checkbox"/> 10	Clear <input checked="" type="checkbox"/> 20
Turbid <input checked="" type="checkbox"/> 15	Turbid <input type="checkbox"/> 25
(Describe) <u>Silly brown</u>	(Describe) <u>Clear</u>

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids \_\_\_\_\_ N/A mg/l \_\_\_\_\_ N/A mg/l

15. COD \_\_\_\_\_ N/A mg/l \_\_\_\_\_ N/A mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Brent Last Name: Fleming

Firm: Ellingson-DTD

17. Additional comments on development:

Horizontal Well

Name and Address of Facility Contact /Owner/Responsible Party

First Name: Denice Last Name: Nelson

Facility/Firm: Johnson Controls

Street: 5757 North Green Bay Avenue

City/State/Zip: Milwaukee, WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

Print Name: Kirk L. Kapfhammer

Firm: Endpoint Solutions

Facility/Project Name Tyco Fire Products LP	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name HW-02
Facility License, Permit or Monitoring No. BRTS # 02-38-000011	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. 45° 5' 47.35527" Long. 87° 36' 41.96889" or	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID 438039470	St. Plane 2585266.48758 ft. N, -16328.81760 ft. E. S/C/N	Date Well Installed 12 / 18 / 2020 m m d d y y v v y
Type of Well Well Code 27 / he	Section Location of Waste/Source NW 1/4 of SW 1/4 of Sec. 5, T. 30 N, R. 24 <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm Brent Fleming Ellingson - DTD
Distance from Waste/ Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ 585.5 ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation _____ 587 ft. MSL	d. Additional protection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: Steel and Concrete Vault
D. Surface seal, bottom _____ ft. MSL or _____ ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Asphalt around vault Other <input checked="" type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Other <input type="checkbox"/>
13. Sieve analysis performed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Duck bill, rockmaster bit Other <input checked="" type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input checked="" type="checkbox"/> 03 None <input type="checkbox"/> 99	7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft <sup>3</sup>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	8. Filter pack material: Manufacturer, product name & mesh size a. Native <input type="checkbox"/> b. Volume added _____ ft <sup>3</sup>
17. Source of water (attach analysis, if required): Potable / City Water	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 4-inch DR11 HDPE - Welded Other <input checked="" type="checkbox"/>
E. Bentonite seal, top _____ ft. MSL or _____ ft.	10. Screen material: 4-inch DR11 HDPE - Welded a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top _____ ft. MSL or _____ ft.	b. Manufacturer _____ c. Slot size: 0.010 in. d. Slotted length: 260 ft.
G. Filter pack, top _____ ft. MSL or _____ ft.	11. Backfill material (below filter pack): Nonc <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top _____ 581 ft. MSL or _____ 6.0 ft.	
I. Well bottom _____ 569.2 ft. MSL or _____ 17.8 ft.	
J. Filter pack, bottom _____ ft. MSL or _____ ft.	
K. Borehole, bottom _____ 569.2 ft. MSL or _____ 17.8 ft.	
L. Borehole, diameter _____ 6.5 in.	
M. O.D. well casing _____ 4.20 in.	
N. I.D. well casing _____ 4.00 in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature \_\_\_\_\_ Firm  
Endpoint Solutions Corp.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name Tyco Fire Products LP	County Name Marinette	Well Name HW-02
Facility License, Permit or Monitoring Number BRRTS #02-38-000011	County Code 38	Wis. Unique Well Number _____
		DNR Well ID Number _____

1. Can this well be purged dry?  Yes  No

2. Well development method

- surged with bailer and bailed  41
- surged with bailer and pumped  61
- surged with block and bailed  42
- surged with block and pumped  62
- surged with block, bailed and pumped  70
- compressed air  20
- bailed only  10
- pumped only  51
- pumped slowly  50
- Other \_\_\_\_\_

3. Time spent developing well \_\_\_\_\_ 180 min.

4. Depth of well (from top of well casing) \_\_\_\_\_ 20 ft.

5. Inside diameter of well \_\_\_\_\_ 4 in.

6. Volume of water in filter pack and well casing \_\_\_\_\_ 450 gal.

7. Volume of water removed from well \_\_\_\_\_ 750 gal.

8. Volume of water added (if any) \_\_\_\_\_ 600 gal.

9. Source of water added Potable / City Water

10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. _____ 34.20 ft.	_____ 34.49 ft.
Date	b. <u>12</u> / <u>19</u> / <u>2020</u>	<u>4</u> / <u>6</u> / <u>2021</u>
Time	c. <u>8</u> : <u>30</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>10</u> : <u>30</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	_____ 0 inches	_____ 0 inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) Silty brown	Clear <input type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) Clear
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ N/A mg/l	_____ N/A mg/l
15. COD	_____ N/A mg/l	_____ N/A mg/l
16. Well developed by: Name (first, last) and Firm		
First Name:	Brent	Last Name: Fleming
Firm:	Ellingson-DTD	

17. Additional comments on development:

Horizontal Well

Name and Address of Facility Contact /Owner/Responsible Party


First Name: Denice Last Name: Nelson

Facility/Firm: Johnson Controls

Street: 5757 North Green Bay Avenue

City/State/Zip: Milwaukee, WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.

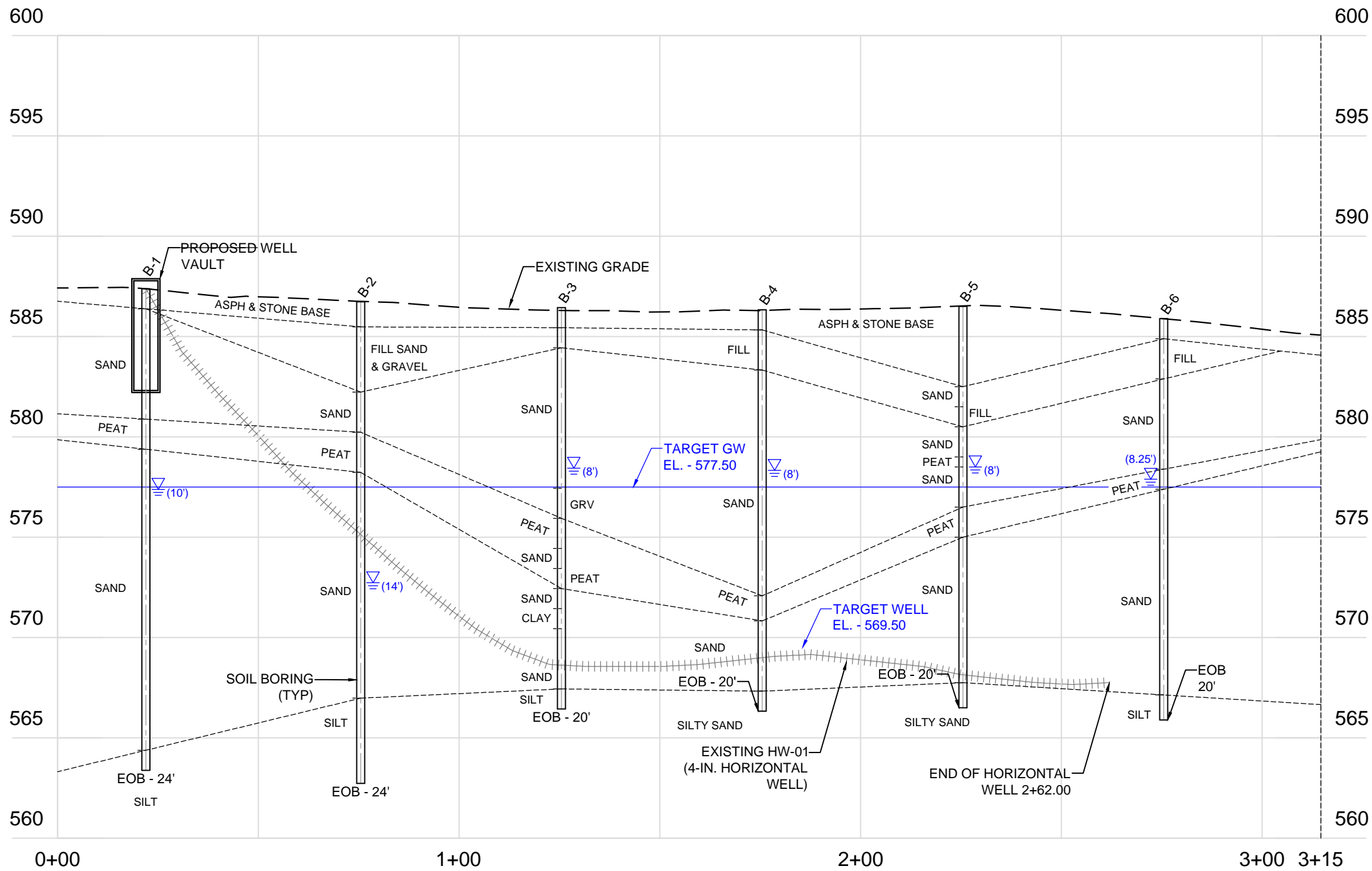
Signature: 

Print Name: Kirk L. Kapfhammer

Firm: Endpoint Solutions

NOTE: See instructions for more information including a list of county codes and well type codes.

P:\Tyco - 415\CAD\001-005 Salt Vault Extraction System Design\Record Drawings\Set #2 Extraction Well System\SH05\_415-001-005 HW-01 Cross Section EWS.dwg



REV	DATE	DESCRIPTION
0		
1	09/23/20	REVISED FOR ADDENDUM #1
2	10/20/20	REVISED ROUTE TO JV-100 & EV-08 & EV-09
3	03/09/21	REVISED FOR RE-BID AND CONSTRUCTION
4	04/08/21	HORIZONTAL WELLS RECORD DRAWING
5	12/14/21	RECORD DRAWINGS

**Endpoint Solutions**  
 6871 S. LOVERS LANE  
 FRANKLIN, WI 53132  
 PHONE: (414) 427-1200

TYCO SALT VAULT EXTRACTION SYSTEM (EXTRACTION PLANS)  
**HORIZONTAL WELL  
 HW-01 CROSS SECTION**  
 ONE STANTON STREET  
 MARINETTE, WISCONSIN 54143

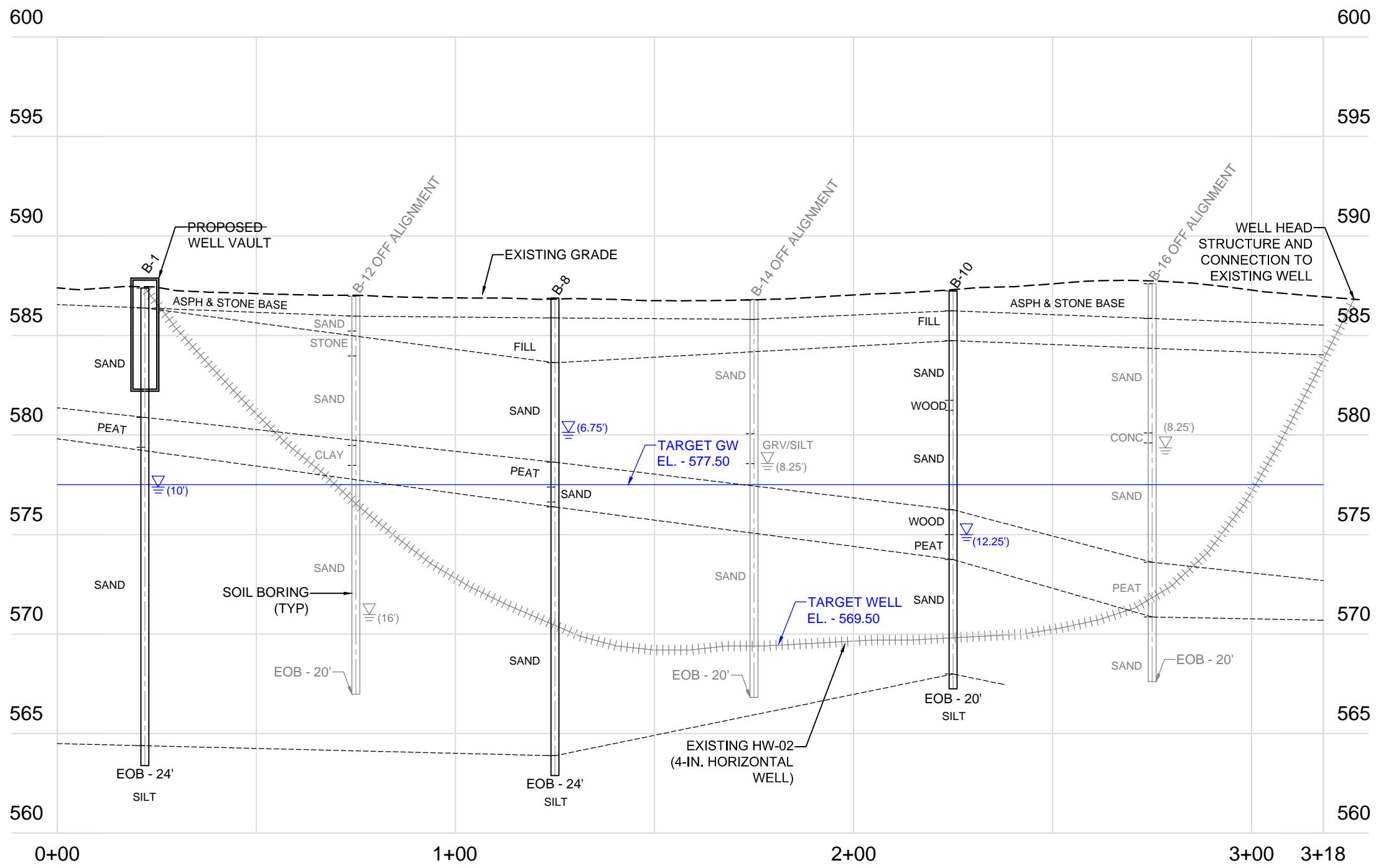
DRAWN BY: JAH/WJD      DATE:  
 CHECKED BY: NWD      12/14/2021  
 APPROVED BY: WCW

PROJECT NO. 415-001-005

THIS BAR REPRESENTS 1/2 INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE.

SHEET NO.  
**5R5**

P:\Tyco - 415\CAD\001-005 Salt Vault Extraction System Design\Record Drawings Set #2 Extraction Well System\SH06\_415-001-005 HW-02 Cross Section EWS.dwg



REV	DATE	DESCRIPTION
0		
1	09/23/20	REVISED FOR ADDENDUM #1
2	10/20/20	REVISED ROUTE TO JV-100 & EV-08 & EV-09
3	03/09/21	REVISED FOR RE-BID AND CONSTRUCTION
4	04/09/21	HORIZONTAL WELLS RECORD DRAWING
5	12/14/21	RECORD DRAWINGS

**Endpoint Solutions**  
 6871 S. LOVERS LANE  
 FRANKLIN, WI 53132  
 PHONE: (414) 427-1200

TYCO SALT VAULT EXTRACTION SYSTEM (EXTRACTION PLANS)  
**HORIZONTAL WELL  
 HW-02 CROSS SECTION**  
 ONE STANTON STREET  
 MARINETTE, WISCONSIN 54143

DRAWN BY: JAH/NWD DATE:  
 CHECKED BY: NWD 12/14/2021  
 APPROVED BY: WCW

PROJECT NO. 415-001-005  
 THIS BAR REPRESENTS 1/2 INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE.

SHEET NO.  
**6R5**