Ongoing Cleanups with Continuing Obligations
Cover Sheet

April, 2010
(RR 5391)

Purpose

This cover sheet summarizes continuing obligations regarding environmental conditions on this property. Continuing obligations are legal mechanisms that:

1) Require or restrict certain actions to protect human health or the environment.
2) Minimize human and natural resource exposure to contamination, and/or
3) Give notice of the **existence** of residual contamination

Learn more about continuing obligations at **http://dnr.wi.gov/org/aw/rr/cleanup/obligations.htm**

DNR Property Information:

DNR Approval Date: Jun 6, 2013

BRRTS #: **02-60-000095** FID #: 460134950

ACTIVITY NAME: Camp Marina Manufactured Gas PLT (MGP)

PROPERTY ADDRESS: 732 N Water St

MUNICIPALITY: Sheboygan

PARCEL ID #: 59281107756, 59281107760, 59281108711

***WTM COORDINATES:**

X: **703811** Y: **366801**

** Coordinates are in WTM83, NAD83 (1991)*

WTM COORDINATES REPRESENT:

○ Approximate Center Of Continuing Obligations

◉ Approximate Source Parcel Center

Please use the CLEAN system at **http://dnr.wi.gov/org/aw/rr/clean.htm** for additional DNR site information.

EPA Superfund Information (*if applicable*):

EPA ID: **WIN000510058** *To view more information click on the EPA ID.*

SITE NAME: WPSC Camp Marina MGP

Requirements for *all* properties with Continuing Obligations

1. Properly manage contaminated soil if it is excavated. Sample and arrange appropriate treatment or disposal.
2. DNR approval is required if a water supply well will be constructed or reconstructed.

Site-Specific Requirement(s) - (BRRTS Action Code)

☒ A "cap" over the contaminated area must be: (222)
- ☐ Constructed & Maintained
- ☒ Maintained

☒ A vapor mitigation system must be: (226)
- ☐ Constructed & Maintained
- ☒ Maintained

☐ The need for vapor control technology must be evaluated if a building will be constructed. (228)

☐ The approved soil cleanup level is suitable for industrial use of the property. (220)

☐ DNR has approved construction on an abandoned landfill and certain maintenance requirements apply. (402) or (404)

☐ A structural impediment (e.g. building) is present which inhibited investigation/cleanup. Further environment work may be required if the impediment is removed. (224)

☐ DNR has directed a local government unit (LGU) to take an action and a LGU liability exemption applies. This exemption does not transfer to future private owners. (230)

☐ Another type of continuing obligation has been established in DNR's remedial action plan approval. (228)
Explain:

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Plymouth Service Center
1155 N Pilgrim Road
Plymouth WI 53073

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 6, 2013

Brian Bartoszek
Integrys Business Support LLC
PO Box 19002 Green Bay, WI 54307

Dear Mr. Bartoszek:

Subject: Air-sparging system shut-down approval and institutional controls, Camp Marina former Manufactured Gas Plant, 732 North Water Street, Sheboygan, file reference BRRTS #0260000095.

Thank you for having your consultant submit a performance evaluation and shut-down request of the ancillary remedial action system at this site, which is the air sparging system, that has reached the limit of its effectiveness. This remedial action was designed to supplement the primary remedial action which consisted of excavation and thermal treatment of soils contaminated with MGP residuals followed by encapsulation of the contaminated soil and groundwater remaining in place with sheet pile walls tied into clay soil at depth, and a barrier cover on top, followed by long term monitoring of the groundwater at the site (the sheet pile walls and cover system will be referred to in the remainder of this letter as the barrier system). This remedial action plan was approved by the Wisconsin Department of Natural Resources (WDNR) in the form of a Record of Decision signed by the WDNR in January of 2001.

I have reviewed your analysis of the performance of the air-sparge system and concur with your consultant that it should be shut-down. Also at this time, the WDNR is hereby imposing institutional controls on the upland portion of the site, that is, inspection, maintenance and upkeep of the barrier system. This maintenance and upkeep requirement was originally part of the remedial action plan/ROD but was not formalized in a deed instrument at that time (deed restrictions and notifications being the common practice for institutional controls in Wisconsin in the past). The institutional controls set forth in this letter are enforceable under s. 292.12 Wis Stats. This letter will be recorded with other documents from our file on the WDNR's publically accessible geographic information system database.

Continuing Obligations

The continuing obligations for this site are summarized below. Further details on actions required are found in the section Conditions.

- Groundwater contamination is present above ch. NR 140, Wis. Adm. Code enforcement standards.
- Residual soil contamination exists.
- The barrier system must be maintained over and surrounding contaminated soil, and the department must approve any changes to this barrier.
- If the land use is ever changed, additional environmental work must be completed.

BRRTS #0260000095, June 6, 2013

GIS Registry

This site will be listed on the Remediation and Redevelopment Program's internet accessible Geographic Information System (GIS) Registry, to provide notice of residual contamination and of continuing obligations.

WDNR approval prior to well construction or reconstruction is required for all sites shown on the GIS Registry, in accordance with s. NR 812.09(4) (w), Wis. Adm. Code. To obtain approval, complete and submit Form 3300-254 to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at http://dnr.wi.gov/topic/wells/documents/3300254.pdf or at the web address listed below for the GIS Registry.

All site information is on file at the Southeast Regional WDNR office, at 1155 Pilgrim Road, Plymouth WI 53073. This letter and file information, including the maintenance plan, will be included on the GIS Registry in a PDF attachment. To review the site on the GIS Registry web page, visit the RR Sites Map page at http://dnrmaps.wi.gov/imf/imf.jsp?site=brrts2.

Prohibited Activities

Certain activities are prohibited at this property because maintenance of the barrier system is intended to prevent contact with any remaining soil contamination, and to contain the spread of groundwater contamination. You or the current or future property owner is required to notify the WDNR before making a change in land use, in order to determine if further action is needed to maintain the protectiveness of the remedy employed. The following activities are prohibited on any portion of the property where pavement, soil cover, or the barrier system is required, as shown on the **attached map**, unless prior written approval has been obtained from the WDNR:

- Removal of the existing barrier;
- Replacement with another barrier;
- Excavating or grading of the land surface;
- Filling on covered or paved areas;
- Plowing for agricultural cultivation;
- Construction or placement of a building or other structure.
- Use of groundwater from the subsurface for human consumption (until standards are met).

Conditions

Compliance with the requirements of this letter is a responsibility to which the current and any subsequent property owners must adhere. WDNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter and the attached maintenance plans are met. If these requirements are not followed, the WDNR may take enforcement action under s. 292.11, Wis Stats. to ensure compliance with the specified requirements, limitations or other conditions related to the property.

Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present on this contaminated property, as shown on the **attached map**. If the property owner intends to construct a new well, or reconstruct an existing well, you'll need prior WDNR approval. Continued sampling of the monitoring of the wells is required.

BRRTS #0260000095, June 6, 2013

Cover or Barrier (s. 292.12 (2) (a), Wis. Stats.)

The pavement, landscaping, and barrier system that exists in the location shown on the **attached map** shall be maintained in compliance with the **attached maintenance plan** in order to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health.

A request may be made to modify or replace a cover or barrier. The replacement or modified cover or barrier must be protective of the revised use of the property, and must be approved in writing by the WDNR prior to implementation. The **attached maintenance plan and inspection log** are to be kept up-to-date and on-site. The current owner must submit the inspection log to the WDNR annually.

In addition, depending on site-specific conditions, construction over contaminated materials may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

Please send written notifications in accordance with the above requirements to:

Remediation and Redevelopment Program Assistant
Wisconsin Department of Natural Resources
P.O. Box 12436
Milwaukee, WI 53211

If you have any questions regarding this letter, please contact John Feeney at 920-892-8756, extension 3023.

Sincerely,

Frances M. Koonce

Frances Koonce, Sub Team Supervisor
Southeast Region Remediation & Redevelopment Program
Wisconsin Department of Natural Resources

Attachments:

- remaining groundwater contamination map
- remaining soil contamination map
- missing monitoring well location map
- extent of sheet pile barrier and cover map
- maintenance plan

cc: Natural Resource Technology
City of Sheboygan
SER File

GROUNDWATER ISOCONCENTRATION

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/17/13

DRAWING NO: 1313-8-B.3.b-Groundwater ISO

REFERENCE: SEE INFO BLOCK

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.3.b

10TH STREET

NEW YORK AVENUE

FORMER CAMPMARINA PROPERTY BOUNDARY

EXISTING BUILDING

PROPOSED BUILDING

PROPOSED BUILDING

RETAINING WALL

RETAINING WALL

RIPRAP

PZ-702	BEN	BTEX	NAPH	PAH
6/19/2012	<0.39	nd	0.03	0.10
12/12/2012	<0.41	nd	0.27	0.49

MW-706	BEN	BTEX	NAPH	PAH
6/19/2012	2,190	4,356	222	356
12/12/2012	3,600	4,788	37	205

MW-708	BEN	BTEX	NAPH	PAH
6/19/2012	<0.39	nd	0.039	0.605
12/12/2012	<0.41	nd	0.059	0.209

MW-707R	BEN	BTEX	NAPH	PAH
6/19/2012	1,540	4,689	266	371
12/12/2012	1,690	4,374	192	355

PZ-703	BEN	BTEX	NAPH	PAH
6/19/2012	726	1,509	106	112.9
12/12/2012	895	1,885	0.35	9.21

MW-701R	BEN	BTEX	NAPH	PAH
6/19/2012	2,640	3,063	355	570
12/12/2012	3,290	3,795	852	1,467

PZ-701	BEN	BTEX	NAPH	PAH
6/19/2012	<0.39	nd	0.029	0.160
12/12/2012	<0.41	nd	0.67	1.19

MW-705	BEN	BTEX	NAPH	PAH
6/26/2008	<0.14	nd	0.45	0.7

MW-709R	BEN	BTEX	NAPH	PAH
6/19/2012	<0.39	nd	0.01	0.027
12/12/2012	<0.41	nd	0.0085	0.037

MW-708 594.48
MW-706 585.16
PZ-702 588.27
MW-707R 582.90
PZ-703 583.19
MW-701R 582.94
PZ-701 582.98
MW-705 586.99
MW-709R 583.11
SG-703 577.36

BW-01 BW-02 BW-03 BW-04 BW-05 BW-06 BW-07 BW-08 BW-09 BW-10 BW-11 BW-12 BW-13 BW-14 BW-15 BW-16 BW-17 BW-18

1' WIDE CONC. WALL

CONCRETE

CONTAINMENT BARRIER

RECREATION AREA

JUNGLE GYM AREA

SHEBOYGAN RIVER FLOW

CAMPMARINA PROPERTY BOUNDARY

FENCE

CONCRETE

BOATHOUSE

BIOSPARGE SYSTEM ENCLOSURE

BOAT DOCK

BOAT ISLAND

SHED

SHEBOYGAN RIVER FLOW

584 WATER TABLE ELEVATION CONTOUR, FT. (DEC. 2012)

584 POTENTIOMETRIC SURFACE ELEVATION CONTOUR, FT. (DEC. 2012)

FLOW DIRECTION

MW-706 585.16 MONITORING WELL AND WATER TABLE ELEVATION, FT.

PZ-701 582.98 PIEZOMETER AND POTENTIOMETRIC ELEVATION, FT.

SG-703 577.36 STAFF GAUGE AND WATER TABLE ELEVATION, FT.

BW-01 BIOSPARGE WELL

RIPRAP

APPROXIMATE FORMER CAMPMARINA PROPERTY BOUNDARY

CONTAINMENT BARRIER

SANITARY/STORM MANHOLE

EXTENT OF GW IMPACT

SAMPLE ID	BENZ	BTEX	NAPH	PAHs
DATE SAMPLED	BENZENE	BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES µg/L	NAPHTHALENE µg/L	TOTAL POLYNUCLEAR AROMATIC HYDROCARBONS µg/L
	µg/L			

DATA QUALIFIER:

<2.0 : PARAMETER NOT DETECTED ABOVE THE LIMIT OF DETECTION INDICATED
na : ANALYSIS WAS NOT PERFORMED
nd : ANALYTE NOT DETECTED

NOTES:
1. DUPLICATE SAMPLES WERE COLLECTED DURING EACH SAMPLING EVENT. CONCENTRATIONS SHOWN REFLECT THE HIGHER CONCENTRATION BETWEEN WELL SAMPLES AND DUPLICATE SAMPLES.
2. BIOSPARGE SYSTEM BEGAN OPERATING ON 11/07/02.

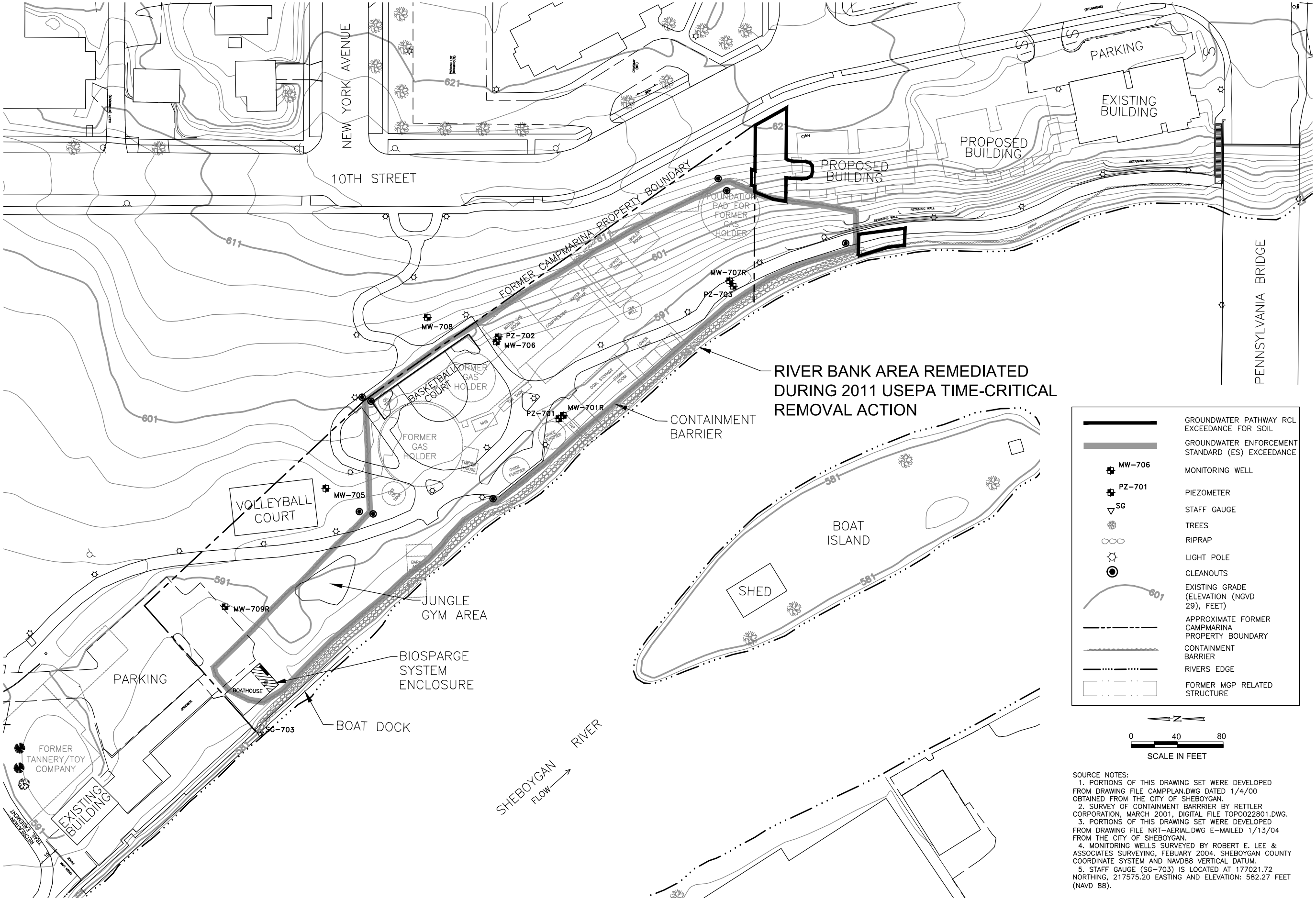
SOURCE NOTES:
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOPO022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NRT-AERIAL.DWG E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.

N

0 15 30 60

SCALE IN FEET

May 17, 2013 10:07am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
H:\ACAD\data\Projects\13\1313\8\1313-8-B.3.b-Groundwater ISO.dwg Layout1
IMAGES:
XREFS:



SOURCE NOTES:
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOP0022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NRT-AERIAL.DWG E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.
5. STAFF GAUGE (SG-703) IS LOCATED AT 177021.72 NORTHING, 217575.20 EASTING AND ELEVATION: 582.27 FEET (NAVD 88).

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/17/13
DRAWING NO: 1313-8-B.2.c-Remaining Soil		
REFERENCE: SEE INFO BLOCK		

PRE/POST-REMAINING SOIL CONTAMINATION

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.2.c

May 17, 2013 10:08am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
X:\ACADdata\Projects\1313\8\1313-8-B.2.c-Remaining Soil.dwg layout1
IMAGES:
XREFS:

Campmarina Former MGP
Maintenance Plan
May 2013

Property: Campmarina Former Manufactured Gas Plant
732 N. Water Street
714 N. Water Street
Sheboygan, Wisconsin 53081
Sheboygan County

Legal Description:

732 N. Water Street:
ORIGINAL PLAT ALL OF BLK 149 & THE VACATED SOUTHERLY 20' OF NEW YORK AVENUE ADJACENT TO BLOCK 149 CAMPMARINA PARK
TAX #59281107760

And

714 N. Water Street:
ORIGINAL PLAT ALL OF LOTS 1,2 & 3 BLK 133 AND THE NELY 40' OF LOTS 4 & 5 AND THE NELY 40' OF THE SELY 20' OF LOT 6 BLK 133, ALSO THE VAC N 20' OF NEW YORK AVE ADJ BLK 133 (CAMPMARINA PARK)
TAX #59281107756

And

Center Avenue ROW:
ORIGINAL PLAT THAT PRT OF VAC CENTER AVE LYING W OF WATER ST BETWEEN BLKS 149 & 156, ALSO THE NLY 10' OF BLK 156 DESC AS COM AT INTERSECTION OF S LN OF CENTER AVE WITH THE W LN OF WATER ST, THE P.O.B., TH S 13* E 10.25', TH 115.79'
TAX #59281108711

Geographic Coordinates (WTM83/91): 703,699 meters Easting, 366,900 meters Northing (NW 1/4 of the SW 1/4 of Sec 23, T15N, R23E),

Property Owner:
City of Sheboygan
828 Center Avenue
Sheboygan, WI 53081

WDNR File: Camp Marina Manufactured Gas Plant
732 N. Water Street
Sheboygan, Wisconsin 53081 (Figure B.1.a)
BRRTS# 02-60-000095; FID # 460134950

WDNR Contact
Mr. John Feeney, Hydrogeologist
Wisconsin Department of Natural Resources
1155 Pilgrim Parkway
Plymouth, WI 53073
(920) 892-8756 Ext. 3023
johnm.feeney@wisconsin.gov

Introduction

This Maintenance Plan has been prepared in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code for the above-referenced property ("Property") to be implemented as part of the case closure. The maintenance activities relate to the following engineering controls occupying the area over impacted soil and groundwater at the park or on the site (Figure D1):

- Vertical barrier wall
- Engineered geosynthetic cover underlying the earthen cover
- Shoreline riprap

A copy of the engineering as-builts for the engineering controls is attached.

A copy of this Plan is to be kept on file by: (1) the Wisconsin Department of Natural Resources (WDNR), Northeast Region; (2) the Property Owner, including future Property owners; and (3) the Property Manager, if any. The Plan shall be made available by the Property Owner to prospective purchasers, contractors, utilities and maintenance personnel, and any other public or private persons or entities authorized to perform work at the Property. Summary reports are on file with the WDNR and are available upon request (WDNR file reference BRRTS# 02-60-001016).

More site-specific information about this property may be found by consulting:

- The case file in the WDNR Northeast Region office;
- BRRTS on the Web (WDNR's internet based data base of contaminated sites): http://dnr.wi.gov/botw/SetUpBasicSearchForm.do;
- GIS Registry PDF file for further information on the nature and extent of contamination: http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts2; and
- The WDNR project manager for Sheboygan County.

Plan Purpose and Site Information

The purpose of this Plan is to document the responsibilities associated with the land use controls applicable to the Property and to identify how to properly manage residual impacted soil and groundwater under the earthen cover. Residual soil impacts are listed on Table 8.

The existing engineering controls contain the underlying residual soil and groundwater impacts. The earthen cover provides further protection from direct contact with underlying residual contaminants. The earthen cover and shoreline rip rap protects the existing engineering controls (geosynthetic cover and vertical barrier wall). The locations of these engineering controls and barriers are located at the park and shown on Figure D.1.a. Based on the current and future use of the property (as a recreational park), the engineering controls and barriers should function as intended at a level of effort similar to any other recreational park, unless disturbed.

Annual Inspection

The existing engineering controls contain the underlying residual soil and groundwater impacts. The earthen cover and the shoreline riprap (Figure D.1.a) will be inspected once a year for to verify the earthen cover and shoreline riprap are present and significant soil erosion has not occurred that may allow exposure to

underlying soils and groundwater. Typically, this annual inspection will be completed in the spring after all snow has melted.

The inspections will be performed by the property owner or designated representative. The inspector will walk the perimeter and interior of the park, looking for areas where soil has rills, eroded, or significantly settled that may result in ponding water. The inspector will stand at the water's edge to visually observe the presence-absence of shoreline riprap along the bank. Any area of the park where soils have eroded or are likely to erode or greater than 10 consecutive linear feet of shoreline riprap are not present, will be documented. A log of the inspections and associated repairs will be maintained by the property owner and is included as Exhibit A, Inspection Log. The log will include recommendations for necessary repairs of areas where erosion was observed. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be kept at the City of Sheboygan municipal offices and available for submittal or inspection by WDNR representatives upon their request.

Maintenance Activities

Repairs will be scheduled by the property owner as soon as practical if problems are noted during the annual inspection or at other times during the year if observed as part of the regular park maintenance activities (i.e., mowing). Repairs are typical of any other shoreline park and can include filling or resurfacing of erosional areas of the earthen cover or replacing shoreline riprap. If maintenance activities may expose the underlying soil or groundwater, the owner must inform maintenance workers of direct contact exposure hazards and ensure they have appropriate personal protective equipment. The owner must also sample any soil excavated from the site prior to off-site disposal to ascertain if contamination remains. The soil must be treated, stored, and disposed by the owner in accordance with applicable local, state, and federal law.

In the event the engineering controls are removed or replaced as a result of significant utility or construction activities at the park, the replacement controls must function in a manner equal to or exceeding the original controls to prevent direct contact with soil and groundwater, and groundwater migration to surface water. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless otherwise indicated by the WDNR or its successor.

The property owner, in order to maintain the integrity of the engineering controls, will maintain a copy of this Maintenance Plan at the City of Sheboygan Municipal Offices and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover or Cap

The following activities are prohibited on any portion of the park property where engineering controls are required as shown on the attached maps, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing engineering control; 2) replacement with another engineering control; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure. Any area of cap disturbance shall be restored in a manner consistent with the original cap condition. If disturbance cannot be avoided, activities that disturb the soil will not be conducted until approval is obtained from WDNR. Proper material management includes, but is not limited to:

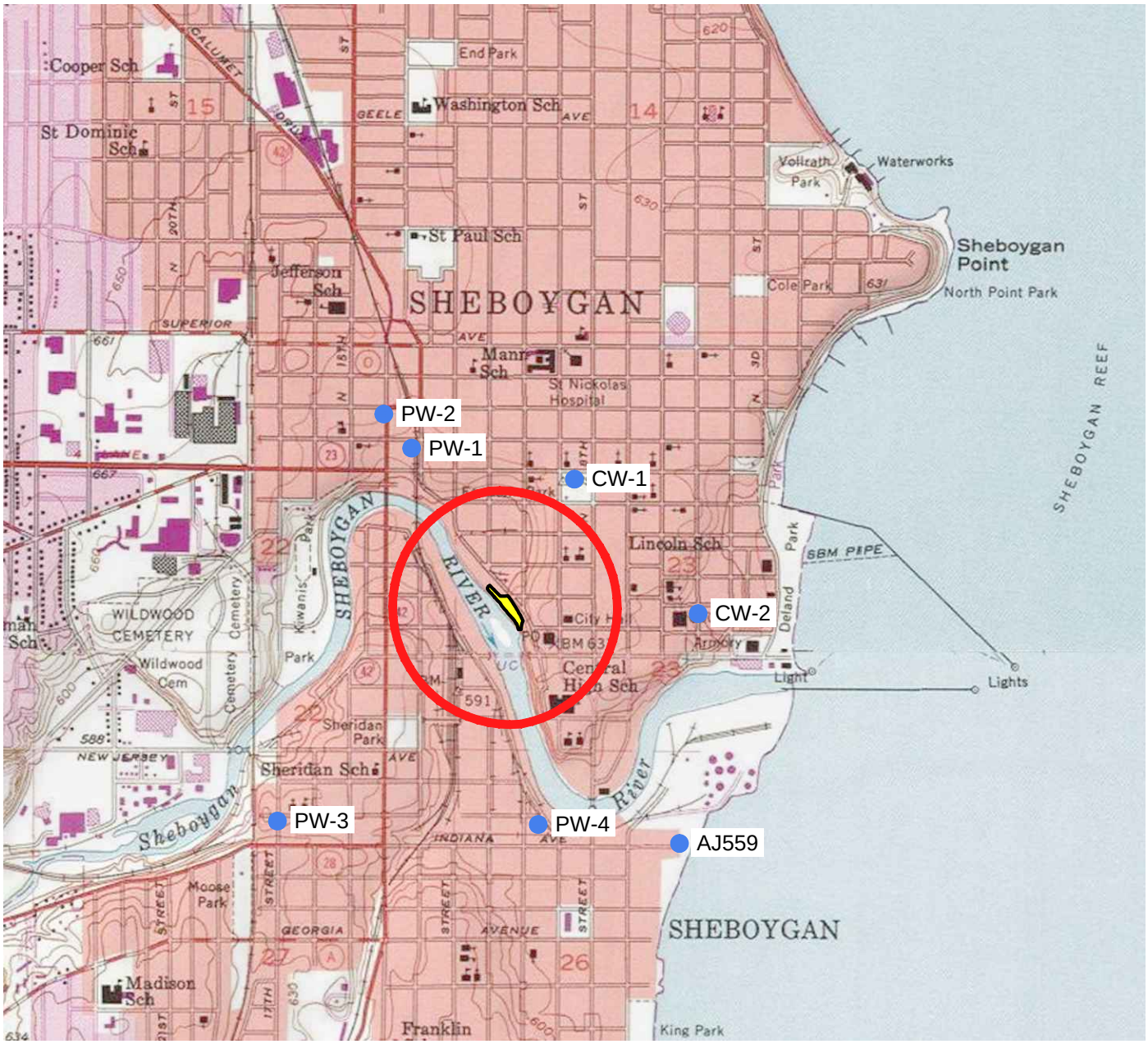
- Characterize, manage, and dispose impacted soil and groundwater in accordance with Wisconsin solid waste rules.

- Determine whether planned site improvements require WDNR approval. Site improvements include, but are not limited to, constructing or placing a building or other structure or landscaping which could be disruptive to the existing barriers.

Amendment or Withdrawal of Plan

This Plan can be amended or withdrawn by the Property Owner with the written approval of the WDNR.

Attachments: Figure B.1.a. - Location Map
Figure D.1.a- Areas Subject to Maintenance Plan
Figure D.1.b- Geosynthetic Cover System As-Built
Figure D.1.c- River Bank and Center Avenue ROW As-Built
Table A.4. - Pre and Post Remaining Soil Contamination
Exhibit A –Inspection Log Form



LOCATION MAP

NATURAL RESOURCE TECHNOLOGY

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

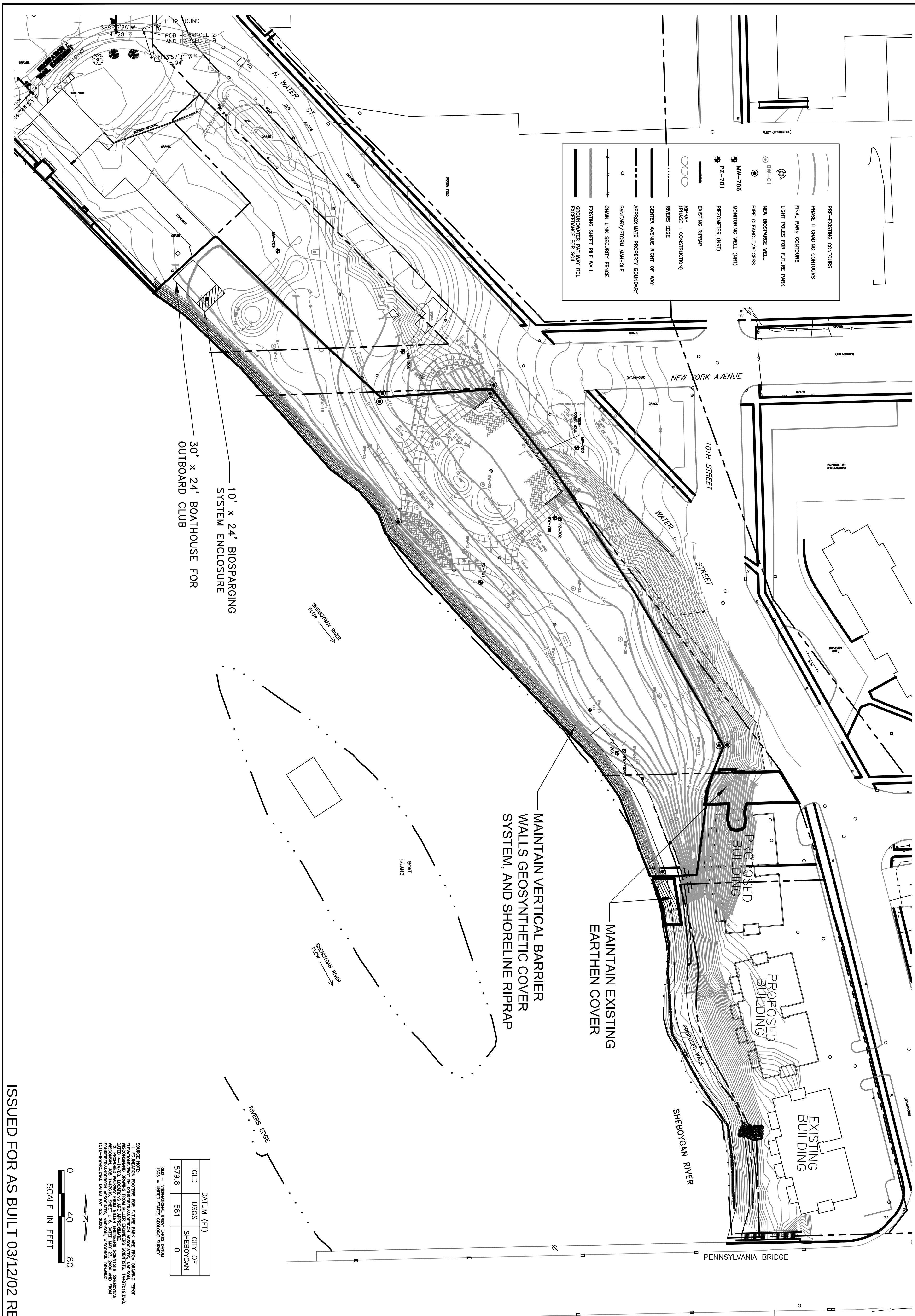
DRAWN: NWD DATE: 04/09/13 CHK'D: JJW DATE: 04/09/13 APP'D: JMK DATE: 05/03/13

PROJECT NO.
1313/8.0

DRAWING NO.
1313-8-B.1.a-LOCATION MAP

FIGURE NO.
B.1.a

May 03, 2013 1:06pm PLOTTED BY: ndraskovich SAVED BY: ndraskovich
Y:\ACAData\Projects\13\1313\8\1313-8-D.1.a-Maint Plan.dwg Layout1
IMAGES:
XREFS:



N. WATER ST.
NEW YORK AVENUE
10TH STREET
WATER STREET
PRE-EXISTING CONTOURS
PHASE II GRADING CONTOURS
FINAL PARK CONTOURS
LIGHT POLES FOR FUTURE PARK
NEW BIOSPARGE WELL
PIPE CLEANOUT/ACCESS
MONITORING WELL (NRT)
PIEZOMETER (NRT)
EXISTING RIPRAP
RIPRAP (PHASE II CONSTRUCTION)
RIVERS EDGE
CENTER AVENUE RIGHT-OF-WAY
APPROXIMATE PROPERTY BOUNDARY
SANITARY/STORM MANHOLE
CHAIN LINK SECURITY FENCE
EXISTING SHEET PILE WALL
GROUNDWATER PATHWAY RCL EXCEEDANCE FOR SOIL
10' x 24' BIOSPARGING SYSTEM ENCLOSURE
30' x 24' BOATHOUSE FOR OUTBOARD CLUB
SHEBOYGAN RIVER FLOW
BOAT ISLAND
RIVERS EDGE
MAINTAIN VERTICAL BARRIER WALLS GEOSYNTHETIC COVER SYSTEM, AND SHORELINE RIPRAP
MAINTAIN EXISTING EARTHEN COVER
PROPOSED BUILDING
PROPOSED BUILDING
EXISTING BUILDING
PROPOSED WALK
SHEBOYGAN RIVER
PENNSYLVANIA BRIDGE
DATUM (FT)
IGLD USGS CITY OF SHEBOYGAN
579.8 581 0
IGLD = INTERNATIONAL GREAT LAKES DATUM
USGS = UNITED STATES GEOLOGIC SURVEY
SCALE IN FEET
0 40 80
ISSUED FOR AS BUILT 03/12/02 REW

AREAS SUBJECT TO MAINTENANCE PLAN

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

DRAWN BY:	NWD	DATE:	04/09/13
CHECKED BY:	JJW	DATE:	04/09/13
APPROVED BY:	JMK	DATE:	05/03/13

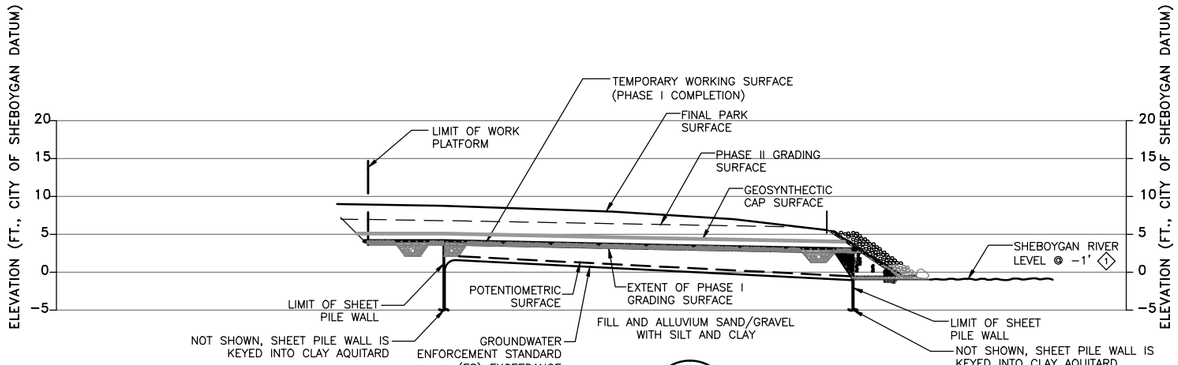
DRAWING NO: 1313-8-D.1.a-Maint Plan

REFERENCE: SEE INFO BLOCK

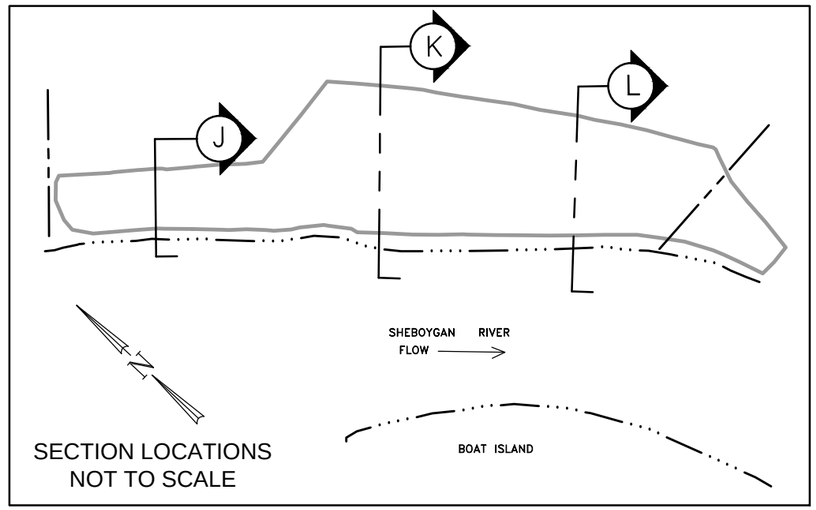
NATURAL RESOURCE TECHNOLOGY

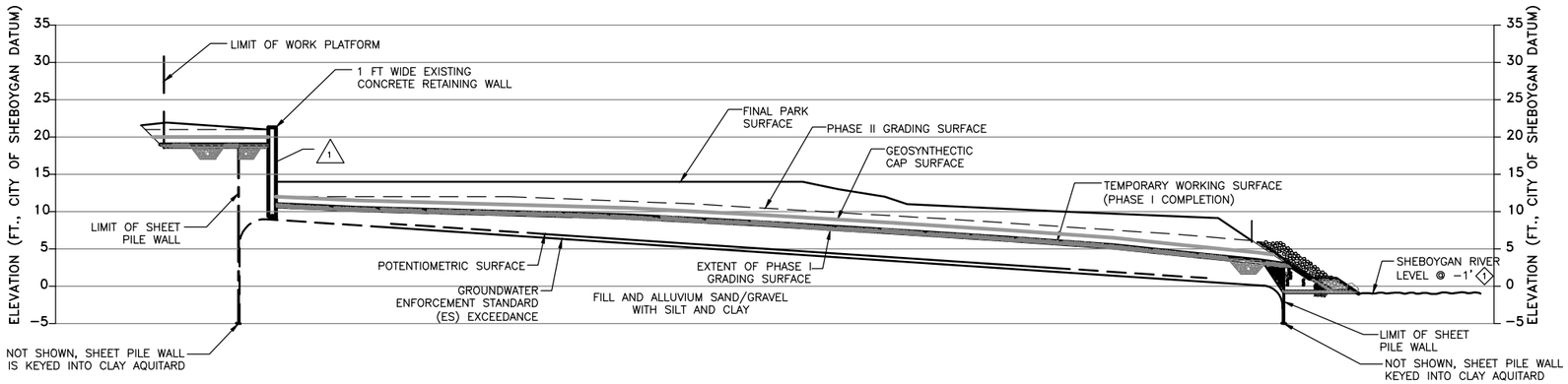
PROJECT NO. 1313/8.0

FIGURE NO. D.1.a

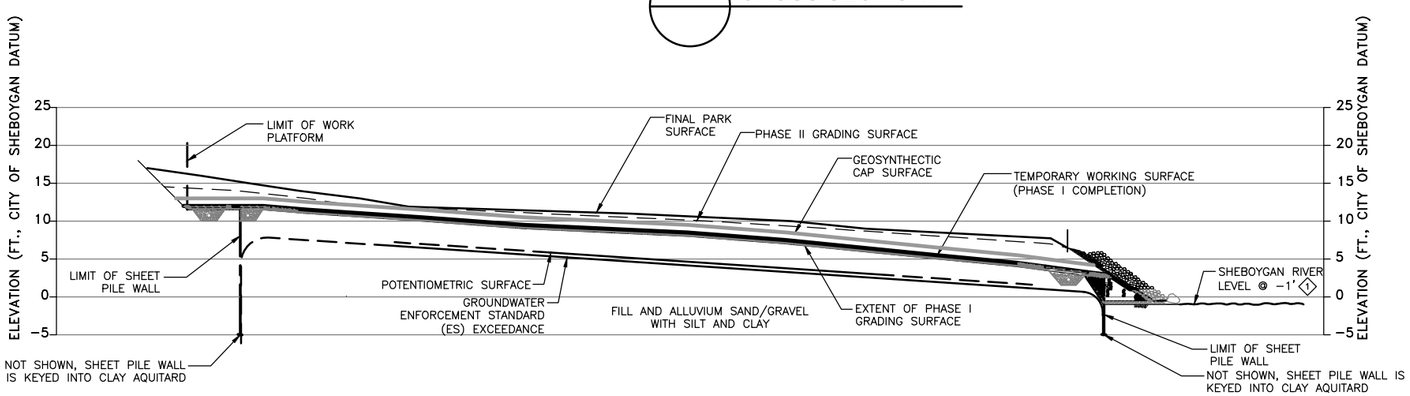


J CROSS SECTION J

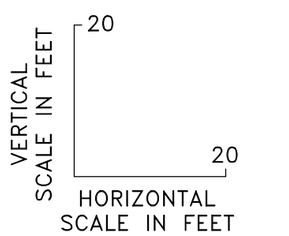




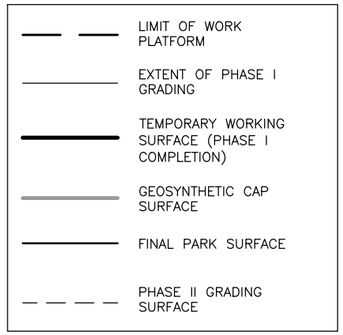
K CROSS SECTION K



L CROSS SECTION L



VERTICAL EXAGGERATION = 1



GENERAL CONTRACTOR NOTES: △

1. CONTRACTOR SHALL TAKE PRECAUTIONS NOT TO DAMAGE EXISTING CONCRETE RETAINING WALL DURING SITE ACTIVITIES.

AS BUILT NOTES: ◇

1. RIVER EDGE LOCATED AT −3FT. ELEVATION (CITY OF SHEBOYGAN DATUM) DURING PHASE I CONSTRUCTION.

DATUM (FT)		
IGLD	USGS	CITY OF SHEBOYGAN
579.8	581.0	0

DRAWN BY: NWD DATE: 04/09/13
CHECKED BY: JJW DATE: 04/09/13
APPROVED BY: JMK DATE: 05/03/13
DRAWING NO: 1313-8-D.1.b-Cover System AB
REFERENCE: SEE INFO BLOCK

GEOSYNTHETIC COVER SYSTEM AS-BUILT

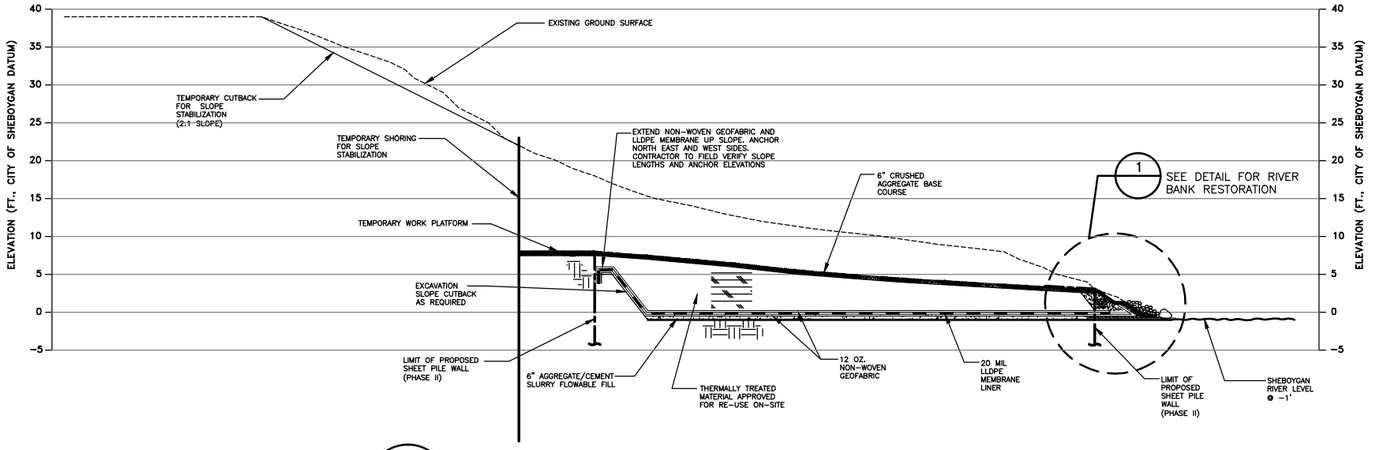
BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

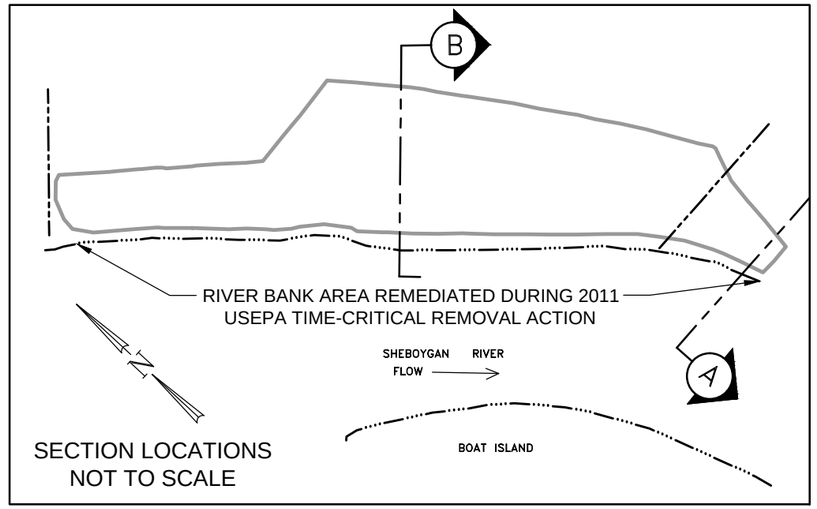
PROJECT NO.
1313/8.0

FIGURE NO.
D.1.b

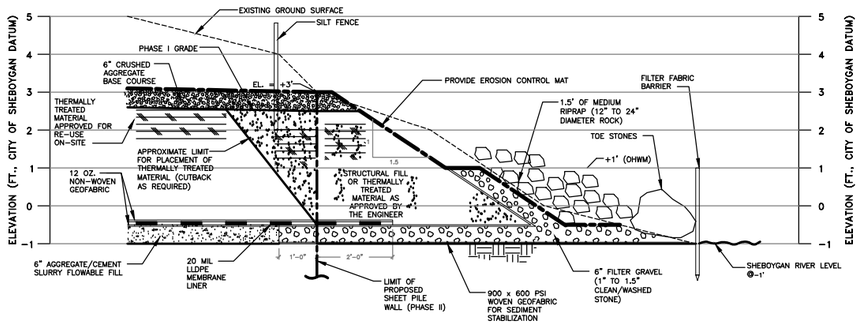
ISSUED FOR AS BUILT 03/12/02 REW



A PHASE I EXCAVATION RESTORATION, CENTER AVENUE RIGHT-OF-WAY



VERTICAL SCALE IN FEET: 10
HORIZONTAL SCALE IN FEET: 10
VERTICAL EXAGGERATION = 1



1 PHASE I RIVER BANK RESTORATION, CENTER AVENUE RIGHT-OF-WAY

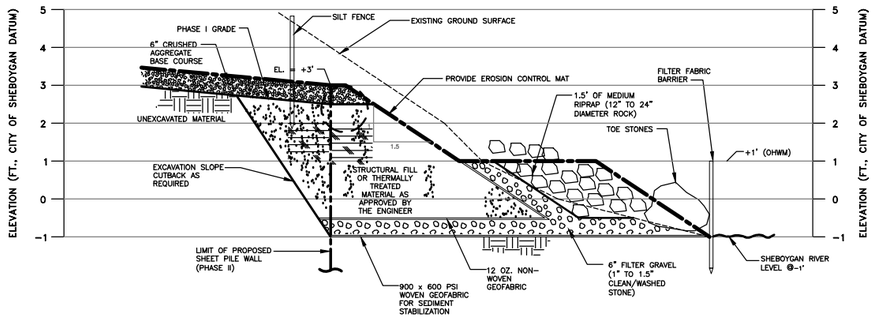
VERTICAL SCALE IN FEET: 2
HORIZONTAL SCALE IN FEET: 2
VERTICAL EXAGGERATION = 1

GENERAL CONTRACTOR NOTES:
1. CROSS SECTION A AND B ARE TYPICAL CROSS SECTIONS OF EXCAVATION AND BACKFILL ALONG THE SHEBOYGAN RIVER. PHASE I BACKFILL ELEVATIONS TO BE FIELD VERIFIED.
2. EXCAVATION LIMITS TO REMAIN SEVERAL INCHES ABOVE THE RIVER LEVEL TO MINIMIZE SEDIMENT DISTURBANCE. NO CONTRACTOR EQUIPMENT OR PERSONNEL ALLOWED DIRECTLY IN THE RIVER.
3. STRUCTURAL FILL AND THERMALLY TREATED MATERIAL APPROVED FOR RE-USE TO BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
4. ELEVATIONS ARE REFERENCED TO CITY OF SHEBOYGAN DATUM.
5. PROPOSED SHEET PILE WALL TO BE INSTALLED AS PART OF THE PHASE II ACTIVITIES.
6. SEE SHEET NO. C050 FOR PHASE I GRADING REQUIREMENTS.
7. EZ-2 AND EZ-3 INDICATE SHALLOW EXCAVATION ZONES TO REMOVE SURFACE MGP IMPACTS. EXCAVATIONS SHALL BE NO MORE THAN ONE FOOT DEEP UNLESS OTHERWISE INDICATED BY ENGINEER.
8. CONTRACTOR TO FIELD VERIFY LIMIT OF SHEET PILE WALL ALIGNMENT FOLLOWING RIVER BANK RESTORATION CURRENTLY SET AT 10' FROM RIVERS EDGE.
9. LIMITS FOR PLACEMENT OF FLOWABLE FILL AND LLDPE MEMBRANE IN CENTER AVENUE RIGHT-OF-WAY TO BE FIELD VERIFIED.
10. EXCAVATION LIMITS ALONG RIVER BANK ARE BASED ON SHEBOYGAN RIVER LEVEL OF -1 (CITY OF SHEBOYGAN DATUM) AND A MINIMUM SLOPE REQUIREMENT OF 1.5' HORIZONTAL TO 1' VERTICAL. CONTRACTOR TO FIELD VERIFY RIVER ELEVATIONS AND RIVER BANK RESTORATION SLOPES.
11. FILTER FABRIC BARRIER ALONG RIVERS EDGE TO REMAIN IN-PLACE THROUGH COMPLETION OF RIVER BANK EXCAVATION AND PLACEMENT OF RIPRAP.

LEGEND

	UNEXCAVATED/NATIVE MATERIAL
	CRUSHED AGGREGATE BASE COURSE
	AGGREGATE/CEMENT SLURRY FLOWABLE FILL
	THERMALLY TREATED MATERIAL
	STRUCTURAL FILL
	FILTER GRAVEL (1" TO 1.5" CLEAN/WASHED STONE)
	12 OZ. NON-WOVEN GEOFABRIC
	900 x 600 PSI WOVEN GEOFABRIC
	20 MIL LLDPE MEMBRANE LINER
	EXISTING GROUND SURFACE
	EXCAVATION LIMITS
	TEMPORARY WORKING SURFACE, PHASE I COMPLETION
EZ	EXCAVATION ZONE
GZ	GRADING ZONE
OHWM	ORDINARY HIGH WATER MARK (ESTIMATED)
MGP	MANUFACTURED GAS PLANT
MSL	MEAN SEA LEVEL
LLDPE	LINEAR LOW DENSITY POLYETHYLENE
PSI	POUNDS PER SQUARE INCH

RIVER BANK AREA REMEDIATED DURING 2011 EPA TIME-CRITICAL REMOVAL ACTION



B PHASE I RIVER BANK RESTORATION, CAMPMARINA

VERTICAL SCALE IN FEET: 2
HORIZONTAL SCALE IN FEET: 2
VERTICAL EXAGGERATION = 1

RIVER BANK AREA REMEDIATED DURING 2011 USEPA TIME-CRITICAL REMOVAL ACTION

ISSUED FOR AS BUILT 03/12/02 REW

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/03/13

DRAWING NO: 1313-8-B.1.c-Engineering Controls

REFERENCE: SEE INFO BLOCK

RIVER BANK AND CENTER AVENUE R.O.W. AS-BUILT

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
D.1.c

May 03, 2013 1:07pm PLOTTED BY: ndraskovich SAVED BY: ndraskovich
N:\ACAD\data\Projects\1313\8\1313-8-D.1.c-Engineering Controls AB.dwg Layout1
IMAGES:
XREFS:

Table A.4.-1 Pre-Remedial Soil Analyical Data Exceeding RCLs Table 1 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample Location	Sample Depth (ft)	Sample Date	Benzene mg/kg	Phenol mg/kg	Benzo(a)anthracene mg/kg	Benzo(b)fluoranthene mg/kg	Benzo(a)pyrene mg/kg	Chrysene mg/kg	Dibenzo(a,h)anthracene mg/kg	Indeno(1,2,3-cd)pyrene mg/kg	Naphthalene mg/kg
Groundwater Pathway RCLs			*0.005*	*2.30*	*NE*	*0.48*	*0.47*	*0.15*	*NE*	*NE*	*0.66*
Direct Contact RCLs			**1.49**	**18300**	**0.15**	**0.15**	**0.01**	**14.8**	**0.01**	**0.15**	**5.15**
Soil Samples from the Unsaturated Zone											
Monitoring Well Samples											
MW-701	2-4	7/18/1995			**2.3**	**0.95**	**1.7**	*1.6*	**0.18**	**1.3**	**77**
MW-702	2-4	7/19/1995			**1.1**	**0.66**	**1.2**	*0.74*	**0.15**	**0.75**	
MW-703	4-6	7/18/1995	*0.013*			*2.3*	*3.8*	*2.8*			*3*
MW-705	2-4	7/19/1995			**1.7**	**1**	**1.7**	*1.3*	**0.27**	**1.1**	
MW-707	2-4	7/19/1995		*83*	**0.33**	**0.18**	**0.43**	*0.23*	**0.063**	**0.33**	
Soil Boring Samples											
SB-701	2-4	7/19/1995			**0.91**	**0.49**	**0.74**	*0.68*	**0.093**	**0.5**	

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) NE - not established.

Table A.4.-2 Pre-Remedial Soil Analyical Data Exceeding RCLs Table 2 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sampling Location	Sampling Depth (feet below ground surface)	Sampling Date	mg/kg						
			Lead, total	Cyanide, total[3]	Cyanide, weak acid dissociable[4]	Benzene	Ethylbenzene	Toluene	Total Xylenes
Groundwater Pathway RCLs			*27*	*NE*	*4.04*	*0.005*	*1.57*	*1.11*	*3.94*
Direct Contact RCLs			**400**	**26.4**	**NE**	**1.49**	**7.47**	**818**	**258**
Soil Samples Collected from the Unsaturated Zone									
HA-701	2	07/29/98	*350*	**89**	*46*	*0.13*			
SS-701	0.5	07/29/98	**410**						
TP-701	2-8	07/29/98	**540**	**78**	*17*	*0.23*			
TP-702	2-7	07/29/98	*110*						
TP-703	4-6	07/29/98	*260*						
TP-705	5	07/29/98	*980*		*260*	*0.11*			
TP-706	1-8	07/29/98	**530**						
SB-717	11-11.5	07/29/98	*110*						
SB-718	13-13.5	07/29/98	*280*						
SB-719	11-11.5	07/29/98	*190*						
SB-720	10-10.5	07/29/98	*400*		*42*				
SB-726	11-12	12/09/98	*61*						
SB-732	12-14	12/10/98				*0.3*	*2.521*		
SB-733	10-12	12/09/98				*25.7*	*5.49*	*55.4*	*49.9*
SB-734	12-14	12/09/98				*0.309*			
SB-735	10-12	12/10/98				*0.172*	*7.07*	*1.15*	*13.46*
SB-736	6-8	12/08/98				*0.314*			
SB-739	6-8	12/09/98	*634*				*1.81*		*6.02*
PZ-702	14-16	12/09/98				*259*	*168*	*572*	*599*
PZ-703	16-18	12/08/98				*1.49*	*10.6*		

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) The groundwater pathway RCL has been established for free cyanide only.
4) The groundwater pathway RCL for free cyanide is used for dissociable cyanide.
5) NE - not established.

Table A.4.-3 Pre-Remedial Soil Analyical Data Exceeding RCLs Table 3 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sampling Location	Sampling Depth (feet)	Sampling Date	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) fluoranthene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Pyrene
Groundwater Pathway RCLs			*NE*	*0.47*	*0.48*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*54.5*
Direct Contact RCLs			**0.15**	**0.01**	**0.15**	**1.48**	**14.8**	**0.01**	**2290**	**2290**	**0.15**	**5.15**	**1720**
Soil Samples Collected from the Unsaturated Zone													
HA-701	2	07/29/98	**49**	**17**	**56**	**32**	**58**	**13**			**25**	**10**	*60*
SS-701	0.5	07/29/98	**7.2**	**4.5**	**7.3**	**7.1**	*8.2*	**1.9**			**3.2**		
TP-701	2-8	07/29/98	**25**	**19**	**56**	**36**	**34**	**11**			**23**	*4.3*	
	8-9	07/29/98		*0.56*	*0.57*		*0.46*						
TP-702	2-7	07/29/98	**40**	**36**	**27**	**28**	**39**	**10**	*110*	*21*	**18**	**13**	*71*
	7-10	07/29/98		*0.71*	*0.71*		*0.59*						
TP-703	4-6	07/29/98		*5.1*	*6.8*		*5.6*						
TP-704	3-4	07/29/98		**0.13**									
	7-8	07/29/98		*1*	*0.81*		*0.67*						
TP-705	5	07/29/98		*43*	*190*		*140*					*19*	
TP-706	1-8	07/29/98	**13**	**11**	**11**		*13*	**3.6**			**7.6**		
SB-717	11-11.5	07/29/98					*0.39*						
SB-718	13-13.5	07/29/98		*2.2*	*2.3*		*2.2*						
SB-719	11-11.5	07/29/98		*3.2*	*3.5*		*3.6*						
SB-720	10-10.5	07/29/98			*82*		*93*		*250*			*170*	*170*
Soil Samples Collected from the Saturated Zone													
SB-726	11-12	12/09/98		*0.622*	*2.65*		*4.86*						
SB-732	12-14***	12/10/98***										*0.699*	
	12-14***	12/10/98***										*1.3*	
SB-733	10-12	12/09/98		*14.8*	*9.03*		*15.1*					*309*	*179*
SB-734	12-14	12/09/98		*14.3*	*10.7*		*13.9*			*20.1*		*5.85*	*66.4*
SB-735	10-12	12/10/98		*16.2*	*9.4*		*14.3*			*54.5*		*268*	*123*
SB-736	6-8	12/08/98		*4.64*	*1.77*		*1.54*					*3.56*	
SB-739	6-8	12/09/98		*1.22*	*1.14*		*1.54*					*1.68*	
PZ-702	14-16	12/09/98		*47.8*	*44.5*		*60.2*					*1,400*	*729*
PZ-703	16-18	12/08/98										*10.7*	

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) *** - The laboratory surrogate recovery was below laboratory limits. The sample was re-extracted past hold time and analyzed. Both results are reported.
4) NE - not established.

Table A.4.-4 Post-Remedial Soil Analyical Data Exceeding RCLs Table 1 of 1.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

			Volatile Organic Compounds (mg/kg)													mg/kg	
Sample ID	Approximate Elevation (Feet, Mean Sea Level)	Date	Benzene	Toluene	Benzo(a)anthracene [c]	Benzo(a)pyrene [c]	Benzo(b)fluoranthene [c]	Benzo(k)fluoranthene [c]	Chrysene [c]	Dibenzo(a,h)anthracene [c]	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene [c]	Naphthalene	Pyrene	Total Lead	Total Cyanide[7]
Groundwater Pathway RCLs			*0.005*	*1.11*	*NE*	*0.47*	*0.48*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*54.5*	*27*	*NE*
Direct Contact RCLs			**1.49**	**818**	**0.15**	**0.01**	**0.15**	**1.48**	**14.8**	**0.015**	**2290**	**2290**	**0.15**	**5.15**	**1720**	**400**	**26.4**
Soil Samples Collected from the Unsaturated Zone																	
EZ-102[5]	580	12/15/2000	*0.3*		**1.5**	**3.27**	**2.92**	**1.89**	*1.76*	**0.563**			**1.42**			*29*	**33**
EZ-103[5]	580	12/15/2000	*0.577*		**40.5**	**41.4**	**50.5**	**31.4**	**39.4**	**8.32**		*31.5*	**20**	*4.65*	*65.4*	*363*	**579**
EZ-104[5]	580	12/15/2000	*0.045*		**2.33**	**2.32**	**3.08**	**2.19**	*2.3*	**0.556**			**1.42**				
EZ-201[5]	Excavated	11/27/2000	*0.066*													**423**	
EZ-202[5]	Excavated	11/27/2000														*192*	**250**
EZ-203[5]	Excavated	11/27/2000	*0.068*													**510**	**411**
EZ-205[5]	601	4/2/2001			**0.663**	**0.742**	**1.0**		*0.786*								**81**
EZ-206[5]	601	4/2/2001			**1.73**	**1.79**	**1.99**	**2.7**	*1.96*								**31**
EZ-301[5]	580	12/5/2000			**4.85**	**4.17**	**4.445**	**4.3**	*5.22*	**0.98**			**2.59**			*346*	**93**
EZ-302[5]	580	12/5/2000			**6.73**	**4.37**	**7.67**	**5.61**	*7.68*	**1.19**			**3.29**			*230*	**241**
EZ-401[6]	580	11/30/2000	*0.284*		**1.17**	**1.29**	**1.32**		*1.47*					*0.949*		**1,010**	
EZ-402[6]	580	11/30/2000	**5.49**	*3.57*	**173**	**157**	**168**	**105**	**153**	**25.6**	*431*	*48.4*	**86**	**10.9**	*358*	*60*	
EZ-403[6]	578	11/30/2000	*0.579*		**9.62**	**12.3**	**14.5**	**8.14**	*9.97*	**2.25**			**7.01**	*2.5*		*168*	**42**
EZ-404[6]	580	11/30/2000			**3.9**	**3.61**	**3.4**	**2.95**	*3.97*				**1.65**	*0.886*		*62*	
EZ-405[6]	580	11/30/2000	*0.371*		**18.7**	**18.2**	**25.9**	**14.6**	**19.4**	**3.4**			**8.07**	*3.23*		*229*	**113**

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) [c]= carcinogenic PAH, classified as B2 probable human carcinogen
4) NE = not established
5) Locations EZ-101 to EZ-302 were either excavated or are covered with geosynthetic and/or earthen cover.
6) Locations EZ-401 to EZ-405 in river bank area remediated during 2011 USEPA time-critical removal action.
7) The groundwater pathway RCL has been established for free cyanide only.

EXHIBIT A

INSPECTION LOG FORM

INSPECTION and MAINTENANCE LOG
Camp Marina Engineering Controls and Barriers

Inspection Date	Inspector	Was Erosion Observed?	Shoreline Riprap Present?	Recommendations	Has recommended maintenance from previous inspection been implemented?

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Case Closure – GIS Registry

SUBMIT AS UNBOUND PACKAGE IN THE ORDER SHOWN

Notice: Pursuant to ch. 292, Wis. Stats., and chs. NR 726 and 746, Wis. Adm. Code, this form is required to be completed for case closure requests. The closure of a case means that the Department of Natural Resources (DNR) has determined that no further response is required at that time based on the information that has been submitted to the DNR. All sections of this form must be completed unless otherwise directed by the Department. Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided. Any section of the form not relevant to the case closure request must be fully filled out or explained on a separate page and attached to the relevant section of this form. DNR will consider your request administratively complete when the form and all sections are completed, all attachments are included, and the applicable fees required under ch. NR 749, Wis. Adm. Code, are included, and sent to the proper destinations. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Site Information

BRRTS No.	Parcel ID No.		
02-60-000095	59281107760; 59281107756; 59281108711		
BRRTS Activity (Site) Name	**WTM Coordinates**		
	X	Y	
Camp Marina Manufactured Gas Plant	43.7524400	-87.7182000	
Street Address	**City**	**State**	**ZIP Code**
732 N Water Street	Sheboygan	WI	53081

Responsible Party (RP) Name			
Brian F. Bartoszek, PE			
Company Name			
Wisconsin Public Service Corporation			
Street Address	**City**	**State**	**ZIP Code**
700 N. Adams Street	Green Bay	WI	54307-9001
Phone Number	**Email**		
(920) 433-2643	bfbartoszek@integrysgroup.com		

☐ Check here if the RP is the owner of the source property.

Environmental Consultant Name			
Jennifer M. Kahler, PE			
Consulting Firm			
Natural Resource Technology, Inc.			
Street Address	**City**	**State**	**ZIP Code**
23713 W. Paul Road	Pewaukee	WI	53072
Phone Number	**Email**		
(262) 522-1227	jkahler@naturalrt.com		
Acres Ready For Use			
2.3	Voluntary Party Liability Exemption Site? ◉ Yes ○ No		

Fees and Mailing of Closure Request

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

1. **Send a copy of page one** of this form and the applicable ch. NR 749, Wis. Adm. Code, fee(s) to the DNR regional Environmental Program Associate at **http://dnr.wi.gov/topic/Brownfields/Contact.html**. Check all fees that apply:

   ☒ $750 Closure Fee

   ☒ $200 GIS Registry Fee for Soil

   ☒ $250 GIS Registry Fee for Groundwater Lost Well(s)

   Total Amount of Payment $ $1,200.00

2. **Send one paper copy and one e-copy on compact disk of the entire closure package** to the Regional Project Manager assigned to your site. Submit as *unbound, separate documents* in the order and with the titles prescribed by this form. For electronic document submittal requirements, see **http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf.**

Site Summary

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

1. General Site Information and Site History

A. **Site Location**: Describe the physical location of the site, both generally and specific to its immediate surroundings.
The site is currently within Worker's Water Street Park, located at 732 N. Water Street, in the NW ¼ of the SW 1/4, Sec. 23 Township 15 N, Range 23 E, Sheboygan, Wisconsin and consists of an area of approximately 2.3 acres (Figure B.1.a). The site is bounded by a private boat club facility on the north, former North Water Street on the east, a vacant lot on the south and the Sheboygan River on the west. Residential properties are located to the north, east, and south of the site. The former Camp Marina Manufactured Gas Plant (MGP) Site is divided into two operable units (OUs) – the Upland OU and the River OU. The USEPA and WPSC entered into an Administrative Settlement Agreement and Order of Consent for the Remedial Investigation and Feasibility Study for the WPSC Campmarina Site in Sheboygan, Wisconsin, Docket V-W-07-C-862 dated January 26, 2007.

B. **Prior and current site usage**: Specifically describe the current and historic occupancy and types of use.
A former manufactured gas plant occupied approximately 1.5 acres of the site from 1872 to 1929. MGP structures were removed between 1955 and 1966. In 1966, the site was used as a parking lot. In 1977, non-manufacturing companies owned the site until the City of Sheboygan purchased the property in 1985. The City operated the site as a recreational vehicle park until WPSC completed upland remediation work. Since 2001, the site has been a neighborhood park. Figure B.1.b presents a detailed site map of the property.

C. Describe how and when site contamination was discovered.
In August 1990, the City of Sheboygan was constructing footings for a boat dock and encountered a black oily substance in the subsurface near the shoreline of the Sheboygan River. Site investigation activities, including soil and groundwater sampling, were initiated in 1992 through 1998. Groundwater monitoring has been performed since completion of site remediation. Refer to the Upland Operable Unit – Technical Letter Report – Camp Marina Former MGP, Revision 0, dated April 25, 2007 for additional details.

D. Describe the type(s) and source(s) or suspected source(s) of contamination.
Constituents of concern (COCs) include benzene, toluene, ethylbenzene, and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), total and amenable cyanide, and lead. The sources of COCs are from the former MGP operations.

E. Other relevant site description information (or enter Not Applicable).
The upland portion of the site and Center Avenue Right-of-Way was remediated under a Wisconsin State Record of Decision (ROD). The remedial action was conducted in two phases between October 2000 and July 2001. Soil was excavated and off-site thermally treated or disposed. Thermally treated material was re-used, a vertical sheet pile barrier wall was installed around the site, and low permeability geosynthetic cover was installed prior to backfilling the site to pre-remediation grades. Refer to the Upland Operable Unit – Technical Letter Report – Camp Marina Former MGP, Revision 0, dated April 25, 2007, and Section 4 of this Closure Report for additional details.

F. List BRRTS activity site name and number for all other BRRTS activities at this property, including closed cases.
The site was initially listed on BRRTS in August 1990 as an ERP (BRRTS#02-60-000095). A second BRRTS case (BRRTS#06-60-554716) was initiated in December 2009 as a VPLE. Both BRRTS activities are open. No other BRRTS activities have been previously established for this property.

G. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to this site, and those impacted by contamination from this site.
BRRTS activities in the vicinity of the Camp Marina site are depicted on the RR Site Map Figure B.1.c.
BRRTS#02-60-261479, Kingsbury Brewery – LGU, is an open ERP site immediately adjacent to the Camp Marina Site. The Kingsbury Brewery site is upgradient of the Camp Marina site.
Note that the Sheboygan River and Harbor Superfund Site (EPA ID#WID980996367) footprint extends to the Sheboygan River, adjacent to the site.

H. **Current zoning** (e.g. industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).
The current zoning for this site and adjacent properties is UR-12, urban residential. The site is currently used as a recreational park. Residential properties are located adjacent to the site to the north, east and south.

2. General Site Conditions

A. Soil/Geology

i. Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.

Pre-remedial surficial soil consisted of 4 to 14 feet of miscellaneous clay, silt, sand and gravel fill material with varying amounts of ash/cinders, ceramic, glass, bricks, concrete and wood pieces. Underlying naturally occurring soil predominantly consists of silty to sandy clay alluvial deposits with discontinuous units of silt and clay. Organic soils and silt with organic material were also encountered, at or just below the water table, possibly representing former floodplain or lower-energy riverbed deposits. Alluvial deposits extend to approximately 18 to 23 feet bgs, followed by low-permeability, low to medium plasticity silty to sandy clay till (diamicton) deposits, which appear to be laterally continuous across the site.

ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.

Pre-remedial surficial soil consisted of 4 to 14 feet of miscellaneous clay, silt, sand and gravel fill material with varying amounts of ash/cinders, ceramic, glass, bricks, concrete and wood pieces.

iii. Depth to bedrock, bedrock type, and whether or not it was encountered during the investigation.

Bedrock was not encountered during soil sampling and remediation activities. In February 2011, two geotechnical borings were advanced along the shoreline at the site to evaluate subsurface conditions. Fractured limestone bedrock was encountered between elevation 542 and 547 feet (46 and 39 feet below ground surface, respectively). Based on regional bedrock maps, bedrock consists of Silurian and Ordovician dolomite, shale and sandstone, and Cambrian sandstone overlying Precambrian crystalline rock. The Silurian dolomite is generally undifferentiated, fine to medium-grained with sandy chert nodules, and is referred to as the Niagara Dolomite.

iv. Describe the nature and locations of current surface cover(s) across the site (e.g. natural vegetation, landscaped areas, gravel, hard surfaces, and buildings).

The post-remedial surface cover installation included placement of non-amended and amended thermally-treated material above a geosynthetic cover. A portion of the thermally-treated material was amended with compost for placement in landscaped areas of the park. Non-amended material was placed in areas where future park structures were to be constructed such as the river walk. A minimum of one foot of clean imported fill was placed above the thermally-treated material. The river bank was restored with additional filter gravel and riprap. All cleanouts and monitoring wells and piezometers were fitted with well covers and protective concrete collars.
The site is within Worker's Water Street Park with landscaped lawn, recreational areas, seating and sidewalks. An asphalt and concrete paved path extends from north to south across the site. The Park generally extends from the river on the west to 10th Street/North Water Street on the east, and from the extension of Center Avenue on the south to Wisconsin Avenue on the north. The Park footprint includes the former MGP property and abandoned right-of-ways for North Water Street, Center Avenue, and New York Avenue. The post-remedial surface cover is depicted in Figure B.1. b., Detailed Site Map.

B. Groundwater

i. **Discuss depth to groundwater and piezometric elevations**. Describe and explain depth variations, and whether free product affects measurement or water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.

Pre-remedial depth to shallow groundwater below Camp Marina ranges from approximately five to seven feet bgs in the upper alluvial unit and approximately 13 to 17 feet bgs in the piezometers in the lower silty/sandy clay till unit. Tar was encountered at or below the water table predominately in the southern and west-central portions of the site at depths ranging from 6 to 21 feet below the ground surface, but tar was not present in groundwater in quantities that would affect water level measurements and groundwater flow interpretations.

ii. Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.

Pre-remedial flow in the upper alluvial unit was generally to the west/southwest toward the Sheboygan River following ground surface contours. Flow within the lower silt/sandy clay till was also generally west/southwest toward the Sheboygan River, consistent with shallow groundwater flow. Post-remedial groundwater elevation data demonstrates the MGP-affected groundwater is contained within the engineered containment barrier (vertical barrier wall and geosynthetic cover system).

iii. Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.

Hydraulic conductivity values calculated during pre-remedial investigations ranged from 2.5x10-5 feet/minute (ft/min) to 2.5x10-4 ft/min in the shallow monitoring wells. The average linear groundwater flow velocity in shallow groundwater calculated during pre-remedial investigations ranged from approximately 3 to 63 feet per year. The higher velocity is representative of monitoring wells constructed in fill with higher hydraulic conductivity, and the lower velocity represents wells set in shallow native silt and clay till.

Horizontal groundwater gradients for shallow groundwater calculated from pre-remedial groundwater contours indicated gradients of approximately 0.046 feet/foot (ft/ft) to the west and 0.078 ft/ft to the southwest. The horizontal gradients present in deep groundwater at the site indicated gradients of approximately 0.074 ft/ft to the west/southwest (toward the Sheboygan River).

Vertical hydraulic gradients were calculated for the three well nests (MW-701/PZ-701, MW 706/PZ-702 and MW-707/PZ-703) utilizing pre-remedial groundwater elevation data and ranged from 0.024 to 0.46 ft/ft. Calculations based on the pre-remedial 1998 groundwater elevation data indicate an upward gradient of 0.019 ft/ft for the MW-706/PZ-702 nest and a downward gradient of 0.11 ft/ft for the MW-707/PZ-703 nest.

iv. Identify and describe locations/distance of potable and/or municipal Wells within 1200 feet of the site.

The City of Sheboygan obtains its municipal water from Lake Michigan. The site and surrounding area are serviced by municipal water, and no drinking water wells are present in the vicinity. Records obtained from the Wisconsin Geological and Natural History Survey (WGNHS), the WDNR and the City of Sheboygan indicated that two city wells (CW-1 and CW 2) and five private potable wells (PW-1 through PW-3 and AJ559) were identified outside the search radius (Figure B.1.a.).

3. Site Investigation Summary

A. General

i. Provide a brief summary of the site investigation history. Reference previous submittals by name and date. Describe site investigation activities undertaken since the last submittal for this project and attach the appropriate documentation in Attachment C, if not previously provided.

Soil investigations began in 1992 after a City of Sheboygan construction crew found a black oily substance in the subsurface near the shoreline of the Sheboygan River when constructing boat dock footings in August 1990. Soil investigation was performed in March 1992, July and August 1995, April 1996, and July, September and December 1998. Analytical results of data obtained during the 1992 and 1995 investigations showed the presence of coal tar and related contamination. The April 1996 investigation further defined the extent of coal tar on the west portion of the property. The final soil investigations in 1998 were completed south of the property, including the Center Avenue ROW and property planned for redevelopment with condominiums, to assess the potential presence of contamination related to the former MGP facility.

Detailed information regarding the soil investigation (including soil boring logs and monitoring well construction forms) is contained in the following documents:

- Simon Hydro-Search (HSI), June 1992. Phase I Environmental Investigation, Manufactured Gas Plant Site, Sheboygan, Wisconsin
- NRT, June 1996. Phase II Environmental Investigation Report, Former Manufactured Gas Plant Site, North Water Street, Sheboygan ,Wisconsin
- NRT, September 1998. Letter to Ms. Connie Lawniczak, WPSC, Regarding: Site Evaluation of Potential Manufactured Gas Plant (MGP) Impacted Soil, Vacant City of Sheboygan Property (Center Avenue Right-of-Way) adjacent to the Former Sheboygan MGP Site, Sheboygan, Wisconsin
- NRT, November 1998. Letter to Ms. Connie Lawniczak, WPSC, Regarding: Additional Soil Borings and Soil Laboratory Analyses, City of Sheboygan Property South of Center Avenue Right-of-Way, Sheboygan, Wisconsin
- NRT, December 1998, Feasibility Study Work Plan, Camp Marina Former Coal Gas Facility, Sheboygan, Wisconsin
- NRT, May 1999, Feasibility Study, Camp Marina Former Coal Gas Facility, Sheboygan, Wisconsin

ii. Identify whether contamination extends beyond the source property boundary, describe the off-site media (e.g., soil, groundwater, etc.) impacted, and the vertical and horizontal extent of off-site impacts.

A July 1998 investigation of Center Avenue ROW Area establish lateral and vertical extents of MGP-related soil contamination. MGP odors/coal tars were observed in soils in test pits and borings TP-701, TP-705, SB-720 and river sediment at HA-701, where surface impacts were previously observed, and extend to groundwater in this area, based on black staining and strong MGP odors observed in SB-720 and TP-705 at 10 and 11 feet bgs, respectively.
MGP-affected river sediments do not extend beneath the fill in the vicinity of Building No. 1. MGP-related constituents in river sediments diminish to non-detect levels directly below the river bank directly south of the Center Avenue ROW and no MGP-affected river sediments extend beneath the foundation for Building No. 2.
During investigations, discontinuous surficial to near surface (< two ft bgs) oxide box wastes were identified within the ROW property. The investigations delineated the vertical and lateral extents of MGP-related constituents in soil above groundwater in the vicinity of the Center Avenue ROW. Two shallow areas (< one ft), one area near TP-706 and the other area near SS-701, and one deeper area (up to 10 ft bgs at SB-720) of MGP-affected soil were identified within the ROW, near the footprint of proposed Building No.3, planned for the second phase of development. The MGP-related constituents did not extend to the property south of the ROW.
Tar and/or oil were also detected in soil samples on the northwest portion of Camp Marina, within 30 to 50 ft of the river bank. Sanborn maps show this was area was previously within the river, and shallow MGP-affected sediments may have been buried by fill in the late 1800s to early 1900s, when the property was built out into the river.
Two small pockets of blue stained soil and a seam of blue stained soil were removed, as discussed in the Phase I and II Remedy Documentation Report, Camp Marina Former Coal Gas Facility, Sheboygan, Wisconsin, submitted in February 2003.

iii. Identify any structural impediments to the completion of site investigation and/or remediation and whether these impediments are on the source property or off the source property. Identify the type and location of any structural impediment (e.g., structure) that also serves as the performance standard barrier for protection of the direct contact or the groundwater pathway.

The building wall of a brewery building was encountered during remediation and was left in place. The barrier wall and geosynthetic cover system were designed to encompass the wall. Additionally, utilities within Water Street ROW limited investigation along the ROW.

B. Soil

i. Describe degree and extent of **soil contamination** at and from this site. Relate this to known or suspected sources and known or potential receptors/migration pathways.

Phase I investigation (1991-1992) detected PAHs in surface soil at very low levels in two locations, potentially from use of the site for RV parking. Subsurface soil contamination related to coal tar and petroleum or fuel oil were identified near the former gas holders and tar tanks.
The Phase II investigation (1995) confirmed MGP-related soil contamination, above the water table, was limited in extent and concentration. No unsaturated source area contributing to groundwater contamination was identified. Tar was encountered at or below the water table predominately in the southern and west-central portions of the site at depths ranging from 6 to 21 feet bgs.
Unsaturated soil samples were collected from six soil borings in April 1996 for analysis of total organic carbon (TOC), total solids and toxicity characteristic leachate procedure (TCLP) benzene. None of the samples analyzed were identified as characteristically hazardous for benzene. The borings were also conducted to further assess the extent of tar on the south portion of the property.
The investigations showed MGP-related contamination of the unsaturated soil was localized to two areas in the central portion of Camp Marina. BTEX compounds were not detected in significant quantities in soil samples collected from the unsaturated zone within the property boundary except for an area near TP-106 and TP-109. PAH concentrations were detected in unsaturated soil samples collected on the property.
Cyanide was not detected in significant quantities in unsaturated soil samples collected within the property boundary and ranged from non-detectable to 9.5 mg/kg (at 1.5 feet bgs at TP-110).
The majority of MGP-related soil contamination was found below the water table, extending approximately 21 feet bgs. BTEX and PAH levels were present generally in saturated soils where tar and/or oil were identified at or below the water table from the west-central and southern portions of Camp Marina.

ii. Describe the level and types of **soil contaminants** found in the upper four feet of the soil column.

No residual impacts remain in the upper four feet of the soil column. Protection of human health from direct contact with contaminated soil and from soil contaminant migration to groundwater have been addressed as a result of contaminated soil excavation, thermal treatment, backfilling, placement of a geosynthetic cover, and additional soil covering during remedial activities performed to date. Figures D.1.b. and D.1.c. illustrate the protective engineering controls and earthen cover as-built construction.

iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site: for example, a Residual Contaminant Level (RCL) , a Site-Specific Residual Contaminant Level (SSRCL), or a Performance Standard as determined under ss NR 720.09, 720.11 and 720.19, Wis. Adm. Code. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/information in Attachment C.

Analytical results for soil samples were compared to the Wisconsin Generic Soil Residual Contaminant Levels (RCLs) from the current Wisconsin Administrative Code (W.A.C.) Chapter NR720 and Wisconsin Department of Natural Resources publication number RR-519-97. The land use classification for this site is Residential.

C. Groundwater

i. Describe degree and extent of groundwater contamination at or from this site. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.

Groundwater impacts are confined to the area within the vertical barrier wall and beneath the geosynthetic cover, both which provide hydraulic containment, and pose no threat to water supply wells or building foundation drain systems. Surface water and sediment contamination has been addressed through a separate removal action with the USEPA. WPSC performed sediment remediation in 2011 followed by a USEPA Great Lakes National Program Office sediment remediation in 2012.

ii. Describe the presence of free product at the site, including the thickness, depth, and locations.

NRT has periodically observed droplets of dense non-aqueous phase liquid which are not a measurable thickness in monitoring well MW-706, located within the barrier wall.

D. Vapor

i. Describe how the vapor migration pathway was assessed, including locations where vapor or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.

The soil vapor pathway was not assessed. The vertical barrier wall and geosynthetic cover would contain any vapor that may be off-gassing from impacted groundwater within the containment system and passively vents to a single stack in the biosparge system enclosure structure. This vent stack is connected to the vapor collection system beneath the geomembrane. Air samples collected from the sump vent stack showed no detectable levels of BTEX and no measurable PID readings.

ii. Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).

Not applicable – see response above.

E. Surface Water and Sediment

i. Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.

Surface water and sediment contamination is addressed through a separate removal action with the USEPA. WPSC performed sediment remediation in 2011 followed by a USEPA Great Lakes National Program Office sediment remediation in 2012.

ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded.

Surface water and sediment contamination is addressed through a separate removal action with the USEPA. WPSC performed sediment remediation in 2011 followed by a USEPA Great Lakes National Program Office sediment remediation in 2012.

4. Remedial Actions Implemented and Residual Levels at Closure

A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.

Remedial action in the Upland area of the site was performed in two phases in accordance with the January 2001, Wisconsin Department of Natural Resources Record of Decision. Phase I was performed In October 2000 through January 2001. Phase II was performed in December 2000 through July 2001. Remedial activities included decommissioning former MGP structures, eliminating potential migration pathways by capping former MGP pipes, excavating and thermally treating soil in the unsaturated zone of the property and into Center Avenue right-of-way, backfilling with a combination of low permeability flowable fill, geosynthetic materials, and thermally-treated soil to provide an initial vapor barrier over phase separated MGP residuals that remain in the saturated zones. A vertical barrier, sheet pile wall was installed to encompass the property and a portion of the right-of-way. The vertical barrier was installed into the clay aquitard (approximately 20-30 feet below ground surface). In addition, a multi-layer geosynthetic cover was installed over the property, as part of the containment system. As a secondary measure, a low flow biosparge system was installed within the containment system. After operating for over 10 years, the biosparge system operation was discontinued in March 2013, as approved by WDNR. Remedial actions are documented in the Phase I and II Remedy Documentation Report, Camp Marina Former Coal Gas Facility, Sheboygan, Wisconsin, submitted in February 2003 and in the Upland Technical Letter- Former Camp Marina MGP, submitted April 2007. No other remedial actions have been undertaken to address the Upland OU since submittal of these documents.

B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code.

No immediate or interim actions were necessary due to completion of the upland remedial actions.

C. Describe the *active* remedial actions taken at the site, including: type of remedial system(s) used for each media impacted; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.

Remedial actions are documented in Phase I and II Remedy Documentation Report, Camp Marina Former Coal Gas Facility, Sheboygan, Wisconsin, submitted in February 2003 and in Upland Technical Letter- Former Camp Marina MGP, submitted April 2007.

Approximately 10,500 tons of soil were excavated and thermally treated and 9,700 tons of debris was disposed at the landfill to address contaminated soil and the groundwater pathway. Confirmation soil samples were collected to document remaining soil quality and confirm remaining residuals are within the containment system.

Thermally treated soil was tested prior to re-use on site. Based on the arithmetic mean of all pre- and post-treatment soil results, the mass of BTEX and PAHs removed by treatment was approximately 108 and 4,815 pounds, respectively.

A vertical sheet pile barrier system (Waterloo® Sheet Pile System) was installed around the site into clay, to address contaminated soil below the groundwater table and contain contaminated groundwater (see Appendix C8 of the Technical Letter). A multi-layer geosynthetic cover system was installed to address potential soil vapor and remove direct contact soil pathways.

A low flow biosparge system was installed as a supplement to the primary remedy of containment. The system operated from November 7, 2002 to March 13, 2013. Groundwater monitoring is performed to verify contaminated groundwater is contained within the vertical barrier wall system as documented in Groundwater Quality Update Reports, submitted to the WDNR.

D. Provide a discussion of the nature, degree and extent of residual contamination that will remain at the site or on off-site affected properties after case closure.

Contaminated soil (BTEX and PAHs) remains above and below the groundwater table within the vertical barrier wall system at concentrations above the Chapter NR720 Wisconsin Administrative Code standards for soil. Groundwater within the vertical barrier wall system is above Chapter NR140, Wisconsin Administrative Code Standards. The areas of exceedances are the former property and the Center Avenue right-of-way. Two small areas of blue stained soil were identified along the former Water Street and removed as part of Phase I site remediation grading operations. Additional soil probing was performed to evaluate the presence of additional stained soil. An additional seam of blue stained soil was encountered and removed as part of the City's utility work. Blue stained soil was removed to a visual cleanup standard. Future construction activities along the former Water Street may encounter unidentified isolated pockets of blue soil.

E. Describe the remaining soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds the ch. NR720, Wis. Adm. Code, standard(s) for direct contact.

Residual soil impacts exceeding the direct contact RCLs are located below the geosynthetic cover system within the area of the vertical barrier wall or are below an earthen cover.

F. Describe the remaining soil contamination in the vadose zone that attains or exceeds the soil standard(s) for the groundwater pathway.

Contaminated soil (BTEX and PAHs) remains in the vadose zone within the vertical barrier wall system and beneath the geosynthetic cover system at concentrations above the groundwater pathway RCL.

G. Describe how the residual contamination will be addressed, including but not limited to details concerning: covers, engineering controls or other barrier features; use of natural attenuation of groundwater; and vapor mitigation systems or measures.

Residual contamination is addressed through maintaining the geosynthetic cover and vertical barrier wall system. Additionally, the earthen cover in the Center Avenue ROW serves as a barrier to direct contact with underlying soil, and the river bank riprap is an a secondary engineering control that benefits the long-term integrity of the vertical barrier wall system. Maintaining the current land use (recreational park), engineering controls, and earthen cover will restrict activities that may threaten the integrity of the remedial components.

H. If using natural attenuation as a groundwater remedy, describe how the data collected supports the conclusion that natural attenuation is effective in reducing contaminant mass and concentration, (e.g. stable or receding groundwater plume).

The primary remedy for groundwater is containment rather than natural attenuation. However, groundwater contaminant concentration trends have decreased over time and there is evidence of increasing increased biological activity (i.e., increasing methane and decreasing sulfate, nitrate), which indicate natural attenuation is occurring. Groundwater quality trends have been reported in annual Groundwater Quality Update Reports.

I. Identify how all exposure pathways were removed and/or adequately addressed by immediate and/or remedial action(s) described above in paragraphs, B, C, D, E and F.

Migration to groundwater and direct contact soil pathways have been addressed through soil excavation, treatment, and the geosynthetic cover system. Groundwater ingestion and seepage to surface water pathways have been addressed by soil excavation, treatment, and geosynthetic cover and vertical barrier wall system. The geosynthetic cover system also provides as a soil gas vapor barrier, however, there are no buildings on site. Air samples collected from the sump vent stack showed no detectable levels of BTEX and no measurable PID readings.
Listing the site on the GIS Registry, soil maintenance plan, and maintaining the current land use (recreational park) will further ensure the integrity of the remedial components.

J. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain.

The low flow biosparge system wells, sump and pipes will remain in place. These components are below the geosynthetic cover system and cannot be removed without harm to the existing engineering controls (i.e., geosythetic cover).

K. Identify the need for a ch. NR 140, Wis. Adm. Code, groundwater Preventive Action Limit (PAL) or Enforcement Standard (ES) exemption, and identify the affected monitoring points and applicable substances.

The ch. NR140, W.A.C. groundwater Preventive Action Limit (PAL) and Enforcement Standard (ES) exemption is not needed for this site.

L. If a DNR action level for vapor intrusion was exceeded (for indoor air, sub slab, or both) describe where it was exceeded and how the pathway was addressed.

The vapor intrusion pathway was not evaluated for the site but has been mitigated through the installation of the vertical barrier wall, geosynthetic cover system, and maintaining the current land use as a recreational park.

M. Describe the surface water and/or sediment contaminant concentrations and areas after remediation. If a DNR action level was exceeded, describe where it was exceeded and how the pathway was addressed.

Surface water and sediment contamination has been addressed through a separate removal action with the USEPA. WPSC performed sediment remediation in 2011 followed by a USEPA Great Lakes National Program Office sediment remediation in 2012.

5. Continuing Obligations: Situations where a maintenance plan(s) and inclusion on DNR's GIS Registry are required.

Directions: Check all that apply to this case closure request:

	This scenario Applies to this Case Closure		Case Closure Scenario: Maintenance Plans and GIS Registry	Maintenance Plan (s) Required in Attachment D	GIS Registry Listing
	A. On-Site	B. Off-Site			
i.	☒	☐	Engineering Control/Barrier for Direct Contact	✓	✓
ii.	☒	☐	Engineering Control/Barrier for Groundwater Infiltration	✓	✓
iii.	☒	☐	Vapor Mitigation - post closure passive system	✓	✓
iv.	☐	☐	Vapor Mitigation - post closure active system	✓	✓
v.	☐	☐	None of the above scenarios apply to this case closure	NA	NA

6. Continuing Obligations: Situations where inclusion on DNR's GIS Registry is required.

Directions: Check all that apply to this case closure request:

	This scenario Applies to this Case Closure		Case Closure Scenario: GIS Registry Only	GIS Registry Listing
	A. On-Site	B. Off-Site		
i.	☒	☐	Residual soil contamination exceeds ch. NR 720 generic or site-specific RCLs	✓
ii.	☒	☐	Sites with groundwater contamination equal to or greater than the ch. NR 140, enforcement standards (ES)	✓
iii.	☐	☐	Monitoring wells: lost, transferred or remaining in use	✓
iv.	☐	☐	Structural Impediment (not as a performance standard)	✓
v.	☐	☐	Residual soil contamination remaining at ch. NR 720 Industrial Use levels	✓
vi.	☒	☐	Vapor intrusion may be future, post-closure issue if building use or land use changes	✓
vii.	☐	☐	None of the above scenarios apply to this case closure	NA

7. Underground Storage Tanks

A. Were any tanks, piping or other associated tank system components removed as part of the investigation or remedial action? ◯ Yes ◉ No

B. Do any upgraded tanks meeting the requirements of ch. SPS 310, Wis. Adm. Code, exist on the property? ◯ Yes ◉ No

C. If the answer to question 7b is yes, is the leak detection system currently being monitored? ◯ Yes ◯ No

Data Tables (Attachment A)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form.All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

General directions for Data Tables:

- Use bold and italics font on information of importance on tables and figures. Use b**old font** for ch. NR 140, Wis. Adm. Code, groundwater enforcement standard (ES) attainments or exceedances, and *italicized font* for ch. NR 140, Wis. Adm. Code, groundwater preventive action limit (PAL) standard attainments or exceedances.
- Do not use shading or highlighting on the analytical tables.
- Include on Data Tables the level of detection for results which are below the detection level (i.e. do not just list as no detect (ND)).
- Include the units on data tables.
- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (2)(g)3, Wis. Adm. Code, in the format required in s. NR 716.15(2)(h)3, Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Pre-remedial Soil Analytical Table, etc).
- For required documents, each table (e.g., A.1., A.2., etc.,) should be a separate PDF.

A. Data Tables

A.1. **Groundwater Analytical Table(s):** Table(s) showing the analytical results and collection dates, for all groundwater sampling points e.g. monitoring wells, temporary wells, sumps, extraction wells, any potable wells and any other wells, extraction wells and any potable wells for which samples have been collected.

A.2. **Pre-remedial Soil Analytical Table(s): T**able(s) showing the soil analytical results and collection dates - prior to conducting the interim and/or remedial action. Indicate if sample was collected above or below the all-time low water table (unsaturated verses saturated).

A.3. **Post-remedial Soil Analytical Table(s):** Table(s) showing the post-remedial action soil analytical results and collection dates. Indicate if sample was collected above or below the all-time low water table (unsaturated verses saturated).

A.4. **Pre and Post Remaining Soil Contamination Soil Analytical Table(s):** Table(s) showing only the pre and post remedial action soil analytical results that exceed a Residual Contaminate Level (RCL) or a Site-Specific Residual Level (SSRCL).

A.5. **Vapor Analytical Table**: Table(s) showing type(s) of samples, sample collection methods, analytical method, sample

results, date of sample collection, time period for sample collection, method and results of leak detection, and date, method and results of communication testing.

A.6. **Other Media of Concern (e.g., sediment or surface water)**: Table(s) showing type(s) of sample, sample collection method, analytical method, sample results, date of sample collection, time period for sample collection, method and results sampling.

A.7. **Water Level Elevations:** Table(s) showing all water level elevation measurements and dates from all monitoring wells. If present, free product should be noted on the table.

A.8. **Other:** This attachment should include: 1) any available tabulated natural attenuation data; 2) data tables pertaining to engineered remedial systems that document operational history, demonstrate system performance and effectiveness, and display emissions data; and (3) any other data tables relevant to case closure not otherwise noted above. If this section is not applicable, please explain the reasons why.

Maps and Figures (Attachment B)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

General Directions for all Maps and Figures:

- If any map or figure is not relevant to the case closure request, you must fully explain the reason(s) why and attach that explanation (properly labeled with the map/ figure title) in Attachment B.
- Provide on paper no larger than 11 x 17 inches, unless otherwise directed by the Department. Maps and figures may be submitted in a larger electronic size than 11x17 inches, in a portable document format (pdf) readable by the Adobe Acrobat Reader. However, those larger-size documents must be legible when printed.
- Prepare visual aids, including maps, plans, drawings, fence diagrams, tables and photographs according to the applicable portions of ss. NR 716.15(2)(h)1 and 726.05(3)(a)4.d, Wis Adm. Code.
- Do not use shading or highlights on any of the analytical tables.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.,) should be a separate PDF.

B.1. Location Maps

B.1.a. **Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all impacted and/or adjacent parcels. If groundwater standards are exceeded, include the location of all potable wells, including municipal wells, within 1200 feet of the area of contamination.

B.1.b. **Detailed Site Map:** A map that shows all relevant features (buildings, roads, current ground surface cover, individual property boundaries for on-site and applicable off-site properties, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under ss. NR 720.09, 720.11 and 720.19, Wis. Adm. Code.

B.1.c. **RR Site Map:** From RR Sites Map (http://dnrmaps.wi.gov/imf/imf.jsp?site=brrts2) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

B.2. Soil Figures

B.2.a. **Pre-remedial Soil Contamination:** Figure(s) showing the sample location of all pre-remedial, unsaturated contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeded a Residual Contaminant Level (RCL) or a Site-Specific Residual Contaminant Level (SSRCL) as determined under ss. NR 720.09, 720.11 and 720.19, Wis. Adm. Code.

B.2.b. **Post-remedial Soil Contamination :** Figure(s) showing the sample location of all post-remedial, unsaturated contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site-Specific Residual Contaminant Level (SSRCL) as determined under ss. NR 720.09, 720.11 and 720.19, Wis. Adm. Code. A separate contour line should be used to indicate the extent of residual direct contact exceedances.

B.2.c. **Pre/Post Remaining Soil Contamination:** Figure(s) showing the only location of all pre and post remedial residual soil sample location(s) where unsaturated contaminated soil remains after remediation and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminate Level (RCL) or a Site-Specific Residual Level (SSRCL) as determined under ss. NR 720.09, 720.11 and 720.19, Wis. Admin. Code. A separate contour line should be used to indicate the extent of residual direct contact exceedances.

B.3. Groundwater Figures

B.3.a. **Geologic Cross-Section Figure(s):** One or more cross-section diagrams showing soil types and correlations across the site, water table and piezometric elevations, and locations and elevations of geologic rock units, if encountered. Display on one or more figures all of the following:

- Source location(s) and vertical extent of residual soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).
- Source location(s) and lateral and vertical extent if groundwater contamination exceeds a ch. NR 140 Enforcement Standard (ES)
- Surface features, including buildings and basements, and show surface elevation changes.
- Any areas of active remediation within the cross section path, such as excavations or treatment zones.
- Include a map displaying the cross-section location(s), if they are not displayed on the Detailed Site Map (Map B.1b)

B.3.b. **Groundwater Isoconcentration:** Figure(s) showing the horizontal extent of the post-remedial groundwater contamination exceeding a ch. NR 140, Wis. Adm. Code, Preventive Action Limit (PAL) and/or an Enforcement Standard (ES). Indicate the date and direction of groundwater flow based on the most recent sampling data.

B.3.c. **Groundwater Flow Direction:** Figure(s) representing groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit two groundwater flow maps showing the maximum variation in flow direction.

B.3.d. **Monitoring Wells:** Figure(s) showing all monitoring wells, with well identification number. Clearly designate any wells that: (1) are proposed to be abandoned; (2) cannot be located; (3) are being transferred; (4) will be retained for further sampling, or (5) have been previously abandoned.

B.4. Vapor Maps and Other Media

B.4.a. **Vapor Intrusion Map:** Map(s) showing all locations and results for samples taken to investigate the vapor intrusion pathway, in relation to remaining soil and groundwater contamination, including sub-slab, indoor air, soil vapor, ambient air, and communication testing. Show locations and footprints of affected structures and utility corridors, and/or where residual contamination poses a future risk of vapor intrusion.

B.4.b. **Other media of concern (e.g., sediment or surface water**): Map(s) showing all sampling locations and results for other media investigation. Include the date of sample collection and identify where any standards are exceeded.

B.4.c. **Other:** Include any other relevant maps and figures not otherwise noted above. (This section may remain blank)

Documentation of Remedial Action (Attachment C)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

General Directions:

- Include in Attachment C all of the following documentation, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: C.1. Site Investigation Documentation; C.2. Investigative Waste, etc).
- If the documentation requested below is "not applicable" to the site-specific circumstances, include a brief explanation to support that conclusion.
- If the documentation requested below has already been submitted to the Department, please note the title and date of the report for that particular document requested.

C.1. **Site investigation documentation,** that has not otherwise been previously submitted.

C.2. **Investigative waste** disposal documentation.

C.3. **NR 720.19 analysis**, assumptions and calculations for site specific RCLs (SSRCLs) , with justification, including EPA Soil Screening Level Model Calculations and results.

C.4. **Construction documentation** or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), Wis. Adm. Code.

C.5. **Decommissioning of Remedial Systems. I**nclude plans to properly abandon any systems or equipment upon receiving conditional closure.

C.6. **Photos. F**or sites or facilities with a cover or other performance standard, a structural impediment or a vapor mitigation system. Include one or more photographs documenting the condition and extent of the feature at the time of the closure request. Pertinent features should be visible and discernible. Photographs must be labeled with the site name, the features shown, location and the date on which the photograph was taken.

C.7. **Other**. Include any other relevant documentation not otherwise noted above. (This section may remain blank)

Maintenance Plan(s) (Attachment D)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

When one or more "maintenance plans" are required for a site closure, include in each maintenance plan all required information in sections D.1. through D.5. below, and attach the plan(s) in Attachment D. The following "model" maintenance plans can be located at: (1) Maintenance plan for a engineering control or cover: http://dnr.wi.gov/topic/Brownfields/documents/maintenance-plan.pdf; and (2) Maintenance plan for vapor intrusion: http://dnr.wi.gov/topic/Brownfields/documents/appendix5_606.pdf.

D.1. **Location map(s)** which show(s): (1) the feature that requires maintenance; (2) the location of the feature(s) that require(s) maintenance - on and off the source property; (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site; (4) the extent and type of residual contamination; and (5) and all property boundaries.

D.2. **Brief descriptions** of the type, depth and location of residual contamination.

D.3. **Description of maintenance action(s)** required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required.

D.4. **Inspection log**, to be maintained on site, or at a location specified in the maintenance plan or approval letter.

D.5. **Contact information,** including the name, address and phone number of the individual or facility who will be conducting the maintenance.

Monitoring Well Information (Attachment E)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

General Directions:

Attach monitoring well construction and development forms (DNR FORM 4400-113 A and B: http://dnr.wi.gov/org/water/dwg/gw/forms/4400_113_1_2.pdf) for all wells that will remain in-use, be transferred to another party or that could not be located. A figure of these wells should be included in Attachment B.3.d.

Select One:

◯ No monitoring wells were required as part of this response action.

◉ All monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site

◯ ***Select One or More:***

☐ Not all monitoring wells can be located, despite good faith efforts. Attachment E must include description of efforts made to locate the "lost" wells.

☐ One or more wells will be transferred to another owner upon case closure being granted. Attachment E should include documentation identifying the name, address and email for the new owner(s).

☐ One or more wells will remain in use at the site after this closure. Attachment E must include documentation as to the reason(s) the well(s) will remain in use.

Notifications to Owners of Impacted Properties (Attachment F)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

General Directions:

- State law requires that the responsible party provide a 30-day, written advance notice (i.e., a letter) to certain persons prior to applying for case closure. This requirement applies if: (1) the person conducting the response action does not own the source property; (2) the contamination has migrated onto another property; and/or (3) one or more monitoring wells will not be abandoned.
- A model "template letter" for these mandatory notifications can be downloaded at: http://dnr.wi.gov/files/PDF/pubs/rr/RR919.pdf.

Check all that apply to the site-specific circumstances of this case closure:

	A. Impacted Source Property and Owner is not Conducting Cleanup	B. Impacted Right of Way	C. Impacted Off-Site Property Owner	Impacted Property Notification Situations: Ch. NR 726 Appendix A Letter
1.	☒	☐	☐	Residual groundwater contamination exceeds Ch. NR 140 Wis. Administrative Code enforcement standards.
2.	☒	☐	☐	Residual soil contamination that attains or exceeds standards is present after the remedial action is complete, and must be properly managed should it be excavated or removed.
3.	☒	☐	☐	An engineered cover or a soil barrier (e.g. pavement) must be maintained over contaminated soil for direct contact or groundwater infiltration concerns.
4.	☐	☐	☐	Industrial land use soil standards were used for the clean-up standard.
5.	☒	☐	☐	A vapor mitigation system (or other specific vapor protection) must be operated and maintained.
6.	☒	☐	☐	Vapor assessment needed if use changes.
7.	☐	☐	☐	Structural impediment.
8.	☐	☐	☐	Lost, transferred or open monitoring wells.
9.	☐	☐	☐	Not Applicable.

If any of the previous boxes in rows 1 thru 8 were checked, include the following as part of Attachment F:

- FORM 4400-246;
- Copy of each letter sent, 30 days or more prior to requesting closure; and
- Proof of receipt for each letter.
- For this site closure, 2 (number) property (ies) has/have been impacted, the owners have been notified, and copies of the letters and receipts are included in Attachment F.

Source Legal Documents (Attachment G)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form.All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

Include all of the following documents, in this order, in Attachment G:

G.1. **Deeds - Source Property and Other Impacted Properties:** The most recent deed with legal descriptions clearly labeled for (1) the **Source Property** (where the contamination originated) and (2) all **off-source** (off-site) properties where letters were required to be sent per the ch. NR 700, Wis. Adm. Code, rule series (e.g., off-site cover maintenance required, lost monitoring well, off-site cover property impacts to groundwater exceeding the ch. NR 140, Wis. Adm. Code.

***Note:** If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*

G.2. ***Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map.* (Lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).

G.3. **Verification of Zoning**: Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.

G.4. **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description(s) accurately describe(s) the correct contaminated property or properties.

Signatures and Findings for Closure Determination

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

Check the correct signature block below for this case closure request, and have the proper environmental professional(s) sign this document, in accordance with the ch. NR 700 Wis. Adm. Code rule series. Both boxes may be checked if applicable to this case closure.

☒ A response action(s) for this site addresses groundwater contamination (including natural attenuation remedies). In this situation, the closure request must be prepared by, or under the supervision of, a professional engineer and a hydrogeologist, as defined in ch. NR 712, Wis. Adm. Code. Include both signatures provided below with the submittal.

☒ The response action(s) for this site addresses media other than groundwater. In this situation, the case closure request must be prepared by, or under the supervision of, a professional engineer, as defined in ch. NR 712, Wis. Adm. Code. The "engineering certification" language below, at a minimum, must be signed.

Engineering Certification

I JENNIFER M. KAHLER hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this case closure request has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this case closure request is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code. All phases of work necessary to obtain data, develop conclusions, recommendations and prepare submittals for this case closure request have been prepared by me, or their preparation has been supervised by me. Specifically, with respect to compliance with the rules, in my professional opinion a site investigation has been conducted in accordance with ch. NR 716, Wis. Adm. Code, and all necessary remedial actions have been completed in accordance with chs. NR 140, NR 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

JENNIFER M. KAHLER	SENIOR ENGINEER	
Printed Name	Title	
Jennifer M. Kahler	5/17/13	WISCONSIN JENNIFER M. KAHLER 37421 JACKSON, WI. PROFESSIONAL ENGINEER
Signature	Date	P.E. Stamp and Number

Hydrogeologist Certification

I Eric P. Kovatch hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this case closure request is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code. All phases of work necessary to address groundwater contamination including obtaining data, developing conclusions, recommendations and preparing submittals for this case closure request have been prepared by me, or their preparation has been supervised by me. Specifically, with respect to compliance with the rules, in my professional opinion a site investigation has been conducted in accordance with ch. NR 716, Wis. Adm. Code, and all necessary remedial actions have been completed in accordance with chs. NR 140, NR 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

Eric P. Kovatch	Sr. Hydrogeologist	
Printed Name	Title	
Eric P. Kovatch	5/17/13	
Signature	Date	

Table A.1.-1 Groundwater Analytical Data Table 1 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

		BTEX						PAHs																	
Sample ID	Sample Date	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene, o (ug/l)	Xylenes, m + p (ug/l)	Xylenes, Total (ug/l)	1-Methylnaphthalene (ug/l)	2-Methylnaphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo(a)anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b)fluoranthene (ug/l)	Benzo(ghi)perylene (ug/l)	Benzo(k)fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h)anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno(1,2,3-cd)pyrene (ug/l)	Naphthalene (PAH) (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
PAL		0.5	140	160	1000	1000	400	NE	NE	NE	NE	600	NE	0.02	0.02	NE	NE	0.02	NE	80	80	NE	10	NE	50
ES		5	700	800	10000	10000	2000	NE	NE	NE	NE	3000	NE	0.2	0.2	NE	NE	0.2	NE	400	400	NE	100	NE	250
BW06	11/07/02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	05/20/04	< 0.41	< 0.54	< 0.67	na	na	< 1.8	< 0.017	< 0.016	< 0.017	< 0.018	< 0.019	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	< 0.013	< 0.015	< 0.012	< 0.016	< 0.02	0.075	< 0.015	< 0.016
BW06	11/24/04	< 0.14	< 0.4	< 0.36	na	na	< 0.74	< 0.2	< 0.23	< 0.19	< 0.19	< 0.18	< 0.2	< 0.18	< 0.018	< 0.21	< 0.19	< 0.16	< 0.22	< 0.16	< 0.22	< 0.17	< 0.22	< 0.2	< 0.16
BW06	05/19/05	< 0.14	< 0.4	< 0.36	na	na	< 0.74	< 0.02	< 0.023	< 0.2	< 0.2	0.025	0.045	*0.091*	*0.047*	0.083	0.053	*0.048*	< 0.022	0.037	< 0.22	0.048	0.036	0.024	0.066
BW06	08/09/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	12/13/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	06/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	12/13/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	06/18/07	*0.58*	0.51	< 0.36	< 0.36	< 0.74	< 0.74	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	12/18/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	06/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	12/08/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	06/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	12/02/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	06/01/11	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	06/19/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW06	12/12/12	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 2.6	0.016	0.0039	0.0061	0.0047	< 0.0057	0.0038	0.0031	0.0041	< 0.0048	0.0061	0.0074	< 0.0032	< 0.0044	< 0.0048	< 0.0047	0.048	< 0.0081	0.0053
BW15	05/20/04	*2.8*	2.5	< 0.67	na	na	2.6	1.3	0.32	0.22	< 0.018	< 0.019	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	< 0.013	< 0.015	< 0.012	0.043	< 0.02	5.9	0.031	< 0.016
BW15	11/24/04	< 0.14	< 0.4	< 0.36	na	na	< 0.74	28	0.68	11	< 0.39	< 0.35	< 0.39	< 0.36	< 0.36	< 0.41	< 0.39	< 0.33	< 0.44	< 0.33	1.8	< 0.34	1.9	0.97	< 0.33
BW15	05/19/05	**1400**	*670*	10	na	na	144	110	< 0.45	38	0.99	0.36	< 0.39	< 0.36	< 0.36	< 0.41	< 0.39	< 0.33	< 0.44	< 0.33	6.1	< 0.34	**130**	2.2	< 0.33
BW15	12/13/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW15	06/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BW15	12/13/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701	08/15/95	**10000**	**880**	96	na	na	*820*	na	na	800	< 2	23	3.4	**1.8**	**0.6**	1.2	0.54	**1.7**	0.25	49	*130*	0.76	**220**	100	20
MW701	09/25/95	**12000**	**780**	53	na	na	*680*	na	na	680	1100	17	2	**1**	**0.24**	0.67	0.3	**1**	0.4	29	*100*	0.36	**3800**	81	11
MW701	12/21/98	**10200**	**818**	77	na	na	*717*	367	188	420	< 1.3	32	15	**7.7**	**5.4**	4.5	2.5	**7.6**	6.7	56	*92*	4.3	**3740**	129	*98*
MW701R	06/25/02	**2700**	*330*	28	na	na	330	na	na	2500	< 770	*1300*	< 630	**420**	< 470	< 500	< 430	**640**	63	**1300**	**790**	< 470	**9400**	3500	**1800**
MW701R	11/07/02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	07/01/03	**3400**	*340*	21	na	na	260	420	480	310	17	< 200	45	**35**	**16**	15	19	**42**	3.5	< 130	< 170	10	**2200**	260	< 170
MW701R	11/10/03	**3400**	*330*	18	na	na	260	420	480	400	25	120	100	**66**	**28**	24	30	**72**	6.2	*140*	*110*	18	**2000**	420	**270**
MW701R	05/20/04	**2600**	*300*	17	na	na	211	270	280	250	10	< 94	30	**21**	**9.4**	8.7	11	**24**	1.9	67	< 80	6	**1400**	240	*120*
MW701R	08/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	11/24/04	**2800**	*280*	17	na	na	208	260	250	180	11	50	23	**17**	**6.4**	6.9	9.1	**21**	< 4.4	49	51	4.9	**1500**	140	*64*
MW701R	05/19/05	**3400**	*340*	20	na	na	224	240	230	180	8.3	44	18	**16**	**7.8**	7.6	9.9	**21**	< 4.4	43	49	4.8	**1500**	150	*61*
MW701R	12/13/05	**2700**	*280*	18	120	76	196	180	< 190	110	< 32	< 46	< 62	< 73	< 63	< 77	< 77	< 76	< 75	< 62	< 36	< 75	**850**	100	< 58
MW701R	03/08/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	06/26/06	**3300**	*330*	21	150	82	232	150	160	120	8.7	28	13	**11**	< 7.8	< 9.6	< 9.7	**14**	< 9.4	29	32	< 9.4	**830**	120	44
MW701R	09/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	12/13/06	na	*330*	17	140	69	209	130	130	90	3.6	16	4.8	**3.7**	**1.8**	< 1.9	2.3	**4.4**	< 1.9	11	26	< 1.9	**810**	45	16
MW701R	03/29/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	06/18/07	**3500**	*360*	20	160	73	na	170	130	160	< 41	< 58	< 78	< 92	< 78	< 96	< 97	< 95	< 94	< 77	< 45	< 94	**1100**	100	< 73
MW701R	09/13/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	12/05/07	**2900**	*300*	18	130	58	188	160	150	140	5.4	33	7	**6.5**	< 3.1	< 3.9	4.9	**12**	< 3.8	22	34	< 3.8	**1000**	90	30

Table A.1.-1 Groundwater Analytical Data Table 1 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	BTEX						PAHs																	
		Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene, o (ug/l)	Xylenes, m + p (ug/l)	Xylenes, Total (ug/l)	1-Methylnaphthalene (ug/l)	2-Methylnaphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo(a)anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b)fluoranthene (ug/l)	Benzo(ghi)perylene (ug/l)	Benzo(k)fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h)anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno(1,2,3-cd)pyrene (ug/l)	Naphthalene (PAH) (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
PAL		0.5	140	160	1000	1000	400	NE	NE	NE	NE	600	NE	0.02	0.02	NE	NE	0.02	NE	80	80	NE	10	NE	50
ES		5	700	800	10000	10000	2000	NE	NE	NE	NE	3000	NE	0.2	0.2	NE	NE	0.2	NE	400	400	NE	100	NE	250
MW701R	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	06/26/08	**3190**	*312*	16	131	50	181	270	152	189	18.9	132	28.3	**27.2**	**12.8**	16.9	15.1	**24.2**	2.6	44.8	52.4	10.3	**1080**	118	*62.7*
MW701R	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	12/18/08	**3460**	*349*	18.9	149	62.8	212	275	252	203	5.4	24.6	5.4	**4.1**	**1.9**	1.9	2.6	**5.3**	0.33	< 20.2	43.2	1.3	**1780**	91.4	< 25.6
MW701R	03/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	06/30/09	**3510**	*370*	19.7	161	65.8	226.8	240	231	258	< 18	129	42.9	**36.8**	< 17	< 24.1	< 21.8	**41.5**	< 16	*92*	*83*	< 23.4	**1240**	289	*131*
MW701R	09/29/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	12/08/09	**4080**	*391*	23.2	175	64.5	239.5	67.4	68.7	55.9	3.3	18.8	4.9	**3.7**	**3.2**	< 2.4	2.2	**6.8**	0.88	12.7	13.9	< 2.3	**417**	44	19.6
MW701R	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	06/08/10	**3200**	*346*	17.2	65.4	48.4	114	113	109	95.7	1.8	16.7	2	**1.6**	**0.62**	0.95	1.2	**2.8**	< 0.34	8.2	29.5	0.58	**793**	64.6	12
MW701R	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	12/02/10	**3850**	*275*	< 26.8	82.1	< 72	< 82.1	151	155	135	3	36.3	5.4	**4**	**2.1**	1.8	2.1	**4.8**	0.35	14.9	39.4	1.2	**1110**	90.8	20.3
MW701R	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	06/01/11	**3320**	*357*	18.6	155	64.3	na	139	106	109	< 9.3	28.4	< 9.3	< 7.4	< 8.7	< 12.4	< 11.2	< 9	< 8.2	16.5	34.2	< 12	**597**	84.5	24.3
MW701R	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	06/19/12	**2640**	*186*	11	84.9	28.1	na	59.4	45.8	40.4	1.6	7.4	2.1	**1.7**	**0.7**	0.78	1.1	**2.4**	< 0.32	6.3	11.8	< 0.47	**355**	24.5	9
MW701R	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	12/12/12	**3290**	*289*	< 26.8	108	< 72	138	141	137	115	4	24.7	5.5	**4.5**	**1.9**	1.9	3	**5.5**	< 0.32	18.5	37.5	1.2	**852**	93.6	20.1
MW702	08/15/95	**5900**	**1500**	**2300**	na	na	*1600*	na	na	390	< 2	19	2.9	**1.4**	**0.32**	0.93	0.48	**1.5**	0.23	41	*150*	0.55	**7300**	96	35
MW702	09/25/95	**6100**	**1400**	**2100**	na	na	*1400*	na	na	400	1400	17	3.7	**1.8**	**0.66**	1.6	0.73	**1.9**	0.28	32	*140*	0.76	**6400**	90	13
MW703	08/15/95	**1300**	**980**	29	na	na	*430*	na	na	180	< 2	17	1.4	**0.46**	*0.1*	0.24	0.16	**0.55**	0.17	28	70	0.16	**2400**	74	9.2
MW703	09/25/95	**1300**	**1100**	23	na	na	*450*	na	na	220	430	14	1.2	**0.37**	*0.05*	0.34	0.12	**0.51**	0.23	19	54	0.19	**2700**	58	5.9
MW703	12/21/98	**1190**	**973**	9.2	na	na	*408*	408	< 0.92	262	< 1.3	5.9	8.7	**2.4**	**1.7**	1.6	0.91	< 0.092	< 0.25	10	45	1.4	**3080**	24	16
MW704	08/15/95	**340**	*280*	*200*	na	na	*430*	na	na	770	< 2	44	26	**22**	**8.9**	17	7.9	**19**	< 0.1	*150*	*180*	10	**5200**	220	*56*
MW704	09/25/95	**1100**	*670*	*380*	na	na	*970*	na	na	440	1400	20	5	**3.1**	**2.7**	< 0.1	2.3	**3.5**	< 0.1	36	*120*	< 0.1	**4200**	120	13
MW704	12/21/98	**29**	13	1.6	na	na	11.3	14	3.6	1.6	5.9	6	8.9	**9.5**	**8.1**	7	3.5	**4.4**	< 0.25	21	10	7.7	*22*	19	26
MW705	08/15/95	< 1	< 1	< 1	na	na	< 3	na	na	< 1	< 2	< 0.2	< 0.05	< 0.2	< 0.05	< 0.1	< 0.05	< 0.1	< 0.1	< 0.2	< 0.4	< 0.1	< 1	< 0.4	< 0.2
MW705	09/25/95	< 0.5	< 1	< 1	na	na	< 3	na	na	< 1	< 2	< 0.2	< 0.05	< 0.2	< 0.05	< 0.1	< 0.05	< 0.1	< 0.1	< 0.2	< 0.4	< 0.1	< 1	< 0.4	< 0.2
MW705	12/21/98	< 0.5	< 0.6	< 0.6	na	na	< 2.2	< 0.94	< 0.92	< 1.4	< 1.3	< 0.1	< 0.1	< 0.21	< 0.12	< 0.23	< 0.23	< 0.092	< 0.25	< 0.23	< 0.056	< 0.11	< 0.73	< 0.11	< 0.39
MW705	06/25/02	< 0.45	< 0.82	< 0.68	na	na	< 1.7	na	na	< 0.018	< 0.023	< 0.02	< 0.019	< 0.012	< 0.014	< 0.015	< 0.013	< 0.018	< 0.017	< 0.028	< 0.021	< 0.014	< 0.027	< 0.019	< 0.02
MW705	11/07/02	< 0.25	< 0.53	< 0.84	na	na	< 1.1	< 0.017	< 0.017	< 0.018	< 0.019	< 0.02	< 0.012	0.017	0.013	< 0.016	< 0.019	< 0.014	< 0.016	0.016	< 0.017	< 0.021	< 0.024	< 0.016	< 0.017
MW705	04/15/03	< 0.41	< 0.54	< 0.67	na	na	< 1.8	< 0.018	0.031	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	0.1	< 0.016	< 0.017
MW705	07/01/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	< 0.018	< 0.017	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	0.015	< 0.017	< 0.021	0.029	< 0.016	0.018
MW705	09/30/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	< 0.018	< 0.017	< 0.018	< 0.019	< 0.02	0.016	0.014	< 0.013	< 0.016	< 0.019	0.014	< 0.016	0.014	< 0.017	< 0.021	0.059	< 0.016	0.02
MW705	11/10/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	0.044	0.053	< 0.018	0.044	0.024	0.021	0.017	< 0.013	< 0.016	< 0.019	0.014	< 0.016	0.028	0.019	< 0.021	0.25	0.071	0.039
MW705	02/17/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW705	05/20/04	< 0.41	< 0.54	< 0.67	na	na	< 1.8	0.082	0.04	0.019	< 0.018	< 0.019	0.017	*0.02*	0.015	< 0.015	< 0.018	0.016	< 0.015	0.025	< 0.016	< 0.02	0.39	0.022	0.029
MW705	08/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW705	11/24/04	< 0.14	< 0.4	< 0.36	na	na	< 0.74	< 0.02	< 0.023	< 0.019	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	0.17	< 0.02	< 0.016
MW705	02/25/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW705	05/19/05	< 0.14	< 0.4	< 0.36	na	na	< 0.74	< 0.02	< 0.023	< 0.019	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	0.055	< 0.02	< 0.016
MW705	08/09/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW705	03/08/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW705	06/18/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW705	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW705	06/26/08	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	0.071	0.087	0.011	0.023	0.0066	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.0058	0.0088	< 0.0036	0.45	0.015	< 0.0068
MW705	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	08/15/95	**34000**	*560*	**13000**	na	na	**7900**	na	na	197000		**177000**	129000	**83000**	**31000**	62000	29000	**82000**	13000	**266000**	**640000**	32000		730000	**142000**

Table A.1.-1 Groundwater Analytical Data Table 1 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	BTEX						PAHs																	
		Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene, o (ug/l)	Xylenes, m + p (ug/l)	Xylenes, Total (ug/l)	1-Methylnaphthalene (ug/l)	2-Methylnaphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo(a)anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b)fluoranthene (ug/l)	Benzo(ghi)perylene (ug/l)	Benzo(k)fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h)anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno(1,2,3-cd)pyrene (ug/l)	Naphthalene (PAH) (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
PAL		0.5	140	160	1000	1000	400	NE	NE	NE	NE	600	NE	0.02	0.02	NE	NE	0.02	NE	80	80	NE	10	NE	50
ES		5	700	800	10000	10000	2000	NE	NE	NE	NE	3000	NE	0.2	0.2	NE	NE	0.2	NE	400	400	NE	100	NE	250
MW706	09/25/95	**31000**	< 2	**12000**	na	na	**7700**	na	na	9400	82000	**15000**	11000	**6700**	**2400**	4900	980	**5400**	< 10	**8400**	**57000**	2700	**166000**	56000	**9700**
MW706	06/25/02	**1900**	*270*	**1300**	na	na	*1020*	na	na	< 290	2700	*1400*	1000	**830**	**270**	270	460	**920**	< 270	**2200**	**1200**	320	**7100**	3200	**2200**
MW706	11/07/02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	07/01/03	**6500**	*360*	**2200**	na	na	*1870*	510	640	34	370	< 200	< 120	< 140	**29**	21	31	< 140	6.4	< 130	< 170	18	**2200**	250	< 170
MW706	11/10/03	**3200**	*150*	**1300**	na	na	*760*	510	640	41	400	140	190	**130**	**70**	43	70	**130**	14	*280*	*150*	38	**2900**	410	**360**
MW706	05/20/04	**1100**	110	**990**	na	na	*400*	130	140	16	220	43	65	**87**	**44**	31	36	**47**	11	*80*	40	27	**680**	110	*130*
MW706	08/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	11/24/04	**4000**	*230*	**1700**	na	na	*1380*	640	840	97	510	240	270	**180**	**78**	60	98	**190**	18	*260*	*240*	54	**2600**	720	**300**
MW706	05/19/05	**1800**	56	*500*	na	na	*520*	120	75	< 7.8	80	< 7.1	< 7.8	< 7.2	< 7.2	< 8.3	< 7.7	< 6.6	< 8.8	< 6.6	< 8.7	< 6.8	**500**	< 8.2	< 6.5
MW706	12/13/05	**2200**	*140*	**990**	450	250	*700*	130	35	12	74	34	30	**34**	**19**	14	16	**23**	3.9	38	40	12	8.3	56	*50*
MW706	06/26/06	**1900**	23	*470*	220	140	360	0.28	< 0.28	1.6	5.2	0.83	1.1	**1.8**	**0.99**	0.83	0.81	**0.87**	< 0.47	1.8	0.47	0.69	0.42	0.52	2.2
MW706	09/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	12/13/06	**2400**	120	**1300**	540	270	*810*	10	5.1	5.9	31	11	16	**21**	**11**	8.9	11	**13**	1.9	22	6.7	6.8	5.2	14	26
MW706	03/29/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	06/18/07	**15000**	**780**	**8800**	*4100*	*1800*	**5900**	110000	200000	< 18000	99000	**49000**	< 35000	< 41000	< 35000	< 43000	< 43000	< 43000	2600	**54000**	**55000**	< 42000	**420000**	170000	**58000**
MW706	12/05/07	**2600**	*410*	**1600**	650	500	*1150*	620	680	44	430	< 120	56	**52**	**23**	23	33	**59**	5.1	*120*	*130*	18	**2900**	170	*140*
MW706	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	06/26/08	**594**	26.1	*217*	131	96.1	227	42.6	7.8	4.2	40.1	6.3	5.8	**6.9**	**3.6**	3.5	4.5	**7.3**	< 0.43	11.2	4.4	2.3	< 1.6	7.1	16.4
MW706	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	12/18/08	**15100**	**770**	**8690**	*3790*	*1680*	**5480**	1570000	2420000	140000	1210000	**596000**	265000	**200000**	**105000**	106000	177000	**350000**	< 41900	**624000**	**729000**	86200	**5550000**	2080000	**915000**
MW706	03/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	06/30/09	**4080**	*252*	**1970**	689	414	*1103*	163	158	7.6	92.5	7.9	0.76	**0.36**	< 0.34	< 0.48	0.46	**0.81**	< 0.32	3.5	26.2	< 0.47	**1240**	21.7	4.1
MW706	09/29/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	12/08/09	**6510**	*412*	**3160**	*1070*	623	*1693*	178	191	9.5	138	11.8	1.8	**1.3**	**0.92**	0.48	0.59	**1.6**	< 0.32	5.3	40.7	< 0.47	**841**	36.6	7.2
MW706	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	06/08/10	**9340**	**734**	**5960**	445	*1310*	*1750*	322	433	15.9	206	14.3	1.6	**1**	**0.49**	0.6	0.83	**1.8**	< 0.34	5.2	55.6	< 0.5	**2910**	53	8.9
MW706	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	12/02/10	**2230**	*227*	*360*	82.5	185	267.5	251	144	15.5	200	11.2	0.75	**0.52**	< 0.34	< 0.48	< 0.44	**0.94**	< 0.32	4.3	47.9	< 0.47	**1340**	33.9	5.5
MW706	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	06/01/11	**2580**	*257*	**1800**	213	471	na	146	151	< 22.6	90.1	< 28.7	< 18.1	< 14.3	< 17	< 24.1	< 21.8	< 17.4	< 16	< 22	26.4	< 23.4	**1160**	< 40.5	< 23.7
MW706	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	06/19/12	**2190**	*256*	*794*	316	242	na	42.1	31.2	2.9	32.1	2.7	0.5	**0.36**	< 0.17	< 0.24	0.3	**0.57**	< 0.16	1.8	7.1	< 0.23	**222**	9.9	2
MW706	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW706	12/12/12	**3600**	*297*	*397*	102	145	247	80.7	9.1	6.9	47.9	3.1	0.3	*0.19*	< 0.17	< 0.25	< 0.22	**0.32**	< 0.16	1.8	12.9	< 0.24	*37*	2.8	1.6
MW707	08/15/95	**1500**	**3600**	*190*	na	na	*1400*	na	na	430	< 2	12	2.2	**1.6**	**0.38**	1.3	0.52	**1.3**	0.25	27	*93*	0.74	**3100**	60	12
MW707	09/25/95	**1200**	**3500**	130	na	na	*1200*	na	na	240	1400	10	0.4	**0.66**	**0.23**	0.83	0.19	**0.64**	0.4	21	*81*	0.35	**3400**	60	4.8
MW707	12/21/98	**830**	**3110**	82	na	na	*990*	454	< 0.92	221	< 1.3	15	< 0.1	**2.1**	< 0.12	1.7	0.76	**2.2**	< 0.25	28	64	1.3	**3470**	69	*58*
MW707R	06/25/02	**1100**	**2300**	51	na	na	*760*	na	na	< 120	6.4	6.2	1.8	**1.2**	**0.73**	0.61	0.51	**1.2**	< 0.34	7.5	< 130	0.48	**1600**	< 120	7.3
MW707R	11/07/02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	07/01/03	**1300**	**2800**	73	na	na	*950*	270	18	< 180	6.8	9	1.8	**1.5**	< 1.3	< 1.6	< 1.9	**1.8**	< 1.6	9.6	39	< 2.1	**1800**	< 160	12
MW707R	11/10/03	**1500**	**3000**	76	na	na	*1050*	310	21	< 180	11	13	6.8	**5.2**	**2.7**	2.3	2.6	**5.6**	< 1.6	18	47	< 2.1	**2000**	< 160	29
MW707R	05/20/04	**1000**	**2500**	76	na	na	*910*	230	14	43	6.1	12	5.2	**4.1**	**2**	2.2	2.3	**4.4**	< 1.5	15	31	< 2	**1600**	77	19
MW707R	08/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	11/24/04	**1300**	**2400**	74	na	na	*790*	250	14	57	6.3	6.1	< 3.9	< 3.6	< 3.6	< 4.1	< 3.9	< 3.3	< 4.4	3.6	31	< 3.4	**1700**	34	3.4
MW707R	02/25/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	05/19/05	**1300**	**2500**	93	na	na	*910*	250	21	55	< 7.8	8.3	< 7.9	< 7.3	< 7.2	< 8.3	< 7.8	< 6.6	< 8.9	6.9	29	< 6.9	**1900**	48	7.7
MW707R	08/09/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	12/13/05	**1300**	**2600**	99	660	260	*920*	200	16	39	3.9	5.7	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	3.7	25	< 1.9	**1700**	33	4.1

Table A.1.-1 Groundwater Analytical Data Table 1 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

		BTEX						PAHs																	
Sample ID	Sample Date	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene, o (ug/l)	Xylenes, m + p (ug/l)	Xylenes, Total (ug/l)	1-Methylnaphthalene (ug/l)	2-Methylnaphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo(a)anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b)fluoranthene (ug/l)	Benzo(ghi)perylene (ug/l)	Benzo(k)fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h)anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno(1,2,3-cd)pyrene (ug/l)	Naphthalene (PAH) (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
PAL		0.5	140	160	1000	1000	400	NE	NE	NE	NE	600	NE	0.02	0.02	NE	NE	0.02	NE	80	80	NE	10	NE	50
ES		5	700	800	10000	10000	2000	NE	NE	NE	NE	3000	NE	0.2	0.2	NE	NE	0.2	NE	400	400	NE	100	NE	250
MW707R	03/08/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	06/26/06	**1300**	**2400**	89	610	260	*870*	220	16	50	5.9	8.4	< 7.8	< 9.2	< 7.8	< 9.6	< 9.7	< 9.5	< 9.4	< 7.7	29	< 9.4	**1800**	38	< 7.3
MW707R	09/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	12/13/06	**960**	**1800**	66	470	170	*640*	110	4.8	25	2.7	4.9	< 3.9	< 4.6	< 3.9	< 4.8	< 4.8	< 4.7	< 4.7	< 3.9	14	< 4.7	**310**	17	< 3.6
MW707R	03/29/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	06/18/07	**1500**	**2600**	94	650	300	*950*	160	< 56	< 41	< 41	< 58	< 78	< 92	< 78	< 96	< 97	< 95	< 94	< 77	< 45	< 94	**1500**	< 57	< 73D
MW707R	09/13/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	12/05/07	**1200**	**2200**	79	550	190	*740*	130	9.1	37	3.8	9.4	0.32	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	5.3	24	< 0.38	**1100**	40	5.6
MW707R	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	06/26/08	**990**	**1660**	50.9	401	135	*535*	70.9	3.5	< 15.6	2.1	2	0.16	*0.15*	< 0.1	< 0.12	< 0.16	*0.18*	< 0.086	1	9	< 0.072	**520**	7.8	1.4
MW707R	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	12/18/08	**951**	**1850**	66.9	502	198	*700*	157	< 42.8	40	< 19.9	< 26	< 13.9	< 21.6	< 20.6	< 25	< 31.1	< 28	< 17.2	< 21.4	< 25.1	< 14.4	**1260**	< 29.9	< 27
MW707R	03/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	06/30/09	**1550**	**2140**	55.2	500	223	*723*	107	10	33.8	< 7.2	< 11.5	0.11	*0.042*	*0.026*	0.013	0.023	*0.088*	< 0.0032	< 8.8	15.1	0.01	**839**	17.2	< 9.5
MW707R	09/29/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	12/08/09	**1510**	**1730**	52.3	485	212	*697*	80.7	4.7	25.2	2	4	0.088	*0.041*	*0.03*	0.018	0.024	*0.076*	0.0032	< 2.2	8.6	0.011	**417**	10.4	< 2.4
MW707R	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	06/08/10	**1660**	**1850**	38	454	213	*666*	80.6	7.9	29.1	1.9	3.8	< 0.38	< 0.3	< 0.36	< 0.51	< 0.46	< 0.37	< 0.34	1.6	14.4	< 0.5	**455**	17.7	1.8
MW707R	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	12/02/10	**2230**	**2600**	46.5	499	183	*682*	150	13.1	51.2	4.1	7.5	0.14	< 0.057	< 0.068	< 0.096	< 0.087	*0.17*	< 0.064	3	21.7	< 0.094	**974**	26.7	3.4
MW707R	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	06/01/11	**1220**	**1630**	35	425	143	na	65.4	0.37	21.7	1.1	1.3	< 0.075	< 0.059	< 0.07	< 0.099	< 0.09	*0.083*	< 0.066	0.93	11.4	< 0.096	0.89	< 0.17	1
MW707R	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	06/19/12	**1540**	**1870**	43.1	451	167	na	55.2	2.8	18.2	1.5	2.7	< 0.072	< 0.057	< 0.068	< 0.096	< 0.087	*0.077*	< 0.064	1.2	9.8	< 0.094	**266**	12.4	1.2
MW707R	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	12/12/12	**1690**	**1650**	29.6	402	100	*502*	87.3	3.6	30.9	2	3.7	< 0.073	< 0.058	< 0.069	< 0.097	< 0.088	*0.088*	< 0.065	1.7	14.7	< 0.094	**192**	17.4	1.5
MW708	12/21/98	< 0.5	< 0.6	< 0.6	na	na	< 2.2	< 0.94	< 0.92	< 1.4	< 1.3	< 0.1	< 0.1	< 0.21	< 0.12	< 0.23	< 0.23	< 0.092	< 0.25	< 0.23	< 0.056	< 0.11	< 0.73	< 0.11	< 0.39
MW708	06/25/02	< 0.45	< 0.82	< 0.68	na	na	< 1.7	na	na	< 0.018	< 0.023	< 0.02	< 0.019	0.014	< 0.014	< 0.015	< 0.013	< 0.018	< 0.017	< 0.028	< 0.021	< 0.014	< 0.027	< 0.019	< 0.02
MW708	11/07/02	< 0.25	< 0.53	< 0.84	na	na	< 1.1	< 0.017	< 0.017	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	< 0.024	< 0.016	< 0.017
MW708	01/24/03	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	04/15/03	< 0.41	< 0.54	< 0.67	na	na	< 1.8	0.019	0.026	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	0.088	< 0.016	< 0.017
MW708	07/01/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	0.2	0.2	0.056	0.032	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	0.02	< 0.021	1.5	0.024	< 0.017
MW708	09/30/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	< 0.018	< 0.017	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	0.23	< 0.016	< 0.017
MW708	11/10/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	0.16	0.19	0.031*	0.27	0.11	0.11	*0.068*	*0.033*	0.026	0.038	*0.071*	< 0.016	0.15	0.11	0.022	0.38	0.36	0.22
MW708	02/17/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	05/20/04	< 0.41	< 0.54	< 0.67	na	na	< 1.8	0.048	0.02	< 0.017	< 0.018	< 0.019	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	< 0.013	< 0.015	< 0.012	< 0.016	< 0.02	0.29	< 0.015	< 0.016
MW708	08/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	11/24/04	**11**	0.43	< 0.36	na	na	< 0.74	0.2	0.19	0.14	< 0.02	0.039	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.017	< 0.022	0.036	0.046	< 0.017	1.8	0.13	0.043
MW708	02/25/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	05/19/05	< 0.14	< 0.4	< 0.36	na	na	< 0.74	0.1	< 0.023	0.028	< 0.02	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.02	< 0.017	< 0.022	< 0.017	< 0.022	< 0.017	0.31	< 0.021	< 0.017
MW708	08/09/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	12/13/05	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.047	< 0.011	< 0.015
MW708	03/08/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	06/26/06	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	0.029	0.016	0.025	*0.021*	< 0.016	< 0.019	< 0.019	*0.023*	< 0.019	0.035	< 0.0091	< 0.019	0.04	0.023	0.046
MW708	09/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	12/13/06	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.014	< 0.011	< 0.015
MW708	03/29/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	06/18/07	< 0.21	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	0.012	0.019	< 0.0082	0.022	< 0.012	< 0.016	0.019	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.018	< 0.0091	< 0.019	0.046	0.02	0.023

Table A.1.-1 Groundwater Analytical Data Table 1 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

		BTEX						PAHs																	
Sample ID	Sample Date	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene, o (ug/l)	Xylenes, m + p (ug/l)	Xylenes, Total (ug/l)	1-Methylnaphthalene (ug/l)	2-Methylnaphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo(a)anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b)fluoranthene (ug/l)	Benzo(ghi)perylene (ug/l)	Benzo(k)fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h)anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno(1,2,3-cd)pyrene (ug/l)	Naphthalene (PAH) (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
PAL		0.5	140	160	1000	1000	400	NE	NE	NE	NE	600	NE	0.02	0.02	NE	NE	0.02	NE	80	80	NE	10	NE	50
ES		5	700	800	10000	10000	2000	NE	NE	NE	NE	3000	NE	0.2	0.2	NE	NE	0.2	NE	400	400	NE	100	NE	250
MW708	09/13/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	12/05/07	< 0.21	< 0.4	0.51	< 0.36	< 0.74	< 0.74	< 0.01	< 0.012	< 0.0084	0.016	< 0.012	0.016	< 0.019	< 0.016	< 0.02	< 0.02	*0.03*	< 0.019	0.026	< 0.0093	< 0.019	0.015	< 0.012	0.034
MW708	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	06/26/08	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	< 0.0095	< 0.011	< 0.0078	0.013	0.0086	0.0087	0.0075	0.0051	0.0071	< 0.0078	0.0083	< 0.0043	0.011	< 0.0063	< 0.0036	< 0.016	0.0098	0.013
MW708	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	12/18/08	< 0.23	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	< 0.0095	< 0.011	< 0.0078	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	0.036	< 0.0075	< 0.0068
MW708	03/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	06/30/09	< 0.23	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	0.061	0.085	0.0077	0.025	< 0.0057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.012	0.017	< 0.0047	0.37	0.038	0.0071
MW708	09/29/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	12/08/09	< 0.39	< 0.41	< 0.42	< 0.38	< 0.87	< 0.87	< 0.005	< 0.0039	< 0.0045	< 0.0036	< 0.0057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	0.012	< 0.0081	< 0.0047
MW708	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	06/08/10	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 2.6	< 0.0053	0.005	< 0.0048	< 0.0038	< 0.0061	< 0.0038	< 0.003	< 0.0036	< 0.0051	< 0.0046	< 0.0037	< 0.0034	< 0.0047	< 0.0051	< 0.005	0.026	< 0.0086	< 0.005
MW708	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	12/02/10	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 1.8	< 0.005	< 0.0039	< 0.0045	< 0.0036	< 0.0057	< 0.0036	0.003	0.0037	< 0.0048	< 0.0044	0.0045	< 0.0032	0.0047	< 0.0048	< 0.0047	0.01	< 0.0081	< 0.0047
MW708	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	06/01/11	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	na	< 0.0051	0.0044	< 0.0047	< 0.0037	< 0.0059	0.0042	< 0.0029	< 0.0035	< 0.005	< 0.0045	0.005	< 0.0033	0.0067	< 0.0049	< 0.0048	0.0085	< 0.0083	0.0065
MW708	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	06/19/12	< 0.39	< 0.41	< 0.42	< 0.38	< 0.87	na	0.026	0.013	0.0083	0.063	0.025	0.039	*0.036*	*0.022*	0.016	0.028	*0.045*	< 0.0032	0.067	0.022	0.01	0.039	0.049	0.097
MW708	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW708	12/12/12	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 2.6	0.0099	0.0096	0.0092	0.011	0.01	0.0083	0.0089	0.0057	0.0064	0.0093	0.013	< 0.0032	0.013	< 0.0048	< 0.0047	0.059	0.017	0.019
MW709	12/21/98	< 0.5	< 0.6	< 0.6	na	na	< 2.2	< 0.94	< 0.92	3.4	< 1.3	2.9	1.3	**0.3**	**0.51**	< 0.23	< 0.23	**0.66**	< 0.25	6.6	3.3	< 0.11	4.6	8.4	10
MW709R	06/25/02	< 0.45	< 0.82	< 0.68	na	na	< 1.7	na	na	0.13	< 0.023	0.032	< 0.019	*0.1*	< 0.014	< 0.015	< 0.013	< 0.018	< 0.017	< 0.028	0.041	< 0.014	1.8	0.084	0.027
MW709R	11/07/02	< 0.25	< 0.53	< 0.84	na	na	< 1.1	< 0.017	< 0.017	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	< 0.024	< 0.016	< 0.017
MW709R	04/15/03	< 0.41	< 0.54	< 0.67	na	na	< 1.8	0.02	0.034	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	0.12	< 0.016	< 0.017
MW709R	07/01/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	0.02	0.019	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	0.04	< 0.016	< 0.017
MW709R	09/30/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	< 0.018	< 0.017	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	< 0.024	< 0.016	< 0.017
MW709R	11/10/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	< 0.018	< 0.017	< 0.018	< 0.019	0.022	0.016	< 0.014	< 0.013	< 0.016	< 0.019	0.015	< 0.016	0.027	< 0.017	< 0.021	0.05	0.064	0.033
MW709R	02/17/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	05/20/04	< 0.41	< 0.54	< 0.67	na	na	< 1.8	0.057	0.023	< 0.017	< 0.018	< 0.019	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	< 0.013	< 0.015	< 0.012	< 0.016	< 0.02	0.38	< 0.015	< 0.016
MW709R	08/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	11/24/04	< 0.14	< 0.4	< 0.36	na	na	< 0.74	< 0.02	< 0.023	< 0.019	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	0.032	< 0.02	< 0.016
MW709R	02/25/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	05/19/05	< 0.14	< 0.4	< 0.36	na	na	< 0.74	< 0.02	< 0.023	< 0.019	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	0.084	< 0.02	< 0.016
MW709R	08/09/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	12/13/05	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	0.012	< 0.0082	< 0.0081	0.015	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.017	< 0.0091	< 0.019	< 0.047	0.016	0.025
MW709R	03/08/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	06/26/06	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	< 0.0081	0.013	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.047	< 0.011	< 0.015
MW709R	09/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	12/13/06	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	0.029	0.031	0.012	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.18	< 0.011	< 0.015
MW709R	03/29/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	06/18/07	< 0.21	< 0.4	< 0.36	< 0.36	< 0.74	na	0.032	0.056	< 0.0082	0.012	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.19	0.012	< 0.015
MW709R	09/13/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	12/05/07	< 0.21	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	< 0.0082	< 0.012	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	< 0.016	< 0.0091	< 0.019	0.035	< 0.011	< 0.015
MW709R	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	06/26/08	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	< 0.0095	< 0.011	< 0.0078	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	0.022	< 0.0075	< 0.0068
MW709R	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	12/18/08	< 0.23	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	< 0.0095	0.014	< 0.0078	< 0.005	0.02	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	0.061	< 0.0075	< 0.0068
MW709R	03/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Table A.1.-1 Groundwater Analytical Data Table 1 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

		BTEX						PAHs																	
Sample ID	Sample Date	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene, o (ug/l)	Xylenes, m + p (ug/l)	Xylenes, Total (ug/l)	1-Methylnaphthalene (ug/l)	2-Methylnaphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo(a)anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b)fluoranthene (ug/l)	Benzo(ghi)perylene (ug/l)	Benzo(k)fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h)anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno(1,2,3-cd)pyrene (ug/l)	Naphthalene (PAH) (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
PAL		0.5	140	160	1000	1000	400	NE	NE	NE	NE	600	NE	0.02	0.02	NE	NE	0.02	NE	80	80	NE	10	NE	50
ES		5	700	800	10000	10000	2000	NE	NE	NE	NE	3000	NE	0.2	0.2	NE	NE	0.2	NE	400	400	NE	100	NE	250
MW709R	06/30/09	< 0.23	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.005	0.0053	< 0.0045	< 0.0036	< 0.0057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	0.04	< 0.0081	< 0.0047
MW709R	09/29/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	12/08/09	< 0.39	< 0.41	< 0.42	< 0.38	< 0.87	< 0.87	< 0.005	0.0086	< 0.0045	0.0039	0.016	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	0.03	< 0.0081	< 0.0047
MW709R	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	06/08/10	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 2.6	< 0.0053	0.006	< 0.0048	< 0.0038	0.02	< 0.0038	< 0.003	< 0.0036	< 0.0051	< 0.0046	< 0.0037	< 0.0034	< 0.0047	< 0.0051	< 0.005	0.022	< 0.0086	< 0.005
MW709R	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	12/02/10	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 1.8	< 0.005	0.004	< 0.0045	< 0.0036	0.012	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.005	< 0.0048	< 0.0047	0.011	< 0.0081	< 0.0047
MW709R	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	06/01/11	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	na	< 0.005	0.0072	< 0.0045	< 0.0036	0.014	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.0049	< 0.0048	< 0.0047	0.012	< 0.0081	< 0.0047
MW709R	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	06/19/12	< 0.39	< 0.41	< 0.42	< 0.38	< 0.87	na	< 0.005	< 0.0039	< 0.0046	< 0.0036	0.017	< 0.0037	< 0.0029	< 0.0034	< 0.0049	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	0.01	< 0.0082	< 0.0048
MW709R	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	12/12/12	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 2.6	< 0.0051	< 0.0039	< 0.0046	< 0.0037	0.028	< 0.0037	< 0.0029	< 0.0035	< 0.0049	< 0.0045	< 0.0035	< 0.0033	< 0.0045	< 0.0049	< 0.0048	0.0085	< 0.0082	< 0.0048
PZ701	08/17/95	*5*	3.6	6.3	na	na	11	na	na	< 1	< 2	1.5	0.89	**0.43**	**0.21**	0.24	0.18	**0.61**	< 0.1	3.3	1	< 0.1	< 1	6.6	2.1
PZ701	09/25/95	*2.2*	1.7	6.6	na	na	6.8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	09/26/95	na	na	na	na	na	na	na	na	< 1	< 2	0.25	0.13	< 0.2	< 0.05	< 0.1	< 0.05	*0.13*	< 0.1	0.7	< 0.4	< 0.1	< 1	0.8	0.77
PZ701	12/21/98	*0.96*	1.1	1.8	na	na	4.2	< 0.94	< 0.92	< 1.4	< 1.3	0.23	0.25	< 0.21	< 0.12	< 0.23	< 0.23	< 0.092	< 0.25	0.6	0.42	< 0.11	7.3	0.8	1.1
PZ701	06/25/02	< 0.45	< 0.82	< 0.68	na	na	< 1.7	na	na	0.04	0.059	0.073	0.13	*0.1*	*0.084*	0.059	0.065	*0.092*	0.018	0.23	< 0.021	0.058	0.18	0.1	0.19
PZ701	11/07/02	*0.9*	< 0.53	< 0.84	na	na	< 1.1	0.076	< 0.051	0.11	0.087	0.15	0.19	*0.16*	*0.17*	0.16	0.14	*0.16*	< 0.048	0.44	0.053	0.13	0.34	0.38	0.38
PZ701	04/15/03	< 0.41	< 0.54	< 0.67	na	na	< 1.8	0.045	0.045	< 0.018	< 0.019	0.023	0.019	0.017	0.017	0.017	< 0.019	0.015	< 0.016	0.029	< 0.017	< 0.021	0.067	0.032	0.034
PZ701	07/01/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	09/30/03	0.35	< 0.6	< 0.58	na	na	< 1.2	0.046	0.042	0.043	0.13	0.23	0.42	**0.24**	*0.19*	0.15	0.17	**0.27**	0.067	0.82	0.056	0.14	0.22	0.89	0.82
PZ701	11/10/03	< 0.3	0.7	< 0.58	na	na	< 1.2	0.27	0.17	0.28	0.68	1.2	2.4	**1.5**	**1.1**	0.65	1.1	**1.5**	0.24	4.4	0.34	0.6	1.3	4.6	4.2
PZ701	05/20/04	< 0.41	< 0.54	< 0.67	na	na	< 1.8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	05/24/04	na	na	na	na	na	na	0.05	0.017	0.055	< 0.018	0.022	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	< 0.013	< 0.015	0.014	0.018	< 0.02	0.22	0.029	0.017
PZ701	08/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	11/24/04	**44**	2.3	< 0.36	na	na	1.47	0.81	0.72	0.44	0.084	0.077	< 0.02	< 0.018	< 0.018	< 0.021	< 0.02	< 0.017	< 0.022	0.029	0.13	< 0.017	4.3	0.23	0.038
PZ701	02/25/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	05/19/05	< 0.14	< 0.4	< 0.36	na	na	< 0.74	< 0.02	< 0.023	< 0.019	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	0.066	< 0.002	< 0.016
PZ701	08/09/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	12/13/05	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	0.061	0.023	< 0.0082	0.016	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.047	< 0.011	< 0.015
PZ701	03/08/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	06/26/06	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.031	< 0.011	< 0.015
PZ701	09/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	12/13/06	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	0.017	< 0.012	0.017	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.024	< 0.0091	< 0.019	0.016	0.013	0.026
PZ701	03/29/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	06/18/07	< 0.21	< 0.4	< 0.36	< 0.36	< 0.74	na	< 0.01	< 0.011	< 0.0082	0.012	< 0.012	< 0.016	0.019	< 0.016	< 0.019	< 0.019	0.019	< 0.019	0.02	< 0.0091	< 0.019	0.028	< 0.011	0.023
PZ701	09/13/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	12/05/07	< 0.21	< 0.4	0.72	< 0.36	< 0.74	< 0.74	< 0.011	< 0.013	< 0.0091	0.011	< 0.013	< 0.017	< 0.02	< 0.017	< 0.022	< 0.022	< 0.021	< 0.021	0.028	< 0.01	< 0.021	< 0.014	< 0.013	0.027
PZ701	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	06/26/08	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	< 0.0095	< 0.011	< 0.0078	< 0.005	< 0.0065	0.01	0.0072	0.0097	0.0096	0.01	0.0096	0.0052	0.0075	< 0.0063	0.0069	< 0.016	< 0.0075	< 0.0068
PZ701	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	12/18/08	< 0.23	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	0.2	0.35	0.03	0.13	0.051	0.0085	0.0058	0.0064	< 0.0062	< 0.0078	0.0093	< 0.0043	0.021	0.082	< 0.0036	1.1	0.14	0.024
PZ701	03/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	06/30/09	< 0.23	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	0.035	0.023	0.017	0.0045	0.0078	0.0039	0.0037	0.0035	< 0.0048	< 0.0044	0.0041	< 0.0032	0.0075	0.0067	< 0.0047	0.36	0.014	0.0087
PZ701	09/29/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	12/08/09	< 0.39	0.51	< 0.42	< 0.38	< 0.87	< 0.87	0.036	0.0089	0.0088	< 0.0036	< 0.0057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	0.26	< 0.0081	< 0.0047
PZ701	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Table A.1.-1 Groundwater Analytical Data Table 1 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	BTEX						PAHs																	
		Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene, o (ug/l)	Xylenes, m + p (ug/l)	Xylenes, Total (ug/l)	1-Methylnaphthalene (ug/l)	2-Methylnaphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo(a)anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b)fluoranthene (ug/l)	Benzo(ghi)perylene (ug/l)	Benzo(k)fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h)anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno(1,2,3-cd)pyrene (ug/l)	Naphthalene (PAH) (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
PAL		0.5	140	160	1000	1000	400	NE	NE	NE	NE	600	NE	0.02	0.02	NE	NE	0.02	NE	80	80	NE	10	NE	50
ES		5	700	800	10000	10000	2000	NE	NE	NE	NE	3000	NE	0.2	0.2	NE	NE	0.2	NE	400	400	NE	100	NE	250
PZ701	06/08/10	**5.3**	0.93	1.4	< 0.83	< 1.8	< 2.6	0.11	0.13	0.031	0.07	0.05	0.0066	0.0059	0.0051	0.0071	0.0054	0.01	< 0.0034	0.037	0.066	< 0.005	0.54	0.18	0.045
PZ701	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	12/02/10	< 0.41	0.74	< 0.67	< 0.83	< 1.8	< 1.8	0.027	0.016	0.022	0.0075	0.0084	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.0055	0.0083	< 0.0047	0.15	0.011	0.0069
PZ701	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	06/01/11	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	na	< 0.005	< 0.0039	< 0.0045	0.0092	0.0058	0.0081	0.0058	0.0055	0.01	0.0077	0.0089	0.0054	0.0095	< 0.0048	0.0053	0.005	< 0.0081	0.01
PZ701	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	06/19/12	< 0.39	< 0.41	< 0.42	< 0.38	< 0.87	na	0.0061	0.0063	< 0.0045	0.013	0.014	0.0089	0.01	0.0076	0.0084	0.012	0.013	< 0.0032	0.014	< 0.0048	< 0.0047	0.029	< 0.0081	0.018
PZ701	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	12/12/12	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 2.6	0.12	0.11	0.044	0.05	0.022	0.016	0.016	0.0094	0.0083	0.015	0.018	< 0.0032	0.023	0.013	0.0058	0.67	0.024	0.027
PZ702	12/21/98	< 0.5	< 0.6	1.5	na	na	< 2.2	< 0.94	< 0.92	< 1.4	< 1.3	0.44	0.9	< 0.21	*0.2*	< 0.23	< 0.23	**0.27**	< 0.25	1.5	0.5	< 0.11	1.2	1.5	2.3
PZ702	06/25/02	< 0.45	< 0.82	< 0.68	na	na	< 1.7	na	na	< 0.018	0.059	< 0.02	< 0.019	< 0.012	< 0.014	< 0.015	< 0.013	< 0.018	< 0.017	< 0.028	0.03	< 0.014	0.42	0.063	0.021
PZ702	11/07/02	< 0.25	< 0.53	< 0.84	na	na	< 1.1	0.031	0.032	< 0.018	0.023	< 0.02	0.015	< 0.014	< 0.013	0.016	< 0.019	*0.023*	< 0.016	0.039	0.02	< 0.021	0.087	0.084	0.046
PZ702	01/24/03	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	04/15/03	< 0.41	< 0.54	< 0.67	na	na	< 1.8	0.054	0.045	< 0.018	< 0.019	< 0.02	0.013	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	0.013	0.017	< 0.021	0.12	0.042	0.018
PZ702	07/01/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	0.029	0.022	< 0.018	0.037	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	0.014	< 0.016	0.022	< 0.017	< 0.021	0.045	0.058	0.033
PZ702	09/30/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	< 0.018	< 0.017	< 0.018	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	< 0.013	< 0.017	< 0.021	0.049	0.019	< 0.017
PZ702	11/10/03	< 0.3	< 0.6	< 0.58	na	na	< 1.2	0.03	0.032	0.027*	0.03	0.025	0.038	*0.034*	0.019	0.019	< 0.019	*0.033*	< 0.016	0.046	0.02	< 0.021	0.13	0.082	0.08
PZ702	02/17/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	05/20/04	< 0.41	< 0.54	< 0.67	na	na	< 1.8	0.029	0.034	< 0.017	0.031	< 0.019	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	0.015	< 0.015	0.017	< 0.016	< 0.02	0.6	0.028	0.027
PZ702	08/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	11/24/04	< 0.14	< 0.4	< 0.36	na	na	< 0.74	0.068	0.063	< 0.019	0.023	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	0.46	< 0.02	< 0.016
PZ702	02/25/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	05/19/05	< 0.14	< 0.4	< 0.36	na	na	< 0.74	0.023	0.026	< 0.02	< 0.02	< 0.019	< 0.021	< 0.019	< 0.019	< 0.022	< 0.02	< 0.017	< 0.023	< 0.017	< 0.023	< 0.018	0.16	< 0.021	< 0.017
PZ702	08/09/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	12/13/05	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.047	< 0.011	< 0.015
PZ702	03/08/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	06/26/06	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	0.0099	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.022	< 0.011	0.017
PZ702	09/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	12/13/06	**3300**	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	0.01	< 0.011	0.013	0.13	0.054	0.14	*0.12*	*0.065*	0.048	0.071	*0.11*	< 0.019	0.16	0.011	0.037	0.014	0.064	0.2
PZ702	03/29/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	06/18/07	< 0.21	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	0.059	0.019	0.067	*0.074*	*0.037*	0.041	0.049	*0.074*	< 0.019	0.075	0.012	0.028	0.028	0.039	0.1
PZ702	09/13/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	12/05/07	< 0.21	< 0.4	0.47	< 0.36	< 0.74	< 0.74	< 0.01	< 0.011	< 0.0082	0.025	0.012	0.018	< 0.019	< 0.016	< 0.019	< 0.02	*0.025*	< 0.019	0.026	< 0.0091	< 0.019	0.033	0.012	0.029
PZ702	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	06/26/08	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	0.03	< 0.011	< 0.008	0.037	0.013	0.026	*0.021*	0.012	0.014	0.018	*0.027*	< 0.0044	0.035	0.0087	0.0093	0.17	0.02	0.047
PZ702	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	12/18/08	< 0.23	< 0.4	< 0.36	< 0.36	< 0.74	< 1.1	0.013	< 0.011	< 0.0078	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	0.097	< 0.0075	< 0.0068
PZ702	03/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	06/30/09	< 0.23	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	0.0059	0.0099	< 0.0045	0.0071	< 0.0057	0.0036	0.0032	< 0.0034	< 0.0048	< 0.0044	0.0045	< 0.0032	0.0052	< 0.0048	< 0.0047	0.057	< 0.0081	0.006
PZ702	09/29/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	12/08/09	< 0.39	< 0.41	< 0.42	< 0.38	< 0.87	< 0.87	0.01	0.02	< 0.0045	< 0.0036	< 0.0057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	0.038	< 0.0081	< 0.0047
PZ702	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	06/08/10	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 2.6	< 0.0053	0.0057	< 0.0048	< 0.0038	< 0.0061	0.004	< 0.003	0.004	< 0.0051	< 0.0046	0.0049	< 0.0034	0.0049	< 0.0051	< 0.005	0.031	< 0.0086	< 0.005
PZ702	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	12/02/10	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 1.8	0.15	0.071	0.054	0.012	0.011	0.007	0.0057	< 0.0034	< 0.0048	0.0072	0.0078	< 0.0032	0.011	0.019	< 0.0047	1.1	0.023	0.014
PZ702	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	06/01/11	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	na	0.012	0.018	< 0.0047	0.0096	< 0.006	0.0094	0.0091	0.01	0.014	0.0075	0.01	< 0.0033	0.013	< 0.005	< 0.0049	0.081	0.0088	0.023
PZ702	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Table A.1.-1 Groundwater Analytical Data Table 1 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

		BTEX						PAHs																	
Sample ID	Sample Date	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene, o (ug/l)	Xylenes, m + p (ug/l)	Xylenes, Total (ug/l)	1-Methylnaphthalene (ug/l)	2-Methylnaphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo(a)anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b)fluoranthene (ug/l)	Benzo(ghi)perylene (ug/l)	Benzo(k)fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h)anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno(1,2,3-cd)pyrene (ug/l)	Naphthalene (PAH) (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
PAL		0.5	140	160	1000	1000	400	NE	NE	NE	NE	600	NE	0.02	0.02	NE	NE	0.02	NE	80	80	NE	10	NE	50
ES		5	700	800	10000	10000	2000	NE	NE	NE	NE	3000	NE	0.2	0.2	NE	NE	0.2	NE	400	400	NE	100	NE	250
PZ702	06/19/12	< 0.39	< 0.41	< 0.42	< 0.38	< 0.87	na	0.0084	0.0085	0.008	0.0038	< 0.0057	0.004	0.0038	< 0.0034	< 0.0048	0.0052	0.0067	< 0.0032	0.0069	< 0.0048	< 0.0047	0.025	0.0096	0.0099
PZ702	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	12/12/12	< 0.41	< 0.54	< 0.67	< 0.83	< 1.8	< 2.6	0.12	0.03	0.022	0.04	< 0.0057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	0.0096	< 0.0047	0.27	< 0.0081	< 0.0047
PZ702	12/05/07	< 0.21	< 0.4	< 0.36	< 0.36	< 0.74	< 0.74	< 0.015	< 0.016	< 0.012	0.015	< 0.017	< 0.022	< 0.026	< 0.022	< 0.028	< 0.028	< 0.027	< 0.027	< 0.022	< 0.013	< 0.027	< 0.018	< 0.016	< 0.021
PZ703	12/21/98	**960**	*429*	26	na	na	299	2.8	< 0.92	< 1.4	< 1.3	0.2	0.22	< 0.21	< 0.12	< 0.23	< 0.23	< 0.092	< 0.25	0.25	0.44	< 0.11	*86*	0.53	0.64
PZ703	01/19/99	**71**	12	9.6	na	na	15.2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/25/02	**570**	*150*	14	na	na	86	na	na	1.2	< 0.46	0.45	< 0.38	< 0.24	< 0.28	< 0.3	< 0.26	< 0.36	< 0.34	< 0.56	< 0.42	< 0.28	**190**	0.38	< 0.4
PZ703	11/07/02	**460**	130	16	na	na	101	< 1.7	< 1.7	< 1.8	< 1.9	< 2	< 1.2	< 1.4	< 1.3	< 1.6	< 1.9	< 1.4	< 1.6	< 1.3	< 1.7	< 2.1	*41*	< 1.6	< 1.7
PZ703	04/15/03	**880**	*260*	22	na	na	146	< 1.4	< 1.4	< 1.4	< 1.5	< 1.6	< 0.96	< 1.1	< 1	< 1.3	< 1.5	< 1.1	< 1.3	< 1	< 1.4	< 1.7	*30*	1.4	< 1.4
PZ703	07/01/03	**1800**	**760**	64	na	na	*450*	7	5*	2.8*	< 1.9	< 2	< 1.2	< 1.4	< 1.3	< 1.6	< 1.9	< 1.4	< 1.6	< 1.3	< 1.7	< 2.1	**410**	< 1.6	< 1.7
PZ703	09/30/03	**2000**	**910**	65	na	na	*520*	8.4	7.2	3.9	0.47	< 0.4	< 0.24	< 0.28	< 0.26	< 0.32	< 0.38	< 0.28	< 0.32	< 0.26	0.41	< 0.42	**350**	0.41	< 0.34
PZ703	11/10/03	**2100**	**1100**	65	na	na	*560*	13	12	7.4	< 1.9	< 2	< 1.2	< 1.4	< 1.3	< 1.6	< 1.9	< 1.4	< 1.6	< 1.3	< 1.7	< 2.1	**510**	4.2	1.8
PZ703	02/17/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	05/20/04	**1000**	**750**	31	na	na	390	38	40	15	< 1.8	< 1.9	< 1.1	< 1.3	< 1.2	< 1.5	< 1.8	< 1.3	< 1.5	< 1.2	< 1.6	< 2	**1900**	< 1.5	< 1.6
PZ703	08/24/04	**3700**	**2800**	110	na	na	*1180*	45	42	21	< 7.7	< 7.1	< 7.8	< 7.2	< 7.2	< 8.3	< 7.7	< 6.6	< 8.8	< 6.6	< 8.7	< 6.8	**1600**	< 8.2	< 6.5
PZ703	11/24/04	**3200**	**2200**	110	na	na	*1090*	18	17	5.9	< 3.9	< 3.6	< 4	< 3.7	< 3.6	< 4.2	< 3.9	< 3.3	< 4.4	< 3.3	< 4.4	< 3.4	**760**	< 4.1	< 3.3
PZ703	02/25/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	05/19/05	**380**	*220*	9.3	na	na	113	1.9	0.59	1.1	0.087	< 0.071	< 0.078	< 0.072	< 0.072	< 0.083	< 0.077	< 0.066	< 0.088	< 0.066	0.097	< 0.068	0.97	< 0.082	0.065
PZ703	08/09/05	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	12/13/05	**330**	*140*	9.3	64	48	112	0.89	0.16	0.87	0.05	0.024	< 0.031	< 0.037	< 0.031	< 0.039	< 0.039	< 0.038	< 0.038	< 0.031	0.11	< 0.038	0.33	0.06	< 0.029
PZ703	03/08/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/26/06	**600**	*400*	22	120	91	211	0.97	0.044	2.3	0.14	0.029	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	< 0.016	0.28	< 0.019	1.4	0.19	< 0.015
PZ703	09/26/06	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	12/13/06	**220**	23	7.6	92	85	177	0.042	< 0.023	0.62	0.096	< 0.023	< 0.031	< 0.037	< 0.032	< 0.039	< 0.039	< 0.038	< 0.038	< 0.031	0.056	< 0.038	0.079	< 0.023	< 0.029
PZ703	03/29/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/18/07	**760**	*520*	31	180	110	290	1.2	< 0.22	3	< 0.16	< 0.23	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	0.22	< 0.38	< 0.25	< 0.23	< 0.29
PZ703	09/13/07	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	12/05/07	**770**	*150*	25	200	120	320	5.7	4.7	4.7	0.33	< 0.23	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	0.48	< 0.38	**120**	0.31	< 0.29
PZ703	04/02/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/26/08	**962**	*465*	31	158	113	270	6.2	5.9	3	0.27	< 0.13	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	< 0.11	0.23	< 0.072	**189**	< 0.15	< 0.14
PZ703	09/11/08	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	12/18/08	**598**	53.2	18.2	157	134	291	2.4	0.27	5	0.66	< 0.13	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	< 0.11	0.5	< 0.072	0.73	< 0.15	< 0.14
PZ703	03/30/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/30/09	**786**	*263*	23.5	159	115	274	2.3	2.6	< 1.8	0.16	0.046	0.0037	0.003	< 0.0034	< 0.0048	< 0.0044	0.0035	< 0.0032	0.015	0.22	< 0.0047	*93.3*	0.14	0.015
PZ703	09/29/09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	12/08/09	**628**	69.4	17.7	185	159	344	2.4	1.2	2.3	0.14	0.069	0.0039	0.0029	0.0035	< 0.0048	< 0.0044	0.0042	< 0.0032	0.017	0.46	< 0.0047	0.12	0.19	0.018
PZ703	03/30/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/08/10	**824**	*202*	26.1	180	122	302	4.2	1.7	2.9	0.32	0.18	< 0.077	< 0.061	< 0.072	< 0.1	< 0.093	< 0.074	< 0.068	0.11	0.57	< 0.099	0.59	0.83	0.15
PZ703	09/08/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	12/02/10	**1960**	*417*	42.7	146	155	301	0.59	0.016	1.2	0.034	0.028	< 0.014	< 0.011	< 0.014	< 0.019	< 0.017	< 0.014	< 0.013	< 0.018	0.19	< 0.019	0.067	0.071	< 0.019
PZ703	03/22/11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/01/11	**232**	76.3	6.9	36	29.4	na	< 0.0052	0.011	0.0071	0.021	0.012	< 0.0038	< 0.003	< 0.0035	< 0.005	< 0.0045	< 0.0036	< 0.0033	0.0056	0.02	< 0.0049	0.028	0.0089	0.0083
PZ703	03/01/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/19/12	**726**	*362*	20.2	113	87.2	na	2.6	2.6	1.7	< 0.36	< 0.57	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	< 0.44	< 0.48	< 0.47	**106**	< 0.81	< 0.47
PZ703	09/10/12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	12/12/12	**895**	*517*	25.2	122	102	224	4.5	< 0.077	3.3	0.27	< 0.11	< 0.072	< 0.057	< 0.068	< 0.096	< 0.087	< 0.07	< 0.064	< 0.088	0.46	< 0.094	0.35	0.33	< 0.095

Table A.1.-2 Groundwater Analytical Data Table 2 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

		Inorganics and Laboratory RNA Parameters										Field RNA Parameters					
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Cyanide, Amenable (mg/l)	Cyanide, Total (mg/l)	Cyanide, Weak Acid Dissociable (mg/l)	Iron, Dissolved (ug/l)	Iron, Total (ug/l)	Manganese, Dissolved (ug/l)	Methane (ug/l)	Nitrogen, N02 + N03, Total (mg/l)	Sulfate, Total (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (millivolts)	PH, Field (Standard Units)	Specific Conductance, Field (umhos/cm)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
PAL		NE	NE	NE	NE	150	NE	60	NE	2	125	NE	NE	NE	NE	NE	NE
ES		NE	NE	NE	NE	300	NE	300	NE	10	250	NE	NE	NE	NE	NE	NE
BW06	11/07/02	na	na	na	na	< 61 U	na	na	< 10 U	0.13	35	3.4	391	8.36	0.004	10.72	na
BW06	05/20/04	na	na	0.0032	na	na	na	na	< 10	< 0.063	30	na	na	na	na	na	na
BW06	11/24/04	na	na	na	< 0.0053	na	na	na	< 10	< 0.063	41	na	na	na	na	na	na
BW06	05/19/05	na	na	na	0.003	na	na	na	< 10	0.23	39	na	na	na	na	na	na
BW06	08/09/05	na	na	na	na	na	na	na	na	na	na	2.52	103	8.59	0.86	14.68	na
BW06	12/13/05	na	na	na	na	na	na	na	< 10	< 0.061	42	8.6	184	6.95	0.88	8.75	na
BW06	06/26/06	na	na	na	na	na	na	na	< 10	< 0.11	41	0.93	97	7.03	0.89	15.35	na
BW06	12/13/06	na	na	na	na	na	na	na	< 10	< 0.11	39	8.77	-304	7.29	0.903	9.47	na
BW06	06/18/07	na	na	na	na	na	na	na	< 10	0.15	39	na	na	na	na	na	na
BW06	12/18/08	na	na	na	na	na	na	na	< 2	0.13	40.2	10.98	-23	7.86	0.946	7.79	na
BW06	06/30/09	na	na	na	na	na	na	na	< 0.93	0.27	41.4	1.99	-11.3	7.83	0.625	10.7	522.9
BW06	12/08/09	na	na	na	na	na	na	na	< 0.93	0.21	36.7	na	na	na	na	na	na
BW06	03/30/10	na	na	na	na	na	na	na	na	na	na	1.8	-20.7	7.76	0.767	10.61	97
BW06	06/08/10	na	na	na	na	na	na	na	< 0.93	0.3	36.9	5.9	-15	8.3	0.001	14.23	40
BW06	09/08/10	na	na	na	na	16	na	13.5	na	na	na	0.31	-55	7.83	0.843	11.85	2000
BW06	12/02/10	na	na	na	na	na	na	na	2.6	< 0.12	39.7	0.92	-111	7.63	0.179	10.54	128
BW06	03/22/11	na	na	na	na	na	na	na	na	na	na	6.46	224	7.91	0.781	6.6	398
BW06	06/01/11	na	na	na	na	na	na	na	3.2	< 0.12	39.9	8.07	60	7.99	0.942	13.26	3.27
BW06	03/01/12	na	na	na	na	na	na	na	na	na	na	7.3	-40	8.35	0.844	9.56	17.6
BW06	06/19/12	na	na	na	na	na	na	na	< 0.64	0.13	38.7	0.59	6	7.79	0.795	13.69	40.2
BW06	09/10/12	na	na	na	na	na	na	na	na	na	na	0.81	-74	8.21	0.8	15.14	35
BW06	12/12/12	na	na	na	na	83.8	na	16.5	7.7	0.13	38.2	1.62	-78	7.47	0.861	10.83	155
BW15	05/20/04	na	na	0.077	na	na	na	na	< 10	1.1	**1500**	na	na	na	na	na	na
BW15	11/24/04	na	na	na	0.0097	na	na	na	190	< 0.063	**560**	na	na	na	na	na	na
BW15	05/19/05	na	na	na	0.0045	na	na	na	4900	< 0.061	72	na	na	na	na	na	na
BW15	12/13/05	na	na	na	na	na	na	na	7500	< 0.061	*190*	0.93	46	6.92	2.18	9.79	na
BW15	06/26/06	na	na	na	na	na	na	na	6600	< 0.11	110	0.67	47	6.95	2.11	14.83	na
BW15	12/13/06	na	na	na	na	na	na	na	400	0.21	**1100**	2.76	-83	7.31	2.79	10.81	na
MW701	08/15/95	na	< 0.005	0.11	0.025	na	na	na	na	na	na	na	na	na	na	na	na
MW701	09/25/95	na	< 0.005	0.088	0.02	na	na	na	na	na	na	na	na	na	na	na	na
MW701	12/21/98	na	0.05	0.17	0.11	na	na	na	na	na	na	na	na	na	na	na	na
MW701R	06/25/02	1200	0.15	0.16	0.012	**20000**	52000	na	na	< 0.23	3.8	na	na	na	na	na	na
MW701R	11/07/02	na	na	na	na	na	na	na	na	na	na	1.08	541	7.18	1.267	13.39	na
MW701R	07/01/03	na	na	0.13	na	**18000**	na	na	11000	< 0.047	2.3	4.29	214	9.32	1.243	12.84	na
MW701R	11/10/03	na	na	0.16	na	**40000**	na	na	5800	< 0.047	< 1.1	0.25	-12	9.12	1.001	12.38	na
MW701R	05/20/04	na	na	0.15	na	na	na	na	6700	< 0.063	1	7.36	13	9.74	0.173	9.9	na
MW701R	08/24/04	na	na	na	na	na	na	na	na	na	na	0.74	179	6.46	2.244	15.66	na
MW701R	11/24/04	na	na	na	0.0067	na	na	na	8100	< 0.063	2.4	2.12	126	6.84	2.418	11.86	na
MW701R	05/19/05	na	na	na	0.0036	na	na	na	8100	< 0.061	1.7	na	na	na	na	na	na
MW701R	12/13/05	na	na	na	na	na	na	na	6800	< 0.061	1.4	na	na	na	na	na	na
MW701R	03/08/06	na	na	na	na	na	na	na	na	na	na	2.35	-233	6.47	2.46	6.94	na
MW701R	06/26/06	na	na	na	na	na	na	na	8300	< 0.11	3.1	na	na	na	na	na	na
MW701R	09/26/06	na	na	na	na	na	na	na	na	na	na	na	-214	6.04	2.057	17.34	na
MW701R	12/13/06	na	na	na	na	na	na	na	5300	< 0.11	2.8	na	na	na	na	na	na
MW701R	03/29/07	na	na	na	na	na	na	na	na	na	na	12.25	-52.4	6.79	0.522	5.38	na
MW701R	06/18/07	na	na	na	na	na	na	na	9600	< 0.096	2.4	1.22	-121	6.77	2.21	12.14	na
MW701R	09/13/07	na	na	na	na	na	na	na	na	na	na	2.02	-78.5	6.08	0.522	16.94	na
MW701R	12/05/07	na	na	na	na	na	na	na	11000	< 0.096	2.4	0.62	-159	6.55	2.3	12.26	na

Table A.1.-2 Groundwater Analytical Data Table 2 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	Inorganics and Laboratory RNA Parameters										Field RNA Parameters					
		Alkalinity, Total (mg/l)	Cyanide, Amenable (mg/l)	Cyanide, Total (mg/l)	Cyanide, Weak Acid Dissociable (mg/l)	Iron, Dissolved (ug/l)	Iron, Total (ug/l)	Manganese, Dissolved (ug/l)	Methane (ug/l)	Nitrogen, N02 + N03, Total (mg/l)	Sulfate, Total (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (millivolts)	PH, Field (Standard Units)	Specific Conductance, Field (umhos/cm)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
PAL		NE	NE	NE	NE	150	NE	60	NE	2	125	NE	NE	NE	NE	NE	NE
ES		NE	NE	NE	NE	300	NE	300	NE	10	250	NE	NE	NE	NE	NE	NE
MW701R	04/02/08	na	na	na	na	na	na	na	na	na	na	0.42	-124	6.09	2.5	6.81	na
MW701R	06/26/08	na	na	na	na	na	na	na	5250	< 0.096	3.2	0.15	-142	6.41	2.04	13.89	366
MW701R	09/11/08	na	na	na	na	na	na	na	na	na	na	0.23	-79	6.54	2.14	15.22	41
MW701R	12/18/08	na	na	na	na	na	na	na	na	na	na	0.6	-98	6.58	2.35	9.78	na
MW701R	03/30/09	na	na	na	na	na	na	na	na	na	na	0.15	-85.1	6.43	1.952	7.6	48.2
MW701R	06/30/09	na	na	na	na	na	na	na	21200	< 0.12	2.5	0.73	-132.3	6.29	1.739	10.75	100.3
MW701R	09/29/09	na	na	na	na	na	na	na	na	na	na	1.43	-229	10.56	2.36	14.52	202
MW701R	12/08/09	na	na	na	na	na	na	na	13900	< 0.12	2	0.54	-173	6.6	2.3	9.53	2000
MW701R	03/30/10	na	na	na	na	na	na	na	na	na	na	1.19	-159.9	6.2	1.803	10.67	19.9
MW701R	06/08/10	na	na	na	na	na	na	na	17600	< 0.12	3.9	0.47	-117	6.59	2.49	11.03	41
MW701R	09/08/10	na	na	na	na	**11400**	na	**364**	na	na	na	0.25	-177	6.62	2.45	16.01	112
MW701R	12/02/10	na	na	na	na	na	na	na	12100	< 0.12	2.2	0.66	-203	6.76	2.27	11.52	20.1
MW701R	03/22/11	na	na	na	na	na	na	na	na	na	na	0.24	-64	6.63	2.29	6.27	29
MW701R	06/01/11	na	na	na	na	na	na	na	12400	< 0.12	2.7	0.37	-108	6.35	2.7	13.59	30.1
MW701R	03/01/12	na	na	na	na	na	na	na	na	na	na	0.99	-92	6.9	2.36	6.42	74
MW701R	06/19/12	na	na	na	na	na	na	na	1180	< 0.12	< 2	2.28	-50	6.64	2.28	24.84	137
MW701R	09/10/12	na	na	na	na	na	na	na	na	na	na	0.3	-135	6.6	2.34	20.29	54.1
MW701R	12/12/12	na	na	na	na	**11900**	na	**375**	8020	< 0.12	2.5	2	-178	6.67	2.44	11.96	1149
MW702	08/15/95	na	< 0.005	0.2	0.043	na	na	na	na	na	na	na	na	na	na	na	na
MW702	09/25/95	na	< 0.005	0.072	0.032	na	na	na	na	na	na	na	na	na	na	na	na
MW703	08/15/95	na	< 0.005	0.12	0.039	na	na	na	na	na	na	na	na	na	na	na	na
MW703	09/25/95	na	< 0.005	0.14	0.028	na	na	na	na	na	na	na	na	na	na	na	na
MW703	12/21/98	na	0.05	0.2	0.074	na	na	na	na	na	na	na	na	na	na	na	na
MW704	08/15/95	na	< 0.005	0.31	0.056	na	na	na	na	na	na	na	na	na	na	na	na
MW704	09/25/95	na	< 0.005	0.28	0.062	na	na	na	na	na	na	na	na	na	na	na	na
MW704	12/21/98	na	0.22	0.31	0.017	na	na	na	na	na	na	na	na	na	na	na	na
MW705	08/15/95	na	< 0.005	< 0.005	< 0.005	na	na	na	na	na	na	na	na	na	na	na	na
MW705	09/25/95	na	< 0.005	< 0.005	< 0.005	na	na	na	na	na	na	na	na	na	na	na	na
MW705	12/21/98	na	< 0.001	< 0.001	< 0.001	na	na	na	na	na	na	na	na	na	na	na	na
MW705	06/25/02	460	0.076	0.08	0.013	**410**	1200	na	na	< 0.023	*190*	4.75	403	8.7	1.232	10.85	na
MW705	11/07/02	na	0.11	0.06	< 0.0027	< 61	na	na	na	< 0.075	< 1.1	6.42	539	7.76	1.407	11.02	na
MW705	04/15/03	na	0.1	0.1	0.0064	na	na	na	na	na	na	6.28	262	8.41	1.404	7.45	na
MW705	07/01/03	na	na	0.14	na	**670**	na	na	93	< 0.047	**380**	4.26	262	9.25	1.5	12.4	na
MW705	09/30/03	na	na	0.15	na	na	na	na	na	na	na	na	na	6.98	2.63	13.9	na
MW705	11/10/03	na	na	0.17	na	**310**	na	na	74	0.21	**380**	0.27	36	9.84	1.084	12.21	na
MW705	02/17/04	na	na	na	na	na	na	na	na	na	na	7.61	200.7	6.68	3.3	6.52	na
MW705	05/20/04	na	na	0.15	na	na	na	na	32	< 0.063	**350**	1.53	10	9.71	0.058	11.35	na
MW705	08/24/04	na	na	na	na	na	na	na	na	na	na	1.2	192	6.83	2.916	15.09	na
MW705	11/24/04	na	na	na	0.0058	na	na	na	99	< 0.063	**400**	2.58	136	7.46	2.889	12.4	na
MW705	02/25/05	na	na	na	na	na	na	na	na	na	na	0.29	150	7.86	2.31	5.94	na
MW705	05/19/05	na	na	na	0.01	na	na	na	190	< 0.061	**450**	1.26	193	7.06	2.75	9.48	na
MW705	08/09/05	na	na	na	na	na	na	na	na	na	na	1.45	95	8.12	2.71	14.06	na
MW705	03/08/06	na	na	na	na	na	na	na	na	na	na	1.49	-211	7.01	2.8	8.53	na
MW705	06/18/07	na	na	na	na	na	na	na	na	na	na	1.65	-80	7.12	2.78	12.24	na
MW705	04/02/08	na	na	na	na	na	na	na	na	na	na	0.27	-25	6.67	1.55	7.07	na
MW705	06/26/08	na	na	na	na	na	na	na	53.8	< 0.096	119	1.7	-44	7.05	1.163	12.22	33.8
MW705	09/11/08	na	na	na	na	na	na	na	na	na	na	0.76	-57	7.26	1.81	14.08	18.2
MW706	08/15/95	na	< 0.005	< 0.005	< 0.005	na	na	na	na	na	na	na	na	na	na	na	na

Table A.1.-2 Groundwater Analytical Data Table 2 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	Inorganics and Laboratory RNA Parameters										Field RNA Parameters					
		Alkalinity, Total (mg/l)	Cyanide, Amenable (mg/l)	Cyanide, Total (mg/l)	Cyanide, Weak Acid Dissociable (mg/l)	Iron, Dissolved (ug/l)	Iron, Total (ug/l)	Manganese, Dissolved (ug/l)	Methane (ug/l)	Nitrogen, N02 + N03, Total (mg/l)	Sulfate, Total (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (millivolts)	PH, Field (Standard Units)	Specific Conductance, Field (umhos/cm)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
PAL		NE	NE	NE	NE	150	NE	60	NE	2	125	NE	NE	NE	NE	NE	NE
ES		NE	NE	NE	NE	300	NE	300	NE	10	250	NE	NE	NE	NE	NE	NE
MW706	09/25/95	na	< 0.005	< 0.005	< 0.005	na	na	na	na	na	na	na	na	na	na	na	na
MW706	06/25/02	140	0.078	0.081	0.0099	**620**	3800	na	na	**23**	**1200**	na	na	na	na	na	na
MW706	11/07/02	na	na	na	na	na	na	na	na	na	na	1.88	541	7.69	0.011	9.44	na
MW706	07/01/03	na	na	0.099	na	140	na	na	25	0.67	**880**	2.51	270	9.35	1.358	10.71	na
MW706	11/10/03	na	na	0.086	na	*280*	na	na	< 10	*7.6*	**500**	0.08	14	9.51	0.749	12.8	na
MW706	05/20/04	na	na	0.15	na	na	na	na	< 10	0.85	**880**	8.9	-4	9.98	0.385	10.15	na
MW706	08/24/04	na	na	na	na	na	na	na	na	na	na	0.72	235	6.59	2.413	13.93	na
MW706	11/24/04	na	na	na	0.0086	na	na	na	29	0.15	**740**	na	na	na	na	na	na
MW706	05/19/05	na	na	na	0.0046	na	na	na	25	0.48	**830**	na	na	na	na	na	na
MW706	12/13/05	na	na	na	na	na	na	na	< 10	0.4	**1000**	na	na	na	na	na	na
MW706	06/26/06	na	na	na	na	na	na	na	< 10	0.14	**800**	1.37	83	6.78	2	12.76	na
MW706	09/26/06	na	na	na	na	na	na	na	na	na	na	na	-223.9	6.26	1.622	15.5	na
MW706	12/13/06	na	na	na	na	na	na	na	< 10	0.11	**910**	na	na	na	na	na	na
MW706	03/29/07	na	na	na	na	na	na	na	na	na	na	12.1	8.4	7.28	1.077	6.17	na
MW706	06/18/07	na	na	na	na	na	na	na	< 10	< 0.096	**730**	na	na	na	na	na	na
MW706	12/05/07	na	na	na	na	na	na	na	11	< 0.096	**420**	na	na	na	na	na	na
MW706	04/02/08	na	na	na	na	na	na	na	na	na	na	2.35	-103	7.01	1.95	6.89	na
MW706	06/26/08	na	na	na	na	na	na	na	4.2	0.097	**310**	0.35	-133	7.11	0.808	13.5	57.4
MW706	09/11/08	na	na	na	na	na	na	na	na	na	na	1.21	-41	7.37	1.207	14.57	3.9
MW706	12/18/08	na	na	na	na	na	na	na	44.8	< 1.9	< 510	3.29	-97	6.91	1.3	9.73	na
MW706	03/30/09	na	na	na	na	na	na	na	na	na	na	1.7	-31.1	7.1	1.202	7.59	-1.2
MW706	06/30/09	na	na	na	na	na	na	na	107	< 0.12	**446**	1.01	-120.1	6.75	1.107	11.93	0.8
MW706	09/29/09	na	na	na	na	na	na	na	na	na	na	0.61	-246	10.62	1.355	14.23	13.8
MW706	12/08/09	na	na	na	na	na	na	na	22.1	< 0.12	**627**	0.71	-181	6.74	1.67	10.15	39
MW706	03/30/10	na	na	na	na	na	na	na	na	na	na	2.57	-113.1	6.85	1.083	11.66	1.2
MW706	06/08/10	na	na	na	na	na	na	na	7.9	< 0.12	**405**	1.38	-162	7.21	1.59	11.8	10.3
MW706	09/08/10	na	na	na	na	**333**	na	*44*	na	na	na	0.41	-205	7.45	1.457	15.8	13.7
MW706	12/02/10	na	na	na	na	na	na	na	118	< 0.12	*235*	0.8	-264	7.32	1.323	12.74	14.1
MW706	03/22/11	na	na	na	na	na	na	na	na	na	na	0.68	-34	7.41	1.234	7.01	12.8
MW706	06/01/11	na	na	na	na	na	na	na	17.8	< 0.12	*236*	0.51	-157	7.07	1.464	12.54	27.8
MW706	03/01/12	na	na	na	na	na	na	na	na	na	na	1.15	-116	7.38	1.396	8.48	14.4
MW706	06/19/12	na	na	na	na	na	na	na	29.3	< 0.12	*197*	0.36	-230	7.1	1.376	17.28	24.1
MW706	09/10/12	na	na	na	na	na	na	na	na	na	na	0.56	-240	7.14	1.295	17.42	4.2
MW706	12/12/12	na	na	na	na	**703**	na	*126*	126	< 0.12	55.7	0.69	-307	6.99	1.177	11.34	6.1
MW707	08/15/95	na	0.21	0.38	0.042	na	na	na	na	na	na	na	na	na	na	na	na
MW707	09/25/95	na	< 0.005	0.44	0.058	na	na	na	na	na	na	na	na	na	na	na	na
MW707	12/21/98	na	0.13	0.64	0.033	na	na	na	na	na	na	na	na	na	na	na	na
MW707R	06/25/02	460	0.76	0.78	0.01	**730**	25000	na	na	< 0.023	40	na	na	na	na	na	na
MW707R	11/07/02	na	na	na	na	na	na	na	na	na	na	1.39	523	7.39	1.099	12.86	na
MW707R	07/01/03	na	na	0.26	na	**510**	na	na	5800	0.049	30	1.93	198	9.58	0.87	13.81	na
MW707R	11/10/03	na	na	0.3	na	1.1	na	na	1800	< 0.047	20	3.36	-85	9.76	0.785	13.01	na
MW707R	05/20/04	na	na	na	na	na	na	na	3400	< 0.063	41	5.23	-73	10.19	0.349	10.15	na
MW707R	08/24/04	na	na	na	na	na	na	na	na	na	na	1.08	214	6.81	1.65	17.15	na
MW707R	11/24/04	na	na	na	0.0087	na	na	na	7200	< 0.063	3.7	1.37	149	8.25	1.69	11.15	na
MW707R	02/25/05	na	na	na	na	na	na	na	na	na	na	0.51	105	8.08	1.47	5.34	na
MW707R	05/19/05	na	na	na	0.0051	na	na	na	3800	0.062	14	na	na	na	na	na	na
MW707R	08/09/05	na	na	na	na	na	na	na	na	na	na	0.45	205	8.41	1.59	14.84	na
MW707R	12/13/05	na	na	na	na	na	na	na	5000	< 0.061	4.4	na	na	na	na	na	na

Table A.1.-2 Groundwater Analytical Data Table 2 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	Inorganics and Laboratory RNA Parameters										Field RNA Parameters					
		Alkalinity, Total (mg/l)	Cyanide, Amenable (mg/l)	Cyanide, Total (mg/l)	Cyanide, Weak Acid Dissociable (mg/l)	Iron, Dissolved (ug/l)	Iron, Total (ug/l)	Manganese, Dissolved (ug/l)	Methane (ug/l)	Nitrogen, N02 + N03, Total (mg/l)	Sulfate, Total (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (millivolts)	PH, Field (Standard Units)	Specific Conductance, Field (umhos/cm)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
PAL		NE	NE	NE	NE	150	NE	60	NE	2	125	NE	NE	NE	NE	NE	NE
ES		NE	NE	NE	NE	300	NE	300	NE	10	250	NE	NE	NE	NE	NE	NE
MW707R	03/08/06	na	na	na	na	na	na	na	na	na	na	2.58	-230	6.6	3.12	7.46	na
MW707R	06/26/06	na	na	na	na	na	na	na	5500	< 0.11	43	0.26	-51	6.88	1.7	12.82	na
MW707R	09/26/06	na	na	na	na	na	na	na	na	na	na	na	-259.8	6.94	1.477	17.4	na
MW707R	12/13/06	na	na	na	na	na	na	na	3900	< 0.11	*190*	0.33	-468	6.78	1.93	9.15	na
MW707R	03/29/07	na	na	na	na	na	na	na	na	na	na	6.6	-134.2	6.9	1.009	5.96	na
MW707R	06/18/07	na	na	na	na	na	na	na	8000	< 0.096	19	1.14	-154	7.27	1.4	13.12	na
MW707R	09/13/07	na	na	na	na	na	na	na	na	na	na	3.17	-92.3	6.85	1.306	17.8	na
MW707R	12/05/07	na	na	na	na	na	na	na	6900	< 0.096	3	0.36	-225	8.45	1.069	11.23	na
MW707R	04/02/08	na	na	na	na	na	na	na	na	na	na	0.61	-119	6.83	1.73	5.26	na
MW707R	06/26/08	na	na	na	na	na	na	na	5830	< 0.096	89.8	0.16	-168	7.15	1.463	15.28	40.8
MW707R	09/11/08	na	na	na	na	na	na	na	na	na	na	0.45	-167	7.2	1.51	16.28	0.2
MW707R	12/18/08	na	na	na	na	na	na	na	9130	< 0.096	3.7	0.42	-100	6.92	1.376	8.78	na
MW707R	03/30/09	na	na	na	na	na	na	na	na	na	na	0.1	-81.3	7.23	1.164	5.69	-2.3
MW707R	06/30/09	na	na	na	na	na	na	na	11400	< 0.12	43.2	0.55	-173.1	7.05	1.258	12.1	-0.1
MW707R	09/29/09	na	na	na	na	na	na	na	na	na	na	0.69	-273	10.97	1.65	15.19	13.4
MW707R	12/08/09	na	na	na	na	na	na	na	5850	< 0.12	10.6	0.55	-209	7.09	1.5	9.89	44.3
MW707R	03/30/10	na	na	na	na	na	na	na	na	na	na	1.06	-161.9	7.07	1.275	11.77	0.2
MW707R	06/08/10	na	na	na	na	na	na	na	6310	< 0.12	40	0.61	-173	7.3	11.78	11.09	18.8
MW707R	09/08/10	na	na	na	na	**1340**	na	**365**	na	na	na	0.32	-221	7.2	1.8	17.26	24.3
MW707R	12/02/10	na	na	na	na	na	na	na	10400	< 0.12	3.7	0.48	-238	7.18	1.58	9.77	6
MW707R	03/22/11	na	na	na	na	na	na	na	na	na	na	3.97	120	7.7	1.57	5.55	10
MW707R	06/01/11	na	na	na	na	na	na	na	6710	< 0.12	67.8	0.29	-194	7.29	1.82	10.31	43.6
MW707R	03/01/12	na	na	na	na	na	na	na	na	na	na	2.01	-137	7.37	1.342	6.95	26.2
MW707R	06/19/12	na	na	na	na	na	na	na	15600	< 0.12	3.2	0.37	-191	6.97	1.49	18.48	9.5
MW707R	09/10/12	na	na	na	na	na	na	na	na	na	na	0.68	-168	7	1.75	20.16	1.9
MW707R	12/12/12	na	na	na	na	**2830**	na	**432**	11000	< 0.12	2.4	0.83	-218	6.93	1.76	10.11	4.6
MW708	12/21/98	na	< 0.001	< 0.001	< 0.001	na	na	na	na	na	na	na	na	na	na	na	na
MW708	06/25/02	520	0.003	0.0036	< 0.00084	**2500**	35000	na	na	0.18	63	4.56	406	7.35	2.301	13.49	na
MW708	11/07/02	na	< 0.0027	0.006	< 0.0027	< 61	na	na	< 10	0.13	66	2.72	516	7.82	2.407	14.37	na
MW708	01/24/03	na	na	na	na	na	na	na	na	na	na	1.93	248	7.83	4.941	10.49	na
MW708	04/15/03	na	< 0.0015	< 0.0015	0.0022	na	na	na	na	na	na	2.52	258	8.67	2.875	9.19	na
MW708	07/01/03	na	na	0.0046	na	51	na	na	< 10	0.14	70	2.32	250	9.43	2.771	12.36	na
MW708	09/30/03	na	na	0.0034	na	na	na	na	na	na	na	na	na	7.09	5.13	13.6	na
MW708	11/10/03	na	na	0.0046	na	< 18	na	na	< 10	0.12	71	0.13	20	9.34	2.103	13.63	na
MW708	02/17/04	na	na	na	na	na	na	na	na	na	na	4.71	200.6	6.88	5.014	10.55	na
MW708	05/20/04	na	na	0.0042	na	na	na	na	< 10	0.18	68	6.1	-14	9.91	1.041	9.67	na
MW708	08/24/04	na	na	na	na	na	na	na	na	na	na	1.63	345	6.9	4.948	14.38	na
MW708	11/24/04	na	na	na	< 0.0053	na	na	na	< 10	0.17	79	0.8	174	7.53	4.923	13.66	na
MW708	02/25/05	na	na	na	na	na	na	na	na	na	na	1.21	158	8.07	4.88	7.46	na
MW708	05/19/05	na	na	na	0.0027	na	na	na	< 10	0.15	67	0.91	162	7.12	5.18	9.51	na
MW708	08/09/05	na	na	na	na	na	na	na	na	na	na	1.23	13	8.21	4.93	12.74	na
MW708	12/13/05	na	na	na	na	na	na	na	na	na	na	0.97	1	6.83	5.07	11.91	na
MW708	03/08/06	na	na	na	na	na	na	na	na	na	na	2.02	-224	6.95	5.18	9.71	na
MW708	06/26/06	na	na	na	na	na	na	na	< 10	0.16	80	0.46	-68	7.01	5.34	12.43	na
MW708	09/26/06	na	na	na	na	na	na	na	na	na	na	na	-205.1	6.52	4.745	15.05	na
MW708	12/13/06	na	na	na	na	na	na	na	na	na	na	1.29	-441	6.55	4.98	11.47	na
MW708	03/29/07	na	na	na	na	na	na	na	na	na	na	7.66	69.8	7.15	3.573	9.69	na
MW708	06/18/07	na	na	na	na	na	na	na	< 10	< 0.096	78	1.16	41	7.51	4.63	12.88	na

Table A.1.-2 Groundwater Analytical Data Table 2 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	Inorganics and Laboratory RNA Parameters										Field RNA Parameters					
		Alkalinity, Total (mg/l)	Cyanide, Amenable (mg/l)	Cyanide, Total (mg/l)	Cyanide, Weak Acid Dissociable (mg/l)	Iron, Dissolved (ug/l)	Iron, Total (ug/l)	Manganese, Dissolved (ug/l)	Methane (ug/l)	Nitrogen, N02 + N03, Total (mg/l)	Sulfate, Total (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (millivolts)	PH, Field (Standard Units)	Specific Conductance, Field (umhos/cm)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
PAL		NE	NE	NE	NE	150	NE	60	NE	2	125	NE	NE	NE	NE	NE	NE
ES		NE	NE	NE	NE	300	NE	300	NE	10	250	NE	NE	NE	NE	NE	NE
MW708	09/13/07	na	na	na	na	na	na	na	na	na	na	1.99	71.5	6.65	4.094	13.89	na
MW708	12/05/07	na	na	na	na	na	na	na	na	na	na	1.54	48	7.19	4.23	12.05	na
MW708	04/02/08	na	na	na	na	na	na	na	na	na	na	0.88	68	7.02	4.21	9.13	na
MW708	06/26/08	na	na	na	na	na	na	na	< 2	< 0.096	72.6	1.24	25	7.12	4.37	13.83	145
MW708	09/11/08	na	na	na	na	na	na	na	na	na	na	0.81	-4	7.34	4.28	14.58	370
MW708	12/18/08	na	na	na	na	na	na	na	< 2	< 0.096	81.6	2.3	45	7.15	4.06	11.48	na
MW708	03/30/09	na	na	na	na	na	na	na	na	na	na	1.61	-3.8	7.28	3.424	9.14	5.1
MW708	06/30/09	na	na	na	na	na	na	na	< 0.93	< 0.12	81	1.75	14.2	7.1	3.636	11.86	7.7
MW708	09/29/09	na	na	na	na	na	na	na	na	na	na	3.44	-142	10.79	4.56	13.71	23.8
MW708	12/08/09	na	na	na	na	na	na	na	< 0.93	< 0.12	81.2	0.92	-33	7.26	4.22	12.1	54.3
MW708	03/30/10	na	na	na	na	na	na	na	na	na	na	5.15	15.2	7.14	2.618	11.74	8.7
MW708	06/08/10	na	na	na	na	na	na	na	< 0.93	< 0.12	75.7	2.25	-12	7.38	5.13	11.54	18.4
MW708	09/08/10	na	na	na	na	< 8.3	na	2.6	na	na	na	1.41	-32	7.36	4.9	15.56	13.6
MW708	12/02/10	na	na	na	na	na	na	na	< 0.93	< 0.12	77.6	0.97	-92	7.23	4.43	12.55	7.4
MW708	03/22/11	na	na	na	na	na	na	na	na	na	na	2.41	100	7.55	4.2	9.29	8
MW708	06/01/11	na	na	na	na	na	na	na	< 0.93	< 0.12	79.5	3.76	99	7.17	5.75	11.8	58.2
MW708	03/01/12	na	na	na	na	na	na	na	na	na	na	2.92	-16	7.57	4.73	9.88	10.1
MW708	06/19/12	na	na	na	na	na	na	na	< 0.64	< 0.12	80.8	0.53	11	7.23	4.65	18.32	35
MW708	09/10/12	na	na	na	na	na	na	na	na	na	na	0.8	-17	7.43	4.69	19.01	7
MW708	12/12/12	na	na	na	na	**1570**	na	37	1.2	< 0.12	80.6	0.69	-307	6.99	1.177	111.34	6.1
MW709	12/21/98	na	0.03	0.03	0.014	na	na	na	na	na	na	na	na	na	na	na	na
MW709R	06/25/02	900	0.45	0.48	0.027	**490**	4000	na	na	*2.7*	**440**	4.44	415	7.97	1.32	14.74	na
MW709R	11/07/02	na	0.038	0.16	0.007	na	na	na	na	na	na	1.82	549	7.57	1.534	13.99	na
MW709R	04/15/03	na	0.28	0.28	0.01	na	na	na	na	na	na	10.14	246	8.65	1.48	6.92	na
MW709R	07/01/03	na	na	0.25	na	**820**	na	na	< 10	0.093	**500**	4.34	253	9.72	0.462	16.03	na
MW709R	09/30/03	na	na	0.11	na	na	na	na	na	na	na	na	na	6.92	3.35	16.2	na
MW709R	11/10/03	na	na	0.1	na	90	na	na	< 10	0.94	*210*	1.06	42	9.54	1.066	12.22	na
MW709R	02/17/04	na	na	na	na	na	na	na	na	na	na	9.38	200.6	6.86	2.68	5.02	na
MW709R	05/20/04	na	na	0.046	na	na	na	na	< 10	0.79	*130*	1.23	-13	9.7	0.221	11.63	na
MW709R	08/24/04	na	na	na	na	na	na	na	na	na	na	1.86	195	7.04	1.524	17.22	na
MW709R	11/24/04	na	na	na	0.0057	na	na	na	420	0.082	*240*	6.3	182	8.16	3.45	11.81	na
MW709R	02/25/05	na	na	na	na	na	na	na	na	na	na	1.06	262	8.52	0.93	4.09	na
MW709R	05/19/05	na	na	na	0.0037	na	na	na	190	0.094	**260**	0.5	169	7.3	2.94	8.79	na
MW709R	08/09/05	na	na	na	na	na	na	na	na	na	na	1.17	140	7.76	3.25	16.98	na
MW709R	12/13/05	na	na	na	na	na	na	na	na	na	na	0.64	20	7.41	2.96	8.75	na
MW709R	03/08/06	na	na	na	na	na	na	na	na	na	na	3.15	-135	7.38	3.22	8.3	na
MW709R	06/26/06	na	na	na	na	na	na	na	530	< 0.11	**310**	0.27	-66	6.81	3.11	12.95	na
MW709R	09/26/06	na	na	na	na	na	na	na	na	na	na	na	-253.5	6.68	2.87	17.72	na
MW709R	12/13/06	na	na	na	na	na	na	na	na	na	na	0.38	-462	6.47	2.84	9.73	na
MW709R	03/29/07	na	na	na	na	na	na	na	na	na	na	6.4	11.9	7.36	1.147	5.56	na
MW709R	06/18/07	na	na	na	na	na	na	na	780	< 0.096	*240*	2.72	-165	6.74	2.64	13.26	na
MW709R	09/13/07	na	na	na	na	na	na	na	na	na	na	3.02	-118.4	7.05	2.298	18.2	na
MW709R	12/05/07	na	na	na	na	na	na	na	na	na	na	1.76	-98	7.17	2.98	11.08	na
MW709R	04/02/08	na	na	na	na	na	na	na	na	na	na	1.44	109	6.71	1.85	5.19	na
MW709R	06/26/08	na	na	na	na	na	na	na	190	< 0.096	*130*	0.73	-77	7.03	0.985	13.6	10.1
MW709R	09/11/08	na	na	na	na	na	na	na	na	na	na	0.53	-67	7.18	2.52	16.22	113
MW709R	12/18/08	na	na	na	na	na	na	na	557	< 0.096	*141*	6.32	-84	6.95	2.55	7.89	na
MW709R	03/30/09	na	na	na	na	na	na	na	na	na	na	0.95	6.1	7.18	1.552	6.31	-3.6

Table A.1.-2 Groundwater Analytical Data Table 2 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	Inorganics and Laboratory RNA Parameters										Field RNA Parameters					
		Alkalinity, Total (mg/l)	Cyanide, Amenable (mg/l)	Cyanide, Total (mg/l)	Cyanide, Weak Acid Dissociable (mg/l)	Iron, Dissolved (ug/l)	Iron, Total (ug/l)	Manganese, Dissolved (ug/l)	Methane (ug/l)	Nitrogen, N02 + N03, Total (mg/l)	Sulfate, Total (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (millivolts)	PH, Field (Standard Units)	Specific Conductance, Field (umhos/cm)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
PAL		NE	NE	NE	NE	150	NE	60	NE	2	125	NE	NE	NE	NE	NE	NE
ES		NE	NE	NE	NE	300	NE	300	NE	10	250	NE	NE	NE	NE	NE	NE
MW709R	06/30/09	na	na	na	na	na	na	na	1220	< 0.12	*148*	0.53	-104.2	6.96	1.949	13.52	0
MW709R	09/29/09	na	na	na	na	na	na	na	na	na	na	1.16	-252	12.29	2.72	13.79	13.6
MW709R	12/08/09	na	na	na	na	na	na	na	na	na	113	0.86	-181	7.39	2.51	10.35	23.4
MW709R	03/30/10	na	na	na	na	na	na	na	na	na	na	2.81	-63.3	6.89	1.863	13.41	0.6
MW709R	06/08/10	na	na	na	na	na	na	na	2000	< 0.12	123	0.83	-133	7.16	2.36	10.99	9.4
MW709R	09/08/10	na	na	na	na	**1700**	na	**915**	na	na	na	1.02	-174	7.22	2.38	16.82	11.6
MW709R	12/02/10	na	na	na	na	na	na	na	1610	< 0.12	50	0.61	-214	7.09	2.45	10.59	9.7
MW709R	03/22/11	na	na	na	na	na	na	na	na	na	na	2.16	53	7.57	1.058	6.89	16.2
MW709R	06/01/11	na	na	na	na	na	na	na	144	< 0.12	*126*	2.2	2	6.97	2.32	13.38	36.5
MW709R	03/01/12	na	na	na	na	na	na	na	na	na	na	3.48	-136	7.43	1.95	7.42	8
MW709R	06/19/12	na	na	na	na	na	na	na	1360	< 0.12	87.4	0.59	-93	6.97	1.93	16.23	5.9
MW709R	09/10/12	na	na	na	na	na	na	na	na	na	na	1.06	-134	7.15	2.23	18.21	0
MW709R	12/12/12	na	na	na	na	**1420**	na	**840**	2250	< 0.12	44.2	1.96	-186	6.94	2.23	9.41	4.5
PZ701	08/17/95	na	0.02	0.02	< 0.005	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	09/25/95	na	0.014	0.014	< 0.005	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	09/26/95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	12/21/98	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	06/25/02	150	0.74	0.83	0.19	**440**	7300	na	na	0.12	**320**	5.92	392	8.25	0.871	12.52	na
PZ701	11/07/02	na	0.042	0.18	0.049	**300**	na	na	250	< 0.075	*200*	1.92	511	7.74	0.562	14.02	na
PZ701	04/15/03	na	0.47	0.47	0.028	na	na	na	na	na	na	7.49	264	8.84	0.159	9.79	na
PZ701	07/01/03	na	na	0.34	na	*170*	na	na	490	0.057	98	na	na	na	na	na	na
PZ701	09/30/03	na	na	0.26	na	na	na	na	na	na	na	na	na	7.56	0.595	10.5	na
PZ701	11/10/03	na	na	0.21	na	92	na	na	250	0.048	58	na	na	na	na	na	na
PZ701	05/20/04	na	na	0.1	na	na	na	na	57	0.14	51	1.01	13	9.91	0	18.06	na
PZ701	05/24/04	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ701	08/24/04	na	na	na	na	na	na	na	na	na	na	3.73	268	6.76	0.712	16.6	na
PZ701	11/24/04	na	na	na	< 0.0053	na	na	na	610	< 0.063	100	0.58	98	7.75	0.698	10.92	na
PZ701	02/25/05	na	na	na	na	na	na	na	na	na	na	2.89	159	8.54	0.6	7.14	na
PZ701	05/19/05	na	na	na	0.0045	na	na	na	< 10	0.19	67	2.98	134	7.14	0.6	9.01	na
PZ701	08/09/05	na	na	na	na	na	na	na	na	na	na	3.4	40	8.62	0.56	18.45	na
PZ701	12/13/05	na	na	na	na	na	na	na	< 10	< 0.061	48	0.71	7	7.18	0.54	10.65	na
PZ701	03/08/06	na	na	na	na	na	na	na	na	na	na	3.24	-143	7.52	0.58	7.68	na
PZ701	06/26/06	na	na	na	na	na	na	na	10	0.15	39	1.43	95	6.78	0.535	12.16	na
PZ701	09/26/06	na	na	na	na	na	na	na	na	na	na	na	-201	7.04	0.272	17.52	na
PZ701	12/13/06	na	na	na	na	na	na	na	< 10	< 0.11	30	4.92	-400	6.95	0.5	11.61	na
PZ701	03/29/07	na	na	na	na	na	na	na	na	na	na	11.13	-84.8	7.24	0.342	7.13	na
PZ701	06/18/07	na	na	na	na	na	na	na	< 10	0.14	24	3.07	140	8.07	0.432	12.05	na
PZ701	09/13/07	na	na	na	na	na	na	na	na	na	na	7	-43.1	7.05	0.397	17.68	na
PZ701	12/05/07	na	na	na	na	na	na	na	250	< 0.096	20	na	-123	7.07	0.43	9.96	na
PZ701	04/02/08	na	na	na	na	na	na	na	na	na	na	4.68	148	7.32	0.543	9.54	na
PZ701	06/26/08	na	na	na	na	na	na	na	27.9	< 0.096	43.4	0.21	-81	7.87	0.444	13.34	5.7
PZ701	09/11/08	na	na	na	na	na	na	na	na	na	na	0.22	-90	7.81	0.438	13.36	0
PZ701	12/18/08	na	na	na	na	na	na	na	3.8	< 0.096	27.5	2.7	-12	7.32	0.451	10.74	na
PZ701	03/30/09	na	na	na	na	na	na	na	na	na	na	1.22	-76.2	7.73	0.375	9.3	-4.2
PZ701	06/30/09	na	na	na	na	na	na	na	89.7	< 0.12	17	0.64	-56.7	7.45	0.359	10.41	-0.4
PZ701	09/29/09	na	na	na	na	na	na	na	na	na	na	0.85	-239	11.54	0.43	12.59	21.2
PZ701	12/08/09	na	na	na	na	na	na	na	523	< 0.12	12.1	0.59	-170	7.79	0.49	10.83	33.2
PZ701	03/30/10	na	na	na	na	na	na	na	na	na	na	0.94	-57.2	7.39	0.324	10.32	19.1

Table A.1.-2 Groundwater Analytical Data Table 2 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	Inorganics and Laboratory RNA Parameters										Field RNA Parameters					
		Alkalinity, Total (mg/l)	Cyanide, Amenable (mg/l)	Cyanide, Total (mg/l)	Cyanide, Weak Acid Dissociable (mg/l)	Iron, Dissolved (ug/l)	Iron, Total (ug/l)	Manganese, Dissolved (ug/l)	Methane (ug/l)	Nitrogen, N02 + N03, Total (mg/l)	Sulfate, Total (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (millivolts)	PH, Field (Standard Units)	Specific Conductance, Field (umhos/cm)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
PAL		NE	NE	NE	NE	150	NE	60	NE	2	125	NE	NE	NE	NE	NE	NE
ES		NE	NE	NE	NE	300	NE	300	NE	10	250	NE	NE	NE	NE	NE	NE
PZ701	06/08/10	na	na	na	na	na	na	na	3.1	0.12	10.2	1.36	-66	7.62	0.447	10.85	9.8
PZ701	09/08/10	na	na	na	na	*222*	na	*60.4*	na	na	na	0.37	-138	7.52	0.443	14.82	36.5
PZ701	12/02/10	na	na	na	na	na	na	na	1220	< 0.12	6.8	0.66	-226	7.46	0.405	9.42	4.5
PZ701	03/22/11	na	na	na	na	na	na	na	na	na	na	3.49	64	8	0.408	9.36	6.7
PZ701	06/01/11	na	na	na	na	na	na	na	7	< 0.12	6.8	0.99	58	7.61	0.486	17.42	30
PZ701	03/01/12	na	na	na	na	na	na	na	na	na	na	3.78	-26	7.53	0.487	8.7	6.9
PZ701	06/19/12	na	na	na	na	na	na	na	< 0.64	0.63	**483**	1.8	65	7.17	1.47	21.32	17.2
PZ701	09/10/12	na	na	na	na	na	na	na	na	na	na	0.43	-60	7.49	1.363	18.23	3.4
PZ701	12/12/12	na	na	na	na	29.2	na	1.4	< 0.64	0.25	**371**	2.96	-146	7.63	1.324	12.02	5.4
PZ702	12/21/98	na	< 0.002	< 0.002	< 0.002	na	na	na	na	na	na	na	na	na	na	na	na
PZ702	06/25/02	50	< 0.0023	< 0.0023	< 0.00084	25	15000	na	na	< 0.023	3.7	3.42	362	8.5	0.154	11.32	na
PZ702	11/07/02	na	< 0.0027	< 0.0027	< 0.0027	na	na	na	22	na	na	1.51	515	8.04	0.22	13.76	na
PZ702	01/24/03	na	na	na	na	na	na	na	na	na	na	2.33	247	8.02	0.2	10.02	na
PZ702	04/15/03	na	< 0.0015	< 0.0015	< 0.0019	na	na	na	na	na	na	2.48	260	9.01	0.216	7.63	na
PZ702	07/01/03	na	na	< 0.0015	na	48	na	na	39	0.053	3.6	4.52	277	9.71	0.103	10.76	na
PZ702	09/30/03	na	na	0.0033	na	na	na	na	na	na	na	na	na	8.22	0.217	10.6	na
PZ702	11/10/03	na	na	0.01	na	< 18	na	na	< 10	< 0.047	< 1.1	2	13	10.36	0.095	10.28	na
PZ702	02/17/04	na	na	na	na	na	na	na	na	na	na	7.76	179.5	7.54	0.265	8.83	na
PZ702	05/20/04	na	na	< 0.0016	na	na	na	na	16	0.2	3.2	1.06	4	10	0.101	9.53	na
PZ702	08/24/04	na	na	na	na	na	na	na	na	na	na	4.41	319	7.43	0.317	14.4	na
PZ702	11/24/04	na	na	na	< 0.0053	na	na	na	< 10	0.14	3.8	1.96	180	8.35	3	12.39	na
PZ702	02/25/05	na	na	na	na	na	na	na	na	na	na	2.64	132	8.68	0.32	7.46	na
PZ702	05/19/05	na	na	na	< 0.0025	na	na	na	< 10	0.16	4.9	3.55	167	7.19	0.29	9.24	na
PZ702	08/09/05	na	na	na	na	na	na	na	na	na	na	3.16	62	8.9	0.29	14.52	na
PZ702	12/13/05	na	na	na	na	na	na	na	< 10	0.13	4.3	3.3	33	7.21	0.35	11.75	na
PZ702	03/08/06	na	na	na	na	na	na	na	na	na	na	2.62	-246	7.75	0.38	9.58	na
PZ702	06/26/06	na	na	na	na	na	na	na	< 10	0.21	5.1	1.88	79	6.57	0.536	11.44	na
PZ702	09/26/06	na	na	na	na	na	na	na	na	na	na	na	-229.5	7.17	0.316	16.25	na
PZ702	12/13/06	na	na	na	na	na	na	na	< 10	0.16	3.9	4.2	-390	6.99	0.28	11.25	na
PZ702	03/29/07	na	na	na	na	na	na	na	na	na	na	9.47	16.9	7.8	0.199	7.52	na
PZ702	06/18/07	na	na	na	na	na	na	na	< 10	< 0.096	3.1	2.94	-17	8.12	0.231	11.64	na
PZ702	09/13/07	na	na	na	na	na	na	na	na	na	na	3.85	14.1	7.13	0.205	14.28	na
PZ702	12/05/07	na	na	na	na	na	na	na	< 10	0.11	3.3	1.65	-65	7.74	0.223	10.04	na
PZ702	04/02/08	na	na	na	na	na	na	na	na	na	na	4.03	-25	7.58	0.211	9.72	na
PZ702	06/26/08	na	na	na	na	na	na	na	< 2	0.21	3.6	3.36	23	7.73	0.251	14.52	115
PZ702	09/11/08	na	na	na	na	na	na	na	na	na	na	2.11	-27	8.27	0.289	13.02	7.1
PZ702	12/18/08	na	na	na	na	na	na	na	< 2	< 0.096	3.2	3.45	4	7.74	0.249	9.73	na
PZ702	03/30/09	na	na	na	na	na	na	na	na	na	na	2.42	-24.5	8.01	0.222	10.15	-3.2
PZ702	06/30/09	na	na	na	na	na	na	na	< 0.93	< 0.12	4.1	3.1	22.2	7.77	0.262	11.88	4
PZ702	09/29/09	na	na	na	na	na	na	na	na	na	na	3.46	-85	11.71	0.236	11.95	
PZ702	12/08/09	na	na	na	na	na	na	na	< 0.93	< 0.12	2.9	2.81	-43	8.16	0.212	11.51	28
PZ702	03/30/10	na	na	na	na	na	na	na	na	na	na	4.22	19	7.83	0.269	11.73	5.7
PZ702	06/08/10	na	na	na	na	na	na	na	< 0.93	< 0.12	3.1	4.02	42	8.04	0.232	11.18	8.2
PZ702	09/08/10	na	na	na	na	< 8.3	na	2.8	na	na	na	1.57	-60	8.85	0.224	13.91	27.4
PZ702	12/02/10	na	na	na	na	na	na	na	< 0.93	< 0.12	2.8	1.82	-192	8.16	0.203	11	8.2
PZ702	03/22/11	na	na	na	na	na	na	na	na	na	na	5.2	91	8.37	0.197	8.89	8.5
PZ702	06/01/11	na	na	na	na	na	na	na	< 0.93	< 0.12	2.8	7.56	26	8.03	0.233	15.86	29.6
PZ702	03/01/12	na	na	na	na	na	na	na	na	na	na	5.9	-33	7.97	0.203	9.02	7.3

Table A.1.-2 Groundwater Analytical Data Table 2 of 2.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample ID	Sample Date	Inorganics and Laboratory RNA Parameters										Field RNA Parameters					
		Alkalinity, Total (mg/l)	Cyanide, Amenable (mg/l)	Cyanide, Total (mg/l)	Cyanide, Weak Acid Dissociable (mg/l)	Iron, Dissolved (ug/l)	Iron, Total (ug/l)	Manganese, Dissolved (ug/l)	Methane (ug/l)	Nitrogen, N02 + N03, Total (mg/l)	Sulfate, Total (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (millivolts)	PH, Field (Standard Units)	Specific Conductance, Field (umhos/cm)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
PAL		NE	NE	NE	NE	150	NE	60	NE	2	125	NE	NE	NE	NE	NE	NE
ES		NE	NE	NE	NE	300	NE	300	NE	10	250	NE	NE	NE	NE	NE	NE
PZ702	06/19/12	na	na	na	na	na	na	na	< 0.64	< 0.12	2.7	3.28	21	8.11	0.202	18.34	20
PZ702	09/10/12	na	na	na	na	na	na	na	na	na	na	1.69	-18	8.33	0.207	16.94	2.5
PZ702	12/12/12	na	na	na	na	27.3	na	48.5	1.2	< 0.12	2.3	3.33	-89	7.58	0.213	10.8	1.6
PZ702	12/05/07	na	na	na	na	na	na	na	< 10	na	na	na	na	na	na	na	na
PZ703	12/21/98	na	0.002	0.002	0.002	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	01/19/99	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
PZ703	06/25/02	73	< 0.0023	< 0.0023	0.0009	**370**	27000	na	na	< 0.023	4.7	0.64	377	8.95	0.283	11.7	na
PZ703	11/07/02	na	0.008	0.007	< 0.0027	< 61	na	na	71	< 0.075	4.2	1.49	492	8.33	0.028	13.01	na
PZ703	04/15/03	na	0.0025	0.0025	< 0.0019	na	na	na	na	na	na	2.25	249	9.08	0.687	7.28	na
PZ703	07/01/03	na	na	0.0019	na	100	na	na	230	< 0.047	4.3	2.51	130	9.99	0.204	9.91	na
PZ703	09/30/03	na	na	0.0039	na	na	na	na	na	na	na	na	na	8.61	0.32	10.6	na
PZ703	11/10/03	na	na	0.0051	na	< 18	na	na	53	< 0.047	4.7	4.82	-80	10.68	0.162	9.94	na
PZ703	02/17/04	na	na	na	na	na	na	na	na	na	na	6.55	178	10.42	0.429	6.69	na
PZ703	05/20/04	na	na	0.039	na	na	na	na	120	< 0.063	77	8.07	6	9.95	0.105	10.36	na
PZ703	08/24/04	na	na	na	< 0.011	na	na	na	na	na	na	1.72	450	7.7	0.574	17.72	na
PZ703	11/24/04	na	na	na	< 0.0053	na	na	na	130	< 0.063	32	1.35	317	9.03	0.4	11.7	na
PZ703	02/25/05	na	na	na	na	na	na	na	na	na	na	0.72	188	8.37	6.4	5.59	na
PZ703	05/19/05	na	na	na	0.0036	na	na	na	180	< 0.061	57	0.98	191	7.42	0.83	8.6	na
PZ703	08/09/05	na	na	na	na	na	na	na	na	na	na	0.43	207	8.48	5.44	13.31	na
PZ703	12/13/05	na	na	na	na	na	na	na	280	< 0.061	37	0.28	114	7.12	5.07	11.02	na
PZ703	03/08/06	na	na	na	na	na	na	na	na	na	na	0.92	-299	6.94	4.59	9.21	na
PZ703	06/26/06	na	na	na	na	na	na	na	470	< 0.11	29	0.42	134	6.77	3.5	16.21	na
PZ703	09/26/06	na	na	na	na	na	na	na	na	na	na	na	-211.9	6.93	2.515	15.51	na
PZ703	12/13/06	na	na	na	na	na	na	na	460	< 0.11	18	1.93	-61	7.27	2.29	10	na
PZ703	03/29/07	na	na	na	na	na	na	na	na	na	na	7.17	-7.9	8.39	1.163	6.22	na
PZ703	06/18/07	na	na	na	na	na	na	na	1100	< 0.096	13	1.09	-183	10.28	1.356	12.57	na
PZ703	09/13/07	na	na	na	na	na	na	na	na	na	na	0.82	-172.2	7.41	1.08	14.44	na
PZ703	12/05/07	na	na	na	na	na	na	na	380	< 0.096	10	na	-151	7.05	1.39	10.44	na
PZ703	04/02/08	na	na	na	na	na	na	na	na	na	na	0.81	-180	8.06	5.31	9.28	na
PZ703	06/26/08	na	na	na	na	na	na	na	1170	< 0.096	17.5	0.25	-223	8.75	2.63	15.9	21.8
PZ703	09/11/08	na	na	na	na	na	na	na	na	na	na	0.62	-192	10.13	1.462	13.84	0.2
PZ703	12/18/08	na	na	na	na	na	na	na	1040	< 0.096	8.2	0.69	-55	7.32	1.285	11.04	na
PZ703	03/30/09	na	na	na	na	na	na	na	na	na	na	0.08	-59.1	8.53	1.038	9.08	-3.6
PZ703	06/30/09	na	na	na	na	na	na	na	2610	< 0.12	8.1	0.31	-203.1	9.08	1.053	10.54	-0.1
PZ703	09/29/09	na	na	na	na	na	na	na	na	na	na	1.38	-298	13.12	0.762	12.6	18.5
PZ703	12/08/09	na	na	na	na	na	na	na	1410	< 0.12	4.6	0.48	-222	7.63	0.706	10.82	24.1
PZ703	03/30/10	na	na	na	na	na	na	na	na	na	na	1.59	-187.1	9.01	1.225	10.49	1.5
PZ703	06/08/10	na	na	na	na	na	na	na	1620	< 0.12	12	0.52	-171	7.56	3.28	11.49	23.6
PZ703	09/08/10	na	na	na	na	< 8.3	na	0.64	na	na	na	0.5	-264	11.25	0.75	12.93	48.7
PZ703	12/02/10	na	na	na	na	na	na	na	1590	< 0.12	4.2	1.5	-283	9.98	1.07	9.01	16.1
PZ703	03/22/11	na	na	na	na	na	na	na	na	na	na	0.4	97	8.2	0.927	7.4	9.6
PZ703	06/01/11	na	na	na	na	na	na	na	884	< 0.12	6.6	0.73	-121	8.06	1.129	11.43	109
PZ703	03/01/12	na	na	na	na	na	na	na	na	na	na	2.5	-170	8.03	0.848	8.36	4.9
PZ703	06/19/12	na	na	na	na	na	na	na	3310	< 0.12	3.4	0.42	-203	7.92	0.87	14.22	40
PZ703	09/10/12	na	na	na	na	na	na	na	na	na	na	0.74	-193	7.58	0.833	18.68	7.9
PZ703	12/12/12	na	na	na	na	135	na	32.5	1850	< 0.12	2.1	0.71	-242	7.33	0.869	10.5	11

[OB: JJW 4/5/13; CB ETO 4/5/13]

Notes:
1) Concentrations in bold font are above the January 2012 ch. NR 140, Wis. Adm. Code groundwater enforcement standard (ES).
2) Concentrations in italic font are above the January 2012 ch. NR 140, Wis. Adm. Code groundwater preventative action limit (PAL).
3) NE = not established
4) na = not analyzed
5) < = Parameter was not detected above the indicated detection limit.

Table A.2.-1 Pre-Remedial Soil Analyical Data Table 1 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample Location	Sample Depth (ft)	Sample Date	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene total mg/kg	Total BETX mg/kg	Phenol mg/kg	Anthracene mg/kg	Benzo(a)anthracene mg/kg	Benzo(b)fluoranthene mg/kg	Benzo(k)fluoranthene mg/kg	Benzo(a)pyrene mg/kg	Benzo(ghi)perylene mg/kg	Chrysene mg/kg	Dibenzo(a,h)anthracene mg/kg	Fluoranthene mg/kg	Fluorene mg/kg	Indeno(1,2,3-cd)pyrene mg/kg	Naphthalene mg/kg	Phenanthrene mg/kg	Pyrene mg/kg	Total PAHs mg/kg
Groundwater Pathway RCLs			*0.005*	*1.11*	*1.57*	*3.94*	*NE*	*2.30*	*197*	*NE*	*0.48*	*NE*	*0.47*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*NE*	*54.5*	*NE*
Direct Contact RCLs			**1.49**	**818**	**7.47**	**258**	**NE**	**18300**	**17200**	**0.15**	**0.15**	**1.48**	**0.01**	**NE**	**14.8**	**0.01**	**2290**	**2290**	**0.15**	**5.15**	**NE**	**1720**	**NE**
Soil Samples from the Unsaturated Zone																							
Monitoring Well Samples																							
MW-701	2-4	7/18/1995	<0.016	<0.016	0.31	0.16	0.47	1.9	15	**2.3**	**0.95**	0.88	**1.7**	2.9	*1.6*	**0.18**	17	13	**1.3**	**77**	53	10	196.8
MW-702	2-4	7/19/1995	<0.016	<0.016	0.05	0.16	0.21	1.2	0.21	**1.1**	**0.66**	0.53	**1.2**	1.2	*0.74*	**0.15**	2.1	0.11	**0.75**	<0.04	0.48	1.1	10.3
MW-703	4-6	7/18/1995	*0.013*	0.0061	<0.005	0.0069	0.026	0.97	1.3	3.8	*2.3*	0.077	*3.8*	5.1	*2.8*	0.64	12	0.95	3.1	*3*	5.6	7.3	51.8
MW-704	2-4	7/19/1995	<0.005	<0.005	<0.005	<0.015	0	0.55	0.015	0.015	0.004	0.0036	<0.008	<0.004	0.0078	<0.004	0.04	0.028	<0.004	<0.04	0.091	0.021	0.2
MW-705	2-4	7/19/1995	<0.005	<0.005	<0.005	<0.015	0	0.76	0.5	**1.7**	**1**	0.88	**1.7**	2.1	*1.3*	**0.27**	4.4	0.36	**1.1**	<0.04	1.7	1.8	18.9
MW-706	2-4	7/18/1995	<0.005	<0.005	<0.005	<0.015	0	0.68	<0.008	<0.002	<0.002	<0.002	<0.008	<0.004	<0.004	<0.004	<0.008	<0.016	<0.004	<0.04	<0.016	<0.008	0
MW-707	2-4	7/19/1995	<0.005	<0.005	<0.005	<0.015	0	*83*	0.068	**0.33**	**0.18**	0.16	**0.43**	0.48	*0.23*	**0.063**	0.64	0.065	**0.33**	<0.04	0.21	0.75	3.9
Soil Boring Samples																							
SB-701	2-4	7/19/1995	<0.005	<0.005	<0.005	<0.015	0	0.63	0.23	**0.91**	**0.49**	0.38	**0.74**	0.89	*0.68*	**0.093**	2.5	0.17	**0.5**	<0.04	1	0.81	9.4

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) < - Parameter was not detected above the indicated detection limit.
4) NE - not established.

[OB: JJW 4/5/13; CB ETO 4/9/13]

Table A.2.-2 Pre-Remedial Soil Analyical Data Table 2 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sampling Location	Sampling Depth (feet below ground surface)	Sampling Date	mg/kg								
			Lead, total	Cyanide, total[7]	Cyanide, weak acid dissociable[8]	Phenolics, total recoverable	Benzene	Ethylbenzene	Toluene	Total Xylenes	Total BETX
Groundwater Pathway RCLs			*27*	*NE*	*4.04*	*NE*	*0.005*	*1.57*	*1.11*	*3.94*	*NE*
Direct Contact RCLs			**400**	**26.4**	**NE**	**NE**	**1.49**	**7.47**	**818**	**258**	**NE**
Soil Samples Collected from the Unsaturated Zone											
HA-701	2	07/29/98	*350*	**89**	*46*	2,380	*0.13*	<0.025	0.14	0.11	0.38
SS-701	0.5	07/29/98	**410**	17 *	3.2	342	<0.025	<0.025	<0.025	0.036	0.036
TP-701	2-8	07/29/98	**540**	**78**	*17*	2,990	*0.23*	0.038	0.27	0.33	0.868
TP-701	8-9	07/29/98	17	0.68	<0.19	142 *	<0.025	<0.025	<0.025	0.072	0.072
TP-702	2-7	07/29/98	*110*	3.8	<0.18	2,270	<0.025	<0.025	<0.025	<0.025	nd
TP-702	7-10	07/29/98	12	0.85	<0.20	114 *	<0.025	<0.025	<0.025	<0.025	nd
TP-703	4-6	07/29/98	*260*	23	0.83	557	<0.025	<0.025	<0.025	<0.025	nd
TP-703	9-10	07/29/98	<3.6	0.4 *	<0.18	102 *	<0.025	<0.025	<0.025	<0.025	nd
TP-704	3-4	07/29/98	8.5 *	1.2	0.66	58 *	<0.025	<0.025	<0.025	0.039	0.039
TP-704	7-8	07/29/98	20	5.6	0.31 *	<52	<0.025	<0.025	<0.025	<0.025	nd
TP-705	5	07/29/98	*980*	2,300	*260*	5,110	*0.11*	<0.025	0.089 *	0.062 *	0.261
TP-706	1-8	07/29/98	**530**	22	1.9	709	<0.025	<0.025	<0.025	<0.025	nd
SB-717	11-11.5	07/29/98	*110*	<0.18	<0.18	760	<0.025	<0.025	<0.025	<0.025	nd
SB-718	13-13.5	07/29/98	*280*	3.7	<0.18	98 *	<0.025	<0.025	<0.025	<0.025	nd
SB-719	11-11.5	07/29/98	*190*	6.6	0.330 *	230	<0.025	<0.025	<0.025	<0.025	nd
SB-720	10-10.5	07/29/98	*400*	120	*42*	3,130	0.5*	<0.310	0.44 *	<0.310	0.94
SB-721	12-14	10/27/98	na	na	na	na	<0.025	<0.025	<0.025	<0.050	nd
SB-722	10-12	10/27/98	na	na	na	na	<0.025	<0.025	<0.025	<0.050	nd
SB-724	26-28	12/09/98	5.7	<0.023	na	na	<0.009	<0.0045	<0.0042	<0.028	nd
SB-725	5-6	12/08/98	11	0.15	na	na	<0.009	<0.0045	<0.0042	<0.028	nd
SB-726	11-12	12/09/98	*61*	380	na	na	0.027*	<0.0045	<0.0042	<0.028	0.027
SB-732	12-14	12/10/98	5.2	0.049 *	na	na	*0.3*	*2.521*	0.043	1.681	4.545
SB-733	10-12	12/09/98	5.0 *	0.12	na	na	*25.7*	*5.49*	*55.4*	*49.9*	136.49
SB-734	12-14	12/09/98	20	2.5	na	na	*0.309*	0.37	0.177	0.387	1.243
SB-735	10-12	12/10/98	10	164	na	na	*0.172*	*7.07*	*1.15*	*13.46*	21.852
SB-736	6-8	12/08/98	19	1.2	na	na	*0.314*	0.255	<0.0042	0.228	0.797
SB-739	6-8	12/09/98	*634*	0.13	na	na	<0.009	*1.81*	0.156	*6.02*	7.986
PZ-702	14-16	12/09/98	3.3 *	0.024 *	na	na	*259*	*168*	*572*	*599*	1598
PZ-703	16-18	12/08/98	3.8 *	0.024 *	na	na	*1.49*	*10.6*	0.082	2.9	15.072

Notes: [OB: JJW 4/5/13; CB ETO 4/9/13]

1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) * - Parameter detected above the limit of detection (LOD) but below the limit of quantitation (LOQ).
4) nd - not detected.
5) na - not analyzed.
6) < - Parameter was not detected above the indicated detection limit.
7) The groundwater pathway RCL has been established for free cyanide only.
8) The groundwater pathway RCL for free cyanide is used for dissociable cyanide.
9) NE - not established.

Table A.2.-3 Pre-Remedial Soil Analyical Data Table 3 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sampling Location	Sampling Depth (feet)	Sampling Date	POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs) (mg/kg)																	
			Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) fluoranthene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	Total PAHs
Groundwater Pathway RCLs			*NE*	*NE*	*197*	*NE*	*0.47*	*0.48*	*NE*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*NE*	*NE*	*0.66*	*NE*	*54.5*	*NE*
Direct Contact RCLs			**3440**	**NE**	**17200**	**0.15**	**0.01**	**0.15**	**NE**	**1.48**	**14.8**	**0.01**	**2290**	**2290**	**0.15**	**15.6**	**229**	**5.15**	**NE**	**1720**	**NE**
Soil Samples Collected from the Unsaturated Zone																					
HA-701	2	07/29/98	<1.4	12	3.8	**49**	**17**	**56**	25	**32**	*58*	**13**	72	<1.5	**25**	3 *	4.3 *	**10**	47	*60*	487
SS-701	0.5	07/29/98	0.54	1.4	1.4	**7.2**	**4.5**	**7.3**	2.8	**7.1**	*8.2*	**1.9**	14	0.68 *	**3.2**	0.39 *	0.56 *	0.62 *	7.1	11	79.9
TP-701	2-8	07/29/98	<0.770	4.3	3.0	**25**	**19**	**56**	18	**36**	**34**	**11**	23	1 *	**23**	0.950 *	1.7 *	*4.3*	11	20	291
	8-9	07/29/98	<0.015	0.04	0.046	0.51	*0.56*	*0.57*	0.3	0.35	*0.46*	0.16	0.67	<0.015	0.31	<0.016	<0.015	0.034 *	0.16	0.51	4.7
TP-702	2-7	07/29/98	22	<2.4	29	**40**	**36**	**27**	18	**28**	**39**	**10**	*110*	*21*	**18**	4.5 *	7.5	**13**	140	*71*	634
	7-10	07/29/98	<0.015	0.073	0.12	0.65	*0.71*	*0.71*	0.52	0.56	*0.59*	0.22	1.1	0.043 *	0.5	<0.017	0.022 *	0.071	0.48	0.78	7.1
TP-703	4-6	07/29/98	0.2 *	0.84	1.9	6.2	*5.1*	*6.8*	2.8	2.9	*5.6*	1.4	11	1	3	<0.160	0.2 *	0.41 *	5.2	8.1	62.7
	9-10	07/29/98	<0.014	<0.016	<0.015	<0.016	<0.014	<0.016	<0.017	<0.016	<0.016	<0.017	<0.015	<0.015	<0.017	<0.016	<0.014	<0.017	<0.013	<0.016	nd
TP-704	3-4	07/29/98	<0.014	<0.016	<0.015	0.1	**0.13**	0.098	0.12	0.094	0.11	0.041 *	0.13	<0.014	0.083	<0.015	0.014 *	<0.017	0.069	0.14	1.1
	7-8	07/29/98	<0.015	0.093	0.047 *	0.66	*1*	*0.81*	0.8	0.59	*0.67*	0.29	0.6	<0.015	0.61	<0.016	0.05	0.052 *	0.19	0.67	7.1
TP-705	5	07/29/98	<2.4	10	5.3	100	*43*	*190*	57	120	*140*	32	47	<2.5	77	<2.7	3.3 *	*19*	14	45	903
TP-706	1-8	07/29/98	2.5	<0.67	4.7	**13**	**11**	**11**	8.2	**9.8**	*13*	**3.6**	29	2.2	**7.6**	<0.65	<0.58	1.1 *	27	21	165
SB-717	11-11.5	07/29/98	<0.046	<0.053	0.094 *	0.38	0.37	0.36	0.37	0.24	*0.39*	<0.055	0.74	<0.048	0.29	<0.052	0.064 *	<0.057	0.49	0.73	4.5
SB-718	13-13.5	07/29/98	0.77	<0.130	0.99	2.4	*2.2*	*2.3*	1.2	1.5	*2.2*	0.55	5.6	0.64	1.2	0.160 *	0.290 *	0.210 *	5.7	4.1	32.0
SB-719	11-11.5	07/29/98	0.6	0.18	1.1	3.5	*3.2*	*3.5*	1.2	2.3	*3.6*	0.68	7.3	0.57	1.5	0.160 *	0.210 *	0.360 *	6.5	6	42.5
SB-720	10-10.5	07/29/98	<5.6	9 *	<6	76	15 *	*82*	24	49	*93*	15 *	*250*	<5.8	30	150	140	*170*	310	*170*	1,583
SB-721	12-14	10/27/98	<0.016	<0.018	<0.017	<0.018	<0.016	<0.018	<0.019	<0.018	<0.018	<0.019	<0.017	<0.017	<0.019	<0.018	<0.016	<0.020	<0.015	<0.018	nd
SB-722	10-12	10/27/98	<0.015	<0.018	<0.017	<0.017	<0.015	<0.017	<0.018	<0.017	<0.017	<0.018	<0.016	<0.016	<0.018	<0.017	<0.015	<0.019	<0.015	<0.017	nd
Soil Samples Collected from the Saturated Zone																					
SB-724	26-28	12/09/98	<0.059	<0.055	0.015	0.035	0.027 *	0.034	0.066	0.011	0.034	<0.011	0.04	<0.0023	0.018	<0.039	<0.038	0.063 *	0.042	0.06	0.4
SB-725	5-6	12/08/98	<0.064	<0.059	<0.0047	<0.0047	0.017 *	0.013 *	<0.010	<0.010	<0.0041	<0.011	<0.010	<0.0025	0.0075 *	<0.042	<0.041	<0.033	0.0056 *	0.024 *	0.1
SB-726	11-12	12/09/98	<0.577	<0.539	0.289	3.46	*0.622*	*2.65*	1.18	1.35	*4.86*	<0.104	9.99	<0.023	1.86	<0.385	<0.373	<0.296	5.65	15	46.9
SB-732	12-14***	12/10/98***	0.222	0.122	0.146	0.076	0.046	0.031	<0.0088	0.017 *	0.051	0.016 *	0.163	0.231	0.0066 *	0.201	0.051	*0.699*	0.549	0.583	3.2
	12-14***	12/10/98***	0.068 *	0.300	0.048	<0.0047	<0.0095	0.0064 *	<0.010	<0.010	0.0068 *	<0.0012	0.106	0.152	<0.0052	0.245	0.061 *	*1.3*	0.256	0.219	2.8
SB-733	10-12	12/09/98	<0.567	65.7	42.4	34.6	*14.8*	*9.03*	4.99	3.71	*15.1*	10.0	66.2	<0.022	6.91	70.4	48.7	*309*	130	*179*	1,011
SB-734	12-14	12/09/98	11.8	<0.516	16.2	32.5	*14.3*	*10.7*	6.32	3.65	*13.9*	9.47	41.1	*20.1*	8.49	7.24	<0.357	*5.85*	44.9	*66.4*	313
SB-735	10-12	12/10/98	<0.586	87	36.3	39.7	*16.2*	*9.4*	6.24	3.76	*14.3*	10.9	54.8	*54.5*	8.11	68.5	50.1	*268*	101	*123*	952
SB-736	6-8	12/08/98	9.95	2.56	12.6	5.23	*4.64*	*1.77*	1.56	1.58	*1.54*	<0.012	14.8	7.01	1.97	5.21	<0.044	*3.56*	30.4	38.6	143
SB-739	6-8	12/09/98	<0.085	<0.079	0.626	0.972	*1.22*	*1.14*	0.909	0.463	*1.54*	<0.015	2.28	0.422	0.581	0.084 *	<0.055	*1.68*	2.32	3.05	17.3
PZ-702	14-16	12/09/98	503	479	159	133	*47.8*	*44.5*	15.8	12.4	*60.2*	39.9	*243*	<0.023	24	264	226	*1,400*	543	*729*	4,924
PZ-703	16-18	12/08/98	1.04	<0.065	0.031	<0.0051	0.045	0.045	0.039	0.026 *	<0.0045	<0.013	0.122	<0.0027	0.053	0.697	1.81	*10.7*	0.116	0.126	14.9

Notes:

[OB: JJW 4/5/13; CB ETO 4/9/13]

1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) * - Parameter detected above the limit of detection (LOD) but below the limit of quantitation (LOQ).
4) *** - The laboratory surrogate recovery was below laboratory limits. The sample was re-extracted past hold time and analyzed. Both results are reported.
5) nd - not detected.
6) < - Parameter was not detected above the indicated detection limit.
7) NE - not established.

Table A.3. Post-Remedial Soil Analytical Data Table.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

			Volatile Organic Compounds (mg/kg)					Polynuclear Aromatic Hydrocarbons (PAH's) mg/kg																			%	mg/kg	
Sample ID	Approximate Elevation (Feet, Mean Sea Level)	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene [c]	Benzo(a)pyrene [c]	Benzo(b)fluoranthene [c]	Benzo(ghi)perylene	Benzo(k)fluoranthene [c]	Chrysene [c]	Dibenzo(a,h)anthracene [c]	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene [c]	Naphthalene	Phenanthrene	Pyrene	Total PAHs	Total cPAHs	Total Solids	Total Lead	Total Cyanide[11]
Groundwater Pathway RCLs			*0.005*	*1.11*	*1.57*	*3.94*	*NE*	*NE*	*NE*	*NE*	*NE*	*197*	*NE*	*0.47*	*0.48*	*NE*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*NE*	*54.5*	*NE*	*NE*	*NE*	*27*	*NE*
Direct Contact RCLs			**1.49**	**818**	**7.47**	**258**	**NE**	**15.6**	**229**	**3440**	**NE**	**17200**	**0.15**	**0.01**	**0.15**	**NE**	**1.48**	**14.8**	**0.015**	**2290**	**2290**	**0.15**	**5.15**	**NE**	**1720**	**NE**	**NE**	**NE**	**400**	**26.4**
Soil Samples Collected from the Unsaturated Zone																													
EZ-101[9]	--	12/15/2000	0.012*	0.024	0.0065*	<0.019	0.043	<0.019	<0.019	<0.017	0.03*	0.019*	<0.022	<0.017	<0.017	<0.033	<0.03	<0.02	<0.043	0.024*	<0.022	<0.046	<0.016	0.032*	0.04*	0.145	nd	91	2.9*	23
EZ-102[9]	580	12/15/2000	*0.3*	0.084	0.257	0.165	0.806	0.289	0.163	0.142	1.38	0.593	**1.5**	**3.27**	**2.92**	1.68	**1.89**	*1.76*	**0.563**	1.83	0.211	**1.42**	0.527	1.27	2.6	24.0	13.3	71	*29*	**33**
EZ-103[9]	580	12/15/2000	*0.577*	0.083	0.056	0.155	0.871	1.66	1.9	0.999	7.52	15.5	**40.5**	**41.4**	**50.5**	21.6	**31.4**	**39.4**	**8.32**	63.2	*31.5*	**20**	*4.65*	29.9	*65.4*	475.3	231.5	63	*363*	**579**
EZ-104[9]	580	12/15/2000	*0.045*	0.049	0.023	0.074	0.191	0.028*	0.037*	0.023*	0.416	0.479	**2.33**	**2.32**	**3.08**	1.4	**2.19**	*2.3*	**0.556**	4.04	0.052*	**1.42**	0.141	1.78	3.74	26.3	14.2	86	25	19
EZ-105[9]	--	12/15/2000	0.015*	0.023	0.021	0.057*	0.116	0.031*	<0.019	0.018*	0.023*	0.021*	0.023*	0.036*	<0.017	<0.033	<0.03	0.026*	<0.042	0.035*	<0.022	<0.046	0.021*	0.062	0.05*	0.365	0.085	89	2.6*	5.5
EZ-201[9]	Excavated	11/27/2000	*0.066*	0.045	<0.0045	0.061*	0.172	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	87	**423**	6.7
EZ-202[9]	Excavated	11/27/2000	0.028*	0.083	<0.0045	<0.019	0.111	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	88	*192*	**250**
EZ-203[9]	Excavated	11/27/2000	*0.068*	0.072	<0.0045	0.121	0.261	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	85	**510**	**411**
EZ-204[9]	601	4/2/2001	<0.009	<0.0042	<0.0045	<0.019	nd	<0.088	<0.088	<0.08	<0.095	<0.079	0.135*	0.102*	0.180*	<0.154	0.177*	0.162*	<0.196	0.338	<0.1	<0.214	<0.073	0.133*	0.319	1.5	0.8	94	na	7.7
EZ-205[9]	601	4/2/2001	<0.009	<0.0042	<0.0045	<0.019	nd	<0.102	<0.102	<0.094	0.173*	0.112*	**0.663**	**0.742**	**1.0**	0.431*	1.220	*0.786*	<0.229	0.592	<0.116	0.388*	<0.085	0.220*	0.906	7.2	4.8	87	na	**81**
EZ-206[9]	601	4/2/2001	<0.009	<0.0042	<0.0045	<0.019	nd	0.804	1.19	0.301*	0.228*	1.06	**1.73**	**1.79**	**1.99**	0.611	**2.7**	*1.96*	0.230*	4.09	0.285*	0.688*	<0.083	0.841	3.77	24.3	11.1	91	na	**31**
EZ-207[9]	~600	6/26/2001	<0.018	<0.0084	<0.009	<0.038	nd	<0.019	<0.019	<0.018	<0.021	<0.017	<0.022	<0.017	<0.017	<0.034	<0.030	<0.020	<0.043	<0.013	<0.022	<0.047	<0.016	<0.018	<0.016	nd	nd	85	3.6*	<0.024
EZ-208[9]	--	6/26/2001	<0.009	<0.0042	<0.0045	<0.019	nd	<0.018	<0.018	<0.017	<0.020	0.017*	0.051*	0.033*	0.049*	0.036*	0.062*	0.056*	<0.041	0.148	<0.021	<0.045	<0.015	0.081	0.107	0.6	0.3	93	7.5	5.3
EZ-301[9]	580	12/5/2000	<0.009	<0.0042	<0.0045	<0.019	nd	0.364	0.378	1.45	0.535	2.9	**4.85**	**4.17**	**4.445**	2.72	**4.3**	*5.22*	**0.98**	11.2	1.19	**2.59**	0.645	10.3	10.6	68.8	26.6	85	*346*	**93**
EZ-302[9]	580	12/5/2000	<0.009	<0.0042	<0.0045	<0.019	nd	0.387	0.421	0.222*	1.76	1.29	**6.73**	**4.37**	**7.67**	3.29	**5.61**	*7.68*	**1.19**	10.6	0.248*	**3.29**	0.591	4.61	11.4	71.4	36.5	83	*230*	**241**
EZ-401[10]	580	11/30/2000	*0.284*	0.578	0.082	0.265	1.209	0.399*	0.5*	<0.199	0.464*	0.399*	**1.17**	**1.29**	**1.32**	1.31	1.29	*1.47*	<0.486	2.85	<0.248	1.08*	*0.949*	1.78	2.62	18.9	7.6	82	**1,010**	3.2
EZ-402[10]	580	11/30/2000	**5.49**	*3.57*	0.613	2.72	12.393	7.12	5.77	14.2	39.3	118	**173**	**157**	**168**	83.4	**105**	**153**	**25.6**	*431*	*48.4*	**86**	**10.9**	310	*358*	2293.7	867.6	82	*60*	25
EZ-403[10]	578	11/30/2000	*0.579*	0.394	0.12*	<0.19	1.089	0.808	0.908	0.26*	5.65	2.54	**9.62**	**12.3**	**14.5**	6.65	**8.14**	*9.97*	**2.25**	15.2	0.544*	**7.01**	*2.5*	5.17	16.9	120.9	63.8	87	*168*	**42**
EZ-404[10]	580	11/30/2000	0.225*	0.092	0.116*	<0.19	0.433	2.86	0.494*	5.08	0.829	3.11	**3.9**	**3.61**	**3.4**	1.76	**2.95**	*3.97*	0.561*	8.87	2.04	**1.65**	*0.886*	10.6	9.86	66.4	20.0	84	*62*	2.7
EZ-405[10]	580	11/30/2000	*0.371*	0.476	0.107*	<0.19	0.954	2.43	2.46	1.35	12.7	6.98	**18.7**	**18.2**	**25.9**	7.46	**14.6**	**19.4**	**3.4**	21.6	1.65	**8.07**	*3.23*	11.2	29.3	208.6	108.3	82	*229*	**113**

Notes:

[OB: JJW 4/5/13; CB ETO 4/9/13]

1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) na = not analyzed
4) nd = not detected
5) * = The reported result is less than the practical quantitation limit
6) [c]= carcinogenic PAH, classified as B2 probable human carcinogen
7) NE = not established
8) < - Parameter was not detected above the indicated detection limit.
9) Locations EZ-101 to EZ-302 were either excavated or are covered with geosynthetic and/or earthen cover.
10) Locations EZ-401 to EZ-405 in river bank area remediated during 2011 USEPA time-critical removal action.
11) The groundwater pathway RCL has been established for free cyanide only.

Table A.4.-1 Pre-Remedial Soil Analytical Data Exceeding RCLs Table 1 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample Location	Sample Depth (ft)	Sample Date	Benzene mg/kg	Phenol mg/kg	Benzo(a)anthracene mg/kg	Benzo(b)fluoranthene mg/kg	Benzo(a)pyrene mg/kg	Chrysene mg/kg	Dibenzo(a,h)anthracene mg/kg	Indeno(1,2,3-cd)pyrene mg/kg	Naphthalene mg/kg
Groundwater Pathway RCLs			*0.005*	*2.30*	*NE*	*0.48*	*0.47*	*0.15*	*NE*	*NE*	*0.66*
Direct Contact RCLs			**1.49**	**18300**	**0.15**	**0.15**	**0.01**	**14.8**	**0.01**	**0.15**	**5.15**
Soil Samples from the Unsaturated Zone											
Monitoring Well Samples											
MW-701	2-4	7/18/1995			**2.3**	**0.95**	**1.7**	*1.6*	**0.18**	**1.3**	**77**
MW-702	2-4	7/19/1995			**1.1**	**0.66**	**1.2**	*0.74*	**0.15**	**0.75**	
MW-703	4-6	7/18/1995	*0.013*			*2.3*	*3.8*	*2.8*			*3*
MW-705	2-4	7/19/1995			**1.7**	**1**	**1.7**	*1.3*	**0.27**	**1.1**	
MW-707	2-4	7/19/1995		*83*	**0.33**	**0.18**	**0.43**	*0.23*	**0.063**	**0.33**	
Soil Boring Samples											
SB-701	2-4	7/19/1995			**0.91**	**0.49**	**0.74**	*0.68*	**0.093**	**0.5**	

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) NE - not established.

Table A.4.-2 Pre-Remedial Soil Analytical Data Exceeding RCLs Table 2 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sampling Location	Sampling Depth (feet below ground surface)	Sampling Date	mg/kg						
			Lead, total	Cyanide, total[3]	Cyanide, weak acid dissociable[4]	Benzene	Ethylbenzene	Toluene	Total Xylenes
Groundwater Pathway RCLs			*27*	*NE*	*4.04*	*0.005*	*1.57*	*1.11*	*3.94*
Direct Contact RCLs			**400**	**26.4**	**NE**	**1.49**	**7.47**	**818**	**258**
Soil Samples Collected from the Unsaturated Zone									
HA-701	2	07/29/98	*350*	**89**	*46*	*0.13*			
SS-701	0.5	07/29/98	**410**						
TP-701	2-8	07/29/98	**540**	**78**	*17*	*0.23*			
TP-702	2-7	07/29/98	*110*						
TP-703	4-6	07/29/98	*260*						
TP-705	5	07/29/98	*980*		*260*	*0.11*			
TP-706	1-8	07/29/98	**530**						
SB-717	11-11.5	07/29/98	*110*						
SB-718	13-13.5	07/29/98	*280*						
SB-719	11-11.5	07/29/98	*190*						
SB-720	10-10.5	07/29/98	*400*		*42*				
SB-726	11-12	12/09/98	*61*						
SB-732	12-14	12/10/98				*0.3*	*2.521*		
SB-733	10-12	12/09/98				*25.7*	*5.49*	*55.4*	*49.9*
SB-734	12-14	12/09/98				*0.309*			
SB-735	10-12	12/10/98				*0.172*	*7.07*	*1.15*	*13.46*
SB-736	6-8	12/08/98				*0.314*			
SB-739	6-8	12/09/98	*634*				*1.81*		*6.02*
PZ-702	14-16	12/09/98				*259*	*168*	*572*	*599*
PZ-703	16-18	12/08/98				*1.49*	*10.6*		

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) The groundwater pathway RCL has been established for free cyanide only.
4) The groundwater pathway RCL for free cyanide is used for dissociable cyanide.
5) NE - not established.

Table A.4.-3 Pre-Remedial Soil Analytical Data Exceeding RCLs Table 3 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sampling Location	Sampling Depth (feet)	Sampling Date	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) fluoranthene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Pyrene
Groundwater Pathway RCLs			*NE*	*0.47*	*0.48*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*54.5*
Direct Contact RCLs			**0.15**	**0.01**	**0.15**	**1.48**	**14.8**	**0.01**	**2290**	**2290**	**0.15**	**5.15**	**1720**
Soil Samples Collected from the Unsaturated Zone													
HA-701	2	07/29/98	**49**	**17**	**56**	**32**	**58**	**13**			**25**	**10**	*60*
SS-701	0.5	07/29/98	**7.2**	**4.5**	**7.3**	**7.1**	*8.2*	**1.9**			**3.2**		
TP-701	2-8	07/29/98	**25**	**19**	**56**	**36**	**34**	**11**			**23**	*4.3*	
	8-9	07/29/98		*0.56*	*0.57*		*0.46*						
TP-702	2-7	07/29/98	**40**	**36**	**27**	**28**	**39**	**10**	*110*	*21*	**18**	**13**	*71*
	7-10	07/29/98		*0.71*	*0.71*		*0.59*						
TP-703	4-6	07/29/98		*5.1*	*6.8*		*5.6*						
TP-704	3-4	07/29/98		**0.13**									
	7-8	07/29/98		*1*	*0.81*		*0.67*						
TP-705	5	07/29/98		*43*	*190*		*140*					*19*	
TP-706	1-8	07/29/98	**13**	**11**	**11**		*13*	**3.6**			**7.6**		
SB-717	11-11.5	07/29/98					*0.39*						
SB-718	13-13.5	07/29/98		*2.2*	*2.3*		*2.2*						
SB-719	11-11.5	07/29/98		*3.2*	*3.5*		*3.6*						
SB-720	10-10.5	07/29/98			*82*		*93*		*250*			*170*	*170*
Soil Samples Collected from the Saturated Zone													
SB-726	11-12	12/09/98		*0.622*	*2.65*		*4.86*						
SB-732	12-14***	12/10/98***										*0.699*	
	12-14***	12/10/98***										*1.3*	
SB-733	10-12	12/09/98		*14.8*	*9.03*		*15.1*					*309*	*179*
SB-734	12-14	12/09/98		*14.3*	*10.7*		*13.9*			*20.1*		*5.85*	*66.4*
SB-735	10-12	12/10/98		*16.2*	*9.4*		*14.3*			*54.5*		*268*	*123*
SB-736	6-8	12/08/98		*4.64*	*1.77*		*1.54*					*3.56*	
SB-739	6-8	12/09/98		*1.22*	*1.14*		*1.54*					*1.68*	
PZ-702	14-16	12/09/98		*47.8*	*44.5*		*60.2*					*1,400*	*729*
PZ-703	16-18	12/08/98										*10.7*	

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) *** - The laboratory surrogate recovery was below laboratory limits. The sample was re-extracted past hold time and analyzed. Both results are reported.
4) NE - not established.

Table A.4.-4 Post-Remedial Soil Analytical Data Exceeding RCLs Table 1 of 1.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

			Volatile Organic Compounds (mg/kg)													mg/kg	
Sample ID	Approximate Elevation (Feet, Mean Sea Level)	Date	Benzene	Toluene	Benzo(a)anthracene [c]	Benzo(a)pyrene [c]	Benzo(b)fluoranthene [c]	Benzo(k)fluoranthene [c]	Chrysene [c]	Dibenzo(a,h)anthracene [c]	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene [c]	Naphthalene	Pyrene	Total Lead	Total Cyanide[7]
Groundwater Pathway RCLs			*0.005*	*1.11*	*NE*	*0.47*	*0.48*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*54.5*	*27*	*NE*
Direct Contact RCLs			**1.49**	**818**	**0.15**	**0.01**	**0.15**	**1.48**	**14.8**	**0.015**	**2290**	**2290**	**0.15**	**5.15**	**1720**	**400**	**26.4**
Soil Samples Collected from the Unsaturated Zone																	
EZ-102[5]	580	12/15/2000	*0.3*		**1.5**	**3.27**	**2.92**	**1.89**	*1.76*	**0.563**			**1.42**			*29*	**33**
EZ-103[5]	580	12/15/2000	*0.577*		**40.5**	**41.4**	**50.5**	**31.4**	**39.4**	**8.32**		*31.5*	**20**	*4.65*	*65.4*	*363*	**579**
EZ-104[5]	580	12/15/2000	*0.045*		**2.33**	**2.32**	**3.08**	**2.19**	*2.3*	**0.556**			**1.42**				
EZ-201[5]	Excavated	11/27/2000	*0.066*													**423**	
EZ-202[5]	Excavated	11/27/2000														*192*	**250**
EZ-203[5]	Excavated	11/27/2000	*0.068*													**510**	**411**
EZ-205[5]	601	4/2/2001			**0.663**	**0.742**	**1.0**		*0.786*								**81**
EZ-206[5]	601	4/2/2001			**1.73**	**1.79**	**1.99**	**2.7**	*1.96*								**31**
EZ-301[5]	580	12/5/2000			**4.85**	**4.17**	**4.445**	**4.3**	*5.22*	**0.98**			**2.59**			*346*	**93**
EZ-302[5]	580	12/5/2000			**6.73**	**4.37**	**7.67**	**5.61**	*7.68*	**1.19**			**3.29**			*230*	**241**
EZ-401[6]	580	11/30/2000	*0.284*		**1.17**	**1.29**	**1.32**		*1.47*					*0.949*		**1,010**	
EZ-402[6]	580	11/30/2000	**5.49**	*3.57*	**173**	**157**	**168**	**105**	**153**	**25.6**	*431*	*48.4*	**86**	**10.9**	*358*	*60*	
EZ-403[6]	578	11/30/2000	*0.579*		**9.62**	**12.3**	**14.5**	**8.14**	*9.97*	**2.25**			**7.01**	*2.5*		*168*	**42**
EZ-404[6]	580	11/30/2000			**3.9**	**3.61**	**3.4**	**2.95**	*3.97*				**1.65**	*0.886*		*62*	
EZ-405[6]	580	11/30/2000	*0.371*		**18.7**	**18.2**	**25.9**	**14.6**	**19.4**	**3.4**			**8.07**	*3.23*		*229*	**113**

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) [c]= carcinogenic PAH, classified as B2 probable human carcinogen
4) NE = not established
5) Locations EZ-101 to EZ-302 were either excavated or are covered with geosynthetic and/or earthen cover.
6) Locations EZ-401 to EZ-405 in river bank area remediated during 2011 USEPA time-critical removal action.
7) The groundwater pathway RCL has been established for free cyanide only.

Attachment A.5. Vapor Analytical Table

Not Applicable

Explanation: The soil vapor pathway was not assessed. The pathway is not complete because there are no occupied buildings on the property and no reasonably foreseeable future plans for occupied buildings. Contaminated soil has been capped and covered and therefore soil vapor, if present, is effectively mitigated.

Attachment A.6. Other Media of Concern

Not Applicable

Explanation: The Case Closure-GIS Registry is applicable to the Upland portion of the site. Surface water and sediment contamination was addressed through a separate removal action with the USEPA. WPSC performed sediment remediation in 2011 followed by a USEPA Great Lakes National Program Office sediment remediation in 2012

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-701	588.97	588.51	13.4	10	585.11		8/14/1995	5.51	583.00	7.38	27.63	2.67E-01	downward
							8/20/1995	5.63	582.88	9.14	27.51	3.32E-01	downward
							9/25/1995	5.58	582.93	10.30	27.56	3.74E-01	downward
							12/21/1998	5.72	582.79	0.60	27.42	2.19E-02	downward
							4/18/2000	5.95	582.56	0.42	27.19	1.54E-02	downward
							6/19/2000	5.62	582.89	0.78	27.52	2.83E-02	downward
							Well Replaced	--	--				
MW-701R		590.47	10.80	5	584.67		6/25/2002	6.20	584.27	3.64	28.90	1.26E-01	downward
							11/7/2002	6.60	583.87	-0.08	28.50	-2.81E-03	upward
							1/24/2003	7.06	583.41	-0.06	28.04	-2.14E-03	upward
							4/15/2003	6.21	584.26	0.19	28.89	6.58E-03	downward
							7/1/2003	6.18	584.29	0.21	28.92	7.26E-03	downward
							11/10/2003	6.31	584.16	0.32	28.79	1.11E-02	downward
	590.43	590.23	10.56	5	584.67		2/17/2004	6.53	583.70	0.25	28.33	8.82E-03	downward
							4/20/2004	6.02	584.21	0.36	28.84	1.25E-02	downward
							5/20/2004	5.63	584.60	3.36	29.23	1.15E-01	downward
							8/24/2004	5.98	584.25	0.15	28.88	5.19E-03	`
							11/24/2004	6.28	583.95	-0.04	28.58	-1.40E-03	upward
							2/25/2005	6.19	584.04	0.16	28.67	5.58E-03	downward
							5/19/2005	6.61	583.62	-0.34	28.25	-1.20E-02	upward
							8/9/2005	5.95	584.28	0.28	28.91	9.69E-03	downward
							12/13/2005	6.38	583.85	0.10	28.48	3.51E-03	downward
							3/7/2006	6.23	584.00	0.39	28.63	1.36E-02	downward
							6/26/2006	5.68	584.55	0.34	29.18	1.17E-02	downward
							9/26/2006	6.01	584.22	0.37	28.85	1.28E-02	downward
							12/13/2006	6.01	584.22	0.21	28.85	7.28E-03	downward
							3/29/2007	6.08	584.15	0.30	28.78	1.04E-02	downward
							6/18/2007	5.78	584.45	0.30	29.08	1.03E-02	downward
							9/13/2007	6.15	584.08	0.14	28.71	4.88E-03	downward
	590.24	590.04	10.37	5	584.67		12/6/2007	6.41	583.63	0.18	28.26	6.37E-03	downward
							4/1/2008	5.94	584.10	0.10	28.73	3.48E-03	downward
							6/26/2008	5.44	584.60	0.18	29.23	6.16E-03	downward
							9/11/2008	6.09	583.95	-0.15	28.58	-5.25E-03	upward
							12/18/2008	6.55	583.49	0.07	28.12	2.49E-03	downward
							3/30/2009	5.89	584.15	-0.13	28.78	-4.52E-03	upward
							6/30/2009	5.64	584.40	0.00	29.03	0.00E+00	

Table A.7. Water Level Elevations.
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							9/29/2009	6.36	583.68	-0.28	28.31	-9.89E-03	upward
							12/8/2009	6.23	583.81	-0.06	28.44	-2.11E-03	upward
							3/30/2010	6.30	583.74	-0.19	28.37	-6.70E-03	upward
							6/8/2010	nm	nm	nm	nm	nm	nm
							9/8/2010	6.65	583.39	-0.81	28.02	-2.89E-02	upward
							12/2/2010	6.61	583.43	-0.09	28.06	-3.21E-03	upward
							3/22/2011	5.95	584.09	0.31	28.72	1.08E-02	upward
							6/1/2011	5.60	584.44	-0.04	29.07	-1.38E-03	upward
							3/1/2012	6.50	583.54	0.48	28.17	1.70E-02	upward
							6/19/2012	5.92	584.12	0.51	28.75	1.77E-02	upward
							9/10/2012	6.10	583.94	0.46	28.57	1.61E-02	upward
							12/12/2012	7.10	582.94	-0.04	27.57	-1.45E-03	upward

Table A.7. Water Level Elevations.
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
PZ-701	589.28	588.89	36.02	5	557.87	555.37	8/14/1995	13.27	575.62				
							8/20/1995	15.15	573.74				
							9/25/1995	16.26	572.63				
							12/21/1998	6.70	582.19				
							4/18/2000	6.75	582.14				
							6/19/2000	6.78	582.11				
		590.53	37.66	5	557.87	555.37	6/25/2002	9.90	580.63				
							11/7/2002	6.58	583.95				
							1/24/2003	7.06	583.47				
							4/15/2003	6.46	584.07				
							7/1/2003	6.45	584.08				
							9/30/2003	6.61	583.92				
							11/10/2003	6.69	583.84				
	590.45	590.25	37.38	5	557.87	555.37	2/17/2004	6.80	583.45				
							4/20/2004	6.40	583.85				
							5/20/2004	9.01	581.24				
							8/24/2004	6.15	584.10				
							11/24/2004	6.26	583.99				
							2/25/2005	6.37	583.88				
							5/19/2005	6.29	583.96				
							5/25/2005	6.30	583.95				
							8/9/2005	6.25	584.00				
							12/13/2005	6.50	583.75				
							3/7/2006	6.64	583.61				
							6/26/2006	6.04	584.21				
							9/26/2006	6.40	583.85				
							12/13/2006	6.24	584.01				
							3/29/2007	6.40	583.85				
							6/18/2007	6.10	584.15				
							9/13/2007	6.31	583.94				
	590.28	590.08	37.21	5	557.87	555.37	12/6/2007	6.63	583.45				
							4/1/2008	6.08	584.00				
							6/26/2008	5.66	584.42				
							9/11/2008	5.98	584.10				
							12/18/2008	6.66	583.42				
							3/30/2009	5.80	584.28				
							6/30/2009	5.68	584.40				

Table A.7. Water Level Elevations.
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							9/29/2009	6.12	583.96				
							12/8/2009	6.21	583.87				
							3/30/2010	6.15	583.93				
							6/8/2010	5.88	584.20				
							9/8/2010	5.88	584.20				
							12/2/2010	6.56	583.52				
							3/22/2011	6.30	583.78				
							6/1/2011	5.60	584.48				
							3/1/2012	7.02	583.06				
							6/19/2012	6.47	583.61				
							9/10/2012	6.60	583.48				
							12/12/2012	7.10	582.98				

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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-702	590.39	590.09	13.40	10	586.69		8/14/1995	4.86	585.23				
							8/20/1995	4.69	585.40				
							9/25/1995	4.88	585.21				
							12/21/1998	4.83	585.26				
							4/18/2000	4.52	585.57				
							6/19/2000	2.68	587.41				
							Abandoned Monitoring Well						
MW-703	589.16	588.80	13.46	10	585.34		8/14/1995	5.63	583.17				
							8/20/1995	5.69	583.11				
							9/25/1995	5.74	583.06				
							12/21/1998	5.7	583.10				
							4/18/2000	5.99	582.81				
							6/19/2000	5.56	583.24				
							Abandoned Monitoring Well						
MW-704	589.43	589.05	13.20	10	585.85		8/14/1995	5.93	583.12				
							8/20/1995	5.96	583.09				
							9/25/1995	6.00	583.05				
							12/21/1998	5.63	583.42				
							4/18/2000	5.64	583.41				
							6/19/2000	5.62	583.43				
							Abandoned Monitoring Well						

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-705	590.22	589.91	16.66	10	583.25		8/14/1995	6.95	582.96				
							8/20/1995	6.07	583.84				
							9/25/1995	6.09	583.82				
							12/21/1998	6.14	583.77				
							4/25/2000	6.11	583.80				
							6/19/2000	5.74	584.17				
	593.57	592.20	18.95	10	583.25		6/25/2002	10.27	581.93				
							11/7/2002	7.05	585.15				
							4/15/2003	7.17	585.03				
							7/1/2003	6.80	585.40				
							9/30/2003	7.23	584.97				
							11/10/2003	6.70	585.50				
							2/17/2004	7.20	585.00				
							4/20/2004	6.41	585.79				
							5/20/2004	5.91	586.29				
							8/24/2004	6.68	585.52				
							11/24/2004	7.22	584.98				
							2/25/2005	6.78	585.42				
							5/19/2005	6.71	585.49				
							8/9/2005	6.81	585.39				
							12/13/2005	6.73	585.47				
							3/7/2006	6.68	585.52				
							6/26/2006	6.15	586.05				
							9/26/2006	6.93	585.27				
							12/13/2006	nm	nm				
							3/29/2007	6.22	585.98				
							6/18/2007	6.88	585.32				
							9/13/2007	6.81	585.39				
	593.33	593.04	19.79	10	583.25		12/6/2007	nm	nm	well buried under snow, could not locate			
							4/1/2008	5.95	587.09				
							6/26/2008	5.77	587.27				
							9/11/2008	6.70	586.34				
							12/18/2008	7.12	585.92				
							3/30/2009	6.69	586.35				
							6/30/2009	6.33	586.71				
							9/29/2009	6.76	586.28				
							12/8/2009	6.52	586.52				

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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							3/30/2010	6.41	586.63				
							6/8/2010	6.19	586.85				
							9/8/2010	6.28	586.76				
							12/2/2010	7.15	585.89				
							3/22/2011	6.53	586.51				
							6/1/2011	6.10	586.94				
							3/1/2012	nm	nm	well under staging pad			
							6/19/2012	6.25	586.79				
							9/10/2012	nm	nm	well burried			
							12/12/2012	6.05	586.99				

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Camp Marina Manufactured Gas Plant
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-706	591.51	591.34	14.10	10	587.94		8/14/1995	3.5 *	587.8 *				
							8/20/1995	3.4 *	587.9 *				
							9/25/1995	3.5 *	587.8 *				
							12/21/1998	3.34	588.00	-1.15	29.34	-3.92E-02	upward
							4/18/2000	2.98	588.36	-0.20	29.70	-6.73E-03	upward
							6/19/2000	3.65	587.69	-0.15	29.03	-5.17E-03	upward
	595.2	594.54	16.60	10	587.94		6/25/2002	8.40	586.14	1.27	27.48	4.62E-02	downward
							11/7/2002	9.22	582.94	-5.28	24.28	-2.17E-01	upward
							1/24/2003	--	--				
							4/15/2003	8.25	586.29	-1.94	27.63	-7.02E-02	upward
							7/1/2003	8.77	585.77	-2.47	27.11	-9.11E-02	upward
							11/10/2003	8.78	585.76	-2.46	27.10	-9.08E-02	upward
							2/17/2004	9.37	585.17	-2.86	26.51	-1.08E-01	upward
							4/20/2004	8.25	586.29	-2.23	27.63	-8.07E-02	upward
							5/20/2004	7.41	587.13	-1.93	28.47	-6.78E-02	upward
							8/24/2004	8.51	586.03	-2.53	27.37	-9.24E-02	upward
							11/24/2004	9.11	585.43	-2.88	26.77	-1.08E-01	upward
							2/25/2005	8.27	586.27	-2.27	27.61	-8.22E-02	upward
							5/19/2005	8.59	585.95	-2.56	27.29	-9.38E-02	upward
							8/9/2005	8.92	585.62	-2.58	26.96	-9.57E-02	upward
							12/13/2005	9.00	585.54	-2.86	26.88	-1.06E-01	upward
							3/7/2006	8.82	585.72	-2.57	27.06	-9.50E-02	upward
							6/26/2006	8.38	586.16	-2.45	27.50	-8.91E-02	upward
							9/26/2006	8.93	585.61	-1.75	26.95	-6.49E-02	upward
							12/13/2006	7.96	586.58	-2.15	27.92	-7.70E-02	upward
							3/29/2007	7.64	586.90	-1.59	28.24	-5.63E-02	upward
							6/18/2007	8.37	586.17	-2.39	27.51	-8.69E-02	upward
							9/13/2007	8.90	585.64	-2.64	26.98	-9.79E-02	upward
	595.00	594.36	16.42	10	587.94		12/6/2007	nm	nm	coal tar present			
							4/1/2008	7.75	586.61	-1.89	27.95	-6.76E-02	upward
							6/26/2008	7.70	586.66	-2.51	28.00	-8.96E-02	upward
							9/11/2008	8.78	585.58	-2.88	26.92	-1.07E-01	upward
							12/18/2008	8.20	586.16	-0.59	27.50	-2.15E-02	upward
							3/30/2009	11.63	582.73	-4.22	24.07	-1.75E-01	upward
							6/30/2009	8.04	586.32	-2.22	27.66	-8.03E-02	upward
							9/29/2009	8.81	585.55	-0.74	26.89	-2.75E-02	upward
							12/8/2009	8.84	585.52	-2.70	26.86	-1.01E-01	upward

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							3/30/2010	7.96	586.40	-1.64	27.74	-5.91E-02	upward
							6/8/2010	nm	nm	nm	nm	nm	nm
							9/8/2010	8.33	586.03	-2.53	27.37	-9.24E-02	upward
							12/2/2010	9.12	585.24	-2.78	26.58	-1.05E-01	upward
							3/22/2011	7.71	586.65	-1.40	27.99	-5.00E-02	upward
							6/1/2011	7.90	586.46	-2.28	27.80	-8.20E-02	upward
							3/1/2012	8.90	585.46	-2.46	26.80	-9.18E-02	upward
							6/19/2012	8.71	585.65	-2.74	26.99	-1.02E-01	upward
							9/10/2012	8.95	585.41	-2.76	26.75	-1.03E-01	upward
							12/12/2012	9.20	585.16	-3.11	26.50	-1.17E-01	upward

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
PZ-702	591.62	591.16	38.62	5	561.2	558.7	12/21/1998	2.01	589.15				
							4/18/2000	2.60	588.56				
							6/19/2000	3.32	587.84				
	596.16	595.34	39.1	5	561.2	558.7	6/25/2002	10.47	584.87				
							11/7/2002	7.12	588.22				
							1/24/2003	7.58	587.76				
							4/15/2003	7.11	588.23				
							7/1/2003	7.10	588.24				
							9/30/2003	7.18	588.16				
							11/10/2003	7.12	588.22				
							2/17/2004	7.31	588.03				
							4/20/2004	6.82	588.52				
							5/20/2004	6.28	589.06				
							8/24/2004	6.78	588.56				
							11/24/2004	7.03	588.31				
							2/25/2005	6.80	588.54				
							5/19/2005	6.83	588.51				
							8/9/2005	7.14	588.20				
							12/13/2005	6.94	588.40				
							3/7/2006	7.05	588.29				
							6/26/2006	6.73	588.61				
							9/26/2006	7.98	587.36				
							12/13/2006	6.61	588.73				
							3/29/2007	6.85	588.49				
							6/18/2007	6.78	588.56				
							9/13/2007	7.06	588.28				
	595.91	595.17	38.97	5	561.2	558.7	12/6/2007	7.07	588.10				
							4/1/2008	6.67	588.50				
							6/26/2008	6.00	589.17				
							9/11/2008	6.71	588.46				
							12/18/2008	8.42	586.75				
							3/30/2009	8.22	586.95				
							6/30/2009	6.63	588.54				
							9/29/2009	8.88	586.29				
							12/8/2009	6.95	588.22				
							3/30/2010	7.13	588.04				
							6/8/2010	6.70	588.47				

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							9/8/2010	6.61	588.56				
							12/2/2010	7.15	588.02				
							3/22/2011	7.12	588.05				
							6/1/2011	6.43	588.74				
							3/1/2012	7.25	587.92				
							6/19/2012	6.78	588.39				
							9/10/2012	7.00	588.17				
							12/12/2012	6.90	588.27				

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-707	590.29	590.08	13.35	10	586.73		8/14/1995	7.48	582.60				
							8/20/1995	7.71	582.37				
							9/25/1995	7.67	582.41				
							12/21/1998	6.65	583.43	2.84	26.71	1.06E-01	downward
							4/18/2000	--	--				
							6/19/2000	6.05	584.03	3.94	27.31	1.44E-01	downward
							Well Replaced	--	--				
MW-707R		587.78	11.97	10	585.81		6/25/2002	4.57	583.21	4.48	26.49	1.69E-01	downward
							11/7/2002	5.04	582.74	0.66	26.02	2.54E-02	downward
							1/24/2003	--	--	--	--	--	--
							4/15/2003	4.9	582.88	0.80	26.16	3.06E-02	downward
							7/1/2003	4.99	582.79	5.09	26.07	1.95E-01	downward
							11/10/2003	5.13	582.65	12.41	25.93	4.79E-01	downward
	588.9	588.57	12.76	10	585.81		2/17/2004	5.30	583.27	2.59	26.55	9.76E-02	downward
							4/20/2004	5.03	583.54	1.13	26.82	4.21E-02	downward
							5/20/2004	4.75	583.82	0.81	27.10	2.99E-02	downward
							8/24/2004	4.87	583.70	0.86	26.98	3.19E-02	downward
							11/24/2004	5.03	583.54	0.66	26.82	2.46E-02	downward
							2/25/2005	5.04	583.53	0.91	26.81	3.39E-02	downward
							5/19/2005	5.03	583.54	1.01	26.82	3.77E-02	downward
							8/9/2005	4.86	583.71	2.26	26.99	8.37E-02	downward
							12/13/2005	5.24	583.33	0.90	26.61	3.38E-02	downward
							3/7/2006	5.25	583.32	1.98	26.60	7.44E-02	downward
							6/26/2006	4.80	583.77	1.38	27.05	5.10E-02	downward
							9/26/2006	4.99	583.58	5.61	26.86	2.09E-01	downward
							12/13/2006	5.02	583.55	3.80	26.83	1.42E-01	downward
							3/29/2007	5.13	583.44	1.19	26.72	4.45E-02	downward
							6/18/2007	4.80	583.77	1.64	27.05	6.06E-02	downward
							9/13/2007	4.97	583.60	5.35	26.88	1.99E-01	downward
	588.63	588.18	12.37	10	585.81		12/6/2007	4.97	583.21	4.19	26.49	1.58E-01	downward
							4/1/2008	4.80	583.38	1.44	26.66	5.40E-02	downward
							6/26/2008	4.19	583.99	5.12	27.27	1.88E-01	downward
							9/11/2008	4.48	583.70	3.83	26.98	1.42E-01	downward

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							12/18/2008	5.00	583.18	3.69	26.46	1.39E-01	downward
							3/30/2009	4.61	583.57	1.56	26.85	5.81E-02	downward
							6/30/2009	4.20	583.98	2.07	27.26	7.59E-02	downward
							9/29/2009	4.79	583.39	1.26	26.67	4.72E-02	downward
							12/8/2009	4.77	583.41	0.76	26.69	2.85E-02	downward
							3/30/2010	4.32	583.86	0.80	27.14	2.95E-02	downward
							6/8/2010	4.35	583.83	1.83	27.11	6.75E-02	downward
							9/8/2010	4.34	583.84	1.76	27.12	6.49E-02	downward
							12/2/2010	4.90	583.28	0.99	26.56	3.73E-02	downward
							3/22/2011	4.57	583.61	2.16	26.89	8.03E-02	downward
							6/1/2011	4.27	583.91	4.13	27.19	1.52E-01	downward
							3/1/2012	5.26	582.92	-0.45	26.20	-1.72E-02	downward
							6/19/2012	4.56	583.62	0.31	26.90	1.15E-02	downward
							9/10/2012	4.70	583.48	0.28	26.76	1.05E-02	downward
							12/12/2012	5.28	582.90	-0.29	26.18	-1.11E-02	downward

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
PZ-703	589.85	589.22	33.94	5	559.2	556.7	12/21/1998	8.63	580.59				
							1/19/1999	8.96	580.26				
							4/18/2000	9.49	579.73				
							6/19/2000	9.13	580.09				
	588.81	588.53	34.33	5	559.2	556.7	6/25/2002	9.80	578.73				
							11/7/2002	6.45	582.08				
							1/24/2003	--	--				
							4/15/2003	6.45	582.08				
							7/1/2003	10.83	577.70				
							9/30/2003	9.40	579.13				
							11/10/2003	18.29	570.24				
							2/17/2004	7.85	580.68				
							4/20/2004	6.12	582.41				
							5/20/2004	5.52	583.01				
							8/24/2004	5.69	582.84				
							11/24/2004	5.65	582.88				
							2/25/2005	5.91	582.62				
							5/19/2005	6.00	582.53				
							8/9/2005	7.08	581.45				
							12/13/2005	6.10	582.43				
							3/7/2006	7.19	581.34				
							6/26/2006	6.14	582.39				
							9/26/2006	10.56	577.97				
							12/13/2006	8.78	579.75				
							3/29/2007	6.28	582.25				
							6/18/2007	6.40	582.13				
							9/13/2007	10.28	578.25				
	588.57	588.29	34.09	5	559.2	556.7	12/6/2007	9.27	579.02				
							4/1/2008	6.35	581.94				
							6/26/2008	9.42	578.87				
							9/11/2008	8.42	579.87				
							12/18/2008	8.80	579.49				
							3/30/2009	6.28	582.01				
							6/30/2009	6.38	581.91				
							9/29/2009	6.16	582.13				
							12/8/2009	5.64	582.65				
							3/30/2010	5.23	583.06				

Table A.7. Water Level Elevations.
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							6/8/2010	6.29	582.00				
							9/8/2010	6.21	582.08				
							12/2/2010	6.00	582.29				
							3/22/2011	6.84	581.45				
							6/1/2011	8.51	579.78				
							3/1/2012	4.92	583.37				
							6/19/2012	4.98	583.31				
							9/10/2012	5.09	583.20				
							12/12/2012	5.10	583.19				

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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-708	606.45	606.09	18.86	15	602.23		12/10/1998	16.39	589.70				
							12/21/1998	16.78	589.31				
							4/18/2000	15.21	590.88				
							6/19/2000	14.98	591.11				
	605.87	605.47	18.24	15	602.23		6/25/2002	14.22	591.25				
							11/7/2002	11.05	594.42				
							1/24/2003	11.58	593.89				
							4/15/2003	10.35	595.12				
							7/1/2003	10.66	594.81				
							9/30/2003	11.07	594.40				
							11/10/2003	9.85	595.62				
							2/17/2004	11.13	594.34				
							4/20/2004	10.28	595.19				
							5/20/2004	9.12	596.35				
							8/24/2004	10.72	594.75				
							11/24/2004	11.05	594.42				
							2/25/2005	10.75	594.72				
							5/19/2005	10.68	594.79				
							8/9/2005	10.98	594.49				
							12/13/2005	10.75	594.72				
							3/7/2006	10.8	594.67				
							6/26/2006	10.17	595.30				
							9/26/2006	10.93	594.54				
							12/13/2006	9.80	595.67				
							3/29/2007	10.31	595.16				
							6/18/2007	10.40	595.07				
							9/13/2007	10.91	594.56				
	605.53	605.28	18.05	15	602.23		12/6/2007	11.28	594.00				
							4/1/2008	9.20	596.08				
							6/26/2008	9.70	595.58				
							9/11/2008	11.21	594.07				
							12/18/2008	11.08	594.20				
							3/30/2009	10.83	594.45				
							6/30/2009	10.28	595.00				
							9/29/2009	10.95	594.33				
							12/8/2009	10.60	594.68				
							3/30/2010	6.38	598.90				

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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							6/8/2010	10.22	595.06				
							9/8/2010	10.50	594.78				
							12/2/2010	11.20	594.08				
							3/22/2011	9.86	595.42				
							6/1/2011	10.18	595.10				
							3/1/2012	10.70	594.58				
							6/19/2012	10.49	594.79				
							9/10/2012	10.73	594.55				
							12/12/2012	10.80	594.48				

Table A.7. Water Level Elevations.
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Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-709	588.51	587.95	12.50	10	585.45		12/21/1998	7.27	580.68				
							4/18/2000	7.62	580.33				
							6/19/2000	7.23	580.72				
							Well Replaced	--	--				
MW-709R	589.15	588.81	16.54	10	582.27		6/25/2002	9.23	579.58				
							11/7/2002	6.40	582.41				
							4/15/2003	5.45	583.36				
							7/1/2003	5.30	583.51				
							9/30/2003	6.33	582.48				
							11/10/2003	5.29	583.52				
	588.96	588.58	16.31	10	582.27		2/17/2004	6.44	582.14				
							4/20/2004	5.02	583.56				
							5/20/2004	4.63	583.95				
							8/24/2004	5.14	583.44				
							11/24/2004	6.19	582.39				
							2/25/2005	5.58	583.00				
							5/19/2005	5.29	583.29				
							5/25/2005	5.20	583.38				
							8/9/2005	5.58	583.00				
							12/13/2005	5.46	583.12				
							3/7/2006	5.38	583.20				
							6/26/2006	4.90	583.68				
							9/26/2006	5.46	583.12				
							12/13/2006	4.81	583.77				
							3/29/2007	4.95	583.63				
							6/18/2007	5.40	583.18				
							9/13/2007	5.43	583.15				
	588.76	588.41	16.14	10	582.27		12/6/2007	6.73	581.68				
							4/1/2008	4.62	583.79				
							6/26/2008	4.51	583.90				
							9/11/2008	5.09	583.32				
							12/18/2008	5.60	582.81				
							3/30/2009	4.95	583.46				
							6/30/2009	4.76	583.65				
							9/29/2009	5.08	583.33				
							12/8/2009	4.88	583.53				

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							3/30/2010	5.48	582.93				
							6/8/2010	4.84	583.57				
							9/8/2010	4.84	583.57				
							12/2/2010	5.62	582.79				
							3/22/2011	4.81	583.60				
							6/1/2011	4.80	583.61				
							3/1/2012	4.95	583.46				
							6/19/2012	4.95	583.46				
							9/10/2012	4.93	583.48				
							12/12/2012	5.30	583.11				

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
SG-701	na	582.02	na	na	na		8/14/1995	2.00	580.02				
							8/20/1995	2.33	579.69				
							9/25/1995	2.49	579.53				
							Abandoned						
SG-702	na	581.37	na	na	na		``````````	2.33	579.04				
							Abandoned						
SG-703	na	582.27	na	na	na		4/20/2004	4.45	577.82				
							5/20/2004	5.5	576.77				
							8/24/2004	3.18	579.09				
							11/24/2004	4.7	577.57				
							2/25/2005	3.80	578.47				
							5/25/2005	3.78	578.49				
							8/9/2005	4.05	578.22				
							12/13/2005	4.45	577.82				
							6/26/2006	3.64	578.63				
							9/26/2006	4.34	577.93				
							12/13/2006	4.61	577.66				
							3/29/2007	4.02	578.25				
							6/18/2007	3.84	578.43				
							9/13/2007	4.65	577.62				
	na	582.03	na	na	na		12/6/2007	4.97	577.06	top of ice			
							4/1/2008	4.80	577.23				
							6/26/2008	3.63	578.40				
							9/11/2008	3.40	578.63				
							12/18/2008	4.90	577.13	top of ice			
							3/30/2009	4.12	577.91				
							6/30/2009	2.87	579.16				
							9/29/2009	3.40	578.63				
							12/8/2009	3.41	578.62				
							3/30/2010	4.00	578.03				
							6/8/2010	3.71	578.32				
							9/8/2010	4.40	577.63				
							12/2/2010	4.79	577.24	top of ice			
							3/22/2011	4.45	577.58				
							6//2011	4.76	577.27				
							3/1/2012	4.11	577.92				

Table A.7. Water Level Elevations.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Monitoring Location	Ground Surface Elevation (feet)	Top of PVC Elevation (feet)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet)	Middle of Screen Elevation (feet)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
							6/19/2012	4.01	578.02				
							9/10/2012	4.60	577.43				
							12/12/2012	4.67	577.36				
							3/22/2011	4.45	577.58				
							6/1/2011	4.76	577.27				
							3/1/2012	4.11	577.92				
							6/19/2012	4.01	578.02				
							9/10/2012	4.60	577.43				
							12/12/2012	4.67	577.36				

6/4/04 U-HMS/MJR 9/17/04 U-HMS/JTB 12/13/04 U-HMS/PAR 3/05 U-HMS/RTB 6/05 U-HMS/PAR 9/05 U-HMS/JTB 12/05 U-RJG/HMS 7/06 U-HMS/JCB 12/06 U-PAR/JTB 4/07 U-HMS/RJG 8/07 U-RJG/HMS 9/07 U-HMS/KJB 2/09 U-RMN/AMM 1/10 U-HMS/AMM 3/10 NDK2/13]

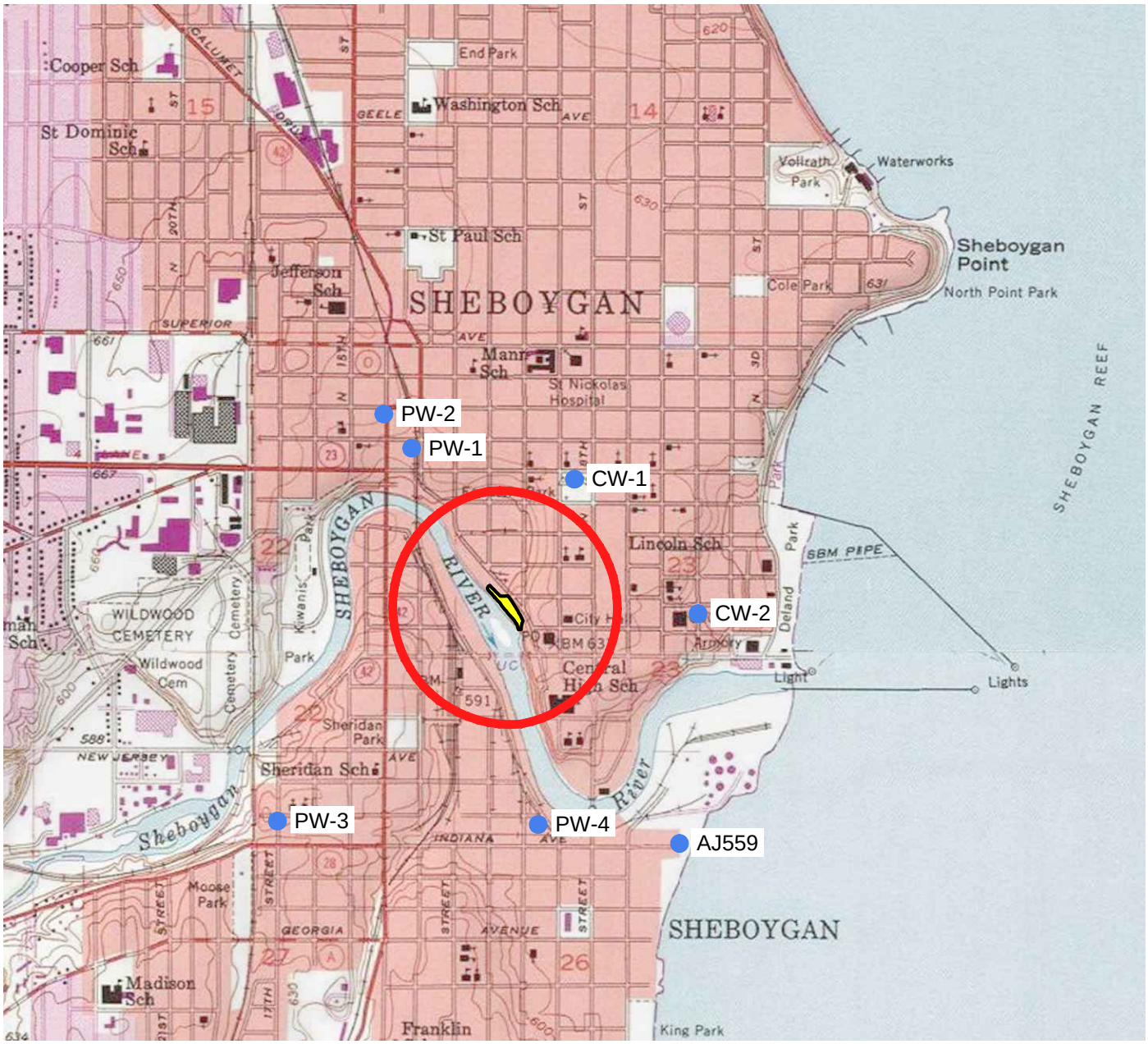
Notes:

1. PZ-701, MW-701R and MW-707R were surveyed on 7/17/01 by Rettler Corporation from Stevens Point, Wisconsin.
   PZ-101 was extended from pre-remedial ground surface elevation to existing ground surface elevation.
2. Elevations are referenced to NAVD88 Datum.
3. * Estimated value.
4. MW-709 was surveyed on 12/22/03 by NRT using MW-701R TOC as a bench mark and a laser level.
5. -- Not Measured
6. On February 17, 2004, Robert E. Lee Associates surveyed top of casing and flushmount covers, and established a staff gauge
   located at the southwest corner,west face, of the Marina's concrete boat dock (chisel marked blue).
   Wells MW-705, MW-706, PZ-702, PZ-703, and MW-708 were extended or reduced to match final grades during remedial construction activities in 2002
   Consequently, the surveyed elevations for these wells were used in groundwater elevation calculations as of 2002.
7. All monitoring wells and staff gauge were suveyed on June 5, 2008 by Integrys surveyor from Green Bay, Wisconsin. Well MW-707R was trimmed on 9/24/07.

Attachment A.8. Other

Not Applicable

Explanation: Groundwater natural attenuation data is included in Attachment A.1. Containment is documented through water levels included in Attachment A.7.



LOCATION MAP

NATURAL RESOURCE TECHNOLOGY

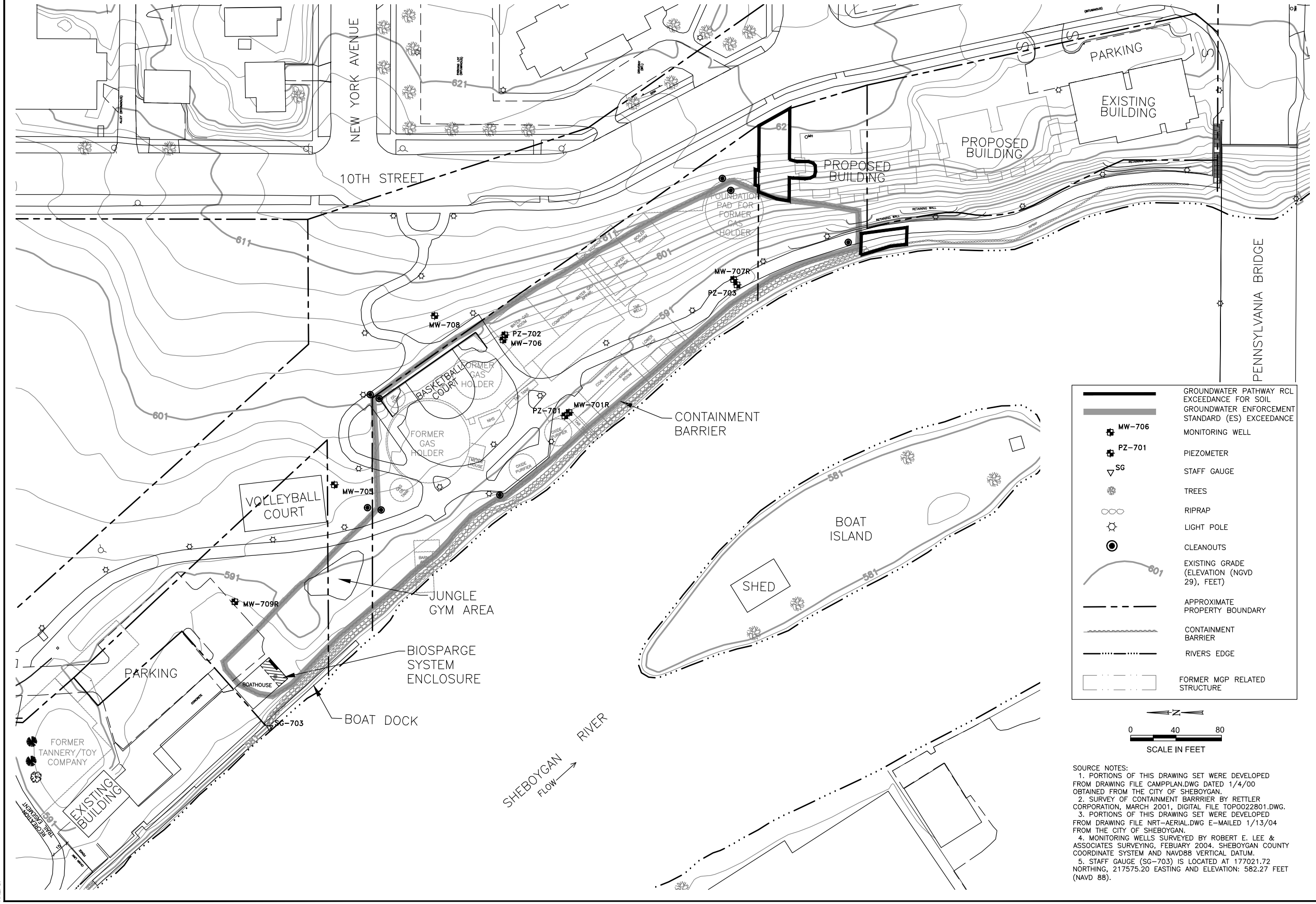
BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

DRAWN: NWD DATE: 04/09/13 CHK'D: JJW DATE: 04/09/13 APP'D: JMK DATE: 05/03/13

PROJECT NO.
1313/8.0

DRAWING NO.
1313-8-B.1.a-LOCATION MAP

FIGURE NO.
B.1.a



SOURCE NOTES:
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOPO022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NRT-AERIAL.DWG E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.
5. STAFF GAUGE (SG-703) IS LOCATED AT 177021.72 NORTHING, 217575.20 EASTING AND ELEVATION: 582.27 FEET (NAVD 88).

DRAWN BY:	NWD	DATE:	04/09/13
CHECKED BY:	JJW	DATE:	04/09/13
APPROVED BY:	JMK	DATE:	05/17/13
DRAWING NO:	1313-8-B.1.b-Detailed Site Map		
REFERENCE:	SEE INFO BLOCK		

DETAILED SITE MAP

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

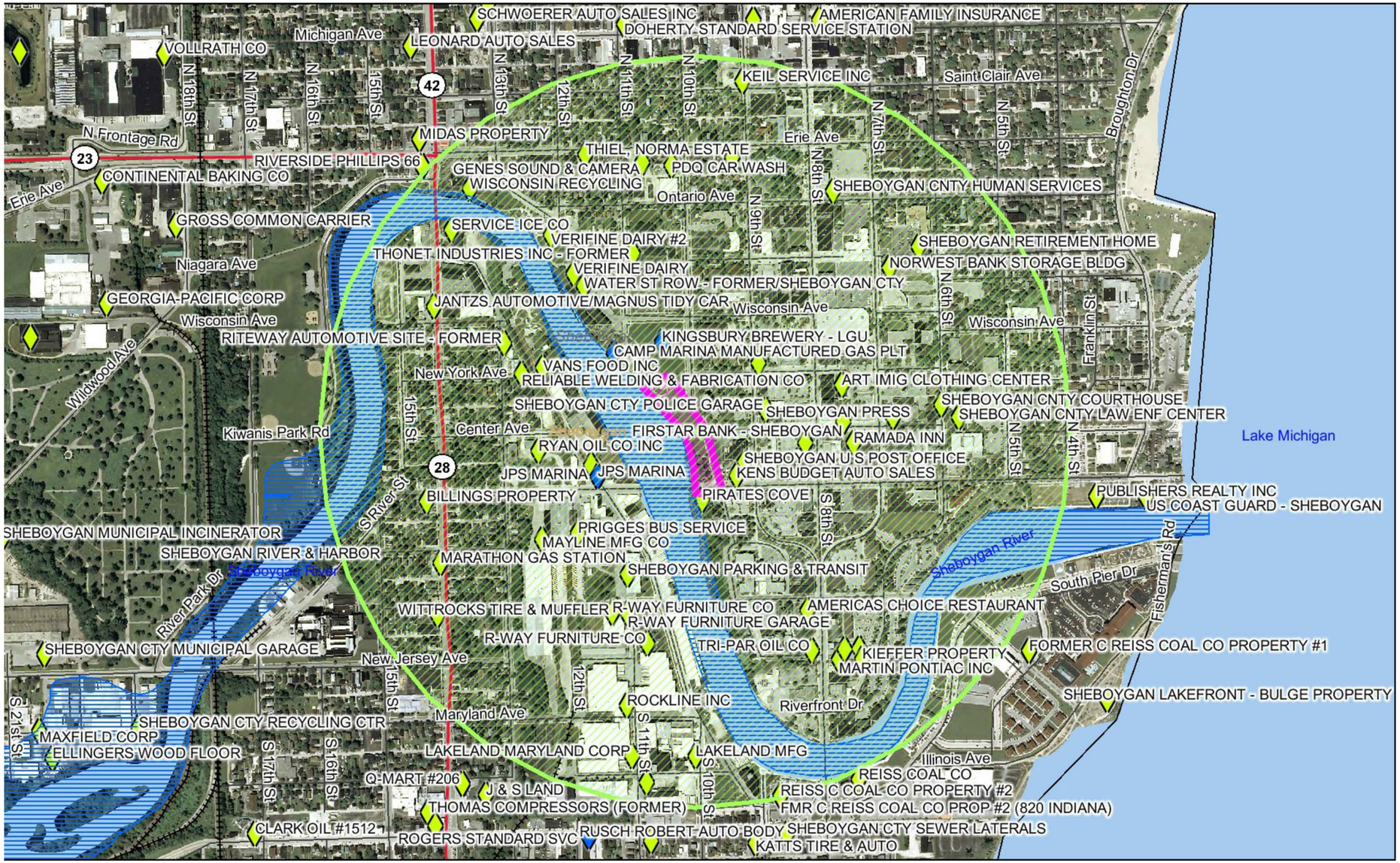
NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.1.b

May 17, 2013 10:11am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
X:\ACAD\Data\Projects\13\1313\8\1313-8-B.1.b-Detailed Site Map.dwg layout1
IMAGES:
XREFS:

Figure B.1.c. RR Sites Map Camp Marina Manufactured Gas Plant BRRTS #02-06-000095



Map created on Apr 3, 2013
Note: Not all RR Sites have been geo-located yet.

Legend

- Open Sites (ongoing cleanups)
- Open Sites (ongoing cleanups) - site boundaries shown
- Closed Sites (completed cleanups)
- Closed Sites (completed cleanups) - site boundaries shown
- County Boundary
- Railroads
- County Roads (WDOT)
- County Trunk Highway
- State and U.S. Highways (WDOT)
- State Trunk Highway
- US Highway
- Interstate Highways (WDOT)
- Interstate Highway
- Local Roads (WDOT)
- Civil Towns
- Civil Town
- 24K Open Water
- 24K Rivers and Shorelines
- Municipalities
- SITE BOUNDARY

0 400 800
SCALE IN FEET

N
Scale: 1:8,879

DRAWN BY: NWD DATE: 04/09/13
CHECKED BY: JJW DATE: 04/09/13
APPROVED BY: JMK DATE: 05/17/13
DRAWING NO: 1313-8-B.1.c-RR Site Map
REFERENCE: SEE INFO BLOCK

RR SITE MAP

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.1.c

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

May 17, 2013 10:10am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
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XREFS:

SB-711 SOIL BORING (NRT)

GB-727 GEOTECHNICAL SOIL BORING (NRT)

B1 GEOTECHNICAL SOIL BORING (MES)

TP-705 TEST PIT (NRT)

TP-101 TEST PIT (SHS)

MW-707 MONITORING WELL (NRT)

PZ-701 PIEZOMETER (NRT)

HA-701 HAND AUGER (NRT)

SS-701 SURFACE SOIL SAMPLE (NRT)

CS-102B SURFACE SOIL SAMPLE (SHS)

SG-702 STAFF GAUGE (NRT)

SG-701 ABANDONED STAFF GAUGE (NRT)

CENTER AVENUE RIGHT-OF-WAY

LIGHT POLE

FIRE HYDRANT

GAS SHUT-OFF VALVE

STORM SEWER MANHOLE

STORM CATCH BASIN-CURB TYPE

WATER SHUT-OFF VALVE

SANITARY SEWER MANHOLE

GAS MANHOLE

TELEPHONE MANHOLE

TELEPHONE PEDESTAL

DISTRIBUTION POLE

WATER VALVE

APPROXIMATE LOCATION OF:

FORMER MGP RELATED STRUCTURE

UGS UNDERGROUND GAS

SAN SANITARY SEWER

STM STORM SEWER

OEL OVERHEAD ELECTRIC

UEL UNDERGROUND ELECTRIC

WTR WATERMAIN

PROPERTY BOUNDARY

UNSATURATED ZONE IMPACTED SOILS

SATURATED ZONE IMPACTED SOILS

GENERAL NOTES:

1. ON-SITE TEST PITS (TP-101 THROUGH TP-114) AND SURFACE SOIL SAMPLES (CS-101 THROUGH CS-103) COMPLETED BY SIMON HYDRO-SEARCH (SHS). REFERENCE "PHASE I ENVIRONMENTAL INVESTIGATION MANUFACTURED GAS PLANT SITE, SHEBOYGAN, WISCONSIN", REPORT DATED JUNE 30, 1992.

2. ON-SITE SOIL BORINGS (SB-701 THROUGH SB-710), MONITORING WELLS (MW-701 THROUGH MW-707 AND PZ-701), AND STAFF GAUGE (SG-701) COMPLETED BY NATURAL RESOURCE TECHNOLOGY, INC. (NRT). REFERENCE "PHASE II ENVIRONMENTAL INVESTIGATION REPORT" DATED JUNE 28, 1996.

3. GEOTECHNICAL SOIL BORINGS (B1 THROUGH B5) PERFORMED BY MILLER ENGINEERS, SCIENTISTS (MES). B1 THROUGH B3 WERE COMPLETED ON APRIL 4, 1998 AND B4 AND B5 WERE COMPLETED ON JULY 23, 1998.

4. ON-SITE SOIL BORINGS (SB-711 THROUGH SB-716) COMPLETED BY NRT ON APRIL 4, 1996. REFERENCE NRT LETTER REPORT "ADDITIONAL SOIL BORINGS AND SOIL LABORATORY ANALYSES, CITY OF SHEBOYGAN PROPERTY SOUTH OF CENTER AVENUE RIGHT-OF-WAY, SHEBOYGAN, WISCONSIN" DATED NOVEMBER 24, 1998.

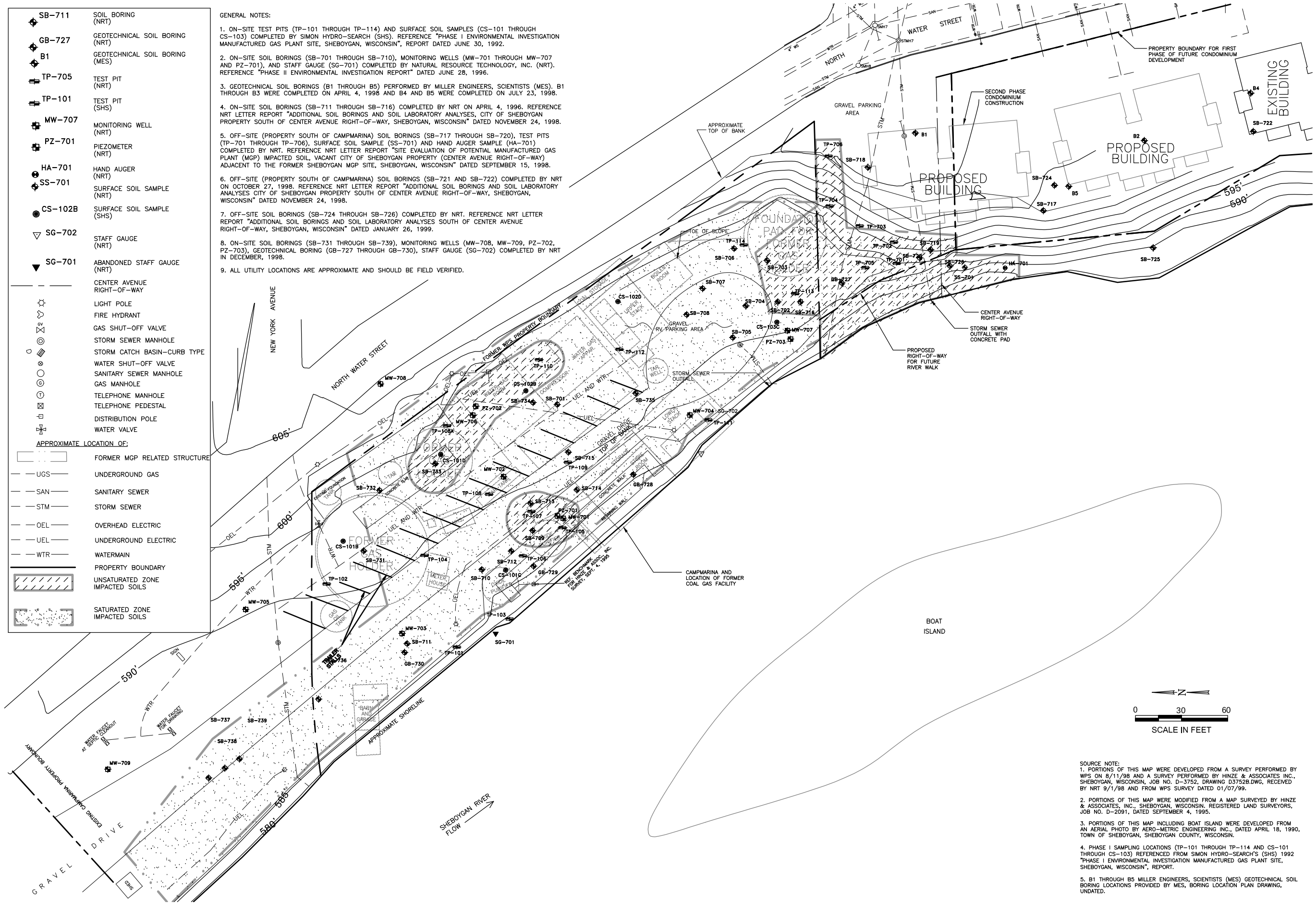
5. OFF-SITE (PROPERTY SOUTH OF CAMPMARINA) SOIL BORINGS (SB-717 THROUGH SB-720), TEST PITS (TP-701 THROUGH TP-706), SURFACE SOIL SAMPLE (SS-701) AND HAND AUGER SAMPLE (HA-701) COMPLETED BY NRT. REFERENCE NRT LETTER REPORT "SITE EVALUATION OF POTENTIAL MANUFACTURED GAS PLANT (MGP) IMPACTED SOIL, VACANT CITY OF SHEBOYGAN PROPERTY (CENTER AVENUE RIGHT-OF-WAY) ADJACENT TO THE FORMER SHEBOYGAN MGP SITE, SHEBOYGAN, WISCONSIN" DATED SEPTEMBER 15, 1998.

6. OFF-SITE (PROPERTY SOUTH OF CAMPMARINA) SOIL BORINGS (SB-721 AND SB-722) COMPLETED BY NRT ON OCTOBER 27, 1998. REFERENCE NRT LETTER REPORT "ADDITIONAL SOIL BORINGS AND SOIL LABORATORY ANALYSES CITY OF SHEBOYGAN PROPERTY SOUTH OF CENTER AVENUE RIGHT-OF-WAY, SHEBOYGAN, WISCONSIN" DATED NOVEMBER 24, 1998.

7. OFF-SITE SOIL BORINGS (SB-724 THROUGH SB-726) COMPLETED BY NRT. REFERENCE NRT LETTER REPORT "ADDITIONAL SOIL BORINGS AND SOIL LABORATORY ANALYSES SOUTH OF CENTER AVENUE RIGHT-OF-WAY, SHEBOYGAN, WISCONSIN" DATED JANUARY 26, 1999.

8. ON-SITE SOIL BORINGS (SB-731 THROUGH SB-739), MONITORING WELLS (MW-708, MW-709, PZ-702, PZ-703), GEOTECHNICAL BORING (GB-727 THROUGH GB-730), STAFF GAUGE (SG-702) COMPLETED BY NRT IN DECEMBER, 1998.

9. ALL UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED.



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SCALE IN FEET

SOURCE NOTE:
1. PORTIONS OF THIS MAP WERE DEVELOPED FROM A SURVEY PERFORMED BY WPS ON 8/11/98 AND A SURVEY PERFORMED BY HINZE & ASSOCIATES INC., SHEBOYGAN, WISCONSIN, JOB NO. D-3752, DRAWING D3752B.DWG, RECEIVED BY NRT 9/1/98 AND FROM WPS SURVEY DATED 01/07/99.

2. PORTIONS OF THIS MAP WERE MODIFIED FROM A MAP SURVEYED BY HINZE & ASSOCIATES, INC., SHEBOYGAN, WISCONSIN. REGISTERED LAND SURVEYORS, JOB NO. D-2091, DATED SEPTEMBER 4, 1995.

3. PORTIONS OF THIS MAP INCLUDING BOAT ISLAND WERE DEVELOPED FROM AN AERIAL PHOTO BY AERO-METRIC ENGINEERING INC., DATED APRIL 18, 1990, TOWN OF SHEBOYGAN, SHEBOYGAN COUNTY, WISCONSIN.

4. PHASE I SAMPLING LOCATIONS (TP-101 THROUGH TP-114 AND CS-101 THROUGH CS-103) REFERENCED FROM SIMON HYDRO-SEARCH'S (SHS) 1992 "PHASE I ENVIRONMENTAL INVESTIGATION MANUFACTURED GAS PLANT SITE, SHEBOYGAN, WISCONSIN", REPORT.

5. B1 THROUGH B5 MILLER ENGINEERS, SCIENTISTS (MES) GEOTECHNICAL SOIL BORING LOCATIONS PROVIDED BY MES, BORING LOCATION PLAN DRAWING, UNDATED.

DRAWN BY: NWD DATE: 04/09/13

CHECKED BY: JJW DATE: 04/09/13

APPROVED BY: JMK DATE: 05/17/13

DRAWING NO: 1313-8-B.2.a-PreRemedial Soil

REFERENCE: SEE INFO BLOCK

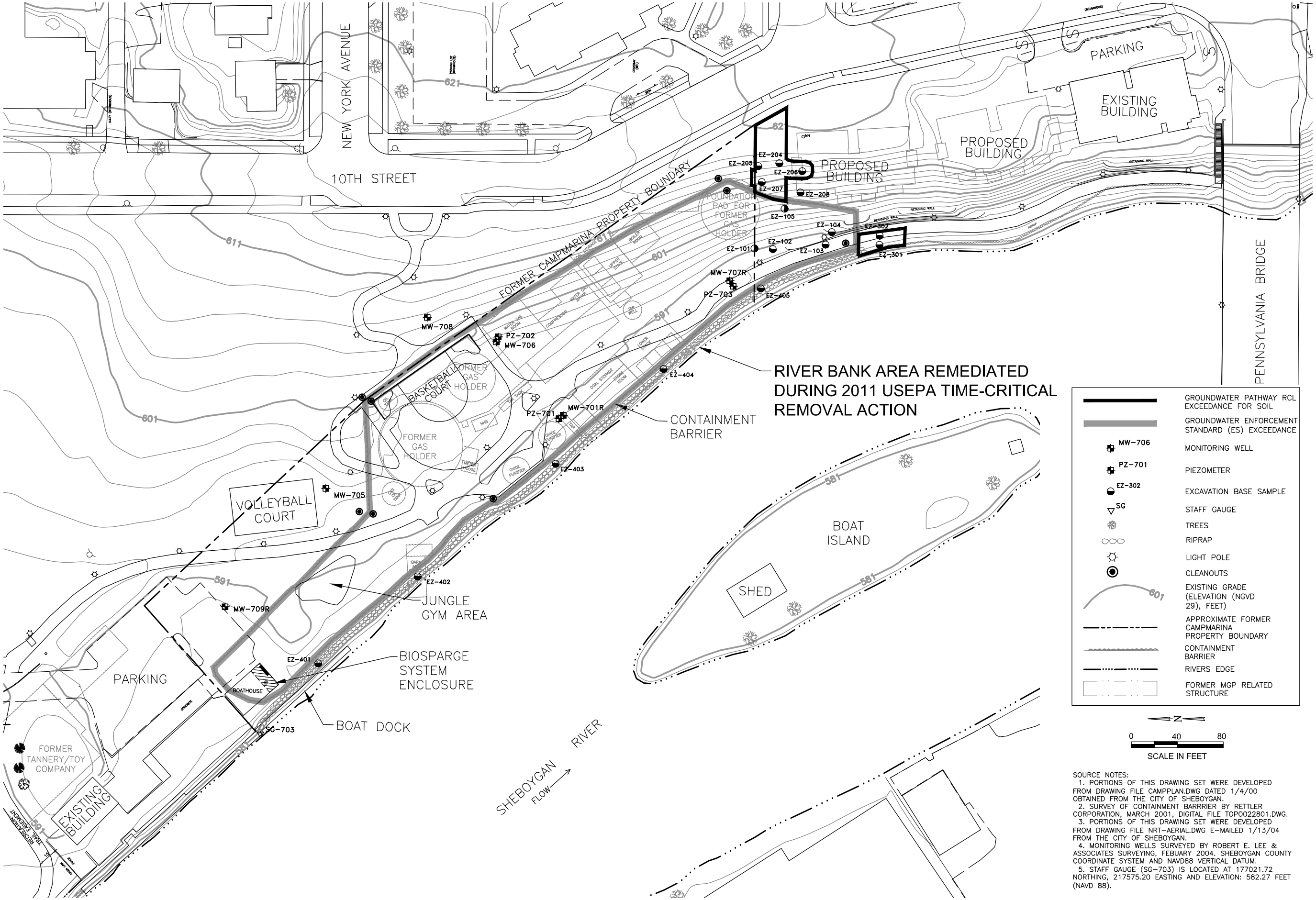
PRE-REMEDIAL SOIL CONTAMINATION

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.2.a



SOURCE NOTES:
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2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOPO022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NRT-AERIAL.DWG E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.
5. STAFF GAUGE (SG-703) IS LOCATED AT 177021.72 NORTHING, 217575.20 EASTING AND ELEVATION: 582.27 FEET (NAVD 88).

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APPROVED BY:	JMK	DATE: 05/17/13
DRAWING NO: 1313-8-B.2.b-Post-Remedial Soil		
REFERENCE: SEE INFO BLOCK		

POST-REMEDIAL SOIL CONTAMINATION

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.2.b

May 17, 2013 10:09am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
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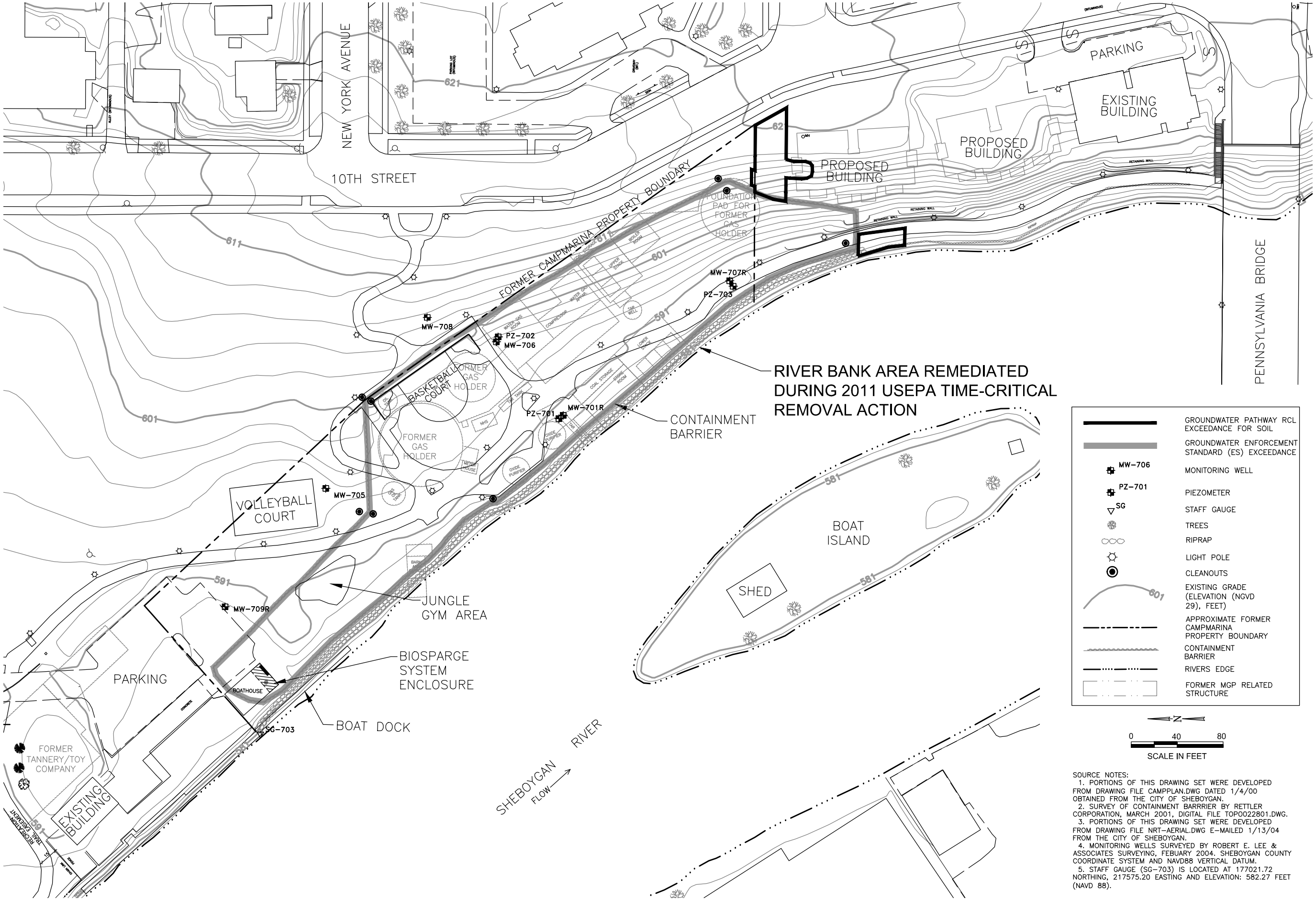

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4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.
5. STAFF GAUGE (SG-703) IS LOCATED AT 177021.72 NORTHING, 217575.20 EASTING AND ELEVATION: 582.27 FEET (NAVD 88).

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APPROVED BY:	JMK	DATE: 05/17/13
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REFERENCE: SEE INFO BLOCK		

PRE/POST-REMAINING SOIL CONTAMINATION

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.2.c

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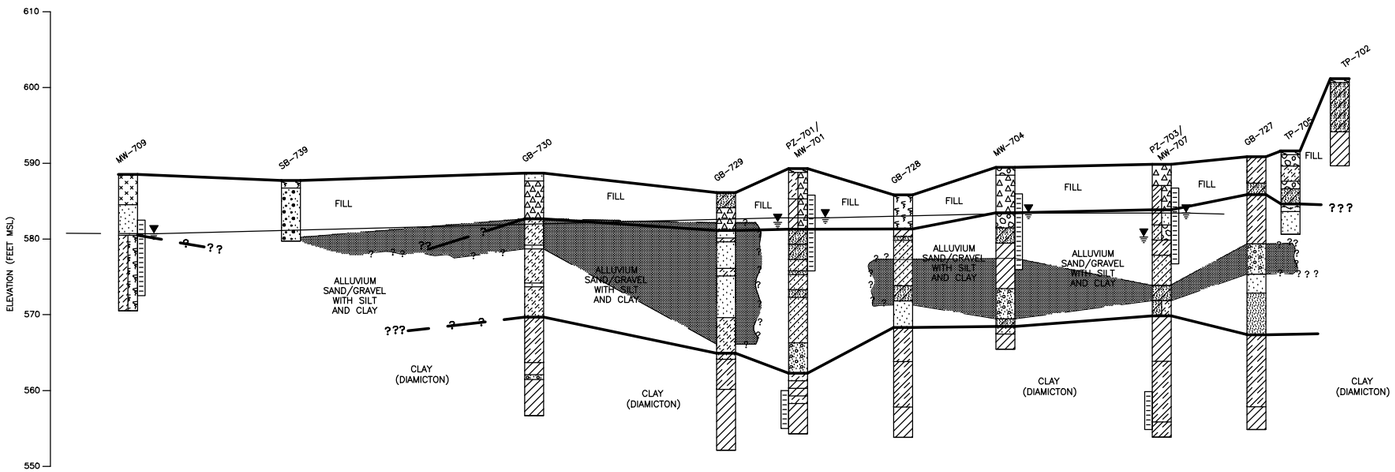
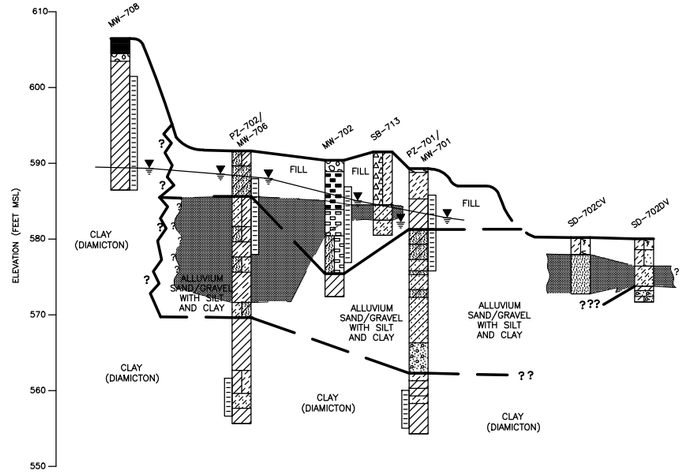
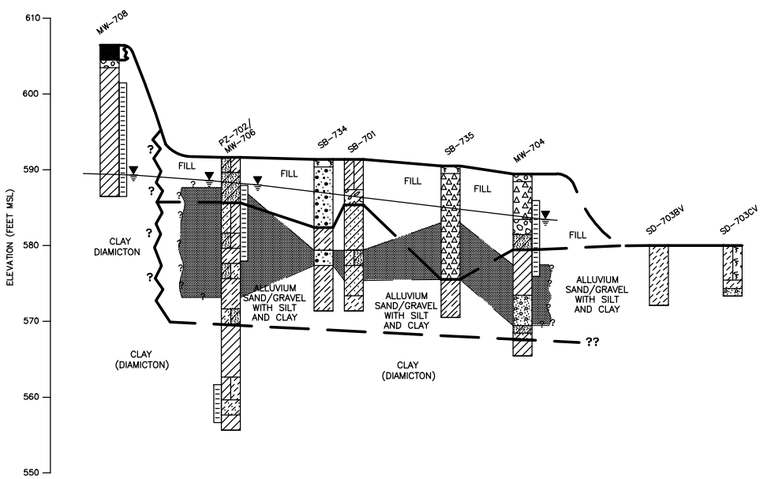
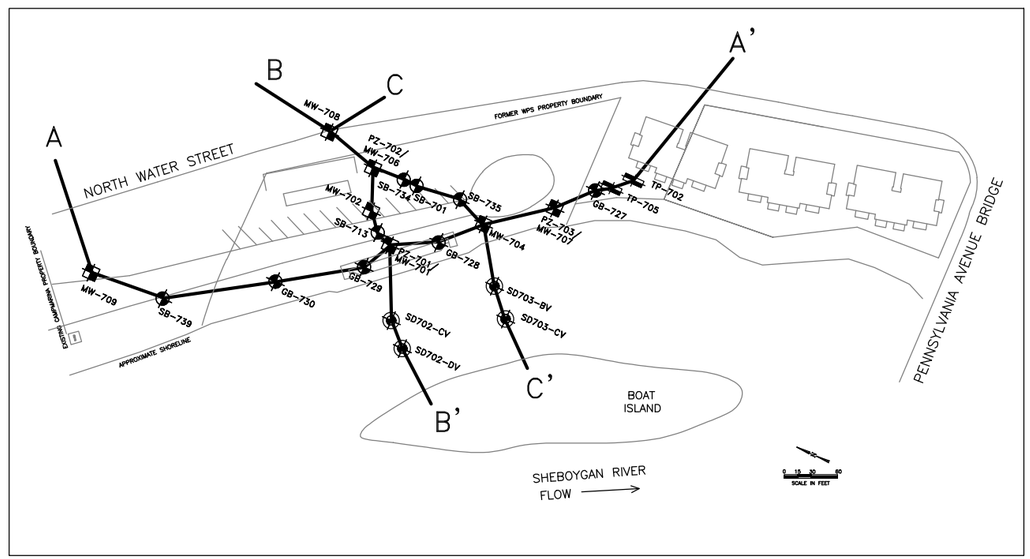




LEGEND

ASPHALT	GRAVEL WITH SAND/ SAND WITH GRAVEL	SILT
CONCRETE	WELL GRADED SAND	SILTY CLAY/ CLAYEY SILT
ORGANIC SOIL	COARSE SAND	SANDY CLAY
PEAT	MEDIUM SAND	CLAY
GRAVEL	FINE SAND	ASH AND/OR CINDERS
SILTY GRAVEL	CLAYEY SAND	WOOD
GRAVEL WITH SAND	SANDY SILT/ SILTY SAND	BRICKS
GROUNDWATER ELEVATION ON 12/21/98	SCREENED INTERVAL	TAR





0 40
FEET

VERTICAL EXAGGERATION = 4.00

GEOLOGIC CROSS SECTIONS PRE-REMEDIATION

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/17/13

DRAWING NO: 1313-8-B.3.a-1-Cross Sections

REFERENCE: SEE INFO BLOCK

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.3.a-1

May 17, 2013 10:08am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
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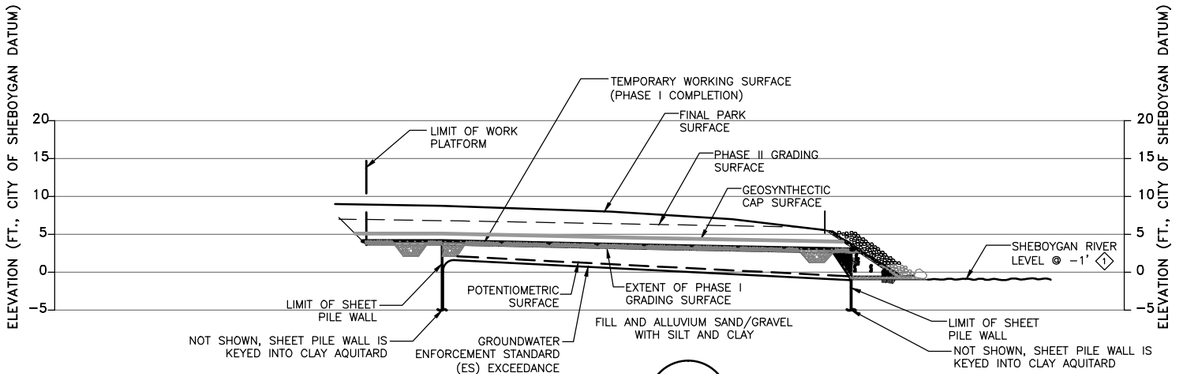
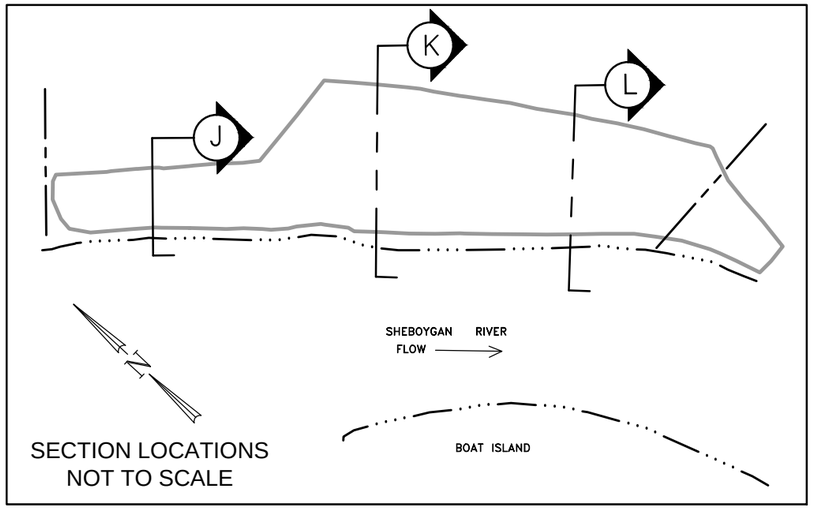
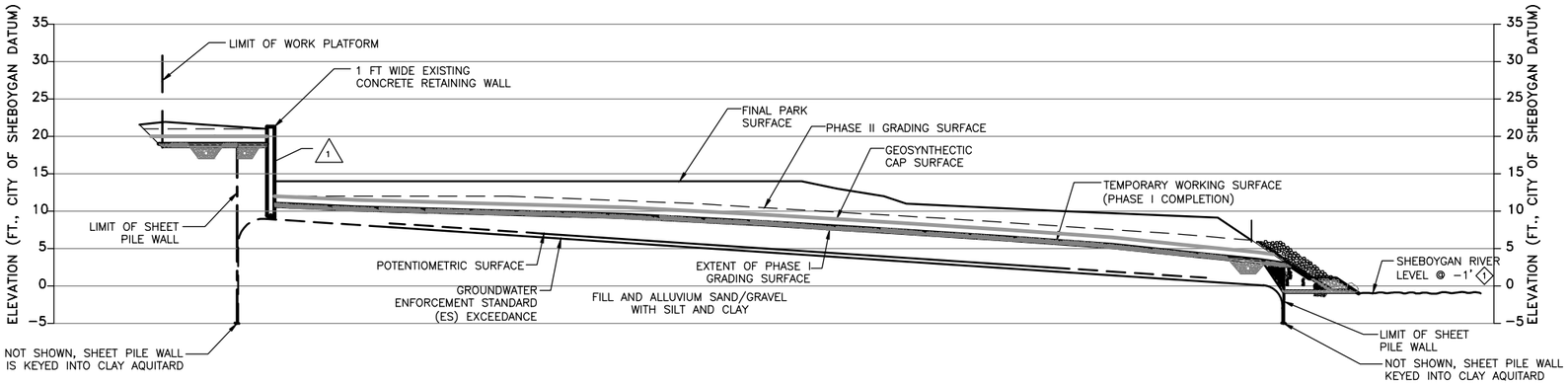


J CROSS SECTION J





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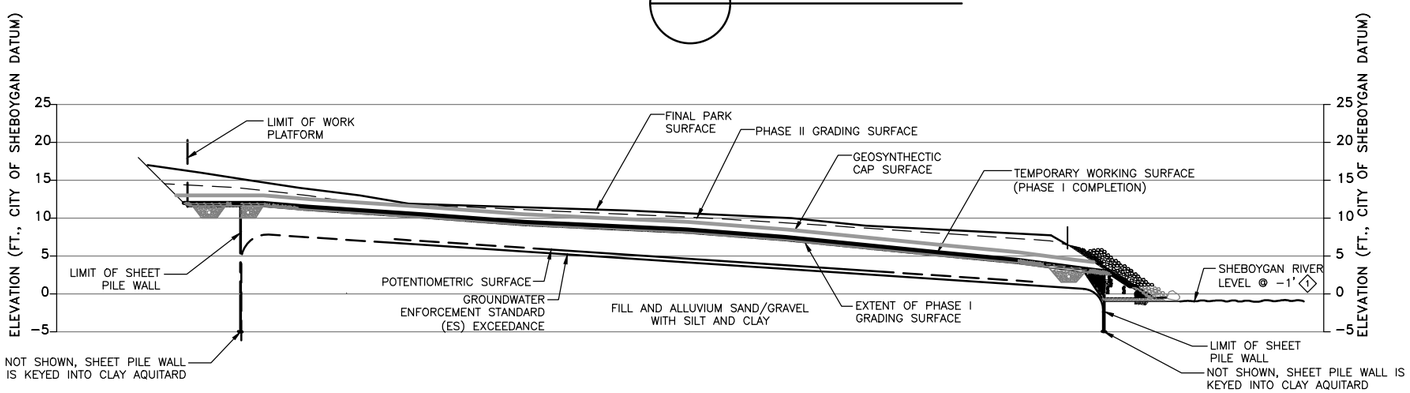

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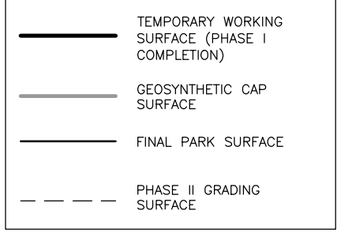
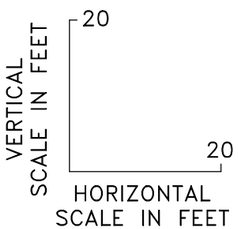


GENERAL CONTRACTOR NOTES: △

1. CONTRACTOR SHALL TAKE PRECAUTIONS NOT TO DAMAGE EXISTING CONCRETE RETAINING WALL DURING SITE ACTIVITIES.

AS BUILT NOTES: ◇

1. RIVER EDGE LOCATED AT −3FT. ELEVATION (CITY OF SHEBOYGAN DATUM) DURING PHASE I CONSTRUCTION.



VERTICAL EXAGGERATION = 1

DATUM (FT)		
IGLD	USGS	CITY OF SHEBOYGAN
579.8	581.0	0

ISSUED FOR AS BUILT 03/12/02 REW

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/17/13
DRAWING NO: 1313-8-B.3.a-2-Cross Sections		
REFERENCE: SEE INFO BLOCK		

GEOLOGIC CROSS SECTIONS POST-REMEDIATION

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.3.a-2

May 17, 2013 10:07am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
N:\AcData\Projects\13\1313\8\1313-8-B.3.a-2-Cross Sections.dwg Layout1
IMAGES:
XREFS:

GROUNDWATER ISOCONCENTRATION

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/17/13

DRAWING NO: 1313-8-B.3.b-Groundwater ISO

REFERENCE: SEE INFO BLOCK

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.3.b

10TH STREET

NEW YORK AVENUE

FORMER CAMPMARINA PROPERTY BOUNDARY

EXISTING BUILDING

PROPOSED BUILDING

PROPOSED BUILDING

RETAINING WALL

RETAINING WALL

RIPRAP

PZ-702	BEN	BTEX	NAPH	PAH
6/19/2012	<0.39	nd	0.03	0.10
12/12/2012	<0.41	nd	0.27	0.49

MW-706	BEN	BTEX	NAPH	PAH
6/19/2012	2,190	4,356	222	356
12/12/2012	3,600	4,788	37	205

MW-708	BEN	BTEX	NAPH	PAH
6/19/2012	<0.39	nd	0.039	0.605
12/12/2012	<0.41	nd	0.059	0.209

MW-707R	BEN	BTEX	NAPH	PAH
6/19/2012	1,540	4,689	266	371
12/12/2012	1,690	4,374	192	355

PZ-703	BEN	BTEX	NAPH	PAH
6/19/2012	726	1,509	106	112.9
12/12/2012	895	1,885	0.35	9.21

MW-701R	BEN	BTEX	NAPH	PAH
6/19/2012	2,640	3,063	355	570
12/12/2012	3,290	3,795	852	1,467

PZ-701	BEN	BTEX	NAPH	PAH
6/19/2012	<0.39	nd	0.029	0.160
12/12/2012	<0.41	nd	0.67	1.19

MW-705	BEN	BTEX	NAPH	PAH
6/26/2008	<0.14	nd	0.45	0.7

MW-709R	BEN	BTEX	NAPH	PAH
6/19/2012	<0.39	nd	0.01	0.027
12/12/2012	<0.41	nd	0.0085	0.037

MW-708 594.48
MW-706 585.16
PZ-702 588.27
MW-707R 582.90
PZ-703 583.19
MW-701R 582.94
PZ-701 582.98
MW-705 586.99
MW-709R 583.11
SG-703 577.36

BW-01 BW-02 BW-03 BW-04 BW-05 BW-06 BW-07 BW-08 BW-09 BW-10 BW-11 BW-12 BW-13 BW-14 BW-15 BW-16 BW-17 BW-18

1' WIDE CONC. WALL

CONCRETE

CONTAINMENT BARRIER

RECREATION AREA

JUNGLE GYM AREA

SHEBOYGAN RIVER FLOW

CAMPMARINA PROPERTY BOUNDARY

FENCE

CONCRETE

BOATHOUSE

BIOSPARGE SYSTEM ENCLOSURE

BOAT DOCK

BOAT ISLAND

SHED

SHEBOYGAN RIVER FLOW

584 WATER TABLE ELEVATION CONTOUR, FT. (DEC. 2012)

584 POTENTIOMETRIC SURFACE ELEVATION CONTOUR, FT. (DEC. 2012)

FLOW DIRECTION

MW-706 585.16 MONITORING WELL AND WATER TABLE ELEVATION, FT.

PZ-701 582.98 PIEZOMETER AND POTENTIOMETRIC ELEVATION, FT.

SG-703 577.36 STAFF GAUGE AND WATER TABLE ELEVATION, FT.

BW-01 BIOSPARGE WELL

RIPRAP

APPROXIMATE FORMER CAMPMARINA PROPERTY BOUNDARY

CONTAINMENT BARRIER

SANITARY/STORM MANHOLE

EXTENT OF GW IMPACT

SAMPLE ID	BENZ	BTEX	NAPH	PAHs
DATE SAMPLED	BENZENE	BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES µg/L	NAPHTHALENE µg/L	TOTAL POLYNUCLEAR AROMATIC HYDROCARBONS µg/L
	µg/L			

DATA QUALIFIER:

<2.0 : PARAMETER NOT DETECTED ABOVE THE LIMIT OF DETECTION INDICATED
na : ANALYSIS WAS NOT PERFORMED
nd : ANALYTE NOT DETECTED

NOTES:
1. DUPLICATE SAMPLES WERE COLLECTED DURING EACH SAMPLING EVENT. CONCENTRATIONS SHOWN REFLECT THE HIGHER CONCENTRATION BETWEEN WELL SAMPLES AND DUPLICATE SAMPLES.
2. BIOSPARGE SYSTEM BEGAN OPERATING ON 11/07/02.

SOURCE NOTES:
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOPO022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NRT-AERIAL.DWG E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.

N

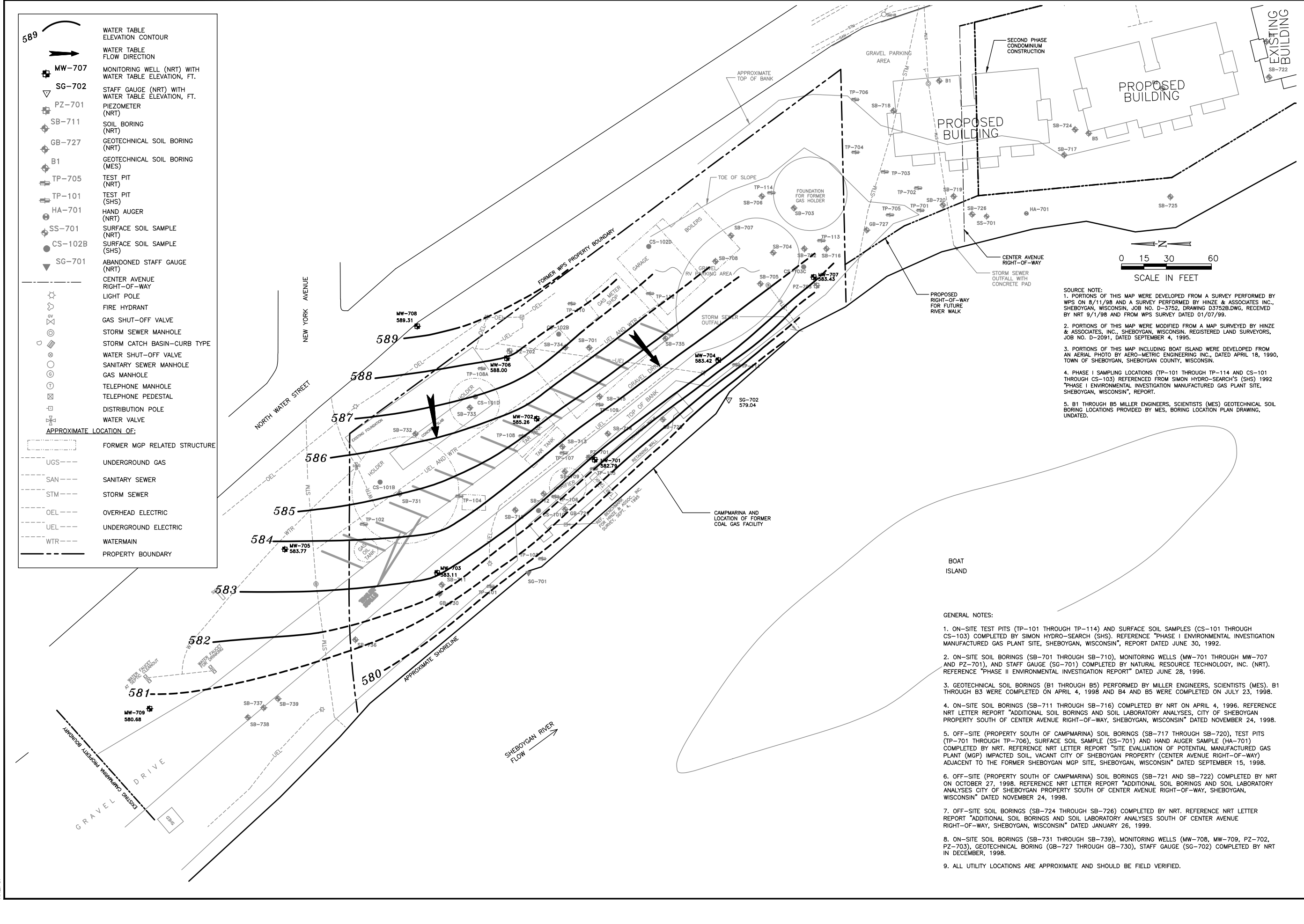
0 15 30 60

SCALE IN FEET

May 17, 2013 10:07am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
H:\ACAD\data\Projects\13\1313\8\1313-8-B.3.b-Groundwater ISO.dwg Layout1
IMAGES:
XREFS:

GROUNDWATER FLOW DIRECTION DECEMBER 1998

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN



SOURCE NOTE:
1. PORTIONS OF THIS MAP WERE DEVELOPED FROM A SURVEY PERFORMED BY WPS ON 8/11/98 AND A SURVEY PERFORMED BY HINZE & ASSOCIATES INC., SHEBOYGAN, WISCONSIN, JOB NO. D–3752, DRAWING D3752B.DWG, RECEIVED BY NRT 9/1/98 AND FROM WPS SURVEY DATED 01/07/99.

2. PORTIONS OF THIS MAP WERE MODIFIED FROM A MAP SURVEYED BY HINZE & ASSOCIATES, INC., SHEBOYGAN, WISCONSIN. REGISTERED LAND SURVEYORS, JOB NO. D–2091, DATED SEPTEMBER 4, 1995.

3. PORTIONS OF THIS MAP INCLUDING BOAT ISLAND WERE DEVELOPED FROM AN AERIAL PHOTO BY AERO–METRIC ENGINEERING INC., DATED APRIL 18, 1990, TOWN OF SHEBOYGAN, SHEBOYGAN COUNTY, WISCONSIN.

4. PHASE I SAMPLING LOCATIONS (TP–101 THROUGH TP–114 AND CS–101 THROUGH CS–103) REFERENCED FROM SIMON HYDRO–SEARCH'S (SHS) 1992 "PHASE I ENVIRONMENTAL INVESTIGATION MANUFACTURED GAS PLANT SITE, SHEBOYGAN, WISCONSIN", REPORT.

5. B1 THROUGH B5 MILLER ENGINEERS, SCIENTISTS (MES) GEOTECHNICAL SOIL BORING LOCATIONS PROVIDED BY MES, BORING LOCATION PLAN DRAWING, UNDATED.

GENERAL NOTES:

1. ON–SITE TEST PITS (TP–101 THROUGH TP–114) AND SURFACE SOIL SAMPLES (CS–101 THROUGH CS–103) COMPLETED BY SIMON HYDRO–SEARCH (SHS). REFERENCE "PHASE I ENVIRONMENTAL INVESTIGATION MANUFACTURED GAS PLANT SITE, SHEBOYGAN, WISCONSIN", REPORT DATED JUNE 30, 1992.

2. ON–SITE SOIL BORINGS (SB–701 THROUGH SB–710), MONITORING WELLS (MW–701 THROUGH MW–707 AND PZ–701), AND STAFF GAUGE (SG–701) COMPLETED BY NATURAL RESOURCE TECHNOLOGY, INC. (NRT). REFERENCE "PHASE II ENVIRONMENTAL INVESTIGATION REPORT" DATED JUNE 28, 1996.

3. GEOTECHNICAL SOIL BORINGS (B1 THROUGH B5) PERFORMED BY MILLER ENGINEERS, SCIENTISTS (MES). B1 THROUGH B3 WERE COMPLETED ON APRIL 4, 1998 AND B4 AND B5 WERE COMPLETED ON JULY 23, 1998.

4. ON–SITE SOIL BORINGS (SB–711 THROUGH SB–716) COMPLETED BY NRT ON APRIL 4, 1996. REFERENCE NRT LETTER REPORT "ADDITIONAL SOIL BORINGS AND SOIL LABORATORY ANALYSES, CITY OF SHEBOYGAN PROPERTY SOUTH OF CENTER AVENUE RIGHT–OF–WAY, SHEBOYGAN, WISCONSIN" DATED NOVEMBER 24, 1998.

5. OFF–SITE (PROPERTY SOUTH OF CAMPMARINA) SOIL BORINGS (SB–717 THROUGH SB–720), TEST PITS (TP–701 THROUGH TP–706), SURFACE SOIL SAMPLE (SS–701) AND HAND AUGER SAMPLE (HA–701) COMPLETED BY NRT. REFERENCE NRT LETTER REPORT "SITE EVALUATION OF POTENTIAL MANUFACTURED GAS PLANT (MGP) IMPACTED SOIL, VACANT CITY OF SHEBOYGAN PROPERTY (CENTER AVENUE RIGHT–OF–WAY) ADJACENT TO THE FORMER SHEBOYGAN MGP SITE, SHEBOYGAN, WISCONSIN" DATED SEPTEMBER 15, 1998.

6. OFF–SITE (PROPERTY SOUTH OF CAMPMARINA) SOIL BORINGS (SB–721 AND SB–722) COMPLETED BY NRT ON OCTOBER 27, 1998. REFERENCE NRT LETTER REPORT "ADDITIONAL SOIL BORINGS AND SOIL LABORATORY ANALYSES CITY OF SHEBOYGAN PROPERTY SOUTH OF CENTER AVENUE RIGHT–OF–WAY, SHEBOYGAN, WISCONSIN" DATED NOVEMBER 24, 1998.

7. OFF–SITE SOIL BORINGS (SB–724 THROUGH SB–726) COMPLETED BY NRT. REFERENCE NRT LETTER REPORT "ADDITIONAL SOIL BORINGS AND SOIL LABORATORY ANALYSES SOUTH OF CENTER AVENUE RIGHT–OF–WAY, SHEBOYGAN, WISCONSIN" DATED JANUARY 26, 1999.

8. ON–SITE SOIL BORINGS (SB–731 THROUGH SB–739), MONITORING WELLS (MW–708, MW–709, PZ–702, PZ–703), GEOTECHNICAL BORING (GB–727 THROUGH GB–730), STAFF GAUGE (SG–702) COMPLETED BY NRT IN DECEMBER, 1998.

9. ALL UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED.

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/17/13
DRAWING NO:	1313-8-B.3.c-1-Groundwater Flow	
REFERENCE: SEE INFO BLOCK		

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.3.c-1

May 17, 2013 10:06am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
X:\ACAData\Projects\13\1313\8\1313-8-B.3.c-1-Groundwater Flow.dwg Layout1
IMAGES:
XREFS:

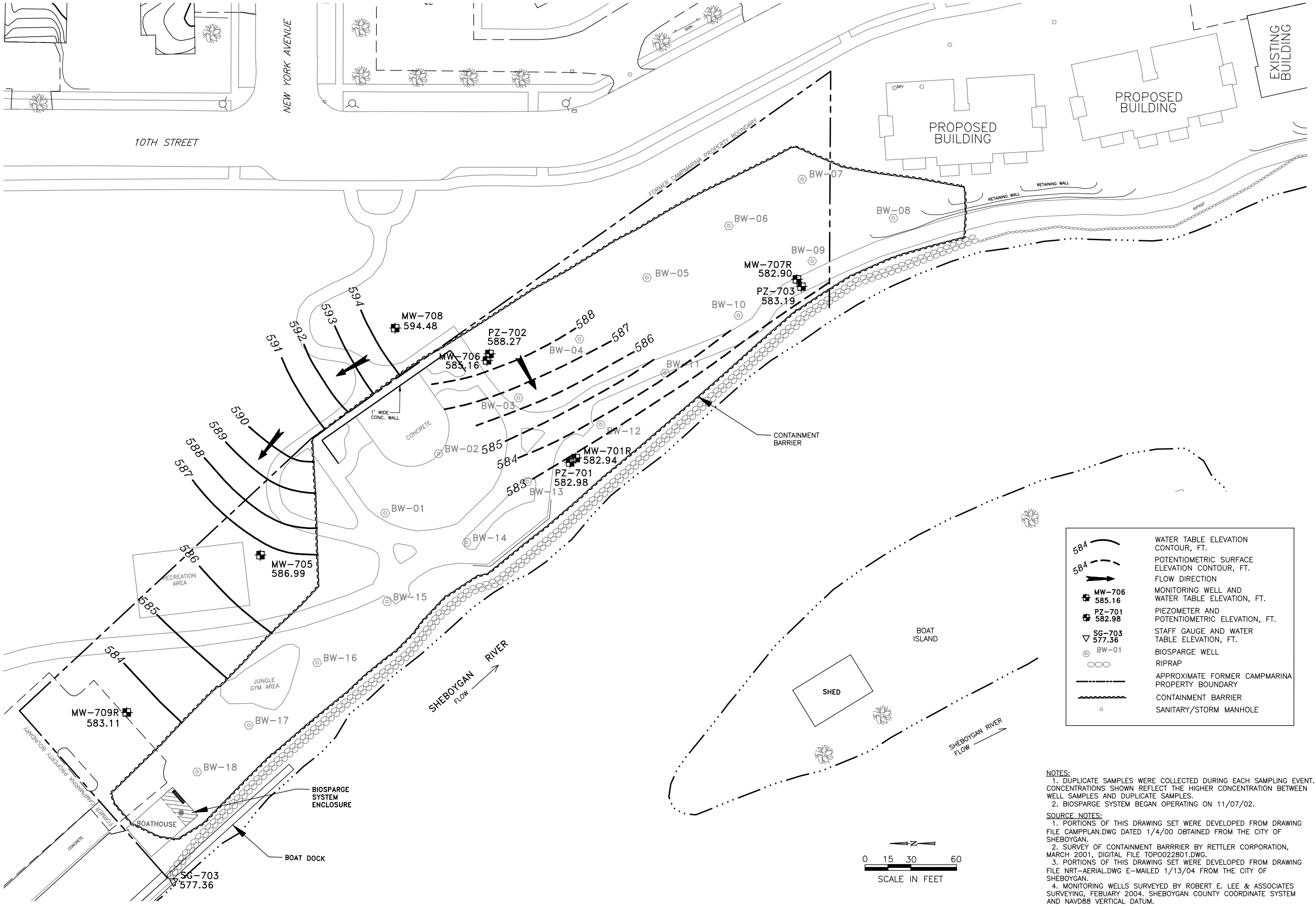
GROUNDWATER FLOW DIRECTION DECEMBER 2012

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/17/13

DRAWING NO: 1313-B.3.c-2-Groundwater Flow

REFERENCE: SEE INFO BLOCK



NOTES:
1. DUPLICATE SAMPLES WERE COLLECTED DURING EACH SAMPLING EVENT. CONCENTRATIONS SHOWN REFLECT THE HIGHER CONCENTRATION BETWEEN WELL SAMPLES AND DUPLICATE SAMPLES.
2. BIOSPARGE SYSTEM BEGAN OPERATING ON 11/07/02.

SOURCE NOTES:
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOPO022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NRT-AERIAL.DWG E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.3.c-2

May 17, 2013 10:06am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
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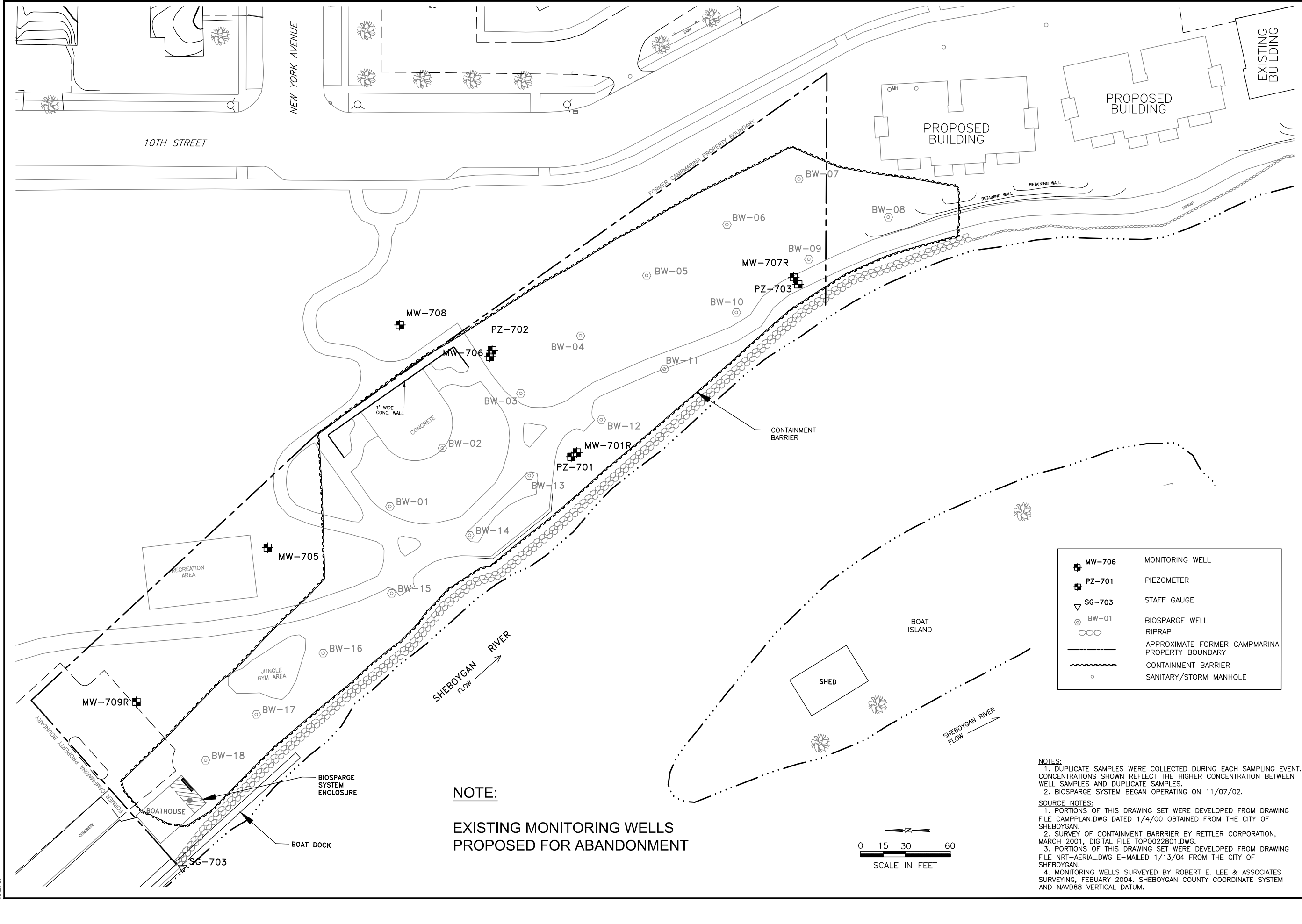

NOTE:

EXISTING MONITORING WELLS
PROPOSED FOR ABANDONMENT

NOTES:
1. DUPLICATE SAMPLES WERE COLLECTED DURING EACH SAMPLING EVENT. CONCENTRATIONS SHOWN REFLECT THE HIGHER CONCENTRATION BETWEEN WELL SAMPLES AND DUPLICATE SAMPLES.
2. BIOSPARGE SYSTEM BEGAN OPERATING ON 11/07/02.

SOURCE NOTES:
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOPO022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NRT-AERIAL.DWG E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.

DRAWN BY:	NWD	DATE:	04/09/13
CHECKED BY:	JJW	DATE:	04/09/13
APPROVED BY:	JMK	DATE:	05/17/13
DRAWING NO:	1313-8-B.3.d-Monitoring Wells		
REFERENCE:	SEE INFO BLOCK		

MONITORING WELLS

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
B.3.d

May 17, 2013 10:05am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
Y:\ACAData\Projects\1313\8\1313-8-B.3.d-Monitoring Wells.dwg Layout1
IMAGES: Y:\ACAData\Projects\1313\913\8\mm81001.tif;
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Attachment B.4.a. Vapor Intrusion Map

Not Applicable

Explanation: The soil vapor pathway was not assessed. The pathway is not complete because there are no occupied buildings on the property and no reasonably foreseeable future plans for occupied buildings. Contaminated soil has been capped and covered and therefore soil vapor, if present, is effectively mitigated.

Attachment B.4.b. Other Media of Concern

Not Applicable

Explanation: The Case Closure-GIS Registry is applicable to the Upland portion of the site. Surface water and sediment contamination was addressed through a separate removal action with the USEPA. WPSC performed sediment remediation in 2011 followed by a USEPA Great Lakes National Program Office sediment remediation in 2012

Attachment B.4.c. Other:

Not Applicable

Documentation of Remedial Action (Attachment C)

DISCLAIMER

Documents contained in Attachment C of the Case Closure – GIS Registry (Form 4400-202) are not included in the electronic version (GIS Registry Packet) available on RR Sites Map to limit file size.

For information on how to obtain a copy or to review the file, please contact the Remediation & Redevelopment (RR) Environmental Program Associate (EPA) at dnr.wi.gov/topic/Brownfields/Contact.html

WISCONSIN
DEPT. OF NATURAL RESOURCES

May 03, 2013 1:06pm PLOTTED BY: ndraskovich SAVED BY: ndraskovich
Y:\ACAData\Projects\13\1313\8\1313-8-D.1.a-Maint Plan.dwg Layout1
IMAGES:
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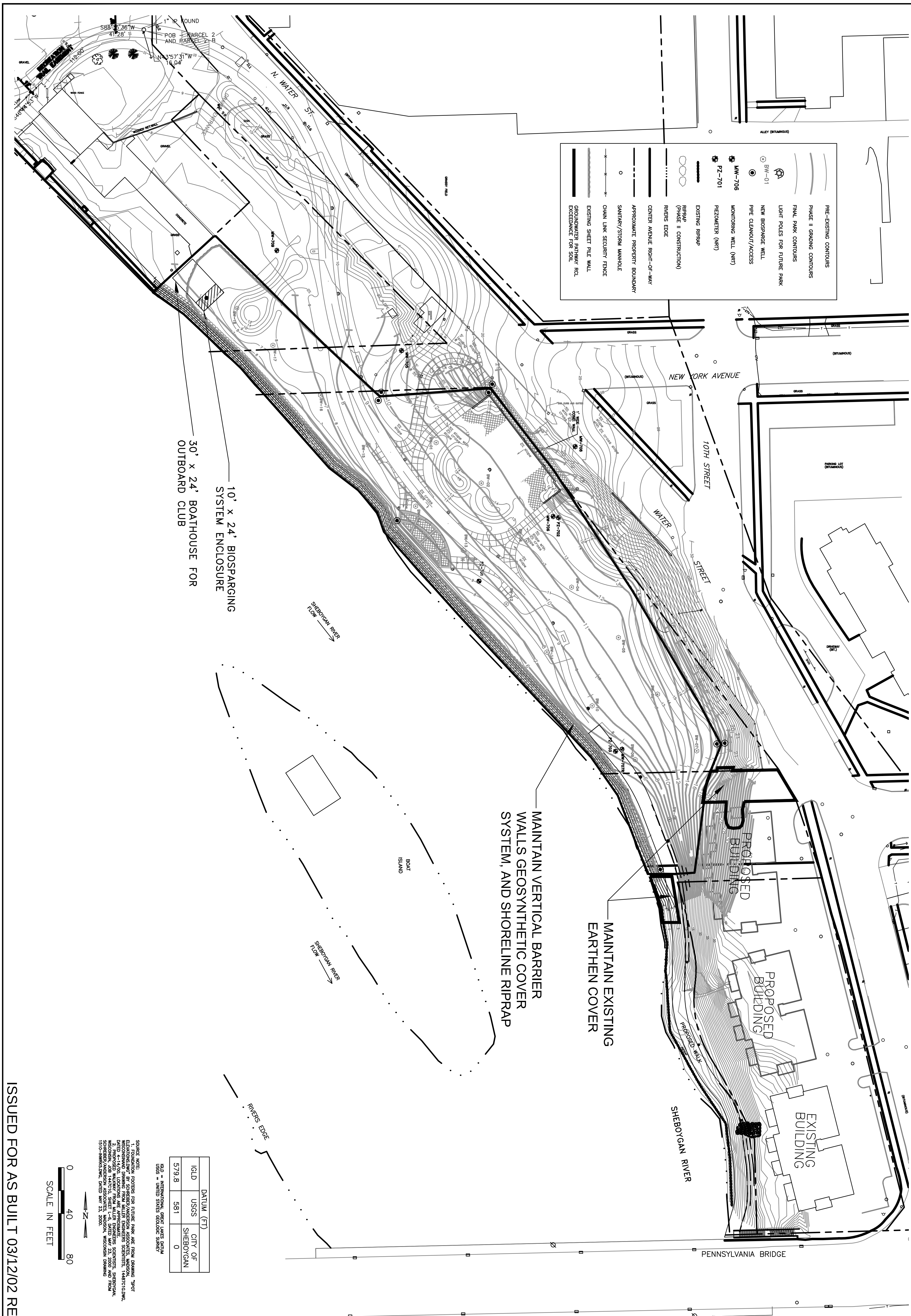


N. WATER ST.
NEW YORK AVENUE
10TH STREET
WATER STREET
PENNSYLVANIA BRIDGE
SHEBOYGAN RIVER
SHEBOYGAN RIVER FLOW
BOAT ISLAND
RIVERS EDGE
PROPOSED BUILDING
PROPOSED BUILDING
EXISTING BUILDING
PROPOSED WALK
PRE-EXISTING CONTOURS
PHASE II GRADING CONTOURS
FINAL PARK CONTOURS
LIGHT POLES FOR FUTURE PARK
NEW BIOSPARGE WELL
PIPE CLEANOUT/ACCESS
MONITORING WELL (NRT)
PIEZOMETER (NRT)
EXISTING RIPRAP
RIPRAP (PHASE II CONSTRUCTION)
RIVERS EDGE
CENTER AVENUE RIGHT-OF-WAY
APPROXIMATE PROPERTY BOUNDARY
SANITARY/STORM MANHOLE
CHAIN LINK SECURITY FENCE
EXISTING SHEET PILE WALL
GROUNDWATER PATHWAY RCL EXCEEDANCE FOR SOIL
MAINTAIN VERTICAL BARRIER WALLS GEOSYNTHETIC COVER SYSTEM, AND SHORELINE RIPRAP
MAINTAIN EXISTING EARTHEN COVER
10' x 24' BIOSPARGING SYSTEM ENCLOSURE
30' x 24' BOATHOUSE FOR OUTBOARD CLUB
DATUM (FT)
IGLD USGS CITY OF SHEBOYGAN
579.8 581 0
SCALE IN FEET
0 40 80
ISSUED FOR AS BUILT 03/12/02 REW

AREAS SUBJECT TO MAINTENANCE PLAN

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

DRAWN BY:	NWD	DATE:	04/09/13
CHECKED BY:	JJW	DATE:	04/09/13
APPROVED BY:	JMK	DATE:	05/03/13

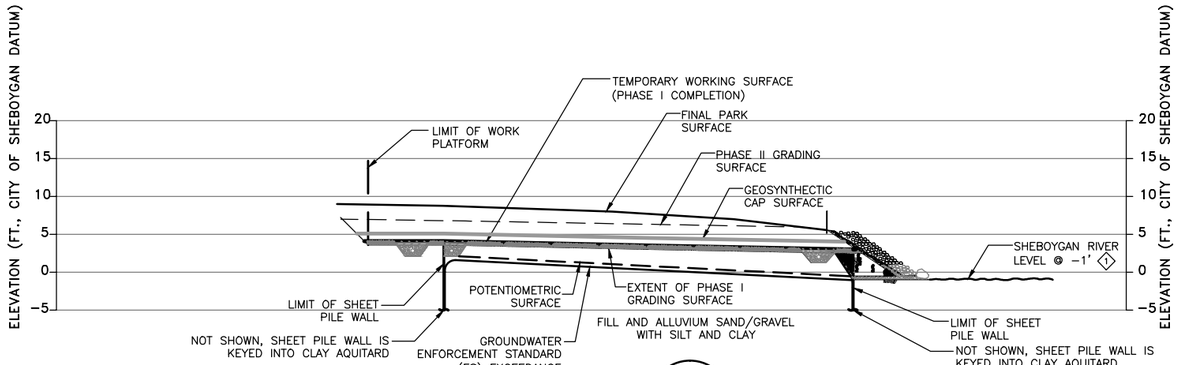
DRAWING NO: 1313-8-D.1.a-Maint Plan

REFERENCE: SEE INFO BLOCK

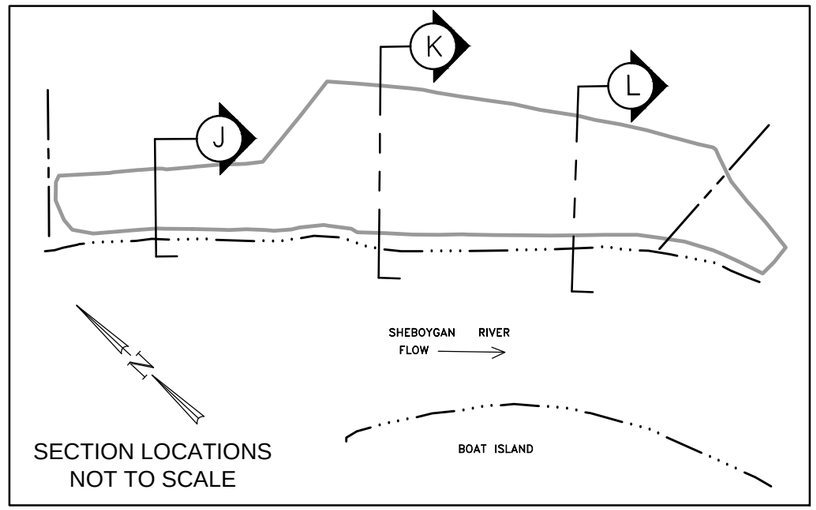
NATURAL RESOURCE TECHNOLOGY

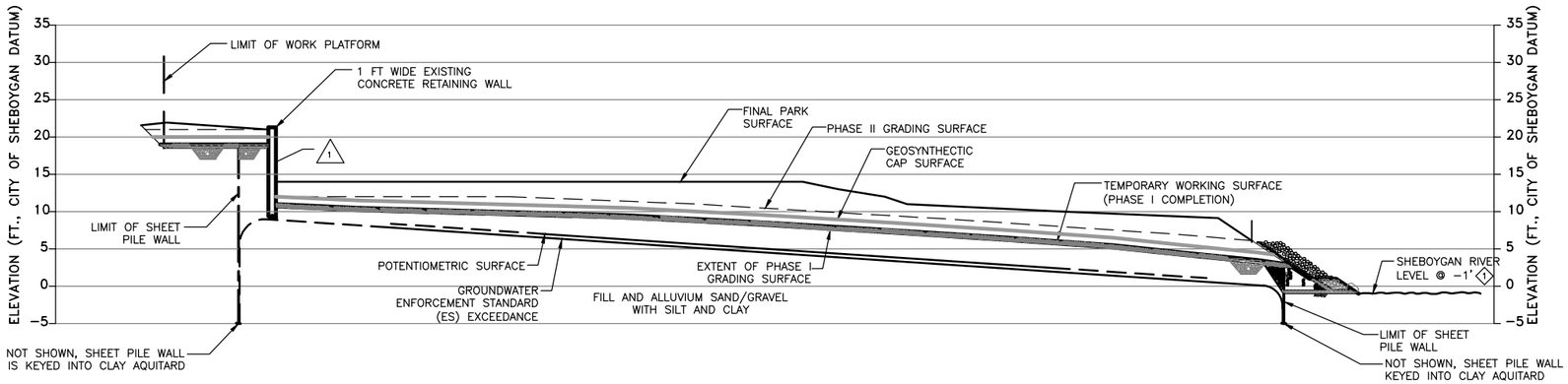
PROJECT NO. 1313/8.0

FIGURE NO. D.1.a



J CROSS SECTION J





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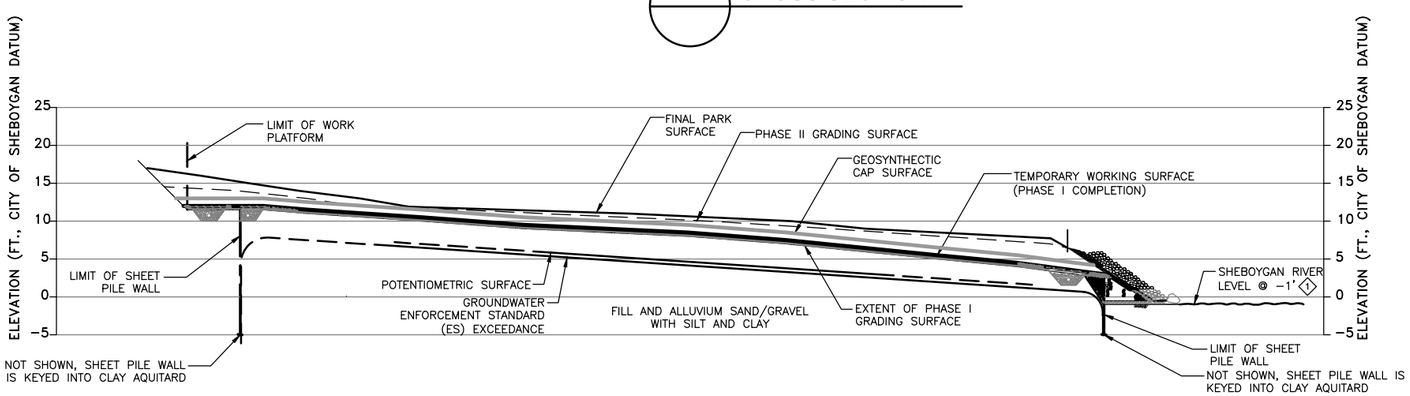
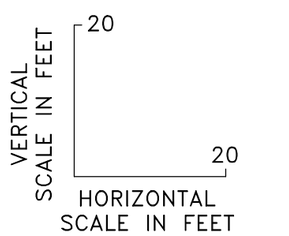
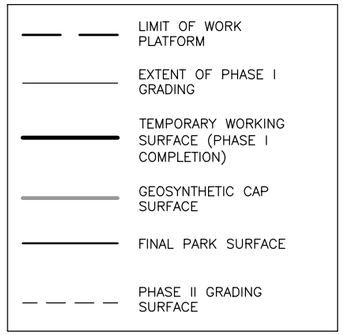


L CROSS SECTION L



VERTICAL EXAGGERATION = 1



GENERAL CONTRACTOR NOTES: △

1. CONTRACTOR SHALL TAKE PRECAUTIONS NOT TO DAMAGE EXISTING CONCRETE RETAINING WALL DURING SITE ACTIVITIES.

AS BUILT NOTES: ◇

1. RIVER EDGE LOCATED AT −3FT. ELEVATION (CITY OF SHEBOYGAN DATUM) DURING PHASE I CONSTRUCTION.

DATUM (FT)		
IGLD	USGS	CITY OF SHEBOYGAN
579.8	581.0	0

DRAWN BY: NWD DATE: 04/09/13
CHECKED BY: JJW DATE: 04/09/13
APPROVED BY: JMK DATE: 05/03/13
DRAWING NO: 1313-8-D.1.b-Cover System AB
REFERENCE: SEE INFO BLOCK

GEOSYNTHETIC COVER SYSTEM AS-BUILT

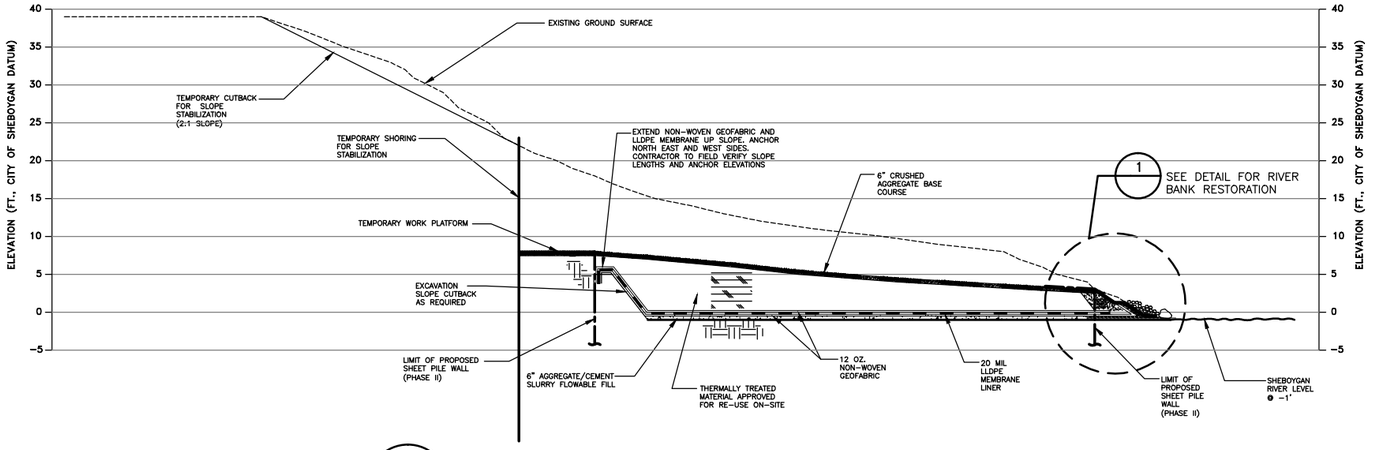
BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

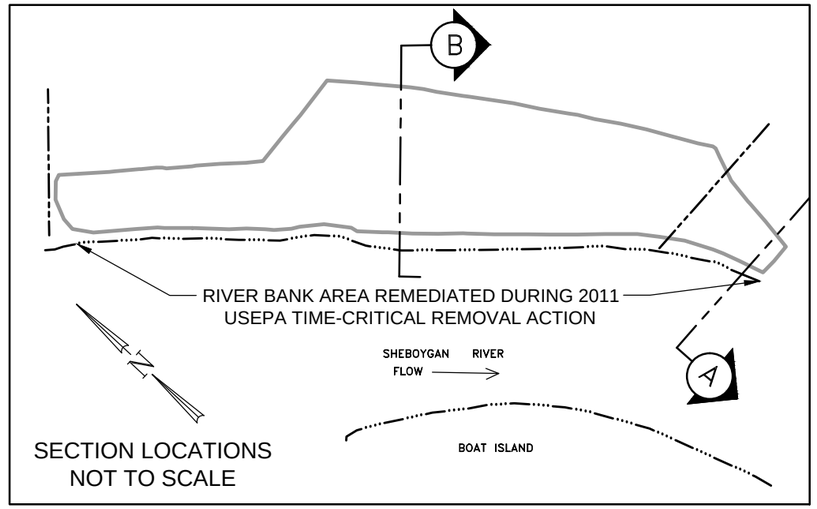
PROJECT NO.
1313/8.0

FIGURE NO.
D.1.b

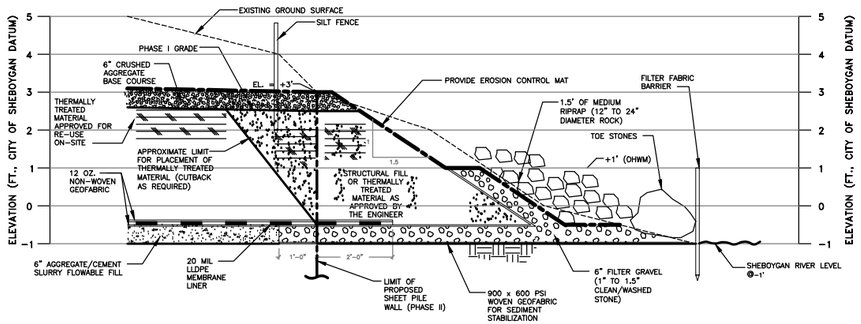
ISSUED FOR AS BUILT 03/12/02 REW



A PHASE I EXCAVATION RESTORATION, CENTER AVENUE RIGHT-OF-WAY



VERTICAL SCALE IN FEET: 10
HORIZONTAL SCALE IN FEET: 10
VERTICAL EXAGGERATION = 1



1 PHASE I RIVER BANK RESTORATION, CENTER AVENUE RIGHT-OF-WAY

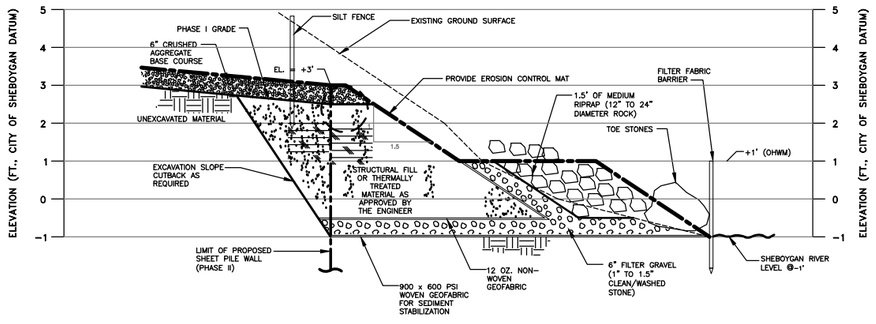
VERTICAL SCALE IN FEET: 2
HORIZONTAL SCALE IN FEET: 2
VERTICAL EXAGGERATION = 1

GENERAL CONTRACTOR NOTES:
1. CROSS SECTION A AND B ARE TYPICAL CROSS SECTIONS OF EXCAVATION AND BACKFILL ALONG THE SHEBOYGAN RIVER. PHASE I BACKFILL ELEVATIONS TO BE FIELD VERIFIED.
2. EXCAVATION LIMITS TO REMAIN SEVERAL INCHES ABOVE THE RIVER LEVEL TO MINIMIZE SEDIMENT DISTURBANCE. NO CONTRACTOR EQUIPMENT OR PERSONNEL ALLOWED DIRECTLY IN THE RIVER.
3. STRUCTURAL FILL AND THERMALLY TREATED MATERIAL APPROVED FOR RE-USE TO BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
4. ELEVATIONS ARE REFERENCED TO CITY OF SHEBOYGAN DATUM.
5. PROPOSED SHEET PILE WALL TO BE INSTALLED AS PART OF THE PHASE II ACTIVITIES.
6. SEE SHEET NO. C050 FOR PHASE I GRADING REQUIREMENTS.
7. EZ-2 AND EZ-3 INDICATE SHALLOW EXCAVATION ZONES TO REMOVE SURFACE MGP IMPACTS. EXCAVATIONS SHALL BE NO MORE THAN ONE FOOT DEEP UNLESS OTHERWISE INDICATED BY ENGINEER.
8. CONTRACTOR TO FIELD VERIFY LIMIT OF SHEET PILE WALL ALIGNMENT FOLLOWING RIVER BANK RESTORATION CURRENTLY SET AT 10' FROM RIVERS EDGE.
9. LIMITS FOR PLACEMENT OF FLOWABLE FILL AND LLDPE MEMBRANE IN CENTER AVENUE RIGHT-OF-WAY TO BE FIELD VERIFIED.
10. EXCAVATION LIMITS ALONG RIVER BANK ARE BASED ON SHEBOYGAN RIVER LEVEL OF -1 (CITY OF SHEBOYGAN DATUM) AND A MINIMUM SLOPE REQUIREMENT OF 1.5' HORIZONTAL TO 1' VERTICAL. CONTRACTOR TO FIELD VERIFY RIVER ELEVATIONS AND RIVER BANK RESTORATION SLOPES.
11. FILTER FABRIC BARRIER ALONG RIVERS EDGE TO REMAIN IN-PLACE THROUGH COMPLETION OF RIVER BANK EXCAVATION AND PLACEMENT OF RIPRAP.

LEGEND

	UNEXCAVATED/NATIVE MATERIAL
	CRUSHED AGGREGATE BASE COURSE
	AGGREGATE/CEMENT SLURRY FLOWABLE FILL
	THERMALLY TREATED MATERIAL
	STRUCTURAL FILL
	FILTER GRAVEL (1" TO 1.5" CLEAN/WASHED STONE)
	12 OZ. NON-WOVEN GEOFABRIC
	900 x 600 PSI WOVEN GEOFABRIC
	20 MIL LLDPE MEMBRANE LINER
	EXISTING GROUND SURFACE
	EXCAVATION LIMITS
	TEMPORARY WORKING SURFACE, PHASE I COMPLETION
EZ	EXCAVATION ZONE
GZ	GRADING ZONE
OHWM	ORDINARY HIGH WATER MARK (ESTIMATED)
MGP	MANUFACTURED GAS PLANT
MSL	MEAN SEA LEVEL
LLDPE	LINEAR LOW DENSITY POLYETHYLENE
PSI	POUNDS PER SQUARE INCH

RIVER BANK AREA REMEDIATED DURING 2011 EPA TIME-CRITICAL REMOVAL ACTION



B PHASE I RIVER BANK RESTORATION, CAMPMARINA

VERTICAL SCALE IN FEET: 2
HORIZONTAL SCALE IN FEET: 2
VERTICAL EXAGGERATION = 1

RIVER BANK AREA REMEDIATED DURING 2011 USEPA TIME-CRITICAL REMOVAL ACTION

ISSUED FOR AS BUILT 03/12/02 REW

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/03/13

DRAWING NO: 1313-8-B.1.c-Engineering Controls

REFERENCE: SEE INFO BLOCK

RIVER BANK AND CENTER AVENUE R.O.W. AS-BUILT

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
D.1.c

May 03, 2013 1:07pm PLOTTED BY: ndraskovich SAVED BY: ndraskovich
N:\ACAD\data\Projects\1313\8\1313-8-D.1.c-Engineering Controls AB.dwg Layout1
IMAGES:
XREFS:

Attachment D.2. Brief Description

Contaminated soil (BTEX and PAHs) remains above and below the groundwater table within the vertical barrier wall system at concentrations above the Chapter NR720 Wisconsin Administrative Code standards for soil. Groundwater within the vertical barrier wall system is above Chapter NR140, Wisconsin Administrative Code Standards. Figures D.1.b. and D.1.c. illustrate the protective engineering controls and earthen cover as-built construction.

The areas of exceedances are the former property and the Center Avenue right-of-way. Future construction activities along the former Water Street may encounter unidentified isolated pockets of blue soil.

Residual soil impacts exceeding the direct contact RCLs are located below the geosynthetic cover system within the area of the vertical barrier wall or are below an earthen cover.

Contaminated soil (BTEX and PAHs) remains in the vadose zone within the vertical barrier wall system and beneath the geosynthetic cover system at concentrations above the groundwater pathway RCL.

Groundwater impacts are confined to the area within the vertical barrier wall and beneath the geosynthetic cover, both which provide hydraulic containment, and pose no threat to water supply wells or building foundation drain systems. Surface water and sediment contamination has been addressed through a separate removal action with the USEPA. WPSC performed sediment remediation in 2011 followed by a USEPA Great Lakes National Program Office sediment remediation in 2012.

Attachment D.3. Description of Maintenance Actions.

Campmarina Former MGP
Maintenance Plan
May 2013

Property: Campmarina Former Manufactured Gas Plant
732 N. Water Street
714 N. Water Street
Sheboygan, Wisconsin 53081
Sheboygan County

Legal Description:

732 N. Water Street:
ORIGINAL PLAT ALL OF BLK 149 & THE VACATED SOUTHERLY 20' OF NEW YORK AVENUE ADJACENT TO BLOCK 149 CAMPMARINA PARK
TAX #59281107760

And

714 N. Water Street:
ORIGINAL PLAT ALL OF LOTS 1,2 & 3 BLK 133 AND THE NELY 40' OF LOTS 4 & 5 AND THE NELY 40' OF THE SELY 20' OF LOT 6 BLK 133, ALSO THE VAC N 20' OF NEW YORK AVE ADJ BLK 133 (CAMPMARINA PARK)
TAX #59281107756

And

Center Avenue ROW:
ORIGINAL PLAT THAT PRT OF VAC CENTER AVE LYING W OF WATER ST BETWEEN BLKS 149 & 156, ALSO THE NLY 10' OF BLK 156 DESC AS COM AT INTERSECTION OF S LN OF CENTER AVE WITH THE W LN OF WATER ST, THE P.O.B., TH S 13* E 10.25', TH 115.79'
TAX #59281108711

Geographic Coordinates (WTM83/91): 703,699 meters Easting, 366,900 meters Northing (NW 1/4 of the SW 1/4 of Sec 23, T15N, R23E),

Property Owner:
City of Sheboygan
828 Center Avenue
Sheboygan, WI 53081

WDNR File: Camp Marina Manufactured Gas Plant
732 N. Water Street
Sheboygan, Wisconsin 53081 (Figure B.1.a)
BRRTS# 02-60-000095; FID # 460134950

WDNR Contact
Mr. John Feeney, Hydrogeologist
Wisconsin Department of Natural Resources
1155 Pilgrim Parkway
Plymouth, WI 53073
(920) 892-8756 Ext. 3023
johnm.feeney@wisconsin.gov

Introduction

This Maintenance Plan has been prepared in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code for the above-referenced property ("Property") to be implemented as part of the case closure. The maintenance activities relate to the following engineering controls occupying the area over impacted soil and groundwater at the park or on the site (Figure D1):

- Vertical barrier wall
- Engineered geosynthetic cover underlying the earthen cover
- Shoreline riprap

A copy of the engineering as-builts for the engineering controls is attached.

A copy of this Plan is to be kept on file by: (1) the Wisconsin Department of Natural Resources (WDNR), Northeast Region; (2) the Property Owner, including future Property owners; and (3) the Property Manager, if any. The Plan shall be made available by the Property Owner to prospective purchasers, contractors, utilities and maintenance personnel, and any other public or private persons or entities authorized to perform work at the Property. Summary reports are on file with the WDNR and are available upon request (WDNR file reference BRRTS# 02-60-001016).

More site-specific information about this property may be found by consulting:

- The case file in the WDNR Northeast Region office;
- BRRTS on the Web (WDNR's internet based data base of contaminated sites): http://dnr.wi.gov/botw/SetUpBasicSearchForm.do;
- GIS Registry PDF file for further information on the nature and extent of contamination: http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts2; and
- The WDNR project manager for Sheboygan County.

Plan Purpose and Site Information

The purpose of this Plan is to document the responsibilities associated with the land use controls applicable to the Property and to identify how to properly manage residual impacted soil and groundwater under the earthen cover. Residual soil impacts are listed on Table 8.

The existing engineering controls contain the underlying residual soil and groundwater impacts. The earthen cover provides further protection from direct contact with underlying residual contaminants. The earthen cover and shoreline rip rap protects the existing engineering controls (geosynthetic cover and vertical barrier wall). The locations of these engineering controls and barriers are located at the park and shown on Figure D.1.a. Based on the current and future use of the property (as a recreational park), the engineering controls and barriers should function as intended at a level of effort similar to any other recreational park, unless disturbed.

Annual Inspection

The existing engineering controls contain the underlying residual soil and groundwater impacts. The earthen cover and the shoreline riprap (Figure D.1.a) will be inspected once a year for to verify the earthen cover and shoreline riprap are present and significant soil erosion has not occurred that may allow exposure to

underlying soils and groundwater. Typically, this annual inspection will be completed in the spring after all snow has melted.

The inspections will be performed by the property owner or designated representative. The inspector will walk the perimeter and interior of the park, looking for areas where soil has rills, eroded, or significantly settled that may result in ponding water. The inspector will stand at the water's edge to visually observe the presence-absence of shoreline riprap along the bank. Any area of the park where soils have eroded or are likely to erode or greater than 10 consecutive linear feet of shoreline riprap are not present, will be documented. A log of the inspections and associated repairs will be maintained by the property owner and is included as Exhibit A, Inspection Log. The log will include recommendations for necessary repairs of areas where erosion was observed. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be kept at the City of Sheboygan municipal offices and available for submittal or inspection by WDNR representatives upon their request.

Maintenance Activities

Repairs will be scheduled by the property owner as soon as practical if problems are noted during the annual inspection or at other times during the year if observed as part of the regular park maintenance activities (i.e., mowing). Repairs are typical of any other shoreline park and can include filling or resurfacing of erosional areas of the earthen cover or replacing shoreline riprap. If maintenance activities may expose the underlying soil or groundwater, the owner must inform maintenance workers of direct contact exposure hazards and ensure they have appropriate personal protective equipment. The owner must also sample any soil excavated from the site prior to off-site disposal to ascertain if contamination remains. The soil must be treated, stored, and disposed by the owner in accordance with applicable local, state, and federal law.

In the event the engineering controls are removed or replaced as a result of significant utility or construction activities at the park, the replacement controls must function in a manner equal to or exceeding the original controls to prevent direct contact with soil and groundwater, and groundwater migration to surface water. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless otherwise indicated by the WDNR or its successor.

The property owner, in order to maintain the integrity of the engineering controls, will maintain a copy of this Maintenance Plan at the City of Sheboygan Municipal Offices and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover or Cap

The following activities are prohibited on any portion of the park property where engineering controls are required as shown on the attached maps, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing engineering control; 2) replacement with another engineering control; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure. Any area of cap disturbance shall be restored in a manner consistent with the original cap condition. If disturbance cannot be avoided, activities that disturb the soil will not be conducted until approval is obtained from WDNR. Proper material management includes, but is not limited to:

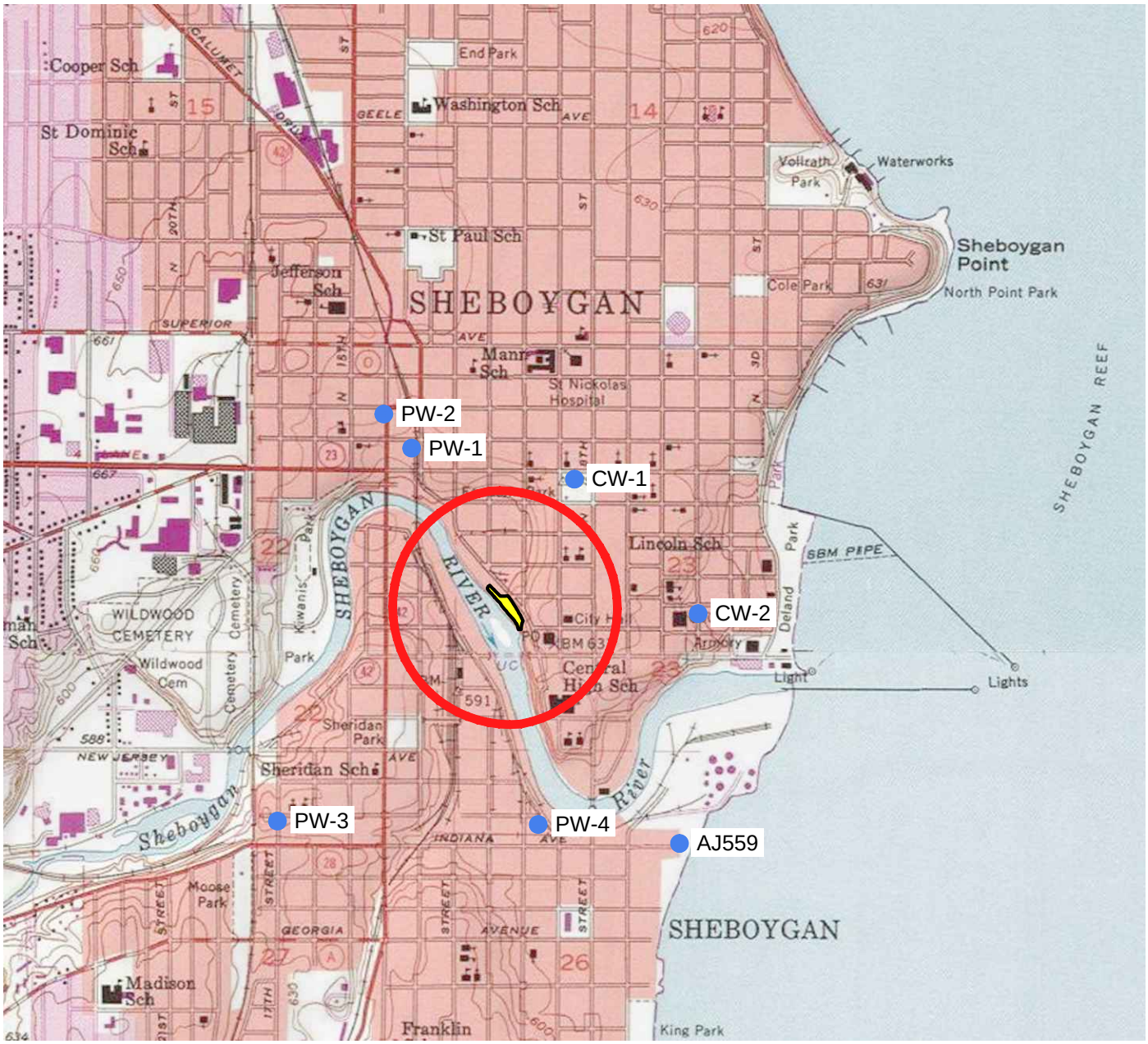
- Characterize, manage, and dispose impacted soil and groundwater in accordance with Wisconsin solid waste rules.

- Determine whether planned site improvements require WDNR approval. Site improvements include, but are not limited to, constructing or placing a building or other structure or landscaping which could be disruptive to the existing barriers.

Amendment or Withdrawal of Plan

This Plan can be amended or withdrawn by the Property Owner with the written approval of the WDNR.

Attachments: Figure B.1.a. - Location Map
Figure D.1.a- Areas Subject to Maintenance Plan
Figure D.1.b- Geosynthetic Cover System As-Built
Figure D.1.c- River Bank and Center Avenue ROW As-Built
Table A.4. - Pre and Post Remaining Soil Contamination
Exhibit A –Inspection Log Form



LOCATION MAP

NATURAL RESOURCE TECHNOLOGY

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

DRAWN: NWD DATE: 04/09/13 CHK'D: JJW DATE: 04/09/13 APP'D: JMK DATE: 05/03/13

PROJECT NO.
1313/8.0

DRAWING NO.
1313-8-B.1.a-LOCATION MAP

FIGURE NO.
B.1.a

May 03, 2013 1:06pm PLOTTED BY: ndraskovich SAVED BY: ndraskovich
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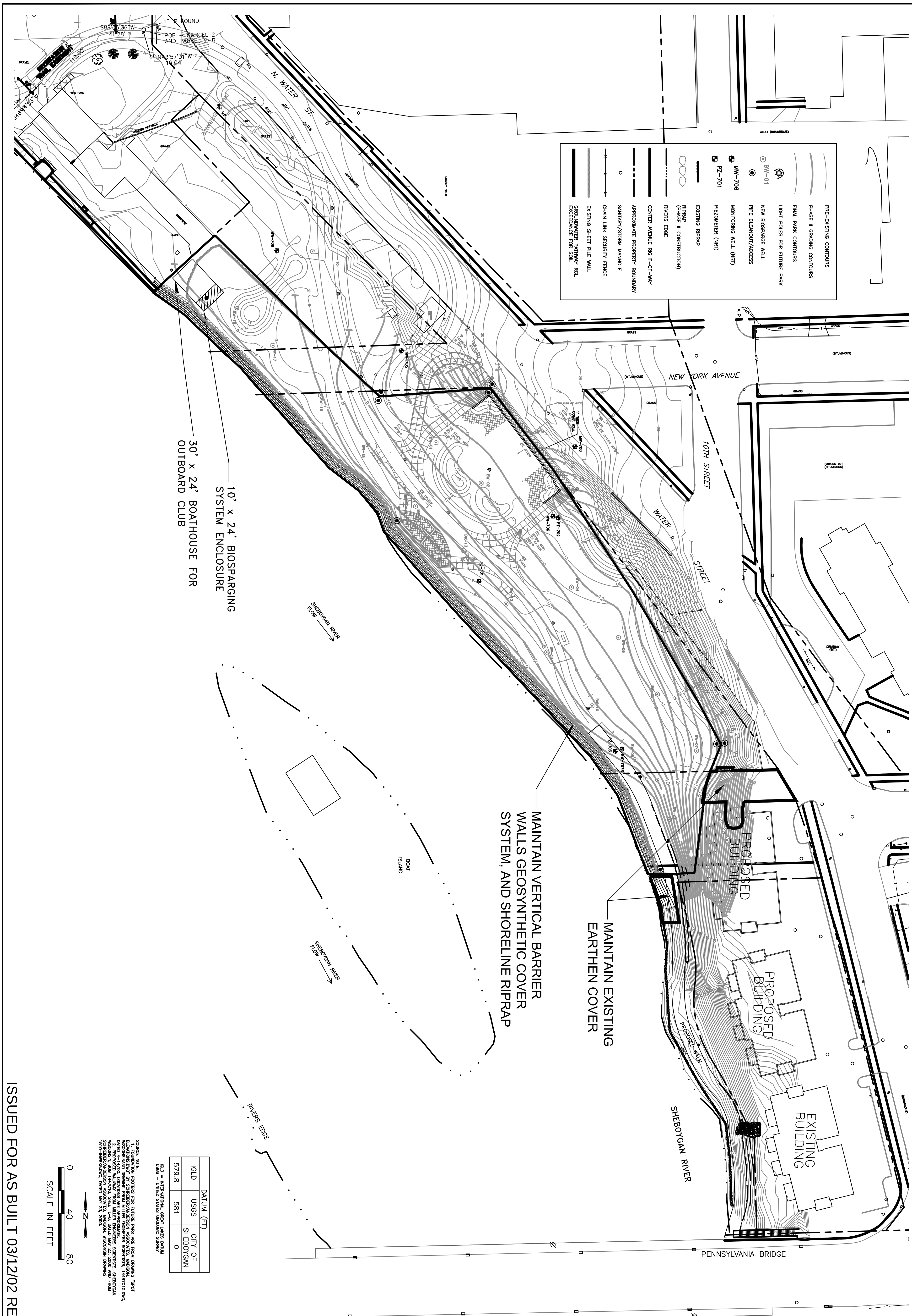
IMAGES:
XREFS:



N. WATER ST.
NEW YORK AVENUE
10TH STREET
WATER STREET
PRE-EXISTING CONTOURS
PHASE II GRADING CONTOURS
FINAL PARK CONTOURS
LIGHT POLES FOR FUTURE PARK
NEW BIOSPARGE WELL
PIPE CLEANOUT/ACCESS
MONITORING WELL (NRT)
PIEZOMETER (NRT)
EXISTING RIPRAP
RIPRAP (PHASE II CONSTRUCTION)
RIVERS EDGE
CENTER AVENUE RIGHT-OF-WAY
APPROXIMATE PROPERTY BOUNDARY
SANITARY/STORM MANHOLE
CHAIN LINK SECURITY FENCE
EXISTING SHEET PILE WALL
GROUNDWATER PATHWAY RCL EXCEEDANCE FOR SOIL
10' x 24' BIOSPARGING SYSTEM ENCLOSURE
30' x 24' BOATHOUSE FOR OUTBOARD CLUB
SHEBOYGAN RIVER FLOW
BOAT ISLAND
MAINTAIN VERTICAL BARRIER WALLS GEOSYNTHETIC COVER SYSTEM, AND SHORELINE RIPRAP
MAINTAIN EXISTING EARTHEN COVER
PROPOSED BUILDING
PROPOSED BUILDING
EXISTING BUILDING
PROPOSED WALK
SHEBOYGAN RIVER
RIVERS EDGE
PENNSYLVANIA BRIDGE
DATUM (FT)
IGLD USGS CITY OF SHEBOYGAN
579.8 581 0
IGLD = INTERNATIONAL GREAT LAKES DATUM
USGS = UNITED STATES GEOLOGIC SURVEY
SCALE IN FEET
0 40 80
ISSUED FOR AS BUILT 03/12/02 REW

AREAS SUBJECT TO MAINTENANCE PLAN

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

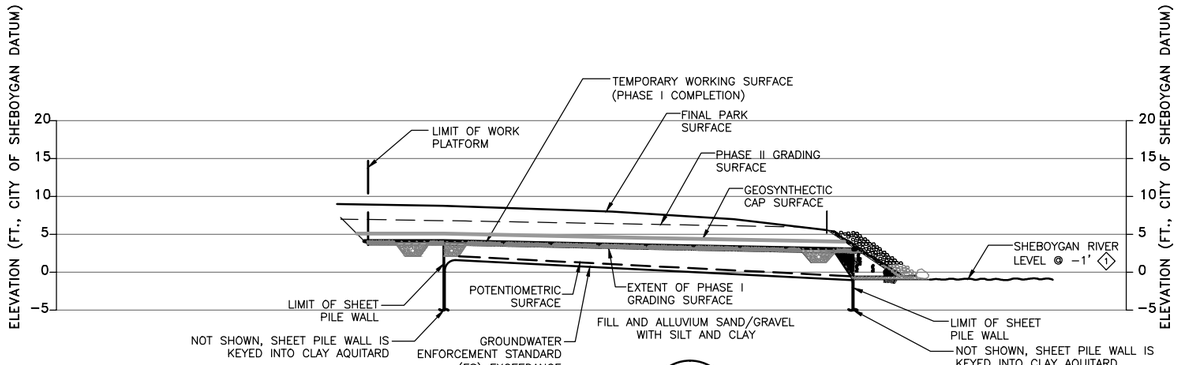
PROJECT NO. 1313/8.0

FIGURE NO. D.1.a

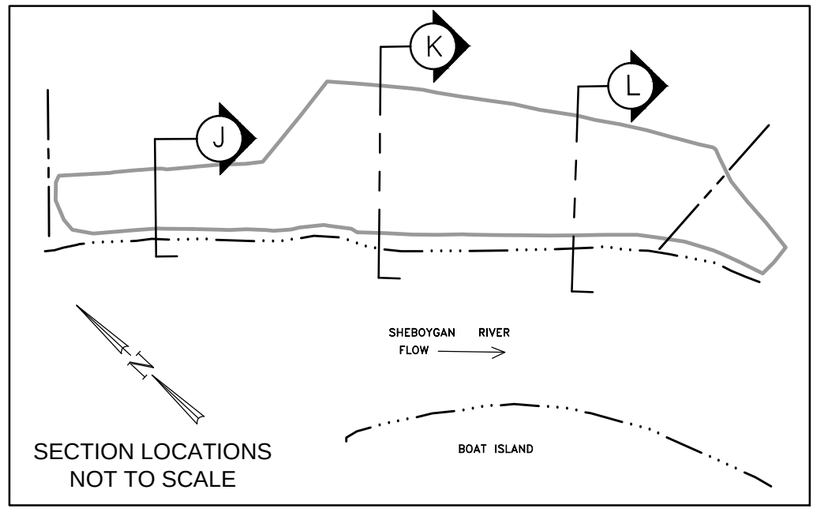
DRAWN BY:	NWD	DATE:	04/09/13
CHECKED BY:	JJW	DATE:	04/09/13
APPROVED BY:	JMK	DATE:	05/03/13

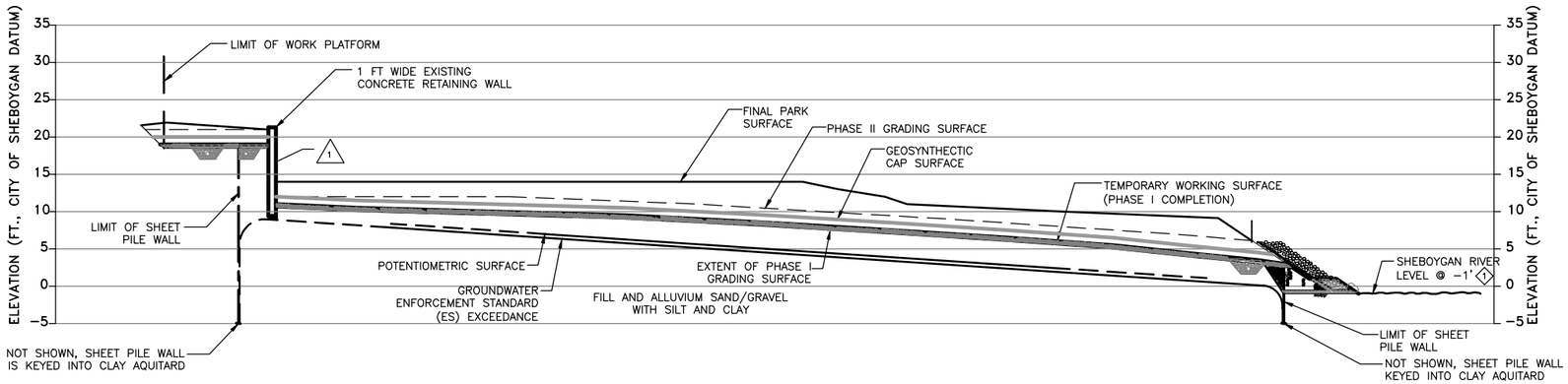
DRAWING NO: 1313-8-D.1.a-Maint Plan

REFERENCE: SEE INFO BLOCK

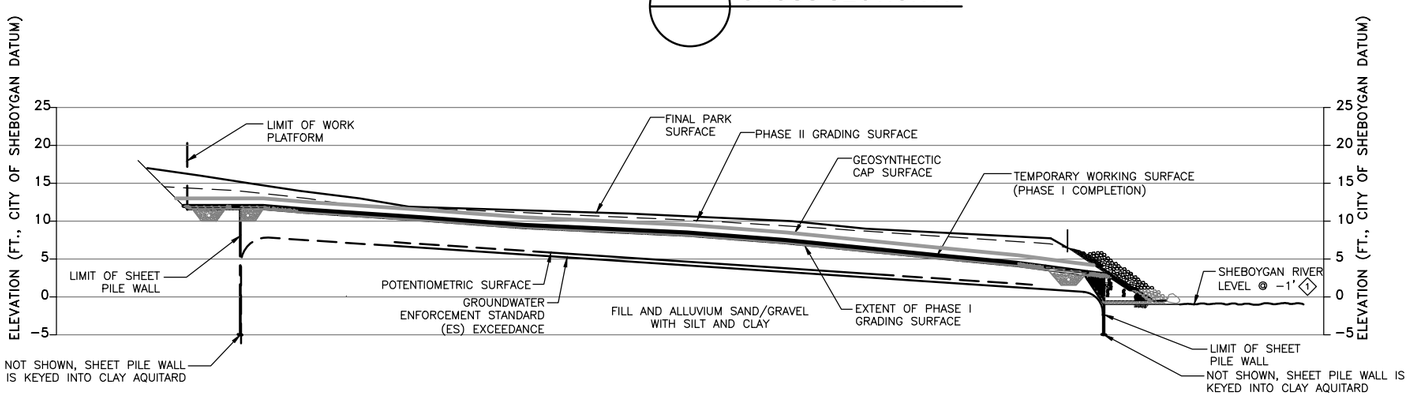


J CROSS SECTION J

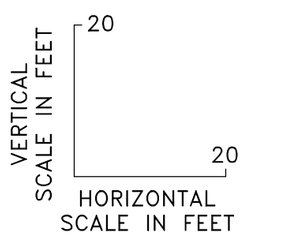




K CROSS SECTION K



L CROSS SECTION L



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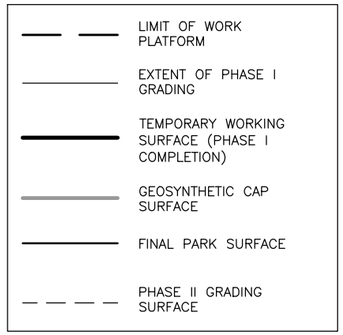


GENERAL CONTRACTOR NOTES: △

1. CONTRACTOR SHALL TAKE PRECAUTIONS NOT TO DAMAGE EXISTING CONCRETE RETAINING WALL DURING SITE ACTIVITIES.

AS BUILT NOTES: ◇

1. RIVER EDGE LOCATED AT −3FT. ELEVATION (CITY OF SHEBOYGAN DATUM) DURING PHASE I CONSTRUCTION.

DATUM (FT)		
IGLD	USGS	CITY OF SHEBOYGAN
579.8	581.0	0

DRAWN BY: NWD DATE: 04/09/13
CHECKED BY: JJW DATE: 04/09/13
APPROVED BY: JMK DATE: 05/03/13
DRAWING NO: 1313-8-D.1.b-Cover System AB
REFERENCE: SEE INFO BLOCK

GEOSYNTHETIC COVER SYSTEM AS-BUILT

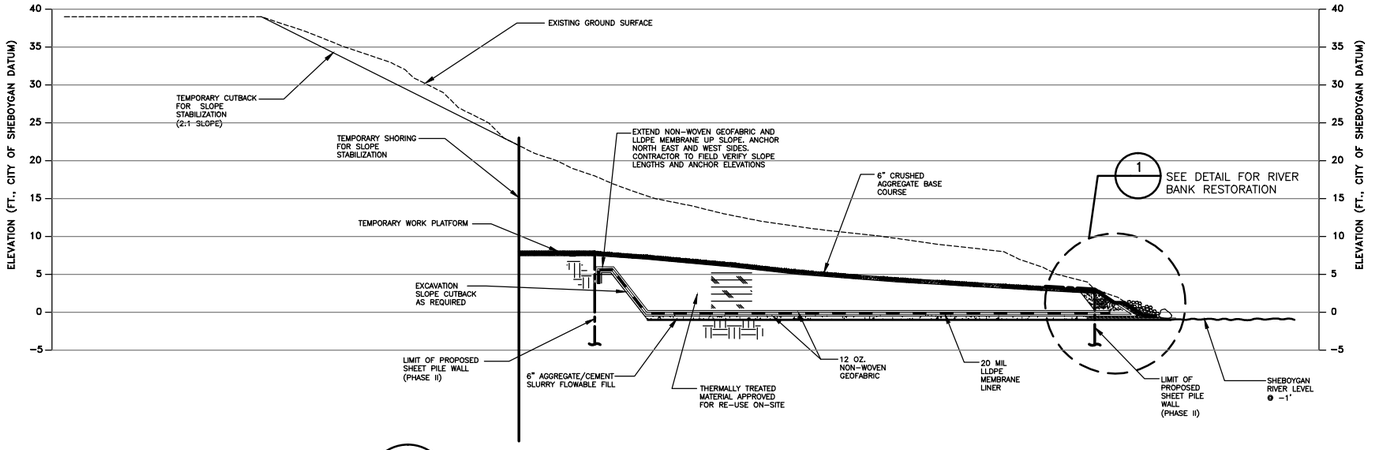
BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

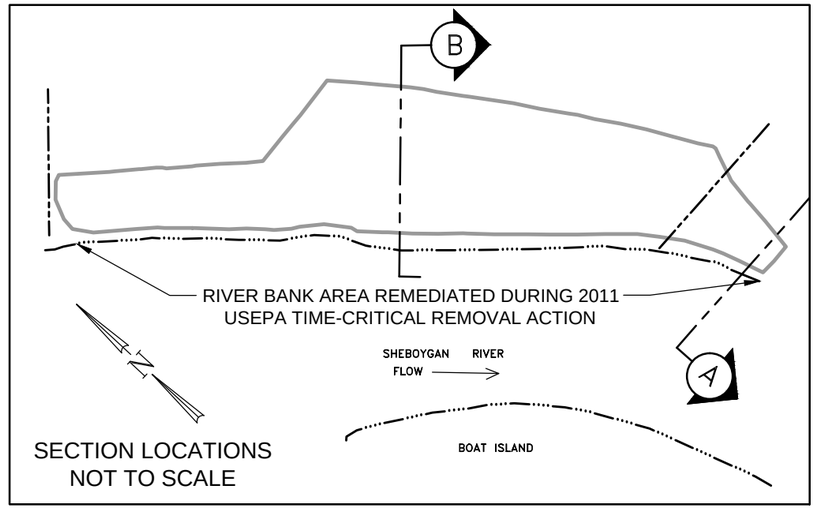
PROJECT NO.
1313/8.0

FIGURE NO.
D.1.b

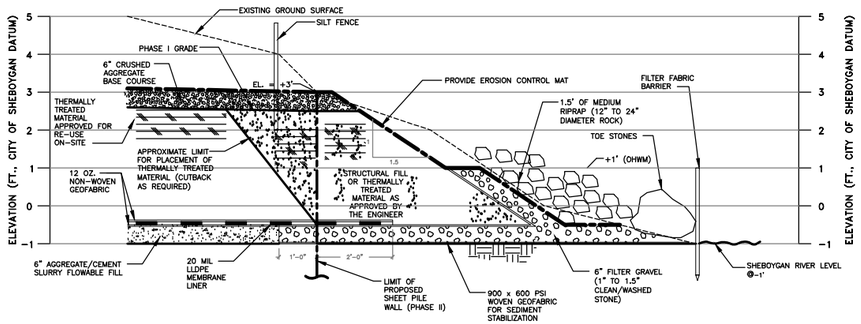
ISSUED FOR AS BUILT 03/12/02 REW



A PHASE I EXCAVATION RESTORATION, CENTER AVENUE RIGHT-OF-WAY



VERTICAL SCALE IN FEET: 10
HORIZONTAL SCALE IN FEET: 10
VERTICAL EXAGGERATION = 1



1 PHASE I RIVER BANK RESTORATION, CENTER AVENUE RIGHT-OF-WAY

VERTICAL SCALE IN FEET: 2
HORIZONTAL SCALE IN FEET: 2
VERTICAL EXAGGERATION = 1

GENERAL CONTRACTOR NOTES:
1. CROSS SECTION A AND B ARE TYPICAL CROSS SECTIONS OF EXCAVATION AND BACKFILL ALONG THE SHEBOYGAN RIVER. PHASE I BACKFILL ELEVATIONS TO BE FIELD VERIFIED.
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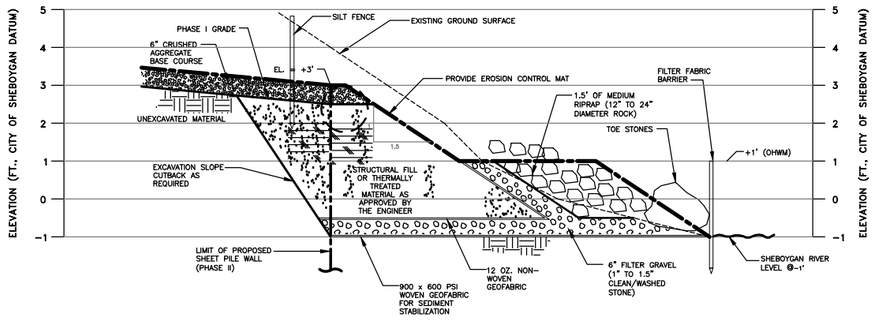
5. PROPOSED SHEET PILE WALL TO BE INSTALLED AS PART OF THE PHASE II ACTIVITIES.
6. SEE SHEET NO. C050 FOR PHASE I GRADING REQUIREMENTS.
7. EZ-2 AND EZ-3 INDICATE SHALLOW EXCAVATION ZONES TO REMOVE SURFACE MGP IMPACTS. EXCAVATIONS SHALL BE NO MORE THAN ONE FOOT DEEP UNLESS OTHERWISE INDICATED BY ENGINEER.
8. CONTRACTOR TO FIELD VERIFY LIMIT OF SHEET PILE WALL ALIGNMENT FOLLOWING RIVER BANK RESTORATION CURRENTLY SET AT 10' FROM RIVERS EDGE.
9. LIMITS FOR PLACEMENT OF FLOWABLE FILL AND LLDPE MEMBRANE IN CENTER AVENUE RIGHT-OF-WAY TO BE FIELD VERIFIED.
10. EXCAVATION LIMITS ALONG RIVER BANK ARE BASED ON SHEBOYGAN RIVER LEVEL OF -1 (CITY OF SHEBOYGAN DATUM) AND A MINIMUM SLOPE REQUIREMENT OF 1.5' HORIZONTAL TO 1' VERTICAL. CONTRACTOR TO FIELD VERIFY RIVER ELEVATIONS AND RIVER BANK RESTORATION SLOPES.
11. FILTER FABRIC BARRIER ALONG RIVERS EDGE TO REMAIN IN-PLACE THROUGH COMPLETION OF RIVER BANK EXCAVATION AND PLACEMENT OF RIPRAP.

LEGEND

	UNEXCAVATED/NATIVE MATERIAL
	CRUSHED AGGREGATE BASE COURSE
	AGGREGATE/CEMENT SLURRY FLOWABLE FILL
	THERMALLY TREATED MATERIAL
	STRUCTURAL FILL
	FILTER GRAVEL (1" TO 1.5" CLEAN/WASHED STONE)
	12 OZ. NON-WOVEN GEOFABRIC
	900 x 600 PSI WOVEN GEOFABRIC
	20 MIL LLDPE MEMBRANE LINER
	EXISTING GROUND SURFACE
	EXCAVATION LIMITS
	TEMPORARY WORKING SURFACE, PHASE I COMPLETION
EZ	EXCAVATION ZONE
GZ	GRADING ZONE
OHWM	ORDINARY HIGH WATER MARK (ESTIMATED)
MGP	MANUFACTURED GAS PLANT
MSL	MEAN SEA LEVEL
LLDPE	LINEAR LOW DENSITY POLYETHYLENE
PSI	POUNDS PER SQUARE INCH

RIVER BANK AREA REMEDIATED DURING 2011 EPA TIME-CRITICAL REMOVAL ACTION



B PHASE I RIVER BANK RESTORATION, CAMPMARINA

VERTICAL SCALE IN FEET: 2
HORIZONTAL SCALE IN FEET: 2
VERTICAL EXAGGERATION = 1

RIVER BANK AREA REMEDIATED DURING 2011 USEPA TIME-CRITICAL REMOVAL ACTION

ISSUED FOR AS BUILT 03/12/02 REW

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/03/13

DRAWING NO: 1313-8-B.1.c-Engineering Controls

REFERENCE: SEE INFO BLOCK

RIVER BANK AND CENTER AVENUE R.O.W. AS-BUILT

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1313/8.0

FIGURE NO.
D.1.c

May 03, 2013 1:07pm PLOTTED BY: ndraskovich SAVED BY: ndraskovich
N:\ACAD\data\Projects\1313\8\1313-8-D.1.c-Engineering Controls AB.dwg Layout1
IMAGES:
XREFS:

Table A.4.-1 Pre-Remedial Soil Analyical Data Exceeding RCLs Table 1 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sample Location	Sample Depth (ft)	Sample Date	Benzene mg/kg	Phenol mg/kg	Benzo(a)anthracene mg/kg	Benzo(b)fluoranthene mg/kg	Benzo(a)pyrene mg/kg	Chrysene mg/kg	Dibenzo(a,h)anthracene mg/kg	Indeno(1,2,3-cd)pyrene mg/kg	Naphthalene mg/kg
Groundwater Pathway RCLs			*0.005*	*2.30*	*NE*	*0.48*	*0.47*	*0.15*	*NE*	*NE*	*0.66*
Direct Contact RCLs			**1.49**	**18300**	**0.15**	**0.15**	**0.01**	**14.8**	**0.01**	**0.15**	**5.15**
Soil Samples from the Unsaturated Zone											
Monitoring Well Samples											
MW-701	2-4	7/18/1995			**2.3**	**0.95**	**1.7**	*1.6*	**0.18**	**1.3**	**77**
MW-702	2-4	7/19/1995			**1.1**	**0.66**	**1.2**	*0.74*	**0.15**	**0.75**	
MW-703	4-6	7/18/1995	*0.013*			*2.3*	*3.8*	*2.8*			*3*
MW-705	2-4	7/19/1995			**1.7**	**1**	**1.7**	*1.3*	**0.27**	**1.1**	
MW-707	2-4	7/19/1995		*83*	**0.33**	**0.18**	**0.43**	*0.23*	**0.063**	**0.33**	
Soil Boring Samples											
SB-701	2-4	7/19/1995			**0.91**	**0.49**	**0.74**	*0.68*	**0.093**	**0.5**	

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) NE - not established.

Table A.4.-2 Pre-Remedial Soil Analyical Data Exceeding RCLs Table 2 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sampling Location	Sampling Depth (feet below ground surface)	Sampling Date	mg/kg						
			Lead, total	Cyanide, total[3]	Cyanide, weak acid dissociable[4]	Benzene	Ethylbenzene	Toluene	Total Xylenes
Groundwater Pathway RCLs			*27*	*NE*	*4.04*	*0.005*	*1.57*	*1.11*	*3.94*
Direct Contact RCLs			**400**	**26.4**	**NE**	**1.49**	**7.47**	**818**	**258**
Soil Samples Collected from the Unsaturated Zone									
HA-701	2	07/29/98	*350*	**89**	*46*	*0.13*			
SS-701	0.5	07/29/98	**410**						
TP-701	2-8	07/29/98	**540**	**78**	*17*	*0.23*			
TP-702	2-7	07/29/98	*110*						
TP-703	4-6	07/29/98	*260*						
TP-705	5	07/29/98	*980*		*260*	*0.11*			
TP-706	1-8	07/29/98	**530**						
SB-717	11-11.5	07/29/98	*110*						
SB-718	13-13.5	07/29/98	*280*						
SB-719	11-11.5	07/29/98	*190*						
SB-720	10-10.5	07/29/98	*400*		*42*				
SB-726	11-12	12/09/98	*61*						
SB-732	12-14	12/10/98				*0.3*	*2.521*		
SB-733	10-12	12/09/98				*25.7*	*5.49*	*55.4*	*49.9*
SB-734	12-14	12/09/98				*0.309*			
SB-735	10-12	12/10/98				*0.172*	*7.07*	*1.15*	*13.46*
SB-736	6-8	12/08/98				*0.314*			
SB-739	6-8	12/09/98	*634*				*1.81*		*6.02*
PZ-702	14-16	12/09/98				*259*	*168*	*572*	*599*
PZ-703	16-18	12/08/98				*1.49*	*10.6*		

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) The groundwater pathway RCL has been established for free cyanide only.
4) The groundwater pathway RCL for free cyanide is used for dissociable cyanide.
5) NE - not established.

Table A.4.-3 Pre-Remedial Soil Analyical Data Exceeding RCLs Table 3 of 3.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

Sampling Location	Sampling Depth (feet)	Sampling Date	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) fluoranthene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Pyrene
Groundwater Pathway RCLs			*NE*	*0.47*	*0.48*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*54.5*
Direct Contact RCLs			**0.15**	**0.01**	**0.15**	**1.48**	**14.8**	**0.01**	**2290**	**2290**	**0.15**	**5.15**	**1720**
Soil Samples Collected from the Unsaturated Zone													
HA-701	2	07/29/98	**49**	**17**	**56**	**32**	**58**	**13**			**25**	**10**	*60*
SS-701	0.5	07/29/98	**7.2**	**4.5**	**7.3**	**7.1**	*8.2*	**1.9**			**3.2**		
TP-701	2-8	07/29/98	**25**	**19**	**56**	**36**	**34**	**11**			**23**	*4.3*	
	8-9	07/29/98		*0.56*	*0.57*		*0.46*						
TP-702	2-7	07/29/98	**40**	**36**	**27**	**28**	**39**	**10**	*110*	*21*	**18**	**13**	*71*
	7-10	07/29/98		*0.71*	*0.71*		*0.59*						
TP-703	4-6	07/29/98		*5.1*	*6.8*		*5.6*						
TP-704	3-4	07/29/98		**0.13**									
	7-8	07/29/98		*1*	*0.81*		*0.67*						
TP-705	5	07/29/98		*43*	*190*		*140*					*19*	
TP-706	1-8	07/29/98	**13**	**11**	**11**		*13*	**3.6**			**7.6**		
SB-717	11-11.5	07/29/98					*0.39*						
SB-718	13-13.5	07/29/98		*2.2*	*2.3*		*2.2*						
SB-719	11-11.5	07/29/98		*3.2*	*3.5*		*3.6*						
SB-720	10-10.5	07/29/98			*82*		*93*		*250*			*170*	*170*
Soil Samples Collected from the Saturated Zone													
SB-726	11-12	12/09/98		*0.622*	*2.65*		*4.86*						
SB-732	12-14***	12/10/98***										*0.699*	
	12-14***	12/10/98***										*1.3*	
SB-733	10-12	12/09/98		*14.8*	*9.03*		*15.1*					*309*	*179*
SB-734	12-14	12/09/98		*14.3*	*10.7*		*13.9*			*20.1*		*5.85*	*66.4*
SB-735	10-12	12/10/98		*16.2*	*9.4*		*14.3*			*54.5*		*268*	*123*
SB-736	6-8	12/08/98		*4.64*	*1.77*		*1.54*					*3.56*	
SB-739	6-8	12/09/98		*1.22*	*1.14*		*1.54*					*1.68*	
PZ-702	14-16	12/09/98		*47.8*	*44.5*		*60.2*					*1,400*	*729*
PZ-703	16-18	12/08/98										*10.7*	

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) *** - The laboratory surrogate recovery was below laboratory limits. The sample was re-extracted past hold time and analyzed. Both results are reported.
4) NE - not established.

Table A.4.-4 Post-Remedial Soil Analyical Data Exceeding RCLs Table 1 of 1.
Camp Marina Manufactured Gas Plant
BRRTS #02-06-000095

			Volatile Organic Compounds (mg/kg)													mg/kg	
Sample ID	Approximate Elevation (Feet, Mean Sea Level)	Date	Benzene	Toluene	Benzo(a)anthracene [c]	Benzo(a)pyrene [c]	Benzo(b)fluoranthene [c]	Benzo(k)fluoranthene [c]	Chrysene [c]	Dibenzo(a,h)anthracene [c]	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene [c]	Naphthalene	Pyrene	Total Lead	Total Cyanide[7]
Groundwater Pathway RCLs			*0.005*	*1.11*	*NE*	*0.47*	*0.48*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*54.5*	*27*	*NE*
Direct Contact RCLs			**1.49**	**818**	**0.15**	**0.01**	**0.15**	**1.48**	**14.8**	**0.015**	**2290**	**2290**	**0.15**	**5.15**	**1720**	**400**	**26.4**
Soil Samples Collected from the Unsaturated Zone																	
EZ-102[5]	580	12/15/2000	*0.3*		**1.5**	**3.27**	**2.92**	**1.89**	*1.76*	**0.563**			**1.42**			*29*	**33**
EZ-103[5]	580	12/15/2000	*0.577*		**40.5**	**41.4**	**50.5**	**31.4**	**39.4**	**8.32**		*31.5*	**20**	*4.65*	*65.4*	*363*	**579**
EZ-104[5]	580	12/15/2000	*0.045*		**2.33**	**2.32**	**3.08**	**2.19**	*2.3*	**0.556**			**1.42**				
EZ-201[5]	Excavated	11/27/2000	*0.066*													**423**	
EZ-202[5]	Excavated	11/27/2000														*192*	**250**
EZ-203[5]	Excavated	11/27/2000	*0.068*													**510**	**411**
EZ-205[5]	601	4/2/2001			**0.663**	**0.742**	**1.0**		*0.786*								**81**
EZ-206[5]	601	4/2/2001			**1.73**	**1.79**	**1.99**	**2.7**	*1.96*								**31**
EZ-301[5]	580	12/5/2000			**4.85**	**4.17**	**4.445**	**4.3**	*5.22*	**0.98**			**2.59**			*346*	**93**
EZ-302[5]	580	12/5/2000			**6.73**	**4.37**	**7.67**	**5.61**	*7.68*	**1.19**			**3.29**			*230*	**241**
EZ-401[6]	580	11/30/2000	*0.284*		**1.17**	**1.29**	**1.32**		*1.47*					*0.949*		**1,010**	
EZ-402[6]	580	11/30/2000	**5.49**	*3.57*	**173**	**157**	**168**	**105**	**153**	**25.6**	*431*	*48.4*	**86**	**10.9**	*358*	*60*	
EZ-403[6]	578	11/30/2000	*0.579*		**9.62**	**12.3**	**14.5**	**8.14**	*9.97*	**2.25**			**7.01**	*2.5*		*168*	**42**
EZ-404[6]	580	11/30/2000			**3.9**	**3.61**	**3.4**	**2.95**	*3.97*				**1.65**	*0.886*		*62*	
EZ-405[6]	580	11/30/2000	*0.371*		**18.7**	**18.2**	**25.9**	**14.6**	**19.4**	**3.4**			**8.07**	*3.23*		*229*	**113**

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Direct Contact RCLs
3) [c]= carcinogenic PAH, classified as B2 probable human carcinogen
4) NE = not established
5) Locations EZ-101 to EZ-302 were either excavated or are covered with geosynthetic and/or earthen cover.
6) Locations EZ-401 to EZ-405 in river bank area remediated during 2011 USEPA time-critical removal action.
7) The groundwater pathway RCL has been established for free cyanide only.

EXHIBIT A

INSPECTION LOG FORM

INSPECTION and MAINTENANCE LOG
Camp Marina Engineering Controls and Barriers

Inspection Date	Inspector	Was Erosion Observed?	Shoreline Riprap Present?	Recommendations	Has recommended maintenance from previous inspection been implemented?

Attachment D.4. Inspection Log

INSPECTION and MAINTENANCE LOG
Camp Marina Engineering Controls and Barriers

Inspection Date	Inspector	Was Erosion Observed?	Shoreline Riprap Present?	Recommendations	Has recommended maintenance from previous inspection been implemented?

Attachment D.5. Contact Information

Chad Pelishek
City of Sheboygan
828 Center Avenue
Sheboygan, WI 53081
(920)459-3383

Attachment E – Form 4400-113A

Not Applicable

Explanation: All monitoring wells will be properly abandoned upon DNR granting conditional closure.

Attachment F – Notifications to Owners of Impacted Properties

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Impacted Property Notification Information

Form 4400-246 (R 10/12)

Notice: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, where specific circumstances exist at the time of case closure. This form applies to situations where: (1) the party conducting the cleanup does not own the source property; (2) contamination has impacted a neighboring property to a certain degree; and (3) not all monitoring wells can/will be abandoned at the time of closure. A letter notifying these property owners is required of the responsible party if certain circumstances exist. The DNR's "Guidance on Case Closure and the Requirements for Managing Continuing Obligations" (PUB-RR-606) specifies those notification requirements. A model "Template for Notification of Residual Contamination and Continuing Obligations" (PUB-RR-919) can be downloaded at: http://dnr.wi.gov/files/PDF/pubs/rr/RR919.pdf. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS No.	Activity Name
02-60-000095	Camp Marina Manufactured Gas PLT (MGP)

						Letter Sent To:			Reasons Letter Sent:							
ID	Impacted Property Address	Parcel No.	Date of Letter	WTMX	WTMY	Source Property Owner is not RP	Right of Way Government or Other	Impacted Off-Site Property Owner	Groundwater Exceeds ES	Residual Soil Exceeds Standards	Cap/Engineerd Control	Industrial Use Soil Standards	Vapor System in Place	Vapor Asmt Needed if use Changes	Structural Impediment	Lost, Transferred or Open Wells
A	732 N Water St, Sheboygan, WI 53081	59281107760	05/2013	703811	366801	X			X	X	X		X	X		
B	714 N Water St, Sheboygan, WI 53081	59281107756	05/2013	703811	366801	X										
C	Center Ave, Sheboygan, WI 5308	59281108711	05/2013	703811	366801	X	X		X	X	X		X	X		
D																
E																
F																
G																
H																
I																

Wisconsin Public Service Corporation
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001

May 3, 2013

Mr. Stephen G. McLean
City Attorney
City of Sheboygan
807 Center Avenue
Sheboygan, WI 53081-4414

Re: CampMarina

Dear Mr. McLean:

This letter relates to Wisconsin Public Service Corporation's (WPSC) investigation and remediation of contaminants at WPSC's historic manufactured gas plant on the city's CampMarina property located at 732 North Water Street. The cleanup of the upland portion of the CampMarina property is now complete. WPSC is working with the United States Environmental Protection Agency and the State of Wisconsin to document that no further action is required on the upland property.

The actual remediation of the upland portion of the CampMarina property took place years ago and involved the removal of contaminated soil, the construction of barrier walls around the site and capping of the surface areas. Some contaminated residuals remain at the site but are appropriately contained with the engineered barriers and cap that were constructed on the property.

In order to maintain the effectiveness of these engineering structures, WPSC needs to assure that no groundwater wells are placed on the property, that the surface cap is not disturbed and that the barrier walls remain in place. WPSC intends to use the Wisconsin Geographic Information System (GIS) approach established by the Wisconsin Department of Natural Resources as opposed to relying on deed notices and restrictions. Under the GIS approach, WPSC will list on a central state database the following restrictions/notices relating to the CampMarina property:

(1) No groundwater wells may be installed, except as approved by the Wisconsin Department of Natural Resources.

(2) No activities may be undertaken that will disturb the engineered cap or the engineered barrier walls, except as approved by the Wisconsin Department of Natural Resources. These activities would include (i) removal of the existing barrier, (ii) replacement of the barrier, (iii) excavating or grading at a depth that would affect the cap or the barrier walls, and (iv)

construction or placement of a building or structure in a manner that adversely affects the cap or the barrier walls, including docks or other structures attached to the Waterloo barrier wall along the Sheboygan River.

A map showing the engineered structures and the cap is enclosed. This map (with the city's approval) will be placed on the GIS system so that a record of the restrictions is maintained and is readily available via the state website.

Under Wis. Stat. § 292.12, the responsibility for meeting the above restrictions will be the city's as the current property owner. Should there be any sale or transfer of the property, these restrictions transfer by law to the subsequent property owner. As we discussed, WPSC is seeking a Certificate of Completion under the Wisconsin Voluntary Party Liability Exemption (VPLE) program. The Certificate of Completion, which runs with the land, will also benefit the city as the property owner. The practical effect of the certificate is to exempt the city (and WPSC) from liability under the Wisconsin cleanup laws for "remedy failure" risks associated with the site.

If the GIS notification is approved and filed with the Department, the groundwater use restriction and the restrictions on not disturbing the engineered cap and barrier walls will be listed on the publicly accessible Bureau of Remediation and Redevelopment Tracking System on the Wisconsin Department of Natural Resources' website. This website will provide public notice that residual contamination exists and that engineered barriers and groundwater use restrictions are in place. In addition, information will be displayed on the Remediation and Redevelopment Sites Map, a mapping application, under the GIS Registry. This GIS Registry is available to the general public on the Department's website. Department approval prior to well construction or reconstruction is required for all sites shown on the GIS Registry, in accordance with Wis. Admin. Code § NR 812.09(4)(w).

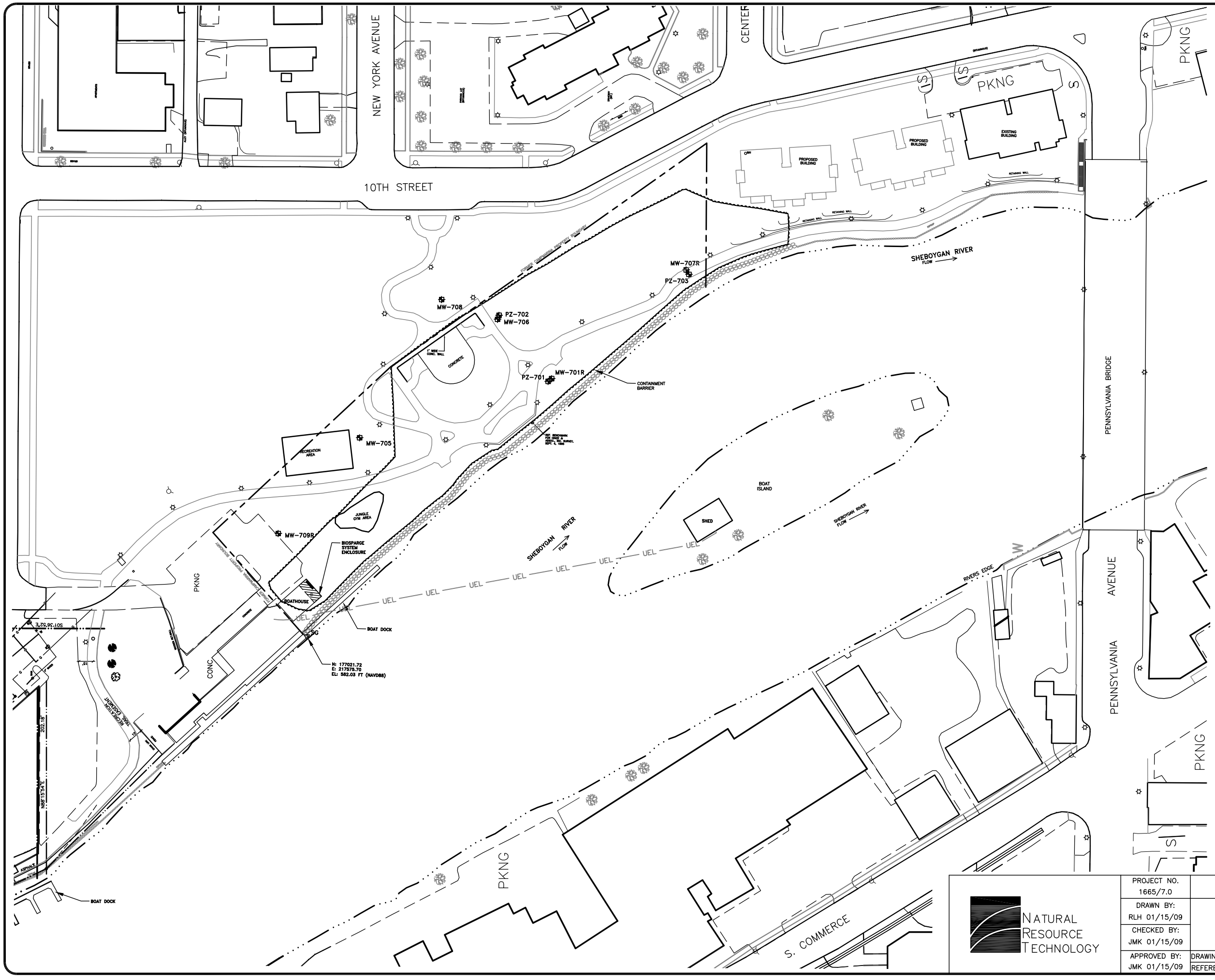
WPSC understands the City Council will be requested to approve the placement of these restrictions on the Wisconsin GIS system. If there are any questions or if additional information would be helpful prior to or at the meeting, please contact Brian Bartoszek, Manager-Remediation & Solid Waste, Integrys Business Support, LLC, 700 North Adams Street, Post Office Box 19001, Green Bay, WI 54307-9001.

Very truly yours,

Brian F. Bartoszek

Enclosure

cc: Connie Lawniczak



LEGEND

MW-706	MONITORING WELL
PZ-701	PIEZOMETER
SG	STAFF GAUGE
	TREES
	RIPRAP
	LIGHT POLE
	FORMER CAMPMARINA PROPERTY BOUNDARY
	CONTAINMENT BARRIER
	RIVERS EDGE
UEL	UNDERGROUND UTILITY LINE

SOURCE NOTES:
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOP0022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NAT-AERIAL.DWG, SHEBOYGAN COUNTY COORDINATE SYSTEM, US FOOT, E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBRUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.

DATUM (FT)		
IGLD85	NAVD88	CITY OF SHEBOYGAN
579.8	581	0

IGLD85 = INTERNATIONAL GREAT LAKES DATUM 1985
NAVD88 = NORTH AMERICAN VERTICAL DATUM (1988)

0 25 50 100
SCALE IN FEET

NATURAL RESOURCE TECHNOLOGY

PROJECT NO. 1665/7.0	
DRAWN BY: RLH 01/15/09	
CHECKED BY: JMK 01/15/09	
APPROVED BY: JMK 01/15/09	DRAWING NO: 1665-7-B02
	REFERENCE: .

SITE PLAN

REMEDIAL INVESTIGATION REPORT
RIVER OU SHEBOYGAN-CAMPMARINA
WISCONSIN PUBLIC SERVICE CORPORATION
SHEBOYGAN, WISCONSIN

FIGURE NO. 2

Jennifer M. Kahler

From: Bartoszek, Brian F <BFBartoszek@integrysgroup.com>
Sent: Friday, May 17, 2013 2:46 PM
To: Jennifer M. Kahler
Subject: FW: Campmarina Maintenance Agreement
Attachments: Exhibit A Cap Maint Plan FINAL 130503.pdf; 20130305_Campmarina Maintenance Agreement.pdf; 20130503_Exhibit B.pdf

Brian F. Bartoszek, P.E.
Manager - Remediation & Solid Waste | Environmental Services | Integrys Business Support, LLC

700 N Adams Street
Green Bay, WI 54307-9001
920-433-2643
920-433-1176 *fax*
bfbartoszek@integrysgroup.com

www.integrysgroup.com

Providing support for Integrys Energy Group, Integrys Energy Services, Integrys Transportation Fuels, Michigan Gas Utilities, Minnesota Energy Resources, North Shore Gas, Peoples Gas, Upper Peninsula Power Company and Wisconsin Public Service.

From: Bartoszek, Brian F
Sent: Friday, May 03, 2013 3:12 PM
To: McLean, Steve
Cc: cpelishek@ci.sheboygan.wi.us; 'MThimke@foley.com'
Subject: Campmarina Maintenance Agreement

Steve,

Attached is the maintenance agreement with exhibits that we discussed earlier today for your use at the council meeting Monday. Please contact me or Mark Thimke with any questions.

Thanks,
Brian

Brian F. Bartoszek, P.E.
Manager - Remediation & Solid Waste | Environmental Services | Integrys Business Support, LLC

700 N Adams Street
Green Bay, WI 54307-9001
920-433-2643
920-433-1176 *fax*
bfbartoszek@integrysgroup.com

www.integrysgroup.com

Providing support for Integrys Energy Group, Integrys Energy Services, Michigan Gas Utilities, Minnesota Energy Resources, North Shore Gas, Peoples Gas, Upper Peninsula Power Company and Wisconsin Public Service.

Attachment G.1. Deed - Source Property

OFFICE OF CITY CLERK
SHEBOYGAN, WISCONSIN
CITY HALL

I hereby certify that this is a true copy of a document from the Common Council proceedings of the City of Sheboygan. VOL 1609 PAGE 790

Patricia Lohse
City Clerk

Res. No. 99 - 98 - 99. By Alderperson Leibham. July 20, 1998.

A RESOLUTION vacating a portion of Center Ave. from the west right-of-way line of N. Water St. to the Sheboygan River.

RESOLVED: That by and through the passage of this resolution, it is the declared judgment and finding of the Common Council of the City of Sheboygan that the public interest requires the vacation of the hereinafter described portion of Center Ave. from the west right-of-way line of N. Water St. to the Sheboygan River.

BE IT FURTHER RESOLVED: That the portion of roadway in the City and County of Sheboygan, State of Wisconsin, described as:

Being part of Center Ave. located between Blk. 149 and Blk. 156, Original Plat, City of Sheboygan, located in the W. 1/2 of the SW 1/4 of Sec. 23, T15N, R23E, being more particularly described as:

Commencing at the NE corner of Lot 9, Blk. 156, Original Plat, that also being the point of beginning, thence W., along the S. r.o.w. line of Center Ave. 152.50, plus or minus, to the E.L. of the Sheboygan River, thence NWly along said E.L. 86', plus or minus, to the N. r.o.w. of Center Ave., thence E., along said N. L. 157', more or less, to the SE corner of Blk. 149, Original Plat, thence SEly 84.37' to the NE corner of Blk. 156, and the point of beginning, said tract containing 12,130.14 sq. ft. or 0.278 acres, being adjacent to Lots 1, 2 and 3 of said Block 149 and Lot 9 of said Block 156.

be and it is hereby vacated and discontinued under the provisions of Sec. 296(2) of the Wisconsin Statutes, and

BE IT FURTHER RESOLVED: That the City Clerk is hereby authorized and directed to cause the recording of a certified copy hereof together with a map of such vacated street in the office of the Register of Deeds for Sheboygan County, Wisconsin.

Plan Comm

Joseph M. Leibham

I HEREBY CERTIFY that the foregoing Resolution was duly passed by the Common Council of the City of Sheboygan, Wisconsin, on the 9th day of September, 1998.

Dated September 11 1998. Patricia Lohse, City Clerk

Approved September 11 1998. James Sorenson, Mayor

Proceedings Published September 14, 1998.

Resolutions Published _____, 19___.

Certified September 15, 1998 to Fin. Dir./Treas.; Dep. Fin. Dir./Treas.; DPW; Eng.; Atty.; City Plan Comm.; Register of Deeds; Assessor; Ameritech; Wis. Power & Light; Wis. Public Service Corp.; Dir. of City Dev.; Water Ut.; Police Dept.; Bldg. Insp. Dept.

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Vol 1609 Page 791

1519699

SHEBOYGAN COUNTY, WI
RECORDED ON

10-02-1998 10:05 AM

DARLENE J. NAVIS
REGISTER OF DEEDS

RECORDING FEE: 14.00
TRANSFER FEE:

003556 0004

OFFICE OF CITY CLERK
SHEBOYGAN, WISCONSIN
CITY HALL

I hereby certify that this is a true copy of a document from the Common Council proceedings of the City of Sheboygan. VOL 1749 PAGE 589

Patricia Lohse
City Clerk

Gen. Ord. No. 26 - 00 - 01. By Alderperson T. Van Akkeren. July 5, 2000.

AN ORDINANCE granting the Sheboygan Outboard Club, Inc., its successors and assigns, the privilege of encroaching upon the described portion of New York Ave. in the City of Sheboygan for the purpose of locating docks along the Sheboygan River.

THE COMMON COUNCIL OF THE CITY OF SHEBYGAN DO ORDAIN AS FOLLOWS:

Section 1. Subject to the terms and conditions contained herein, the Sheboygan Outboard Club, Inc., its successors and assigns, is hereby granted the privilege of encroaching upon the following-described portion of New York Ave. right-of-way for the purpose of locating docks along the Sheboygan River, and as further shown in the sketch attached hereto and made a part hereof:

That part of the existing right-of-way for New York Ave., adjacent to Lot 1 and 2 of Block 133 and Lot 11 of Block 149 of the Original Plat of the City of Sheboygan, in the NW 1/4 of the SW 1/4 of Section 23, T15N, R23E, Sheboygan County, Wisconsin, being more particularly described as follows:

A 30' wide strip of land all that lies within the existing right-of-way for said New York Ave., and adjacent to the NEly shore of the Sheboygan River. Said tract contains 1,517 square feet, or 0.035 acre.

Section 2. The privilege as granted above is granted only on the condition that by the acceptance of the privilege, the said Sheboygan Outboard Club, Inc., its successors and assigns:

a. Shall become primarily responsible and liable for all and any damage to persons or property caused by and arising from the grant and exercise of such privilege.

1575608

SHEBOYGAN COUNTY, WI
RECORDED ON

07-26-2000 11:55 AM

DARLENE J. NAVIS
REGISTER OF DEEDS

RECORDING FEE: 12.00
TRANSFER FEE:

041240 2

2

b. Shall remove the encroachment allowed herein within ten (10) days after notice so to remove given by the State of Wisconsin or the City of Sheboygan; in the event of the failure so to remove, the said Sheboygan Outboard Club, its successors and assigns: shall pay the costs of removal by the State of Wisconsin or the City of Sheboygan, waiving all claim or claims for damages resulting from such removal, whether the removal is done by the said Sheboygan Outboard Club, Inc., its successors and assigns, or by the State of Wisconsin or by the City of Sheboygan.

c. Shall pay such compensation to the City of Sheboygan for the grant of this privilege as may be determined by a board consisting of the Mayor, the Director of Public Works and the City Attorney; the compensation shall be paid into the General Fund.

d. Shall make such construction and/or alterations and maintain the same subject to the approval of the City Building Inspector and Director of Public Works, and shall waive the right to contest in any manner the validity of this ordinance or the amount of compensation charged.

Section 3. The provisions of §66.045(1)(2) of the Wisconsin Statutes are incorporated herein by reference to all intents and purposes as if set out fully.

Section 4. The City Clerk is authorized and directed to record a certified copy of this ordinance in the office of the Register of Deeds for Sheboygan County, Wisconsin, the costs thereof to be charged to the General Fund.

Section 5. This ordinance shall take effect and be in full force from and after its passage and publication and upon payment of the consideration to be determined hereunder, provided, however, that in the event of failure to exercise the privilege herein granted and the payment of such consideration within six (6) months from the effective date hereof, then and in that event such privilege shall be rendered null and void.

Plan Comm Dept Dir and be passed

I HEREBY CERTIFY that the foregoing Ordinance was duly passed by the Common Council of the City of Sheboygan, Wisconsin, on the 17th **day of** July, 20 00.

Dated July 19 20 00. Patricia Lohse, City Clerk

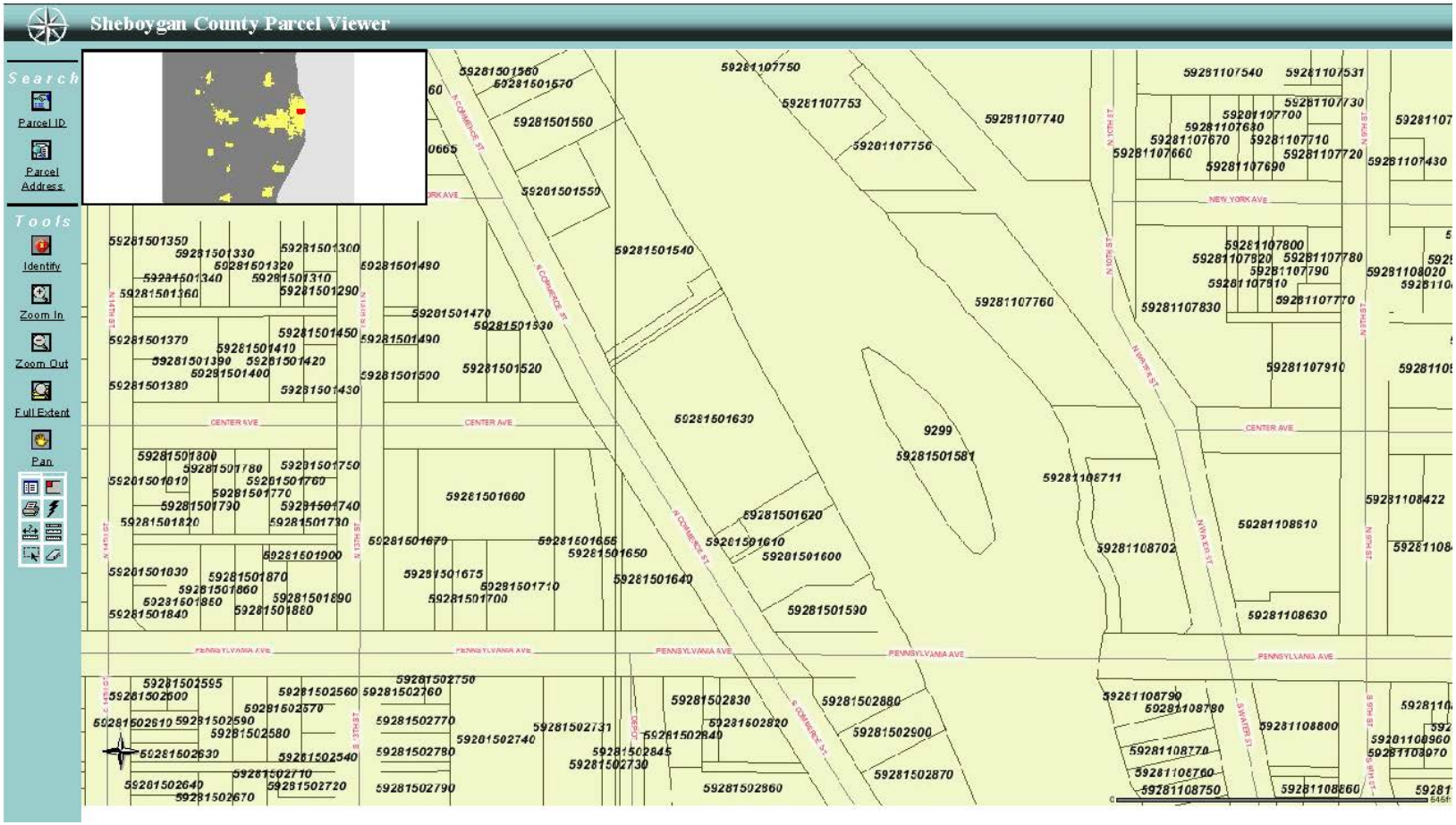
Approved July 19 20 00. James DeBruin, Mayor

Proceedings Published July 22 20 00.

Ordinances Published July 22 20 00.

Certified July 24 20 00 to Atty.; Ord. Book; Dir. of City Dev.; Assessor; DPW; Bldg. Insp.; Eng.; Police Dept.; Mayor; Fin. Dir./Treas.; Dep. Fin. Dir./Treas.; Register of Deeds; Sheboygan Outboard Club

Sheboygan County Parcel Viewer



These descriptions are for the purpose of compliance with Chapter 70.09, Wisconsin State Statutes. Courses and distances are extracted from the public record, and are often developed from more than one, incompatible source. Actual descriptions are available from the Sheboygan County Register of Deeds office. The descriptions listed on this page should not be considered a substitute for any but the most general purposes.

NOTE: Recorded Descriptions are available online at: Tapestry - Public Information on the Internet

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Property Information
Parcel Number 59281107760
Municipality CITY OF SHEBOYGAN

Site Address: 640 N WATER ST
Mailing Address 828 CENTER AVE
City, State, Zip SHEBOYGAN,WI 530814442
Sec, Town, Range Approx. Acres 0
Full Parcel Description Documents List School District SHEBOYGAN

Legal Description
ORIGINAL PLAT ALL OF BLK 149 & THE VAC S 20' OF NEW YORK AVE ADJ BLK 149 CAMPMARINA PARK

Property Information
Parcel Number 59281108711
Municipality CITY OF SHEBOYGAN

Sites Address
Mailing Address 807 CENTER AVE
City, State, Zip SHEBOYGAN,WI 530814462
Sec, Town, Range Approx. Acres 0
Full Parcel Description Documents List School District SHEBOYGAN

Legal Description
ORIGINAL PLAT THAT PRT OF VAC CENTER AVE LYING W OF WATER ST BETWEEN BLKS 149 & 156, ALSO THE NLY 10' OF BLK 156 DESC AS COM AT INTERSECTION OF S LN OF CENTER AVE WITH THE W LN OF WATER ST, THE P.O.B., TH S 13* E 10.25', TH W 115.79',

TH N 22* W 10.03', TH E 117.19' TO P.O.B., ALSO THE WLY 25' M/L OF BLK 156 ADJ TO THE SHEBOYGAN RIVER FROM VAC CENTER AVE S TO PENNSYLVANIA AVE

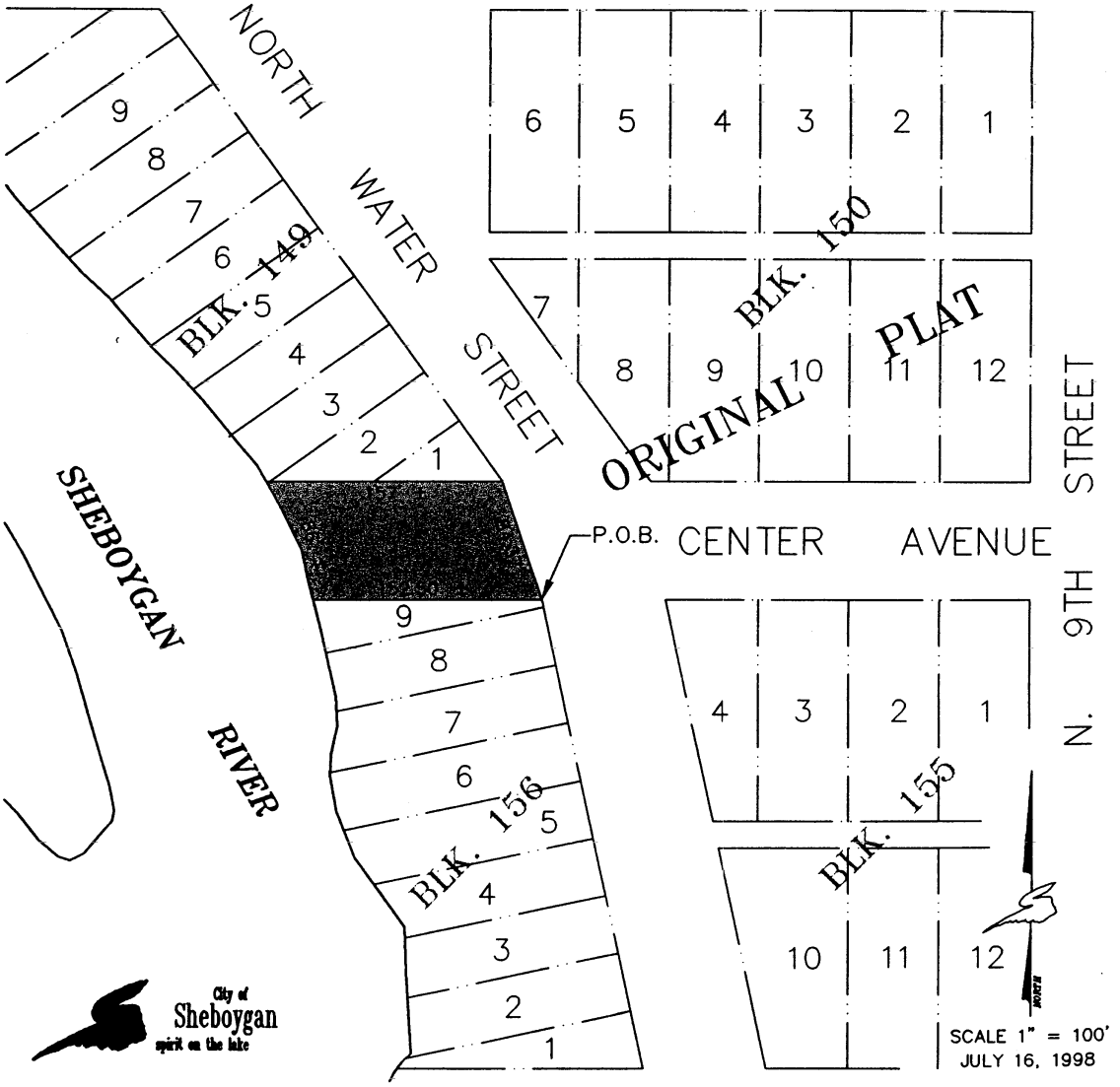
Attachment G.2. Certified Survey Map

PROPOSED VACATION OF CENTER AVENUE

SECTION 23, T. 15 N., R. 23 E.

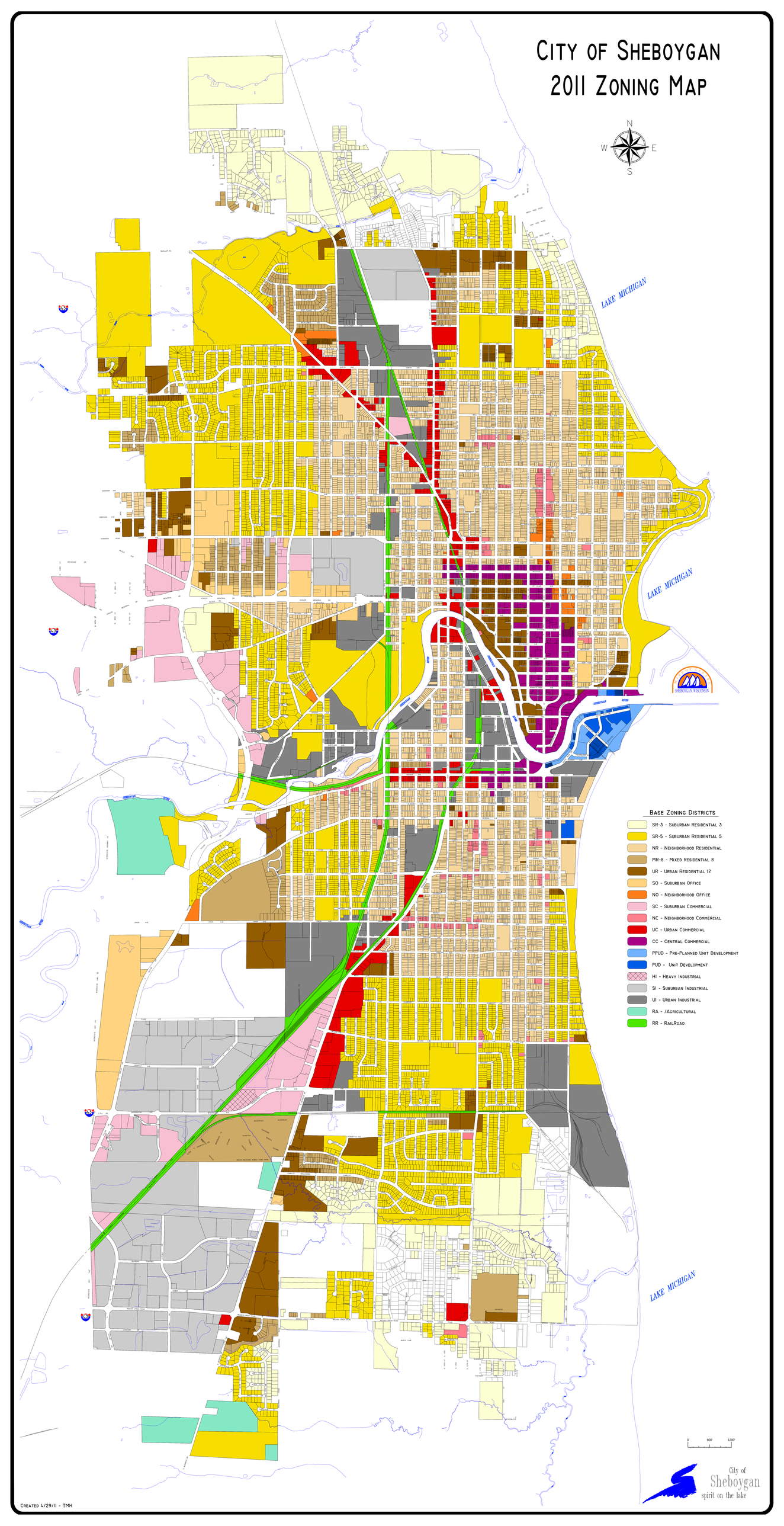
BEING PART OF CENTER AVENUE LOCATED BETWEEN BLOCKS 149 AND 156 OF THE ORIGINAL PLAT OF THE CITY OF SHEBOYGAN, LOCATED IN THE WEST 1/2 OF THE SW 1/4 OF SECTION 23, T. 15 N., R. 23 E., IN THE CITY OF SHEBOYGAN, BEING MORE PARTICULARLY DESCRIBED AS

COMMENCING AT THE NORTHEAST CORNER OF LOT 9, BLOCK 156 OF THE ORIGINAL PLAT OF THE CITY OF SHEBOYGAN, THAT ALSO BEING THE POINT OF BEGINNING. THENCE WEST, ALONG THE SOUTH R/W LINE OF CENTER AVENUE 152.50' ± TO THE EAST LINE OF THE SHEBOYGAN RIVER, THENCE NORTHWESTERLY, ALONG SAID EAST LINE 86' ± TO THE NORTH R/W OF CENTER AVENUE, THENCE EAST, ALONG SAID NORTH LINE 157' ± TO THE SOUTHEAST CORNER OF BLOCK 149 OF THE ORIGINAL PLAT OF THE CITY OF SHEBOYGAN, THENCE SOUTHEASTERLY 84.37' TO THE NORTHEAST CORNER OF BLOCK 156, AND THE POINT OF BEGINNING. SAID TRACT CONTAINS 12,130.14 SQ. FT. OR 0.278 ACRES.



Attachment G.3. Verification of Zoning

City of Sheboygan
2011 Zoning Map



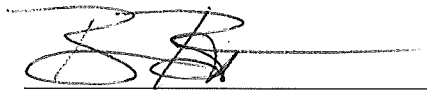
Created 4/29/11 - TMH

Attachment G.4. Signed Statement

LEGAL DESCRIPTION CERTIFICATION

Legal Description Provided as Part of a WDNR GIS Registry Packet for:
Wisconsin Public Service Corporation
Camp Marina Manufactured Gas Plant
732 N Water St
Sheboygan, WI
BRRTS # 02-60-000095
FID #460134950

"I certify that the attached legal description is, to the best of my knowledge, complete and accurate."



Mr. Brian Bartoszek
Manager - Remediation and Solid Waste
Environmental Services
Integrys Business Support, LLCs

5/17/13
Date