

This SWPPP was prepared using the Ecology SWPPP Template downloaded from the Ecology website on June 28, 2019. The Template has been revised to incorporate all items in the General NPDES Permit as well as provide more project specific BMPs that will be utilized onsite. This SWPPP was prepared based on the requirements set forth in the Construction Stormwater General Permit, *Stormwater Management Manual for Western Washington* (SWMMWW 2012). The site project information for the site is summarized below.

Project/Site Name: Legacy Plaza Senior Living  
 Street/Location: 36 West Main Street  
 City: Auburn State: WA Zip code: 98001  
 Subdivision: City of Auburn  
 Receiving waterbody: City of Auburn

## 1.1 Existing Conditions

The site is approximately 0.85 acres and consists of four existing parcels (King County Parcel Nos. 781570-0115, 781570-0110, 781570-0095, and 781570-0135). Currently the project site consists of an asphalt and gravel parking lot with planters containing deciduous trees and shrubs. The four-parcel project site occupies most of a city block, with the exception of a single parcel to the northeast and a single parcel in the southwest corners that are not a part of the project. The topography of the site slopes down in a west and north direction with slopes ranging from approximately 1 percent to 3 percent. Total relief across the site is roughly 2 feet. The on-site soils encountered during exploration borings are fill overlying Quaternary alluvial deposits.

Total acreage: 0.85  
 Disturbed acreage: 0.85  
 Existing structures: 0  
 Landscape: Flat  
 topography:  
 Drainage patterns: Topography slopes to the northwest with a series of onsite catch basins that convey water to the public storm system located in A street SW.  
 Existing Vegetation: Planters containing deciduous trees and shrubs  
 Critical Areas (wetlands, streams, high erosion Ground Water Protection Zone 3 risk, steep or difficult to stabilize slopes):

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody: None

Table 1 includes a list of suspected and/or known contaminants associated with the construction activity.

**Table 1 – Summary of Site Pollutant Constituents**

Constituent (Pollutant)	Location	Depth	Concentration
GRPH	SW quadrant of site	9ft-16ft9ft-16ft9ft-16ft	430 mg/kg

DRPH	SW quadrant of site	9ft-16ft	2,600 µg/L
ORPH	SW quadrant of site	9ft-16ft	3,300 µg/L

## 1.2 Proposed Construction Activities

Description of site development (example: subdivision):

The proposal is to construct a mid-rise apartment building which includes a ground-level mixed-use floor that includes parking, commercial space, recreational facilities, and an office, and six floors of residential units above. The site will have sewer service from an existing public sewer main, as well as water service from an existing water main.

Description of construction activities (example: site preparation, demolition, excavation):

Construction activities will include clearing & grading, contaminated soil remediation, utilities installation, foundation excavation, building construction, and landscaping.

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:

Based on available topography maps, and the developed condition of the properties directly adjacent to the site, it does not appear that the site receives any runoff from adjacent properties. The onsite area contains one basin.

In the developed condition, drainage will be collected via catch basins and roof drains and piped to a detention vault.

Description of final stabilization (example: extent of revegetation, paving, landscaping):

In the developed condition the site area will be covered almost entirely by the building footprint.

### *Contaminated Site Information:*

Proposed activities regarding contaminated soils or groundwater (example: on-site treatment system, authorized sanitary sewer discharge):

The on-site contaminated soils and groundwater on the South East corner of the site will be excavated and treated under the supervision of the project's geotechnical engineer.

Contaminated soils will be excavated and disposed of at an approved disposal site.

Contaminated groundwater will be captured and treated with baker tanks prior to discharge to the city storm system. This water shall be tested by Associated Earth Sciences, Inc for compliance prior to discharge.

## A. Site Map

The site map must meet the requirements of Special Condition S9.E of the CSWGP

## B. BMP Detail

Insert BMPs specification sheets here.

Download BMPs from the Ecology Construction Stormwater website at:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

Select Resources and Guidance to find the links to the Stormwater Manuals.

## C. Correspondence

Ecology

EPA

Local Government

## D. Site Inspection Form

Create your own or download Ecology's template:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

Select Permit, Forms and Application to find the link to the Construction Stormwater Site Inspection Form.

## E. Construction Stormwater General Permit (CSWGP)

Download the CSWGP:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

## F. Contaminated Groundwater Sampling and Testing Program

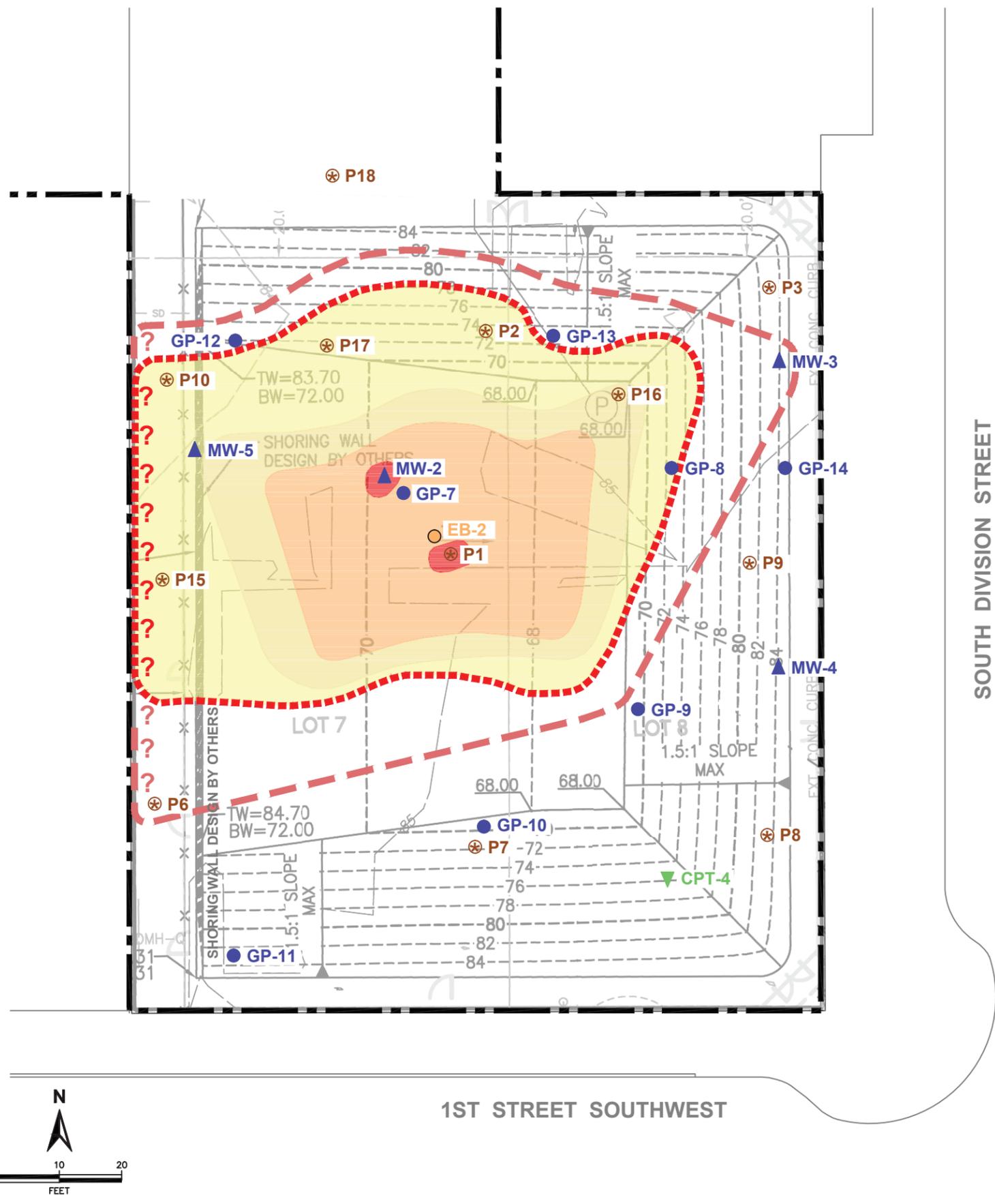
Example contaminated groundwater sampling and testing program. The treated water must be sampled and tested by Associated Earth Sciences, Inc. for compliance prior to discharging to the public storm system.

# Appendix F Contaminated Groundwater Sampling and Testing Program

## APPENDIX F: CONTAMINATED GROUNDWATER SAMPLING AND TESTING PROGRAM

Pollutant & CAS No. (if available)	Sampling Frequency	Sample Type	Indicator Level, µg/L unless otherwise noted	Analytical Method <sup>b</sup>	Detection Level, µg/L	Quantitation Level, µg/L
<b>PETROLEUM HYDROCARBONS</b>						
Diesel-Range Hydrocarbons (NWTPH-Dx)	Weekly when using flow-through system	Grab	250 <sup>a</sup>	NWTPH-Dx	250	250
Gasoline-Range Hydrocarbons (NWTPH-Gx)	Weekly when using flow-through system	Grab	250 <sup>a</sup>	NWTPH-Gx	250	250
BTEX (benzene + toluene + ethylbenzene + m,o,p xylenes)	Weekly when using flow-through system	Grab	2 <sup>a</sup>	EPA SW 846 8021/8260	1	2
<b>Construction Stormwater General Permit Benchmarks</b>						
Parameter			Benchmark	Analytical Method		
Turbidity	Weekly when using flow-through system.	Grab	25 NTU	SM2130 <sup>b</sup>		
pH	Weekly when using flow-through system.	Grab	6.5 - 8.5 SU	pH Meter		
<sup>a</sup>	No surface water standard, value is laboratory quantitation level.					
<sup>b</sup>	Or equivalent					

EXPLORATION ID	SAMPLE ID	DEPTH	BENZENE	GRPH	DRPH	ORPH
P1	P1-9	9	<0.03	750	16,000	<250
P2	P2-10	10	<0.03	<2	4,800	<250
P6	P6-9	9	<0.03	90	<50	<250
P9	P9-15	15	--	--	<50	<250
P10	P10-7	7	<0.03	400	160	<250
	P10-20	20	<0.03	<2	<50	<250
P15	P15-7	7	<0.02	670	1,700	<250
	P15-15	15	<0.02	350	4,200	<250
	P15-20	20	<0.02	<2	<50	<250
P16	P16-9	9	<0.02	270	8,100	<250
	P16-15	15	<0.02	8.2	<50	<250
P17	P17-9	9	<0.02	560	4,200	<250
	P17-13	13	<0.02	6.4	<50	<250
	P17-20	20	<0.02	<2	<50	<250
P18	P18-10	10	--	<2	<50	<250
GP-7	GP-7:9	9	<0.02	290	2,300	<250
	GP-7:16	16	<0.02	430	4,000	<250
	GP-7:20	20	<0.02	<5	<50	<250
GP-8	GP-8:15	15	<0.02	16	<50	<250
	GP-8:16	16	<0.02	100	150	<250
	GP-8:20	20	<0.02	<5	<50	<250
GP-9	GP-9:16	16	<0.02	<5	<50	<250
	GP-9:20	20	<0.02	<5	<50	<250
GP-10	GP-10:15	15	<0.02	<5	<50	<250
	GP-10:17	17	<0.02	<5	<50	<250
	GP-10:18	18	<0.02	<5	<50	<250
GP-11	GP-11:16	16	<0.02	<5	<50	<250
	GP-11:20	20	<0.02	<5	<50	<250
GP-12	GP-12:16	16	<0.02	<5	<50	<250
	GP-12:20	20	<0.02	<5	<50	<250
GP-13	GP-13:12	12	<0.02	32	<50	<250
	GP-13:17	17	<0.02	63	270	<250
	GP-13:20	20	<0.02	<5	<50	<250
GP-14	GP-14:16	16	<0.02	<5	<50	<250
	GP-14:20	20	<0.02	<5	<50	<250
EB-2	EB-2-5	5	<0.02	<5	<50	<250
	EB-2-7.5	7.5	<0.02	170	1,300	<250
	EB-2-15	15	<0.02	310	8,700	<250
	EB-2-22.5	22.5	<0.02	7.2	<50	<250
MW-2	MW-2:15	15	<0.02	320	7,600	<250
MW-3	MW-3-7.5	7.5	<0.02	<5	<50	<250
	MW-3-20	20	<0.02	<5	<50	<250
MW-4	MW-4-7.5	7.5	<0.02	<5	<50	<250
	MW-4-15	15	<0.02	<5	67 x	<250
	MW-4-20	20	<0.02	<5	<50	<250
MW-5	MW-5-5	5	<0.02	<5	<50	<250
	MW-5-7.5	7.5	<0.02	140	7,900	<250
	MW-5-15	15	<0.02	<5	<50	<250
	MW-5-20	20	<0.02	12	<50	<250
MTCA METHOD A CLEANUP LEVEL			0.03	30/100	2,000	2,000
ALL CONCENTRATIONS ARE REPORTED AS MILLIGRAMS PER KILOGRAM.						



**LEGEND:**

- GP GEOPROBE BORING
- EB EXPLORATION BORING
- ▲ MW MONITORING WELL
- ⊗ P GEOPROBE BORING - BY OTHERS THE RILEY GROUP - 2014
- SITE BOUNDARY
- ▼ CPT GEOTECH CONE PENETRATION TEST
- BOLD** CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL
- NOT ANALYZED
- GRPH GASOLINE-RANGE PETROLEUM HYDROCARBONS
- DRPH DIESEL-RANGE PETROLEUM HYDROCARBONS
- ORPH OIL-RANGE PETROLEUM HYDROCARBONS
- APPROXIMATE EXTENTS OF PETROLEUM-CONTAMINATED SOIL AT CONCENTRATIONS ABOVE MTCA METHOD A CLEANUP LEVELS
- APPROXIMATE EXTENTS OF CATEGORY II / III PETROLEUM-CONTAMINATED SOIL

**DRPH CONCENTRATION**

- Red: ≥12,000
- Orange: 10,000 - 11,999
- Yellow: 8,000 - 9,999
- Light Yellow: 2,000 - 7,999

ALL CONCENTRATIONS ARE REPORTED AS MILLIGRAMS PER KILOGRAM

NOTE: LOCATION AND DISTANCES SHOWN ARE APPROXIMATE

**NOTES:**

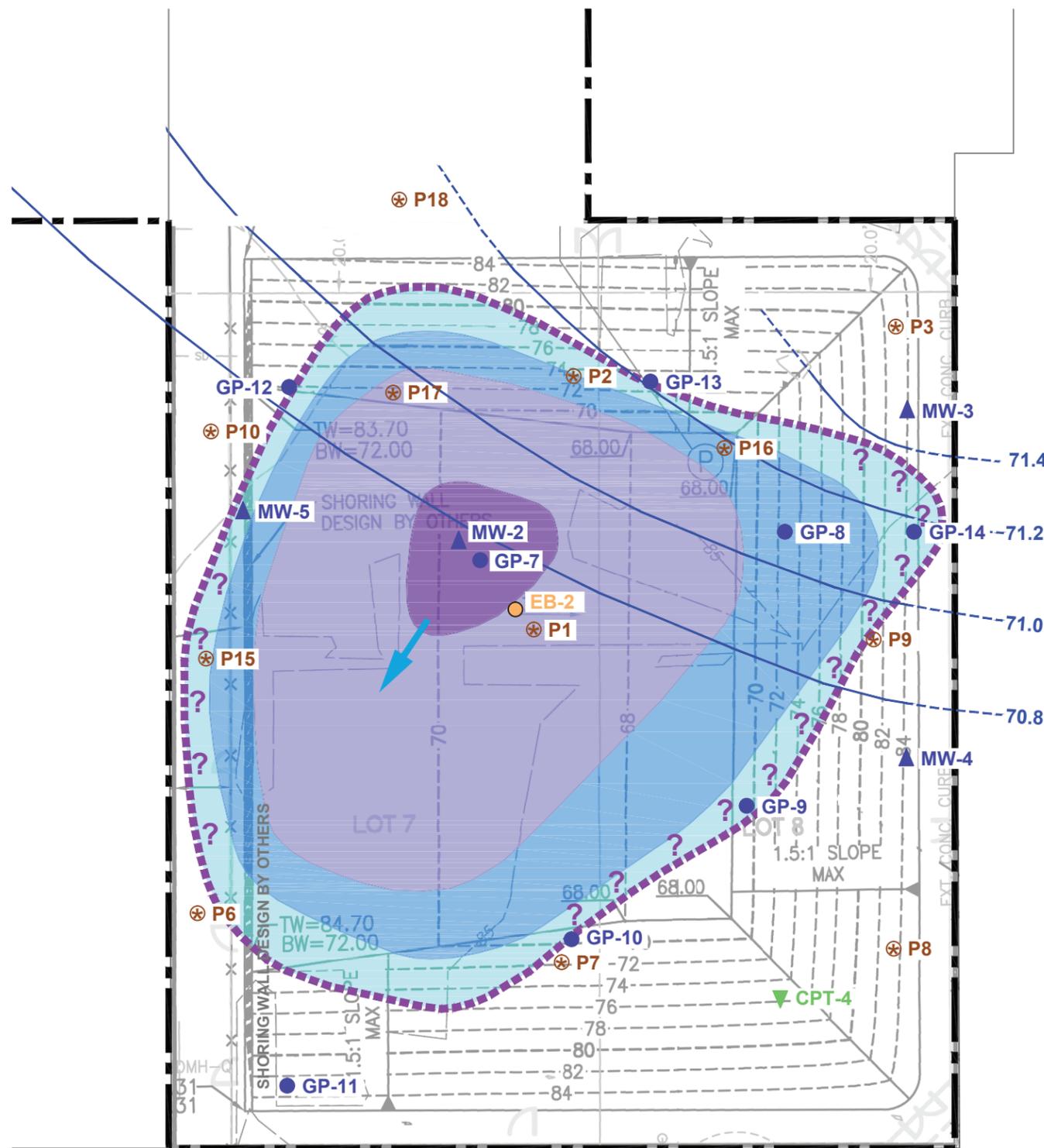
- BASE MAP REFERENCE: BARBOURSON CONSULTING ENGINEERS, INC., LEGACY PLAZA SENIOR LIVING EXCAVATION TEST PLAN, SHEET C3 OF 11, 2/22/19.
- APPROXIMATELY 7.68 INCHES OF FREE-FLOATING SEPARATE PHASE HYDROCARBONS (SFH) WERE MEASURED IN MW-2 ON 5/13/19.

NOTE: BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION



**ESTIMATED LIMITS OF PETROLEUM-CONTAMINATED SOIL**  
 LEGACY PLAZA SENIOR LIVING APARTMENTS  
 AUBURN, WASHINGTON

EXPLORATION ID	SAMPLE ID	BENZENE	GRPH	DRPH	ORPH
TEMPORARY RECONNAISSANCE GROUNDWATER WELLS					
P1	P1-W	<0.35	200	160 x	<250
P6	P6-W	<0.35	<100	<60	<300
P9	P9-W	<0.35	--	<50	<250
P15	P15-W	<1	570	<b>2,400</b>	<350
P16	P16-W	<1	140	<b>2,600</b>	<350
P18	P18-W	--	<200	<500	<500
GP-8	GP-8:GW	<1	130	<b>2,000</b>	<b>900 x</b>
GP-9	GP-9:GW	<1	<100	<b>710 x</b>	420 x
GP-10	GP-10:GW	<1	<100	150 x	<300
GP-11	GP-11:GW	<1	<100	89 x	<250
GP-12	GP-12:GW	<1	<100	250	<320
GP-13	GP-13:GW	<1	<100	300	<280
GP-14	GP-14:GW	<1	<100	<b>920 x</b>	<b>3,300</b>
MONITORING WELLS					
MW-1	MW-1:GW	<1	--	--	--
MW-2	MW-2:GW	<1	770	<b>2,600</b>	<250
	MW-2-190429	<1	600	<b>44,000</b>	<b>580 x</b>
MW-3	MW-3-190429	<1	<100	<50	<250
MW-4	MW-4-190429	<1	<100	120 x	<250
MW-5	MW-5-190429	<1	250	<b>950</b>	<250
MTCA METHOD A CLEANUP LEVEL		5	800/ 1,000	500	500
ALL CONCENTRATIONS ARE REPORTED AS MICROGRAMS PER LITER.					



**LEGEND:**

- GP GEOPROBE BORING
- EB EXPLORATION BORING
- ▲ MW MONITORING WELL
- ⊗ P GEOPROBE BORING - BY OTHERS THE RILEY GROUP - 2014
- SITE BOUNDARY
- ▼ CPT GEOTECH CONE PENETRATION TEST
- BOLD** CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL
- NOT ANALYZED
- GRPH GASOLINE-RANGE PETROLEUM HYDROCARBONS
- DRPH DIESEL-RANGE PETROLEUM HYDROCARBONS
- ORPH OIL-RANGE PETROLEUM HYDROCARBONS
- APPROXIMATE EXTENTS OF PETROLEUM-CONTAMINATED GROUNDWATER AT CONCENTRATIONS ABOVE MTCA METHOD A CLEANUP LEVELS

**DRPH CONCENTRATION**

- Dark Purple: ≥40,000
- Medium Purple: 10,000 - 39,999
- Light Purple: 1,000 - 9,999
- Blue: 500 - 999

ALL CONCENTRATIONS ARE REPORTED AS MICROGRAMS PER LITER

- GROUNDWATER CONTOUR DASHED WHERE INFERRED
- INFERRED SHALLOW GROUNDWATER FLOW DIRECTION

NOTE: LOCATION AND DISTANCES SHOWN ARE APPROXIMATE

**NOTES:**

- BASE MAP REFERENCE: BARGHAUSEN CONSULTING ENGINEERS, INC., LEGACY PLAZA SENIOR LIVING APARTMENTS PHASE 1, SHEET C3 OF 11, 2/22/19.
- APPROXIMATELY 7.66 INCHES OF FREE-FLOATING SEPARATE PHASE HYDROCARBONS (SPH) WERE MEASURED IN MW-2 ON 5/13/19.

NOTE: BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION



**ESTIMATED LIMITS OF  
TPH-CONTAMINATED GROUNDWATER  
LEGACY PLAZA SENIOR LIVING APARTMENTS  
AUBURN, WASHINGTON**

