

# Work Session Memorandum

PLANNING DIVISION COMMUNITY & NEIGHBORHOODS

- To: Salt Lake City Historic Landmark Commission
- From: Kelsey Lindquist, Principal Planner 801 535 7930 or <u>kelsey.lindquist@slcgov.com</u>
- Date: September 6, 2018

Re: PLNHLC2018-00557 and PLNHLC2018-00558 4<sup>th</sup> Avenue Pump House New Construction

#### 4<sup>TH</sup> AVENUE PUMP HOUSE NEW CONSTRUCTION

PROPERTY ADDRESS: 300 North Canyon Road PARCEL ID: 09-31-327-022-0000 HISTORIC DISTRICT: The Avenues Local Historic District ZONING DISTRICT: H Historic Preservation Overlay District (21A.34.020) & Open Space (21A.32.100) MASTER PLAN: Avenues Community Master Plan DESIGN GUIDELINES: Residential Design Guidelines

REQUEST: 4<sup>th</sup> Avenue Pump House – The Historic Landmark Commission will hold a work session to provide preliminary review of a proposal and application by Salt Lake City Public Utilities for the new construction and special exceptions associated with the new pump house located at 300 N. Canyon Road. The pump house is necessary to continue to provide drinking water to the community and protect the well that is located on the site. The pump house will contain equipment necessary to operate the well and required chemicals to treat the water. The upgrade and pump house is required per federal and state regulation. This will be a work session review, no formal public hearing will be held and a decision will not be made at this meeting. The subject property lies within the Avenues Historic District (H Historic Preservation Overlay), is zoned OS (Open Space) and is within Council District 3, represented by Chris Wharton. (Staff contact: Kelsey Lindquist, (801) 535-7930 or kelsey.lindquist@slcqov.com) Case numbers: PLNHLC2018-00557 & PLNHLC2018-00558

RECOMMENDATION: This is a Historic Landmark Commission Work Session to discuss the proposed new construction and associated special exceptions. <u>NO Staff recommendation is made in this current review</u>.

#### THE PROPOSAL - PUMP HOUSE NEW CONSTRUCTION

These applications propose the new construction of a pump house located on the southern corner of 300 North Canyon Road at 4<sup>th</sup> Avenue. The proposed pump house is required, due to state and federal requirements for chemical injection and mechanical equipment standards. Through evaluating the options for addressing the deferred upgrades for the well, Public Utilities analyzed several options. While the new construction of the pump

house is a difficult option, in regards to the park and open space users, Public Utilities considers it the most feasible and risk averse option.

The engineer consultants evaluated the following options, which are also included in Attachment E:

- 1. Underground Well/Mechanical with 2300 Volt Power
- 2. Aboveground Well/Mechanical with 480 Volt Power
- 3. Aboveground Well/Mechanical with 480 Volt Power and Emergency Power Generation
- 4. Relocate Well

Public Utilities reviewed the potential options evaluated by the engineering consultants and selected option 3: Aboveground well/mechanical with 480 volt power and emergency power generation.



Proposed Site Plan

Option 3, includes the new construction of the proposed pump house. The pump house, as currently proposed, is approximately 993 square feet in size, with the generator and transformer outside of the structure. The entire pump house site will approximate 1300 square feet. The size of the subject property is approximately 10,853 square feet. The proposed pump house will cover approximately 9.14% of the subject property. Public Utilities worked diligently with the engineering consultants to ensure that the majority of the existing open space would remain as such – and to impact the existing space as little as possible. Public Utilities acknowledges the difficulties of the proposed pump house and provided the following Design Statement:

"The visual appearance of the proposed building is composed of simple rectangular forms. When viewed from the south and west (the front and corner side yards) the building's modules will appear to be relatively equal width and height. The intent of this proposal is to remain neutral with simple rectangular solids while respecting the context of the more historic vicinity. The proposed building has a **purely utility functionality. Therefore the building's design seeks to r**eflect that functionality with a utilitarian appearance. A flat roof was chosen to further compliment the utilitarian presentation of the **building.**"

The initial proposals included historic architectural replicas, which reflected some aspects of both the Avenues and Capitol Hill Local Historic Districts. Through several discussions and revisions, Public Utilities modified the proposal to eliminate the conflict of faux historic representation within a contemporary utility structure. The most

recent iteration of the pump house consists of utilitarian form and materials. The utilitarian form, reflects the use associated with the principal structure, and simplifies the proposal, as well as minimizes the potential impacts. The revised design includes the use of two varieties of CMUs (concrete masonry unit), steel doors, steel transom **features and a coping addition.** The proposed structure is approximately 13'8" in height. The roofline is proposed to be flat, to reflect the use of the structure, as well as to provide the minimum height required for the function of the structure.



Proposed Rendering

#### SPECIAL EXCEPTION REQUESTS

The site is located within the OS (Open Space) zoning district. Several special exception approvals will be required to accommodate the facility: the setbacks and location of the principal structure, as well as the associated equipment. Public Utilities is seeking input on the proposed special exceptions. The special exceptions are listed on page 4 in the project description and include the following:

- 1. Building setbacks: The OS (Open Space) zoning district requires a minimum of 30' for the front yard, 30' for the corner side yard, **20**' for interior side yards and 30' for the rear yard. Due to the location of the well and creek water feature in the park, Public Utilities is proposing 3'1" for the corner side yard and 4'3" for the front yard setback.
- 2. Landscape yard requirements: In relation to the required front, corner and rear yard setbacks; these setbacks are required to be landscaped. The proposed 3'1" corner side yard and 4'3" front yard will be maintained as landscaped yards.
- 3. Fence height: Public Utilities is required to provide a 6-foot fence for protection against vandalism, terrorism or contamination. The additional height consists of 2 feet beyond the permitted 4 foot fence height.
- 4. HVAC location: the use requires an individual HVAC unit for each separate chemical room. The pump house requires both chlorine and fluoride treatments. The two HVAC units are located on the east elevation of the proposed pump house. HVAC units are not permitted to be located within a required front yard. Due to the limitations of the site and the quadruple frontage, the HVAC units are located within the front yard.
- 5. Utility box location: both the electrical transformer and emergency power generator will be located in the northern yard. Due to the location of the transformer and the generator on public property, they require a

special exception for approval for the proposed location. The two boxes are located outside of the structure to minimize the footprint of the pump house.

#### LIMITATIONS OF THE HISTORIC LANDMARK COMMISSION

The Historic Landmark Commission is tasked with the review of the proposed new construction, which includes: the design, siting, access, materials, form, scale, landscaping and associated compatibility features. The difficult aspect of the proposal involves the engineering constraints and requirements. The following list are the constraints facing the proposal:

- Location of the well;
- Accommodating a lower height;
- Decreased footprint;
- Ability to accommodate openings;
- Alternative material for the doors;
- Interior CMU material, due to weathering and damage from moisture exposure;
- Modification of entry and access ways;
- Or an engineering alternative.

The proposal in front of the Historic Landmark Commission can be modified in regards to design, a potential veneer, additional exterior materials, faux openings, alternate roofline and landscaping.

#### THE SITE & CONTEXT

The site and context, identified as 300 North Canyon Road, is located between both the east and west Canyon Road. The site is also located south of Memory Grove Park and has been utilized as an open space and enjoyed by the community for decades. Due to the public use of the site, the open space contains several old growth trees, and an homage to the original City Creek. This particular open space has been utilized for gatherings, relaxation and general public use. The pump house will encompass 993 square feet of the 1300 square feet of the fenced off area. The generator will encompass approximately 207 square feet and the transformer will encompass approximately 56 square feet. Outside of the proposed total 1300 square feet, the remainder of the open space will continue to be utilized by the public.

The site also includes the passage and entry into Memory Grove Park, **one of Salt Lake City's local historic districts.** The Memory Grove neighborhood consists of some of the oldest structures within the City. The several parks and surrounding structures create a unique aesthetic and environment for the residents, tourists and direct neighbors.

#### Historic Architectural Surveys

The subject property was initially surveyed as part of The City Creek National Historic District in 1980 and later included in the Avenues Local Historic District. As noted in the 1980 nomination:

> Towards the end of the nineteenth century, the cities in the United States were overcrowded with immigrants and farmers who had moved into the urban centers hoping to find a better way of life.



Aerial Indicating Site Location Most of the newcomers were crowded into low rental slum areas. During the 1880's and 1890's, Americans became aware of the problems that people faced in cities and social reform movements developed. Several solutions to urban problems were tried including Jane Addams' settlement houses, an increased interest in social work because of the writings of the "muckrakers" and attempts to end the control of the city bosses. Another expression of this type of reform was the development of parks in cities. Those people who supported parks argued that open spaces would help "civilize" the new residents who were coming into the area. Parks and city planning in general received great impetus from the World Columbian Exposition in Chicago in 1893.

Salt Lake faced many of the same problems that the rest of the nation was dealing with at the turn of the century. The city grew rapidly during that time and the population of the area doubled between 1900 and 1920. The city council was probably aware of the attempts in other areas to correct the problems of urbanization and in 1902 suggested that park areas be created in the City Creek Canyon area. The area that the city proposed for the park was one of the areas where the Mormons first camped when they came to the valley in 1847. They selected this area because City Creek provided a good source of **water for drinking and irrigating...** 

Although the city passed the resolution to create the park in 1902 and similar suggestions were made during the next few years, the first improvements were not made until 1914. At that time some trees were planted by the mayor. The major developments in the park did not come until after World War I, however. At that time the Service Star Legion, a group of women whose sons had served during World War I, asked the city if the area could be set aside as a memorial to those who died during the war. A similar park had been made in Baltimore in 1919 by the Legion, The city agreed to the proposal, and the area was dedicated as a memorial park in 1924. Since then a number of monuments have been added and it is now a memorial to all men and women who lost their lives in defense of their country. South of Memory Grove there are two small green areas in the center of Canyon Road. Originally Canyon Road had been built in two sections, with one side on each side of the City Creek. In 1909 the city decided to put the creek underground to protect the water supply and to prevent accidental drownings in the creek. About that time, the residents of the area petitioned the city to make the creek bed that was being filled in into park areas. By 1912 a small formal park had been completed on the strip between 3<sup>rd</sup> and 4<sup>th</sup> Avenue area was constructed in the park area above 4<sup>th</sup> Avenue.

The area was eventually designated in the Avenues Local Historic District.

#### KEY CONSIDERATIONS

The park, in its present form, is largely intact with the old growth vegetation and City Creek representation. The proposal to construct a new pump house encroaches on the historic use of the property. An initial Staff review of the proposal raised several issues and conflicts. Each issue and conflict are framed in the form of a question. Each question has a bearing on a future decision by the Commission.

The applicant seeks the considered views and advice of the Historic Landmark Commission on the proposed new construction of the utilitarian designed pump house. Public Utilities is open to design input from the Historic Landmark Commission and potential design solutions.

1. Is the current use and design utilizing the CMU material an issue?

Public Utilities suggests that CMU is the optimal material for this project. This is due to the unusually high impact that the interior use of this structure will have on the material. Public Utilities and the engineering consultants have explained and provided through the documentation, that the interior will experience a great deal of moisture, climate, vibrational and chemical impacts. While these impacts are less prevalent on the exterior of the structure, the interior will need to be constructed to withstand all of the concerns. Conflict with Standard 6.

Staff has discussed an alternative material on the exterior with Public Utilities. A masonry veneer would be more compatible with the surrounding environment. The only concern raised from Public Utilities regarding a masonry veneer, was additional reduction of the required yards. The veneer would encroach an additional 8 inches.

- 2. Is the current design without the integration of openings a compatibility issue? Public Utilities cannot incorporate actual openings into the proposed structure, due to safety regulations. Any openings provided would be faux in nature and bricked-in. The initial proposal included brick-in windows. Staff, not having worked with such regulations in a new construction project, encouraged Public Utilities to eliminate the bricked-in openings. Conflict with Standard 5a.
- 3. Does each elevation address the public way? Due to the configuration of the site, each elevation will be readily visible from the public way. Is there additional detailing or landscaping that would minimize the impact on each elevation? Conflict with Standard 1c.
- 4. Does the design include enough design details to create a smooth transition from the open space to an established historic neighborhood? Public Utilities has designed the structure with CMUs and added a split face CMU. The building consists of a concrete foundation, split face CMU, regular CMU, split face scored CMU and regular CMU. The engineers tried to integrate additional detailing with the variety of CMUs, the parapet, and the coping. Staff has encouraged the integration of a green screen, cornice and potential belt coursing to provide undulation and material variation. Conflict with Standard 1c, 1d, 1e, 3, 4a(1-3), 5a (1-4) and 6.
- 5. Does the proposal balance the need and manage the change successfully? The infringement of the utility structure within the existing small scale park is difficult to manage, in the sense of compatibility. The space has been open space with large old growth trees and an homage to City Creek. The park is more or less an entrance into the larger Memory Grove Park. While the well has existed since the early 1960s, there has been little mechanical equipment on site. The integration of the pump house on the corner of this site will alter the visual and physical experience of this park. The pump house is necessary and unavoidable to guarantee safety for Public Utility employees and safe drinking water.
- 6. Are there additional guidelines that can be utilized for the review of this proposal? Staff is currently utilizing the Residential Design Guidelines for new construction to review this proposal. Since the proposed new construction is not a residential, commercial or multi-family building, staff believes that the Residential Design Guidelines are the most applicable. The applicability is due to the location of the proposed new construction. While the use is utilitarian, the setting is residential.
- 7. Could landscaping further be utilized to ease the transition from the open space to a utility structure?

The current proposal includes the removal of 6 trees. Several of the existing trees are considered to be specimen trees, which will require mitigation or replacement, in order to be removed. Public Utilities has stressed that there are no additional alternatives to removing the trees. The current landscaping proposal incorporates more of a natural swath for the landscaping to grow. Staff has had several conversations with Public Utilities to address landscaping concerns and potential solutions. Staff raised the potential addition of a green screen or rain screen on the eastern elevation to help transition from open space to a utility structure. The addition of landscaping would aid the overall compatibility and design of the structure. Conflict with Standard 3.

- 8. If the current design is not appropriate what changes to the plan need to be made to bring it into compliance? The previous questions ranged from openings, siting and materials. Are these all of the considerations? Does the Historic Landmark Commission have additional considerations?
- 9. What type of renderings or plans need to be provided to review the full scope of the proposal? A streetscape will be required for the review of the new construction proposal for the public hearing with the Historic Landmark Commission. Does the Historic Landmark Commission request or require any additional studies, plans or renderings for the review of the new construction and special exceptions?

#### PUBLIC COMMENTS AND CONCERNS

Public Utilities attended the Capitol Hill Community Council and the Greater Avenues Community Council and presented about the need of a new pump house. Both of these community council presentations occurred prior to the submittal of the HLC applications. After the applications were submitted, Planning Staff sent notice of the applications to both applicable community councils and scheduled an Open House. The Open House took place on August 17, 2018. Staff received 9 written comments and had several conversations with the 27 attendees. The comments, which are attached in Attachment F, generally consist of concerns with the proposal. The concerns include the removal of the old growth trees, the design of the structure, the proposed structure, the proposed use, the loss of open space and the compatibility of the structure with the existing neighborhood and the Avenues Local Historic District. Staff received comments both written and verbal about the desire of an alternate proposal, meaning a solution that would eliminate the need of the pump house. The comments that address an engineering alternative are not within the prevue of Planning Staff or the Historic Landmark Commission. Public Utilities and the engineering consultants have evaluated alternate solutions and have selected this option to accomplish the safety upgrades for workers, safety upgrades for the drinking water, and to eliminate any potential contamination or pump failure.

#### ATTACHMENTS:

- A. Location
- B. Photographs
- C. Application Materials
- D. Design and Project Alternatives
- E. Public Process and Comments
- F. Design Standards for New Construction and Applicable Design Guidelines
- G. Special Exception Review Standards

### ATTACHMENTA: LOCATION



### ATTACHMENT B: PHOTOGRAPHS



View of the Existing Well



View Looking West/South



View Looking West/South



View Looking West



View of Existing Well



North/Eastern View of Existing Well



South/East View of Existing Well



View of Existing Park

### ATTACHMENT C: APPLICATION MATERIALS



#### **Project: 4th Avenue Well Building**

#### **PROJECT DESCRIPTION**

#### **Overview:**

The application includes the demolition of an existing underground culinary water well vault and construction of a replacement well building and associated miscellaneous equipment. The project is located within Canyon Side Park (situated at the intersection of 4<sup>th</sup> Avenue and Canyon Road). The park and the parcel on which it is located are both owned by Salt Lake City. The park's main features include: open lawn with trees interspersed throughout, an above ground grouted rock lined storm water channel, benches, and a walkway.

The parcel is 10,853 square feet and zoned as Open Space (OS). The proposed well project encompasses a public utility building that falls within a permitted use of the zone. The proposed project would include a well building (approximately 995 square feet) and a fenced yard for electrical equipment. Therefore the approximately 2,295 square feet total proposed well area would reduce the park area to approximately 8,560 square feet accessible to the public.

#### **Existing Conditions/Need for Improvements:**

Salt Lake City Department of Public Utilities operates the existing 4<sup>th</sup> Avenue Well. This well is a critical water source used to meet existing City culinary water demands. The well has been in active service since it was drilled in 1968. The existing well is located in an underground concrete vault. From the surface, a metal lid and access hatch with concrete curbing is visible (along with various electrical and miscellaneous equipment).

Due to aged electrical equipment at the well, electrical and State of Utah Division of Drinking Water code violations, and to maintain functionality, the well needs to be upgraded to current standards. Due to the well's outdated configuration, it is very susceptible to various issues that pose serious risks of knocking the well, and its associated relatively large production of culinary water, out of commission for many weeks.

To correct the existing deficiencies and bring the well into regulatory compliance, the following are the most significant of the improvements required:

1. The existing well is located in an underground vault that needs to be brought above ground. The existing well vault will be demolished. The existing well casing will be extended above ground and a new building to house the well's mechanical and electrical equipment (including chlorine and fluoride treatment processes) will be constructed above ground.

- 2. Chlorine and fluoride treatment processes will be added to the water produced by the well to meet State and County requirements; this will result in a larger building than the existing vault size.
- 3. The electrical components need to be updated to modern safety standards and include an alternate power source in the event of an emergency (an on-site power generator will be added).
- 4. A 6-feet tall ornamental fence will be provided to improve site security.
- 5. As there is very limited existing street parking, a concrete driveway access/parking location was added to the site.

Upgrading the well to current standards is particularly difficult because the site presents several significant physical layout challenges. These challenges and constraints include the following:

- Overall limited space for expansion because the site is located inside a small City owned median/park adjacent to a residential neighborhood
- A grouted rock lined storm water conveyance channel is located to the east.
- There are buried 5-feet diameter storm drain pipes to the immediate east and west of the well site. The proposed building design will not be able to negatively impact those pipelines.
- There are Minimal existing setbacks from property boundaries and the road/sidewalk. For instance there is less than an approximately 1-foot of setback from the existing vault to the south side of the property boundary.
- Multiple large diameter trees are located immediately north of the existing well. Because the actual well head location is fixed, the existing 5-foot diameter storm drain pipelines are located in very close proximity on both the east and west sides, and the 4<sup>th</sup> Avenue roadway is located just to the south of the well head, the only available direction to expand the proposed well building is to the north. Significant efforts were made to reduce the footprint of the proposed well building and appurtenances. However, six existing trees will need to be removed to accommodate this project. The City Forester has been contacted and is evaluating the impacts and proposed mitigation measures shown in the landscape plan.

Due to all of those factors, efforts were made to minimize the building's footprint throughout the design process.

#### **Design Statement:**

The visual appearance of the proposed building is composed of simple rectangular forms. When viewed from the south and west (the front and corner side yards) the building's modules will appear to be of relatively equal width and height. The intent of this proposal is to remain neutral with simple rectangular solids while respecting the context of the more historic vicinity. The proposed building has a purely utility functionality. Therefore the building's design seeks to reflect that functionality with a utilitarian appearance. A flat roof was chosen to further compliment the utilitarian presentation of the building.

The orientation of the building's primary facing is toward Canyon Road and parallel to the property boundary (similar to most existing buildings in the vicinity). A side access to the building was placed facing south toward 4<sup>th</sup> Avenue with a walkway intended to engage the roadway.

#### **Building Materials and Details:**

The materials proposed for this project have proven durability and will promote a sense of human scale. The primary building materials will be insulated concrete masonry units (CMU) and a moderate amount of metal. The CMU construction will include both standard CMUs and a lower coursing of split faced CMUs to provide varied visual appearance. Although most of the existing building in the vicinity are either brick or siding, CMU construction was selected for maintenance purposes. The inside of the building will be subjected to frequent interior cleaning/hosing down. Therefore, standard interior sheetrock walls are not recommended. In addition, due the severe site space constraints, a thin but durable wall is needed. CMUs were selected to satisfy those requirements.

Metal will be utilized in the form of doors and vents to complement the brick and to help bring balance to the overall building composition. In addition, as the site constraints restrict fencing options, the metal doors will provide additional site security.

This well provides drinking water to many residents of Salt Lake City; drinking water is a City resource that is critical to protect against both vandalism and terrorism. In addition, if vandals broke windows to access the building, the equipment and chemicals inside could pose a significant danger to them (without the proper training). Therefore windows would compromise security and will not be provided with the proposed building. Also, relatively large amounts of chemicals will be stored inside the buildings which would to be best left out of public view, especially considering the limited building setbacks available. Finally, the relative lack of solid to void ratio will emphasize the utilitarian function of the building.

In three locations around the building (next to each of the three ground mounted HVAC units), small vertical undulations in the wall are visible; they serve two purposes. First, they house ventilation ducts for each of the three HVAC units. They also assist in breaking up the form of the relatively long wall on the east side of the building. As the building's dimensions were already reduced as practicable to minimize impacts to the park, there is no extra space available inside the building to accommodate the ductwork along the walls. An objective of the landscaping plan was to obscure the HVAC units from public view. Roof mounted HVAC units were not selected as they would require a 42-inch guard rail or parapet be built around the top of the building for the safety of maintenance personnel.

A roof hatch will be provided over the top of the well pump and motor to facilitate access, removal, and maintenance requirements. That hatch will rise approximately 15-inches above the building's wall height of 13-feet and 4-inches.

A 16-inch diameter pipeline will pass through the building's east wall and discharge into a grate connecting into an existing 60-inch buried storm drain pipeline. This 16-inch pipeline is

necessary to allow a relatively limited amount of water to be discharged from the well periodically. This will replace the existing well discharge piping located adjacent to the road curbing immediately west of the existing well site.

#### Summary:

The intent of Salt Lake City Public Utilities is to construct a safe and reliable culinary water well that is in compliance with state and local regulations and while also minimizing impacts to the existing park and neighborhood.

#### **SPECIAL EXCEPTIONS**

The following are a list of special exceptions that were identified during the building's design process:

- 1. **Building Setbacks:** The well building and associated improvements appear to comply with the specific requirements applicable to the OS zone except for the minimum yard requirements. The OS zone states that 30-feet is required in the front yard and 30-feet for the corner side yard. The proposed well will not be able to achieve those setbacks. The front setback (to the west) is proposed to be approximately 4'-3". The corner side setback is proposed to be approximately 3'-1". It should be noted that the existing underground vault has an approximately 4'-7" front setback and a 0'-9" corner side setback. As shown on the Vicinity Setback Map, only a small area (with less than 18-feet of maximum width) of the parcel falls within the allowable buildable area based on zone setbacks will be very similar to the existing. Obtaining special exceptions for the setbacks are critical to allow the project to move forward.
- 2. Gate Setback: The gate across the driveway has an approximately 4'-7" setback from the property line. According to City code, the setback is supposed to be 17'-6". As there is currently no parking permitted along the road curbing around the park, a driveway/parking area will be required for maintenance/chemical delivery vehicles. An exception to the gate setback requirement is necessary to avoid orienting the driveway to the north and thereby adding significant additional encroachment into the existing park.
- 3. Fence Height: To provide additional safety to the public and improve site security, the ornamental fence and gate around the building will be 6-feet tall. The extra 2-feet of height will require a special exception to be granted.
- 4. **HVAC Location:** Each room will utilize a separate HVAC unit to isolate the two different chemical types stored in two of the rooms from entering any other room. The chlorine room's HVAC unit will be located in the south west corner of the building to minimize the overall footprint of the well building. Because that HVAC unit will be located in the front/corner side yard, a special exception is requested.

5. Utility Box Locations: The utility boxes (electrical transformer and emergency power generator) will not be able to be located inside the buildable area of the property. This is due to many factors such as their relatively large sizes, conflicts with existing utilities and site improvements, and the very limited buildable area that results from the relatively large setback requirements upon the small property area. Those utility boxes have been moved to the building's side yard.



PARCEL ZONING = OPEN SPACE (OS) TOTAL PARCEL AREA = 10,853 $FT^2$ (0.249 ACRES) NEW WELL BUILDING FOOTPRINT = 993 $FT^2$ NEW WELL BUILDING W/ FENCED AREA = 2,293 $FT^2$ OPEN SPACE TO REMAIN = 8,560 $FT^2$			SASOCIATES
	PRE	MAR	
			NU. DAIE REV. BY DESCRIPTION REVISIONS
	RICK TANK	VERIFY SCALE BAR IS ONE INCH ON	
	UT LAKE CITY PUBLIC UTILITI WELL AND BF SALT LAKE CITY, UTAH	REVIEW CHECKED K. BAGLEY	APPROVED K. BAGLEY
4TH /	4TH AVE	DESIGN DESIGN J. BEAN	DRAWN J. BEAN
	SITE 1	- - -	PROJECT 032-16-04 NUMBER 032-16-04
			лте: JULY 2018
September	DRAW <u>C</u> - 6.~2018 2	ING NO. -02	- 10



e City\032-16-04 4th Avenue Well & Brick Tank\2.0 - Design Phase\2.







PLNHLC2018-00557 & PLNHLC2018-00558 .ake City\032-16-04 4th Avenue Well & Brick Tank\2.0 – Design Phase\2.10 Drawings\Sht\C-5.dwg Plotted: 7/9/2018 3:00 PM By:

TREES	BOTANICAL NAME	CONT	QTY
	ACER TRUNCATUM X PLATANOIDES 'PACIFIC SUNSET'	2" CAL	1
$\underbrace{\bullet}$	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	2" CAL	1
$\overline{\mathbb{O}}$	AMELANCHIER X GRANDIFLORA 'PRINCESS DIANA'	2" CAL	1
$\overline{\cdot}$	PYRUS CALLERYANA 'CHANTICLEER' CHANTICLEER PEAR	2" CAL	4
$(\cdot)$	QUERCUS ROBUR 'FASTIGIATA' COLUMNAR ENGLISH OAK	2" CAL	4
SHRUBS	BOTANICAL NAME	SIZE	QTY
A	ARCTOSTAPHYLOS X COLORADOENSIS 'PANCHITO' PANCHITO MANZANITA	5 GAL	9
B	BUDDLEIA DAVIDII 'VIOLET' BUTTERFLY BUSH	5 GAL	3
c	CARAGANA FRUTEX 'GLOBOSA' GLOBE PEASHRUB	5 GAL	22
$\overline{\mathbf{\cdot}}$	HIBISCUS SYRIACUS 'MINERU' ROSE OF SHARON	5 GAL	2
	PRUNUS BESSEYI SAND CHERRY	5 GAL	1
F	RHAMUS FRANGULA 'COLUMNARIS' TALLHEDGE BUCKTHORN	5 GAL	24
ANNUALS/PERENNIALS	BOTANICAL NAME	SIZE	QTY
G	AQUILEGIA ALPINA ALPINE COLUMBINE	1 GAL	42
Э	HEMEROCALLIS X 'IRRESISTIBLE CHARM' DAYLILY	1 GAL	15
	HEMEROCALLIS X 'JOAN SENIOR' DAYLILY	1 GAL	13
(J)	HEUCHERA X 'CITRONELLE' CORAL BELLS	1 GAL	11
GROUND COVERS	BOTANICAL NAME	CONT	QTY
	BARK	NONE	1,044 SF
	POA PRATENSIS KENTUCKY BLUEGRASS	SOD	1,202 SF
5.50.05.05.05.07.05.07.05.07 5.50.05.07.05.07.05.07 5.50.05.05.07.05.07	ROCK MULCH 3" DECORATIVE GRAVEL MULCH	NONE	752 SF

NOTES: 6 TREES REMOVED 11 TREES PLANTED

OAK TREES PLACED AT THE REQUEST OF SLC PLANNING DEPARTMENT



#### NOTES:

1. MOUNTED ELECTRICAL PANELS/EQUIPMENT NOT SHOWN FOR CLARITY. 2. CMU MORTAR COLOR TO MATCH CMU BLOCK COLOR.



:\Salt Lake City\032-16-04 4th Avenue Well & Brick Tank\2.0 - Desian Phase\2.10 Drawinas\Sht\0321604\_A-01.dwa Plotted: 8/10/2018 11:31 AM By: Sarah Duckwort



#### KEYED NOTES:

- 1 CHLORINE TANK
- FLUORIDE TANK TRANSFER PUMP
- DAY TANK
- 000000 DOSING PUMP
- ELECTRICAL DISCONNECT/INCOMING POWER
- ELECTRICAL DISCONNE(
   VFD
   UIGHTING TRANSFORMEF
   RTU PANEL
   UIGHTING PANEL
   IIGHTING PANEL
   THE PRESSURE RECORDER LIGHTING TRANSFORMER

- (2) WATER METER TRANSMITTER/READOUT
- (3) 480V GENERATOR W/ SOUNDPROOF ENCLOSURE
- AUTOMATIC TRANSFER SWITCH
- 14 15 16 POWER METER BASE
- CT ENCLOSURE
- Õ GROUND MOUNTED HVAC

- (1) GROUND MOUNTED HAC
  (8) RMP 480V POWER TRANSFORMER
  (9) FLOW METER
  (9) BUTTERFLY VALVE
  (2) CHECK VALVE
  (2) CHECK VALVE
  (2) RESTRAINED DISMANTLING JOINT
  (2) 450 HP 3800 GPM VERTICAL TURBINE PUMP
- 24 INJECTION QUILL W/ INTEGRATED CHECK VALVE
   25 MAIN CIRCUT BREAKER
   26 TANKLESS WATER HEATER



#### KEYED NOTES:

1.5 0

#### 1 CHLORINE TANK

FLUORIDE TANK

) 3 SCALE IN FEET

- 2345 TRANSFER PUMP
- DAY TANK
- DOSING PUMP
- ELECTRICAL DISCONNECT/INCOMING POWER
- VFD
- LIGHTING TRANSFORMER
- 000000 RTU PANEL
- LIGHTING PANEL
- DRESSURE RECORDER
- (2) WATER METER TRANSMITTER/READOUT
- 3 460V GENERATOR W/ SOUNDPROOF ENCLOSURE (3) 460V GENERATOR W/ SOUNDPROOF ENCLOSURE
  AUTOMATIC TRANSFER SWITCH
  (5) POWER METER BASE
  (6) CT ENCLOSURE
  (7) HVAC
  (8) RMP 480V POWER TRANSFORMER
  (9) FLOW METER
  (9) FLOW METER
  (9) BUTTERFLY VALVE
  (2) CHECK VALVE
  (2) CHECK VALVE
  (2) RESTRAINED DISMANTLING JOINT
  (3) 450 HP 3800 GPM VERTICAL TURBINE PUMP
  (4) INJECTION QUILL W/ INTEGRATED CHECK VALVE

- INJECTION QUILL W/ INTEGRATED CHECK VALVE
   MAIN CIRCUT BREAKER



SECTION VIEW









# 4th Ave Well Brick Tank Draft Simulations 1 of 4

August 2018







Disclaimer:

Simulations for conceptual review only.



# 4th Ave Well Brick Tank Draft Simulations 2 of 4

August 2018





# 4th Ave Well Brick Tank Draft Simulations 3 of 4

August 2018





# 4th Ave Well Brick Tank Draft Simulations 4 of 4

August 2018



#### **Existing Well Photographs**



Photo #1: Existing Well Looking North



Photo #2: Existing Well Looking North



Photo #3: Existing Well Looking East



Photo #4: Existing Well Looking South-East



Photo #5: Existing Well Looking West



Photo #6: Existing Well Looking South
## Existing Buildings in the Immediate Vicinity of the 4<sup>th</sup> Avenue Well



### 127 East 4<sup>th</sup> Ave







207 and 211 N Canyon Road







208 and 212 North Canyon Road















## ATTACHMENT D: DESIGN AND PROJECT ALTERNATIVES



### **EXECUTIVE SUMMARY**

The existing 4<sup>th</sup> Avenue Well facilities do not meet current State, electrical, mechanical and safety requirements. Three alternatives were evaluated to bring the facility into compliance with State requirements and address safety concerns. Alternative 3 was selected by the City for the following reasons:

- The current well deficiencies are brought into compliance with current State requirements
- The wellhouse is much safer to operate and maintain as confined spaces are eliminated, accessibility is improved and the 460 volt power is much safer than what is currently provided and eliminating flooding risks
- The electrical equipment installation is brought into compliance with current electrical code and redundant power is provided with the addition of a back-up generator
- Allow the city the flexibility to address future state or city requirements with the addition of chlorine and fluoride facilities at the facility

### **INTRODUCTION AND PURPOSE**

Salt Lake City Department of Public Utilities (City) Fourth Avenue Well is a critical water source used to meet water demands of the downtown area. Due to aged electrical equipment at the well, electrical and mechanical code violations, and in order to maintain functionality, the well should be upgraded to current standards.

### EXISTING WELL SITE

The existing 4<sup>th</sup> Avenue Well is located adjacent to the intersection of 4<sup>th</sup> Avenue and Canyon Road. The well is also located within the southern portion of the Salt Lake City owned Canyon Side Park. The well has been in active service since it was drilled in 1968. The existing well, piping, and associated electrical equipment are located in an underground concrete vault with ladder access as shown. Power is supplied to the well via a Rocky Mountain Power owned 2300 volt electrical transformer located to the north of the vault. A submersible pump with an approximately 4,000 gallons per minute (gpm) capacity is used to pump water from the well into the City's Victory-Tanner drinking water pressure zone. The City owns a spare 2300 volt submersible pump to back-up this well. The well typically operates from June through September. Our understanding is that this well is primarily utilized to satisfy peaking needs of the Victory-Tanner pressure zone.

### **EXISTING WELL DEFICIENCIES**

Based upon the initial inspection and a review of the electrical code and Division of Drinking Water (DDW) rules, the following list of deficiencies were noted:

- The well casing is not located 18-inches above finished ground surface per DDW requirements.
- The existing vault does not provide the DDW required six air changes per hour.
- The well water lacks a secondary disinfectant dosing system to achieve a detectible disinfectant residual concentration.
- The pump to waste pipeline does not appear to be designed for complete drainage per DDW recommendations.
- The existing vault is not equipped with a proper access ladder and fall protection equipment.
- The motor starter and the main power disconnect located in the existing vault do not have a full 4-feet of frontal clear space as required by the electrical code.
- The existing vault does not have proper egress from the electrical equipment.
- The existing vault does not provide the required clearance above the lighting panel as required by the electrical code.
- There is a safety concern regarding water flooding the existing vault with the 2300 volt equipment energized as the sump pump is not capable of conveying the well pump flow rate.

• The well does not have capability for on-site back-up power generation.

### WATER TREATMENT

**Chlorine** – It is our understanding that the water obtained from the 4<sup>th</sup> Avenue Well is sufficiently high quality as to not require direct disinfection or other treatment. DDW regulations require that the combined water distribution system have a detectible chlorine residual present. The 4<sup>th</sup> Avenue Well does not currently have any chlorine injection capability and depends on other sources/storage facilities to provide extra chlorine dosing to account for the dilution provided by the 4<sup>th</sup> Avenue Well. In the event another chlorine dosing facility goes offline, it is generally advantageous to have every source capable of maintaining acceptable chlorine concentration levels in the water it supplies to the system. Due to the City's desire, all three alternatives (described later in this memorandum) include a batch liquid chlorine storage and dosing system.

**Fluoride** – City regulations require that fluoride is added to all the City's culinary water. For various reasons, the 4<sup>th</sup> Avenue Well has been exempted from this requirement in the past. As part of the 4<sup>th</sup> Avenue Well upgrade, the City has requested that all the alternatives include the capability for fluoridation of the well water to bring the well in compliance with the current standards.

### **POWER SUPPLY**

### **Primary Power Evaluation**

The site is currently supplied power from the existing Rocky Mountain Power (RMP) 2300 volt electrical transformer. The transformer has been in service for approximately 15-years. RMP has indicated that they are phasing out 2300 volt transformers and are not stocking back-up equipment. If the transformer fails, there would be an approximately 12-week delay before it could be replaced. A twelve week outage during peak demand in the summer would be problematic to the City delivering water to the downtown area. RMP has stated that the the existing 2300 volt transformer could be replaced with a 480 volt transformer. This is only an option if the well pump changes from a submersible pump to a vertical turbine pump (Alternatives 2 and 3).

If the City decides to remain on 2300 volt power, it is suggested that the City investigate the option of prepurchasing a back-up 2300 volt transformer (stored off-site) with RMP to prevent a potential 12-week outage.

**Back-up Power Generation** – The existing well does not have permanent back-up power generation or the capability for connection to temporary power back-up. Back-up power generation has been requested to be included as an alternative for the project depending on City funding and site constraints. The alternatives, discussed in detail later, include potentially locating a permanent power generator on-site or providing a transfer switch to allow connection with portable power generation equipment.

### **DESIGN ALTERNATIVES**

Each of the alternative described below will have a few common design elements to be resolved. They included architectural elements of the new above ground structure, set-back issues and coordination with both the planning and parks departments.

As all three alternatives will require a new above-ground structure in some fashion, we believe that due to the park's location the architectural design will most likely be more aesthetically pleasing than a standard block building. It is likely that the architectural design will need to fit in with the existing neighborhood surroundings. In addition noise issues from the pump motor and possible heating/AC units will likely be a sensitive issue for nearby residences and park visitors.

All of the alternatives will also have set-back issues. The proximity of the proposed improvements to the sidewalks along both 4<sup>th</sup> Avenue and Canyon Road may be a concern. Each of these alternatives will also give the park a different look and feel than what it currently has. Trees will need to be removed, the amount of usable space could decrease and the aesthetics will be different. All of these alternatives could have zoning issues or open space issues as they relate to current City code and may need special permissions.

Consideration should be made for park access. Currently, the park does not include any designated vehicle parking areas. Furthermore vehicular parking is prohibited around the perimeter of the park. Although unlikely, further investigation of the potential to add a designated parking area inside the park for well maintenance vehicles, chlorine and fluoride delivery vehicles.

Fencing to restrict access to the well site is normally recommended to prevent vandalism or other unauthorized access. Due to the location of the well and the minimal existing set-backs, fencing does not appear to be feasible. Decorative privacy walls, vegetation, or other methods of obscuring portions of the site as practicable are recommended.

With that introduction, the three alternatives that have been developed are presented as follows:

### Alternative 1 – Underground Well/Mechanical with 2300 Volt Power

This alternative would remedy the deficiencies previously identified while minimizing changes as feasible. The 2300 volt power source would remain, although it would be relocated above ground to improve safety and to make space for the other improvements including an enclosed space for fluoridation and chlorination facilities. The relocated electrical would be housed in a new above ground structure. The well mechanical and piping would remain underground utilizing most of the existing vault structure. This alternative includes the following:

- 2300 volt power source (relocate RMP transformer and meter enclosure)
  - o Recommend working with RMP to obtain a back-up 2300 volt transformer
- Reuse existing underground vault for mechanical
  - o Raise well casing to 18-inches above finished ground surface and add pitless adapter
  - o Raise vault access port/hatch to accommodate taller well casing
  - Reuse existing submersible pump
  - Well piping and mechanical components replaced (including pump to waste piping)
  - Add forced air ventilation and heating to vault
  - Replace access ladder and add handrails
- Add batch sodium hypochlorite water treatment capability
- Add fluoride water treatment capability
- Replace all electrical components include adding a variable frequency drive (VFD) for the pump.
- Above ground building to house all electrical, chlorination, and fluoridation equipment

Due to the already significant additional space in the City's park that this alternative will require, it was determined that it would not be viable to install a permanent power generator. Capability to connect to a portable back-up power generator was also not included in this alternative. A 2300 volt portable back-up power generator was deemed unfeasible because the large portable generator footprint.

### Alternative 2 – Aboveground Well/Mechanical with 480 Volt Power

This alternative would seek to remedy the deficiencies previously identified by replacing and expanding all existing well infrastructure by constructing a new well building that would house the mechanical, electrical, fluoridation and chlorination facilities. This alternative includes the following:

- Upgrade the 2300 volt power source to 480 volts
  - New transformer, CT enclosure, and meter base
- Demolish underground well vault and replace with aboveground structure.
  - Replace submersible pump with vertical turbine pump (a submersible pump at the required flow rate and head are not available at 480 volt)
  - o Combined electrical and well mechanical room
  - Add forced air ventilation, heating, and cooling
  - Well piping and mechanical components (including upgrading pump to waste configuration to allow complete drainage)
- Add batch sodium hypochlorite water treatment capability

- Add fluoride water treatment capability
- Replace all electrical components include adding a variable frequency drive (VFD) for the pump.
- Above ground building to also house all electrical, chlorination, and fluoridation equipment

To minimize impacts to the park, this alterative does not include permanent on-site power generation capability. The alternative does include the ability to connect to a portable back-up power generator. If a portable power generator was ever needed at this site, it is estimated to require a temporary space 8-feet wide by 30-feet long. Based on information from City personnel, the City's existing portable power generators are insufficient to power the pump motor during a power outage.

### Alternative 3 – Aboveground Well/Mechanical with 480 Volt Power and Emergency Power Generation

This alternative is the same as Alternative 2 except that it provides on-site back-up power generation. This differences from Alternative 2 include the following:

- A back-up on-site diesel power generator
- Replace the manual transfer switch with an automatic transfer switch

### Alternative 4 – Relocate Well

This alternative is not preferred by the City and was not evaluated in detail. Challenges involved in relocated the well from the current location are briefly address below.

If the well is relocated within a radius of 150-feet of the existing well the process for permitting the well relocation is relatively straight forward. However, relocating within 150-feet of the existing well would not solve the planning issues with the existing site as there are no suitable locations available without purchasing existing properties for the relocation.

If relocation is greater than 150-feet from the existing well the permitting and approval process is more involved. A change application would be required to be filed with the Utah State Engineers Office. This change application would require a public comment period where individuals or organizations could provide comment. In our experience with relocating wells in urban areas, it is probable the change application would be protested in some fashion or another. In addition to the change application process there is always the risk of what yield the City would get with drilling a well in a new location. The existing well produces approximately 4,000 gpm. There is no guarantee that relocated well could provide a yield of 4,000 gpm.

### WHY CITY SELECTED ALTERNATIVE 3

This alternative was selected by the City for the following reasons:

- The current well deficiencies are brought into compliance with current State requirements
- The wellhouse is much safer to operate and maintain as confined spaces are eliminated, accessibility is improved and the 460 volt power is much safer than what is currently provided and eliminating flooding risks
- The electrical equipment installation is brought into compliance with current electrical code and redundant power is provided with the addition of a back-up generator
- Allow the city the flexibility to address future state or city requirements with the addition of chlorine and fluoride facilities at the facility

## ATTACHMENT E: PUBLIC PROCESS AND COMMENTS

Planning staff held a public open house on August 16, 2018. 27 people signed in and approximately 9 people left comments. The comments attached are from the open house, as well as several received via email.



August 28, 2018

Ms. Kelsey Lindquist Salt Lake City Planning Department City and County Building 451 S. State Street Salt Lake City, UT 84111

Dear Ms. Lindquist,

This letter serves as Preservation Utah's response to the pump house planned for the southern tip of City Creek Park (Fourth Avenue and Canyon Road). A subterranean pump has existed at this site for decades, but city officials have deemed this arrangement to be impractical and dangerous. According to these officials, the pump must be both raised to the surface and reconstructed within the park to secure Salt Lake's water system and provide water to large quarters of the city over the coming decades.

Preservation Utah recognizes the limitations Salt Lake City faces as it considers improving a critical component of the civic water system. As Utah's statewide Preservation Organization, however, Preservation Utah also recognizes the value and fragile nature of City Creek Park and the surrounding City Creek Local Historic District. Taking these resources into consideration, Preservation Utah's strongest preference would be to move the pump to a location outside the park and preferably outside the historic district. Moving the pump would allow the features of the park and the district to retain the various qualities (green space, tree canopy, view sheds, traditional architecture, etc), that distinguishes this area of Salt Lake City.

Should moving the pump not prove feasible, Preservation Utah strongly encourages city officials to design and build a pump house that would be an asset to City Creek Park. Many of the pump houses that currently serve the city are cement blocks; in every respect, these pump



houses are utilitarian in construction and in design. By using traditional construction materials (brick, stone, and wood) and landscaping around the pump house, this building can be less of a distraction from the surrounding historically sensitive setting. By using creative, inspired design, the pump house could even become a benefit to City Creek Park. Some of Utah's historic utilitarian buildings provide a starting point for a well-designed and historically sensitive pump house. Such buildings include the Big Cottonwood Canyon Stairs Station Power Plant, the historic Trolley Barns at Trolley Square, and the Murray City Diesel Power Plant.

Preservation Utah offers Salt Lake City its expertise on this project. Please let us know how we may contribute to either the relocation and / or the design of the future City Creek Pump House.

Sincerely,

Cart

David Amott, Ph.D Programs Director



Tue 8/21/2018 10:37 AM

Sean McKenna

### Re: Case PLNHL2018-00557 and 558

To Lindquist, Kelsey

12:45 PM. Pou replied to this message on 8/21/2018 12:45 PM.

### Action Items

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~

Hi Kelsey, I was unable to attend the open house because I was out of town. I would like to submit a public comment though. I think this proposed project would be extremely detrimental to the historic neighborhood of memory grove. The area is beautiful right now with the center open space with City Creek running through the middle. The open space acts as a nice natural pathway from Temple Square and Brigham park through Memory Grove to Memory Grove Park and on to City Creek Canyon. It is very common to see families picnicking and playing in the open space where this building is proposed. The location of the proposed building is on the corner of Canyon Drive and 4th Ave and would completely ruin the natural and peaceful feeling of our historic neighborhood. The location of the building would eliminate valuable and beautiful public open space and the design of the building does not fit in with the neighborhood at all. I would urge SLC to find a different solution. Keeping everything underground as it currently is would be much preferred or building the structure somewhere else that does not ruin a very peaceful and serene oasis of nature within a historic neighborhood in downtown Salt Lake City.

Please let me know that these comments will be submitted and please let me know what the next steps are.

Thank you, J. Sean McKenna





As you may be aware SL Public Utilities proposes to build a pump house on 4th Ave and Canyon Road.

The preliminary drawings are attached.

Thanks.

There is an Open House with SLC Planning Division at City Hall, 451 S Sate Street 4th Floor, August 16 from 5 to 7 which is open to all. Below is the post card you should have received. This will be the neighborhoods first opportunity to effect design, size and other executions.

The neighbors plan a get together in the near future to discuss the steps we need to take to have further meaningful influence on the construction, design and mitigation of impacts.

To help us to know we have the right address to keep you in the loop for meetings, will you please reply to this email. That way we'll know this email got to you and through your spam filter.



Open House on August 16, 2018 at 5:00 to 7:00 p.m. City & County Building 451 S State Street, 4th Floor Hallway Salt Lake City, Utah 84111

4th Avenue Pump House at approximately 300 N Canyon Road-Salt Lake City Public Utilities is proposing to construct a new pump house on the property listed above. The pump house is necessary to continue to provide drinking water to the community and protect the well that is on the site. The pump house will contain equipment necessary to operate the well and required chemicals to treat the water. The subject property is located in the OS (Open Space) zoning district and is located in Council District 3, represented by Chris Watron, (Ctaff Contact – Kelsey Lindquist at 801-535-7930 or kelsey.lindquist@slegov.com) Case Numbers PLNHLC2018-00557



Thanks for this. That's a pretty stark Change for that little park

On Aug 13, 2018, at 11:56 AM, Lindquist, Kelsey <<u>Kelsey.Lindquist@slcgov.com</u>> wrote:

Craig,

Thank you for the phone call. The applicable plans are attached. Please note, the engineers are currently revising the elevations and the renderings – which I can forward, as soon as I receive them. The Open House is on Thursday from 5-7. If you have any questions or concerns, please let me know.

Sincerely,

Kelsey Lindquist Principal Planner

COMMUNITY AND NEIGHBORHOODS PLANNING DIVISION SALT LAKE CITY CORPORATION

TEL 801-535-7930 FAX 801-535-6174

WWW.SLC.GOV/PLANNING

<Street Renderings - 4th Ave Well.pdf>

<Site Plans - 4th Ave Well.pdf>

From:	Lindquist, Kelsey
To:	
	McIntire, Blayde; Stewart, Brad
Subject:	RE: PLNHLC2018-00557 & PLNHLC2018-00558
Date:	Friday, August 10, 2018 3:22:48 PM
Attachments:	Site Plans - 4th Ave Well.pdf
	<u>Street Renderings - 4th Ave Well.pdf</u>

Winston,

I would first like to say congratulations on the upcoming baby. I hope all goes as planned!

I had Public Utilities address a few of the technical questions, specifically 1, 2,3,4, 6, 7 and 8. If you happen to have additional technical questions or need any clarification on the answers provided, I cc'd Public Utilities on this email.

## 1. Could you please provide details and specifications of the current pump and facilities?

The current pump house has been in service since 1968. The well is one of the biggest producers in all of Salt Lake City. It is 20" in diameter and 464 ft deep. On average during the summer months it produces 5.5-7.0 million gallons per day (MGD). For reference, that is more than the City Creek Water Treatment Plant produces during the summer. It supplies downtown Salt Lake City with a majority of its water. The current facility has a below-ground vault, approximately 10'Wx20'Lx12'D, which houses all electrical equipment, the well head, and pipe. There is an above-ground transformer.

The issue with the current vault is that it does not meet current state code. Periodically, SLCDPU facilities are inspected with state officials in what is called the "State Sanitary Survey." Past inspections have found several deficiencies at the site that should be corrected. SLCDPU has not yet been required to correct the deficiencies because the site is "grandfathered." However, if any work is done at the site, it loses its "grandfathered" status and the whole site must be brought up to current standards.

The safety of our workers is paramount on every SLCDPU project, and there is no question they are in jeopardy if we do not make this change. This update will also provide greater resiliency and safety for the neighborhood and entire community.

The main driver for this project is the electrical system. Currently the site is supplied by a 2300V transformer. Rocky Mountain Power has informed the project team that parts are no longer available for that transformer, and that 480V transformers are now used. If the old transformer were to need repair, there is no easy fix, and the well would be placed out of service for an extended period of time. Obviously this poses a significant problem for the water distribution system because of the well's importance. Rather than hope that doesn't happen, SLCDPU has proposed a proactive approach in which we upgrade to a 480V transformer. To accommodate the 480V transformer, all electrical equipment must be replaced. Therefore, the site loses its "grandfathered" status and must be brought up to current standards. Current standards include putting the equipment in an above-ground structure and adding disinfection and fluoride injection.

## 2. Could please provide details and specifications for the envisioned pump facilities and chemical?

The proposed pump house is an above-ground structure, 46'Wx34'Lx12'H. It houses the wellhead, electrical equipment, piping, and chemicals. The chemicals will be entirely contained within the structure and will be transferred directly into the water pipes so there will very little to no smell. There is an above-ground generator and transformer located outside of the building to provide backup power in case of a power system outage.

# 3. Could you please provide the list of considered alternatives, and details on the selected alternative?

Thank you for asking about the alternatives. Our project team spent significant time analyzing and discussing alternatives because we knew the challenges the project would face.

The first alternative considered was to abandon this well and drill a new well in a new location. The advantage of this alternative is the minimal impact to the existing site. The greatest disadvantage is to find a location that would produce the same volume of water.

There are two key components to finding a location: the surface location and the sub-surface hydrogeological make-up. The surface location needs to be close enough to the existing water distribution system and end users—in this case, the downtown area. If the well were relocated, large diameter pipes would need to be extended to the new location. This would be tremendously expensive and disruptive to the neighborhoods. The second key component is that the existing well was drilled into a near-perfect aquifer. It reliably provides large amounts of pristine water. This aquifer is limited in size and it is unlikely that another aquifer would be found to match its production capability in the immediate vicinity. The design team evaluated the water distribution system for another existing source that rerouted to provide water to the area. They also looked at the operation of the system to see if changes could be made to provide the same water service without the well. The project team concluded that updating the current site makes the most operational and economic sense, but recognizes this choice has a high social impact, as do most of the alternatives.

Once the team evaluated the site location, they examined alternatives to the layout of the new building and transformer. They worked to reduce the footprint of the building as much as possible, while still meeting electrical, noise, drinking water, building and safety codes. Due to the importance of this well, the team decided to include a generator on-site. In the event of a power outage, this well needs to function to provide the surrounding area with water. A portable generator was not feasible because of the large pump motors.

# 4. Is an underground pump house as currently in place an alternative under consideration?

An underground structure is not possible because state code requires that any well structure must be free draining. This means in the event of a water main break, flood or other event the water will flow away from the well by gravity (non-mechanical means). An underground vault does not have this capability. In addition, electrical equipment is extremely sensitive to water and creates potentially dangerous environment for operational staff in underground vaults. Without a free-draining site during an event the possibility exists for contaminated water to enter the well itself. Contaminating the aquifer could shut down the well for a very long time. 5. Will any new pump house be held to the same historic aesthetic that our home is held to? Are there plans that could be provided?

The new construction of the pump house is subject to review and approval by the Historic Landmark Commission. The review and approval is slightly different from what you may have experienced with any design or application review of an existing historic structure with the Historic Landmark Commission. The difference occurs with the request. Since Public utilities is proposing the new construction of the pump house, the design will need to comply with the adopted standards for new construction (21A.36.020.H). Public Utilities is planning on attending a Work Session with the Historic Landmark Commission in September, to discuss design concerns and the proposal. I attached the current set of plans. Public Utilities is currently modifying these plans by adding more detail. I can forward the revised plans, as soon as I receive them.

### 6. What are the noise levels of above ground pump house?

Sound attenuation is included in the design of the structure. The sound of the pump should not be noticed. The generator must run once per month to ensure it is in good working order and noise will be noticeable during that process. Duration would be one hour, during regular, weekday business hours. In another effort to minimize the impacts to the neighborhood, part of the selection criteria for the generator will be noise levels. We have extensive experience with noise attenuation and have very rigorous and detailed standards.

### 7. How will the chemicals be delivered to the pump house?

A truck delivers the required chemicals. A gate and driveway would be included in the design for this purpose. Hoses are used to transfer the chemicals from the trucks to the tanks. We have established safety protocols for chemical transfer here and at other locations.

8. Will activities at a new pump house be significantly greater than at the current facility?

SLCDPU crew activities will be the same as at the current facility. For the most part, the facility is operated remotely.

SLCDPU appreciates this opportunity to explain our methodology and will remain transparent and attentive during the public engagement, design, construction and maintenance of this project. More communication will be forthcoming as we go forward. Thank you.

I would encourage you to come to next week's Open House, which is scheduled for Thursday, August 16 at 5:00-7:00. The Open House is located on the fourth floor of the City and County Building (451 S. State Street). The Open House will provide an opportunity to ask questions and provide comments about sound proofing for the building, budget and design. If you cannot make the Open House, please feel free to forward comments or concerns. Please don't hesitate to contact me with any questions or to voice any comments or concerns.

Sincerely,

Kelsey Lindquist Principal Planner

COMMUNITY AND NEIGHBORHOODS PLANNING DIVISION SALT LAKE CITY CORPORATION TEL 801-535-7930 FAX 801-535-6174

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From: Winston Seiler [
Sent: Wednesday, August 8, 2018 4:44 PM
To: Lindquist, Kelsey <Kelsey.Lindquist@slcgov.com>
Cc: Catherine Williams
Subject: PLNHLC2018-00557 & PLNHLC2018-00558

Hello Kelsey,

I am writing regarding the proposed new construction of the pump house on Canyon Rd.

We live at 211 Canyon Rd, almost directly across from the proposed construction.

A few questions come immediately to mind:

1. Could you please provide details and specifications of the current pump and facilities

2. Could you please provide details and specifications for the envisioned pump facilities and chemicals

3. Could you please provide the list of considered alternatives, and details on the selected alternative?

4. Is an underground pump house as currently in place an alternative under consideration?

5. Will any new pump house be held to the same historic aesthetic that our home is held to? Are there plans that could be provided?

6. What are the noise levels of above ground pump house?

7. How will chemicals be delivered to the pump house?

8. Will activities at a new pump house be significantly greater than at the current facility?

I will try to attend the meetings this month, but may be unable to due to upcoming birth of a child.

Thank you for taking the time to provide information on the questions above?

Sincerely,

Winston Seiler

T 84103

Hi Kelsey,

Thank you so much for taking the time and making the effort to send the overview. I will indeed make the upcoming meeting on August 16. It is comforting to note that Historic Preservation applications have been made. Bottom line: try to make this (necessary) thing as visually acceptable as possible.

Again, thanks for your reply.

cheers, David Garcia

From: Lindquist, Kelsey <Kelsey.Lindquist@slcgov.com>
Sent: Thursday, August 9, 2018 11:49:49 AM

### To:

**Cc:** 'Sydne Jacques'; McIntire, Blayde; Stewart, Brad; Mullen, Holly; Kirk Bagley; Josh Bean; Robinson, Molly

Subject: blends with surroundings

Dear David Garcia,

My name is Kelsey Lindquist and I am the project planner working with Public Utilities on processing the two Historic Preservation Applications for the pump house located at 300 N. Canyon Road. I would like to say thank you for the comments and concerns. I would also like to address a couple of the comments within this email to hopefully provide additional information and clarification.

The proposed footprint of the new pump house is approximately 993 square feet in size and approximately 13'4" in height. The size has been reduced to the minimum size necessary to accommodate the specifications and need to house the equipment for the pump house. With that said, the location of the proposed pump house is set and unfortunately cannot not be modified. The subject property is located in the Avenues Local Historic District, and the new construction is subject to review and approval by the Historic Landmark Commission. The review and approval is slightly different from what you may have experienced with any design or application review of an existing historic structure with the Historic Landmark Commission. The difference occurs with the request. Since Public Utilities is proposing the new construction of the pump house, the design will need to comply with the adopted standards for new construction (21A.34.020.H). Generally, any faux representation of historic structures or styles is not encouraged or supported in local historic districts. Public Utilities has been working with Planning to achieve a sympathetic solution to the need and the established standards of review. Everyone involved would like to achieve a "win-win" for the neighborhood and park users, as well as the public need for the pump house. I would encourage you to come to next week's Open House, which is scheduled for Thursday, August 16 at 5:00-7:00. The Open House is located on the fourth floor of the City and County Building (451 S. State Street). The Open House will provide an opportunity to ask questions and provide comments about sound proofing for the building, budget and design. Additionally, if you cannot make the Open House, please feel free to forward comments or concerns. Please don't hesitate to contact me with any questions or to voice any comments

or concerns.

Sincerely,

Kelsey Lindquist Principal Planner

COMMUNITY AND NEIGHBORHOODS PLANNING DIVISION SALT LAKE CITY CORPORATION

TEL 801-535-7930 FAX 801-535-6174

www.SLC.GOV/PLANNING

From:	
To:	Lindquist, Kelsey
Cc:	McIntire, Blayde; Stewart, Brad
Subject:	RE: Notice of Planning Petition
Date:	Thursday, August 9, 2018 8:39:55 AM

Kelsey,

Our board is working on a formal letter that will be submitted next week, which will illustrate all of our concerns. We will make sure that you receive a copy of the letter.

Thanks,

**Brian Berkelbach** 



Registered Representative offering securities through NYLIFE Securities LLC (member FINRA/SIPC), a Licensed Insurance Agency.

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New York Life Insurance Company, 51 Madison Ave., New York, NY 10010

From: Lindquist, Kelsey [Kelsey.Lindquist@slcgov.com] Sent: Thursday, August

Cc: McIntire, Blayde; Stewart, Brad Subject: RE: Notice of Planning Petition

Brian,

Of course. I will forward updated information, as I receive it. The Open House, which is scheduled for next Thursday, is a great opportunity to gather additional information. Could you offer a little more information about the frustrations? I am happy to try to address any and all of the voiced frustrations.

I understand that this has been an open space enjoyed by the public, but I would like to stress that Public Utilities has decreased the size of the pump house to the minimal size required. This is to ensure that the pump house does not encroach into additional open space. If you have any questions, concerns or comments, please don't hesitate to contact me.

Sincerely,

Kelsey Lindquist Principal Planner COMMUNITY AND NEIGHBORHOODS PLANNING DIVISION SALT LAKE CITY CORPORATION

TEL 801-535-7930 FAX 801-535-6174

www.SLC.GOV/PLANNING

From: Brian J Berkelbach

Sent: Thursday, August 9, 2018 8:28 AM To: Lindquist, Kelsey <Kelsey.Lindquist@slcgov.com> Subject: RE: Notice of Planning Petition

Thank you for following up. Our board met last night and talked at length about this project. We are deeply frustrated with what might happen to such a beautiful area of our city. We are spreading the word as fast as we can. We want to be on the front end of this.

Any additional insights would be greatly appreciated.

Thanks,

### **Brian Berkelbach**



Registered Representative offering securities through NYLIFE Securities LLC (member FINRA/SIPC), a Licensed Insurance Agency.

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New York Life Insurance Company, 51 Madison Ave., New York, NY 10010

From: Lindquist, Kelsey [Kelsey.Lindquist@slcgov.com] Sent: Wednesday, August 08, 2018 2:17 PM To: 'council@chnc-slc.org'; Greater Avenues CC Chair Cc: McIntire, Blayde; Robinson, Molly Subject: FW: Notice of Planning Petition

Dear Laura Arellano and Brian Berklebach,

I am just following-up on the notice of a planning application, which was emailed on July 19<sup>th</sup>. As the notice discusses, there is an upcoming Open House on August 16, 2018. The Open House is scheduled from 5-7 and is located on the fourth floor of the City and County

Building, which is located at 451 S. State Street. If you could post about the upcoming Open House or send an email to constituents, it might reach more individuals and park users. A notice was mailed to property owners and tenants within 300 feet of the subject property. I will also be posting a sign on the property for park users to be informed. I am hoping that you can reach additional members of the public through an email or a website post about the Open House. If you have any questions, concerns or would like additional information, please let me know.

Sincerely,

Kelsey Lindquist Principal Planner

COMMUNITY AND NEIGHBORHOODS PLANNING DIVISION SALT LAKE CITY CORPORATION

TEL 801-535-7930 FAX 801-535-6174

www.SLC.GOV/PLANNING

From: Lindquist, Kelsey
Sent: Thursday, July 19, 2018 3:56 PM
To: 'council@chnc-slc.org' <<u>council@chnc-slc.org</u>>; Greater Avenues CC Chair <<u>gaccchair@slc-avenues.org</u>>
Cc: McIntire, Blayde <<u>Blayde.McIntire@slcgov.com</u>>; Mullen, Holly <<u>Holly.Mullen@slcgov.com</u>>;
Stewart, Brad <<u>Brad.Stewart@slcgov.com</u>>

Subject: Notice of Planning Petition

Dear Laura Arellano and Brian Berklebach,

The Planning Division has received a petition for the new construction of a pump house located at 300 N Canyon Road. The proposed new construction includes a pump house that will enclose the required equipment and chemicals. I have attached:

- 1. The petitioner's application materials
- 2. An illustration of where the pump house will be located
- 3. A formal letter requesting your community council's input

As a recognized community organization you have 45 days from the date of this e-mail to provide comments on the proposed petition. The 45 day period ends on September 10, 2018. Please let me know if you intend to have the petitioner present at one of your community council meetings, including the date and time of the meeting, and I will coordinate with them.

This project is also scheduled for an Open House at the following time/date (place TBD):

### Thursday, August 16, 2018

### 5:00PM - 7:00 PM

If you have any questions about the petition please feel free to contact me.

Thanks,

Kelsey Lindquist Principal Planner

COMMUNITY AND NEIGHBORHOODS PLANNING DIVISION SALT LAKE CITY CORPORATION

TEL 801-535-7930 FAX 801-535-6174

WWW.SLCGOV.COM

From:	cindy cromer
To:	Lindquist, Kelsey
Cc:	McIntire, Blayde; Stewart, Brad; Bollwinkel, Lee;
Subject:	mitigation for the Pump House in City Creek
Date:	Saturday, August 25, 2018 8:42:17 PM

To members of the Historic Landmark Commission From Cindy Cromer Re briefing on the Pump House proposed for City Creek Park

The Park is owned by Salt Lake City Public Utilities and maintained by Salt Lake City Parks, from what I have been able to learn. That is exactly the situation for **Reservoir Park in the University Historic District**, which makes the rehabilitation of the space formerly containing the reservoir very relevant to the current proposal in City Creek Park.

The project in Reservoir Park began in 2009 when the "lid" on the reservoir collapsed and concluded in 2012. Prior to the collapse of the "lid," the space was not safe for any recreational use, although there had been tennis courts above the reservoir until the mid-'90's. Here's what Salt Lake Public Utilities did during the course of the project, none of which was required to create a safer space.

-returned the space within the boundaries of the reservoir to recreational use,

-significantly increased the green space in the Park,

-installed a seating area where there hadn't been one previously,

-constructed public sidewalks where none had existed,

-cleaned and treated the historic concrete wall,

-replaced the historic lamp fixtures on top of the wall,

-installed xeric landscaping at the intersection, and

-planted Hawthorne trees consistent with the perimeter planting in the northern end of the Park.

So far, the discussion about the proposed Pump House in City Creek has not included any conversation about enhancements to the Park or mitigation for the loss of trees, viewshed, and green space.

I am requesting at a minimum that the City

-estimate the value of the individual trees proposed for removal,

-place a separate value on the disruption of the formal line of mature Sycamores on the west side of Canyon Road,

-identify equal or greater green space to mitigate the loss of access to the current well site, -mitigate the impacts on the viewshed in this park design characteristic of Frederick Law Olmsted's work.

The modifications necessary in Reservoir Park were not associated with the management of

water. Dealing with the collapsed reservoir provided no economic benefit to Public Utilities as an enterprise fund. There will clearly be long term benefits in managing water for the proposal in City Creek. The contrast is striking.

From:	cindy cromer
To:	McIntire, Blayde
Cc:	Stewart, Brad; Bollwinkel, Lee; Lindquist, Kelsey
Subject:	Open House for Pump House-City Creek Park
Date:	Saturday, August 25, 2018 6:51:55 PM

Blayde-Thanks for your attendance at the Open House for the Pump House in City Creek Park on August 16. I want to summarize our conversation as I remember it over the "din" of the lousy acoustics in the hallway.

1 I am not convinced by the technical information provided so far that the needed functions cannot be **housed in two separate, smaller buildings.** There is no question that the construction of two smaller buildings would be more expensive. There is also no question that smaller buildings in the tight quarters of the Canyon would have less impact.

2 I do not understand based on the information provided so far **why all of the needs have to be met in the current well site** at the intersection of Canyon Road and 4th Avenue. At the Open House, I heard about a previous discussion which involved locating a Public Utilities facility just north of Ottinger Hall in what is currently "dead" space. Even the kids at Youth City do not use this slope. The City owns extensive property in the area on both sides of the Canyon which is underutilized because of its location and slope. The entrance to the Canyon between 2nd and 3rd Avenues is much less tightly constrained than the area around 4th Avenue.

3 The City has **established appropriate materials for the Park** with the extensive use of cobbles in the retaining walls. The surrounding historic residences and Ottinger Hall are made of brick, wood, and stucco over adobe. Those materials appear to me to give Public Utilities plenty of options for new construction.

4 The City's Parks and Open Lands designed a **pump house for irrigation water recently in Liberty Park**. It is immediately south of the Concessions Building and was approved by the Landmarks Commission. Nothing about this successful design shows up in the proposal for City Creek....no trellises, no vines, no arbor linking the pump house to another building, no human-scale fenestration....nothing. It is as if the successful project in Liberty Park is irrelevant. I understand that Public Utilities and Parks have different processes for awarding contracts, but the outcome is highly inefficient. There is a good example on the ground. Granted it is for irrigation water, not drinking water, but it is a pump house, approved by Landmarks, and functioning as intended.

5 At the Open House, we talked about **the expanse of asphalt in the proposal.** The neighborhood has restricted residential parking because of its proximity to Downtown. Public Utilities can have cut-back parking without providing a pad for turning around. The restrictions on parking are followed in this part of the City. It should even be possible to

design a parking pad within a secure enclosure with far less asphalt than the proposed site plan. This is a park space in an urban environment, not the suburbs.

Again, thanks for the opportunity to talk with you at the Open House.

Sincerely, cindy cromer

(This is a public comment.)

From:	Dave Jonsson
To:	<u>cindy cromer; Lindquist, Kelsey</u>
Cc:	McIntire, Blayde; Stewart, Brad; Bollwinkel, Lee;
Subject:	Re: mitigation for the Pump House in City Creek
Date:	Sunday, August 26, 2018 1:10:39 PM

While I recognize the importance of making our desires known on the look of this "pumphouse" if they ever build it, I want to focus firstly on alternatives to the building being here in the first place. So any and all suggestions about remote injection of chlorine and fluorine are welcome. Also, if this project can be delayed a construction season (i.e. a year) for more discussion, that would be great, too.

On August 25, 2018, at 8:42 PM, cindy cromer wrote:

To members of the Historic Landmark Commission From Cindy Cromer Re briefing on the Pump House proposed for City Creek Park

The Park is owned by Salt Lake City Public Utilities and maintained by Salt Lake City Parks, from what I have been able to learn. That is exactly the situation for **Reservoir Park in the University Historic District**, which makes the rehabilitation of the space formerly containing the reservoir very relevant to the current proposal in City Creek Park.

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The modifications necessary in Reservoir Park were not associated with the management of water. Dealing with the collapsed reservoir provided no economic benefit to Public Utilities as an enterprise fund. There will clearly be long term benefits in managing water for the proposal in City Creek. The contrast is striking.

From:	Craig Ogan
To:	Lindquist, Kelsey
Subject:	4th Ave Canyon Road Pump house
Date:	Sunday, August 26, 2018 9:57:10 AM
Attachments:	Questions Pump House SENT08262018 SLCPU.docx
	Utah Mills Summary.pdf
	Pumphouse Examples Winston.pdf

Enlcosed is are some documents for you to consider as part of the Historic Landmarks Work Session Briefing:

1. Utah Mills Summary PDF showing picks and descriptions of pump houses and mills constructed in Utah created by Winston Seiler

2. Pumphouse Examples PDF of "Victorian" era pump house to consider for design, reated by Winston Seiler

3. A word document of all the questions submitted to me by neighbors and or stakeholders. You'll see a column for answers already received from you and others. Feel free to edit, or extend and revise your own answers. Will you send me a copy of the edited doc so i can relay it to interested parties. (Under separate cover I will send you a link the the Q & A master doc on Google drive if you'd rather edit there then you don't need to send me anything, I'll have it real time on Google drive docs).

Craig S. Ogan



# **Example of Architecture Used in Salt Lake Pump Houses** Pump House on Cortez Rd (Above the Utah Capitol)







Imagery from Google Maps Street View (not current), but provides an example of architectural style likely, planned for Canyon Rd.

# Various Examples of Pump Houses found Online













### MARCH 2018 LESSON, ARTIFACT, AND MUSIC

### MARCH 2018 DUP Lesson <u>PIONEER MILLS AND MILLWRIGHTS</u>

### Ellen Taylor Jeppson

One of the most important goals of Brigham Young in settling the Saints in the Utah Territory was self-sufficiency. Before leaving for the West, Brigham Young encouraged and admonished the Saints "to take along the best tools of every description; machinery for spinning and weaving and the dressing of wool, cotton, flax and silk, or models and descriptions of the same in relation to all kinds of farming utensils and husbandry, such as corn shellers, grain threshers and cleaners, smut machines, mills and every implement and article within their knowledge that shall tend to promote the health, happiness or prosperity of the people."



Chase Gristmill designed by Frederick Kesler (DUP Photo Collection)

A flour mill was a critical need for a new community, making it possible to grind the grain grown by the settlers for use in their homes and to feed their animals. Converts to The Church of Jesus Christ of Latter-day Saints were highly skilled and had been trained in a variety of professions. This situation was certainly the case in the milling industry. The millwrights who would come to Utah were trained in great American milling centers such as New York, Baltimore, and St. Louis, and were prepared to use their talents to build and operate Utah mills.



East Millcreek Gristmill built by John Neff (DUP Photo Collection)

Allen D. Roberts, former Architectural Historian for the Utah State Historical Society, wrote:

Coming as they did from leading milling areas, the builders of Utah's mills had become acquainted with the most advanced technology the flour-making industry could offer. Also, as Mormons, they had a predilection for searching out and employing the finest systems available. Not surprisingly, Kesler, Chase, Neff, Crismon, Gardner and others brought milling machinery with them to Utah, or that after they arrived they made several trips east to obtain the latest improvements in gearing, wheat-cleaning machinery, and other equipment.

Brigham Young arranged for millwrights to be among the first to arrive in the Salt Lake Valley. Millwrights Isaac Chase, William Weeks, Archibald Gardner, John Neff, and Charles Crismon all traveled west in various companies with their families in 1847.

Although these millers were familiar with and trained to build highly efficient mills, there were several factors that limited their ability to build them. Foremost among these limitations was transportation. Before the coming of the railroad, the pioneers relied on animal-drawn wagons which could carry limited amounts of machinery. The new mills needed equipment that was cumbersome and heavy, and most of the available wagons were used to transport human passengers and other necessary domestic goods. Another limiting factor was the lack of capital, and milling equipment was expensive. Limited natural resources, particularly water and wood, which were needed in abundance to build and operate mills, made it difficult to find a place to build a mill even if the equipment could be obtained.


East Millcreek Gristmill (DUP Photo Collection)



Empire Mill built by Frederick Kesler (DUP Photo Collection)

Between the years of 1847 and 1849, four primitive, small-capacity mills were built. Charles Crimson built a chopping mill in the mouth of City Creek Canyon which was ready to produce rough meal during the first winter in the Valley. John Neff, a miller in Winters Quarters, brought his machinery to the territory in late 1847, with which he built a gristmill. More sophisticated than Crismon's, Neff's mill became the first white flour mill in Utah. In time for the wheat harvest of 1848, Isaac Chase built a gristmill, which was the predecessor of his adobe mill of 1852. Archibald Gardner built a mill on Mill Creek, just two miles below Neff's mill. It had millstones cut out of the mountain rock.

By 1869 there were nearly one hundred millers and millwrights in the Utah Territory. However, the accomplishments of three men including John Neff. Archibald Gardner, and Frederick Kesler cause them to stand out. They were responsible for the design and construction of about one hundred mills in the Utah Territory.



Winter Quarters Gristmill (DUP Photo Collection)



Heber C. Kimball Gristmill Bountiful, Utah (DUP Photo Collection)

## HEBER C. KIMBALL GRISTMILL

Heber C. Kimball Gristmill marker site consists of a gristmill replica, two original burr-type grist stones, and three pillars dedicated to three men involved in the building and operation of the mill. It is located in Bountiful, Utah, on the corner of Orchard Drive and Mill Street.

The Heber C. Kimball Gristmill replica was constructed in September 1937 by the Kimball Camp of Daughters of Utah Pioneers. The replica sits 30 yards east of the original burr mill. The mill is a 1:3 scale replica and measures nine feet six inches high with a depth of eight feet six inches and a width of six feet.

Daughters of Utah Pioneers Marker #25 is located on the front of the gristmill replica. This marker reads:

The site was surveyed August 1, 1852, and the mill (larger [largest] of it's [sic] time in Utah) was dedicated May 6, 1853. Built on rock foundation with solid adobe walls trimmed with red sandstone. This burr mill operated until 1892, when roller mills replaced this type.

George Quinn McNeil, a local trapper, assisted in the building of the mill. McNeil trapped black bears from the nearby Wasatch Mountains and brought them to the mill site where he trained them to work at the mill. When the work was completed, McNeil left the area to travel the United States and show his trained bears. However, the trip was cut short, as the bears misbehaved not too far into the journey.

For many years Bountiful Ward baptisms took place in the pond south of the mill. Millers, Daniel Davis, George Lincoln, George Winn, Richmond Louder, Charles Adcock, Wm. Adcock, Wm. D. Major.

In 1984, Davis County and Bountiful began construction of a debris catch site for Mill Creek which would sit in the same place that the gristmill stood one hundred years earlier. During excavation, two original gristmill stones were found. Although out of use and buried for nearly one hundred years, the stones were in remarkably good condition. Under the direction of the Sons of Utah Pioneers, the stones were put on display ten yards to the north of the gristmill replica created about half a century previously by Daughters of Utah Pioneers.



Heber C. Kimball Gristmill Bountiful, Utah (DUP Photo Collection)



Heber C. Kimball Gristmill stones (Ellen Jeppson photo)



Kimball Gristmill Farmington, Utah Designed by Frederick Kesler (DUP Photo Collection)

## MARCH 2018 DUP Artifact

## "RIDING/DRIVING GLOVES"

Where: Grantsville DUP Museum 378 West Clark Street Grantsville, UT 84029

These white kid leather riding/driving gloves belonged to Hilda Anderson Erickson. They were probably made for her by the Goshute Indians in Ibapah, Utah where she and her husband had a ranch and she served as a midwife. Hilda came to Utah in 1866 from Sweden when she was seven years old, and was the last remaining pioneer immigrant when she died at the age of 108.



She was living in Grantsville at the time of her death. She gave these gloves to Dennis McBride, a Grantsville resident, when he was a young boy as he helped her with her yard work. Mr. McBride donated them to the Grantsville DUP Museum.



MARCH 2018 DUP Song

"The Way We Crossed the Plains"

Pioneer Songs Music Book #299 Sung by T. Coral Mair on the 2017-2018 Music CD

In the early settlement of Utah men were called to take their ox teams and go to Omaha to bring back Saints who had emigrated from foreign lands. The trek was long and monotonous. So to pass the time away many of the drivers composed songs which told the story of their trip. This song by John Murdock's company was set to the tune of one of their familiar hymns, "When Shall We Meet Again?" The immigrants caught their valiant spirit, sang the songs, and grew to love them. "The Way We Crossed the Plains" is still sung at celebrations and pioneer meetings by the descendants of the Murdock company.

## LeeAnn Nelson, Music Chairperson, ISDUP Dr. Morris F. Lee, Instrumental Accompaniment



**Front cover:** The painting of pioneer women huddled near the handcart is by artist Julie Rogers. She has said, "I paint the stories for people to enjoy. I especially love the women of the trail." Her permission was graciously given to use this picture.

**Songs include:** Oh! Willie We Have Missed You; Rosy Neil; The Vacant Chair; I Heard The Bells On Christmas Day; Oh Dear! What Can The Matter Be?; Grandpapa; The Way We Crossed The Plains; Echo Canyon; Grandmother's Old Arm Chair; Salute To Our Utah Pioneers.



**Pioneer Songs music book:** compiled by Daughters of Utah Pioneers and arranged by Alfred M. Durham, was first published in 1932. Music for the pioneers served as a source of enjoyment as well as inspiration. The songs have a legacy, each one with a story that could be told about life's trials, hardship, and joy.



**Pioneer Song Contest Collection:** To commemorate Pioneer Day of July 24, 2013, ISDUP had a song writing contest of modern-day composers and lyricists. They wrote in honor of a rich pioneer legacy of faith, fortitude, courage, freedom and industry.

Eighty-nine entries, representing over eleven-hundred DUP Camps, were divided into six categories for assessment. The songs of all the winners and twenty "close contenders" entries are published in this collection.

This volume represents the first modern-day song collection ever printed in the history of DUP other than the original book of Pioneer Songs published in 1932.

The CD, Pioneer Song Contest Collection, and hardbound Pioneer Songs music book, are available for purchase at the Pioneer Memorial Museum in Salt Lake City or from our online shop at <u>isdup.org</u>.

From:	Lindquist, Kelsey
To:	"James Livingston"
Cc:	McIntire, Blayde; Stewart, Brad
Subject:	RE: 4th Avenue Pump House
Date:	Tuesday, August 28, 2018 9:38:00 AM

James and Lisa,

Thank you for the comments, regarding the proposed 4<sup>th</sup> Avenue Pump House. I will incorporate these comments into the staff memo for the upcoming work session with the Historic Landmark Commission. Please feel free to submit additional comments or forward additional questions. Thank you.

Sincerely,

Kelsey Lindquist Principal Planner

COMMUNITY AND NEIGHBORHOODS PLANNING DIVISION SALT LAKE CITY CORPORATION

TEL 801-535-7930 FAX 801-535-6174

www.SLC.GOV/PLANNING

From: James Livingston [mailto:jl132639@gmail.com]Sent: Monday, August 27, 2018 4:30 PMTo: Lindquist, Kelsey <Kelsey.Lindquist@slcgov.com>

Cc: Subject: 4th Avenue Pump House

To: Salt Lake City Historic Landmark CommissionFrom: Lisa & James LivingstonDate: 27 August 2018

Re: 4<sup>th</sup> Avenue Pump House

We appreciate the opportunity to provide comments regarding the proposed 4<sup>th</sup> Avenue pump house. We are among the residents who will be most affected by the construction and very much appreciate any consideration that can be given to our comments. The front of our home directly faces Canyon Side Park in which the proposed pump house is to be built. The proposed pump house would be visible from our front porch, living room window, bedroom window and a balcony above the front porch. According to the proposed plan we would have a direct sight line of the large diesel generator to the north of the pump house.

We understand that the current pump has been deemed to not be up to code and consequently unsafe for employees and at risk of contamination. It has not been made clear, however, that the only feasible solution is to bring it above ground. We believe additional analysis should be conducted to determine whether it would be plausible to maintain at least some of the equipment below ground. Nevertheless, we support upgrading and protecting the city's water supply.

Our main concerns with the project relate to diminished property values due to an unsightly building that diminishes the historic character of the neighborhood, loss of public space, destruction of valuable tree assets, noise levels and risks related to use and storage of hazardous chemicals in a residential neighborhood. We understand that the Historic Landmark Commission is primarily tasked with consideration of the first few of these concerns and will limit our comment to those topics.

We request that the Commission give consideration to the following requests:

- 1. Consider (a) decreasing the size of the structures and fenced area somewhat and/or (b) moved or reconfigured slightly (even if it means diverting the current creek course) to avoid destruction of some of the trees. For example, while it is understandable that the pump itself needs to be proximate to the existing well, certainly the backup generator certainly does not. We understand that heavy equipment will need to be placed within the structure and that a crane would be the easiest way to accomplish that and that the tree canopy would interfere with that. However, there are other ways to move and place heavy equipment. The loss of large, mature trees will affect the character of the neighborhood as much as the construction of the pump house itself. Even if the trees needed to be pruned it would be preferable to retain them.
- 2. Appropriate landscaping, including plants, hardscapes and fences should be placed to shield unsightly elements from view. We are particularly concerned with the placement, appearance and noise level of the large backup diesel generator. We have observed the one adjacent to the pump house north of the State Capitol (corner of 500 N and Cortez St) and that is unacceptable. The generator either needs to be brought inside the building, housed in a separate building or enclosed in a suitable wall and/or evergreen landscaping. Also noted in the proposal is the limited availability of street parking and the proposal for a driveway and parking space. We respectfully request that parking here be limited to occasional vehicles at the location for the purpose of servicing the facility only, and not day-to-day vehicle or equipment storage.
- 3. The pump house <u>must</u> meet standards of appropriateness to preserve the architectural and cultural character of the historic district. All residents of the district must comply with strict requirements relating to the appearance of their residences and the City should not be excepted from this. The Commission's Standards for New Construction do not seem to grant any special allowances for the construction of public buildings. We believe that with minimal effort and expense, and preferably with consultation of interested neighbors, the structure(s) and landscaping can be done in such a way to reduce the adverse effect on the neighborhood character.

To facilitate determination of structural elements that would be consistent with neighborhood character, we conducted a visual survey of the 13 structures that border (including kitty corner) Canyon Side Park. The pump house should include most if not all of the predominant elements. Most of the residences would probably be considered late Victorian or having many Victorian elements with steeply pitched roofs of irregular shape, textured shingles, porches and asymmetrical facades. Specifically, we found the following:

Exterior surface: 10 brick exterior (five painted brick, five unpainted, one with first floor brick, second floor shakes), 2 wood siding, 1 historic stucco

<u>Foundation</u>: 7 homes have an exposed stone foundation with average height of 4 feet; four have concrete or concrete covered foundation; two not visible

<u>Windows and doors</u>: The average number of openings (windows and doors) facing the park per residence is eight. This ignores the two apartment buildings.

<u>Roofs</u>: All buildings except one have pitched roofs with irregular roof lines, gables, dormers, etc. There are a few roofs that are pyramidal. Only the three story apartment building has a flat roof.

<u>Porches</u>: Most homes have porches (not sure how that could be incorporated into pump house design).

<u>Fences</u>: Of the homes that have fences, the most common type is stone base (sandstone or cobbles in cement) with cast iron top. Modern wrought iron fencing would not fit the character of the neighborhood. There are also some picket fences.

<u>Trees</u>: The average number of mature trees in the front yard facing the park is 2.5 <u>Other common features observed</u>: Lintels (typically stone) above doors and windows (5), stone/paver sidewalk and/or driveway (4), transom windows (8), leaded

glass/stained glass (5), scalloped siding (2), balcony (3), bay windows (3).

<u>Other</u>: The cobbled barriers and lining of the creek should be considered as well. Ottinger Hall, two houses from Canyon Side Park would be an ideal reference for suitable architectural elements. A functional cupola similar to that on Ottinger could help the structure look more like an old carriage house and can be highly effective at improving ventilation.

<u>Notably absent:</u> Large block construction similar to that in the architectural rendering or found on other pump houses such as the one north of the State Capitol.

We have reviewed carefully the Commission's Standards for New Construction and believe that significant care, consideration and planning will need to be brought to bear in order for the City to comply with those standards. We are encouraged by the language of the standard and plead with the Commission to stand its ground with respect to the City's plans. There is only one chance to get this right. We won't quote specific elements of the Standard, with which the Commission is well familiar, but we will be watching closely the development of specific plans to ensure that "the project substantially complies with each" of the standards.

We appreciate the efforts of you, the Historic Landmark Commission, and our fellow residents to ensure that this construction is as good as possible and not only does not detract but actually enhances the character of the neighborhood.

Sincerely, Lisa & James Livingston

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OPEN HOUSE PUBLIC COMMENT FORM August 16, 2018	AND
4 <sup>th</sup> Avenue Pump House	Planning and Zoning Division Department of Community and Economic Development
PLNHLC2018-00557 & PLNHLC2	018-00558
Name Fra Hincklas	010-00550
Maine:	
Address:	
SLC OT	
Zip Code	84103
Phone: E-mail	
Comments: I am Very much opposi	ed to destroy in
our beautiful park with this he	deously ugly
umphonebuilding. Thispumphouse	needsto
Stay under around	
TE a good huilding is the	in the
<u>the small boilding is he</u>	guired 'T has
to match the surrounding archit	ecture,
Ma Henckly	

Please provide your contact information so we can notify you of other meetings or hearings on this issue. You may submit this sheet before the end of the Open House, or you can provide your comments via e-mail at <u>kelsey.lindquist@slcgov.com</u> or via mail at the following address: Kelsey Lindquist, Salt Lake City Planning Division, PO Box 145480, Salt Lake City, UT 84114-5480.

**OPEN HOUSE PUBLIC COMMENT FORM** August 16, 2018 Planning and Zoning Division Department of Community and **Economic Development** 4<sup>th</sup> Avenue Pump House **Petition Numbers:** PLNHLC2018-00557 & PLNHLC2018-00558 ker Name: Address: 117 Zip Code 84103 **Phone:** E-mail NO Can **Comments:** ho Veriove/ MOMA house is foo Droposed DUMA ne harmony neichborhood anse terally the ples OLUC 100 re neighborhood, epaired Balmp Con Please provide your contact information so we can notify you of other meetings or hearings on this issue. You may submit this sheet before the end of the Open House, or you can provide your comments via e-mail at kelsey.lindquist@slcgov.com or via mail at the following address: Kelsey Lindquist, Salt Lake City Planning Division, PO Box 145480, Salt Lake City, UT 84114-5480. without this unappealing structule, Ne-sleeved PLNHLC2018-00557 & PLNHLC2018-00558 89 September 6, 2018

O PUBLIC Au	PEN HOUSE COMMENT FORM 1gust 16, 2018	Planning and Zoning Divi Department of Community
Name:	4 <sup>th</sup> Avenue Pump House Petition Numbers: [LC2018-00557 & PLNHLC	Economic Development e 2018-00558
ddress:		
	Zip Co	ode
'hone:	E-mail	
-	D Green Walls on Gtr	ucture
comments: - Jofa		
Comments:-Jofa Heavy Pel	creation use on open	Spaces.
Comments: -Jofa Heavy Pe	creation use on open	Spaces.
Comments: -Jofa Heavy rec	creation use on open	Spaces.

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PU	OPEN HOUSE BLIC COMMENT FORM August 16, 2018	Planning and Zoning Division Department of Community and
	4 <sup>th</sup> Avenue Pump House Petition Numbers: PLNHLC2018-00557 & PLNHLC	Economic Development 2018-00558
Name:	DAVE ALDERMAN	
Address:		
	SGC UT Zip Co	de 84/03
Comments:	ASSUMING ALL EFFORTS HAVE B	EEN MADE TO
LUKE T	TO SEE THE STPLE OF THE BUILDIN	6 REFLECT THE
HISTORN OF THUS	AS A PARKS' PROSECT, NOT A	OF THE AREA. THIN PUBLIC UTILITILS
PROJEC	T. A GOOD EXAMPLE IS THE REST	TROOM BUILDING
		CACACO III.

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TIED TO THE EXISTING BUILDING. A MORE HANDSCAPING TO REPLACE WHAT'S BEING REMOVED.

**OPEN HOUSE PUBLIC COMMENT FORM** August 16, 2018 Planning and Zoning Division Department of Community and Economic Development 4<sup>th</sup> Avenue Pump House **Petition Numbers:** PLNHLC2018-00557 & PLNHLC2018-00558 Name: erna Address: SLC Zip Code 8410 3 **Phone:** E-mail **Comments:** a est enne crou una Ce eme an Please provide your contact information so we can notify you of other meetings or hearings on this issue. You may submit this sheet before the end of the Open House, or you can provide your comments via e-mail at kelsey.lindquist@slcgov.com or via mail at the following address: Kelsey Lindquist, Salt Lake City Planning Division, PO Box 145480, Salt Lake City, UT 84114-5480. nce to De dine will Led LNHLC2018-005 2018-00557 & F tember 6, 2018

Aistoric nature of the street and residences. As well, more compatible materials, sandstone foundations, and wood trims.

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**OPEN HOUSE** PUBLIC COMMENT FORM August 16, 2018 Planning and Zoning Division Department of Community and Economic Development 4<sup>th</sup> Avenue Pump House **Petition Numbers:** PLNHLC2018-00557 & PLNHLC2018-00558 Jessica Thesing \$ Wathan -Name: Thesing Address: SLC 101 84103 Zip Code **Phone:** E-mail Comments: I know this is meeded but design important. I love the idea of walls / noop. also ok with a pitched with consideration of the historic This park neighborhood charact 20 anjoyed by all city residents and loved on hood character Keep the and residential use in mind when making may resile submit this sheet before the end of the Open House, or you can provide your comments via e-mail at kelsey.lindquist@slcgov.com or via mail at the following address: Kelsey Lindquist, Salt Lake City Planning Division, PO Box 145480, Salt Lake City, UT 84114-5480.

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OPEN HOUSE PUBLIC COMMENT FORM August 16, 2018	VIII VIII KE
August 10, 2010	Planning and Zoning Division
	Department of Community and Economic Development
	Beonomie Bereiepment
4 <sup>th</sup> Avenue Pump House	
Petition Numbers:	
PLNHLC2018-00557 & PLNHLC20	18-00558
Name: CATHERINE WILLIAMS S	FILER
Address:	
SLC	
UT	QU1 47
Zip Code_	84105
Phone:E-mail	//
il a la l	Illections
Comments: We own that have accords	The sweet
from this project. We love the	ask the way
it is, and whilite it daily to	valleur dog.
to play in the creek (1-3 yearded, 1	on the way)
to ear dinner (literally almost eve	my night this
summer we put a blanket ca	in and eat
by the creek), to soak our fut	in the creck
	haarings on this issue Vou may

Please provide your contact information so we can notify you of other meetings or hearings on this issue. You may submit this sheet before the end of the Open House, or you can provide your comments via e-mail at <u>kelsey.lindquist@slcgov.com</u> or via mail at the following address: Kelsey Lindquist, Salt Lake City Planning Division, PO Box 145480, Salt Lake City, UT 84114-5480.

atter ar son has gene to bed. The trees provide nuch needed shade throughout the day in the hol-sumer, and black the early morning son from an windows in the winter, nigson practices skiing and we built snow men in the park. We neved here Ann Bakerstield, CA, and evenycay pinch anselves in disbelief over have inter use abe to have landed in disbelief over have interphorhood in such a beautiful neighborhood in such a beautiful neighborhood In such a province rugshowhood above grind The plans to bring the well above grind will definitely impact air Gives. It will reduce on will definitely impact air Give dewin many of side of the parke by 13-12, Cut dewin many of the beautiful trees that we enjoy. It will not the beautiful trees that we enjoy it will not only impact the lives of all of us living on everyday. Road, but the many visitors that come everyday. Road, but the many visitors that come ever serve. It is one of the busiest partes I have ever serve. There are also the Children that attend the There are also the Summer camp of a Hurschool moran and summer camp Day Ottinger Hall Hueguse the park every day For recording and Eating lunch. We understand the need to privide a safe working environment for sic employeers servicing the well, and to ensure sate dinking water for so many sic to ensure sure and and like to unimice the impact residents. We ust would like to unimice the impact on the park by limiting the size of the trees as possible. on the park by limiting wrow yot the trees as possible. Compand, and keep as wrow yot new structure / compand of the possible to limit the new structure / compand of the possible to limit the new structure / compand to the entry the tree possible to limit the new structure / compand to the wastry foot print, that would certainly be a higi improvement over the proposed plans. One this change has been maide, the park will be Fir ever changed. Ne hepe it is a change that evenyone who enjoys the park can appreciate. Maphine 2913-00552/8 PHONHICZO18-065589 80 direction

**OPEN HOUSE IC COMMENT FORM** PURI August 16, 2018 Planning and Zoning Division Department of Community and Economic Development 4<sup>th</sup> Avenue Pump House **Petition Numbers:** PLNHLC2018-00557 & PLNHLC2018-00558 Winston Seiler Name: Address: Salt Lake City U \_Zip Code\_84/03 **Phone:** E-mail 1. Would preter a different location for the well 5 **Comments:** We do not want associated thec to see this built but 2. Minimize tootprint as much as possible 3. Consider locating chemicals and PUMD locations to minimize toot print tor chemicals QUICKCONNect no drive way ove trea generator Please provide your contact information so we can notify you of other meetings or hearings on this issue. You may submit this sheet before the end of the Open House, or you can provide your comments via e-mail at kelsey.lindquist@slcgov.com or via mail at the following address: Kelsey Lindquist, Salt Lake City Planning Division, PO Box 145480, Salt Lake City, UT 84114-5480. and asmathire tores as are possible ugly! Make it look like historic Nomo September 6, 2018

9. Can New well be loaded at mouth of canyon Canyon Rd of 2nd Ave Park 10. Evaluate well integrity, condition, of statistical life span and consulting velocate well it near statistical end of life or dannage is present. 11. IUnderstand the value of a known producing well, but geologically this is tapping unconsolidated alluvium being fed from up the canyou. This is not a tractured reservoir of the vist of volocating a well is likely the vist of volocating a well is likely not too high. This is not a single sweet spot.

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by the city to the canyon Rd neighborhood listed 300 N canyon Rd as site of construction This is in the part block south of 220 N. A few more thoughts raised by this: a) The city sent misleading documentation to community. This is unacceptable + norts credibility of project. b) The indir. I spoke with had no idea about discrepaining + could not explain. I'm hard-pressed to be impressed by the city's ability to plan and execute two project, as the city cannot correctly identify the project's address. 4) Size + scale of pump house not a ppropriate for a dense residential neighborhood Ironically, if this were placed at 300W. Campn Rd, it would be more appropriate, given the scale of buildings in part and the greater space in manory Grove 5) Long-time vesidents (who have been in neighborhood 15+, 20+, 25+ years) are inhappy 6) Why tear up established thees? The street was wit enough by the tornado in that be spect. 7) While ( an not engineer, + thus do not know technical defails, there are other spots aboug canyon Rd for bldg of this scale (note: this ins noted above). 8) Frankly, proposed bldg is kuid of ugly.

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# ATTACHMENT F: STANDARDS FOR NEW CONSTRUCTION

H Historic Preservation Overlay District – Standards for Certificate of Appropriateness for New Construction (21A.34.020.H)

In considering an application for a Certificate of Appropriateness for new construction in a historic district, the Historic Landmark Commission shall find that the project substantially complies with all of the general standards that pertain to the application and that the decision is in the best interest of the City.

Design Guidelines for New Construction of Residential Buildings in Salt Lake City, Chapter 12 New Construction, are the relevant historic design guidelines for this design review. The Design Objectives and related design guidelines are and are referenced in the following review where they relate to the corresponding Historic Design Standards for New Construction (21A.34.020.H), and can be accessed via the links below.

Standard	Design Guidelines for New Construction
1. SETTLEMENT PATTERNS AND NEIGHBORHOOD CHARACTER 1.a Block and Street Patterns: The design of the project preserves and reflects the historic block, street, and alley patterns that give the district its unique character. Changes to the block and street pattern may be considered when advocated by an adopted City plan.	<ul> <li>Settlement Patterns &amp; Neighborhood Character Street and Block Patterns</li> <li>12.1 The plan of alleys and streets in a historic district is essential to its historic character and should be preserved.</li> <li>Most historic parts of the city developed in traditional grid patterns, with the exception of Capitol Hill which has a more irregular street pattern.</li> <li>In Capitol Hill, the street system initially followed the steep topography, and later a grid system was overlaid with limited regard for the topography.</li> <li>The grid plan also takes different forms, with for example the much tighter pattern of urban blocks in the Avenues being one its distinctive characteristics and attractions.</li> <li>Closing streets or alleys and aggregating lots into larger properties would adversely affect the integrity of the historic street pattern.</li> </ul>
1.b Lot and Site Patterns: The design of the project preserves the pattern of lot and building site sizes that create the urban character of the historic context and the block face. Changes to the lot and site pattern may be considered when advocated by an adopted City plan.	<ul> <li>12.2 The role of the street pattern, including the layout of the individual block, as a unifying framework and setting for a variety of lot sizes and architecture, should be retained.</li> <li>The orientation, scale and form of a building has a role in supporting a coherent street pattern.</li> </ul>

1.c The Public Realm: The project relates to adjacent streets and engages with sidewalks in a manner that reflects the character of the historic context and the block face. Projects should maintain the depth of yard and height of principal elevation of those existing on the block face in order to support consistency in the definition of public and semi-public spaces.	<ul> <li>The Public Realm – Design Objective</li> <li>12.3 When designing a new building, the historic settlement patterns of the district and context should be respected. <ul> <li>A new building should be situated on its site in a manner similar to the historic buildings in the area.</li> <li>This includes consideration of building setbacks, orientation and open space.</li> </ul> </li> </ul>
1.d Building Placement: Buildings are placed such that the project maintains and reflects the historic pattern of setbacks and building depth established within the historic context and the block face. Buildings should maintain the setback demonstrated by existing buildings of that type constructed in the district or <b>site's period of significance.</b>	<ul> <li>Building Placement, Orientation &amp; Use – Design Objective</li> <li>12.4 The front and the entrance of a primary structure should orient to the street.</li> <li>A new building should be oriented parallel to the lot lines, maintaining the traditional grid pattern of the block.</li> <li>An exception might be where early developments have introduced irregular or curvilinear streets, such as in Capitol Hill.</li> </ul>
1.e Building Orientation: The building is designed such that principal entrances and pathways are oriented such that they address the street in the pattern established in the historic context and the block face.	<ul> <li>12.4 The front and the entrance of a primary structure should orient to the street.</li> <li>A new building should be oriented parallel to the lot lines, maintaining the traditional grid pattern of the block.</li> <li>An exception might be where early developments have introduced irregular or curvilinear streets, such as in Capitol Hill.</li> </ul>

And Services: a. Site Access: The design of the project allows for site access that is similar, in form and function, with patterns common in the historic context and the block face. (1) Pedestrian: Safe pedestrian access is provided through architecturally highlighted entrances and	<ul> <li>12.4 The front and the entrance of a primary structure should orient to the street.</li> <li>A new building should be oriented parallel to the lot lines, maintaining the traditional grid pattern of the block.</li> <li>An exception might be where early developments have introduced irregular or curvilinear streets, such as in Capitol Hill.</li> </ul>
And Services: a. Site Access: The design of the project allows for site access that is similar, in form and function, with patterns common in the historic context and the block face. (1) Pedestrian: Safe pedestrian access is provided through architecturally highlighted entrances and walkways, consistent with patterns common in the historic context and the block face. (2) Vehicular: Vehicular access is located in the least obtrusive manner possible.	<ul> <li>(Multi-Family DG)</li> <li>12.17 Design a prominent and appropriately scaled public entrance as a focus of the street façade.</li> <li>12.18 Retain and use alternative rear public access to the site where this exists or can be reinstated.</li> <li>12.19 Design for accessible bicycle parking</li> </ul>
and parking should be located to the rear or to the side of the	12.20 Provide convenient storage space for each residential unit.
building.	12.21 Avoid combining a vehicular access with a pedestrian access.
	12.22 Place a vehicular entrance discreetly to the side or rear of the building.
	12.23 Restrict a curb cut to the minimum width required.
	12.24 Consolidate or combine adjacent multifamily driveways wherever possible.
	12.25 Situate parking below or behind the building.
2.b Site and Building Services and Utilities: Utilities and site/building services (such as HVAC systems, venting fans, and dumpsters) are located such that they are to the rear of the building or on the roof and screened from public spaces and public properties.	<ul> <li>Site &amp; Building Services &amp; Utilities – Design Objective (Multi-Family DG)</li> <li>12.26 Site and design service and utility areas away from the frontage and screen from views.</li> <li>12.27 Site and screen rooftop and higher level mechanical services from street views.</li> <li>12.28 Provide acoustic screening for mechanical services adjacent to residential uses.</li> <li>12.29 Locate small utilities such as air conditioning away from primary and secondary facades or fully conceal within the design of the façade.</li> <li>12.30 Integrate vents into the design of the building and conceal from view on building facades and roofscape.</li> <li>12 31 Site cellular equipment away from street views</li> </ul>

3 Landscape And	Front Yard Landscape – Design Objective
Lighting: a Grading of	(Multi-Family DG)
Land: The site's landscape.	
such as grading and retaining walls, addresses the public way in a manner that reflects	12.32 The front yard landscaping for a new multi- family building should coordinate with historic and/or established patterns.
the character of the historic	Evaluate existing historic patterns and character.
context and the block face.	Design a creative complement to the established     bistoric character
	12.33 Landscape walls and fences perpendicular to the street, which could separate front yards, should be
	minimized or avoided where this separation is not an inherent part of the established topographic or historic character.
	Retaining walls provide significant opportunity for creative design and natural materials, where they are a
	characteristic of the setting.
	Where retaining walls are a part of established historic character, avoid excessive retaining wall height by
	<ul> <li>terracing a change in grade.</li> <li>Design any fencing to be low and transparent in form</li> </ul>
	12.34 Where is it a characteristic of the street, a front yard should be designed and graded to reflect this pattern, retaining the relationship and continuity of
	open space, and the sense of progression from public to private space.
	<ul> <li>Reflect the historic grading and landscaping of the area between the street pavement and the building.</li> <li>The building should readily opgage with the street and</li> </ul>
	public realm.
	12.36 Exterior lighting should be discreetly designed to illuminate entrances and exterior spaces such as balconies, terraces or common spaces.
	<ul><li>Design to avoid light trespass beyond the area to be lit.</li><li>Design for creative and discrete task lighting.</li></ul>
	12.37 Where architectural lighting is appropriate, it should be designed to strengthen the historic context, providing selective visual accent to specific elements of
	the primary facades, using discreet and creatively designed light fittings.
	Avoid general illumination of a façade or undue prominence of an individual building, since this will detract from the nighttime character of the historic
	<ul> <li>Design building light fixtures for architectural quality and durability.</li> </ul>
	Shield architectural illumination at higher levels to avoid a view of any exposed light source from the street or adjacent occupied space.

3.b Landscape Structures: Landscape structures, such as arbors, walls, fences, address	Front Yard Landscape – Design Objective (Multi-Family DG)
the public way in a manner that reflects the character of the historic context and the block face.	<ul> <li>12.33 Landscape walls and fences perpendicular to the street, which could separate front yards, should be minimized or avoided where this separation is not an inherent part of the established topographic or historic character.</li> <li>Retaining walls provide significant opportunity for creative design and natural materials, where they are a characteristic of the setting.</li> <li>Where retaining walls are a part of established historic character, avoid excessive retaining wall height by terracing a change in grade.</li> <li>Design any fencing to be low and transparent in form.</li> <li>12.34 Where it is a characteristic of the street, a front yard should be designed and graded to reflect this pattern, retaining the relationship and continuity of open space, and the sense of progression from public to private space.</li> <li>Reflect the historic grading and landscaping of the area between the street pavement and the building.</li> <li>The building should readily engage with the street and public realm.</li> </ul>
	<ul> <li>12.35 Where a new multifamily building includes another use/s, such as restaurant or café, seating should be considered as part of the landscape design for front yard area and/or sidewalk.</li> <li>Design any seating as a creative element of the landscape design.</li> <li>Low walls in the landscape design can provide the opportunity for integrated informal seating.</li> <li>Use ergonomic and durable materials in the design and choice of seating, e.g. wood &amp; metal.</li> </ul>
3.c Lighting: Where appropriate lighting is used to enhance significant elements of the design and reflects the character of the historic context and the block face.	Lighting – Design Objective 12.39 Landscape lighting should be designed discreetly and creatively to enhance pathways and entrances, while accentuating planting design. <ul> <li>Light specific design features.</li> <li>Avoid light trespass and glare.</li> </ul>
	12.40 Conceal supply and switch equipment for exterior lighting.
	12.41 Conduit and electrical supply equipment for both architectural and utility light fittings should be concealed from view form all streets and adjacent properties.

4. Building Form and Building Form & Scale – Design Objective Scale: a. Character Of The 12.5 A new building should be designed to reinforce a Street Block: The design of sense of human scale. the building reflects the A new building may convey a sense of human scale by historic character of the street employing techniques such as these: facade in terms of scale, Using building materials that are of traditional composition, and modeling. dimensions. (1) Height: The height of the Providing a porch, in form and in depth, that is similar project reflects the character to that seen traditionally. of the historic context and the Using a building mass that is similar in size to those block face. Projects taller than seen traditionally. those existing on the block Using a solid-to-void (wall to window/door) ratio that face step back their upper is similar to that seen traditionally. floors to present a base that is Using window openings that are similar in size to those in scale with the historic seen traditionally. context and the block face. 12.6 A new building should appear similar in scale to (2) Width: The width of the the established scale of the current street block. project reflects the character Larger masses should be subdivided to smaller of the historic context and the "modules" similar in size to buildings seen block face. Projects wider than traditionally, wherever possible. those existing on the block The scale of principal elements such as porches and face modulate the facade to window bays is important in establishing and express a series of volumes in continuing a compatibility in building scale. scale with the historic context 12.7 The roof form of a new building should be and the block face. designed to respect the range of forms and massing (3) Massing: The shape, found within the district. form, and proportion of This can help to maintain the sense of human scale buildings, reflects the characteristic of the area. character of the historic The variety often inherent in the context can provide a context and the block face. range of design options for compatible new roof forms. (4) Roof Forms: The building incorporates roof 12.8 A front façade should be similar in scale to those seen traditionally in the block. shapes that reflect forms The front façade should include a one-story element, found in the historic context such as a porch or other single-story feature and the block face. characteristic of the context or the neighborhood. The primary plane of the front façade should not appear taller than those of typical historic structures in the block. A single wall plane should not exceed the typical maximum façade width in the district. 12.9 Building heights should appear similar to those found historically in the district. 12.10 The back side of a building may be taller than the established norm if the change in scale would not be perceived from the public way. 12.11 A new building should appear similar in width to that established by nearby historic buildings. If a building would be wider overall than structures seen historically, the façade should be divided into subordinate planes that are similar in width to those of the context. Stepping back sections of wall plane helps create an impression of similar width in such a case. 12.14 Roof forms should be similar to those seen traditionally in the block and in the wider district. Visually, the roof is the single most important element in the overall form of the building. Gable and hip roofs are characteristic and appropriate for primary roof forms in most residential areas.

	<ul> <li>Roof pitch and form should be designed to relate to the context.</li> <li>Flat roof forms, with or without a parapet, are an architectural characteristic of particular building types and styles.</li> <li>In commercial areas, a wider variety of roof forms might be appropriate for residential uses.</li> </ul>
<ul> <li>5. Building Character:</li> <li>a. Façade Articulation</li> <li>And Proportion: The</li> <li>design of the project reflects</li> <li>patterns of articulation and</li> <li>proportion established in the</li> <li>historic context and the block</li> <li>face. As appropriate, façade</li> <li>articulations reflect those</li> <li>typical of other buildings on</li> <li>the block face. These</li> <li>articulations are of similar</li> <li>dimension to those found</li> <li>elsewhere in the context, but</li> <li>have a depth of not less than</li> <li>twelve inches (12").</li> <li>(1) Rhythm Of Openings:</li> <li>The facades are designed to</li> <li>reflect the rhythm of openings</li> <li>(doors, windows, recessed</li> <li>balconies, etc.) established in</li> <li>the historic context and the</li> <li>block face.</li> <li>(2) Proportion And Scale</li> <li>Of Openings: The facades</li> <li>are designed using openings</li> <li>(doors, windows, recessed</li> <li>balconies, etc.) of similar</li> <li>proportion and scale to that</li> <li>established in the historic</li> <li>context and the block face.</li> <li>(3) Ratio Of Wall To</li> <li>Openings: Facades are</li> <li>designed to reflect the ratio of</li> <li>wall to openings (doors,</li> <li>windows, recessed balconies,</li> <li>etc.) established in the historic</li> <li>context and the block face.</li> <li>(4) Balconies, Porches,</li> <li>And External Stairs: The</li> <li>project, as appropriate,</li> <li>incorporates entrances,</li> <li>balconies, porches, stairways,</li> <li>and other projections that</li> <li>reflect patterns established in</li> <li>the historic context and the</li> <li>block face.</li> </ul>	<ul> <li>Façade Articulation, Proportion &amp; Visual Emphasis – Design Objective</li> <li>12.12 The ratio of wall-to-window (solid to void) should be similar to that found in historic structures in the district. <ul> <li>Large surfaces of glass are usually inappropriate in residential structures.</li> <li>Divide large glass surfaces into smaller windows.</li> </ul> </li> <li>12.13 Building forms should be similar to those seen traditionally on the block. <ul> <li>Simple rectangular solids are typically appropriate.</li> <li>These might characteristically be embellished by front porch elements, a variation in wall planes, and complex roof forms and profiles.</li> </ul> </li> <li>12.15 Overall façade proportions should be designed to be similar to those of historic buildings in the neighborhood.</li> <li>The "overall proportion" is the ratio of the width to height of the building, especially the front façade.</li> <li>The design of principal elements of a façade, for example projecting bays and porches, can provide an alternative and balancing visual emphasis.</li> <li>12.16 The pattern and proportions of window and door openings should fall within the range associated with historic buildings in the area.</li> <li>This is an important design criterion, because these details directly influence the compatibility of a building within its context.</li> <li>Where there is a strong fenestration relationship between the current historic buildings, large expanses of glass, either vertical or horizontal, may be less appropriate in a new building.</li> </ul>

<ul> <li>6. Building Materials, Elements And Detailing:</li> <li>a. Materials: Building facades, other than windows and doors, incorporate no less than eighty percent (80%) durable material such as, but not limited to, wood, brick, masonry, textured or patterned concrete and/or cut stone. These materials reflect those found elsewhere in the district and/or setting in terms of scale and character.</li> <li>6. b. Materials On Street- Facing Facades: The following materials are not considered to be appropriate and are prohibited for use on facades which face a public street: vinyl siding and aluminum siding.</li> </ul>	<ul> <li>Materials – Design Objective</li> <li>12.17 Use building materials that contribute to the traditional sense of human scale of the setting.</li> <li>This approach helps to complement and reinforce the traditional palette of the neighborhood and the sense of visual continuity in the district.</li> <li>12.18 Materials should have a proven durability for the regional climate and the situation and aspect of the building.</li> <li>Materials which merely create the superficial appearance of authentic, durable materials should be avoided, e.g. fiber cement siding stamped with wood grain.</li> <li>The weathering characteristics of materials become important as the building and setting, depending on the type and quality of material and construction, e.g. cedar shingles.</li> <li>12.19 New materials that are similar in character to traditional materials may be acceptable with appropriate detailing.</li> <li>Alternative materials should appear similar in scale, proportion, texture and finish to those used</li> </ul>
6.c. Windows: Windows are other openings are incorporated in a manner that reflects patterns, materials, and detailing established in the district and/or setting.	<ul> <li>Nistorically.</li> <li>Windows – Design Objective</li> <li>12.20 Windows with vertical emphasis are encouraged. <ul> <li>A general rule is that the height of a vertically proportioned window should be twice the dimension of the width in most residential contexts.</li> <li>Certain styles and contexts, e.g. the bungalow form, will often be characterized by horizontally proportioned windows.</li> </ul> </li> <li>12.21 Window reveals should be characteristic of most masonry facades. <ul> <li>This helps to emphasize the character of the façade modeling and materials.</li> <li>It should enhance the degree to which the building integrates with its historic setting.</li> <li>It also helps to avoid the impression of superficiality which can be inherent in some more recent construction, e.g. with applied details like window surrounds.</li> </ul> </li> <li>12.22 Windows and doors should be framed in materials that appear similar in scale, proportion and character to those used traditionally in the neighborhood.</li> <li>Double-hung windows with traditional reveal depth and trim will be characteristic of most districts.</li> </ul>

6.d. Architectural Elements And Details: The design of the building features architectural elements and details that reflect those characteristic of the district and/or setting.	<ul> <li>Details – Design Objective</li> <li>12.23 Building components should reflect the size, depth and shape of those found historically along the street.</li> <li>These include eaves, windows, doors, and porches, and their associated decorative composition and details.</li> <li>12.24 Where they are to be used, ornamental elements, ranging from brackets to porches, should be in scale with similar historic features.</li> <li>The proportion of elements such as brackets for example should appear to be functional as well as decorative.</li> <li>12.25 Contemporary interpretations of traditional details are encouraged.</li> <li>New designs for window moldings and door surrounds, for example, can provide visual interest and affinity, while helping to convey the fact that the building is new.</li> <li>Contemporary details for porch railings and columns are other examples.</li> <li>New soffit interest and visual compatibility, while expressing a new, complementary form or style.</li> </ul>
7.Signage Location: Locations for signage are provided such that they are an integral part of the site and architectural design and are complementary to the principal structure.	<ul> <li>Signs – Design Objective (Multi-Family DG)</li> <li>12.78 Place signs where they traditionally would be found in the context.</li> <li>12.79 Design signs to express the identity of a non- residential use.</li> <li>12.80 Design signs and lettering to respect traditional scale and forms.</li> <li>12.81 Design signs for primary and secondary facades as an integral part of the architecture.</li> <li>12.82 Design for individual lettering or graphic motif with no or minimal illumination.</li> <li>12.83 Design any illumination to be discrete to the lettering or symbol.</li> <li>12.84 Integrate signs with the architecture through the use of durable, architectural quality, materials.</li> <li>12.85 Conceal fixings, power supply and switch gear.</li> </ul>

## ATTACHMENT G: SPECIAL EXCEPTION REVIEW STANDARDS

21a.O6.O5O(c) of the Zoning Ordinance authorizes the Historic Landmark Commission to review and approve or deny certain Special Exceptions for properties located within an H Historic Preservation Overlay District, including modifications to bulk and lot regulations of the underlying zoning district, where it is found that the underlying zoning would not be compatible with the historic district and/or landmark site.

21A.52.020(A): Definition: A "special exception" is an activity or use incidental to or in addition to the principal use(s) permitted in a zoning district or an adjustment to a fixed dimension standard permitted as exceptions to the requirements of this title of less potential impact than a conditional use but which requires a careful review of such factors as location, design, configuration and/or impacts to determine the desirability of authorizing its establishment on any given site.

General Standards and Considerations for Special Exceptions		Finding
A.	Compliance With Zoning Ordinance And District Purposes: The proposed use and development will be in harmony with the general and specific purposes for which this title was enacted and for which the regulations of the district were established.	Not Analyzed as part of this Work Session.
B.	No Substantial Impairment Of Property Value: The proposed use and development will not substantially diminish or impair the value of the property within the neighborhood in which it is located.	Not Analyzed as part of this Work Session.
C.	No Undue Adverse Impact: The proposed use and development will not have a material adverse effect upon the character of the area or the public health, safety and general welfare.	Not Analyzed as part of this Work Session.
D.	Compatible With Surrounding Development: The proposed special exception will be constructed, arranged and operated so as to be compatible with the use and development of neighboring property in accordance with the applicable district regulations.	Not Analyzed as part of this Work Session.
E.	No Destruction Of Significant Features: The proposed use and development will not result in the destruction, loss or damage of natural, scenic or historic features of significant importance.	Not Analyzed as part of this Work Session.
F.	No Material Pollution Of Environment: The proposed use and development will not cause material air, water, soil or noise pollution or other types of pollution.	Not Analyzed as part of this Work Session.
G.	Compliance With Standards: The proposed use and development complies with all additional standards imposed on it pursuant to this chapter.	Not Analyzed as part of this Work Session.