



# Application for a State Waste Discharge Permit to Discharge Industrial Wastewater to a Publicly-Owned Treatment Works (POTW)

This application is for a state waste discharge permit for a discharge of industrial wastewater to a publicly-owned treatment works (POTW) as required by Chapter 90.48 RCW and Chapter 173-216 WAC. It is designed to provide Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, and the flow characteristics of the discharge.

Ecology may request additional information to clarify the conditions of this discharge. The applicant should reference information previously submitted to Ecology that applies to this application in the appropriate section.

## SECTION A. GENERAL INFORMATION

1. Applicant Name: SeaCast Arlington, LLC
  
2. Facility Name: SeaCast Arlington, LLC  
(if different from Applicant)
  
3. Applicant Mail Address: 18410 63<sup>rd</sup> Avenue N.E.  
Street  
  
Arlington, Washington 98223  
City/State Zip
  
4. Facility Location Address: 18410 63<sup>rd</sup> Avenue N.E.  
(if different from 3 above) Street  
  
Arlington, Washington 98223  
City/State Zip
  
5. UBI No. 604-569-466 Sometimes called a registration, tax, "C," or resale number, the Unified Business Identifier (UBI) number is a nine-digit number used to identify persons engaging in business activities. The number is assigned when a person completes a [Master Business Application](#) to register with or obtain a license from state agencies. The Departments of Revenue, Licensing, Employment Security, Labor and Industries, and the Corporations Division of the Secretary of State are among the state agencies participating in the UBI program.
  
6. Latitude/longitude of the facility as decimal degrees (NAD83/WGS84):  
48.163667 / -122.146291

SIC Code – 3324; NAICS Code - 331512

<b>FOR OFFICE USE ONLY</b>		<b>Check One:</b>	
		New/Renewal <input type="checkbox"/>	Modification <input type="checkbox"/>
Date Application Received _____	Date Fee Paid _____	Application/ Permit No. _____	Date Application Accepted _____

7. Person to contact who is familiar with the information contained in this application:

George (Jerry) McCaslin

Name

Corporate EH&S Manager

Title

(360) 386-1628

Telephone number

N/A

Fax number

8. Check One:

**Permit Renewal** (including renewal of temporary permits)

Does this application request a greater amount of wastewater discharge, a greater amount of pollutant discharge, or a discharge of different pollutants than specified in the last permit application for this facility?  YES  NO

For permit renewals, the current permit is an attachment, by reference, to this application.

**Permit Modification**

**Existing Unpermitted Discharge**

**Proposed Discharge**

Anticipated date of discharge: November, 2021

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment for knowing violations.*

Signature\*



09/22/2021

Date

President & Owner

Title

Michael Robins

Printed Name

\*Applications must be signed as follows: corporations, by a principal executive officer of at least the level of vice-president; partnership, by a general partner; sole proprietorship, by the proprietor. If these titles do not apply to your organization, the person who makes budget decisions for this facility must sign the application.

The application signatory may delegate signature authority for submittals required by the permit, such as monthly reports, to a suitable employee. You can delegate this authority to a qualified individual or to a position, which you expect to fill with a qualified individual. If you wish to delegate signature authority, please complete the following:

Signature of delegated employee



09/22/2021

Date

Corporate EH&S Manager

Title or function at the facility

Printed name

George G. McCaslin

## SECTION B. PRODUCT INFORMATION

- Briefly describe all manufacturing processes and products, and/or commercial activities, at this facility. Provide the applicable Standard Industrial Category (SIC) and the North American Industry Classification System (NAICS) Code(s) for each activity (see *North American Industrial Classification System*, 2007 ed.). You can find the 1997 NAICS codes and the corresponding 1987 Standard Industry Category (SIC) codes at (<http://www.census.gov/epcd/naics/frames3.htm>).

Description: The manufacturing process includes making the finished parts to be cast out of pattern wax or sterolithographic (SLA) patterns and cleaning the surface of the part to remove any residual oils or dust. The part is then invested in multiple layers of ceramic (fused silica) shell in increasing particle sizes to build a strong and resilient shell for the molten metal to be cast in. Once the shell is built up to the correct thickness, the wax is melted out of the shell in a Flash Fire Wax Recovery Oven where the wax is recovered to be recycled. Alternately, the SLA is burned out of the shell in a high temperature oven. The shell is then subjected to high temperature thermal treatment to help anneal and strengthen the fused silica mold. Once this is completed, the individual molds are placed into the vacuum melt oven and the metal alloy is melted to a consistency which allows it to freely flow from the furnace crucible into the mold. This is all done under a very high vacuum. Then the part is transferred into the cooling side of the vacuum furnace where it is allowed to cool under vacuum and then is transferred outside of the oven. It is allowed to cool with the help of large cooling fans before the shell removal begins. The part is subjected to high pressure water blast removal of the shell. After shell removal, the castings are cutoff the tree they are mounted on or single parts that undergo deburring and finishing. They may be heat treated, sandblasted or shotblasted to help provide a hardened, smooth finished surface. They then may undergo non-destructive testing to verify the quality of the part and are then released for delivery to the customer.

- List raw materials and products used at his facility:

Type	RAW MATERIALS	Quantity
<i>Grapes (Example)</i>		<i>1,000 tons per year</i>
Aerospace Metal Alloys - IN-625 & IN-718, GTD 222, etc.		80 tons/year
Pattern Wax - F-288B		5 tons/year
MACO Reclaim Wax		5 tons/year
Sterolithographic Patterns		1,000 pounds/year
PC-205 for Cleaning Wax Parts		200 gallons/year
Pattern Pre-wet Solution		100 gallons/year
Collodial Silica		1,000 gallons/year
Fused Silica Sand		20 tons/year
Mastertop		2 tons/year
Type	PRODUCTS	Quantity
<i>Grape Juice(Example)</i>		<i>300,000 gallons per year</i>
Aerospace Castings Average		Assumed to be 200/year
Aerospace 2021		10 Castings
Aerospace 2022		100 Castings
Aerospace 2023		160 Castings
Aerospace 2024		250 Castings

## SECTION C. PLANT OPERATIONAL CHARACTERISTICS

1. For each process listed in B.1. that generates wastewater, list the process, assign the waste stream a name and an ID # and describe whether it is a batch or continuous flow.

Process	Waste Stream Name	Waste Stream ID#	Batch (B) or Continuous (C) Process
Wax Part Making - 2022	Soluable Wax Removal / Citric Acid	DP#1	B
Shell Room Part Washing	PC-205 Waste Stream Wastewater	DP#2	C
Vacuum Oven Cooling Water	Furnace Coolant Wastewater (close Loop)	DP#3	B
Water Blast Shell Removal	Water Blast Wastewater	DP#4	C
Non-Destructive Testing	NDT Wastewater - Fluorecsent Dye	DP#5	C
Non-Destructive Testing	NDT Wastewater-Photo Developing	DP#6	C
Non-Destructive Testing	Silver Recovery System Wastewater	DP#7	C

2. On a separate sheet, produce a schematic drawing showing production processes, water flow through the facility, wastewater treatment devices and waste streams as named above. The drawing should indicate the source of intake water and show the operations contributing wastewater to the effluent. The treatment units should be labeled. Construct a water balance by showing average flows between intakes, operations, treatment units, and points of discharge to the POTW. *(See the example on page 16 of this application form.)*
3. What is the maximum daily wastewater discharge flow?                      ~2,500 gallons/day
- What is the maximum average monthly wastewater discharge flow (daily flows averaged over a month)?                      ~2,000 (TBD) gallons/day
4. Describe any planned wastewater treatment improvements or changes in wastewater disposal methods, and the schedule for these improvements. *(Use additional sheets, if necessary and label as attachment C4.)*
- Because this is a new foundry, state of the art wastewater treatment processes will be in place from the start of operations. This will include the following steps:
- Please see attachment C.4.

5. If production processes are subject to seasonal variations, provide the following information. The combined value for each month should equal the estimated total monthly flow. Please indicate the proper flow unit by checking one of the following boxes:

- gallons per day                       gallons per month                       million gallons per month

Waste Stream ID#	MONTHS											
	J	F	M	A	M	J	J	A	S	O	N	D
DP#1	10	10	10	10	10	10	10	10	10	10	10	10
DP#2	600	600	600	600	600	600	600	600	600	600	600	600
DP#3	15	15	15	15	15	15	15	15	15	15	15	15
DP#4	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
DP#5	500	500	500	500	500	500	500	500	500	500	500	500
DP#6	400	400	400	400	400	400	400	400	400	400	400	400
DP#7	10	10	10	10	10	10	10	10	10	10	10	10
<b>Estimated Total Monthly Flow (GPD)</b>	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500

6. How many hours a day does this facility typically operate?                      10

How many days a week does this facility typically operate?                      5

How many weeks per year does this facility typically operate?                      50

7. List all incidental materials, such as oil, paint, grease, solvents, and cleaners, that are used or stored on site (*list only those with quantities greater than 10 gallons for liquids and 50 pounds for solids*). For solvents and solvent-based cleaners, include a copy of the material safety data sheet and estimate the quantity used. (*Use additional sheets, if necessary, and label as attachment C.7.*)

Materials/Quantity Stored: C.7. - 01

Acetone Solvent for parts cleaning - 4 x 1 gallon containers in flammable storage

Motor Oil - 55 gallon drums

Hydraulic Fluid - 55 gallon drums

Silicone Spray Release - Aerosol cans - 12-24 cans at a time

8. Some types of facilities are required to have spill or waste control plans. Does                      Yes                      No

this facility have:

- a. A spill prevention, control, and countermeasure plan (40 CFR 112)?
- b. An Oil Spill Contingency Plan (chapter 173-182 WAC)?
- c. An emergency response plan (per WAC 173-303-350)?
- d. A runoff, spillage, or leak control plan (per WAC 173-216-110(f))?
- e. Any spill or pollution prevention plan required by local, state or federal authorities? If yes specify: P2P
- f. A solid waste control plan?
- g. A Slug Discharge Control Plan (40 CFR 403.8(f)(2)(v))?

**SECTION D. WATER CONSUMPTION AND WATER LOSS**

1. Potable water source(s):

Public System (Specify) City of Arlington, WA Public Water Supply

Private Well

Surface Water

a. Water Right Permit Number: N/A

b. Legal Description of Water Source

         1/4S,          1/4E,         , Section,          TWN,          R

2. Potable water use

a. Indicate total water use         

Gallons per day (average) 2,500

Gallons per day (maximum) 5,500

b. Is water metered?

YES     NO

## SECTION E. WASTEWATER INFORMATION

1. How are the water intake and effluent flows measured?

Intake: Metered

Effluent Metered

2. Describe the collection method for the samples analyzed below. (*i.e.*, grab, 24-hour composite). Applicants must collect grab samples (not composites) for analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and Enterococci (previously known as fecal streptococcus at § 122.26 (d)(2)(iii)(A)(3)), or volatile organics.

Because historically we have only been required to sample for heavy metals for discharge permitting and for profiling waste streams, these samples have been taken as composite samples from the tanks or totes that they are in. For process flow water samples, the samples are taken as grab samples at the discharge location over a period of time and combined.

3. Has the effluent been analyzed for any other parameters than those identified in question E.4.?  YES  NO  
If yes, attach results and label as attachment E.4. This data must clearly show the date, method and location of sampling. (*Note: Ecology may require additional testing.*)
4. Provide measurements or range of measurements for treated wastewater prior to discharge to the POTW for the parameters with an "X" in the left column. If you obtain the application from the internet, contact Ecology's regional office to see if testing for a subset of these parameters is permissible. All analyses (except pH) must be conducted by a laboratory registered or accredited by Ecology (WAC 173-216-125). If this is an application for permit renewal, provide data for the last year for those parameters that are routinely measured. For parameters measured only for this application, place the values under "Maximum." Report the values with units as specified in the parameter name or in the detection level.

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table unless Ecology approves an alternate method **or the method used produces measurable results in the sample and EPA has listed it as an EPA approved method in 40 CFR Part 136. If the Permittee uses an alternative method as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.**

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 <sup>th</sup> ,20 <sup>th</sup> edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	BOD (5 day)					SM 5210 B	/2 mg/l
	COD					SM 5220 D	/10 mg/l
	Total suspended solids					SM 2540 D	/5 mg/l
	Fixed Dissolved Solids					SM 2540 E	
	Total dissolved solids					SM 2540 C	
	Conductivity (micromhos/cm)					SM 2510 B	
	Ammonia-N as N					SM 4500-NH <sub>3</sub> C	/0.3 mg/L
X	pH	6.5	7.5	7.0	From other facility	SM 4500-H	0.1 standard units
	Fecal coliform (organisms/100 mL)					SM 9221 E or 9222 D	
	Total coliform (organisms/100 mL)					SM 9221 B or 9222 B	
	Dissolved oxygen					SM 4500-O C/G	
	Nitrate + nitrite-N as N					SM 4500-NO <sub>3</sub> E	100 µg/L
	Total kjeldahl N as N					SM 4500-N <sub>org</sub> C/E/FG	300 µg/l
	Ortho-phosphate-P as P					SM 4500-P E/F	10 µg/l
	Total-phosphorous-P as P					SM 4500-P E/P/F	10 µg/l
	Total Oil & grease					EPA 1664A	1.4/5 mg/l
	NWTPH - Dx					Ecology NWTPH Dx	250/250 µg/l
	NWTPH - Gx					Ecology NWTPH Gx	250/250 µg/l
	Calcium					EPA 200.7	10 µg/l
	Chloride					SM 4500-Cl C	0.15 µg/l
	Fluoride					SM 4500-F E	.025/0.1 mg/l
	Magnesium					EPA 200.7	10/50 µg/l
	Potassium					EPA 200.7	700/ µg/l
	Sodium					EPA 200.7	29/ µg/l
	Sulfate					SM 4500-SO <sub>4</sub> C/D	/200 µg/l

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 <sup>th</sup> , 20 <sup>th</sup> edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
X	Arsenic(total)				N/A	EPA 200.8	0.1/0.5 µg/l
X	Barium (total)				N/A	EPA 200.8	0.5/2 µg/l
X	Cadmium (total)				N/A	EPA 200.8	.05/.25 µg/l
X	Chromium (total)				N/A	EPA 200.8	0.2/1 µg/l
X	Copper (total)				N/A	EPA 200.8	0.4/2 µg/l
X	Lead (total)				N/A	EPA 200.8	0.1/.5 µg/l
	Mercury (total) pg/L				N/A	EPA 1631E	0.2/0.5 pg/l
X	Molybdenum(total)				N/A	EPA 200.8	0.1/0.5 µg/l
X	Nickel(total)				N/A	EPA 200.8	0.1/0.5 µg/l
X	Selenium (total)				N/A	EPA 200.8	1/1 µg/l
X	Silver (total)				N/A	EPA 200.8	.04/.2 µg/l
X	Zinc (total)				N/A	EPA 200.8	0.5/2.5 µg/l

6. Does this facility use any of the following chemicals as raw materials or produce them as part of the manufacturing process, or are they present in the wastewater?  YES  NO

*(The number in the column next to the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.)*

If yes, specify how the chemical is used and the quantity used or produced: None are used individually but are part of a metal alloy. Cr, Cu, Ni. Silver is produced in the photodeveloping but is captured in the Silver Recovery unit and refined. It is not discharged.

METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total	7440-36-0	Nickel, Total	7440-02-0
Arsenic, Total	7440-38-2	Selenium, Total	7782-49-2
Beryllium, Total	7440-41-7	Silver, Total	7440-22-4
Cadmium, Total	7440-43-9	Thallium, Total	7440-28-0
Chromium (hex) dissolved	18540-29-9	Zinc, Total	7440-66-6
Chromium, Total	7440-47-3		
Copper, Total	7440-50-8	Cyanide, Total	57-12-5
Lead, Total	7439-92-1	Cyanide, Weak Acid Dissociable	
Mercury, Total	7439-97-6)	Phenols, Total	

PESTICIDES			
Aldrin	309-00-2	Endrin	72-20-8
alpha-BHC	319-84-6	Endrin Aldehyde	7421-93-4
beta-BHC	319-85-7	Heptachlor	76-44-8
gamma-BHC	58-89-9	Heptachlor Epoxide	1024-57-3
delta-BHC	319-86-8	PCB-1242	53469-21-9
Chlordane	57-74-9	PCB-1254	11097-69-1
4,4'-DDT	50-29-3	PCB-1221	11104-28-2
4,4'-DDE	72-55-9	PCB-1232	11141-16-5
4,4' DDD	72-54-8	PCB-1248	12672-29-6
Dieldrin	60-57-1	PCB-1260	11096-82-5
alpha-Endosulfan	959-98-8	PCB-1016	12674-11-2
beta-Endosulfan	33213-65-9	Toxaphene	8001-35-2
Endosulfan Sulfate	1031-07-8		

VOLATILE COMPOUNDS			
Acrolein	107-02-8		
Acrylonitrile	107-13-1	1,1-Dichloroethylene	75-35-4
Benzene	71-43-2	1,2-Dichloropropane	78-87-5
Bromoform	75-25-2	1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene)	542-75-6
Carbon tetrachloride	56-23-5	Ethylbenzene	100-41-4
Chlorobenzene	108-90-7	Methyl bromide (Bromomethane)	74-83-9
Chloroethane	75-00-3	Methyl chloride (Chloromethane)	74-87-3
2-Chloroethylvinyl Ether	110-75-8	Methylene chloride)	75-09-2
Chloroform	67-66-3	1,1,2,2-Tetrachloroethane	79-34-5
Dibromochloromethane	124-48-1	Tetrachloroethylene	127-18-4
1,2-Dichlorobenzene	95-50-1	Toluene (108-88-3)	
1,3-Dichlorobenzene	(541-73-1)	1,2-Trans-Dichloroethylene (Ethylene dichloride)	156-60-5
1,4-Dichlorobenzene	106-46-7	1,1,1-Trichloroethane	71-55-6
Dichlorobromomethane	75-27-4	1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethane	75-34-3	Trichloroethylene	79-01-6
1,2-Dichloroethane	107-06-2	Vinyl chloride	75-01-4

ACID COMPOUNDS			
2-Chlorophenol	95-57-8	4-nitrophenol	100-02-7
2,4-Dichlorophenol	120-83-2	Parachlorometa cresol (4-chloro-3-methylphenol)	59-50-7
2,4-Dimethylphenol	105-67-9	Pentachlorophenol	87-86-5
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	534-52-1	Phenol	108-95-2
2,4 dinitrophenol	51-28-5	2,4,6-Trichlorophenol	88-06-2
2-Nitrophenol	88-75-5		

BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene	83-32-9	3,3-Dichlorobenzidine	91-94-1
Acenaphthylene	208-96-8	Diethyl phthalate	84-66-2
Anthracene	120-12-7	Dimethyl phthalate	131-11-3
Benzidine	92-87-5	Di-n-butyl phthalate)	84-74-2
Benzyl butyl phthalate	85-68-7	2,4-dinitrotoluene	121-14-2
Benzo(a)anthracene	56-55-3	2,6-dinitrotoluene	606-20-2
Benzo(b)fluoranthene (3,4-benzofluoranthene)	205-99-2	Di-n-octyl phthalate	117-84-0
<b>Benzo(j)fluoranthene</b>	<b>205-82-3</b>	1,2-Diphenylhydrazine (as <i>Azobenzene</i> )	122-66-7
Benzo(k)fluoranthene (11,12-benzofluoranthene)	207-08-9	Fluoranthene	206-44-0
<b>Benzo(r,s,t)pentaphene</b>	<b>189-55-9</b>	Fluorene	86-73-7
Benzo(a)pyrene	50-32-8	Hexachlorobenzene	118-74-1
Benzo(ghi)Perylene	191-24-2	Hexachlorobutadiene	87-68-3
Bis(2-chloroethoxy)methane	111-91-1	Hexachlorocyclopentadiene	77-47-4
Bis(2-chloroethyl)ether	111-44-4	Hexachloroethane	67-72-1
Bis(2-chloroisopropyl)ether	39638-32-9	Indeno(1,2,3-cd)Pyrene	193-39-5
Bis(2-ethylhexyl)phthalate	117-81-7	Isophorone	78-59-1
4-Bromophenyl phenyl ether	101-55-3	<b>3-Methyl cholanthrene</b>	<b>56-49-5</b>
2-Chloronaphthalene	91-58-7	Naphthalene	91-20-3
4-Chlorophenyl phenyl ether	7005-72-3	Nitrobenzene	98-95-3
Chrysene	218-01-9	N-Nitrosodimethylamine	62-75-9
<b>Dibenzo (a,j)acridine</b>	<b>224-42-0</b>	N-Nitrosodi-n-propylamine	621-64-7
<b>Dibenzo (a,h)acridine</b>	<b>226-36-8</b>	N-Nitrosodiphenylamine	86-30-6
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	53-70-3	<b>Perylene</b>	<b>198-55-0</b>
Dibenzo(a,e)pyrene	192-65-4	Phenanthrene	85-01-8
Dibenzo(a,h)pyrene	189-64-0	Pyrene	129-00-0
		1,2,4-Trichlorobenzene	120-82-1

7. Are any other pesticides, herbicides or fungicides used at this facility?  YES  NO

If yes, specify the material and quantity used:

8. Are there other pollutants that you know of or believe to be present?  YES  NO

If yes, specify the pollutants and their concentration if known  
(attach laboratory analyses if available as Attachment E8):

9. Is the wastewater being discharged, or proposed for discharge, to the POTW designated as a dangerous waste according to the procedures in Chapter 173-303 WAC?

YES  NO  DON'T KNOW

10. If the answer to question 9 above is yes, how did the waste designate as a dangerous waste (check appropriate box)?

For Listed and TCLP Characteristic Wastes only, also provide the Dangerous Waste Number(s).

**Listed Waste**  Dangerous Waste Number(s) \_\_\_\_\_

**Characteristic Wastes** Dangerous Waste Number(s) \_\_\_\_\_

Ignitable

Reactive

Corrosive

TCLP

**State Only Dangerous Wastes** Dangerous Waste Number(s) \_\_\_\_\_

Toxicity

Persistent

For questions about waste designation under the *Dangerous Waste Regulations*, Chapter 173-303 WAC, contact Ecology's Hazardous Waste and Toxics Program at:

Northwest Regional Office - Bellevue	(425) 649-7000
Southwest Regional Office - Lacey	(360) 407-6300
Central Regional Office - Yakima	(509) 575-2490
Eastern Regional Office - Spokane	(509) 329-3400

## SECTION F. SEWER INFORMATION

1. Is an inspection and sampling manhole or similar structure available on-site?  YES  NO  
*If yes, attach a map or hand drawing of the facility that shows the location of these structures  
(Label as attachment F1 or this may be combined with map in H8, if H8 is applicable to your  
facility.)*

## **SECTION G. OTHER PERMITS**

1. List all environmental control permits or approvals needed for this facility; for example, air emission permits.

Air Emission permit from PSCAA; multiple construction permits were obtained from Arlington, L&I and other agencies for construction purposes including building permits, construction stormwater management permits, electrical, natural gas and fire suppression permits.

## SECTION H. STORMWATER

1. Do you have coverage under the Washington State Industrial Stormwater NPDES General Permit?  YES  NO

If yes, please list the permit number here. \_\_\_\_\_

If no, have you applied for a Washington State Stormwater Industrial Stormwater General Permit?  YES  NO

If you answered no to both questions above, complete the following questions 2 through 5.

2. Does your facility discharge stormwater: *(Check all that apply)*

To storm sewer system *(provide name of storm sewer system operator: \_\_\_\_\_)*

Directly to any surface waters of Washington State *(e.g., river, lake, creek, estuary, ocean).*

Specify waterbody name(s) \_\_\_\_\_

Indirectly to surface waters of Washington State *(i.e., flows over adjacent properties first).*

To a Sanitary Sewer

Directly to ground waters of Washington State via:

Dry well

Drainfield

Other

3. Areas with industrial activities at facility: *(check all that apply)*

Manufacturing Building

Material Handling

Material Storage

Hazardous Waste Treatment, Storage, or Disposal *(Refers to RCRA, Subtitle C Facilities Only)*

Waste Treatment, Storage, or Disposal

Application or Disposal of Wastewaters

Storage and Maintenance of Material Handling Equipment

Vehicle Maintenance

Areas Where Significant Materials Remain

Access Roads and Rail Lines for Shipping and Receiving

Other (please specify): \_\_\_\_\_

4. Material handling/management practices

a. Types of materials handled and/or stored outdoors: *(check all that apply)*

- |                          |                                     |                                     |  |
|--------------------------|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> | Solvents                            | <input type="checkbox"/>            | Hazardous Wastes                         |
| <input type="checkbox"/> | Scrap Metal                         | <input type="checkbox"/>            | Acids or Alkalies                        |
| <input type="checkbox"/> | Petroleum or Petrochemical Products | <input type="checkbox"/>            | Paints/Coatings                          |
| <input type="checkbox"/> | Plating Products                    | <input type="checkbox"/>            | Woodtreating Products                    |
| <input type="checkbox"/> | Pesticides                          | <input checked="" type="checkbox"/> | Other <i>(please list)</i> : <u>None</u> |

b. Identify existing management practices employed to reduce pollutants in industrial stormwater discharges: *(check all that apply)*

- |                                     |                             |                                     |   |
|-------------------------------------|-----------------------------|-------------------------------------|---|
| <input type="checkbox"/>            | Oil/Water Separator         | <input type="checkbox"/>            | Detention Facilities                    |
| <input type="checkbox"/>            | Containment                 | <input checked="" type="checkbox"/> | Infiltration Basins                     |
| <input checked="" type="checkbox"/> | Spill Prevention            | <input type="checkbox"/>            | Operational BMPs                        |
| <input type="checkbox"/>            | Surface Leachate Collection | <input type="checkbox"/>            | Vegetation Management                   |
| <input type="checkbox"/>            | Overhead Coverage           | <input checked="" type="checkbox"/> | Other <i>(please list)</i> : <u>P2P</u> |

5. Attach a facility site map showing stormwater drainage/collection areas, disposal areas and discharge points. This may be a hand-drawn map if no other site map is available *(See example on page 16 of this application)*. Label this as attachment H.5.

## SECTION I. OTHER INFORMATION

1. Describe liquid wastes or sludges being generated by your facility that are not disposed of in the waste stream(s) and how they are being disposed of. For each type of waste, provide type of waste and the name, address, and phone number of the hauler.

N/A

2. Describe storage areas for raw materials, products, and wastes.

Raw materials and products are stored at various locations throughout the facility depending on the process of production. Designated areas are in each section of the foundry and the materials/products are stored on pallet racks equipped to handle the materials.

Wastes are stored in satellite containment areas and when they reach their designated capacity (either volume or time allowed) they are transferred off-site by waste management companies.

3. Have you designated the wastes described above according to the applicable  YES  NO procedures of Dangerous Waste Regulations, Chapter 173-303 WAC?

**SECTION J. CERTIFICATIONS**

**1. Approval by Publicly-Owned Treatment Works [required by WAC 173-216-070(4)(b)]**

*I approve of the discharge as described in this application. The applicant is:*

(Please check the appropriate box below.)

A Significant Industrial User (see Definitions at the end of this Section)

A Categorical Industrial User

Neither of the above

Name and location of sewer system to which this project will be tributary:

Arlington Wastewater Treatment Plant

Treatment Works Owner: City of Arlington

Street: 154 West Cox Street

City/State: Arlington, Washington Zip: 98223

\_\_\_\_\_  
Signature of Treatment Works Authority                      Date                      Title

\_\_\_\_\_  
Printed Name

**2. Application review by Intermediate Sewer Owner at point of discharge (if applicable)**

*I hereby acknowledge that I have reviewed the application for discharge to this sewer system.*

Name and location of sewer system to which this project will be tributary:

Sewer System Owner: \_\_\_\_\_

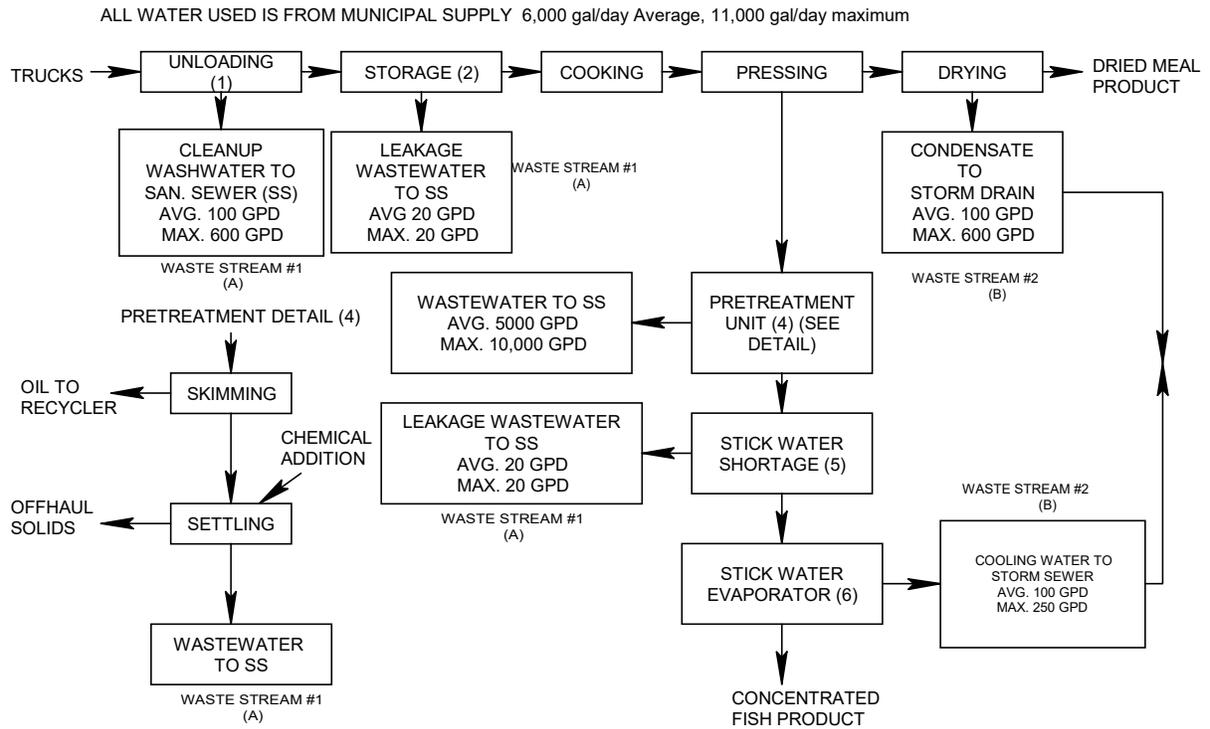
Street: \_\_\_\_\_

City/State: \_\_\_\_\_ Zip: \_\_\_\_\_

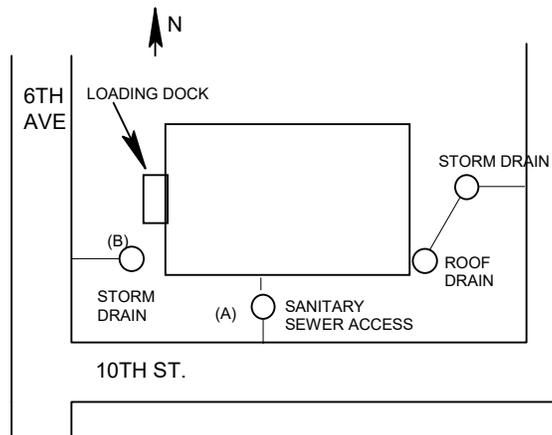
\_\_\_\_\_  
Signature of Sewer System Authority                      Date                      Title

\_\_\_\_\_  
Printed Name

Example 1 for application section C.2. (SCHEMATIC DIAGRAM)



Example 2 for application section F1 or H8 (FACILITY SITE MAP)



## DEFINITIONS

### Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

**Control Authority** - means the Washington State Department of Ecology in the case of non-delegated POTWs or means the POTW in the case of delegated POTWs.

**Categoric Industrial User (CIU):** An industrial user subject to national categorical pretreatment standards promulgated by EPA (40 CFR 403.6 and 40 CFR parts 405-471).

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### Summary of Attachments That May be Required for This Application:

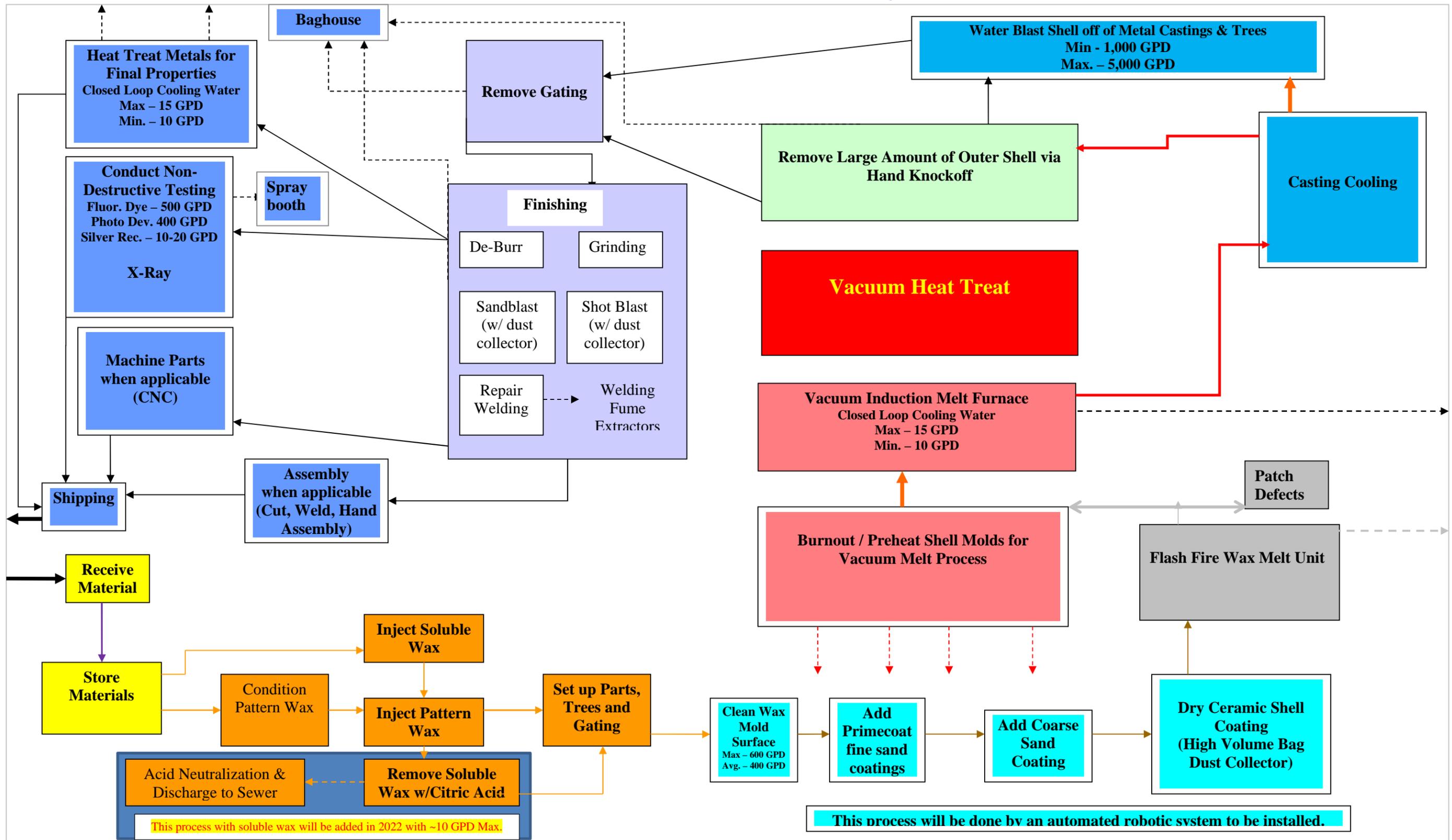
*(Please check those attachments that are included)*

- |                                     |                          |      |   |
|-------------------------------------|--------------------------|------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | C.2. | Production schematic flow diagram and water balance |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | C.4. | Wastewater treatment improvements                   |
| <input type="checkbox"/>            | <input type="checkbox"/> | C.7. | Additional incidental materials                     |
| <input type="checkbox"/>            | <input type="checkbox"/> | E.8. | Additional results of effluent testing              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | F.1. | Facility site map                                   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | H.5. | Stormwater drainage map                             |

*If you need this document in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.*

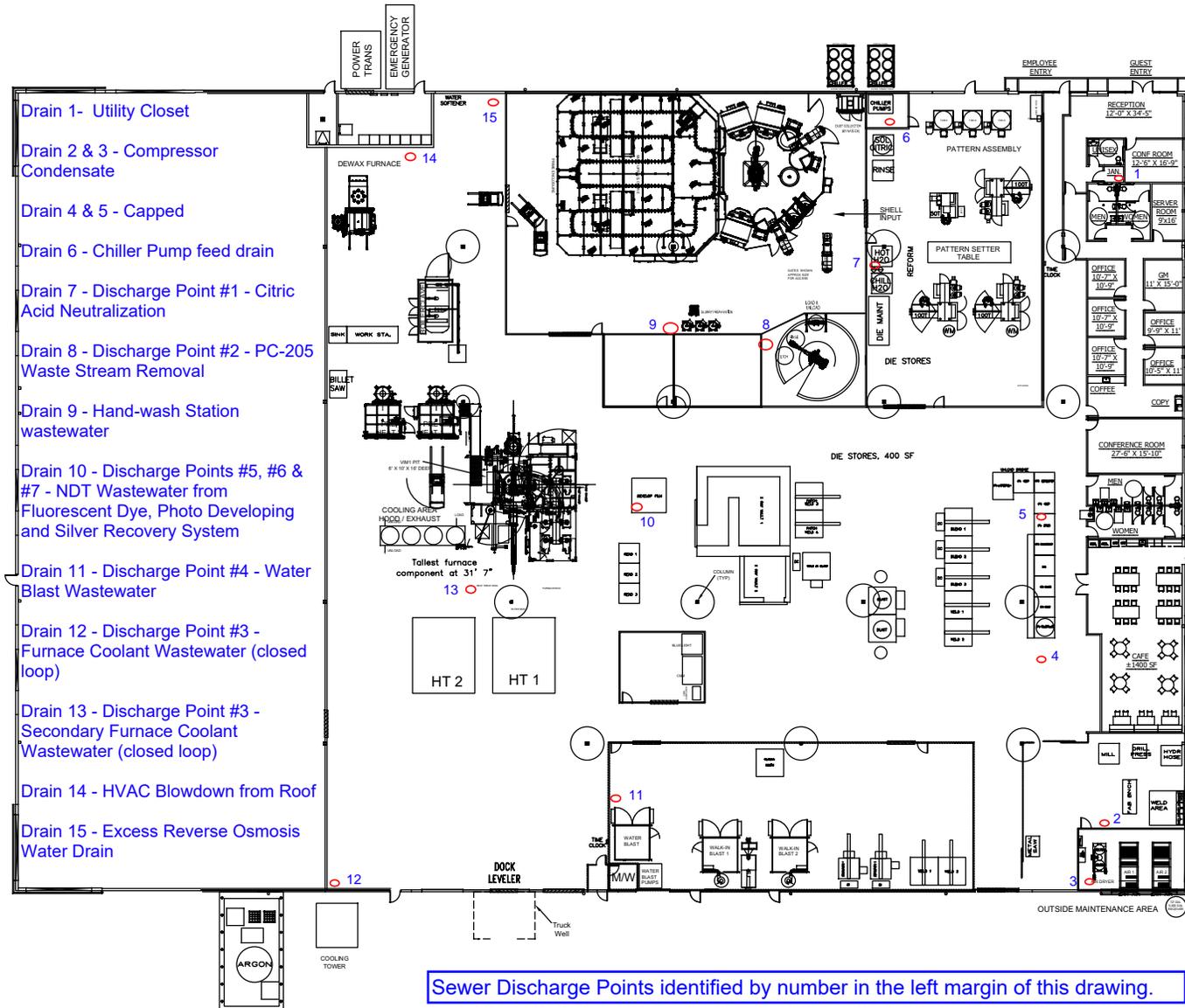
# SeaCast, Inc.-Arlington

## Process Flow Chart for New Foundry – Attachment C.2.



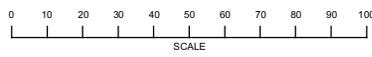
All Water Used is from the Municipal Water Supply from the City of Arlington, WA with an Average of ~2,000 Gallons/Day and a Maximum of ~2,500 Gallons/Day.

# Wastewater Discharge Points - SeaCast Arlington - Attachment C2a



- Drain 1 - Utility Closet
- Drain 2 & 3 - Compressor Condensate
- Drain 4 & 5 - Capped
- Drain 6 - Chiller Pump feed drain
- Drain 7 - Discharge Point #1 - Citric Acid Neutralization
- Drain 8 - Discharge Point #2 - PC-205 Waste Stream Removal
- Drain 9 - Hand-wash Station wastewater
- Drain 10 - Discharge Points #5, #6 & #7 - NDT Wastewater from Fluorescent Dye, Photo Developing and Silver Recovery System
- Drain 11 - Discharge Point #4 - Water Blast Wastewater
- Drain 12 - Discharge Point #3 - Furnace Coolant Wastewater (closed loop)
- Drain 13 - Discharge Point #3 - Secondary Furnace Coolant Wastewater (closed loop)
- Drain 14 - HVAC Blowdown from Roof
- Drain 15 - Excess Reverse Osmosis Water Drain

Sewer Discharge Points identified by number in the left margin of this drawing.



										<b>SEACAST, INC</b>		
										CASTING PLANT AND FUTURE MACHINE SHOP		
										ENGINEER	SCALE	REV
										OS	NTS	SC20-020
										DRAWN BY	DATE	SHEET: 1 OF 1
DATE	DRAWN BY	REV	REVISIONS	DATE	DRAWN BY	REV	REVISIONS	DATE	DRAWN BY	REV	REVISIONS	
				03/26/21	KS	00		SC 20-016 REV 10 W/FUTURE MACHINE SHOP BUILDING. REF Arlington Foundry-BASE (BUILDING)_T1_07.06.20.DWG				



## ATTACHMENT C.4.

DP#1 - The citric acid solution will undergo a neutralization process to bring the pH to ~7.0 pH units. The solution will then be filtered through a pressure filtration system prior to discharge to the sewer. This is a batch discharge. This operation and discharge is not anticipated to start until sometime in 2022 but if that changes, you will be notified at least 90 days in advance.

DP#2 - The PC-205 that is rinsed off of the parts in this process contains d-Limonene which is an environmentally friendly chemical. The rinsing process removes this cleaner and the chemical is at a concentration that is not regulated in the discharge currently in our Marysville facility. This is a continuous discharge of water during operations.

DP#3 - The coolant water for the vacuum furnace operations and the vacuum heat treat operations are closed loop systems that are circulated under a Nitrogen blanket to inhibit bacterial growth and formation of Iron scale. Periodically this water will be batch discharged from the system and fresh water will be put into the closed loop circulation system.

DP#4 - The wastewater from the water blast process will be recirculated and reused prior to discharge through a final filtration unit prior to going to the sewer. This will be a batch discharge.

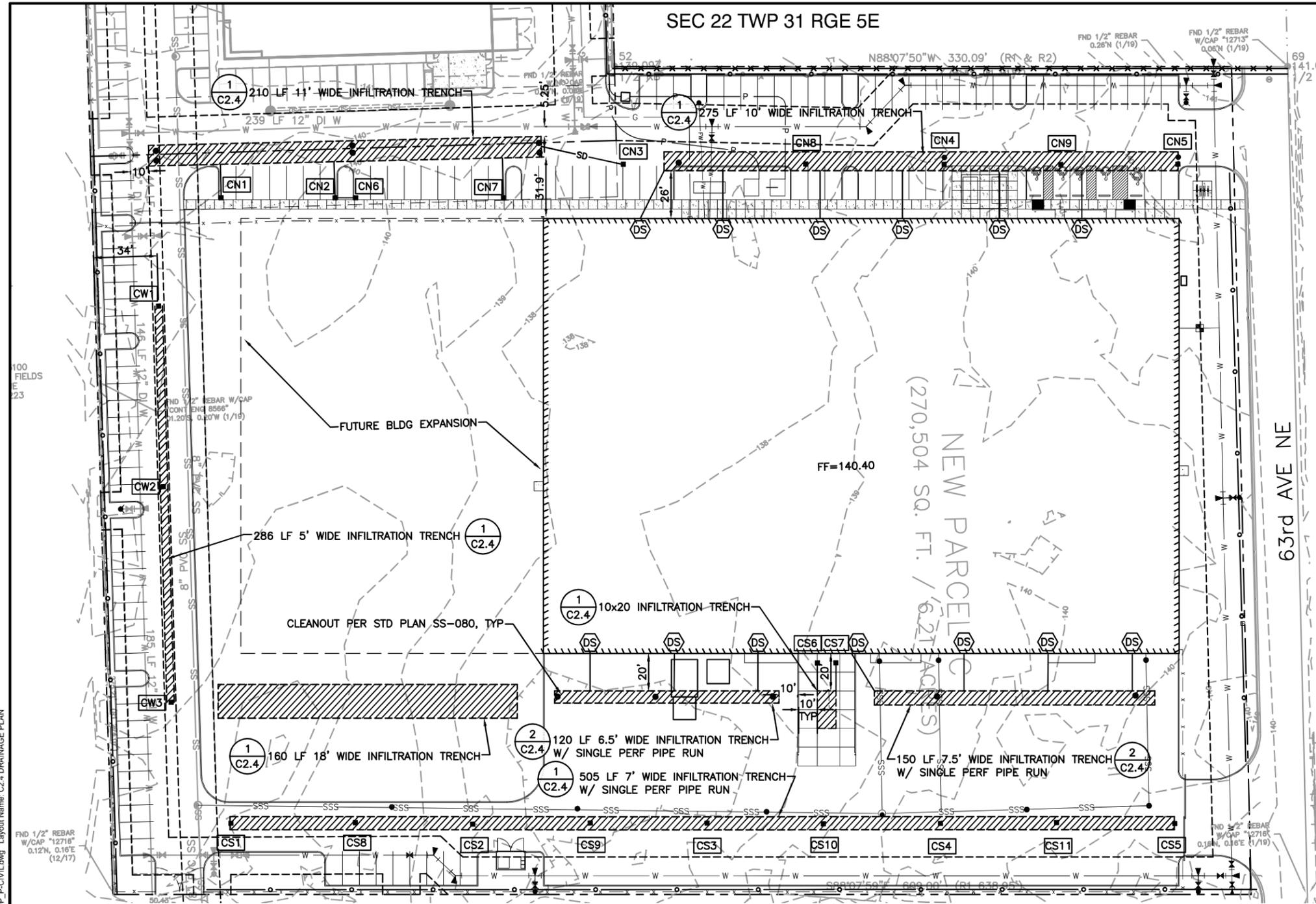
DP#5 -The wastewater from the fluorescent penetrant dye, greenish-yellow in color, will be discharged directly to the sewer system with no further treatment as it currently is at our Marysville facility. This will be a continuous discharge during operations.

### **The wastewater from the photo developing & processing systems are segregated into two separate waste streams:**

DP#6 - The first waste stream is produced from the developing of the photographic paper from the X-Ray units. This stream is discharged directly to the sewer as no further treatment is needed.

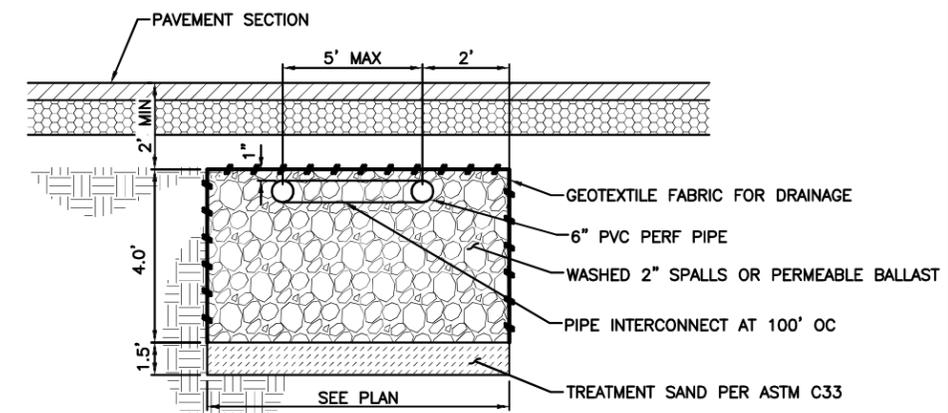
DP#7 - The second waste stream is generated by the fixing process involved in developing film. This process removes excess silver halide from the photographic paper which allows the developed image to be distinct and clear. This waste stream undergoes pre-treatment with a silver recovery system in which the silver that is suspended in the fixer solution is pumped through a bed of steel wool and chopped iron fiber. The reaction of the silver thiosulfate with the iron results in the capture of the elemental silver and silver sulfate. The silver is then removed from the packing material through a refining process and the silver can then be reused or recycled.

# Attachment H.5. - Stormwater Drainage System - SeaCast Arlington

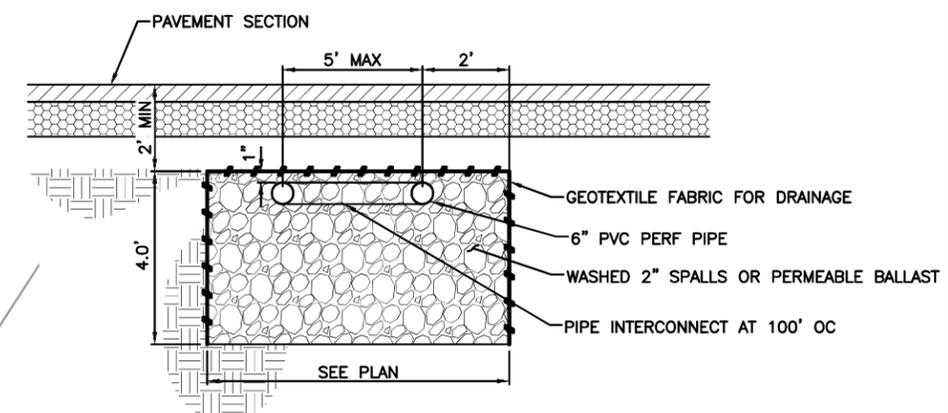


**NOTES:**

1. SEE SHEET C1.1 AND C1.2 FOR GENERAL INFORMATION.
2. (PSD) PERFORATED STORM DRAIN PIPE SHALL BE SDR-35 PVC PIPE PER ASTM D3034, WITH TWO ROWS OF 1/2" DIAMETER HOLES AT 12" OC.
3. (CO) CLEANOUTS SHALL CONFORM TO COA STD DETAIL SS-080.
4. GEOTEXTILE FABRIC SHALL BE NONWOVEN AND SUITABLE FOR SEPARATION APPLICATIONS.
5. AT LANDSCAPE ISLANDS, PERF PIPE SHALL BE REPLACED WITH SOLID PIPE TO PREVENT ROOT INTRUSION. SOLID PIPE SHALL EXTEND 5' BEYOND LANDSCAPE ISLAND.
6. CATCH BASINS SHALL BE OIL/WATER SEPARATOR PER COA STD PLAN SD-120. UNLESS NOTED OTHERWISE, INVERT ELEVATION SHALL BE RIM MINUS 2.67'.



**1**  
C2.4 INFILTRATION TRENCH  
SCALE 1"=2' (1/2" = 1'-0")



**2**  
C2.4 INFILTRATION TRENCH  
SCALE 1"=2' (1/2" = 1'-0")

STRUCTURE TABLE

CB #	RIM	IE
CN1	+40.06 140.01	+37.23 137.35
CN2	+39.75 139.74	+37.23 137.60

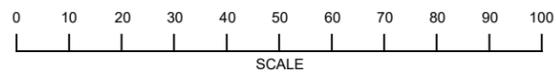
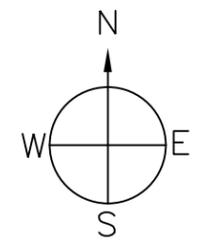
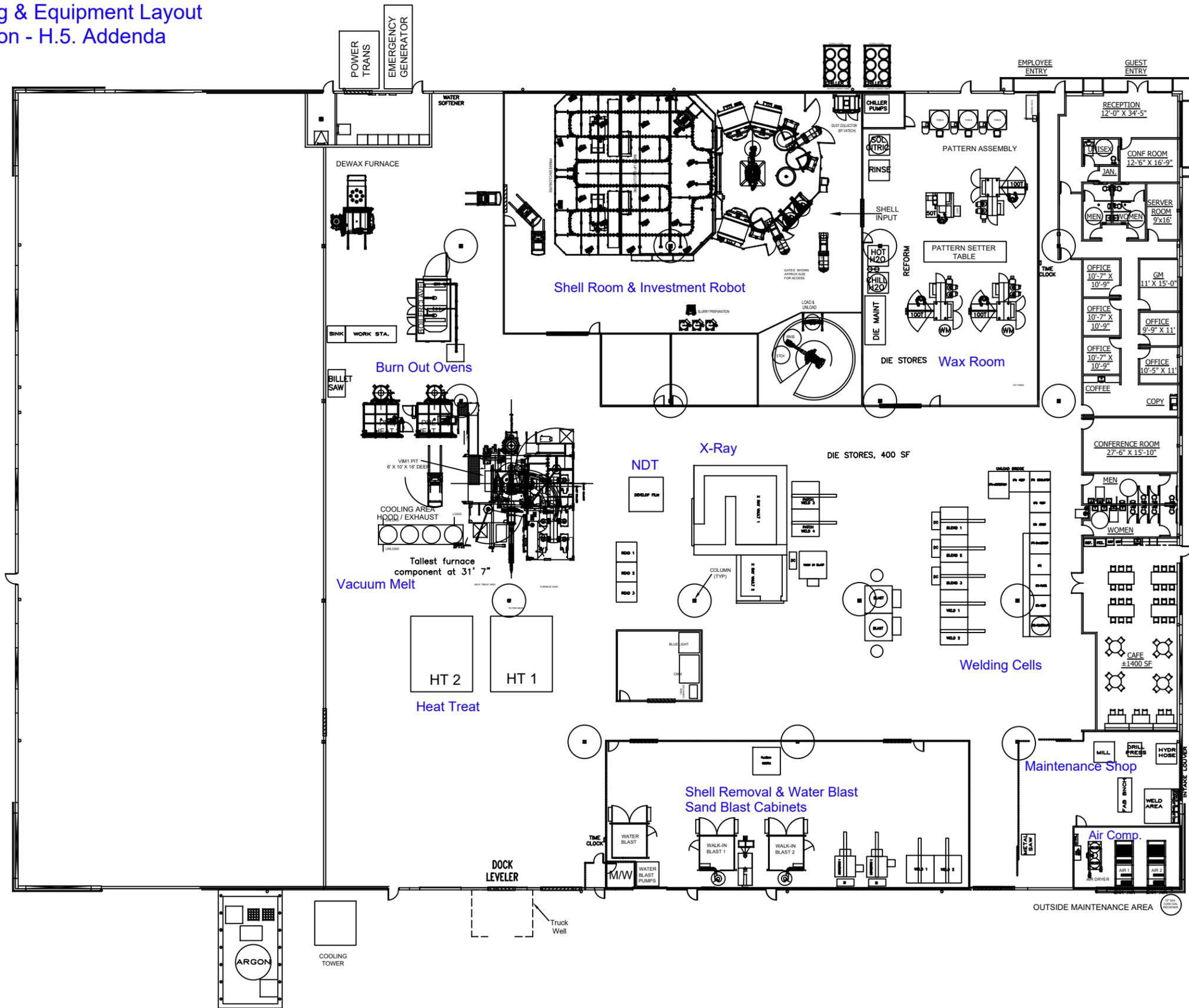
STRUCTURE TABLE

CB #	RIM	IE
CW1	+39.80 139.84	+37.13 136.85
CW2	+39.10 139.19	+36.43 136.50 (N, S)

v:\arlington\Plans\CASTOP\_P-CVIL.dwg Layout Name: C2.4 DRAINAGE PLAN



Foundry Building & Equipment Layout  
SeaCast Arlington - H.5. Addenda



DATE	DRAWN BY	REV	REVISIONS	DATE	DRAWN BY	REV	REVISIONS
				03/26/21	KS	00	SC 20-016 REV 10 W/FUTURE MACHINE SHOP BUILDING. REF Arlington Foundry-BASE (BUILDING) T_07.06.20.DWG

<b>SEACAST, INC</b>			
CASTING PLANT AND FUTURE MACHINE SHOP			
ENGINEER: GS	SCALE: NTS	SC20-020	REV
DRAWN BY: KS	DATE: 03/26/21	SHEET: 1 OF 1	00