



<u>CITY OF RICHLAND</u> Determination of Non-Significance

Description of Proposal: Construction of a commercial storage facility consisting of sixty

(60) parking spaces, totaling approximately 33,240 square feet and drive aisle for a total site of 91,865 square feet. The project will consist of approximately 3,047 cubic yards of earth to be

moved/filled.

Proponent: David Ferrette

349 Lake Havasu Ave., Ste 104 Lake Havasu City, AZ 86403

Location of Proposal: The project is located at 905 Curie Street in Richland,

Washington. The site is described as Lot 2 of SP 3612.

Lead Agency: City of Richland

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

() There is no comment for the DNS.

(**X**) This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen days from the date of issuance.

() This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

Responsible Official: Mike Stevens **Position/Title:** Planning Manager

Address: 625 Swift Blvd., MS #35, Richland, WA 99352

Date: December 20, 2023

Comments Due: January 5, 2024

Signature Much Str

SEPA¹ 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.

¹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance

A.Background

Find help answering background questions²

- 1. Name of proposed project, if applicable: Luxelocker Richland
- 2. Name of applicant: David Ferrette
- **3.** Address and phone number of applicant and contact person: 349 Lake Havasu Avenue, Suite 104, Lake Havasu City, AZ 86403
- 4. Date checklist prepared: November 21, 2023
- 5. Agency requesting checklist: City of Richland Community Development Department
- **6. Proposed timing of schedule (including phasing, if applicable):** The schedule is to start grading in February of 2024 and proceed directly into construction. We will finish with landscaping and paving in Summer with an anticipated completion date of November.
- 7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. No Plans for further expansion at this time.
- 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. We have a Phase 1 Environmental Site Assessment complete for the property, available upon request.
- 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. I do not know of any other proposals regarding this property.
- **10.** List any government approvals or permits that will be needed for your proposal, if known. We will need a grading permit and building permits for this proposal.

² https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background

- 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.) Luxelocker- Richland, WA is a commercial storage facility located in the northern portion of Richland, Washington. The proposed facility will consist of sixty (60) parking spaces, totaling approximately 33,240 square feet and drive aisle for a total site of 91,865 square feet. The project will consist of approximately 3,047 cubic yards of earth to be moved/filled.
- 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 is located on an approximate 2.109-acre parcel located at the intersection of Stevens Drive and Curie Street in Richland, Washington. The parcel is bounded by an existing industrial facility (Western Sintering Company inc.) to the south and Fermi Avenue to the East. Specifically located at Lot 2 SP3612 at 905 Curie Street, Richland, WA 99354.

B.Environmental Elements

1. Earth

Find help answering earth questions³

a. **General description of the site:** The existing site comprises an area of approximately 2.109 acres of mostly flat land. Typical existing slopes for the site range from 0 to 2 percent. The site is undeveloped scrubland with no current use and includes no existing buildings.

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

- b. What is the steepest slope on the site (approximate percent slope)? The steepest slope on the site is approximately 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. A geotechnical report prepared by PBS describes the local geology as "underlain by Pleistocene age outburst flood sediments consisting

³ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth

of sand, silt, and fluvial gravels (Riedel and Fecht, 1994; Schuster, 1994"). PBS goes on to describe the subsurface conditions/units as follows:

- Fill: Variable fill consisting of sand and coarse-grained, round gravel from the ground surface to approximately 0.5 to 1.5 feet below ground surface. The fill was generally brown and non-plastic.
- Sand: 2 to 3 feet of poorly graded sand was observed below the gravel fill. The sand was generally fine-grained and ranged in color from brown to olive.
- Gravel: Brown to dark brown, poorly graded gravel was found to the termination depth of 10 feet below ground surface. Particles were generally coarse-grained and rounded or subrounded. Silt, sand and cobbles were intermixed with the gravel.
- 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 proposed parcel will have an approximate infill volume of 1,421 cubic yards of fill. The imported fill material will be sourced locally by a local excavator to be determined.
- f. Could erosion occur because of clearing, construction, or use? If so, generally describe. Erosion could occur during excavation and filing activities; however, erosion control and sedimentation measures will be implemented per local, state, and federal requirements to mitigate any erosion during and after construction. The expected duration of construction activities where erosion may occur is 6-7 months depending on weather conditions.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximately 8000 square feet for drive aisle right-a-way. The site will consist of gravel drive aisles, gravel parking spaces and no buildings.
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any. Installation of perimeter site controls consisting of silt fence to limit discharges off site. Maintaining and re-establishing natural vegetation in infiltration basins and other pervious surfaces. Dust control during construction through moistening excavated or disturbed soils as needed throughout construction.

2. Air

Find help answering air questions⁴

- a. What types of ecubicmissions 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 include dust and exhaust during construction, with minimal emissions after completion associated with vehicle exhaust from the outdoor storage facility.
- 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:

 Apply water during construction to control dust and stabilize soils after construction.

3. Water

Find help answering water questions⁵

a. Surface:

Find help answering surface water questions⁶

- 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. No.
- 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. No.
- 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. None.
- 4. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known. No.

⁴ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air

⁵ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water

⁶ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Surface-water

- 5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. No.
- 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. No.

b. Ground:

Find help answering ground water questions⁷

- 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 a general description, purpose, and approximate quantities if known. No.
- 2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (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. None.

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. The storm water runoff from the site will be conveyed to four surface infiltration basins proposed in each corner of the project site. This water will infiltrate into the existing sub surface soil. The static groundwater levels for the project site are anticipated to be at a depth of 50 feet below ground surface based on regional groundwater logs available from the Washington State Department of Ecology.
- 2. Could waste materials enter ground or surface waters? If so, generally describe. No.

⁷ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater

- 3. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. No, the peak runoff from a 25-year 24-hour storm is fully retained on the project site. Drainage patterns in the vicinity of the project are not being altered or modified from the proposed site.
- d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: Four infiltration basins are proposed to provide peak runoff control for the project.

4. Plants

Find help answering plants questions

a.	Check the types of vegetation found on the site:
	□ deciduous tree: alder, maple, aspen, other
	\square evergreen tree: fir, cedar, pine, other
	⊠ grass
	□ pasture
	\square crop or grain
	$\hfill \Box$ orchards, vineyards, or other permanent crops.
	\square wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
	\square water plants: water lily, eelgrass, milfoil, other
	\square other types of vegetation
b.	What kind and amount of vegetation will be removed or altered? The entire site will be cleared of the grasses and sage brush. Existing street trees that interfere with site will be removed as well.
c.	List threatened and endangered species known to be on or near the site. None.
d.	Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any. None.
e.	List all noxious weeds and invasive species known to be on or near the site. None.

5. Animals

Find help answering animal questions⁸

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site. None.

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.
- Is the site part of a migration route? If so, explain. Yes, the area is part of the Pacific Flyway.
- d. Proposed measures to preserve or enhance wildlife, if any. None.
- e. List any invasive animal species known to be on or near the site. None.

6. Energy and natural resources

Find help answering energy and natural resource questions⁹

- 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. Site will consist of light poles around the perimeter of the facility, there will be no manufacturing or heating uses.
- 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. Project will follow energy code requirements.

⁹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou

https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals https://ecology.wa.gov/Regulations_Permits/SEPA/Environmental_review/SEPA_guidance/SEPA_checklist

7. Environmental health

Health Find help with answering environmental health questions¹⁰

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe. No hazards known.
 - Describe any known or possible contamination at the site from present or past uses. Per the Phase 1 Environmental Site Assessment there is no known contamination at this site.
 - 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. None.
 - 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. This project is governed by condo owner's association CC&R's that would restrict the use and storage of this type of material.
 - 4. **Describe special emergency services that might be required.** No special emergency services will be required.
 - 5. Proposed measures to reduce or control environmental health hazards, if any. CC&R's will be in place to control the types of materials that will be stored and used on this property.

b. Noise

- What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? Street noise from local roads, but nothing that will affect development.
- 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)? In the short term there will be construction noises such as earthwork, large trucks coming to the site

¹⁰ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health

to complete construction. In the long-term part of this development is a outdoor storage facility for recreational vehicles so motor homes and trailed vehicles.

3. Proposed measures to reduce or control noise impacts, if any: None.

8. Land and shoreline use

Find help answering land and shoreline use questions¹¹

- 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. Most adjacent sites are currently vacant so I would anticipate insignificant impact to nearby properties.
- 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 because 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? This site hasn't been used as working farmlands or working forest lands in recent history.
 - 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, there are no surrounding working farm or forest land operations.
- **c. Describe any structures on the site.** There are currently no structures on the lot associated with this site.
- d. Will any structures be demolished? If so, what? No.
- e. What is the current zoning classification of the site? The site is currently zoned I-M, Medium Industrial
- f. What is the current comprehensive plan designation of the site? Open Storage Facility for Boat & RVs.

¹¹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use

- g. If applicable, what is the current shoreline master program designation of the site? $\ensuremath{\mathsf{N}/\mathsf{A}}$
- h. Has any part of the site been classified as a critical area by the city or county? If so, specify. No.
- i. Approximately how many people would reside or work in the completed project? There will be no people residing at the site or working. Outdoor storage only.
- j. Approximately how many people would the completed project displace? No people will be displaced by this project.
- k. Proposed measures to avoid or reduce displacement impacts, if any. None.
- I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any. We have worked with both the City of Richland and the Port of Benton to ensure the overall project fits within their vision for this area. It provides a good space and convenient location.
- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any: None.

9. Housing

Find help answering housing questions¹²

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. No residential units are a part of this project.
- 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: None.

¹² https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing

10. Aesthetics

Find help answering aesthetics questions¹³

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? Oft. This site has no buildings.
- **b.** What views in the immediate vicinity would be altered or obstructed? Due to most of the adjacent properties are vacant there would not be any views altered or obstructed.
- c. Proposed measures to reduce or control aesthetic impacts, if any: All surrounding fencing will have landscape screens to stay visually appealing from all public streets.

11. Light and glare

Find help answering light and glare questions¹⁴

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? On-site exterior lights for security and safety will be on during nondaylight hours.
- b. Could light or glare from the finished project be a safety hazard or interfere with views? No.
- 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

Find help answering recreation questions

- a. What designated and informal recreational opportunities are in the immediate vicinity? None.
- b. Would the proposed project displace any existing recreational uses? If so, describe. No, this project will not displace any existing recreational uses.

https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics
 https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: This project is primarily a storage facility for recreational vehicles such as campers, boats, ATVs, etc.

13. Historic and cultural preservation

Find help answering historic and cultural preservation questions¹⁵

- 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? If so, specifically describe. No.
- 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. No.
- 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. None.
- 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. If any items of historic, cultural, or archaeological significance are uncovered during construction, the work will be stopped, and the appropriate authorities will be notified.

14. Transportation

Find help with answering transportation questions¹⁶

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. There are streets along three sides of the property and currently we are including drives to two of them for access. The drive access Fermi Drive on the east and Curie Street on the North. Stevens Drive runs along the west side of the property and can be accessed via Curie Street. See the plans included in this permit application.

¹⁵ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation

- 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? The closest bus stop to this site is just under one mile away.
- c. 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). No, none are planned.
- d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. No.
- e. 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? The ITE Trip Generation handbook was used to estimate the average daily trips for the development as follows:
 - Land Use Category 151- Mini Warehouse/Storage: 1.51 trips per day per 1,000 sf* 33,240 sf/1,000=50 daily trips. AM Peak trips would be approx. 3 and PM Peak trips approx. 6.
- f. 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.
- g. Proposed measures to reduce or control transportation impacts, if any: None.

15. Public services

Find help answering public service questions¹⁷

- 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. The development would increase the need for public services such as fire protection and police protection similar to other commercial developments.
- b. Proposed measures to reduce or control direct impacts on public services, if any. None.

¹⁷ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services

16. Utilities

Find help answering utilities questions¹⁸

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:
- 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. The proposed project will be served by fire flow provided by The City of Richland. Power and internet will also be needed.

C.Signature

Find help about who should sign¹⁹

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.

Type name of signee: David Ferrette

Position and agency/organization: Director of Development

Date submitted: 11/21/2023

D.Supplemental sheet for nonproject actions

Find help for the nonproject actions worksheet²⁰

Do not use this section for project actions. This section is not needed so the following sheets have been eliminated.

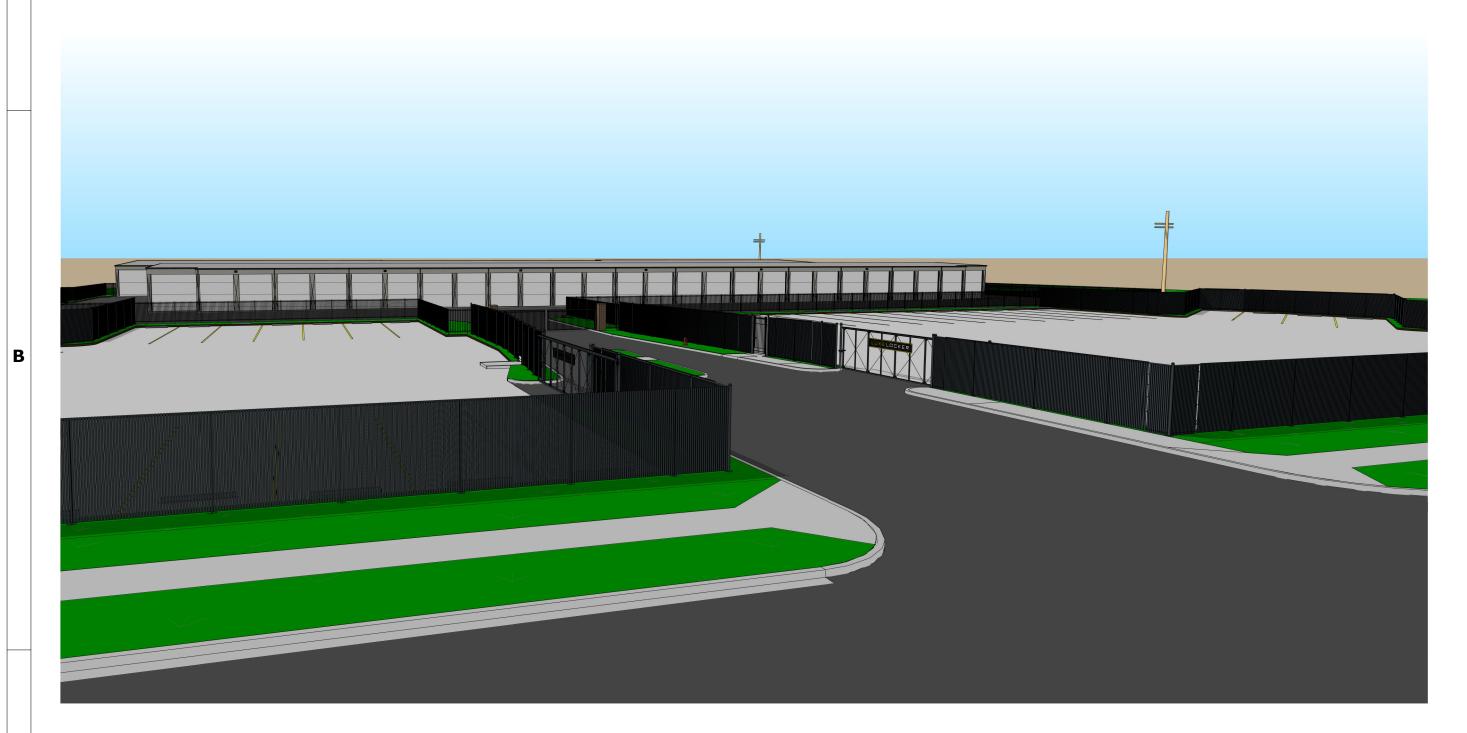
¹⁸ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities

¹⁹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature

²⁰ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions

LUXELOCKER

LUXURY R.V. & BOAT STORAGE 905 CURIE STREET RICHLAND, WA 99354



		AB	BREVIATION	12	
&	AND	FIN.	FINISHED	OFF.	OFFICE
@	AT	FL.	FLOOR	OPP.	OPPOSITE
<	CENTERLINE	F.O.	FINISHED OPENING	O.T.S.	OPEN TO STRUCTURE
> #	PLATE	F.O.C.	FACE OF CONCRETE		
#	POUND OR NUMBER	F.O.F.	FACE OF FINISH	P.A.	PUBLIC ADDRESS
		F.O.M.	FACE OF MASONRY	PL.	PLATE
A.B.	ANCHOR BOLT	F.O.S.	FACE PF STD	PLAS.	PLASTIC
ACOUS.	ACOUSTICAL	FOUND.	FOUNDATION	PLYWD.	PLYWOOD
A.D.	AREA DRAIN	FT.	FOOT OR FEET	P.R.	PAIR
ADJ.	ADJUSTABLE				
A.F.S.	AUTOMATIC FIRE	GA.	GUAGE	R.	RADIUS
	SPRINKLER	GALV.	GALVANIZED	R.D.	ROOF DRAIN
ALUM.	ALUMINUM	G.B.	GRAB BAR	REC.	RECESSED
ANOD.	ANODIZED	GYP.	GYPSUM	REFRIG.	REFRIGERATOR
APPROX.	APPROXIMATELY			REINF.	REINFORCED
ASB.	ASBESTOS	H.B.	HOSE BIBB	REQ.	REQUIRED
ASPH.	ASPHALT	H.C.	HANDICAP	RM.	ROOM
AVE.	AVENUE	H.C.W.	HOLLOW CORE WOOD	R.O.	ROUGH OPENING
		HDWD.	HARDWOOD	R.W.L.	RAIN WATER LEADER
BD.	BOARD	HDWR.	HARDWARE		
BLDG.	BUILDING	H.M.	HOLLOW METAL	S.C.W.	SOLID CORE WOOD
BLVD.	BOULEVARD	HORIZ.	HORIZONTAL	SH.	SHELVES
вот.	ВОТТОМ	HR.	HOUR	SHT.	SHEET
BSMT.	BASEMENT	HT.	HEIGHT	SHTHG.	SHEATHING
B.U.	BUILT UP			SHWR.	SHOWER
		I.D.	INSIDE DIAMETER	SIM.	SIMILAR
CAB.	CABINET	INSUL.	INSULATION	S.M.	SHEET METAL
CEM.	CEMENT	INT.	INTERIOR	S.M.S.	SHEET METAL SCREWS
CLG.	CEILING	INV.	INVERT	SPEC.	SPECIFICATIONS
C.O.	CLEAN OUT			S.S.	STAINLESS STEEL
COL.	COLUMN	JAN.	JANITOR	STD.	STANDARD
CONC.	CONCRETE	JT.	JOINT	STOR.	STORAGE
CONSTR.				STRUC.	STRUCTURAL
CONT.	CONTINOUS	KIT.	KITCHEN	SQ.	SQUARE
CORR.	CORRIDOR		LABORATORY	SUSP.	SUSPENDED
CSK.	COUNTERSUNK	LAB.	LABORATORY	SYM.	SYMMETRICAL
_{DD1}	DOUBLE	LAM.	LAMINATE	T 0 C	TONGLIE 9, CDOOVE
DBL.	DOUBLE	LAV.	LAVATORY	T&G	TONGUE & GROOVE
DEPT.	DEPARTMENT	L.M.B.	LIQUID MARKER BOARD	T.B. T.O.C.	TACKBOARD TOP OF CURB
DET. D.F.	DETAIL DRINKING FOUNTAIN	MAT.	MATERIAL	T.O.C. T.O.P.	TOP OF CORB
DIA.	DIAMETER	MAX.	MAXIMUM	T.O.S.	TOP OF STEEL
DIA.	DIMENSION	M.B.	MACHINE BOLT	T.O.S.	TOP OF STEEL
DIN.	DOWN	M.C.	MEDICINE CABINET	T.V.	TELEVISION
DRWG.	DRAWING	MECH.	MECHANICAL	TYP.	TYPICAL
	DIAWING	MET.	METAL		ITICAL
EA.	EACH	MANUF.	MANUFACTURER	U.N.O.	UNLESS NOTED OTHERWISE
ELEC.	ELECTRICAL	MIN.	MINIMUM	UR.	URINAL
ELEV.	ELEVATION	MISC.	MISCELLANEOUS		
E.P.	ELECTRICAL PANEL	M.O.	MASONRY OPENING	V.C.T.	VINYL NOTED OTHERWISE
EQ.	EQUAL	-		VERT.	VERTICAL
E.W.C.	ELECTRIC WATER COOLER	N.I.C.	NOT IN CONTRACT	VEST.	VESTIBULE
EXH.	EXHAUST	N.O.	NUMBER		
EXIST.	EXISTING	NOM.	NOMINAL	w/	WITH
EXP.	EXPANSION	N.T.S.	NOT TO SCALE	w.c.	WATER CLOSET
EXT.	EXTERIOR			WD.	WOOD
		OBSC.	OBSCURE	W/O	WITHOUT

REFERENCE AND TYPICAL DETAILS OF CONSTRUCTION. THEY DO NOT INDICATE EVERY CONDITION: WORK NOT PARTICULARLY DETAILED SHALL BE OF CONSTRUCTION SIMILAR TO PARTS THAT ARE DETAILED. DO NOT SCALE DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS WHERE DISCREPANCIES OCCUR. THEY SHALL BE REPORTED TO THE ARCHITECT FOR RESOLUTION. COORDINATE ALL CUTTING & PATCHING OF WALLS/CEILINGS WITH NEW/REMOVED MECHANICAL AND ELECTRICAL PENETRATIONS. VERIFY ALL EXISTING CONDITIONS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND COORDINATE AS REQUIRED. DETAILED DRAWINGS AND LARGER SCALE DRAWINGS TAKE

PRECEDENCE OVER SMALLER SCALE DRAWINGS.

APPLICABLE STATE AND LOCAL CODES, LAWS, AND REGULATIONS AND SHALL CONFORM TO THE 2018 IBC.

ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO ALL

CONSTRUCTION NOTES

THE DRAWINGS INDICATE LOCATION, DIMENSIONS,

S	YMBOLS &	GRAI	PHICS
+	WORK/CONTROL POINT OR DATUM		BATT, BLANKET, OR BLOWN INSULATION
<u>1</u> A →	DOOR TAG (NUMBER & LETTER)		RIGID INSULATION
(1t) ◀	WINDOW TAG (LETTER)		EARTH FILL
1	KEYNOTE (NUMBER)	50505050505050505050505050505050505050	GRAVEL FILL
	PARTITION TYPE TAG (NUMBER)	4	CONCRETE
Room name	ROOM ID (NUMBER)		CMU WALL
<u></u>	REVISION TAG (NUMBER & CLOUDED)	\(\psi \)	GRASS FILL
1 A-0.0	DETAIL NUMBER SHEET NUMBER		ECTION NUMBER CHEET NUMBER
A-0.0	INTERIOR ELEVATION TAG (NUMBER AND SHEET)		

PROJECT TEAM					
PROJECT ARCHITECT					
HATCH DESIGN ARCHITECTURE	JEFF HATCH, AIA LEED AP				
200 WEST 36TH STREET	TEL: (208) 475-3204				
BOISE, IDAHO 83714	FAX: (208) 475-3205				
CIVIL ENGINEER					
IRIS DEVELOPMENT SERVICES	MAC HALL				
2763 N. RILEY RD.	TEL: (602) 616-6898				
BUCKEYE, ARIZONA 85396					
MEP ENGINEER					
COFFMAN ENGINEERS SAM SWINBANK, MBA, PE					
901 MOPAC S. BLDG 1, STE. 300	TEL: (737) 667-5818				
AUSTIN, TEXAS 78746					

VICINIT	YMAP
Battelle Blvd Stevens Dr	Columbia River
Tingsgate Way	University Dr Sprout Rd
SITE LOCATION	ogton Way Harris Ave Columbia River
Stevens Dr	Seorge Washington Way Saint St Leslie
McMurray St	Groves Park George
Van Giesen St	Washington Way St. Giesen St.
*MAP NOT	
	RICHLAND, WA

SHEET NAME	SHEET #
ARCHITECTURAL	
COVER SHEET	A-0.0
SITE PLAN	A-1.0
SITE DETAILS	A-1.1
CIVIL	
COVER SHEET	C1
LEGEND & ABBREVIATIONS	C2
GENERAL NOTES	C3
existing conditions	C4
SITE PLAN	C5
GRADING PLAN	C6
CUT & FILL PLAN	C7
EROSION CONTROL PLAN	C8
DETAILS	C9
ELECTRICAL	
SYMBOLS LEGEND AND ABBREVIATIONS	E-0.0
ELECTRICAL NOTES	E-0.1
SPECIFICATIONS	E-0.2
ENERGY CODE COMPLIANCE FORMS	E-0.3
ENERGY CODE COMPLIANCE FORMS	E-0.4
ELECTRICAL SITE PLAN	E-1.0
SITE LIGHTING CALC SUMMARY	E-3.0
ELECTRICAL DETAILS	E-5.0
ONE-LINE AND GROUNDING RISER DIAGRAM	E-6.0
ELECTRICAL SCHEDULES	E-7.0

THIS PLAN AND/OR DESIGN ARE NOT TO BE CHANGED OR
COPIED IN ANY FORM, NOR ARE THE DOCUMENTS TO BE
ASSIGNED TO A THIRD PARTY WITHOUT WRITTEN CONSENT
AND PROPER COMPENSATION TO HATCH DESIGN
ARCHITECTURE.

THE USE OF THE PLANS SHALL BE RESTRICTED TO THE

200 W. 36TH ST.

JEFFERYL WRENCE HATCH STATE OF WASHINGTON

ER RICHLAND

V LUXURY R.V. & BOA

DELTA DATE: DESCRIPTION - COMMENTS

DATE: NOV. 202

DATE: NOV. 2023
DRAWN BY: NL
CHECKED BY: JLH
JOB NUMBER: MKT 23
SHEET TITLE

COVER SHEET

NUMBER

4-0.0

FLOOR DRAIN

F.E.C. FIRE EXTINGUISHER

O.C.

O.D.

ON CENTER

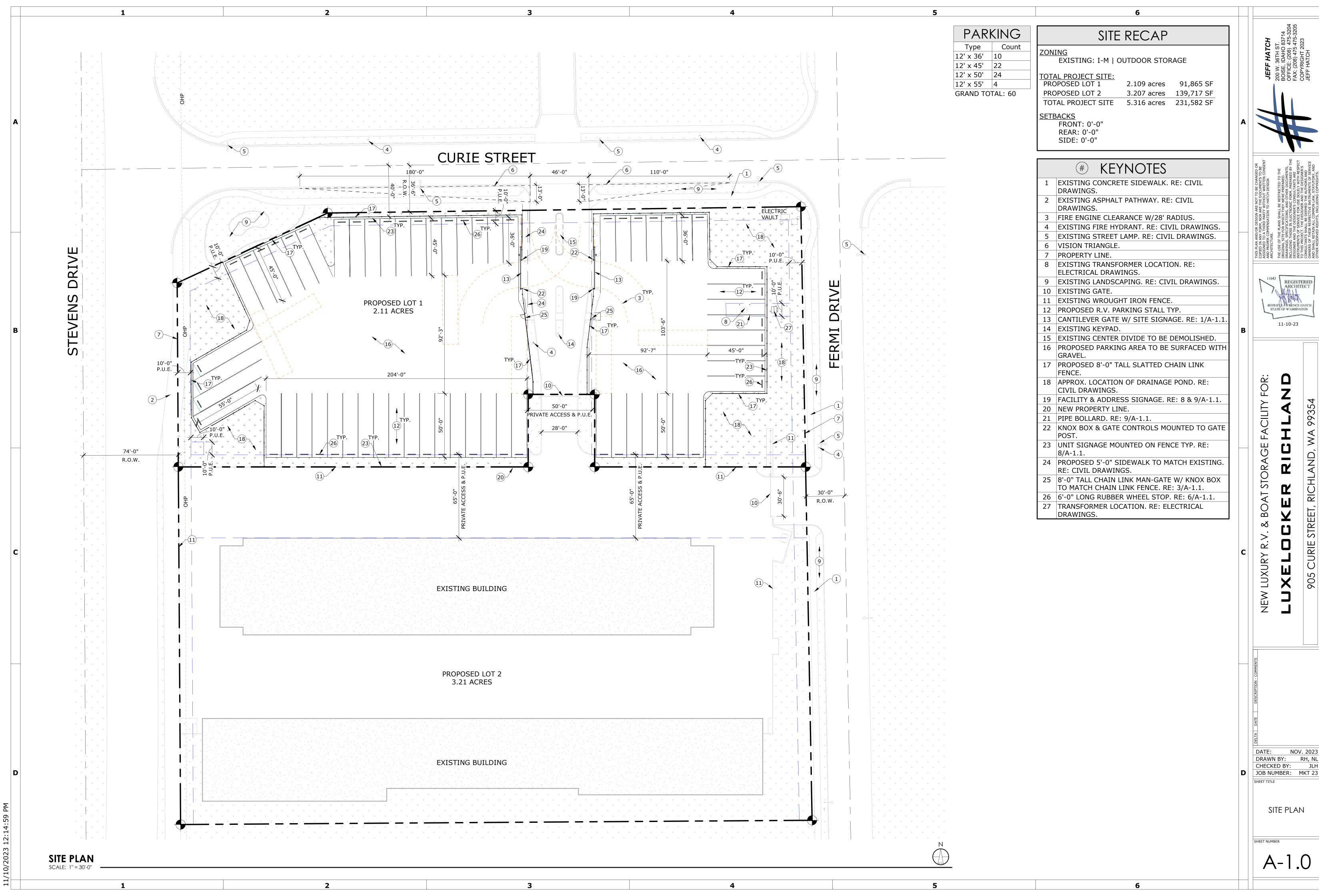
OUTSIDE DIAMETER

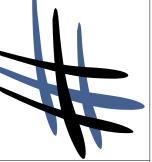
WATERPROOF

WATER RESISTANT

WR.

23-02527 - 23-

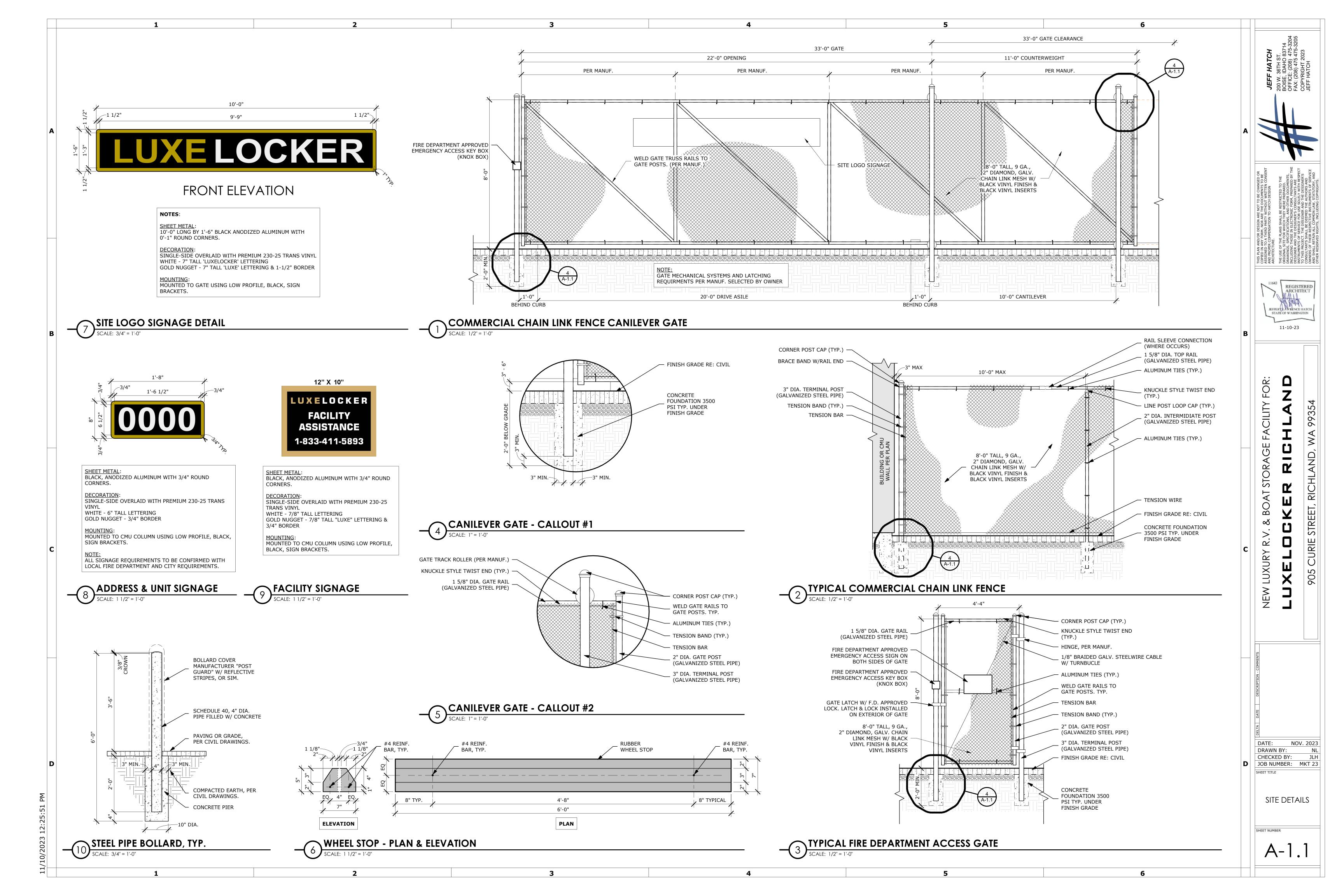




JEFFERY LAWRENCE HATO STATE OF WASHINGTON

NOV. 2023 DRAWN BY: RH, NL

SITE PLAN



903 W CURIE STREET, RICHLAND BENTON COUNTY, WASHINGTON

PROJECT DESIGN TEAM

OWNER/DEVELOPER

RICHLAND STORAGE PARTNERS, LLC 349 LAKE HAVASU AVENUE SOUTH, SUITE 106 LAKE HAVASU CITY, ARIZONA 86403 PHONE: 928.854.7747

CIVIL ENGINEER

IRIS DEVELOPMENT SERVICES, LLC 3129 MARICOPA AVENUE, #200 LAKE HAVASU CITY, ARIZONA 86406 PHONE: (928) 433-3816

PERMITTING/UTILITY CONTACTS

WATER

SEWER

CITY OF RICHLAND 2700 DUPORTAIL STREET, BLDG 100 RICHLAND, WA 99532 PHONE: 509.924.7670

CITY OF RICHLAND 625 SWIFT BLVD., MS#27 RICHLAND, WA 99352 PHONE: 509.942.7480

ELECTRICITY

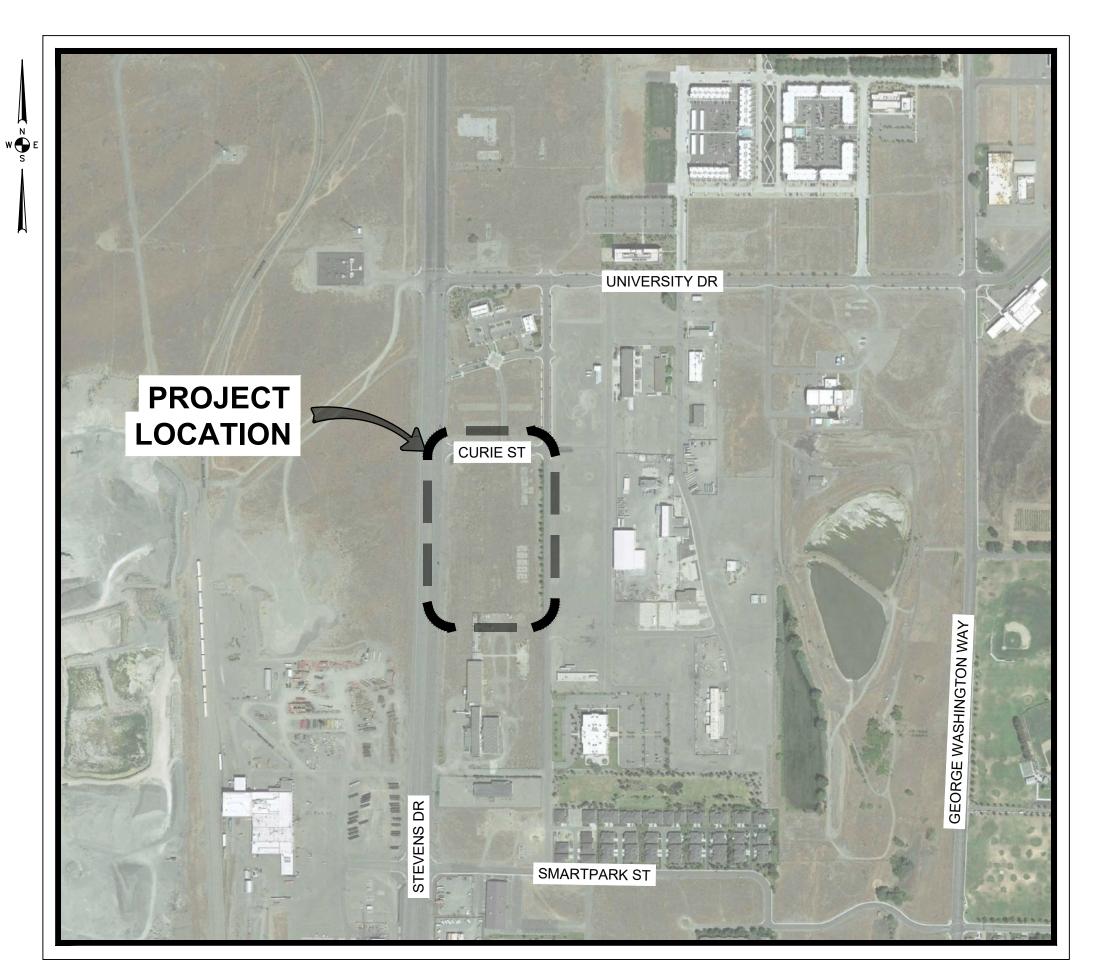
CITY OF RICHLAND ENERGY SERVICES 625 SWIFT BLVD., MS#27 RICHLAND, WA 99352 PHONE: 509.942.7403

PUBLIC WORKS DEPARTMENT

CITY OF RICHLAND 625 SWIFT BLVD., MS#26 RICHLAND, WA 99352 PHONE: 509.942.7500

FIRE DEPARTMENT

CITY OF RICHLAND 1000 GEORGE WASHINGTON WAY RICHLAND, WA 99352 PHONE: 509.942.7703



VICINITY MAP

SCALE: NTS

SHEET INDEX

C1 COVER SHEET TITLE
C1 COVER SHEET
C2 LEGEND & ABBREVIATIONS
C3 GENERAL NOTES
C4 EXISTING CONDITIONS
C5 SITE PLAN
C6 GRADING PLAN
C7 CUT & FILL PLAN
C8 EROSION CONTROL
C9 DETAILS

GENERAL NOTES

- 1. ATTENTION IS DRAWN TO THE FACT THAT THE SCALE OF THESE DRAWINGS MAY HAVE BEEN DISTORTED DURING THE REPRODUCTION PROCESS. THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNEES PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF A IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION FROM IRIS DEVELOPMENT SERVICES, PLLC SHALL BE WITHOUT LIABILITY TO IRIS DEVELOPMENT SERVICES, PLLC.
- 2. IF ANY CONFLICTS, DISCREPANCIES, OR ANY OTHER UNSATISFACTORY CONDITIONS DISCOVERED, EITHER ON THE CONSTRUCTION DOCUMENTS OR FIELD CONDITIONS. THE CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY AND SHALL NOT COMMENCE FURTHER OPERATINS UNTIL T HE CONFLICTS, DISCREPANCIES, OR OTHER UNSATISFACTORY CONDITIONS ARE RESOLVED.
- THE WORK SHOWN ON THESE PLANS HAVE BEEN PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE COMMITMENT BEING PROVIDED TO IRIS DEVELOPMENT SERVICES, PLLC. DUE TO THE ABSENCE OF THIS INFORMATION, IRIS DEVELOPMENT SERVICES, PLLC IS UNABLE TO IDENTIFY POTENTIAL EASEMENTS AND/OR OTHER RESTRICTIONS AND ENCUMBRANCES WITH THE POTENTIAL TO CONFLICT WITH THE PLANNED IMPROVEMENTS.

SURVEY NOTES

BASIS OF BEARING: NAD83(11) WASHINTON STATE PLANE COORDINATE SYSTEM, SOUTH ZONE.

UNITS OF MEASURE:
US SURVEY FEET GRID DISTANCES. MULTIPLY
GRID DISTANCES BY A COMBINED SCALE FACTOR
OF 1.000094929 TO ACHIVE GROUND DISTANCES.
REFERENCE SURVEY DISTANCES AND LOT AREA
ARE GROUND DISTANCES. MULTIPLY GROUND
DISTANCES BY A COMBINED SCALE FACTOR OF
0.999905080 TO ACHIVE SURVEYED GRID
DISTANCES.

<u>VERTICAL DATUM:</u> NAVD88 CITY OF RICHLAND DATUM.

ET# SHEE

IS DEVELOPMENT SER

IRIS DEVE

RICHLAND

LUXELOCKE

PROJECT

DESIGNER: DRAWN BY:



PROJECT NO. 2022-78

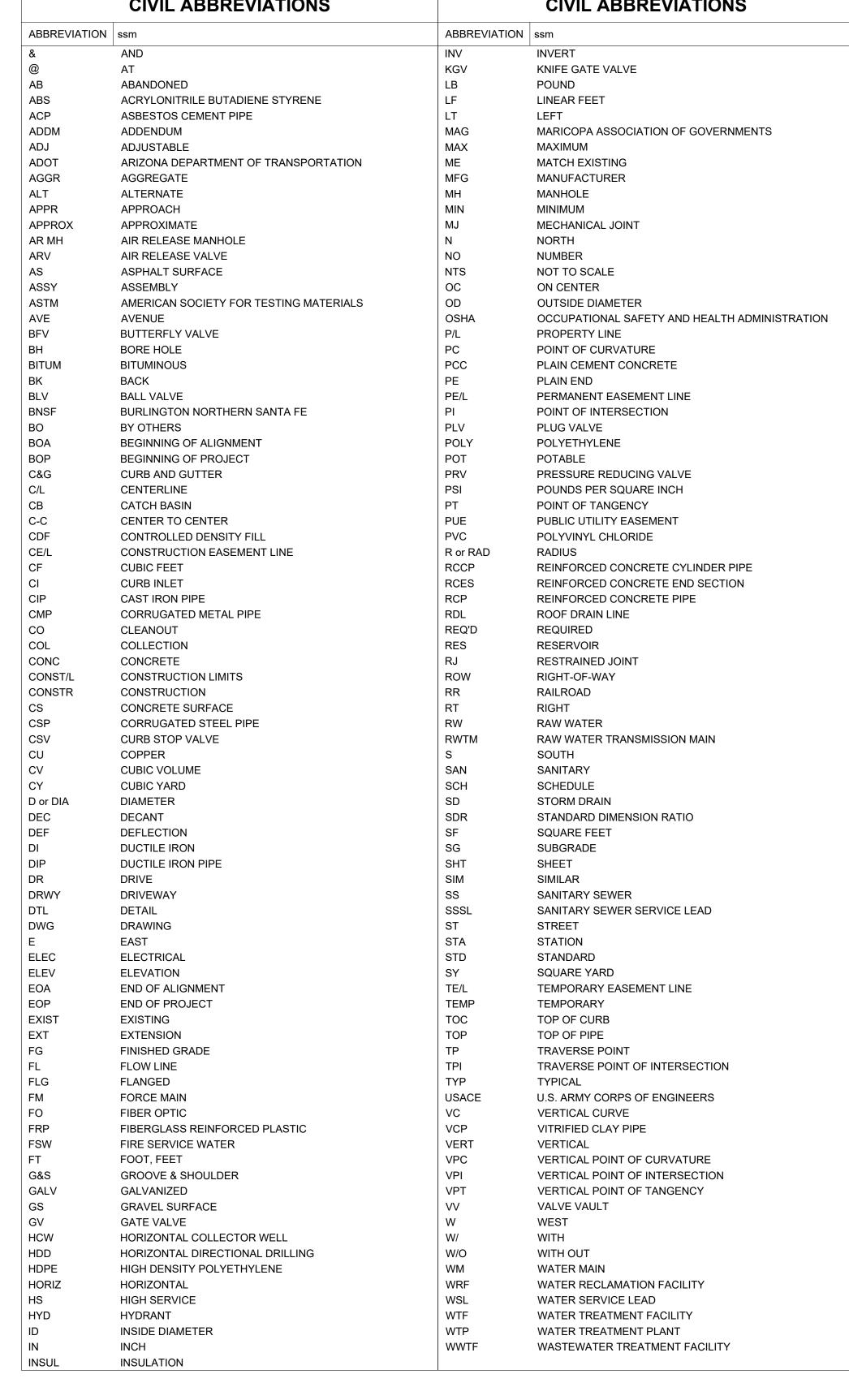
SHEET NO.

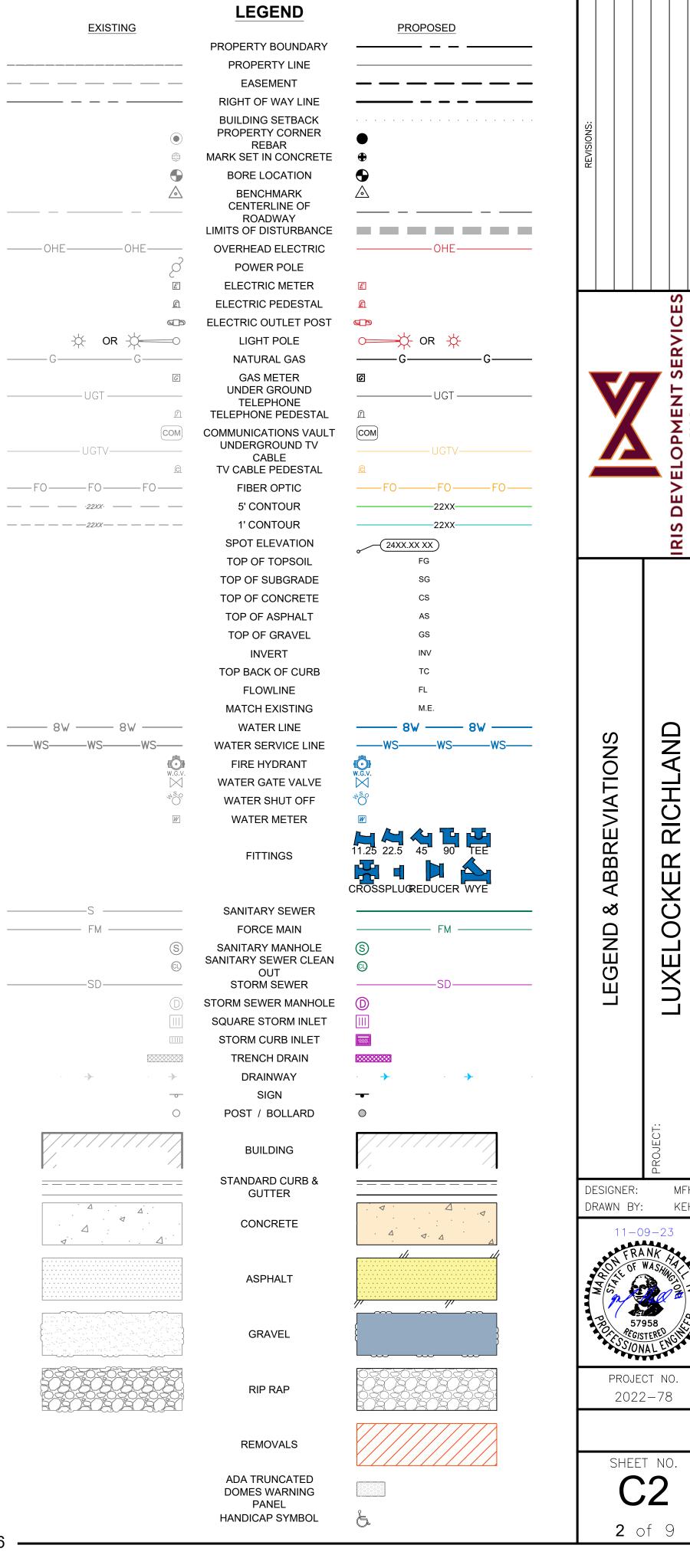
C1

1 of 9



ABBREVIATION & @ AB ABS ACP	ssm AND	ABBREVIATIO	ON ssm
@ AB ABS ACP	AND		
@ AB ABS ACP	7.1.12	INV	INVERT
AB ABS ACP	AT	KGV	KNIFE GATE VALVE
ACP	ABANDONED	LB	POUND
	ACRYLONITRILE BUTADIENE STYRENE	LF	LINEAR FEET
ADDIA	ASBESTOS CEMENT PIPE	LT	LEFT
ADDM	ADDENDUM	MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
ADJ ADOT	ADJUSTABLE ARIZONA DEPARTMENT OF TRANSPORTATION	MAX ME	MAXIMUM MATCH EXISTING
AGGR	AGGREGATE	MFG	MANUFACTURER
ALT	ALTERNATE	MH	MANHOLE
APPR	APPROACH	MIN	MINIMUM
APPROX	APPROXIMATE	MJ	MECHANICAL JOINT
AR MH	AIR RELEASE MANHOLE	N	NORTH
ARV	AIR RELEASE VALVE	NO	NUMBER
AS ASSY	ASPHALT SURFACE ASSEMBLY	NTS OC	NOT TO SCALE ON CENTER
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	OD	OUTSIDE DIAMETER
AVE	AVENUE	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
BFV	BUTTERFLY VALVE	P/L	PROPERTY LINE
ВН	BORE HOLE	PC	POINT OF CURVATURE
BITUM	BITUMINOUS	PCC	PLAIN CEMENT CONCRETE
BK	BACK	PE PE	PLAIN END
BLV BNSF	BALL VALVE BURLINGTON NORTHERN SANTA FE	PE/L PI	PERMANENT EASEMENT LINE POINT OF INTERSECTION
BO	BURLINGTON NORTHERN SANTA FE BY OTHERS	PLV	PUINT OF INTERSECTION PLUG VALVE
BOA	BEGINNING OF ALIGNMENT	POLY	POLYETHYLENE
ВОР	BEGINNING OF PROJECT	POT	POTABLE
C&G	CURB AND GUTTER	PRV	PRESSURE REDUCING VALVE
C/L	CENTERLINE	PSI	POUNDS PER SQUARE INCH
СВ	CATCH BASIN	PT	POINT OF TANGENCY
C-C	CENTER TO CENTER	PUE	PUBLIC UTILITY EASEMENT
CDF CE/L	CONTROLLED DENSITY FILL CONSTRUCTION EASEMENT LINE	PVC R or RAD	POLYVINYL CHLORIDE RADIUS
CF	CUBIC FEET	RCCP	REINFORCED CONCRETE CYLINDER PIPE
CI	CURB INLET	RCES	REINFORCED CONCRETE END SECTION
CIP	CAST IRON PIPE	RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE	RDL	ROOF DRAIN LINE
CO	CLEANOUT	REQ'D	REQUIRED
COL	COLLECTION	RES	RESERVOIR
CONC	CONCRETE	RJ	RESTRAINED JOINT
CONST/L CONSTR	CONSTRUCTION LIMITS CONSTRUCTION	ROW	RIGHT-OF-WAY RAILROAD
CS	CONCRETE SURFACE	RT	RIGHT
CSP	CORRUGATED STEEL PIPE	RW	RAW WATER
CSV	CURB STOP VALVE	RWTM	RAW WATER TRANSMISSION MAIN
CU	COPPER	S	SOUTH
CV	CUBIC VOLUME	SAN	SANITARY
CY	CUBIC YARD	SCH	SCHEDULE
D or DIA DEC	DIAMETER DECANT	SD SDR	STORM DRAIN STANDARD DIMENSION RATIO
DEF	DEFLECTION	SF	SQUARE FEET
DI	DUCTILE IRON	SG	SUBGRADE
DIP	DUCTILE IRON PIPE	SHT	SHEET
DR	DRIVE	SIM	SIMILAR
DRWY	DRIVEWAY	SS	SANITARY SEWER
DTL	DETAIL	SSSL	SANITARY SEWER SERVICE LEAD
DWG	DRAWING	ST	STATION
E ELEC	EAST ELECTRICAL	STA STD	STATION STANDARD
ELEV	ELECTRICAL	SY	SQUARE YARD
EOA	END OF ALIGNMENT	TE/L	TEMPORARY EASEMENT LINE
EOP	END OF PROJECT	TEMP	TEMPORARY
EXIST	EXISTING	тос	TOP OF CURB
EXT	EXTENSION	TOP	TOP OF PIPE
FG	FINISHED GRADE	TP	TRAVERSE POINT
FL	FLOW LINE	TPI	TRAVERSE POINT OF INTERSECTION
FLG FM	FLANGED FORCE MAIN	TYP USACE	TYPICAL U.S. ARMY CORPS OF ENGINEERS
FM FO	FIBER OPTIC	VC	VERTICAL CURVE
FRP	FIBERGLASS REINFORCED PLASTIC	VCP	VITRIFIED CLAY PIPE
FSW	FIRE SERVICE WATER	VERT	VERTICAL
FT	FOOT, FEET	VPC	VERTICAL POINT OF CURVATURE
G&S	GROOVE & SHOULDER	VPI	VERTICAL POINT OF INTERSECTION
GALV	GALVANIZED	VPT	VERTICAL POINT OF TANGENCY
GS	GRAVEL SURFACE	VV	VALVE VAULT
GV HCW	GATE VALVE	W W/	WEST WITH
HCW HDD	HORIZONTAL COLLECTOR WELL HORIZONTAL DIRECTIONAL DRILLING	W/ W/O	WITH WITH OUT
HDPE	HIGH DENSITY POLYETHYLENE	W/O WM	WATER MAIN
HORIZ	HORIZONTAL	WRF	WATER MAIN WATER RECLAMATION FACILITY
	HIGH SERVICE	WSL	WATER RECEAMATION FACILITY WATER SERVICE LEAD
H9	HYDRANT	WTF	WATER TREATMENT FACILITY
HS HYD ID	INSIDE DIAMETER	WTP	WATER TREATMENT PLANT







CONSTRUCTION NOTES

(THESE NOTES ARE NOT ALL-INCLUSIVE. ALL WORK MUST COMPLY WITH CURRENT EDITION OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS)

GENERAL NOTES

- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST REVISION OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS AND DETAILS AND THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION. PLEASE CONFIRM THAT YOU HAVE THE LATEST SET OF STANDARD SPECS AND DETAILS BY VISITING THE CITY'S WEB PAGE.
- 2. ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, UTILITY EASEMENT, OR INVOLVING THE CONSTRUCTION OF PUBLIC INFRASTRUCTURE WILL REQUIRE THE APPLICANT TO OBTAIN A RIGHT-OF-WAY PERMIT PRIOR TO CONSTRUCTION. A PLAN REVIEW AND INSPECTION FEE IN THE AMOUNT EQUAL TO 5% OF THE CONSTRUCTION COSTS OF THE WORK THAT WILL BE ACCEPTED AS PUBLIC INFRASTRUCTURE OR IS WITHIN THE RIGHT-OF-WAY OR EASEMENT WILL BE COLLECTED AT THE TIME THE PERMIT IS ISSUED. A STAMPED, ITEMIZED ENGINEER'S ESTIMATE (OPTION OF PROBABLE COST) SHALL BE USED TO CALCULATE THE 5% FEE.
- 3. ONCE THE PLANS HAVE BEEN ACCEPTED BY THIS DEPARTMENT, A PRE-CONSTRUCTION CONFERENCE WILL BE REQUIRED PRIOR TO THE START OF ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENT. CONTACT THE PUBLIC WORKS ENGINEERING DIVISION AT (509) 942-7500 OR (509) 942-7742 TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE.
- 4. WHEN THE CONSTRUCTION IS SUBSTANTIALLY COMPLETE A PRELIMINARY SET OF "RECORD DRAWINGS" SHALL BE PREPARED BY A LICENSED SURVEYOR AND INCLUDE ALL CHANGES AND DEVIATIONS. PLEASE REFERENCE THE PUBLIC WORKS DOCUMENT "RECORD DRAWING REQUIREMENTS & PROCEDURES" FOR A COMPLETE DESCRIPTION OF THE RECORD DRAWING PROCESS. AFTER REVIEW OF THE PAPER COPY, A FINAL CORRECTED COPY OF THE RECORD DRAWINGS SHALL BE SUBMITTED ALONG WITH A CAD AND PDF COPY OF THEM.
- 5. NO WORK ON THIS PROJECT SHALL COMMENCE UNTIL A CITY OF RICHLAND RIGHT-OF-WAY CONSTRUCTION PERMIT HAS BEEN ISSUED.
- ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- 7. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE LICENSED BY THE STATE OF WASHINGTON AND BE BONDED TO DO THE WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL PROVIDE THE CITY A CERTIFICATE OF INSURANCE PRIOR TO ISSUANCE OF THE RIGHT-OF-WAY CONSTRUCTION PERMIT.
- 8. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL HAVE A CURRENT CITY OF RICHLAND BUSINESS LICENCE.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CONSTRUCTION DEFICIENCIES FOR A PERIOD OF ONE-YEAR FROM THE DATE OF ACCEPTANCE BY THE CITY OF RICHLAND.
- 10. THE CONTRACTOR SHALL BE REQUIRED TO CALL 1-800-424-5555 OR "811" A MINIMUM OF TWO WORKING DAYS PRIOR TO COMMENCING ANY EXCAVATION ACTIVITIES TO DETERMINE FIELD LOCATIONS OF ALL UNDERGROUND UTILITIES.
- 11. ANY CHANGES OR MODIFICATIONS TO THE PROJECT PLANS SHALL FIRST BE APPROVED BY THE CITY ENGINEER OR HIS REPRESENTATIVE.
- 12. THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 13. THE FACE OF CURB SHALL BE STAMPED AT ALL UTILITY CROSSINGS,
 MAIN LINES AND SERVICE LINES AS FOLLOWS: "S" SANITARY SEWER, "I"
 IRRIGATION, "G" GAS, "W" WATER, "C" CONDUITS, "D" STORM DRAIN.
- 14. ALL FIRE HYDRANTS AND GUARD POSTS SHALL BE PAINTED OSHA SAFETY YELLOW, QUICKSET ENAMEL NO. 3472 HYDRANT YELLOW AS MANUFACTURED BY FARWEST PAINT MANUFACTURING COMPANY OR AN APPROVED EQUAL.
- 15. FIRE HYDRANTS AND GUARD POSTS SHALL BE INSTALLED AT 2-FEET BEHIND THE BACK OF SIDEWALK TO THE FACE OF EQUIPMENT WHERE THE SIDEWALK IS ADJACENT TO THE CURB AND 6-FEET BEHIND THE BACK OF CURB WHERE THE SIDEWALK IS NOT ADJACENT TO THE CURB UNLESS OTHERWISE NOTED ON THE PLANS.
- 16. ANY DAMAGED OR BADLY DETERIORATED CONCRETE CURB, GUTTER AND SIDEWALK WITHIN PUBLIC RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED. THIS INCLUDES ANY CURB DAMAGED BY CONSTRUCTION EQUIPMENT DURING THE PROJECT.
- 17. 2-INCHES OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED BENEATH ALL SIDEWALKS PRIOR TO PLACEMENT OF CONCRETE.
- 18. ALL STORM DRAINAGE MANHOLES WITH A GRATED LID SHALL BE CONSTRUCTED WITH A "SUMP" IN THE BOTTOM OF THEM, AND ALL STORM MANHOLES WITH SOLID LIDS SHALL HAVE CHANNELED BASES, IN ACCORDANCE WITH THE STANDARD DETAILS.
- 19. IRRIGATION VALVE BOXES OR LIDS WITHIN THE ROADWAY OR PUBLIC RIGHT-OF-WAY NEED TO BE PER CITY OF RICHLAND SPEC" "RICH 931" CAST IRON LID SHALL HAVE "IRR" CAST INTO TOP.
- 20. A MINIMUM HORIZONTAL SEPARATION OF TEN-FEET SHALL BE MAINTAINED BETWEEN WATER MAINS AND SEWER MAINS AND SERVICE LINES. WATER MAINS SHOULD CROSS OVER THE TOP OF SEWER MAINS WITH A MINIMUM VERTICAL SEPARATION OF 18-INCHES. ANY CROSSING WITH A VERTICAL SEPARATION OF LESS THAN 18" OR ANY CROSSING IN WHICH THE WATER MAIN CROSSES BELOW THE SEWER MAIN SHALL BE IN ACCORDANCE WITH WASHINGTON STATE DEPARTMENT OR ECOLOGY STANDARDS. PRESSURIZED SEWER MAINS SHALL NOT CROSS OVER POTABLE WATER MAINS IN ANY CASE. IF A MINIMUM VERTICAL SEPARATION OF 12" CANNOT BE MAINTAINED BETWEEN MAINLINE PIPES, CDF OR CONCRETE SHALL BE USED AS BACKFILL IN PLACE OF NATIVE SOILS OR GRAVEL.

- 21. RESIDENTIAL SEWER SERVICES SHALL BE 4-INCHES IN DIAMETER AND SHALL NOT EXCEED 10-FEET BEYOND THE RIGHT-OF-WAY INTO THE LOT. THE END SHALL BE MARKED WITH A MARKER POST INSTALLED IN ACCORDANCE WITH CITY STANDARD DETAILS.
- 22. RESIDENTIAL WATER SERVICES SHALL BE 1-INCH IN DIAMETER AND SHALL EXTEND 1-FOOT BEYOND THE BACK OF SIDEWALK THROUGH THE CURB STOP. THE END SHALL BE MARKED WITH A BLUE MARKER POST INSTALLED IN ACCORDANCE WITH CITY STANDARD DETAILS.
- 23. THE CONTRACTOR SHALL TAKE ANY NECESSARY MEANS TO KEEP FROM TRACKING MUD AND DEBRIS OUT ONTO THE EXISTING STREETS, AND SHALL ALSO KEEP MUD AND ANY OTHER DEBRIS FROM HIS SITE FROM ENTERING THE EXISTING PUBLIC STORM DRAINAGE SYSTEM.
- 24. THE CONTRACTOR SHALL SUPPLY A DUST CONTROL PLAN PRIOR TO STARTING WORK IN ACCORDANCE WITH RMC CHAPTER 9.16.046, SECTION J.
- 25. ALL DISTURBED AREAS SHALL BE HYDRO-SEEDED AT THE COMPLETION OF THE PROJECT.
- 26. THE CONTRACTOR SHALL TAKE CARE TO PREVENT CONSTRUCTION SITE RUNOFF FROM ENTERING INTO THE CITY'S STORMWATER SYSTEM, IN ACCORDANCE WITH RMC CHAPTER 16.05. CONSTRUCTION MATERIALS THAT MAY INTRODUCE SEDIMENT INTO THE STORMWATER SYSTEM MAY NOT BE STOCKPILED IN THE STREET. SUCH MATERIALS MAY INCLUDE BUT NOT BE LIMITED TO: CONSTRUCTION MATERIALS, SOIL, SAND, GRAVELS. ETC.

SITE EARTHWORK NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CLEARING, STRIPPING, GRUBBING, TREE MOVES, AND STUMPING WITHIN AREAS OF NEW IMPROVEMENTS. ALL CLEARING AND WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF LEGALLY AT CONTRACTORS EXPENSE. THE CONTRACTOR SHALL DETERMINE OF MATERIAL TO BE REMOVED, SUCH AS TREES, STUMPS, AND STRIPPING. ALL TREES AND NATURAL VEGETATION OUTSIDE OF CLEARING LIMITS SHALL BE RETAINED AND PROTECTED. AREAS UNDERLYING STRUCTURAL IMPROVEMENTS INCLUDED, BUT NOT LIMITED TO PAVEMENT, CURB, AND SIDEWALK SHALL BE STRIPPED OF 6-INCES OF EXISTING MATERIAL OR AS DETERMINED BY THE ENGINEER.
- 2. ALL EXCESS EXCAVATED CUT MATERIAL SHALL BE STOCKPILED ON SITE AS DIRECTED BY THE ENGINEER. ANY STOCKPILED MATERIAL FROM EXCAVATION SHALL BE REMOVED FROM CITY RIGHT-OF-WAY, EASEMENTS, AND DRAINAGE WAYS.
- 3. CONSTRUCTION STAKING ARE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.
- 4. THE GRADING CONTRACTOR SHALL DESIGNATE THE LOCATION FOR WASTING SPOIL MATERIALS AND A LETTER FROM THE OWNER GIVING PERMISSION FOR SAID DISPOSAL PRIOR TO STARTING ON-SITE CONSTRUCTION.
- 5. THE CONTRACTOR IS HEREBY ADVISED THAT NO PERSON SHALL USE ANY MECHANICAL EQUIPMENT FOR LAND LEVELING OR CLEARING, ROAD CONSTRUCTION, TRENCHING, EXCAVATING, DEMOLITION OR ENGAGE IN ANY EARTHMOVING ACTIVITY WITHOUT FIRST OBTAINING A PERMIT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COMPACTION TESTING REQUIRED ON SUBGRADE, BASE COURSE, AND PAVEMENT.
- 7. ALL NON-COMPACTABLE MATERIAL SHALL BE REMOVED AND REPLACED PRIOR TO COMPACTION OF SUBGRADE.

SWPPP NOTES

- SITE DISTURBANCES FOR THIS PROJECT WILL REQUIRE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN OBTAINED FROM ACHD AND THE CITY OF RICHLAND.
- 2. IF DISTURBANCE BY CONTRACTORS AND OR OWNERS IS ONE ACRE OR GREATER AS PART OF CONSTRUCTION ACTIVITIES, THE FOLLOWING SHALL BE PERFORMED, IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
- 3. FILE A NOTICE OF INTENT (NOI) WITH EPA'S CONSTRUCTION GENERAL PERMIT (CGP).
- 4. PREPARE A SWPPP PLAN
- 5. FOLLOW THE SWPPP PLAN AND CGP TO INSTALL ALL ONSITE SIGNAGE.
- 6. MAINTAIN COPIES OF THE NOI, CGP, AND SWPPP PLAN ON-SITE WHERE IT CAN BE EASILY ACCESSED WHEN REQUESTED.
- 7. PERFORM REGULAR INSPECTIONS PER GUIDELINES ESTABLISHED IN THE SWPPP AND REQUIREMENTS OF THE CGP. PROPER DOCUMENTATION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE SWPPP PLAN.
- 8. WHEN ALL WORK IS COMPLETED AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES ARE PERFORMING APPROPRIATELY, A NOTICE OF TERMINATION (NOT) SHALL BE FILED.
- 9. THESE NOTES MAY NOT BE ALL INCLUSIVE, AND ARE PROVIDED AS A GENERAL GUIDELINE. CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL APPLICABLE REQUIREMENTS AND REGULATIONS.

STORMWATER RUNOFF MANAGEMENT

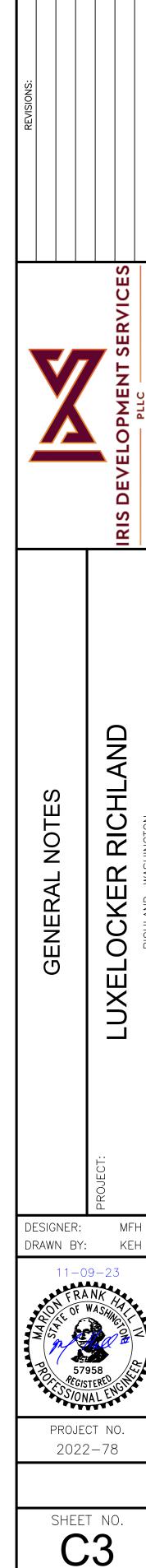
- 1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
- 2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN CONSTRUCTION SITE BEST MANAGEMENT PRACTICES GUIDANCE MANUAL.
- 3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS POSSIBLE AND NOT LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO WASHINGTON CONSTRUCTION GENERAL PERMIT FOR CONSTRUCTION ACTIVITY.
- 4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCHES OR GREATER. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE WASHINGTON CONSTRUCTION GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES.
- 5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN THE BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.
- 6. CONTRACTOR SHALL CONTACT THE CITY OF RICHLAND PUBLIC WORKS DEPARTMENT FOR INSPECTION OF ALL STORM WATER FACILITIES & BMPS PRIOR TO BACKFILLING THE EXCAVATION. 24 HOURS MINIMUM NOTICE IS REQUIRED. APPROVAL OF STORM WATER BMPS IS CONTINGENT UPON INSPECTION.
- STORM WATER BMPS HAVE BEEN DESIGNED TO RETAIN THE 25-YR, 24-HR DESIGN STORM.

SANITARY SEWER NOTES

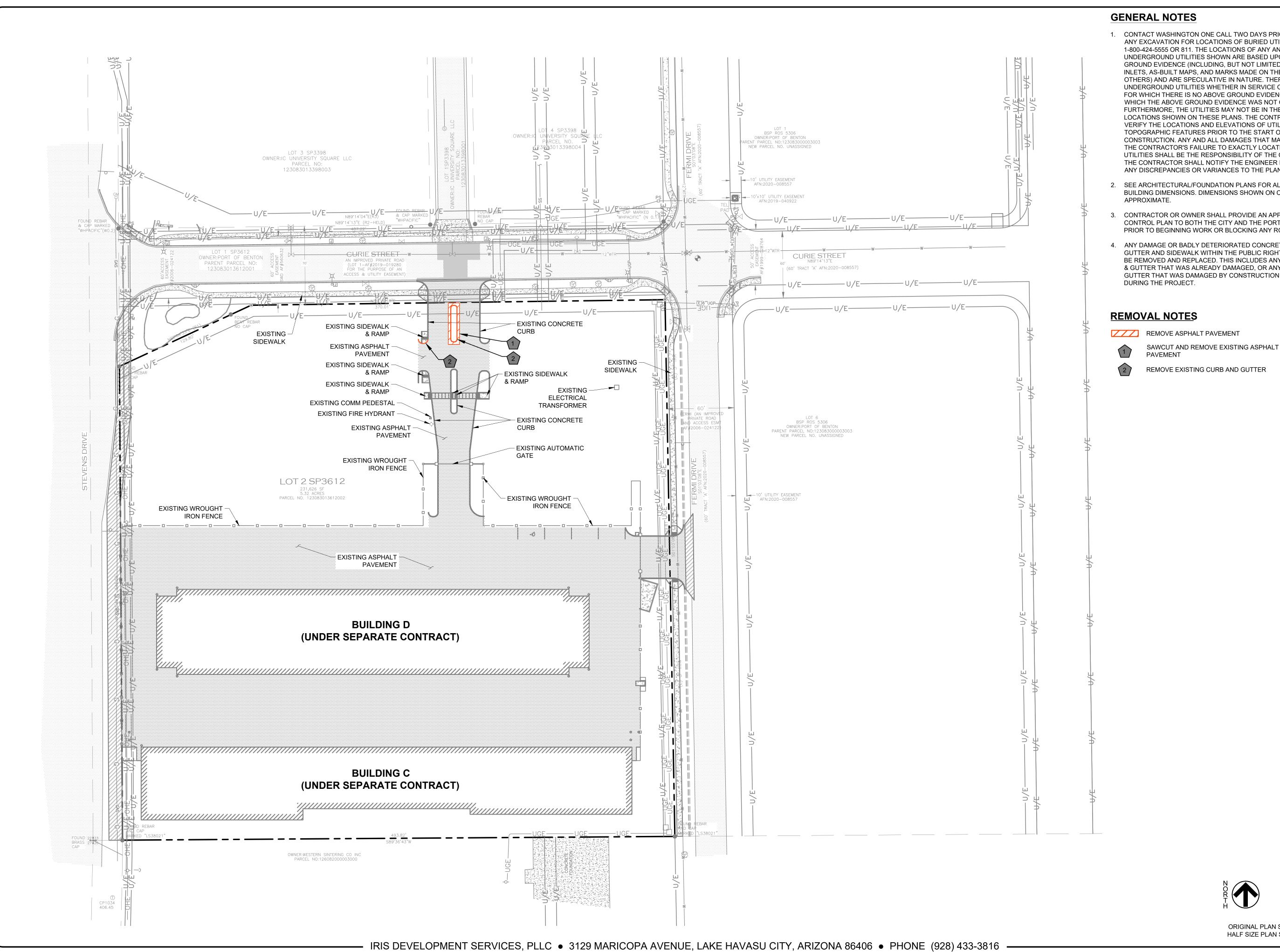
- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE WASHINGTON STATE DEPARTMENT OF ECOLOGY PUBLICATION "CRITERIA FOR SEWAGE WORKS DESIGN" (THE "ORANGE BOOK").
- 2. SEWER SERVICES SHALL BE A MINIMUM SIZE OF 6" PVC SDR 35.
- SEWER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 4-FEET OF COVER, UNLESS OTHERWISE NOTED ON THE PLANS.
- 4. A MINIMUM HORIZONTAL SEPARATION OF TEN-FEET SHALL BE MAINTAINED BETWEEN WATER MAINS AND SEWER MAINS AND SERVICE LINES. WATER MAINS SHOULD CROSS OVER THE TOP OF SEWER MAINS WITH A MINIMUM VERTICAL SEPARATION OF 18-INCHES. ANY CROSSING WITH A VERTICAL SEPARATION OF LESS THAN 18-INCHES OR ANY CROSSING IN WHICH THE WATER MAIN CROSSES BELOW THE SEWER MAIN SHALL BE IN ACCORDANCE WITH WASHINGTON STATE DEPARTMENT OF ECOLOGY STANDARDS (SEWER LINES SHALL BE CONSTRUCTED OF WATER-CLASS PIPE, CROSSING PIPES SHALL BE CENTERED SO THAT THE ENDS ARE EQUIDISTANT FROM ONE ANOTHER, INTERSECTIONS OF PIPES SHALL BE ENCASED IN CONCRETE, ETC.) PRESSURIZED SEWER MAINS SHALL NOT CROSS OVER POTABLE WATER MAINS IN ANY CASE. IF A MINIMUM VERTICAL SEPARATION OF 12" CANNOT BE MAINTAINED BETWEEN MAINLINE PIPES, CDF OR CONCRETE SHALL BE USED AS BACKFILL IN PLACE OF NATIVE SOILS OR GRAVEL.
- SEWER MAINS THAT ARE STUBBED FOR FUTURE EXTENSIONS SHALL HAVE A MANHOLE OR STANDARD CLEANOUT AT THE END OF THE STUB CAPPED SEWER MAINLINES ARE NOT ALLOWED.
- 6. MANHOLES OR CLEANOUTS OUTSIDE OF PAVED AREAS SHALL HAVE A CONCRETE COLLAR AROUND THEM PER CITY OF RICHLAND STANDARD DETAILS
- 7. SEWER MAINS SHALL BE EXTENDED TO ALL ADJACENT PROPERTIES, 10-FEET PAST THE END OF PAVEMENT. THE SEWER MAIN MAY NEED TO BE EXTENDED FURTHER IF IT IS DEEP, AND/OR IF THE NATIVE SOILS ARE PRONE TO SLOUGHING OR CAVING.

WATER MAIN NOTES

- 1. ALL WATER MAINS SHALL BE INSTALLED WITH 4-FEET OF COVER. LEGITIMATE CONFLICTS THAT ARISE DURING DESIGN OR IN THE FIELD CAN FORCE THE WATER MAIN TO BE INSTALLED SHALLOWER OR DEEPER THAN THIS. UNDER NO CIRCUMSTANCES SHALL THE AMOUNT OF COVER OVER A WATER MAIN BE LESS THAN 30-INCHES OR GREATER THAN 66-INCHES. THE WATER MAIN SHALL RETURN TO 48-INCHES OF COVER IMMEDIATELY BEYOND THE CONFLICT. VERTICAL BENDS SHOULD BE AVOIDED UNLESS NECESSARY.
- 2. LIVE WATER TAPS OR CUT-INS TO EXISTING WATER LINES SHALL BE PERFORMED BY CITY CREWS. THE CONTRACTOR SHALL SUPPLY ALL MATERIALS, EXCAVATION, AND TRAFFIC CONTROL BUT THE CONNECTION TO EXISTING CITY WATER LINES SHALL BE COMPLETED BY CITY CREWS AT THE DEVELOPER'S EXPENSE.
- 3. 8-INCH WATER MAINS IN RESIDENTIAL STREETS MAY BE CLASS 150, AWWA C900 POLYVINYL CHLORIDE PIPE. WATER MAINS LARGER THAN 8-INCHES, OR MAINS THAT ARE OUTSIDE OF THE ROADWAY, OR WATER MAINS IN COMMERCIAL AND INDUSTRIAL AREAS SHALL BE CLASS 50 DUCTILE IRON PIPE. IF THE NATIVE SOIL IS EXCEPTIONALLY ROCKY THE WATERMAIN SHALL BE DUCTILE IRON INSTEAD OF PVC.
- 4. THE FOLLOWING ARE OPTIONS AVAILABLE WHEN CONNECTING TO OR EXTENDING AN EXISTING CITY DOMESTIC WATERMAIN:
- 4.1. A NEW 8-INCH GATE VALVE SHALL BE INSTALLED AT THE POINT OF CONNECTION TO ISOLATE THE NEW, UNTESTED WATERMAIN FROM THE EXISTING CITY MAIN.
- 4.2. THE CONTRACTOR SHALL PROVIDE A PRESSURE TEST SHOWING THAT THE EXISTING WATERMAIN STUB CAN HOLD 150 PSI FOR 2 HOURS AND CAN THEREFORE PASS A STANDARD PRESSURE (AND BACTERIOLOGICAL) TEST. THE CONTRACTOR THEREFORE TAKES RESPONSIBILITY FOR THE EXISTING WATERMAIN STUB THAT HE IS CONNECTING TO.
- 4.3. THE NEW MAIN SHALL BE INSTALLED AND PRESSURE TESTED ENTIRELY SEPARATE FROM THE EXISTING WATER STUB, AND THE CITY WATER CREWS WILL MAKE THE CONNECTION BETWEEN NEW AND EXISTING AFTER THE WATERMAIN HAS BEEN TESTED AND ACCEPTED AS PUBLIC INFRASTRUCTURE. THIS WILL RESULT IN AN ADDITIONAL FEE.
- 5. VALVES 8-INCHES AND SMALLER SHALL BE GATE VALVES. VALVES 10-INCHES AND LARGER SHALL BE BUTTERFLY VALVES.



3 of 9



- 1. CONTACT WASHINGTON ONE CALL TWO DAYS PRIOR TO START OF ANY EXCAVATION FOR LOCATIONS OF BURIED UTILITIES. CALL 1-800-424-5555 OR 811. THE LOCATIONS OF ANY AND ALL UNDERGROUND UTILITIES SHOWN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, AS-BUILT MAPS, AND MARKS MADE ON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY BE UNDERGROUND UTILITIES WHETHER IN SERVICE OR ABANDONED, FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH THE ABOVE GROUND EVIDENCE WAS NOT OBSERVED. FURTHERMORE, THE UTILITIES MAY NOT BE IN THE EXACT LOCATIONS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND ELEVATIONS OF UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF CONSTRUCTION. ANY AND ALL DAMAGES THAT MAY OCCUR FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE ANY AND ALL UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES OR VARIANCES TO THE PLANS ARE FOUND.
- 2. SEE ARCHITECTURAL/FOUNDATION PLANS FOR ALL ACTUAL BUILDING DIMENSIONS. DIMENSIONS SHOWN ON CIVIL PLANS ARE
- 3. CONTRACTOR OR OWNER SHALL PROVIDE AN APPROVED TRAFFIC CONTROL PLAN TO BOTH THE CITY AND THE PORT OF BENTON PRIOR TO BEGINNING WORK OR BLOCKING ANY ROADWAYS.
- 4. ANY DAMAGE OR BADLY DETERIORATED CONCRETE CURB, GUTTER AND SIDEWALK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE REMOVED AND REPLACED. THIS INCLUDES ANY EXISTING CURB & GUTTER THAT WAS ALREADY DAMAGED, OR ANY NEW CURB & GUTTER THAT WAS DAMAGED BY CONSTRUCTION EQUIPMENT DURING THE PROJECT.

REMOVAL NOTES

REMOVE EXISTING CURB AND GUTTER

ONDITION

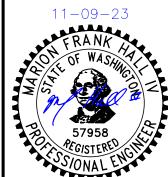
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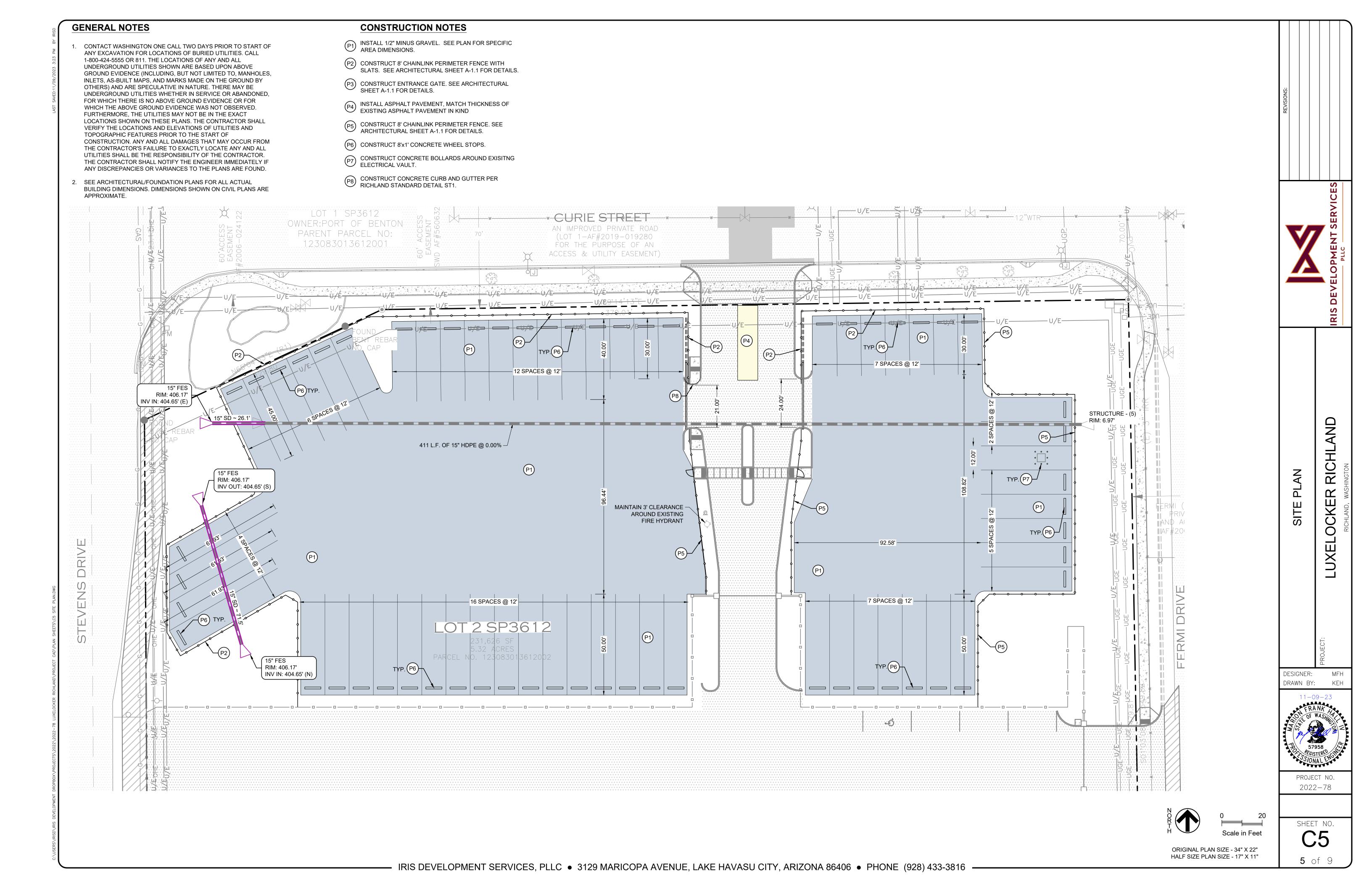


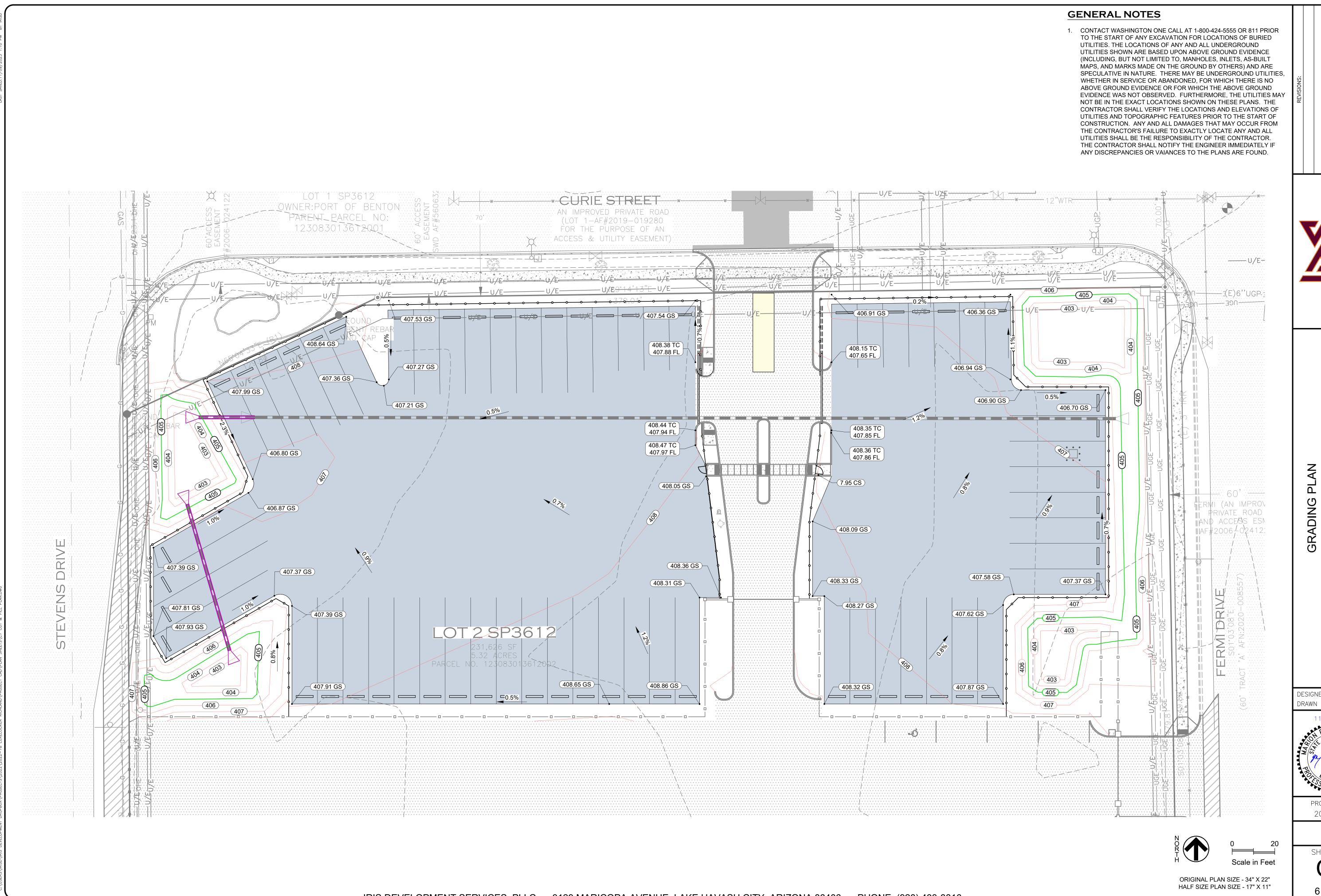
PROJECT NO. 2022-78

4 of 9

SHEET NO.

ORIGINAL PLAN SIZE - 34" X 22" HALF SIZE PLAN SIZE - 17" X 11"





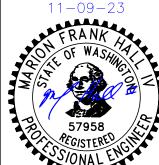
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IRIS DEV

LUXELOCKER RICHLAN

PROJECT:

DESIGNER: MI DRAWN BY: KE



PROJECT NO. 2022-78

SHEET NO. **C6**6 of 9

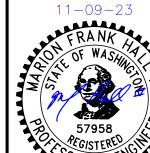
GENERAL NOTES EARTHWORK QUANTITIES E1. FINISH GRADE TO EXISTING GRADE. CONTACT WASHINGTON ONE CALL AT 1-800-424-5555 OR 811 PRIOR TO THE START OF ANY EXCAVATION FOR LOCATIONS OF BURIED UTILITIES. THE LOCATIONS OF ANY AND ALL UNDERGROUND TOTAL CUT: 1,626 CY TOTAL FILL: 1,421 CY UTILITIES SHOWN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, AS-BUILT E2. EARTHWORK VOLUMES IS SOIL ONLY (ASPHALT AND AGGREGATE MAPS, AND MARKS MADE ON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY BE UNDERGROUND UTILITIES, ARE NOT INCLUDED). WHETHER IN SERVICE OR ABANDONED, FOR WHICH THERE IS NO E3. THE QUANTITIES SHOWN ARE AN ESTIMATE AND MAY NO REFLECT ABOVE GROUND EVIDENCE OR FOR WHICH THE ABOVE GROUND ACTUAL QUANTITIES OBSERVED DURING CONSTRUCTION. THE EVIDENCE WAS NOT OBSERVED. FURTHERMORE, THE UTILITIES MAY CONTRACTOR SHALL PERFORM HIS/HER OWN CALCULATION TO NOT BE IN THE EXACT LOCATIONS SHOWN ON THESE PLANS. THE OBTAIN QUANTITIES. ENGINEER TO SPOT CHECK GRADES PRIOR CONTRACTOR SHALL VERIFY THE LOCATIONS AND ELEVATIONS OF TO CONTRACTOR INSTALLING AGGREGATE AND UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF CONSTRUCTION. ANY AND ALL DAMAGES THAT MAY OCCUR FROM ASPHALT/CONCRETE. CONTRACTOR TO MAKE ANY EARTHWORK MEDICATIONS DEEMED NECESSARY BY ENGINEER AND THIS SHALL THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE ANY AND ALL BE INCIDENTAL TO THE BID PRICE. UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES OR VAIANCES TO THE PLANS ARE FOUND. LOT 1 SP3612 CURIE STREET)WNER:PORT OF BENTON AN IMPROVED PRIVATE ROAD (LOT 1-AF#2019-019280 FOR THE PURPOSE OF AN ACCESS & UTILITY EASEMENT) -----U/E-0.4 0.2 0.1 0.1 0.1 0.14 -1.7 -3.5 -3.6 -3.5 -3.5 -0.4 | -0.5 | -0.4 | -0.3 | -0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.4 | 0.6 0.6 0.3 0.0 0.1 0.1 0.2 -1.6 -3.5 -3.5 -3.5 -3.4 0.0 -0.1 \-0.3 -0.7 -0.7 \-0.6 \| -0.5 \| -0.4 \| -0.3 -0.2 -0.1 \| 0.0 \| 0.1 \| 0.2 \| 0.4 \| 0.6 -0.2 \ -0.4 \ \0.5 -0.\ -0.9 -0.8 _|-0.7 | -0.5 | -0.4 |0.3 -0.2 -0.1 0.0 | 0.1 0.3 0.5 0.7 | 0.9 | 1.3 1.1 0.8 0.6 0.4 \mid -0.1 0.0 0.2 0.3 \setminus -0.3 -0.4 -0.5 -0.6 -0.8 -1.0 -1.1 -1.1 -0.9 -0.8 -0.7 -0.5 -0.4 -0.3 -0.2 -0.1 0.0 0.1 0.3 0.5 0.7 |0.9 |0.91.3 1.1 0.9 0.9 0.8 -0.1 -0.1 0.1 \ 0.0 -0.4 0.2 0.2 0.2 | (≥3/1 | -1.0 - 1.1 -1.2 -1.3 -1.3 -1.2 -1.1 -1.0 -0.9 -0.8 -0.6 -0.5 -0.4 -0.3 -0.1 0.0 0.1 0.2 0.4 0.6 0.8 / 1.0 | 1.5 1.2 1.0 0.8 0.5 \mid 0.3 0.2 0.1 0.0 0.0 \mid 0.0 0.0 0.0 1.5 1.3 1.1 0.8 0.6 0.3 0.2 0.1 0.1 0.1 0.1 0.1 0.1 -1.5 -1.4 -1.3 $\cancel{}^{\prime\prime}$ -1.2 -1.1 -1.0 -0.9 $\cancel{}$ $\cancel{}$ $\cancel{}$ $\cancel{}$ 0.4 -0.3 -0.1 0.0 0.1 0.2 0.3 0.5 0.6 0.8 0.8 0.1 0.2 0.3 0.5 0.6 0.8 0.8 0.1 0.2 0.3 0.5 0.6 0.8 0.8 0.1 0.2 0.3 0.5 0.6 0.8 0.8 0.5 0.8 -1.3 -1.3 -1.3 -1.2 -1.1 -1.1 -1.0 -0.8 -0.6 -0.5 -0.3 -0.2 0.0 0.1 0.2 0.3 0.5 0.6 0.7 /1.0 /1.2 1.4√1.1 -1.2 -1.2 -1.1 -1.0 -0.9 -0.8 /-0.7 -0.5 -0.4 -0.2 -0.1 0.1 0.2 0.3 0.5 0.6 0.7 0.9 1.1 1.3 1.5 $\begin{bmatrix} 1.9 & 1.8 & 1.5 & 1.2 & 1.0 & 0.7 & 0.3 & 0.2 & 0.2 & 0.3 & 0.3 & 0.5 & 0.4 & 0.3 & 0.$ $\begin{bmatrix} 2.0 & 1.8 \\ 1.5 & 1.2 & 1.0 & 0.7 \end{bmatrix}$ 0.3 0.3 0.3 0.4 0.4 0.4 STEVENS -0.4 -0.4 -0.3 -0.2 -0.1 0.1 0.3 0.6 0.5 2 | 1.7 | 1.4 | 1/2 | 0.9 | 0.6 | 0.4 | 0.5 | 0.5 ORIGINAL PLAN SIZE - 34" X 22" HALF SIZE PLAN SIZE - 17" X 11"

DEVELOPMENT SERVIC

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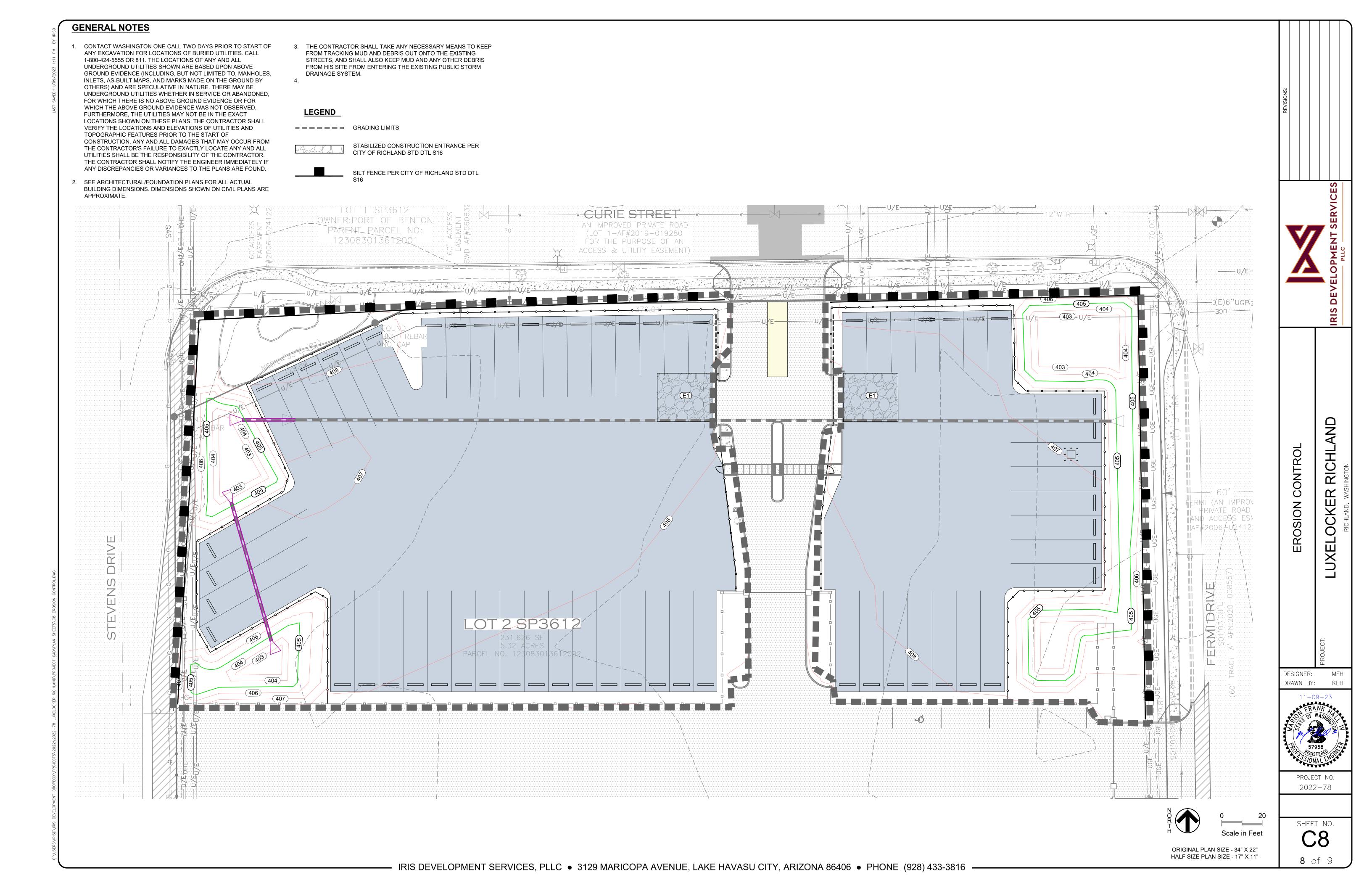
LUXEL

DESIGNER: MFH
DRAWN BY: KEH



PROJECT NO. 2022-78

SHEET NO. **C7**7 of 9



NOTE: PUBLIC WORKS WILL INSPECT THE SITE FOR SOIL/SEDIMENT STABILIZATION.

WARNING! EXTRA MEASURES (Beyond the BMP's) MAY BE NEEDED IF YOUR SITE:

• IS WITHIN 300-FEET OF A STREAM OR STORM DRAIN INLET THAT LEADS TO A STREAM.

Sediment Cleanup:

DRAIN SYSTEM.

1. BY THE END OF EACH WORK DAY, SWEEP OR SCRAPE UP

2. BY THE END OF THE NEXT WORK DAY AFTER A STORM,

3. REMEMBER TO CONTROL YOUR DUST, BUT TOO MUCH

1. WHEREVER POSSIBLE, PRESERVE EXISTING TREES, SHRUBS,

CLEAN UP SOIL WASHED OFF-SITE.

GRASSES AND OTHER VEGETATION.

Vegetation/Revegetation:

INTO THE STREET OR NEIGHBORING LOT.

SOIL TRACKED ONTO THE ROAD. <u>DO NOT HOSE INTO STORM</u>

WATERING CAN LEAD TO RUNOFF OF SEDIMENT-LADEN WATER

VEGETATION IS THE MOST EFFECTIVE WAY TO CONTROL EROSION.

- TOP BACK OF CURB

2"-3" FRACTURED

AGGREGATE

- IS STEEPLY GRADED (SLOPES OF 5% OR MORE). RECEIVES RUNOFF FROM ADJACENT LAND.
- HAS MORE THAN AN ACRE OF DISTURBED GROUND.

Soil/Landscaping Piles:

- 1. DO NOT STOCKPILE SOIL OR LANDSCAPING MATERIALS IN THE STREET.
- LOCATE AWAY FROM ANY DOWNSLOPE STREET, DRIVEWAY, STREAM, WETLAND, DITCH OR DRAINAGE WAY. COVER WITH PLASTIC OR HYDROSEED.
- TEMPORARY DROUGHT-TOLERANT SEEDING OR TACKIFIER IS RECOMMENDED FOR TOPSOIL PILES.

Storm Drain Inlet Protection:

- PROTECT THE NEAREST DOWNSTREAM STORM DRAIN INLET IN THE CITY STREET WITH SILT FENCES, SILT FABRIC OR EQUIVALENT MEASURES.
- 2. SEED, SOD OR MULCH BARE SOIL AS SOON AS POSSIBLE. INSPECT, REPAIR AND REMOVE SEDIMENT DEPOSITS FROM LOW AREAS AND STREET AFTER EVERY STORM OR RUNOFF EVENT.

Stabilized Construction Entrances (See Detail):

- THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED BEHIND THE CURB AT THE FUTURE DRIVEWAY LOCATION. CALL 942-7500 FOR A CURB-CUT INSPECTION PRIOR TO INSTALLATION. DO NOT PILE SOIL OR ROCK IN THE GUTTER. THE ENTRANCE SHALL BE COMPOSED OF 2-INCH TO 3-INCH FRACTURED AGGREGATE STONE (WITH MINIMAL FINES). LAY THE STONE A MINIMUM OF 6" DEEP, AT LEAST 8-FEET WIDE AND A MINIMUM OF 15-FEET ONTO
- THE SITE, MEASURED FROM BACK OF CURB, OR THE DISTANCE TO THE FOUNDATION, WHICHEVER IS
- TOP BACK OF CURB REPLACE STONE AS NEEDED WHEN FULL OF SEDIMENT, AND TO MAINTAIN A 6-INCH DEPTH. MAINTAIN THROUGHOUT CONSTRUCTION.
- 4. PREVENT TRACKING OF MUD ONTO THE ROAD.

SHEET 2 of 3

PUBLIC WORKS ENGINEERING APPR. BY: PKR DATE: 11.15 DRAWN BY: LD DWG: S16 CAD FILE: 2014_S16-2_11_2015

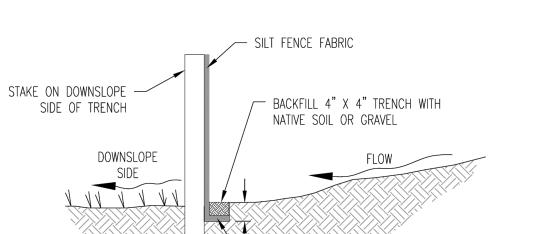
Silt Fences*:

- INSTALL PRIOR TO LAND DISTURBANCE. INSTALL ON DOWNSLOPE SIDES OF SITE,
- PARALLEL TO CONTOUR OF THE LAND.
- 3. EXTEND ENDS UPSLOPE ENOUGH TO KEEP PONDING WATER BEHIND FENCE. 4. LEAVE NO GAPS. OVERLAP SECTIONS OF SILT FENCE, OR TWIST ENDS OF SILT

FENCE TOGETHER.

5. INSPECT AND REPAIR ONCE A WEEK AND AFTER ANY RAIN/SNOWMELT EVENTS. REMOVE SEDIMENT IF DEPOSITS REACH HALF THE FENCE HEIGHT. MAINTAIN UNTIL LANDSCAPING OR HYDROSEED IS ESTABLISHED.

EXTEND 8" OF FABRIC INTO 4" X 4" TRENCH



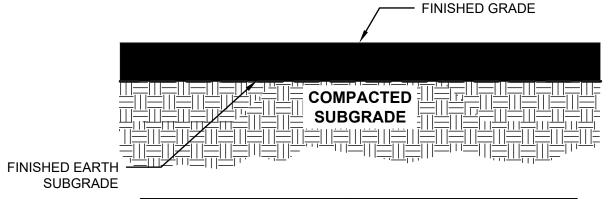
SILT FENCE INSTALLATION CROSS SECTION

*ALTERNATIVELY, IF THE STREET IS ON THE LOW SIDE OF THE LOT, GRADE THE LOT 5' BEHIND THE CURB, THEN STABILIZE WITH 2-INCH TO 3-INCH FRACTURED AGGREGATE (6" DEEP). THIS CAN BE ALLOWED IN LIEU OF SILT FENCE.



EROSION CONTROL PLAN CONSTRUCTION BMP'S SHEET 3 of 3

PUBLIC WORKS EN	GINEERING
APPR. BY: PKR	DATE: 05.14
DRAWN BY: LD	DWG: S16
CAD FILE: 2014_S16-3_0	05_2014



COURSE	GRAVEL SECTION				
A 4"					
RECOMMENDATIONS FRO CONCRETE PAVEMENT IS R	REGATE BASES REFLECT OM GEOTECHNICAL REPORT. BECOMMENDED, BUT ASPHALT IS OPTIONAL.				



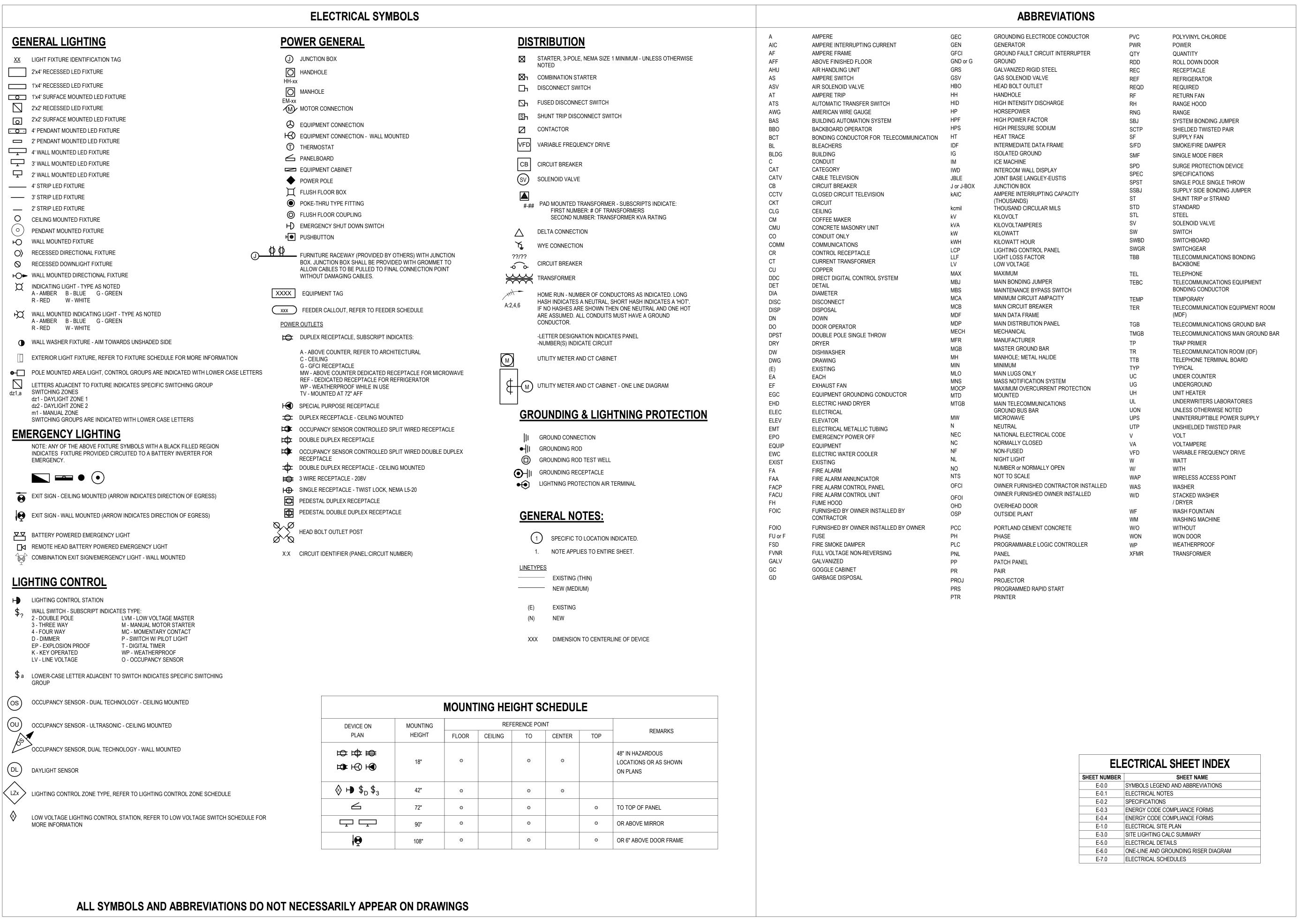
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PROJECT NO. 2022-78

SHEET NO. **C**9



COFFMAN
ENGINEERS

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Austin, TX 78746
ph 737.667.5818
www.coffman.com

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DATE: NOVEMBER 2023

JOB NUMBER: MKT 2

SYMBOLS LEGEND

AND ABBREVIATIONS

DRAWN BY:

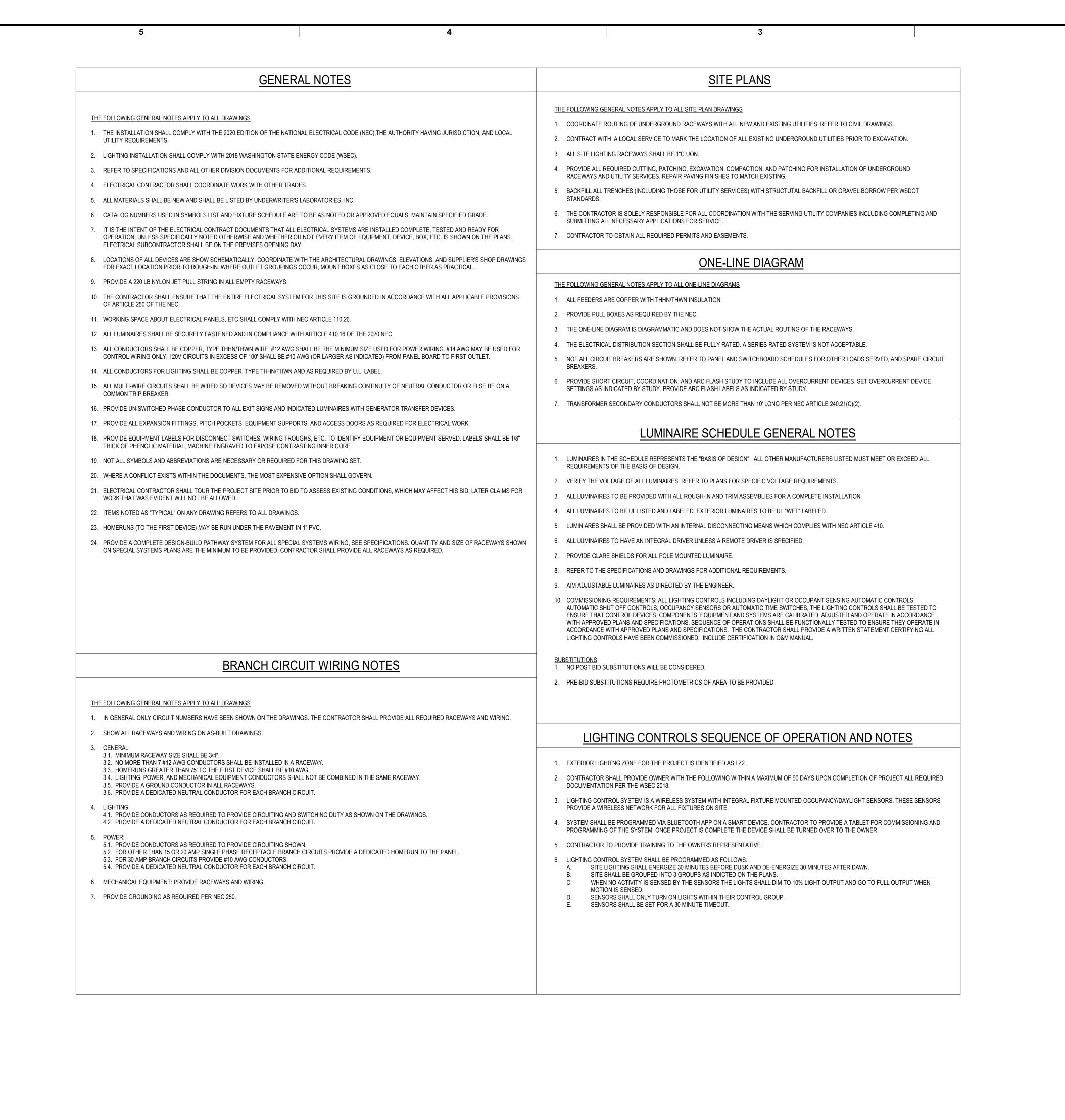
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ZE CHOWN WASHINGTON WA

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ELOCKER RIC

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DATE: NOVEMBER 2023
DRAWN BY: STM
CHECKED BY: LC
JOB NUMBER: MKT 23

ELECTRICAL NOTES

SHEET NUMBER

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1.2 SCOPE OF WORK

- A. PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, AND SERVICES REQUIRED FOR A COMPLETE INSTALLATION, TESTING,
- AND STARTUP OF ALL SYSTEMS DENOTED ON THE PLANS AND SPECIFICATIONS. B. VERIFY EXISTING AND LOCAL CONDITIONS AFFECTING THE ELECTRICAL WORK TO PRIOR ID AND COMMENCEMENT OF

1.3 ELECTRICAL DRAWINGS AND SYMBOLS

- A. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW ALL FEATURES OF WORK. HOWEVER, THE CONTRACTOR SHALL PROVIDE PRODUCTS NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM IN
- ACCORDANCE WITH NEC, EIA/TIA, NFPA 72, NFPA 101, AND ALL LOCAL AMENDMENTS. B. INSTALL UN-DIMENSIONED ELECTRICAL ITEMS IN A MANNER TO PROVIDE SYMMETRICAL APPEARANCE. DO NOT SCALE DRAWINGS FOR EQUIPMENT LOCATION. REVIEW ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS.
- ADJUST WORK TO CONFORM TO ACTUAL CONDITIONS SHOWN. C. DRAWING SYMBOLS USED FOR BASIC MATERIALS, EQUIPMENT, ETC., ARE DENOTED BY INDUSTRY STANDARD

SYMBOLS. SPECIAL ITEMS ARE DENOTED BY SYMBOL LEGEND OR CALLED OUT ON THE DRAWINGS OR SPECIFICATION. 1.4 COORDINATION

- A. EXPOSED RACEWAYS AND CABLES WHERE SPECIFICALLY ALLOWED SHALL BE ROUTED IN SUCH A MANNER
- AGREEABLE TO THE ARCHITECT. COORDINATE ALL SUCH WORK PRIOR TO INSTALLATION. B. OBTAIN WRITTEN PERMISSION FROM ENGINEER OR OWNER'S REPRESENTATIVE PRIOR TO CUTTING, DRILLING OR
- WEAKENING STRUCTURAL COMPONENTS.
- C. COORDINATE WITH OWNER'S REPRESENTATIVE TO FORM A WORK PLAN AND SCHEDULE. SOME AREAS OF THE SITE MAY BE OFF LIMITS TO THE CONTRACTOR DURING SPECIFIC HOURS.
- OF SUCH EQUIPMENT TO OPTIMIZE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL MONITOR THE WORK OF ALL TRADES TO ASSURE THAT THE SPACE AND CLEARANCE REQUIREMENTS OF THE CODE ARE MET. E. THE HORSEPOWER AND WATTAGE OF EQUIPMENT DENOTED ON THE DRAWINGS ARE ESTIMATED REQUIREMENTS OF EQUIPMENT FURNISHED UNDER OTHER DIVISIONS OF THE CONTRACT. COORDINATE OVERLOAD ELEMENTS TO MATCH ACTUAL EQUIPMENT NAMEPLATES.

D. AT EACH SWITCHBOARD, PANEL-BOARD AND ELECTRICAL DEVICE THAT REQUIRES WORKING CLEARANCE BY THE NEC

THE CONTRACTOR SHALL ARRANGE EQUIPMENT TO PROVIDE ADEQUATE CLEARANCE INCLUDING REARRANGEMENT

1.5 PAINTING AND REPAIR

- A. ALL MATERIALS, EQUIPMENT AND EXISTING FURNITURE DAMAGED DURING THE INSTALLATION OF THE WORK MUST BE REPAIRED OR REPLACED WITH MATERIALS IN LIKE KIND AND QUALITY OF THE ORIGINAL BY SKILLED LABOR EXPERIENCED IN THAT PARTICULAR BUILDING TRADE.
- B. ITEMS SCRATCHED OR MARRED IN SHIPMENT OR INSTALLATION SHALL BE REFINISHED WITH TOUCHUP PAINT SELECTED TO MATCH INSTALLED EQUIPMENT FINISH.

1.6 CODES AND STANDARDS

- A. CODES: PERFORM ALL WORK IN ACCORDANCE WITH ALL LATEST LEGALLY ENACTED EDITIONS OF NATIONAL, STATE
- AND LOCAL CODES INCLUDING:
- 1. NFPA 70 NATIONAL ELECTRICAL CODE (NEC) NFPA 72 AND 101 - NATIONAL FIRE ALARM CODE AND LIFE SAFETY CODE.
- ANSI/IEEE C2 NATIONAL ELECTRICAL SAFETY CODE (NESC)
- 4. WASHINGTON STATE BUILDING CODE (IBC) 5. WASHINGTON STATE FIRE CODE (IFC)
- 6. AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)
- 7. WASHINGTON STATE ENERGY CODE (IECC) 8. LOCAL JURISDICTION AMENDMENTS TO NEC, IBC, AND IFC.
- B. STANDARDS: PROVIDE ALL EQUIPMENT, MATERIALS AND INSTALLATION IN CONFORMANCE WITH THE FOLLOWING
- LATEST CURRENT PUBLICATIONS AND STANDARDS AS APPLICABLE.
- UNDERWRITER'S LABORATORY (UL)
- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM)
- 4. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)
- 5. NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION (NECA)
- 6. NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION (NEMA) INTERNATIONAL ELECTRICAL TESTING ASSOCIATION (IETA)
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
- 9. NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)
- C. CERTIFICATE OF INSPECTION: OBTAIN A CERTIFICATE OF ELECTRICAL INSPECTION FROM THE LOCAL INSPECTING AUTHORITY INDICATING FINAL ACCEPTANCE. SUBMIT TO THE OWNER UPON COMPLETION OF THE PROJECT AS PART OF PROJECT CLOSEOUT.
- D. SAFETY MEASURES TO BE TAKEN: THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS. METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED FOR THE CONTRACTOR TO PERFORM HIS WORK. THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF HIS WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION OBSERVATIONS OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

1.7 SUBMITTALS

- A. CONTRACTOR SHALL SUBSTANTIATE CONFORMANCE TO THIS SPECIFICATION BY SUPPLYING THE NECESSARY DOCUMENTS, PERFORMANCE DATA AND WIRING DIAGRAMS. ANY DEVIATIONS TO THIS SPECIFICATION MUST BE CLEARLY STATED BY LETTER AND SUBMITTED.
- B. PROVIDE STANDARD CATALOG LITERATURE FOR ALL NEW ELECTRICAL EQUIPMENT AND DEVICES INCLUDING PANELBOARDS, OUTLETS, DISCONNECTS, STARTERS ETC
- C. SUBMIT STANDARD CATALOG LITERATURE FOR ALL LIGHT FIXTURES AND LIGHTING CONTROL EQUIPMENT WHICH INCLUDES PERFORMANCE SPECIFICATIONS INDICATING COMPLIANCE TO THE SPECIFICATION. INCLUDE DRIVER/BALLAST DATA, ENERGY EFFICIENCY DATA, AND LIFE, OUTPUT, EFFICIENCY FOR ALL LAMPS.

1.8 WARRANTY

A. WARRANTY: THE CONTRACTOR SHALL GUARANTEE ALL WORK INSTALLED UNDER THIS SPECIFICATION AND MAKE GOOD, REPAIR OR REPLACE AT HIS OWN EXPENSE, ANY DEFECTIVE WORK, MATERIALS OR PARTS WITHIN ONE YEAR AFTER FINAL ACCEPTANCE, IF, IN THE OPINION OF THE ARCHITECT, SAID DEFECT IS DUE TO IMPERFECTION IN MATERIAL, DESIGN OR WORKMANSHIP.

1.9 QUALITY ASSURANCE

- A. WORKMANSHIP IS CONSIDERED IMPORTANT AND IS SUBJECT TO APPROVAL. EMPLOY WORKMEN SKILLED IN THE TRADE AND FAMILIAR WITH PARTICULAR TECHNIQUES APPLICABLE TO VARIOUS SECTIONS OF WORK.
- B. PROVIDE ALL MATERIALS TO CONFORM WITH APPLICABLE INDUSTRY STANDARDS AND UNDERWRITERS LABORATORIES STANDARDS OR NATIONALLY RECOGNIZED TESTING LABORATORY. WHENEVER POSSIBLE, SIMILAR ITEMS SHALL BE SUPPLIED BY THE SAME MANUFACTURER THROUGHOUT THE PROJECT.

1.10 EQUIPMENT SCHEDULES

A. FIXTURE AND EQUIPMENT SCHEDULES ON THE DRAWINGS DENOTING CAPABILITIES, RATINGS, SIZES, ETC., SHOWN ARE THE MINIMUM ACCEPTABLE AND MAY NOT NECESSARILY CORRESPOND WITH CATALOG RATINGS OR EQUIPMENT SPECIFIED.

PART 2 PRODUCTS

2.1 GENERAL

A. MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED. ALL ELECTRICAL EQUIPMENT SHALL BEAR THE SEAL OF A NATIONALLY RECOGNIZED TESTING LABORATORY FOR THE PURPOSE FOR WHICH IT IS INSTALLED.

2.2 PANELS

- A. SERVICE: SERVICES SHALL BE AS INDICATED ON THE DRAWINGS. COORDINATE WITH THE UTILITY FOR INSTALLATION
- B. DISTRIBUTION PANEL: SHALL BE RATED AS SHOWN ON DRAWINGS.
- C. INSTALL PANEL BOARDS PLUMB. D. HEIGHT: 6 FEET TO TOP OF PANEL BOARD; INSTALL PANELBOARDS TALLER THAN 6 FEET WITH BOTTOM NO MORE THAN
- 4 INCHES ABOVE FLOOR. E. INSTALL FILLER PLATES FOR UNUSED SPACES IN PANELBOARDS.
- F. PROVIDE TYPED CIRCUIT DIRECTORY FOR EACH BRANCH CIRCUIT PANEL BOARD. REVISE DIRECTORY TO REFLECT CIRCUITING CHANGES TO MATCH AS-BUILT CONDITIONS.
- G. INSTALL ENGRAVED PLASTIC NAME PLATES. H. PANELS SHALL HAVE PHASE BUSES THAT EXTEND THE FULL LENGTH OF THE PANEL SPACES/CIRCUITS.

2.3 WIRING

- A. SERVICE LATERALS AND FEEDERS: XHHW, COPPER
- B. BRANCH CIRCUITS: 1. THHW/THHN COPPER OR HIGHER TEMPERATURE RATING APPROVED FOR DAMP LOCATION AND RACEWAY USE FOR ALL HEATED SPACES.
- XHHW COPPER APPROVED FOR DAMP LOCATION AND RACEWAYS IN UNHEATED LOCATION. C. CONDUCTOR MATERIAL
- FEEDERS: COPPER FOR FEEDERS SMALLER THAN #4 AWG; COPPER OR ALUMINUM FOR FEEDERS #4 AWG AND LARGER. CONDUCTORS MUST BE SOLID FOR #10 AWG AND SMALLER; STRANDED FOR #8 AWG AND LARGER. THE DOR SHALL BE INFORMED IF ALUMINUM CABLE SHALL BE USED.
- BRANCH CIRCUITS: COPPER. SOLID FOR #12 AWG AND SMALLER; STRANDED FOR #10 AWG AND LARGER. POWER-LIMITED FIRE ALARM AND CONTROL: SOLID FOR #12 AWG AND SMALLER.
- D. PROVIDE ALL CONDUCTORS SIZED PER NEC REQUIREMENTS INCLUDING ADJUSTMENT FACTORS FOR AMBIENT TEMPERATURE AND MORE THAT THREE CURRENT CARRYING CONDUCTORS PER RACEWAY. ALL EXTERIOR OR UNDERGROUND CONDUCTORS SHALL HAVE XHHW INSULATION.
- PROVIDE ALL BRANCH CIRCUITS SIZED TO PROVIDE LESS THAN 5% VOLTAGE DROP FROM THE PANEL BOARD TO THE LAST DEVICE ON THE CIRCUIT. USE THE LOAD PROVIDED IN THE PANEL SCHEDULE FOR CALCULATIONS. G. PERFORM WIRING CONNECTIONS AND SPLICES ONLY IN ACCESSIBLE OUTLET OR JUNCTION BOXES.
- H. DO NOT SPLICE FEEDER CONDUCTORS UNLESS OTHERWISE NOTED ON THE DRAWINGS. MAKE SPLICES, TAPS, AND TERMINATIONS TO CARRY FULL AMPACITY OF CONDUCTORS WITH NO PERCEPTIBLE
- J. CLEAN CONDUCTOR SURFACES BEFORE INSTALLING LUGS AND CONNECTORS.
- K. STRIP CONDUCTOR INSULATION TO THE EXPOSED LENGTH AS RECOMMENDED BY THE MANUFACTURER FOR THE
- L. TAPE UNINSULATED CONDUCTORS AND CONNECTORS WITH ELECTRICAL TAPE TO 150 PERCENT OF INSULATION RATING OF CONDUCTOR.
- M. INSTALL COMPRESSION CONNECTORS FOR COPPER CONDUCTOR SPLICES AND TAPS, #6 AWG AND LARGER. N. INSTALL INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS OR COMPRESSION WHEN NOT AVAILABLE FOR COPPER CONDUCTOR SPLICES AND TAPS, #8 AWG AND SMALLER.

SHALL BE COLORED, #6 AWG AND LARGER MAY BE COLORED WITH PLASTIC TAPE OF THE APPROPRIATE COLOR.

 WHERE STRANDED CONDUCTORS ARE TERMINATED ON SCREW TYPE TERMINALS INSTALL CRIMP ON FORK TERMINALS. DO NOT PLACE BARE STRANDED CONDUCTORS DIRECTLY UNDER SCREWS. B. 480/277V AND 120/208V WIRING SHALL CONFORM TO THE FOLLOWING COLOR CODE. SIZES #8 AWG AND SMALLER

DESCRIPTION	COLOR
480V LINE 1	BROWN
480V LINE 2	ORANGE
480V LINE 3	YELLOW
480V NEUTRAL	GRAY
120V LINE 1	BLACK
120V LINE 2	RED
120 LINE 3	BLUE
120V NEUTRAL	WHITE
GROUND	GREEN OR GREEN AND YELLOW
120VAC CONTROL	RED
120VAC CONTROL NEUTRAL	WHITE

2.4 CONDUIT

A. RIGID NON-METALLIC CONDUIT (RNMC): ALL RNMC CONDUIT SHALL BE SCHEDULE 40, RIGID HEAVY WALL POLYVINYL CHLORIDE (PVC).

YELLOW

2.5 RECEPTACLES

A. GFCI PROTECTED RECEPTACLES: SPECIFICATION GRADE GROUND FAULT RECEPTACLE, WEATHER PROOF WHILE IN USE, 5MA PLUS OR MINUS 1 MA, FEED-THROUGH, DUPLEX NEMA 5-20R, 120 VOLT, 20 AMP, UL 943, CLASS A AND FUSL WC596-G, BACK AND SIDE WIRED, WHITE FACE (COORDINATE WITH OWNER).

2.6 WALL PLATES

A. EXTERIOR OR WET AREA COVER PLATES: WEATHERPROOF, CAST METAL WITH HINGED GASKETED DEVICE COVERS, GFCI CONFIGURATION WHERE DEVICE IS GFCI. FLAP TO OPEN IN UPWARD DIRECTION TO ALLOW DEVICE TO REMAIN WEATHERPROOF WHILE IN USE. PROVIDE COVER PLATES THAT FIT SNUGLY AGAINST THE FINISHED SURFACE AND PROVIDE A WEATHERPROOF SEAL.

2.7 DEVICES GENERAL

A. INSTALL DEVICES PLUMB AND LEVEL

EXTERNAL SOURCE

- B. INSTALL SWITCHES 48 INCHES ABOVE FLOOR, WITH OFF POSITION DOWN.
- C. INSTALL WALL DIMMERS TO ACHIEVE FULL RATING SPECIFIED AND INDICATED AFTER DERATING FOR GANGING AS
- INSTRUCTED BY MANUFACTURER. D. DO NOT SHARE NEUTRAL CONDUCTOR ON LOAD SIDE OF DIMMERS.
- INSTALL RECEPTACLES WITH GROUNDING POLE ON BOTTOM. INSTALL DECORATIVE PLATES ON SWITCH, RECEPTACLE, AND BLANK OUTLETS IN FINISHED AREAS.
- G. INSTALL GALVANIZED STEEL PLATES ON OUTLET BOXES AND JUNCTION BOXES IN UNFINISHED AREAS, ABOVE ACCESSIBLE CEILINGS, AND ON SURFACE MOUNTED OUTLETS.

2.8 ENCLOSED SWITCHES AND CIRCUIT BREAKERS

- A. SOURCE LIMITATIONS: OBTAIN PRODUCTS FROM SINGLE MANUFACTURER.
- B. PRODUCT SELECTION FOR RESTRICTIVE SPACE: DRAWINGS INDICATE MAXIMUM DIMENSIONS FOR ENCLOSED SWITCHES AND CIRCUIT BREAKERS, INCLUDING CLEARANCES BETWEEN ENCLOSURES, AND ADJUST SURFACES AND OTHER ITEMS. COMPLY WITH INDICATED MAXIMUM DIMENSIONS.
- C. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED IN ACCORDANCE WITH NFPA 70, BY QUALIFIED ELECTRICAL TESTING LABORATORY RECOGNIZED BY AHJ, AND MARKED FOR INTENDED LOCATION AND D. FUSIBLE SWITCHES:
- 1. TYPE HD. HEAVY DUTY: SINGLE THROW. THREE POLE, 600V(AC), 200A AND SMALLER.
- F. NONFUSIBLE SWITCHES
- 1. TYPE GD, GENERAL DUTY, THREE POLE, SINGLE THROW, 240 V(AC), 600A AND SMALLER: UL 98 AND NEMA KS 1, HORSEPOWER RATED, LOCKABLE HANDLE WITH CAPACITY TO ACCEPT TWO PADLOCKS, AND INTERLOCKED WITH
- 2. TYPE HD, HEAVY DUTY, THREE POLE, SINGLE THROW, 600 V(AC), 1200A AND SMALLER: UL 98 AND NEMA KS 1, HORSEPOWER RATED, LOCKABLE HANDLE WITH CAPACITY TO ACCEPT THREE PADLOCKS, AND INTERLOCKED WITH COVER IN CLOSED POSITION.

2.9 IDENTIFICATION

- A. DEGREASE AND CLEAN SURFACES TO RECEIVE NAMEPLATES AND TAPE LABELS.
- B. INSTALL NAMEPLATES ON ALL EQUIPMENT DISCONNECTS, CONTROL PANELS, ETC., INSTALLED. INSTALL PARALLEL TO EQUIPMENT LINES. C. SECURE NAMEPLATES TO EQUIPMENT USING SCREWS.
- D. INSTALL LABELS (EMBOSSED TAPE) ON ALL OTHER BOXES AND DEVICES, INCLUDING BUT NOT LIMITED TO SWITCHES, RECEPTACLES. E. NAMEPLATES AND LABELS SHALL INDICATE PANEL AND CIRCUIT NUMBER EQUIPMENT IS SERVED FROM. ("PNLA:2"
- FOR CIRCUIT 2 FROM PANEL A). F. PROVIDE WIRE MARKERS ON EACH CONDUCTOR IN PANELBOARD GUTTERS. PULL BOXES. OUTLET AND JUNCTION BOXES, AND AT ALL LOAD CONNECTIONS. IDENTIFY WITH BRANCH CIRCUIT OR FEEDER NUMBER AS INDICATED ON DRAWINGS. FOR CONTROL WIRING, IDENTIFY WITH WIRE NUMBER INDICATED ON THE SCHEMATIC OR

2.10 LIGHTING

A. DEFINITIONS CRI: COLOR-RENDERING INDEX

INTERCONNECTION DIAGRAMS. PROVIDE MEGGER RESULTS.

- 2. HID: HIGH-INTENSITY DISCHARGE
- LED: LIGHT EMITTING DIODE
- LUMINAIRE: COMPLETE LIGHTING FIXTURE, INCLUDING LAMP AND DRIVER. POLE: LUMINAIRE SUPPORT STRUCTURE, INCLUDING TOWER USED FOR LARGE AREA ILLUMINATION.
- 6. STANDARD: LUMINAIRE SUPPORT STRUCTURE, INCLUDING TOWER USED FOR LARGE AREA ILLUMINATION.
- 2.11 STRUCTURAL ANALYSIS CRITERIA FOR POLE SELECTION A. DEAD LOAD: WEIGHT OF LUMINAIRE AND ITS HORIZONTAL AND VERTICAL SUPPORTS, LOWERING DEVICES, AND

SUPPORTING STRUCTURE, APPLIED AS STATED IN AASHTO LTS-4.

B. ICE LOAD: LOAD OF 3 LBS/SQUARE FOOT APPLIED AS STATED IN AASHTO LTS-4. C. WIND LOAD: PRESSURE OF WIND ON POLE AND LUMINAIRE, CALCULATED AND APPLIED AS STATED IN AASHTO LTS-4.

- 2.12 SUBMITTALS
- A. PRODUCT DATA: SUBMIT FOR EACH TYPE OF LUMINAIRE, ARRANGED IN ORDER OF FIXTURE DESIGNATION. B. SPECIAL SUBMITTALS: PROVIDE SPECIAL SUBMITTALS AS SPECIFIED ON THE LUMINAIRE SCHEDULE.
- C. LAMP DATA: PROVIDE A LIST WHICH GIVES THE LAMP PART NUMBER FOR EACH LUMINAIRE TYPE.
- D. DRIVER DATA: PROVIDE A LIST WHICH GIVES THE BALLAST PART NUMBER FOR EACH LUMINAIRE TYPE.

2.13 DELIVERY, STORAGE, AND HANDLING A. STORE POLES ON DECAY-RESISTANT-TREATED SKIDS AT LEAST 12 INCHES ABOVE GRADE AND VEGETATION. SUPPORT POLES TO PREVENT DISTORTION AND ARRANGE TO PROVIDE FREE AIR CIRCULATION.

B. RETAIN FACTORY-APPLIED POLE WRAPPINGS ON METAL POLES UNTIL RIGHT BEFORE POLE INSTALLATION. HANDLE POLES WITH NONMETALLIC FINISHES BY USING WEB FABRIC STRAPS.

A. NOTIFY THE COMMISSIONING AGENT ONE WEEK PRIOR TO START UP OR TESTING OF EQUIPMENT IF REQUIRED. REFER TO 01 91 13 FOR A LIST OF COMMISSIONING ACTIVITIES.

B. ASSIST THE COMMISSIONING AGENT AS REQUIRED TO PERFORM THE FUNCTIONAL TESTING ON THE SYSTEM COMPONENTS AND THE SYSTEM AS A WHOLE IF REQUIRED.

2.15 LUMINAIRES, GENERAL REQUIREMENTS

- A. LUMINAIRES SHALL COMPLY WITH UL 1598 AND BE LISTED AND LABELED FOR INSTALLATION IN WET LOCATIONS BY AN NRTL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
- B. COMPLY WITH IESNA RP-8 FOR PARAMETERS OF LATERAL LIGHT DISTRIBUTION PATTERNS INDICATED FOR LUMINAIRES. C. METAL PARTS: FREE OF BURRS, AND SHARP CORNERS AND EDGES.
- D. SHEET METAL COMPONENTS: CORROSION-RESISTANT ALUMINUM, UNLESS OTHERWISE INDICATED. FORM AND SUPPORT TO PREVENT WARPING AND SAGGING. E. HOUSINGS: RIGIDLY FORMED, WEATHER- AND LIGHT-TIGHT ENCLOSURES THAT WILL NOT WARP, SAG, OR DEFORM IN USE.
- PROVIDE FILTER/BREATHER FOR ENCLOSED LUMINAIRES. F. DOORS, FRAMES, AND OTHER INTERNAL ACCESS: SMOOTH OPERATING, FREE OF LIGHT LEAKAGE UNDER OPERATING CONDITIONS, AND DESIGNED TO PERMIT RE-LAMPING WITHOUT USE OF TOOLS. DESIGNED TO PREVENT DOORS, FRAMES, LENSES, DIFFUSERS, AND OTHER COMPONENTS FROM FALLING ACCIDENTALLY DURING RE-LAMPING AND WHEN SECURED IN OPERATING POSITION. DOORS SHALL BE REMOVABLE FOR CLEANING OR REPLACING LENSES. DESIGNED TO
- DISCONNECT BALLAST WHEN DOOR OPENS. G. EXPOSED HARDWARE MATERIAL: STAINLESS STEEL H. PLASTIC PARTS: HIGH RESISTANCE TO YELLOWING AND OTHER CHANGES DUE TO AGING, EXPOSURE TO HEAT, AND UV
- I. LIGHT SHIELDS: METAL BAFFLES, FACTORY INSTALLED AND FIELD ADJUSTABLE, ARRANGED TO BLOCK LIGHT DISTRIBUTION TO INDICATED PORTION OF NORMALLY ILLUMINATED AREA OR FIELD. J. REFLECTING SURFACES SHALL HAVE MINIMUM REFLECTANCE AS FOLLOWS, UNLESS OTHERWISE INDICATED:
- WHITE SURFACES: 85 PERCENT. SPECULAR SURFACES: 83 PERCENT.
- 3. DIFFUSING SPECULAR SURFACES: 75 PERCENT. K. LENSES AND REFRACTORS GASKETS: USE HEAT- AND AGING-RESISTANT RESILIENT GASKETS TO SEAL AND CUSHION
- LENSES AND REFRACTORS IN LUMINAIRE DOORS. L. LUMINAIRE FINISH: MANUFACTURER'S STANDARD PAINT APPLIED TO FACTORY-ASSEMBLED AND -TESTED LUMINAIRE BEFORE SHIPPING. WHERE INDICATED, MATCH FINISH PROCESS AND COLOR OF POLE OR SUPPORT MATERIALS.

2.16 LED DRIVERS

- A. LED DRIVERS: OPERATION TO BE AT STANDARD RATED VOLTAGE OF DRIVER, NOT "OVER-DRIVEN". COMPLY WITH UL 1598 AND 8750. TEST ACCORDING TO IES LM-79 AND LM-80.
- MINIMUM EFFICIENCY: 85% AT FULL LOAD.
- MINIMUM OPERATION AMBIENT TEMPERATURE: 20 DEGREES C (- 4 DEGREES F) INPUT VOLTAGE: 120 - 277 V (+/- 10%) AT 60 HZ
- INTEGRAL SHORT CIRCUIT, OPEN CIRCUIT, AND OVERLOAD PROTECTION POWER FACTOR: >95%
- . TOTAL HARMONIC DISTORTION: < 20%
- 7. COMPLY WITH FCC 47 CFR PART 15

2.17 LED SOURCES

- A. LED LUMINAIRES SHALL BE IN ACCORDANCE WITH IES, NFPA, UL, AS SHOWN ON DRAWINGS, AND AS SPECIFIED. WHERE
- CONFLICTS OCCUR, THE MOST EXPENSIVE OPTION SHALL GOVERN, NO EXCEPTIONS. B. LED LUMINAIRES SHALL BE REDUCTION OF HAZARDOUS SUBSTANCE (ROHS) - COMPLIANT.
- C. LED MODULES SHALL INCLUDE THE FOLLOWING FEATURES UNLESS OTHERWISE INDICATED:
- 1. COMPLY WITH IES LM-79, LM-80, AND LM-82 REQUIREMENTS COLOR RENDERING INDEX AND COLOR TEMPERATURE AS SPECIFIED IN LUMINAIRE SCHEDULE
- MINIMUM RATED LIFE: 50,000+ HOURS PER IES L70 DEFINITION OR AS SPECIFIED IN LUMINAIRE SCHEDULE. 4. LIGHT OUTPUT LUMENS AS SPECIFIED IN <u>LUMINAIRE SCHEDULE</u>.

D. LED EXTERIOR LUMINAIRES: SHALL BE TENANT APPROVED. 2.18 POLES AND SUPPORT COMPONENTS, GENERAL REQUIREMENTS

- A. STRUCTURAL CHARACTERISTICS: COMPLY WITH AASHTO LTS-4 WIND-LOAD STRENGTH OF POLES: ADEQUATE AT INDICATED HEIGHTS ABOVE GRADE WITHOUT FAILURE, PERMANENT DEFLECTION, OR WHIPPING IN STEADY WINDS OF SPEED INDICATED IN PART 1 "STRUCTURAL ANALYSIS CRITERIA FOR
- POLE SELECTION" WITH A GUST FACTOR OF 1.3. 2. STRENGTH ANALYSIS: MULTIPLY THE ACTUAL EQUIVALENT PROJECTED AREA OF LUMINAIRES AND BRACKETS FOR EACH POLE BY A FACTOR OF 1.1 TO OBTAIN THE EQUIVALENT PROJECTED AREA TO BE USED IN POLE SELECTION
- STRENGTH ANALYSIS. B. EXTERIOR LIGHT LUMINAIRES: UNLESS OTHERWISE NOTED, EXTERIOR LIGHT POLES SHALL BE 20' ROUND SPUN STEEL MOUNT ON CONCRETE POLE BASES AS SHOWN ON DRAWINGS.
- C. LUMINAIRE ATTACHMENT PROVISIONS: COMPLY WITH LUMINAIRE MANUFACTURERS' MOUNTING REQUIREMENTS. USE STAINLESS-STEEL FASTENERS AND MOUNTING BOLTS, UNLESS OTHERWISE INDICATED. D. MOUNTINGS, FASTENERS, AND APPURTENANCES: CORROSION-RESISTANT ITEMS COMPATIBLE WITH SUPPORT
- COMPONENTS. MATERIALS: SHALL NOT CAUSE GALVANIC ACTION AT CONTACT POINTS. 2. ANCHOR BOLTS, LEVELING NUTS, BOLT CAPS, AND WASHERS: HOT-DIP GALVANIZED AFTER FABRICATION, UNLESS
- STAINLESS-STEEL ITEMS ARE INDICATED. 3. ANCHOR-BOLT TEMPLATE: PLYWOOD OR STEEL E. CONCRETE POLE FOUNDATIONS: CAST-IN-PLACE OR PRE-CAST WITH ANCHOR BOLTS TO MATCH POLE-BASE FLANGE. CONCRETE, REINFORCEMENT AND FORMWORK ARE SPECIFIED IN DIVISION 03, SECTION 03 30 00, "CAST-IN-PLACE

CONCRETE.

- 2.19 GROUNDING
- A. PROVIDE AN EQUAL-POTENTIAL GROUND SYSTEM FOR THE BUILDING SERVICE BY BONDING ALL OF THE FOLLOWING SYSTEMS AND COMPONENTS TO THE SERVICE ENTRANCE GROUND BUS:
- METAL UNDERGROUND WATER PIPE. METAL BUILDING FRAME.
- . CONCRETE-ENCASED ELECTRODE METAL PIPING SYSTEMS.
- ROD ELECTRODES. UTILITY NEUTRAL TO THE GROUND SYSTEM AT THE SERVICE ENTRANCE DISCONNECT SWITCH. TELEPHONE SERVICE ENTRANCE.
- B. INSTALL GROUNDING AND BONDING CONDUCTORS CONCEALED FROM VIEW EXCEPT IN MECHANICAL AND ELECTRICAL
- C. PROVIDE RACEWAY FOR EACH ELECTRICAL GROUNDING OR BONDING CONDUCTOR. BOND THE RACEWAY AND CONDUCTOR TOGETHER AT EACH FERROUS CONDUIT TERMINATION WITH GROUNDING BUSHINGS. D. PROVIDE EXOTHERMICALLY WELDED CONNECTIONS TO ALL CONNECTIONS THAT WILL BE CONCEALED OR LOCATED
- BELOW GRADE. CLEAN EACH MECHANICAL CONNECTION AND COAT WITH ANTIOXIDANT PRIOR TO CONNECTION.
- F . INSTALL CONCRETE ENCASED ELECTRODE AS SHOWN ON THE DRAWINGS OR A MINIMUM OF 25 FEET #4 AWG BARE COPPER WIRE IN FOUNDATION FOOTING BONDED TO THE GROUND SYSTEM. PROVIDE MINIMUM 2 INCH CONCRETE COVER. G. EQUIPMENT GROUNDING CONDUCTOR: INSTALL SEPARATE, INSULATED CONDUCTOR WITHIN EACH FEEDER AND BRANCH
- BOX AND ENCLOSURE. H. ALL FEEDERS AND BRANCH CIRCUITS 60 AMPS AND LARGER SHALL UTILIZE INSULATED GROUNDING BUSHING AT EACH CONDUIT TERMINATION POINT.

DISCONTINUITIES IN METALLIC PIPING SYSTEMS. PROVIDE BONDING JUMPER OF EQUAL TO OR LARGER THEN THE

J. PERMANENTLY GROUND ENTIRE LIGHT AND POWER SYSTEM IN ACCORDANCE WITH NEC, INCLUDING SERVICE EQUIPMENT,

PROVIDE BONDING JUMPER AROUND INLINE METERS, WATER HEATERS, FILTERS, REMOVABLE DEVICES AND

GROUNDING ELECTRODE CONDUCTOR TO THAT SYSTEM REQUIRED BY NEC.

CIRCUIT RACEWAY. TERMINATE EACH END ON SUITABLE LUG, BUS, OR BUSHING. PROVIDE BOND TO EVERY ELECTRICAL

DISTRIBUTION PANELS. LIGHTING PANEL BOARDS. SWITCH AND STARTER ENCLOSURES. MOTOR FRAMES. GROUNDING TYPE RECEPTACLES, AND OTHER EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT.

2.20 TELCOM SYSTEM

- A. PROVIDE ALL TELECOMMUNICATIONS SYSTEM OUTLETS AS INDICATED ON PLANS. CONDUIT SHALL BE PROVIDED WITH
- PULL STRING. CABLE INSTALLATION BY OTHERS. B. MINIMUM CONDUIT SIZE SHALL BE 1" EMT U.O.N.

3.1 GENERAL

A. ALL MATERIALS SHALL BE NEW, FREE FROM DEFECTS AND ARRIVE AT THE JOB SITE IN THEIR ORIGINAL UNOPENED CONTAINER. B. INSTALL ALL ELECTRICAL EQUIPMENT USING MANUFACTURERS RECOMMENDED METHODS, UNLESS SPECIFICALLY APPROVED BY THE OWNER'S REPRESENTATIVE.

- A. GENERAL: THE INSTALLATION OF ALL RACEWAYS SHALL BE DONE IN A NEAT MANNER, CONCEALED WHEREVER POSSIBLE. B. RIGID STEEL CONDUIT: RIGID STEEL CONDUIT SHALL BE USED FOR ALL EXTERIOR AND DAMP LOCATIONS AND WHERE SUBJECT TO
- D. CONDUIT RUNS: ALL CONDUIT RUNS SHALL BE RUN PARALLEL OR AT RIGHT ANGLES TO FLOORS
- INSTALLATION. ENTIRE ELECTRICAL INSTALLATION MUST BE KEPT INDEPENDENT FROM ANY OTHER STRUCTURE.
- a. DIAGONAL BRACING: 2" X 2" X 16-GAUGE STEEL ANGLE EVERY THIRD HANGER, NOT TO EXCEED 24' ON CENTER. b. LONGITUDINAL BRACING: 2-1/2" X 16-GAUGE STEEL ANGLE ON 80' CENTERS, MAXIMUM.
- H. SEALING AROUND RACEWAYS: ALL OPENINGS AROUND RACEWAYS AND SLEEVES THAT PENETRATE THE BUILDING WALLS, FLOORS, CEILINGS, ETC., SHALL BE SEALED WITH A MATERIAL OF EQUAL FIRE RATING TO THAT OF THE SURFACE PENETRATED.

3.3 LIGHT FIXTURE INSTALLATION

- 1. USE ANCHOR BOLTS AND NUTS SELECTED TO RESIST SEISMIC FORCES DEFINED FOR THE APPLICATION AND APPROVED BY
- 3. USE A SHORT PIECE OF 1/2-INCH DIAMETER PIPE TO MAKE A DRAIN HOLE THROUGH GROUT. ARRANGE TO DRAIN CONDENSATION
- C. POLES AND POLE FOUNDATIONS SET IN CONCRETE PAVED AREAS: INSTALL POLES WITH MINIMUM OF SIX INCHES WIDE UNPAVED GAP BETWEEN THE POLE OR POLE FOUNDATION AND THE EDGE OF ADJACENT CONCRETE SLAB. FILL UNPAVED RING WITH PEA GRAVEL

D. RAISE AND SET POLES USING WEB FABRIC SLINGS (NOT CHAIN OR CABLE)

A. EXTERIOR LIGHTING SHALL BE CONTROLLED BY AN ASTRONOMICAL CLOCK FUNCTION SYSTEM WITH A CUSTOMIZABLE SCHEDULE, THAT SHALL BE FINALIZED BY THE OWNER. UNLESS OTHERWISE NOTED, LIGHTING SHALL BE TURNED ON THROUGH THE LIGHTING CONTROL SYSTEM WITH MAINTAINED INPUT AND TURNED OFF THROUGH AN ASTRONOMICAL CLOCK DETERMINED TIME SCHEDULE.

3.5 CORROSION PREVENTION A. ALUMINUM: DO NOT USE IN CONTACT WITH EARTH OR CONCRETE. WHEN IN DIRECT CONTACT WITH A DISSIMILAR METAL, PROTECT

INSTALL GROUNDING ELECTRODE FOR EACH POLE, UNLESS OTHERWISE INDICATED

CONDUIT WITH 0.010-INCH-THICK, PIPE-WRAPPING PLASTIC TAPE APPLIED WITH A 50-PERCENT OVERLAP. C. GROUND METAL POLES AND SUPPORT STRUCTURES ACCORDING TO DIVISION 26, SECTION 26 05 26, "GROUNDING AND BONDING."

INSTALL GROUNDING CONDUCTOR PIGTAIL IN THE BASE FOR CONNECTING LUMINAIRE TO GROUNDING SYSTEM.

- A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ALL PROPER ADJUSTMENTS TO ASSURE OWNER'S SATISFACTION WITH THE LIGHTING CONTROL AND OCCUPANCY SYSTEM. EXTENT OF LIGHTING CONTROL SYSTEM WORK IS INDICATED BY DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. IT IS THE INTENT TO PROVIDE ENERGY SAVING LIGHTING CONTROL OCCUPANCY SENSORS FROM A SINGLE SUPPLIER. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THAT THE SENSORS ARE APPROPRIATE FOR THE APPLICATION,
- PROVIDE ADEQUATE COVERAGE AND ARE PROPERLY ADJUSTED. SET ALL SENSORS TO 20 MINUTE DELAY. B. BASIS OF DESIGN IS LSI AIRLINK, OTHER LIGHTING CONTROL PRODUCTS ARE ACCEPTABLE BASED UPON APPROVAL OF THE ENGINEER.

- B. PROVIDE GROUND CONTINUITY THROUGH THE ENTIRE ELECTRICAL SYSTEM. A GROUNDING CONDUCTOR SHALL BE PROVIDED IN ALL

- A. GROUNDING SYSTEMS SHALL COMPLY WITH THE CODES AND ORDINANCES SPECIFIED.

2

DRAWN BY: CHECKED BY:

SHEET NUMBER

PART 3 EXECUTION

- 3.2 INSTALLATION OF RACEWAYS
- SEVERE PHYSICAL DAMAGE.
- RIGID NON-METALLIC CONDUIT (RNMC): RNMC MAY BE USED FOR ALL UNDER GROUND WIRING
- E. CONDUIT HANGERS: SHALL BE PROVIDED FOR ALL SUSPENDED CONDUIT RUNS AS FOLLOWS: 1. CONDUITS WILL NOT BE PERMITTED TO BE SUPPORTED FROM DUCTS, PIPES OR OTHER SYSTEMS FOREIGN TO THE ELECTRICAL
- F. CONDUIT BRACING:
- G. GROUPING OF CONDUIT RUNS: WHEREVER POSSIBLE, MULTIPLE CONDUIT RUNS SHALL BE GROUPED AND NEATLY RACKED AND SUPPORTED FROM THE UNDERSIDE OF THE STRUCTURAL CHANNELS WITH CLAMPS.

- A. CONCRETE POLE FOUNDATIONS: SET ANCHOR BOLTS ACCORDING TO ANCHOR-BOLT TEMPLATES FURNISHED BY POLE MANUFACTURER. B. FOUNDATION-MOUNTED POLES: MOUNT POLE WITH LEVELING NUTS, AND TIGHTEN TOP NUTS TO TORQUE LEVEL RECOMMENDED BY
- MANUFACTURER. 2. GROUT VOID BETWEEN POLE BASE AND FOUNDATION. USE NONSHRINK OR EXPANDING CONCRETE GROUT FIRMLY PACKED TO FILL
- FROM INTERIOR OF POLE. 4. INSTALL POLE BASE COVER

TO A LEVEL ONE INCH BELOW TOP OF CONCRETE SLAB.

- 3.4 EXTERIOR LIGHT LUMINAIRE CONTROL
- ALUMINUM BY INSULATING FITTINGS OR TREATMENT. B. STEEL CONDUITS: COMPLY WITH DIVISION 26, SECTION 26 05 33, "RACEWAY AND FITTINGS." IN CONCRETE FOUNDATIONS, WRAP

3.6 LIGHTING CONTROLS

- C. SIZE OF GROUND WIRE, IN ALL CASES, SHALL NOT BE LESS THAN THAT REQUIRED UNDER NATIONAL ELECTRIC CODE REQUIREMENTS D. PROVIDE A GROUND CONDUCTOR IN ALL FLEXIBLE CONDUIT RUNS AND RNMC. CONNECT THE GROUND TERMINAL OF ALL RECEPTACLES BY UTILIZING A SEPARATE GROUNDING CONDUCTOR BETWEEN THE

WITHIN THE RECEPTACLE CONNECTED TO THE DEVICE MOUNTING STRAPS ARE NOT APPROVED AS A GROUNDING METHOD.

RECEPTACLE GROUNDING SCREW AND THE GROUND CONDUCTOR PROVIDED IN THE BRANCH CIRCUIT. INTEGRAL GROUND STRAPS

DATE: NOVEMBER 2023

JOB NUMBER: MKT

SPECIFICATIONS

l 901 MoPac S., Bldg. 1, Ste. 300

Austin, TX 78746 ph 737.667.5818 www.coffman.com C405.2.3.1 than multifamily) or light reduction controls)

Item 2 units

C405.2.3.1 C405.2.5

C405.2.4

C405.2.1,

Exception 3

C405.2.1.1 controls

C405.2.5, Lighting in sleeping Indicate method of automatic off control of

C405.2.3 Manual controls Indicate on plans the method of manual

C405.2.3.1 Manual interior light Indicate on plans which method of manual

C405.2.1 Method of automatic Indicate on plans the method of automatic C405.2.2.1 shut-off control shut-off control during unoccupied periods

C405.2.1 Occupant sensor Indicate on plans all luminaires that are

C405.2.1 Occupant sensor Indicate if occupant sensor controls are

to 100% power

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C405.2.1.1 reduction controls 50% lighting load reduction is provided, or

Receptacles

all installed luminaires in sleeping units

(vacancy or key card control); also refer to

lighting control, location of manual control

(occupancy sensor, time switch or digital

timer switch) for all lighting zones

controlled by occupant sensor controls; indicate controls are configured to turn luminaires 100% off when the space is

configured to be manual on or automatic on to not more than 50% power; indicate spaces eligible for exception that allows automatic on

indicate applicable exception

device and the area or specific application it

Lighting, Motor and Electrical Requirements List, pg 4 of 10

Exterior Tradable Lighting Power Allowance

Proposed Tradable Lighting Power Density

Fixtures (#F)

Surface LPA Linear Area (SF) (Watts/SF) Feet (LF)

Tradable Surface Sub-Type

https://waenergycodes.com/print_project_summary_form.php?k=aWQ9MjA5NzcmZnZpPTE4JnJlc2V0PTE=&debug=1

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area served by each control device does not

Identify sidelit and toplit daylight zones that are not provided with daylight sensing controls and the exception(s) that apply

dimming that provides at least two even steps between 0%-100% of rated power)

and display case lighting independently from both general area lighting and other lighting applications within the same space Indicate manual and automatic (occupant sensor or time switch) lighting control

vacancy or captive key control of all installed luminaires and switched receptacles in guest

time switch) for supplemental task lighting, including under-shelf or under-cabinet

and other lighting applications within the

Indicate manual and automatic (occupant

sensor or time switch) lighting control

served by each control device does not

Indicate on plans that non-visual lighting are controlled independently from both general

area lighting and other lighting applications

controlled lights in the lighting zone

The following information is necessary to check a permit application for compliance with the lighting systems, motors and electrical system requirements in the

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controls daylight responsive controls; indicate that the

exceeds 2,500 sf

controls method (continuous dimming, or stepped

controls configured to completely shut off all

Specific application that require specific application lighting

Tradable Surface Type

Uncovered parking areas and drives -

Tradable Surface

Uncovered parking areas and drives

Fixture ID

Lighting, Motor and Electrical Requirements List, pg 3 of 10

C405.2.4 Daylight responsive Indicate on plans lighting zone(s) served by

C405.2.4.1.1 Daylight responsive Indicate on plans the lighting load reduction

C405.2.4.1 Daylight responsive Indicate that daylight sensing controls are

C405.2.5 Additional controls - Identify spaces and lighting fixtures on plans

lighting controls controls per this section C405.2.5, Display and accent Indicate on plans that manual controls are Item 1 lighting provided that control display, accent lighting

C405.2.5, Hotel/motel guest Indicate method of automatic control -

C405.2.5, Supplemental task Indicate method and location of manual and Item 1 lighting automatic shut-off control (occupant sensor or

C405.2.5, Lighting equipment Indicate on plans that lighting equipment for Item 1 for sale or sale or demonstration are controlled

C405.2.5, Lighting for non- Identify all eligible non-visual lighting Item 4 visual applications applications on plans; indicate that the area

lighting

demonstration independently from both general area lighting

same space

methods

exceeds 4,000 sf

within the same space

Item 3 rooms

Pole-mounted F01/02

Fixture Type

Individual Fixtures

Washington State Energy Code, Commercial Provisions.

Total Watts Allowed

(LPA x SF) or

Total Linear

Feet (LF)

(LPA x LF)

Total Tradable

Proposed Watts

Watts per Linear

Foot (WpLF)

Tradable Compliance

Status

Proposed (#F x WpF) or

(LF x WpĹF)

1/1

LPA (Watts/LF)

Wattage Limit

per Fixture

(WpF)

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NA			Indicate method of manual lighting control and applicable automatic lighting control	
NA	C405.2.5, Item 5	Means of egress lighting	Identify on plans egress fixtures that function as both normal and emergency means of egress illumination	
NA			Provide calculation of lighting power density of total egress lighting	
NA			If total egress lighting power density is greater than 0.02 W/sq. ft., indicate on plans egress fixtures requiring automatic shut-off during unoccupied periods	
NA			Indicate method of automatic shut-off control	
NA	C405.4.1 C405.4.2	Lighting control of exempt interior lighting	Indicate that exempt interior lighting equipment and lighting located within spaces that are eligible for a lighting power exemption are controlled independently from non-exempt and general area lighting	
NA	C405.2.6	Exterior lighting controls	For decorative exterior lighting, indicate on plans automatic daylight shut-off controls, or exception taken	
YES			For exterior lighting that is not decorative, indicate on plans automatic daylight or timeswitch shut-off controls and setback controls; or indicate exception taken	
YES			For lighting requiring setback controls, include control sequence that reduces lighting power by at least 30% between 12am-6am, or from 1 hour after closing to 1 hour before opening, or based upon motion sensor	
NA			For building facade and landscape lighting, indicate control sequence for shut-off control is based on dawn-to-dusk and business opening/closing schedule; indicate whether automatic or time switch controls will be provided for this function	
NA	C405.5.2	Lighting control of exempt exterior lighting	Indicate that exempt exterior lighting and lighting located within exterior areas/surfaces that eligible for a lighting power exemption are controlled independently from non-exempt exterior lighting	
NA	C405.5.4	Exterior gas-fired lighting appliances	Indicate ignition system is a method other then continuously burning pilot light	
NA	C405.2.7	2.7 Area controls - Master control switches and circuit power limit	Indicate location(s) of master control switch(es) intended to control multiple independent switches; circuit breaker may not be used as a master control switch	
YES			Verify that no 20 amp circuit controlled by a single switch or automatic control is loaded beyond 80%	

Washington S	tate Energy Code, C	ommercial Provisions.	dication for compliance with the lighting systems, mo Technical Support at 360-539-5300 or via email at c	• •
NA	C405.2.1.2	Occupant sensor controls - warehouses spaces	Indicate each aisleway and corridor within a warehouse space are designated as separate zones that are independently controlled	

NA	C405.2.1.2	Occupant sensor controls - warehouses spaces	Indicate each aisleway and corridor within a warehouse space are designated as separate zones that are independently controlled	
YES			Indicate occupant sensors are configured to automatically reduce lighting power by 50% when the zone is unoccupied and 100% off after the zone is unoccupied for over 20 minutes; indicate controls are configured to automatically restore lighting to full power when the zone or space is occupied	
NA	C405.2.1.3	Occupant sensor controls - open plan office areas	For open plan office areas larger than 300 sf, indicate general lighting is provided with vacancy controls that reduce lighting power by not less than 80% and are configured to turn luminaires 100% off when the space is unoccupied; indicate that no individual control zone area exceeds 600 sf	
NA	C405.2.1.4	Occupant sensor controls - parking garages	Indicate parking garage general lighting is provided with vacancy controls that reduce lighting power by not less than 30% and are configured to turn luminaires 100% off when no vehicles or pedestrians are present, unless eligible for an exception; indicate that no individual control zone area exceeds 3,600 sf	
NA	C405.2.1.5	Occupant sensor controls - enclosed fire-rated stairwells	Indicate stairway lighting is provided with vacancy controls that reduce lighting power by not less than 50% when the stairway in unoccupied	
NA	C405.2.2.1	Automatic time switch controls	Indicate spaces on plans where time switch controls turn luminaires 100% off during unoccupied hours	
NA			Indicate spaces on plans where time switch controls are configured to turn on lighting to full power versus 50% power	
NA			Indicate locations of override switches on plans and the lighting zone(s) served; indicate that the area(s) served by each override switch does not exceeds 5,000 sf	
NA	C405.2.1, Exception 3	Digital timer switch	Indicate digital timer switch control includes: manual on/off, time delay, audible and visual indication of impending time-out	
NA	C405.2.4.2 C405.2.4.3	Daylight zones - Sidelit and toplit	Indicate primary and secondary sidelit daylight zone floor areas on plans	
NA			Indicate toplit daylight zone floor areas on plans	
NA			For small vertical fenestration assemblies (rough opening less than 10 percent of primary daylight zone floor area) where daylight responsive controls are not required, provide fenestration area to daylight zone	

floor area calculation(s)

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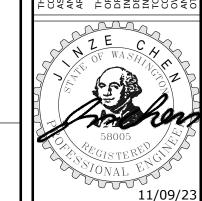
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Lighting, Motor and Electrical Requirements List, pg 5 of 10

NA	C406.4	Enhanced digital lighting controls	To comply with additional efficiency credit, indicate on plans that interior lighting fixtures are configured with all of the following control functions, as applicable: 1) Each fixture is individually addressed, or exception taken; 2) Fixtures are configured for continuous dimming; 3) No more than eight fixtures are controlled by a single daylight sensor; 4) In enclosed and open office areas, illumination levels of overhead general area lighting is configured to be individually adjusted by occupants	
NA			Include calculations that demonstrate the total lighting power of all interior lighting fixtures configured with enhanced lighting controls is no less than 90% of the total interior lighting power for the area the enhanced lighting controls credit is being applied to	
INTERIOR L	IGHTING POW	VER & EFFICACY		
NA	C405.4.1 C405.4.2	Total connected interior lighting power	Include all luminaires in interior lighting fixture schedule; indicate fixture types, lamps, ballasts, and manufacturer's watts per fixture for the installed lamp	
NA			Identify spaces eligible for lighting power exemption on plans and in WSEC interior lighting compliance reports; indicate the exception applied	
NA			Identify lighting equipment eligible for lighting power exemption in fixture schedule and in WSEC interior lighting compliance reports; indicate the exception applied	
NA	C405.1 C405.1.1	Lighting in dwelling units (multifamily)	For all installed luminaires, include lamp type and number of lamps in lighting fixture schedule; for lamps that are not LED, T-8 or small diameter fluorescent, indicate efficacy of other lamp types is 65 lumens per watt or greater	
NA			For all installed luminaires, indicate in lighting fixture schedule whether complying via lighting power density or by qualifying lamp type; if by lamp type, include number of lamps	
NA			For all installed luminaires, indicate in lighting fixture schedule whether complying via lighting power density or by qualifying lamp type; if by lamp type, include number of lamps	
INTERIOR I	IGHTING POW	VER CALCULATION -	INDICATE COMPLIANCE PATH TAKEN	
NA	C405.4.2.1	Building Area Method	Demonstrate that total proposed wattage per building area does not exceed maximum allowed wattage per building area; identify locations of building areas on plans; provide WSEC exterior lighting compliance reports	

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DATE: NOVEMBER 2023 DRAWN BY: Author CHECKED BY: Checker JOB NUMBER: MKT 2

> **ENERGY CODE** COMPLIANCE FORMS

beyond 80% ADDITIONAL EFFICIENCY CREDIT - ENHANCED INTERIOR LIGHTING CONTROLS

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5	4 3	2	
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NA C405.4.2.2 Space-By-Space Demonstrate that total proposed wattage does	For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com	For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com	FF H/
Method not exceed maximum allowed wattage; identify locations of space types on plans, including retail display areas and areas with	YES Demonstrate that proposed wattage per non- tradable surface type does not exceed maximum allowed wattage per non-tradable	NA C503.6.3 Lighting panel Where a new interior and/or exterior lighting panel is installed or an existing panel is moved (all new raceway and conductor wiring),	200 200 1
display, highlight and decorative lighting; provide WSEC exterior lighting compliance	surface type (including base site allowance remaining after tradable allowance	indicate all applicable lighting controls requirements apply	
ADDITIONAL EFFICIENCY CREDITS - REDUCED INTERIOR LIGHTING POWER DENSITY	calculation); identify locations of non-tradable surfaces on plans; provide WSEC exterior lighting compliance reports	NA C503.6.4 Newly-created rooms Where interior space(s) is reconfigured (permanently installed walls or ceiling-height	
NA C406.3.1 Reduced interior To comply with additional efficiency credit, demonstrate that total connected interior	LIGHTING ALTERATIONS	partitions) to create new enclosed spaces, indicate all applicable lighting controls	
density lighting wattage is 10% or 20% less than the total maximum allowed lighting wattage for	NA C503.6.1 Interior and parking Where ≥ 50% of existing luminaires in an garage lighting interior space or parking garage are replaced;	NA C504.2 Lighting repairs Identify existing luminaires being upgraded	
the area the reduced lighting power credit is being applied to; indicate whether lighting power allowance is based on the building area	fixture alterations indicate compliance path (building area or space-by-space method); include all new and existing-to-remain luminaires in WSEC	with bulb and / or ballast replacement; indicate fixture alteration does not increase existing fixture wattage	
method or space-by-space method; provide WSEC exterior lighting compliance reports	interior lighting compliance reports; indicate proposed lighting wattage does not exceed	NA C505.1 Change of interior Identify spaces on plans where the building	SED OR TO BE
NA C406.3 Reduced interior For project with dwelling units, to comply lighting power with additional efficiency credit indicate in	NA Where < 50% of existing luminaires in an	space use area type or space use type is being changed from one type to another per Tables C405.4.2(1) or (2)	E CHANG
density - dwelling lighting fixture schedule that lamps within unit lamp efficacy installed interior luminaires have an efficacy rating of at least 65 lumens per watt; include	interior space or parking garage are replaced; indicate total existing lighting wattage in each space prior to alteration; include all new and	NA Indicate compliance method (building area or space-by-space); include all new and existing-	NOT TO E THE DOCL THOUT W HATCH D
number of lamps and provide calculations that demonstrate at least 95% of lamps have this	existing-to-remain luminaires in WSEC interior lighting compliance reports; indicate	to-remain luminaires in WSEC interior lighting compliance reports; indicate proposed	GN ARE I AR ARE T TION TO
efficacy rating EXTERIOR LIGHTING POWER & EFFICACY	proposed total lighting wattage in alteration area does not exceed total existing lighting wattage prior to alteration	lighting wattage does not exceed maximum allowed per compliance path	OR DEST
YES C405.5.2 Total connected Include all luminaires in exterior lighting exterior lighting fixture schedule; indicate fixture types, lamps,	NA Where ≥ 50% of existing exterior lighting	RECEPTACLES NA C405.10 Controlled Identify all controlled and uncontrolled	AN AND/ IN ANY FED TO A OPER CO ECTURE
power ballasts, and manufacturer's watts per fixture for the installed lamp	wattage is replaced; include all new and existing-to-remain luminaires in WSEC exterior lighting compliance reports; indicate	receptacles receptacles on electrical plans in each space in which they are required; include receptacle	THIS PL COPED ASSIGN ARD PR ARUIT THE USI
YES Identify exterior applications eligible for lighting power exemption on plans and in	proposed total exterior lighting wattage does not exceed maximum allowed	configuration such as spacing between controlled and uncontrolled, duplex devices, etc	7.7
WSEC exterior lighting compliance reports; indicate exception applied	NA Where < 50% of existing exterior lighting wattage is replaced; indicate total existing	NA Provide schedule that lists the number of	OF STORY
YES C405.5.3(1) Exterior lighting zone Indicate building exterior lighting zone as specified by the AHJ	lighting wattage prior to alteration; include all new and existing-to-remain luminaires in WSEC interior exterior compliance reports;	controlled and uncontrolled receptacles in each space where controlled receptacles are required - classrooms, private offices, open	
NA C405.5.1 Exterior building For building grounds fixtures rated at greater grounds lighting than 50 watts, indicate rated lamp efficacy (in	indicate proposed total exterior lighting wattage does not exceed total existing wattage	office areas, conference rooms, copy rooms, break rooms and modular	50 h Rp.
lumens per watt) in fixture schedule EXTERIOR LIGHTING POWER CALCULATION	prior to alteration NA C503.6.2 Interior lighting Where new wiring is installed to serve new	NA Indicate on plans the method of automatic	88101
TES C405.5.3 Tradable allowances Demonstrate that total proposed tradable	wiring and circuiting interior luminaires and /or luminaires are alterations relocated to a new circuit; indicate manual	control for each controlled receptacle zone (occupant sensor or programmable time-of- day control); indicate that each zone served by	
surface wattage does not exceed maximum allowed tradable surface wattage (including base site allowance); identify locations of	and automatic lighting controls are provided (as applicable) - manual (C405.2.3); occupancy sensor (C405,2.1); light reduction	a single controller does not exceed 5,000 sf	
tradable surfaces on plans; provide WSEC exterior lighting compliance reports	(C405.2.3); daylight responsive (C405.2.4); specific application (C405.2.5)	NA C405.2.5, Switched receptacles in sleeping units Indicate method of automatic off control of all switched receptacles in sleeping units (vacancy or key card control)	
	NA Where new wiring is installed to serve new exterior luminaires and /or luminaires are	NA C503.6.6 Electrical receptacle alerations Where new receptacles are added or replaced within an alteration project that is 5,000 sf or	
	relocated to a new circuit; indicate automatic lighting controls are provided (C405.2.6)	larger, indicate receptacles are provided with automatic controls per C405.10, or exception	
		MOTORS, TRANSFORMERS, ELECTRIC METERS, INTERIOR TRANSPORTATION	
18 WSEC Requirements for Commercial Buildings including Group R2, R3 & R4 over 3 stories & all R1 Administered by ©2023 NEEA, All rights reserved the following information is necessary to check a permit application for compliance with the lighting systems, motors and electrical system requirements in the ashington State Energy Code, Commercial Provisions. In questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com	2018 WSEC Requirements for Commercial Buildings including Group R2, R3 & R4 over 3 stories & all R1 Administered by ©2023 NEEA, All rights reserved The following information is necessary to check a permit application for compliance with the lighting systems, motors and electrical system requirements in the Washington State Energy Code, Commercial Provisions. For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com		TRUCTI
NA C405.6 Electrical Include electrical transformer schedule on transformers electrical plans; indicate transformer type,	NA C408.1.2 Commissioning Include general summary of Cx plan per C408.1.2.1 requirements in C408.1.2 including: 1) Narrative description		NST I
yes C405.11 Feeders and branch Provide documentation that demonstrates	C408.1.4 construction of activities; 2) Responsibilities of the Cx C103.6.3 documents team; 3) Schedule of activities including		
circuits maximum voltage drop across feeders and branch circuits does not exceed 5%	verification of project close out documentation per C103.6; 4) Conflict of interest plan (if required)		
Dwelling unit Indicate on electrical plans that each dwelling electrical energy unit in Group R-2 has a separate electrical	NA C408.1.2 Commissioning Include in general summary that a Cx project report and Compliance Checklist (Figure		
consumption energy meter IA C405.8 Electric motor Include all motors, including fractional hp	C103.6.3 construction C408.1.4.1) shall be completed by the documents Certified Cx Professional and provided to the		
efficiency motors, in electric motor schedule on electrical plans; indicate motor type,	YES C408.4.1 Functional Identify in plans and specifications the		
horsepower, rpm, rated efficiency, or exception applied	performance testing intended operation of all equipment and controls during all modes of operation, including interfacing between new and		
NA C405.9.1 Elevator cabs For luminaires in each elevator cab, provide calculations that demonstrate average efficacy is not less than 35 lumens per watt	existing-to-remain systems PROJECT CLOSE OUT DOCUMENTATION		
For elevators that do not have an integral air conditioning system, indicate rated watts per	YES C103.6.3 Project close out Indicate in plans that project close out		
cfm for elevator cab ventilation fans do not exceed 0.33 watts per cfm	documentation documentation is required including WSEC requirements lighting compliance reports that document all interior and exterior lighting area and / or		
Indicate automatic controls that de-energize lighting and ventilation fans when elevator is	surface types, lighting power allowances and installed densities		SLI
stopped and unoccupied for a period of 15 minutes or more	If "no" is selected for any question, provide explanation.		COMMEN
A C405.9.2 Escalators and Indicate escalators comply with ASME moving walks A17.1/CSA B44; automatic controls are			PTION -
configured to reduce operational speed to the minimum permitted when not in use			DESCRIF
A C405.9.3 Regenerative drive Indicate all one-way down or reversible escalators are provided with a variable			
frequency regenerative drive OCUMENTATION AND SYSTEM REQUIREMENTS TO SUPPORT COMMISSIONING (CX)			
C408.4 Scope of electrical power and lighting power			DELTA
systems and horizontal transportation) for which the commissioning WSEC requires control functions and / or configuration to perform specific functions			DATE: NOV
are required to be commissioned			CHECKED E JOB NUMBE
Where total building lighting load is > 20 kW, or where total lighting load of luminaires requiring daylight sensing and / or occupancy			SHEET TITLE
control > 10 kW, indicate that all automatic lighting control systems are required to be			ENERG
commissioned; or provide building lighting power calculation demonstrating eligibility for exception			COMI
VA C405.13 Commissioning Indicate Cx requirements in plans and			FO
C408.1.2 construction lighting control systems per C408 C408.1.4.2 documents		▲ COFI	FMAN SHEET NUMBER
C103.6.3		ENGI	NEERS
		901 MoPac S., Bldg. 1, Ste. Austin, TX 78746	300 E-(
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