

# MUNICIPALITY OF ANCHORAGE



Community Development Department  
Planning Division

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*Mayor Dan Sullivan*

August 4, 2014

Mr. Todd Carroll, PE  
Anchorage Water & Wastewater Utility  
3000 Arctic Boulevard  
Anchorage, Alaska 99503

Re: 2014-0100      Administrative Site Plan Review for Ship Creek Water  
Treatment Facility Exchanger Project

Dear Mr. Carroll:

The Community Development Department has reviewed the application for an administrative site plan for the heat exchanger addition to the AWWU energy recovery station located on T13N, R2W Section 7, Lot 8 at 8670 Starview Drive. The application was reviewed in accordance with Anchorage Municipal Code Title 21, effective January 1, 2014.

The existing AWWU facility is a permitted use in the PLI (public lands and institutions) district. The proposed heat exchanger addition to the energy recovery station generally meets the requirements of the applicable provisions of the code.

The Community Development Department APPROVES the site plan for the 1,750 square foot addition to existing AWWU energy recovery station, subject to the following conditions:

1. Obtain permits from the ADOT&PF Right-of-Way Office prior to any construction within the Starview Drive right-of-way which is a state-owned local roadway. Access to Starview Drive is regulated by the state of Alaska and requires compliance with state driveway standards.
2. Amend the landscape plan to seven (7) additional bushes.

Sincerely,

Jerry T. Weaver, Jr.  
Director, Community Development Department

Attachment: Department Findings

cc: R&M Consultants, Inc.  
Ms. Van Le  
9101 Vanguard Drive  
Anchorage, AK 99507

**Administrative Site Plan Review**  
**Case 2014-0088 AWWU Ship Creek Plan Review**  
**August 4, 2014**

**Applicable Code:** New Code (effective January 1, 2014)  
**Legal Description:** T13N, R2W Section 7, Lot 6 (Reference Plat C-237)  
**Area:** 31.8 acres (1,385,208 SF)  
**Address:** 8670 Starview Drive  
**Grid:** SW 1142  
**Tax Parcel I.D.:** 074-061-02  
**Zoning:** PLI (public lands and institutions) district  
**Use:** Anchorage Water and Wastewater Utility (AWWU) Energy Recovery Station (ERS) utility substation  
**Definition:** A service of a regional nature that normally entails the construction of new buildings or structures, and that typically has employees at the site. Examples include water works, water or sewage treatment plants, power or heating plants, or steam generating plants.

**Proposal:**

Anchorage Water and Waste Water Utility requests an administrative site plan review for a 1,760 square foot addition to an existing 5,740 square foot energy recovery station on 32 acres in north east Anchorage. The building addition will house new heat exchangers and associated piping to effect the heat transfer from Municipal Light & Power's (ML&P's) proposed new power plant currently under construction.

The substation is located on BLM Lot 8, Section 7, T13N, R3W at 8670 Starview Drive, north of the Glenn Highway and Muldoon Road interchange.

The property is zoned PLI (public lands and institutions) district. A public utility is a permitted use in the PLI district subject to an Administrative Site Plan Review in accordance with Chapter 21.05.010 Table 21.05-1 Table of Allowed Uses.

The Ship Creek Water Treatment Facility Heat Exchanger project will transfer waste heat from the new Ship Creek ML&P power plant, currently under construction and scheduled for a 2015 completion, into AWWU's water system. The tempered water will lower winter freeze potential in AWWU's water storage and distribution system, and will help to lower water heating costs for AWWU's customers year round. The co-location of the proposed heat exchanger building with the ERS will provide a benefit to constructions costs and usability of the facilities.

Previous development on this site required approval of a site plan, a conditional use and a landscape plan. On February 4, 1985, the Planning and Zoning Commission approved a site plan for the Municipal Light & Power expansion located east of the Muldoon Road intersection with the Glenn Highway, next to Centennial Park. The power plant had been in operation since 1975.

On January 9, 2012, the Planning and Zoning Commission approved final conditional use for expansion of the electrical power generation. On June 13, 2012, the Urban Design Commission approved a landscape plan for screening along a major highway for the Municipal Light & Power, Plant 2.

AMC 21.03.180F. An application for administrative site plan review shall be approved upon a finding that the site plan meets all of the following criteria:

1. The site plan is consistent with any previously approved subdivision plat, planned development master plan, or any other precedent plan for land use approval.

The previously approved site plan and conditional use were for the expansions to the ML&P's power generation plant. The proposed heat exchanger addition to the energy recovery system is a complementary addition to an existing utility and is permitted use in the PLI district. The petition site has been developed with public utilities since the 1960's and the addition to the AWWU facility will not change the character or use of the property that has previously been approved.

- 2 The site plan complies with all applicable development design standards set forth in this title, including but not limited to the provisions in chapter 21.04, *Zoning Districts*, chapter 21.05, *Land Use Regulations*, chapter 21.06, *Dimensional Standards and Measurements*, and chapter 21.07, *Development and Design Standards*.

The PLI district is intended to include major public and quasi-public civic, administrative and institutional uses. The heat exchanger addition to the energy recovery station conforms to the intent of the zoning district under chapter 21.04.

The proposed booster station meets the intent and purpose of the utility substation as defined in Title 21: "a service that is necessary to support development within the immediate vicinity and is typically not staffed. Examples include but are not limited to electric transformer stations, gas regulator stations; water reservoirs; telephone exchange facilities, and water and sewage collection or pumping stations."

The development has generally been found to meet the chapter 21.06, *Dimensional Standards and Measurements*, and chapter 21.07, *Development and Design Standards* out outlined below.

- 3 The site plan addresses any significant impacts that can reasonably be anticipated to result from the use, by mitigating or offsetting those impacts to the maximum extent feasible.

The 1,750 square foot addition to the Energy Recovery Station (ERS) is minor in nature. The site is adjacent to Centennial Park and is buffered by extensive natural vegetation. Highway Screening is to be installed along the Glenn Highway. The building materials will match the existing ERS structure.

- 4 The development proposed in the site plan is consistent with the goals, objectives, and policies of the comprehensive plan.

The site plan addresses Policy #80 of Anchorage 2020 that outlines a strategy that *"Utilities shall be located and designed with balanced regard for the environment, energy conservation, reliability, visual impacts, natural hazard survivability, and cost."*(page 88)

The petition site is not impacted by streams, wetlands or major drainageways. The facility is located in a moderate-low seismic zone and is not within an avalanche hazard zone.

The AWWU facility has existed on site since the early 1960's. The heat generated by ML&P's utility will be used to heat water in AWWU's storage tanks and distribution lines which reduce the cost of heating water for AWWU's customers throughout the year.

#### AGENCY REVIEW COMMENTS

The State Department of Transportation and Public Facilities (DOT&PF) state that Figures 1, 2 &3 shows Lot 6 as extending onto the Glenn Highway. Please provide a copy of the record of survey which shows the property ownership of this area. Property Appraisal records indicate that Lot 6 is located in Grid SW 1042 and contains 28,314 square feet. The property is shown as owned by AWWU and is vacant

The Municipal Traffic Engineer states that Starview Drive is classified as a State DOT&PF local roadway. Access to Starview is regulated by the state of Alaska and requires compliance with state driveway standards. It is the responsibility of the developer to obtain permits whenever construction within the right-of-way is anticipated. Please provide calculations for required off-street parking stalls.

Anchorage Water and Wastewater Services (AWWU) state that public water is available to Lot 6; sanitary sewer is not available to this parcel.

21.04.060E.1.	<u>Purpose</u> The PLI district is intended to include major public and quasi-public civic, administrative, and institutional uses and activities.	Met
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21.05.040J.	<u>Utility Facility</u> This category includes major utilities, which are infrastructure services providing regional or community-wide service, and minor utilities, which are infrastructure services that need to be located in or near the neighborhood where the service is provided. Services may be publicly or privately provided.		Met
21.05.040J.3. 21.05.040J.3.a.	<u>Utility Substation</u> <u>Definition:</u> A service that is necessary to support development within the immediate vicinity and is typically not staffed. Examples include, but are not limited to, electric transformer stations; gas regulator stations; water reservoirs; telephone exchange facilities; and water and sewage collection or pumping stations.		Met
21.05.040J.3.b.	<u>Use Specific Standard:</u> The facility shall be designed and constructed to ensure visual and aesthetic compatibility with the surrounding neighborhood. Compatibility may be achieved either by using similar architectural design and materials as building(s) in the surrounding neighborhood, or by screening the facility with L2 buffer landscaping.		Met
21.06-2 <u>Table of Dimensional Standards – Other</u>	Lot size: Width: Lot Coverage: Front Side yard: Rear: Height:	6,000 SF- 32.8 acre site 50 feet- 1,255 width 45%- 12.1% proposed 25 feet- 1100' provided 25 feet- 28.3' provided 25 feet- 5.5' provided (legally non-conforming) 45 feet- 27' proposed	Met Met Met Met Met Met
21.07.020A	<u>Natural Resource Protection</u> The requirements of this section are intended to ensure that the natural character of the municipality is reflected in patterns of development and redevelopment, where feasible and appropriate.  The site is not impacted by wetlands, streams or natural drainageways. Although Lot 6 has been developed with essential public services, native vegetation has been preserved on site.		Met
21.07.040D.4. Drainage	The current drainage pattern for the overall site is generally from east to west. The site experiences spring snow melt ponding from higher elevation land to the east.		Met; plan will be submitted with the

	A new earthen berm along the east property boundary is proposed to redirect snow melt runoff around the building and access driveway into a reconstructed drainage ditch along the existing roadway. Existing 18" culverts will be replaced with 24" culverts. The existing drainage pattern will be maintained with this proposed project with the addition of landscaped berms and the replacement of larger culverts.	building permit
21.07.080 <u>Table 21.07-1 Freeway Landscaping</u>	Freeway landscaping requirements apply to the Glenn Highway between Boniface Parkway and the northern municipal boundary.	
	<u>Minimum Planting Bed Width:</u> Minimum planting bed width of 30 feet.	Met
	<u>Required Materials:</u>  Provide 3 trees and 10 bushes per 20 linear feet along the freeway; 50% shall be coniferous.	Not met
	Per AMC 21.14.0200. <u>Fractions</u> 1. Except where stated otherwise, when any calculation for determining a number of items (such as parking spaces, trees, etc.) results in a fraction, any fraction less than one-half (0.5) shall be rounded down to the preceding whole number, and any fraction of one-half (0.5) or greater shall be rounded up to the next consecutive whole number. Where the calculation results in a fraction less than one, the fraction shall be rounded up to one.	
	Length of required freeway landscaping is 247'. 37 trees are provided; 19 of which are coniferous and 22 are deciduous.	Met; 4 deciduous trees are saved trees
	124 bushes are required; 117 bushes provided.	Not met; 7 additional bushes required
	Planting bed shall be covered with living ground cover, turf or mulch.	Met
	Plant materials chosen for suitable hardiness and length of season for the specific area	Met

<u>21.07.090. Table</u> <u>21.07-4 Off-Street</u> <u>Parking Spaces</u> <u>Required</u>	Per AMC 21.07.090E.3. the requirements for off-street parking facilities shall be determined by the director and the traffic engineer in cases where a use is listed without a specific requirement in Table 21.07-4: Off-Street Parking Spaces Required.  Letter signed by the Traffic Engineer dated 6/5/14 approved the addition of 1 (one) parking space used for periodic maintenance purposes along the northeast side of the existing Energy Recovery Station shown on Figure 3 Site Plan.	Met
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**CONDITIONS OF APPROVAL:**

1. Obtain permits from the ADOT&PF Right-of-Way Office prior to any construction within the Starview Drive right-of-way which is a state-owned local roadway. Access to Starview Drive is regulated by the state of Alaska and requires compliance with state driveway standards.
2. Amend the landscape plan to provide seven (7) additional bushes.

(Case 2014-0100; Parcel I.D. 074-061-02)