SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

***Instructions for applicants*:**

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable: *WWTP Upgrades* After-the-fact installation of an emergency engine rated greater than 500 brake horsepower (BHP).

2. Name of applicant: *City of Montesano*

3. Address and phone number of applicant and contact person:
Mike Olden, P.E.
Public Works and Community Development Director

Annotations in red are from Olympic Region Clean Air Agency (ORCAA)

City of Montesano
112 N. Main Street
Montesano, WA 98563

4. Date checklist prepared: *April 11, 2019* Edits added: October 22, 2024

5. Agency requesting checklist: *City of Montesano* Olympic Region Clean Air Agency

6. Proposed timing or schedule (including phasing, if applicable): *May 2019 through December 2019*

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. *There are associated projects at the WWTP that have parallel environmental permitting processes. These projects, WWTP protection and biosolids removal, have preceding SEPA actions.*

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. *None.*

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. *Approval of a project report and design drawings by the Department of Ecology (Ecology). Shoreline Master Program Exemption from Substantial Development Permit (repair of existing facilities).*

10. List any government approvals or permits that will be needed for your proposal, if known. *Approval of a project report and design drawings by Ecology.* Notice of Construction from ORCAA

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

After-the-fact installation of a diesel-fired emergency engine rated greater than 500 brake horsepower (BHP) to provide power in case of power outages.

This project includes modifications to the existing biosolids holding lagoon, upgrades to the disinfection process, and new effluent pumps.

Lagoon modifications consist of installing a new berm in the middle of the lagoon to split the lagoon in approximately half. The western half of the lagoon will be decommissioned and filled to grade with compacted imported material; the eastern half will have a new liner installed and continue to be used as the biosolids holding pond. Total imported material for new berm, side slope, and fill is estimated at 9800 CY. The new lagoon will have approximately 1.14 million gallons of storage with 2 ft of freeboard available, estimated to store biosolids for up to 10 years or more before a dredge is required.

The disinfection process will be upgraded from chlorine disinfection and dechlorination to ultraviolet (UV) light disinfection. The system will be located in the eastern most basin of the former, unused polishing pond next to the existing chlorine contact channels. Secondary effluent piping will be diverted through the wall of the polishing pond structure, into the new UV system, and back into the former contact channel that flows out the gravity outfall pipe or into the effluent pump station basin. The UV system consists of three treatment trains; with two trains online, the plant can treat up to the peak day plant capacity of 1.6 MGD. With all three train online, the plant can treat up to the peak instantaneous capacity of 2.0 MGD. The system also includes automatic isolation valves for each UV train, a new flow

Annotations in red are from Olympic Region Clean Air Agency (ORCAA)

meter influent to the UV system, and continuous ventilation of the space. Access to the UV system will be provided by new stairs from grade down to the UV system.

New vertical turbine/mixed flow style effluent pumps will be provided to replace the former effluent pumps. Each pump is sized to handle the peak instantaneous flow of 2.0 MGD. The pump station will be used to ensure gravity flow through the UV system can be achieved during peak plant flows and used during infrequent flood stages in the Chehalis River that may impact gravity outfall operation.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. *The project will occur within the City's WWTP. The WWTP is located at 128 State Route 107 in S7 T17N R7W and can be reached by driving south from the City of Montesano on Hwy 107.*

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

(circle one): (Flat), (rolling), hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?
2%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.
The soils in the area are Chehalis silt loam and Cloquato silt loam. The project work would have no impacts to agricultural soils or lands.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
No

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.
The project will include importing approximately 9,800 cubic yards of material to fill half of the existing biosolids holding pond. Minor grading of fill will take place to facilitate use of the site.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Stockpiling, and backfill operations may expose soils to wind and water erosion if left unattended for an extended period. Construction practices will follow best management practices (BMPs) for erosion and sediment control from the Western Washington Stormwater Management Manual, which will include silt fencing in

sensitive areas.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
No new impervious surfaces will be created.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
Construction practices will follow the best management practices from the Western Washington Stormwater Management Manual and will include silt fencing, waddles and placement of straw where needed on downhill slopes.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. Emissions from emergency engine when used for emergency purposes and routine maintenance/testing according to BMPs recommended by the engine manufacturer
Anticipated short-term air emissions include dust and vehicle and equipment exhaust during construction, but no long-term impacts from vehicles are expected. No significant emissions are expected from ongoing operations at the property.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
All heavy equipment will be factory-fitted with emission control devices and turned off when not in use. BMPs will be utilized during construction to control dust if necessary.

3. **Water**

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *Project work will occur near the Wynoochee River. Sylvia Creek is nearby to the north, but upstream of the WWTP.*

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. *Yes*

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. *Not Applicable*

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *No*

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
Yes, the entire project area is within the 100-year floodplain. However, the placement of fill within the existing lagoon will cause no rise in base flood elevation because the site is already protected by a flood wall.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. *Not Applicable*

Annotations in red are from Olympic Region Clean Air Agency (ORCAA)

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. *Not Applicable*

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. *Not Applicable*

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
No impervious surfaces will be created.

2) Could waste materials enter ground or surface waters? If so, generally describe.
No

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.
No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Potential impacts during construction will be mitigated by utilized best management practices in accordance with the Western Washington Stormwater Management Manual, specifically silt fencing, waddles, straw and temporary silt detaining ponds.

4. **Plants**

a. Check the types of vegetation found on the site:

____deciduous tree: alder, maple, aspen, other
____evergreen tree: fir, cedar, pine, other
____shrubs
X____grass
____pasture
____crop or grain
____ Orchards, vineyards or other permanent crops.
____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
____other types of vegetation

b. What kind and amount of vegetation will be removed or altered?
None.

c. List threatened and endangered species known to be on or near the site.
None known

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
Not Applicable

e. List all noxious weeds and invasive species known to be on or near the site.
None determined

5. **Animals**

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site.
None Known

c. Is the site part of a migration route? If so, explain.

The site is within the Pacific Flyway, a migratory bird route that extends from Alaska to South America. The project is not anticipated to have any measurable effects to migratory birds.

d. Proposed measures to preserve or enhance wildlife, if any:
Not Applicable

e. List any invasive animal species known to be on or near the site.
None known

6. **Energy and Natural Resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Not Applicable.

7. **Environmental Health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

No

1) Describe any known or possible contamination at the site from present or past uses.
None Known

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
N/A

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
None

4) Describe special emergency services that might be required.
Police and Fire services by City of Montesano

5) Proposed measures to reduce or control environmental health hazards, if any:

The project will be designed, and construction activities will be controlled, to avoid any potential hazards associated with construction. A health and safety plan will be created and followed during the construction of the project. Additionally, a SPCC Plan and a SWPPP will be used to ensure that any spills or incidents occurring during the project construction are addressed in the proper manner.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
Sources of ambient noise include vehicle traffic traveling on US-107 and equipment at the WWTP. These will not affect the project construction or operation

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.
Short term noise is expected from construction activities during normal working hours. Long term impacts are not anticipated.

3) Proposed measures to reduce or control noise impacts, if any:
Construction activities will be limited to daylight work hours. All construction equipment will be maintained and properly functioning and equipment will be turned off while not in use.

8. **Land and Shoreline Use**

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.
Besides the WWTP site, the existing and adjacent properties are undeveloped.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?
No

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:
No

c. Describe any structures on the site.
Lab and equipment buildings consistent with WWTP use.

d. Will any structures be demolished? If so, what?
No

e. What is the current zoning classification of the site?
The area is zoned C-2 Heavy Commercial.

f. What is the current comprehensive plan designation of the site?
C-2 Heavy Commercial

g. If applicable, what is the current shoreline master program designation of the site?
Y*es, the project area is designated a conservancy environment in the City's 1992 SMP.*

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.
Not within the WWTP area where the work will occur.

i. Approximately how many people would reside or work in the completed project?
One worker

j. Approximately how many people would the completed project displace?
None

k. Proposed measures to avoid or reduce displacement impacts, if any:
N/A

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
None Needed

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:
N/A

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None

c. Proposed measures to reduce or control housing impacts, if any:
N/A

10. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
10' for a building modification.

b. What views in the immediate vicinity would be altered or obstructed?
None

b. Proposed measures to reduce or control aesthetic impacts, if any:
No aesthetic impacts are anticipated.

11. **Light and Glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
Exterior lighting will be replaced.

b. Could light or glare from the finished project be a safety hazard or interfere with views?
N/A

c. What existing off-site sources of light or glare may affect your proposal?
None

d. Proposed measures to reduce or control light and glare impacts, if any:
None

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity?
Not Applicable.

b. Would the proposed project displace any existing recreational uses? If so, describe.
No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None

13. **Historic and cultural preservation**

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

None

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None. Native soils will not be disturbed.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

N/A

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

N/A

14. **Transportation**

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Lake Hill Road and Lake Sylvia Road to forest access roads.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

N/A

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

NONE

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Not Applicable.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

h. Proposed measures to reduce or control transportation impacts, if any:
None

15. **Public Services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.
No

b. Proposed measures to reduce or control direct impacts on public services, if any.
None

16. **Utilities**

a. Circle utilities currently available at the site:
electricity, natural gas, **water, refuse service, telephone, sanitary sewer,** septic system, other _____ None

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
N/A

C. Signature

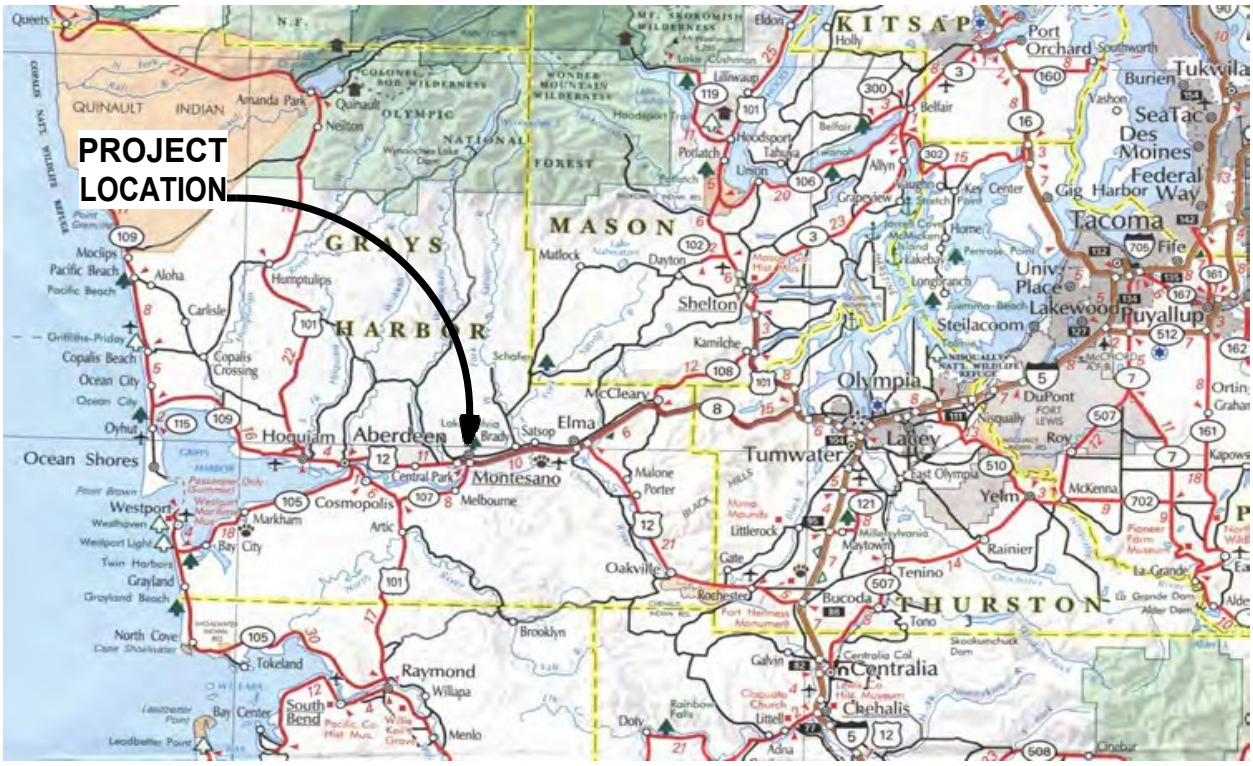
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Name of signee Mike Olden, P.E.

Position and Agency/Organization Public Works and Community Development Director

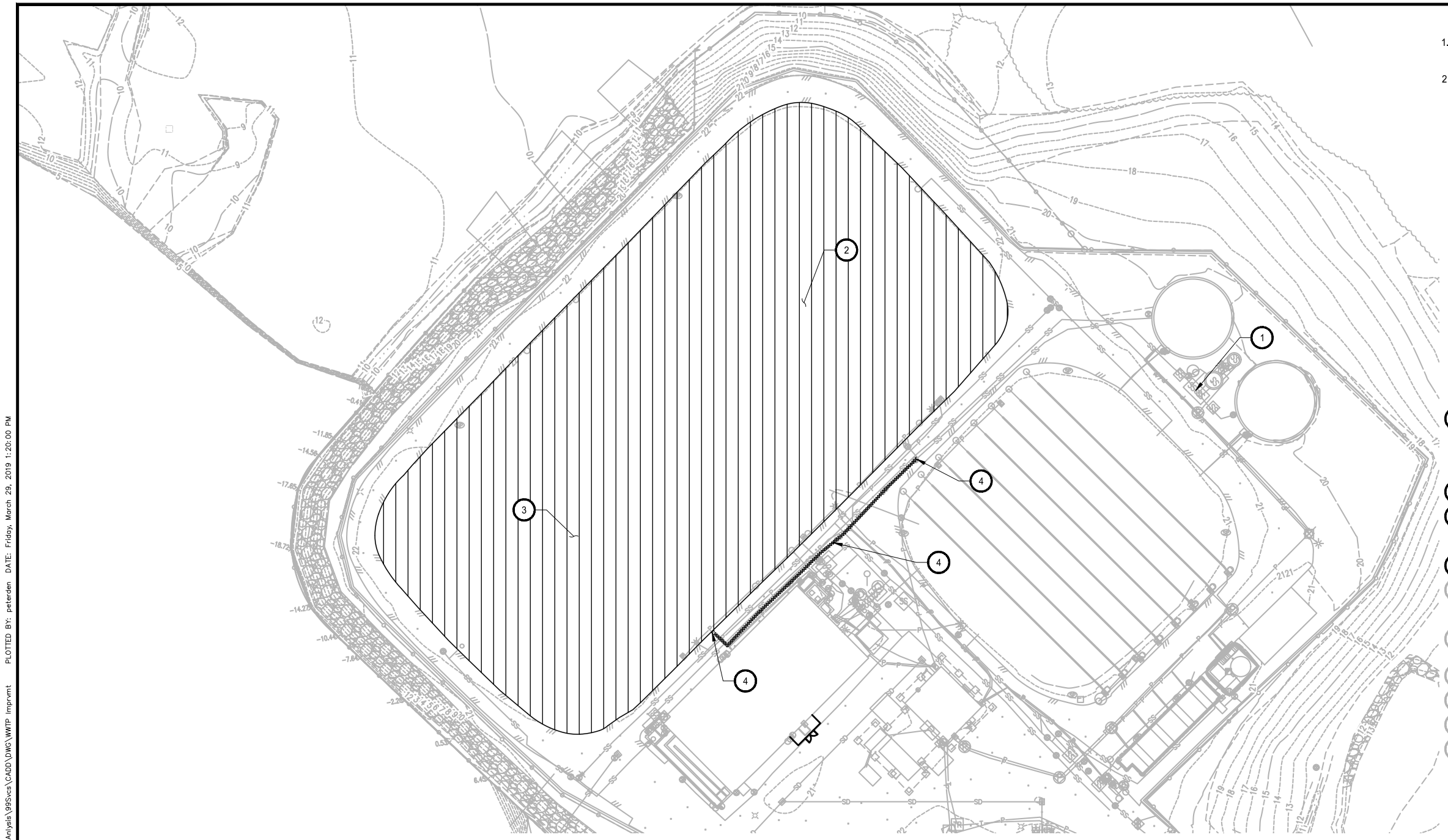
Date Submitted: April 11, 2019



VICINITY MAP

LOCATION MAP

PATH: U:\PSO\Projects\Clients\1678-CityOfMontesano\217-1678-044 WWTP Jack0gn Anlysis\99Svcs\CADD\DWG\WWTP Imprvmt PLOTTED BY: peterden DATE: Friday, March 29, 2019 1:20:00 PM
LAYOUT: D1



GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY DIMENSIONS, ELEVATIONS, AND LOCATIONS PRIOR TO CONSTRUCTION.
2. ELEVATIONS ARE BASED ON NAVD88 DATUM. NOTE: THE ORIGINAL WASTEWATER TREATMENT PLANT PLANS FROM 1990 AND THE WASTEWATER TREATMENT PLANT IMPROVEMENTS PLANS FROM 1998 ARE BASED ON NGVD29.

CONSTRUCTION SEQUENCING:

1. TEMPORARILY SUSPEND LAGOON OPERATIONS AND CLOSE LAGOON; REMOVE ONE CLARIFIER FROM OPERATION AND BEGIN TEMPORARY HOLDING OF WASTE ACTIVATED SLUDGE (WAS) IN OFFLINE CLARIFIER. IF CLARIFIER VOLUME CANNOT HOLD WAS FOR DURATION OF LAGOON CONSTRUCTION, CONTINGENCY WAS HAULING SHALL BE ENACTED PER PROJECT SPECIFICATIONS.
2. DREDGE AND DEWATER BIOSOLIDS FROM EXISTING LAGOON FOR LAND APPLICATION
3. DECANT (DRAIN) LIQUID OUT OF ENTIRE EXISTING LAGOON AND BACK TO BIOLAC; CONTRACTOR SHALL USE FLOW LESS THAN OR EQUAL TO FLOW RATE PROVIDED IN PROJECT SPECIFICATIONS FOR LAGOON DRAINING.
4. CAP AT LAGOON INLET 1 TEE, ABANDON 4" WAS PIPE
5. REMOVE EXISTING AERATORS ALONG WITH CONCRETE BLOCKS FROM ENTIRE LAGOON FOR FUTURE USE; COMPLETE EXISTING LINEAR DECOMMISSIONING BY ABANDONING IN PLACE AND PERFORATING LINER PER PROJECT SPECIFICATIONS.
6. CONSTRUCT PERMANENT BERM ACROSS LAGOON TO SPLIT EXISTING LAGOON IN HALF.
7. FILL EXISTING WEST LAGOON
8. RE-LINE / PLACE NEW LINER ON EAST LAGOON
9. RE-INSTALL AERATORS AND CONCRETE BLOCKS FOR PLANT OPERATION
10. END TEMPORARY WAS HOLDING AND/OR PUMPING TO TRUCKS; RESUME NORMAL PLANT OPERATION BY PUMPING TO EAST LAGOON AND RE-FILL LAGOON.

LEGEND:

- ABANDON EX. PIPE
- DECANT / DEWATER / DREDGE
- NEW PERMANENT BERM & SLOPE GRADING
- EARTHWORK / FILL
- NEW LAGOON LINING

PLAN
SCALE IN FEET
0 30 60
N

90 % REVIEW SUBMITTAL
NOT FOR CONSTRUCTION

	REVISIONS	DATE	BY

DESIGNED M. AUSTIN
DRAWN M. AUSTIN
CHECKED D. BERSCHAUER
APPROVED

ONE INCH AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

FILE NAME PU16780044P03AT03C-D1
JOB No. 217-1678-044 PH3
DATE MARCH 2019

MATTHEW F. AUSTEN — STATE OF WASHINGTON — 52623 — REGISTERED PROFESSIONAL ENGINEER

PRELIMINARY

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
CITY OF MONTESANO
WWTP IMPROVEMENTS
MONTESANO, WASHINGTON

DEMOLITION / CONSTRUCTION SEQUENCING PLAN

DRAWING NO.
8 OF 48
D1

PLOTTED BY: peterden DATE: Friday, March 29, 2019 1:20:28 PM
PATH: U:\PSO\Projects\Clients\1678-CityOfMontesano\217-1678-044 WWTP Jcob\Dgn Anlysis\99Svca\CADD\DWG\WWTP Imprvmt
LAYOUT: D2

GENERAL NOTES:

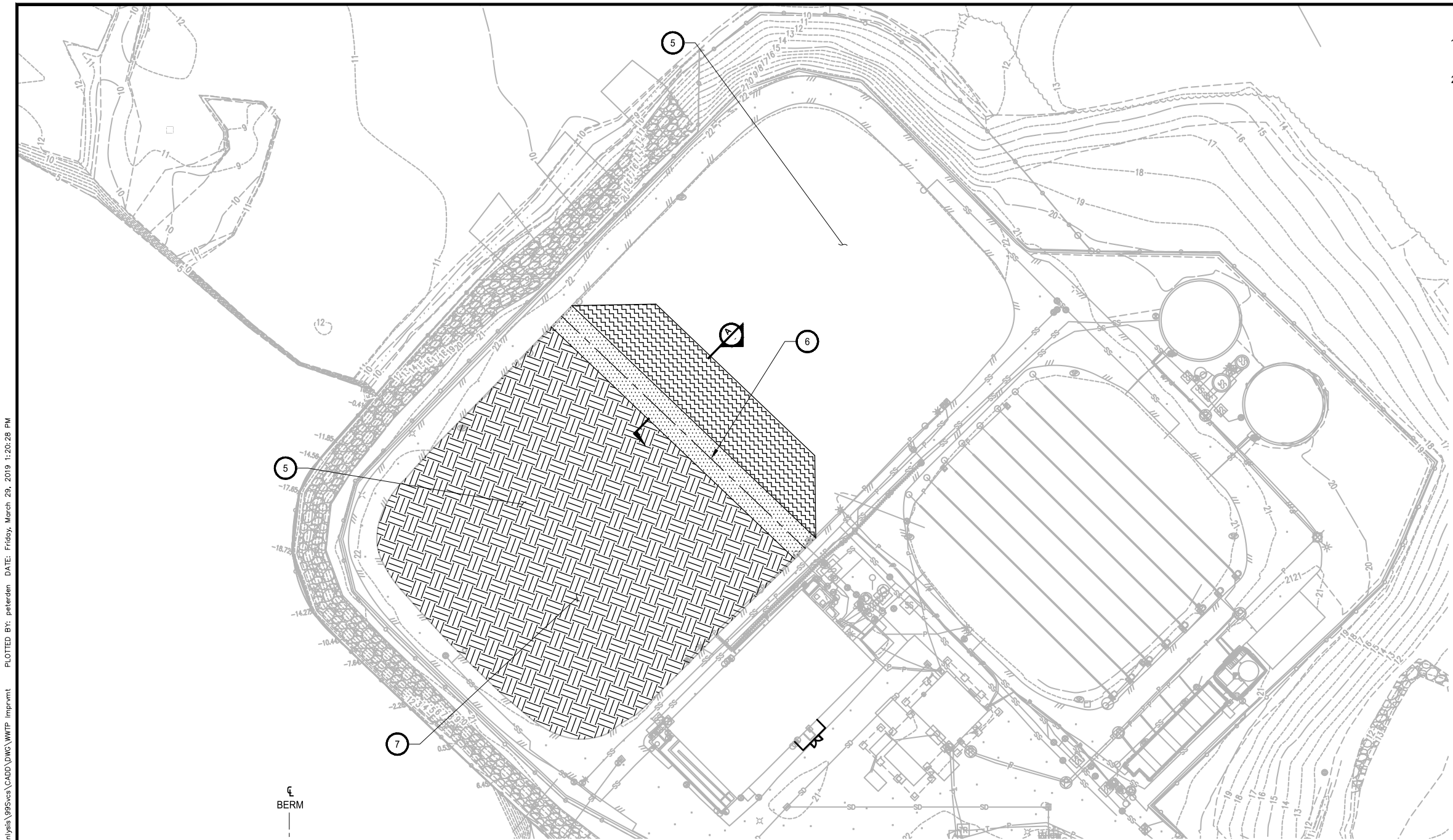
1. CONTRACTOR SHALL VERIFY DIMENSIONS, ELEVATIONS, AND LOCATIONS PRIOR TO CONSTRUCTION.
2. ELEVATIONS ARE BASED ON NAVD88 DATUM. NOTE: THE ORIGINAL WASTEWATER TREATMENT PLANT PLANS FROM 1990 AND THE WASTEWATER TREATMENT PLANT IMPROVEMENTS PLANS FROM 1998 ARE BASED ON NGVD29.

CONSTRUCTION SEQUENCING:

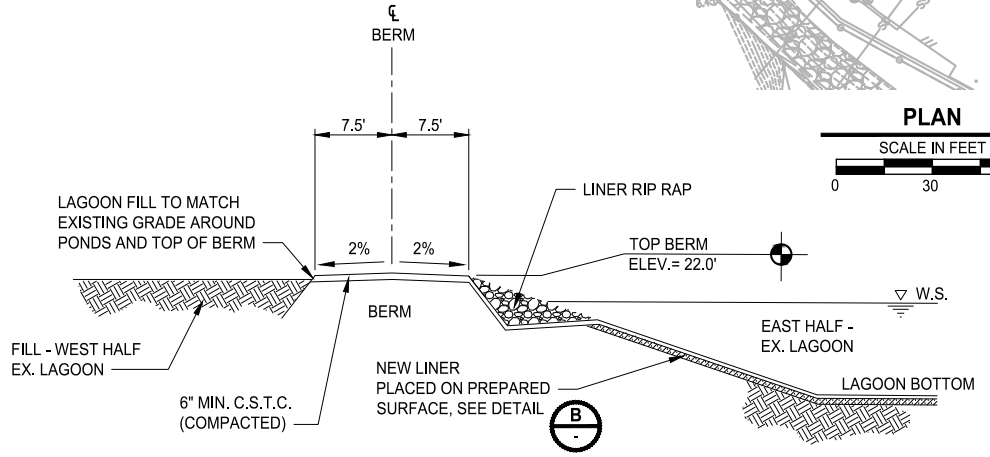
1. TEMPORARILY SUSPEND LAGOON OPERATIONS AND CLOSE LAGOON; REMOVE ONE CLARIFIER FROM OPERATION AND BEGIN TEMPORARY HOLDING OF WASTE ACTIVATED SLUDGE (WAS) IN OFFLINE CLARIFIER. IF CLARIFIER VOLUME CANNOT HOLD WAS FOR DURATION OF LAGOON CONSTRUCTION, CONTINGENCY WAS HAULING SHALL BE ENACTED PER PROJECT SPECIFICATIONS.
2. DREDGE AND DEWATER BIOSOLIDS FROM EXISTING LAGOON FOR LAND APPLICATION
3. DECANT (DRAIN) LIQUID OUT OF ENTIRE EXISTING LAGOON AND BACK TO BIOLAC; CONTRACTOR SHALL USE FLOW LESS THAN OR EQUAL TO FLOW RATE PROVIDED IN PROJECT SPECIFICATIONS FOR LAGOON DRAINING.
4. CAP AT LAGOON INLET 1 TEE, ABANDON 4" WAS PIPE
5. REMOVE EXISTING AERATORS ALONG WITH CONCRETE BLOCKS FROM ENTIRE LAGOON FOR FUTURE USE; COMPLETE EXISTING LINEAR DECOMMISSIONING BY ABANDONING IN PLACE AND PERFORATING LINER PER PROJECT SPECIFICATIONS.
6. CONSTRUCT PERMANENT BERM ACROSS LAGOON TO SPLIT EXISTING LAGOON IN HALF.
7. FILL EXISTING WEST LAGOON
8. RE-LINE / PLACE NEW LINER ON EAST LAGOON
9. RE-INSTALL AERATORS AND CONCRETE BLOCKS FOR PLANT OPERATION
10. END TEMPORARY WAS HOLDING AND/OR PUMPING TO TRUCKS; RESUME NORMAL PLANT OPERATION BY PUMPING TO EAST LAGOON AND RE-FILL LAGOON.

LEGEND:

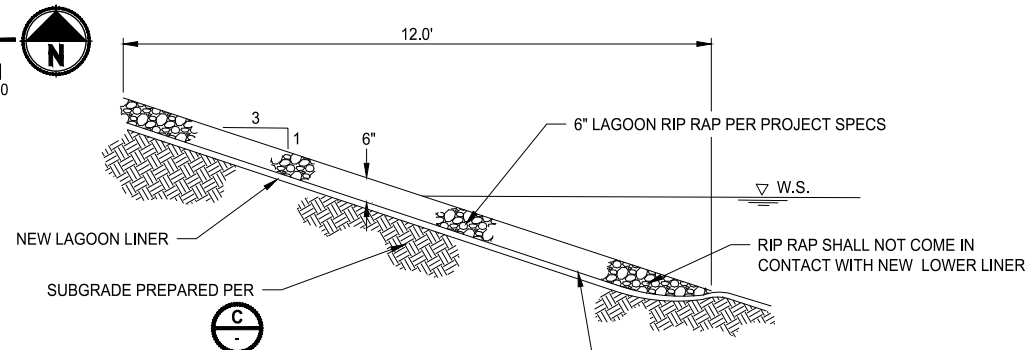
- ABANDON EX. PIPE
- DECANT / DEWATER / DREDGE
- NEW PERMANENT BERM & SLOPE GRADING
- EARTHWORK / FILL
- NEW LAGOON LINING



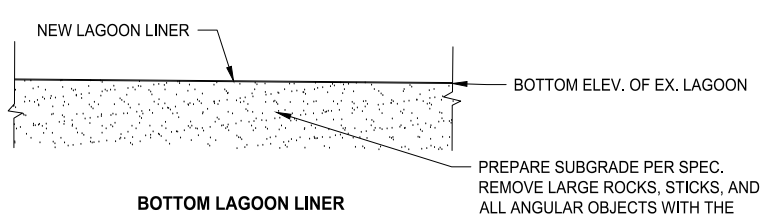
PLAN
SCALE IN FEET
0 30 60



PERMANENT BERM FOR LAGOON FILL
SECTION A
N.T.S.



SIDE SLOPE LAGOON LINER
SECTION B
N.T.S.



BOTTOM LAGOON LINER
SECTION C
N.T.S.

90 % REVIEW SUBMITTAL
NOT FOR CONSTRUCTION

	REVISIONS	DATE	BY

DESIGNED M. AUSTIN
DRAWN M. AUSTIN
CHECKED D. BERSCHAUER
APPROVED

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PU16780044P03AT03C-D1
JOB No. 217-1678-044 PH3
DATE MARCH 2019

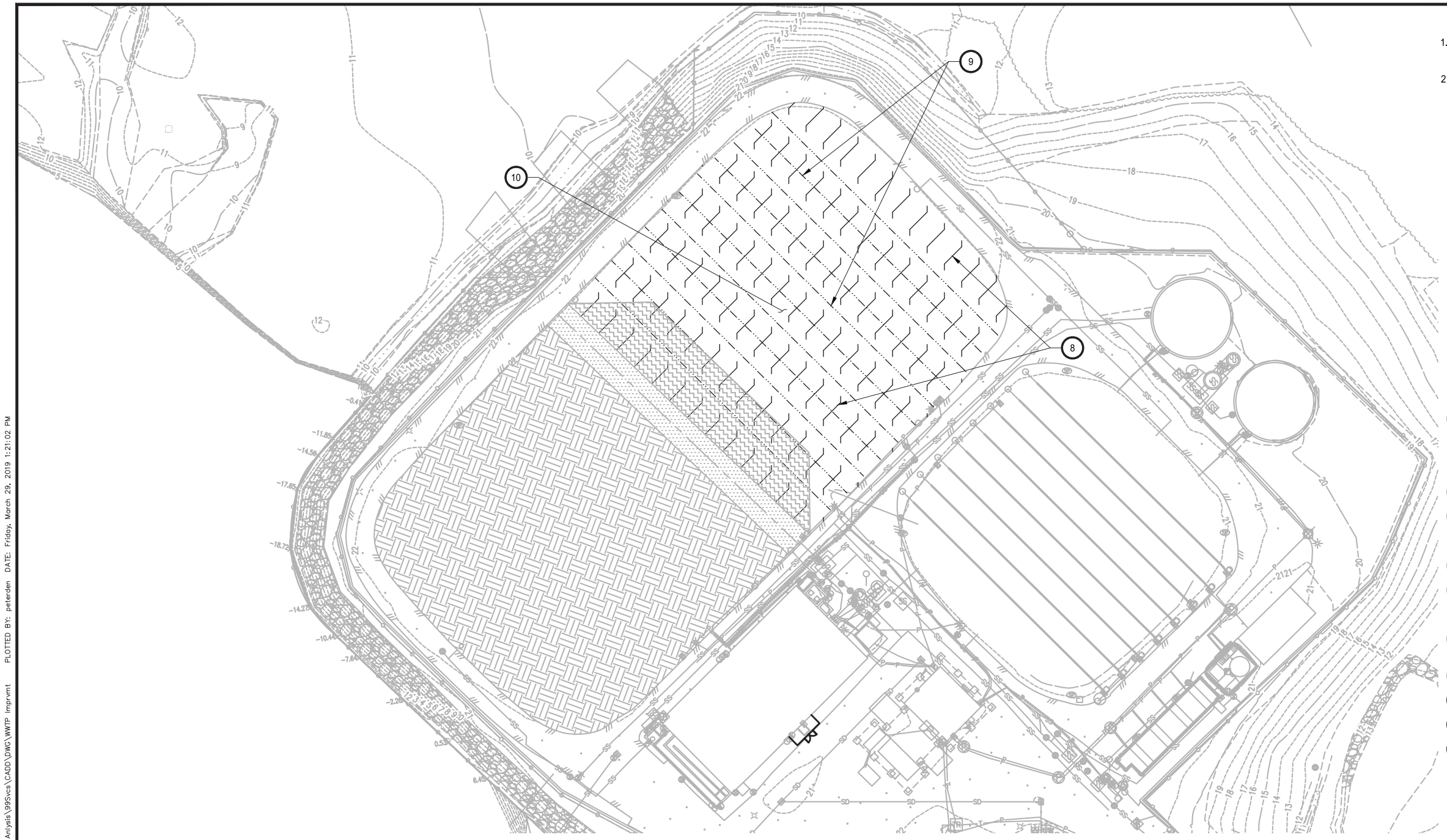
MATTHEW P. AUSTIN STATE OF WASHINGTON 52823 REGISTERED PROFESSIONAL ENGINEER
PRELIMINARY

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
CITY OF MONTESANO
WWTP IMPROVEMENTS
MONTESANO, WASHINGTON

DEMOLITION / CONSTRUCTION SEQUENCING PLAN

DRAWING NO.
9 OF 48
D2



PLAN
SCALE IN FEET
0 30 60

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY DIMENSIONS, ELEVATIONS, AND LOCATIONS PRIOR TO CONSTRUCTION.
2. ELEVATIONS ARE BASED ON NAVD88 DATUM. NOTE: THE ORIGINAL WASTEWATER TREATMENT PLANT PLANS FROM 1990 AND THE WASTEWATER TREATMENT PLANT IMPROVEMENTS PLANS FROM 1998 ARE BASED ON NGVD29.

CONSTRUCTION SEQUENCING:

1. TEMPORARILY SUSPEND LAGOON OPERATIONS AND CLOSE LAGOON; REMOVE ONE CLARIFIER FROM OPERATION AND BEGIN TEMPORARY HOLDING OF WASTE ACTIVATED SLUDGE (WAS) IN OFFLINE CLARIFIER. IF CLARIFIER VOLUME CANNOT HOLD WAS FOR DURATION OF LAGOON CONSTRUCTION, CONTINGENCY WAS HAULING SHALL BE ENACTED PER PROJECT SPECIFICATIONS.
2. DREDGE AND DEWATER BIOSOLIDS FROM EXISTING LAGOON FOR LAND APPLICATION
3. DECANT (DRAIN) LIQUID OUT OF ENTIRE EXISTING LAGOON AND BACK TO BIOLAC; CONTRACTOR SHALL USE FLOW LESS THAN OR EQUAL TO FLOW RATE PROVIDED IN PROJECT SPECIFICATIONS FOR LAGOON DRAINING.
4. CAP AT LAGOON INLET 1 TEE, ABANDON 4" WAS PIPE
5. REMOVE EXISTING AERATORS ALONG WITH CONCRETE BLOCKS FROM ENTIRE LAGOON FOR FUTURE USE; COMPLETE EXISTING LINEAR DECOMMISSIONING BY ABANDONING IN PLACE AND PERFORATING LINER PER PROJECT SPECIFICATIONS.
6. CONSTRUCT PERMANENT BERM ACROSS LAGOON TO SPLIT EXISTING LAGOON IN HALF.
7. FILL EXISTING WEST LAGOON
8. RE-LINE / PLACE NEW LINER ON EAST LAGOON
9. RE-INSTALL AERATORS AND CONCRETE BLOCKS FOR PLANT OPERATION
10. END TEMPORARY WAS HOLDING AND/OR PUMPING TO TRUCKS; RESUME NORMAL PLANT OPERATION BY PUMPING TO EAST LAGOON AND RE-FILL LAGOON.

LEGEND:

- ABANDON EX. PIPE
- DECANT / DEWATER / DREDGE
- NEW PERMANENT BERM & SLOPE GRADING
- EARTHWORK / FILL
- NEW LAGOON LINING

90 % REVIEW SUBMITTAL
NOT FOR CONSTRUCTION

	REVISIONS	DATE	BY

DESIGNED M. AUSTIN
DRAWN M. AUSTIN
CHECKED D. BERSCHAUER
APPROVED

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

FILE NAME PU1678044P03AT03C-D1
JOB No. 217-1678-044 PH3
DATE MARCH 2019

PRELIMINARY
MATTHEW P. AUSTIN — STATE OF WASHINGTON — 52823 — REGISTERED PROFESSIONAL ENGINEER

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
CITY OF MONTESANO
WWTP IMPROVEMENTS
MONTESANO, WASHINGTON

DEMOLITION / CONSTRUCTION SEQUENCING PLAN

DRAWING NO.
10 OF 48
D3

LAYOUT: D3 PATH: U:\PSO\Projects\Clients\1678-CityOfMontesano\217-1678-044 WWTP JackOgn Anlysis\99Svcs\CADD\DWG\WWTP Imprvmt PLOTTED BY: peterden DATE: Friday, March 29, 2019 1:21:02 PM