

# **Staff Report**

PLANNING DIVISION COMMUNITY & NEIGHBORHOODS

То:	Salt Lake City Historic Landmark Commission
From:	Lex Traughber – Senior Planner (801) 535-6184 or <u>lex.traughber@slcgov.com</u>
Date:	May 7, 2020
Re:	Petition PLNHLC2020-00103, 33rd Ward Minor Alterations

#### **MINOR ALTERATIONS**

Property Address: 453 S. 1100 East Parcel IDs: 16-05-408-057 Historic District: University Zoning District: I - Institutional Master Plan: Central Community Master Plan - Institutional

**REQUEST:** Brad Gygi, Bradley Gygi Architect & Associates, PLLC, representing the property owner, the Church of Jesus Christ of Latter Day Saints, is requesting a Certificate of Appropriateness (COA) for various "Minor Alterations" on the property located at 453 S. 1100 East in the University Historic District. The subject property is located in Council District 4 represented by Ana Valdemoros and is zoned I - Institutional.

**RECOMMENDATION:** As outlined in the analysis and findings in this staff report, it is Planning Staff's professional opinion that the proposed minor alterations request substantially meets the applicable standards of approval and therefore, recommends that the Historic Landmark Commission approve the request for a Certificate of Appropriateness (COA).

#### **BACKGROUND AND PROJECT DESCRIPTION:**

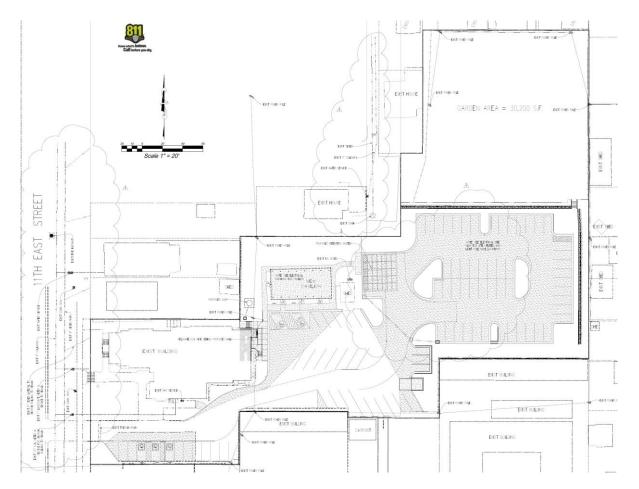
The church or meeting house on the subject property was built c.1920 in a gothic revival style. According to the latest University District survey conducted in 2015, the building is contributing and is rated as "ES" – Eligible Significant, the highest rating under the current rating system. An "Eligible Significant" building is defined as built within the historic period retaining its integrity, is an excellent example of a style or type, is generally unaltered and eligible for individual listing on the National Register for architectural or know historic significance.

The applicant has requested a Certificate of Appropriateness (COA) for various modifications to the building and property. All proposed site improvement are located at the rear of the property and are not readily visible from the street. In summary, the following is a list of the modifications being requested:

- Expansion of the existing parking lot into the area that is currently used as a community garden;

- Installation of required parking lot interior and perimeter landscaping;
- Installation of parking lot and pavilion lighting;
- Construction of a new retaining wall and stairway between the new parking lot and the new community garden area;
- Construction of a new retaining wall along the east border of the new parking area;
- The construction of a new pavilion;
- Reconstruction and amelioration of the ADA access on the rear of the building;
- Site grading to accommodate the new parking lot, pavilion and ADA access;
- Relocation and construction of a new dumpster enclosure, and;
- Fencing (6' cedar fencing) in the required landscape buffer.

Typically, requests of this nature are reviewed and approved at an administrative level; approved by members of Planning Staff. At the discretion of the Planning Director, this request is coming before the HLC for a decision in response to public concern for the proposed development, in particular the loss of a portion of the community garden on the subject property.



### SITE PLAN

The applicant has submitted a detailed narrative, a site plan, and elevation drawings for review (Attachments C & D).

#### **PHOTOS OF SUBJECT SITE:**



The 33<sup>rd</sup> Ward as viewed from the sidewalk on 1100 East.



The 33<sup>rd</sup> Ward building as viewed from the parkway on 1100 East.



The view toward the rear of the building as seen from the existing parking lot.



The rear parking area.

PLNHLC2020-00103, 33rd Ward Minor Alterations



The area in the rear of the property where the pavilion is proposed. Not visible from the street.



Second view of the area in the rear of the property where the pavilion is proposed. Not visible from the street.



The gated entrance to the garden area from the parking lot.



The garden area as viewed to the north from the gate in the previous photo.



A view from the garden area toward the meeting house to the west.



The rear of the meeting house and the ADA access to be rebuilt and improved.

PLNHLC2020-00103, 33rd Ward Minor Alterations

Please note that the applicant also provided various site photographs which are included for review (Attachment C).

#### **NEXT STEPS:**

If the project is approved by the HLC, the applicant would be issued a Certificate of Appropriateness for the proposed alterations and then proceed to the building permit stage. If the Commission disagrees with Staff's recommendation and the project is denied, the applicant would not be issued a Certificate of Appropriateness for the proposed alterations and any new proposal would require a new application.

#### **ATTACHMENTS:**

- A Vicinity Map
- B Historic District Map
- C Applicant Information Project Narrative
- D Development Plan Set (9/10/19 revised 3/16/20)
- E Existing Conditions
- F Analysis of Standards for Minor Alterations
- G Public Process and Comments
- H City Department/Division Comments
- I Traffic Study

## ATTACHMENT A: VICINITY MAP



## South Temple UNIVERSITY Alameda Finch 100 Bueno 200 Elizabeth 1200 1300 University 1100 300 Douglas 400 University 500 N $\square$

## **ATTACHMENT B: HISTORIC DISTRICT MAP**

★ Approximate Project Location

## ATTACHMENT C: APPLICANT INFORMATION/NARRATIVE



## bradley gygi architect & associates, pllc

2150 South 1300 East, Suite 500 Salt Lake City, Utah 84106 801 · 747 · 2451

## correspondence

#### March 11, 2020

#### to

Lex Traughber Planning Division 451 South State St. Salt Lake City, UT

#### re:

Thirty Third Ward Certificate of Appropriateness HP: Minor Alterations

#### project

Thirty Third Ward SL Central Stake 453 South 100 East Salt Lake City, UT Project Number: 5076994-19020101 Mr Traughber,

Please find below a revised and updated project description based on correspondence and an on site meeting following the initial application.

Thank you for your consideration of this application for Certificate of Appropriateness for minor alterations to an existing building and site. Please note there is a related building permit review in progress BLD2019-09985.

#### project description

- The intent of all alterations is to meet requirements of the current "I" Institutional zone for this use without special exceptions, including permitted parking stalls, 40% open space, new landscape buffers at altered areas, perimeter and interior landscape requirements at added parking areas, trash enclosure, etc. Owner is seeking to increase the functionality and accessibility of site elements as well as within the building to enhance use of the existing facility.
- **Garden Areas:** Provide new perimeter 6' tall chain link fencing (see detail A/C703) in existing locations and above new retaining wall north of new parking. Provide access gates from Elizabeth Street and from new east parking area to remaining garden areas. Provide foot access with concrete stairs from new parking up to garden area with gate in new chain link fence. Owner is coordinating with the Community Council regarding administration of the garden areas.

- Alterations to existing parking and addition of new parking areas:
  - **East parking expansion:** Justification for increased stalls is indicated in parking calculations on Sheet C101, using Place of Worship and Accessory Auditorium uses. Grading and modular retaining walls to add area to existing parking lot, directly east of existing parking. Traffic and parking study will be provided as required. Grading will consist of excavation ranging from 2-4 feet below existing grades to minimize transition drives between new and additional grading to maintain as much current garden space as possible. Provide required interior and perimeter landscaping and required 15 foot landscape buffer (see landscape drawings) and wood fencing system (see detail G/C703) at areas of new parking. Provide underground stormwater design for additional parking area. Provide turnaround maneuvering for fire department vehicles as part of revised parking design. Provide new parking lot lighting to meet zoning ordinance requirements for minimum light levels and prevent light intrusion onto adjacent properties (see sheets ES101, ES102).
  - Drive Alterations: Modifications to omit portion of existing sidewalk near southwest corner of the existing building in order to widen the drive area for improved fire department access and two way vehicle traffic.
  - Accessible stalls: Modifications to parking striping at existing areas to provide accessible parking stalls and accessible signage closer to the main west entrance to the lower level, which will also be served by a new elevator inside the building.
- New Pavilion Structure: New pavilion structure with concrete slab and related work east of (behind) existing meetinghouse building.
  - Grading: Modifications to parking and landscape grading to provide accessibility to new building ramp entrance (see below) and pavilion. This will raise the grades several feet adjacent to the building and corner of the parking, tapering to no changes near the property lines around the pavilion area.
  - Landscaping: Provide required 15 foot landscape buffer (see landscape drawings) and wood fencing system (see detail G/C703) at areas around new pavilion.
  - Pavilion Building Materials: Asphalt shingle roofing to match existing meetinghouse roof, metal fascia, exposed wood beam and decking structure at underside with powder coated steel posts. See photo of similar structure.
- Trash Enclosure: New masonry trash enclosure with powder coated metal gate at southeast corner of existing parking. See details C,D,F on revised sheet C703.

- Modifications to existing building to increase accessibility:
  - East Entry and exterior ramp: Removal of existing concrete ramp and canopy at north end of west (back) side of the building. New concrete ramp and handrails with metal canopy roof to be installed with small addition to building to facilitate accessible interior ramp. New addition will be brick veneer to match existing with new white painted wood window to match existing and white metal storefront entry system. Also includes new concrete stairs with handrails north of this work on site due to changes in grading for new ramp and pavilion grading.
  - Elevator Penthouse: Minor exterior alterations to the existing building to include new elevator with small shaft projection through existing roof (shown on elevation drawings).

#### list of drawings submitted

\* indicates this resubmittal includes revisions to this sheet from the original application

- G101 Code Information: provided to show occupancy of building relating to parking requirement calculations.
- 1 of 1 Site Survey: boundary and topographic survey of existing site.
- \* C101 Site Plan
- C102 Demolition Site Plan
- C103 Grading & Drainage Plan
- **C104** Site Utility Plan
- \* C703 Site Civil Details: provided to show chain link and wood fences and trash enclosure materials and details.
- **C705** Site Civil Details: provided to show new east concrete ramp and entry addition area
- C811 Pavilion Plans and Details
- L100 Hardscape Plan: includes landscape calculations
- \* L101 Landscape Plan
- A102 New Second Floor Plan: shows new east entry addition
- A201 Exterior Elevations
- A301 Sections and Details: shows east entry addition area
- ES101 Electrical Site Plan
- ES102 Electrical Site Illumination Plan

#### list of materials

- East Entry and Ramp: concrete ramp with stainless steel pipe handrails, powder coated steel canopy structure with metal roof canopy. Brick veneer to match existing at new addition with white painted wood window and prefinished white aluminum storefront entry system. Intent is to match look of existing area.
- Pavilion: Asphalt shingle roofing to match existing meetinghouse roof, metal fascia, exposed wood beam and decking structure at underside with powder coated steel posts. See photo of similar structure..
- Wood Fence System: See detail G/C703. Powder coated steel posts with clear finished or unfinished cedar or redwood wood cap, rails and slats.

Sincerely,

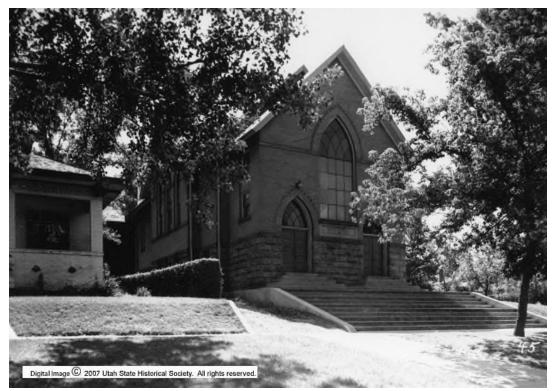
Bradley Gygi, AlA

#### additional attachments

- Historic Photographs
- Existing Photographs
- Materials Photographs
- Letter of Representation from Owner



West side (1100 East) of original building Source: Utah State Historical Society



West side (1100 East) of original building Source: Utah State Historical Society



Aerial view of Existing Building, north and west sides



Aerial view of existing east garden area and portion of existing parking



Aerial view of Existing Building, from south



Aerial view of existing building from northeast



Aerial view of Existing Building,east entry and ramp area



Existing south side, east end



1100 East (west) view of building at sidewalk level



Existing west side, north end



Existing west side, south end



Existing south side, west end



Existing south side, east end

## materials photographs

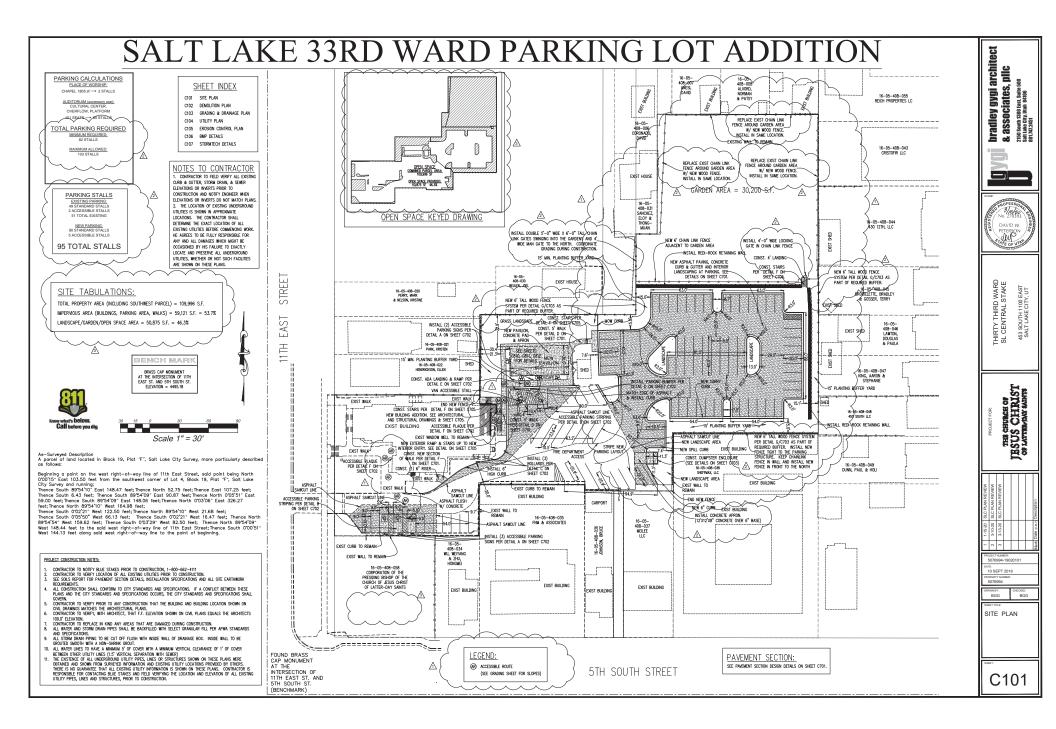


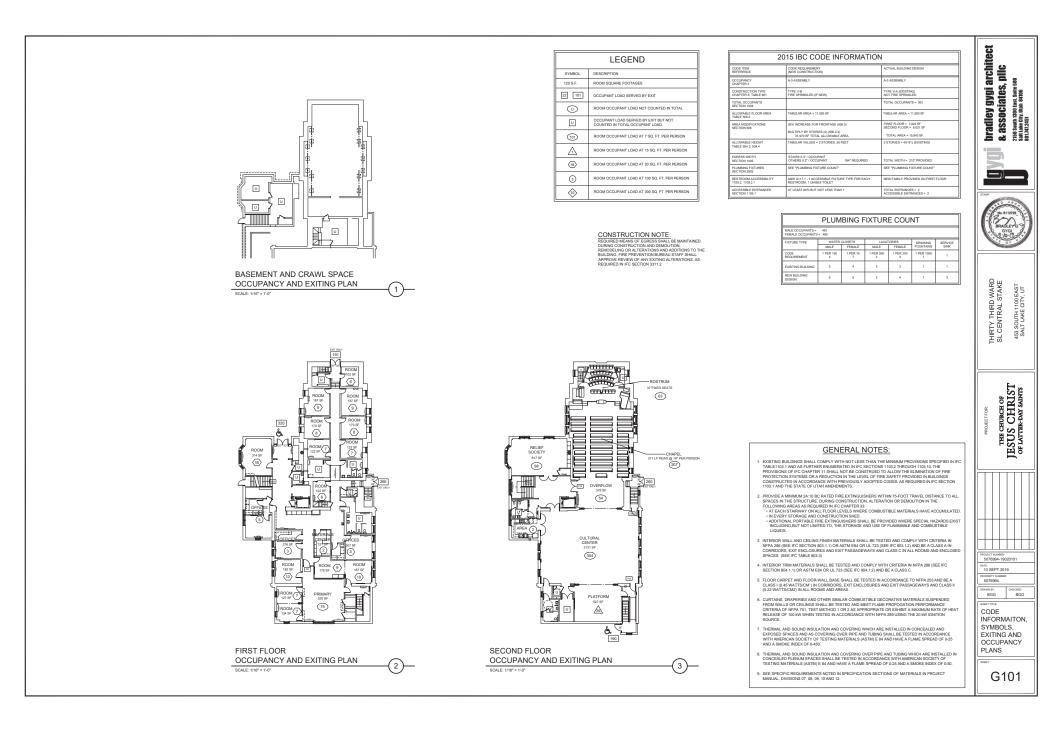
New brick veneer to match existing appearance

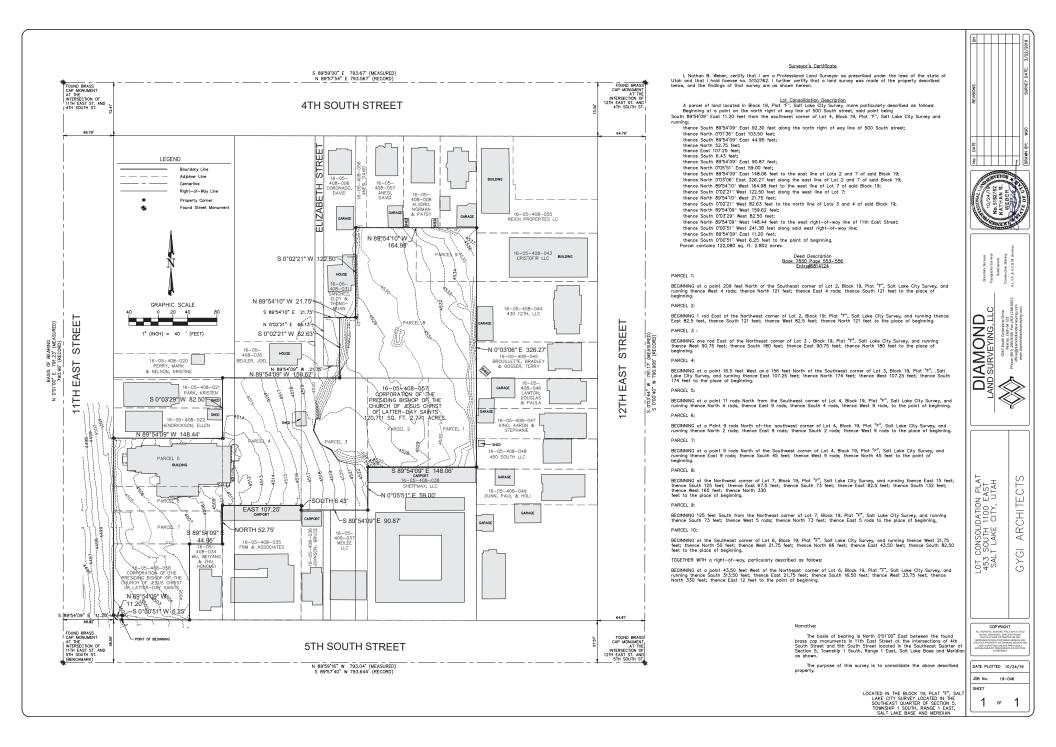


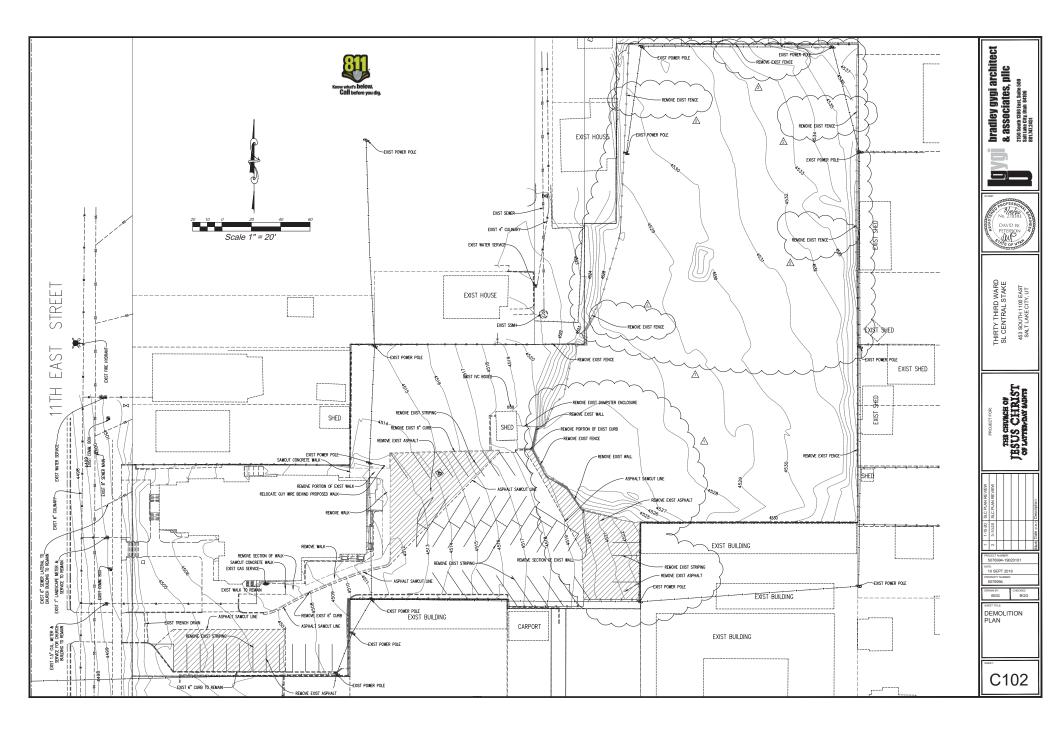
Photograph of similar pavilion structure: Shingle roof, exposed wood beams and steel posts

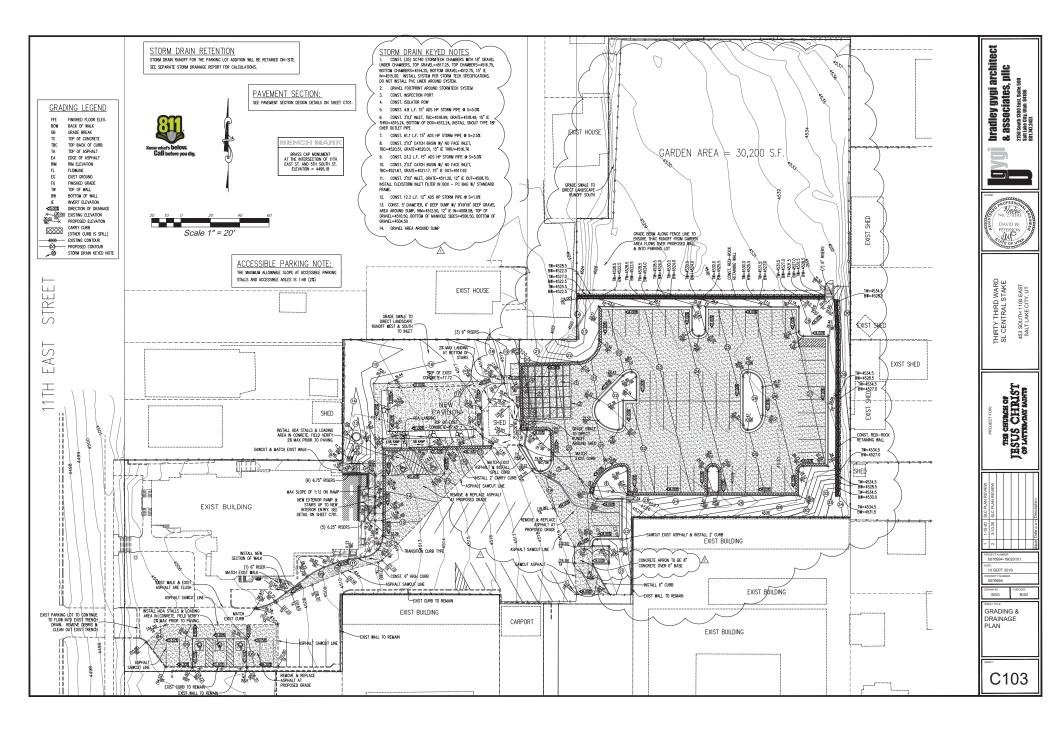
## ATTACHMENT D: DEVELOPMENT PLAN SET (9/10/19 revised 3/16/20)

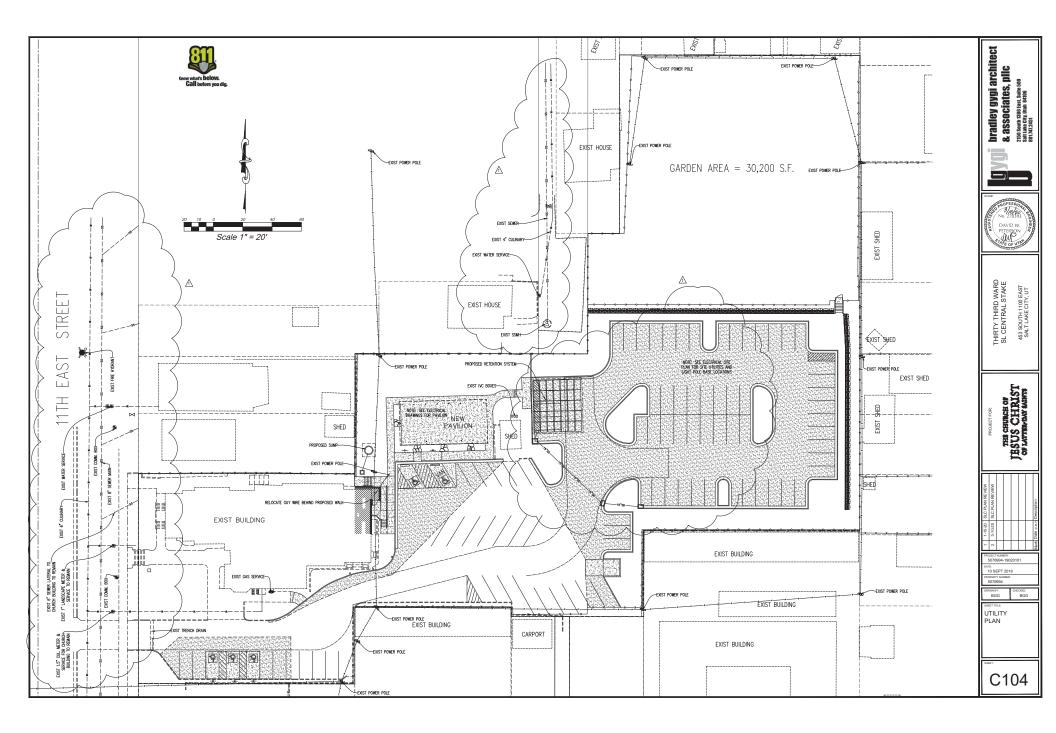


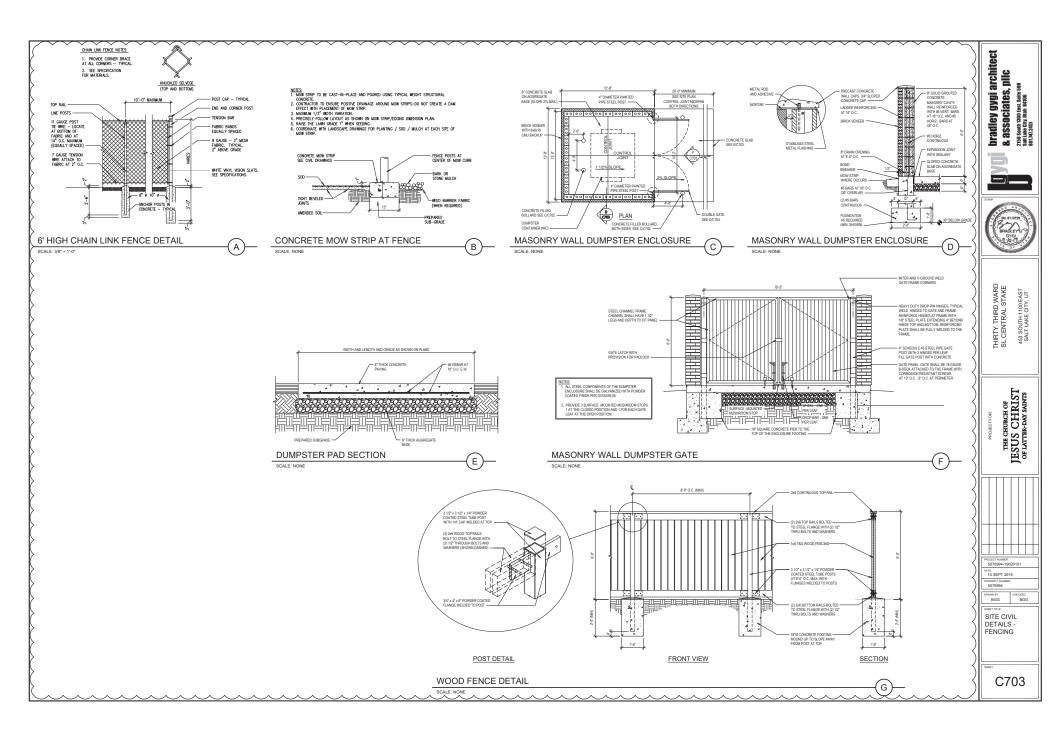


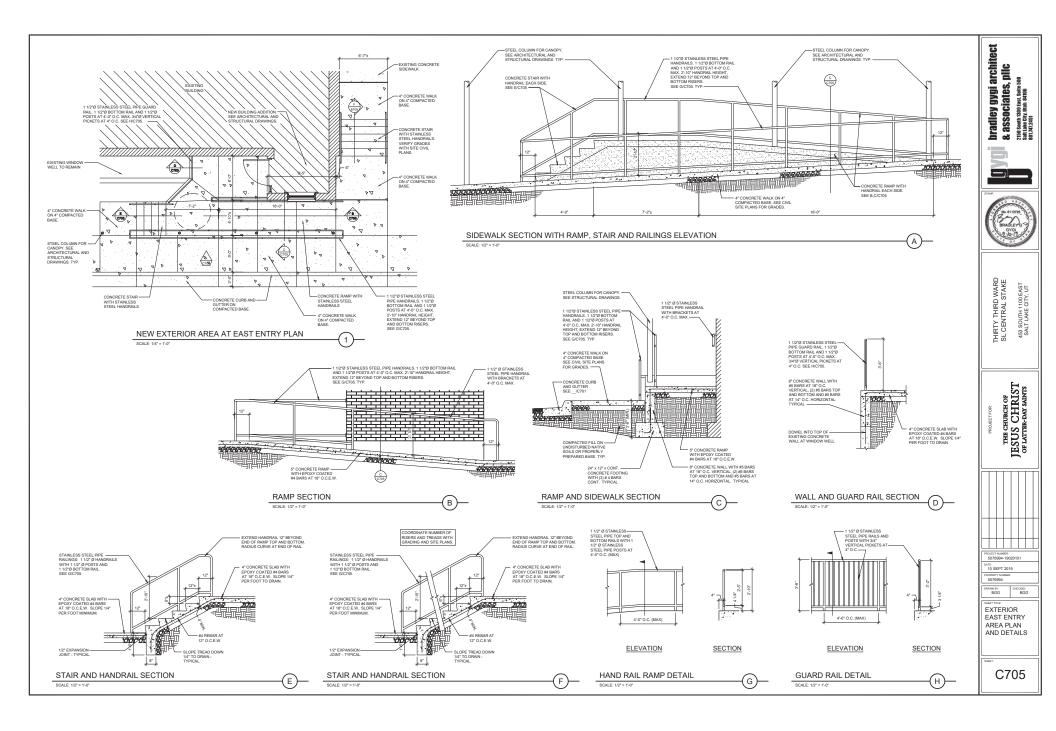


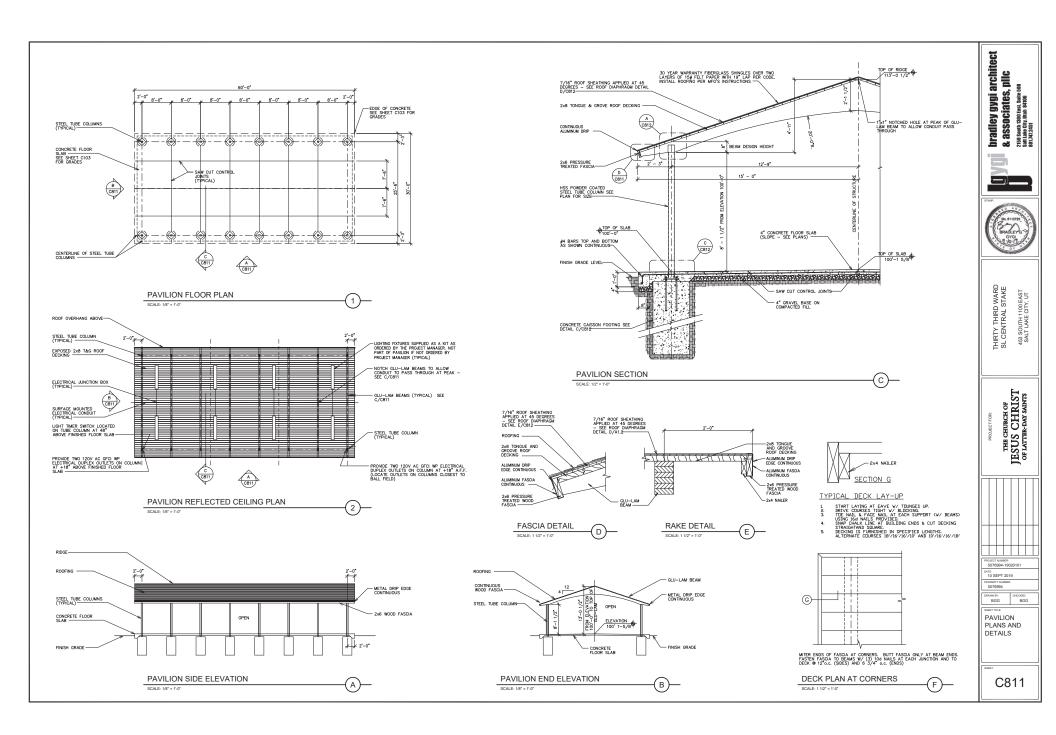


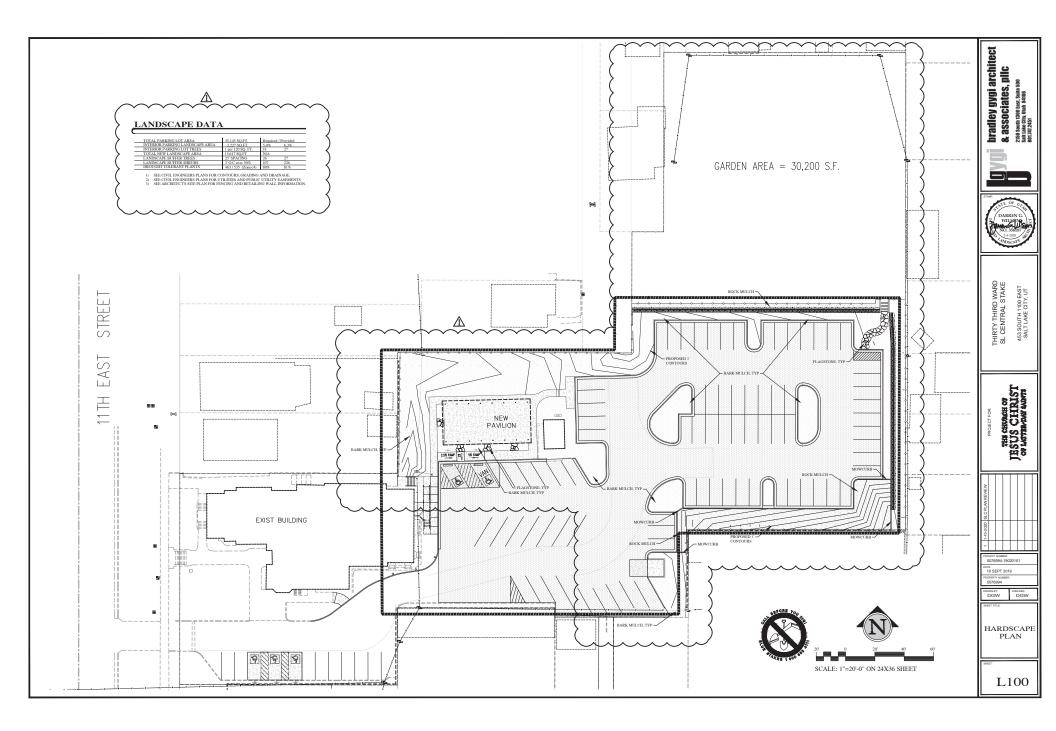


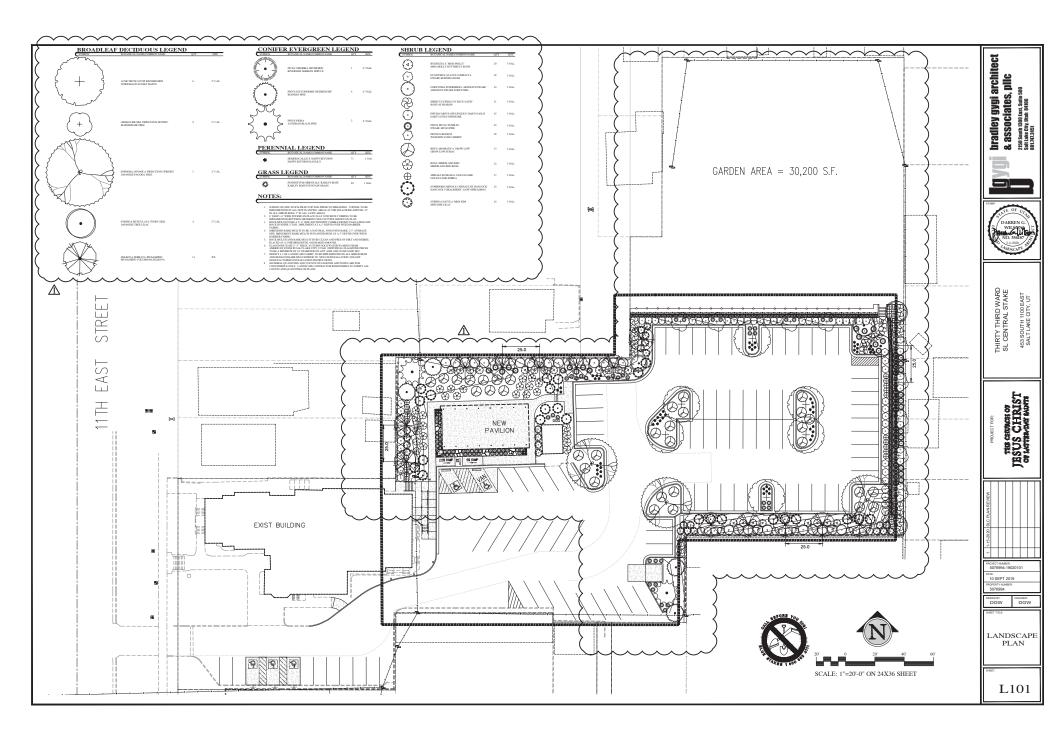


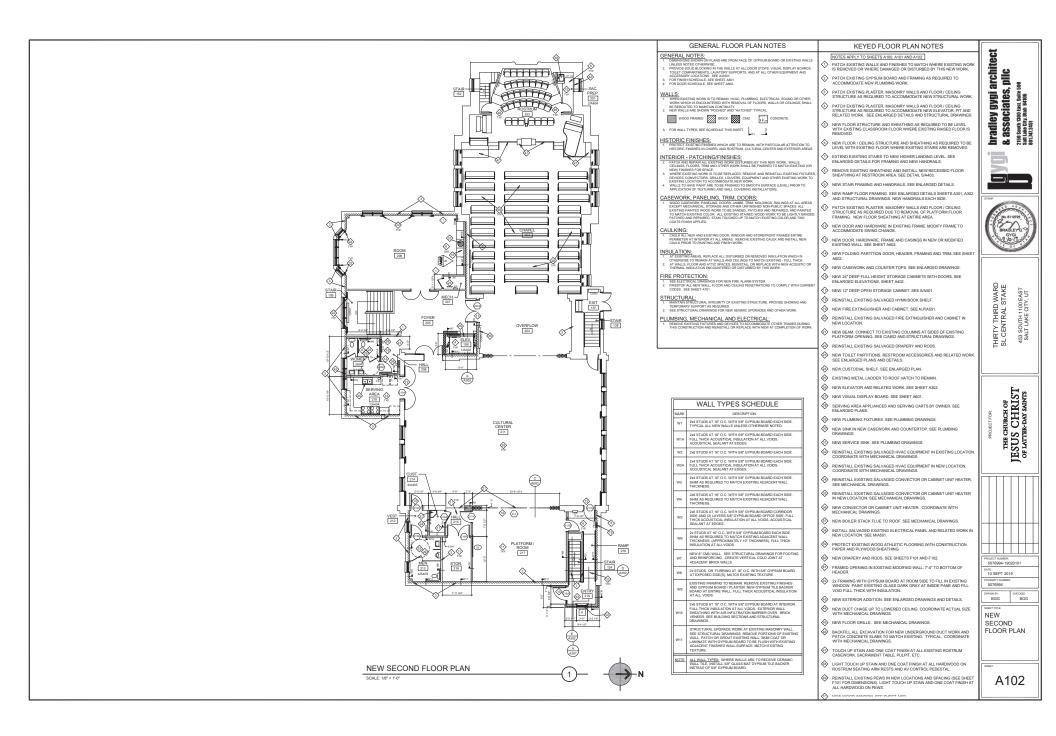




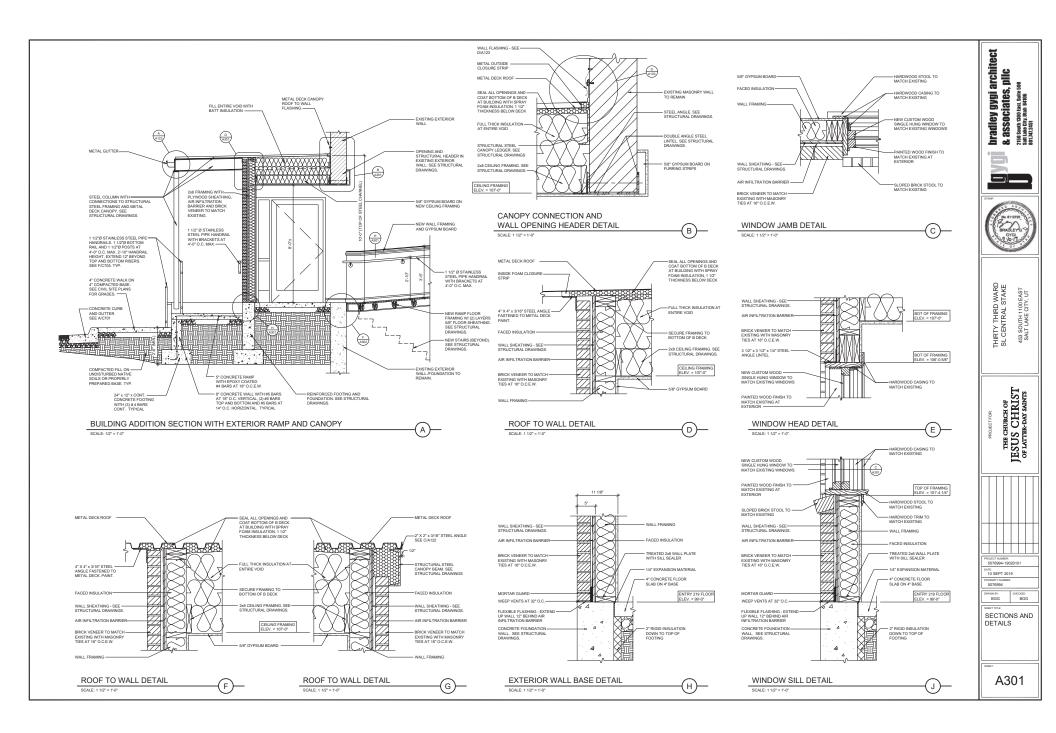


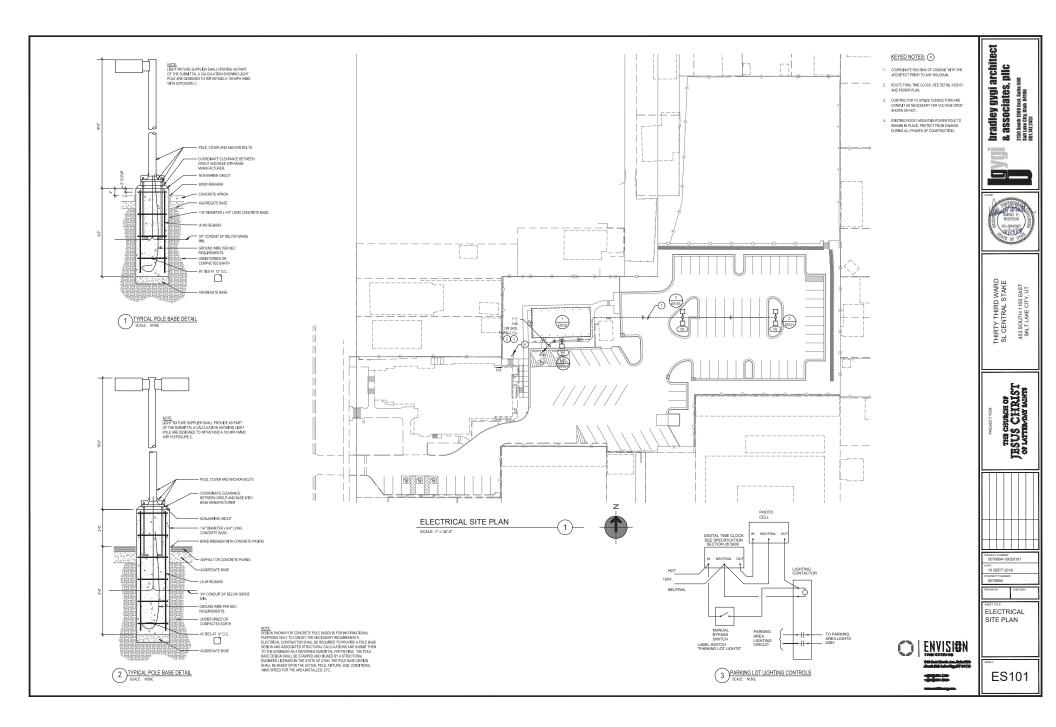


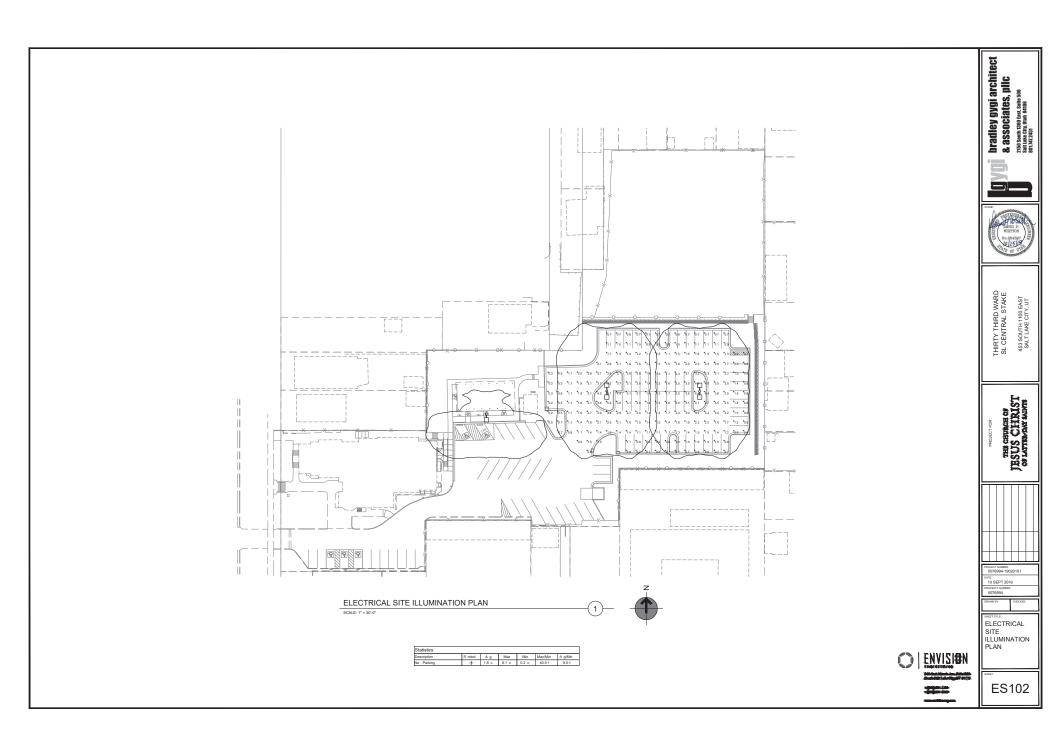












# ATTACHMENT E: EXISTING CONDITIONS

The site is currently occupied by a meeting house for the Church of Jesus Christ of Latter Day Saints and associated parking areas, yard areas, and a community garden.

#### I – Institutional District

The purpose of the I Institutional District is to regulate the development of larger public, semipublic and private institutional uses in a manner harmonious with surrounding uses. The uses regulated by this district are generally those having multiple buildings on a campus like setting. Such uses are intended to be compatible with the existing scale and intensity of the neighborhood and to enhance the character of the neighborhood. This district is appropriate in areas of the City where the applicable master plans support this type of land use.

#### Zoning Ordinance Standards for I – Institutional District

Standard	Finding	Rationale				
<b>Minimum Lot Size:</b> Places of Worship 2 acres and a minimum lot width of 100 feet.	Complies	The subject property is 2.61 acres in size.				
<b>Maximum Building Height:</b> Building height shall be limited to thirty five feet (35'). Building heights in excess of thirty five feet (35') but not more than seventy five feet (75') may be approved through the design review process; provided, that for each foot of height over thirty five feet (35'), each required yard shall be increased one foot (1').	Complies	The maximum building height requirement is irrelevant in this instance as the building existed prior to the implementation of the current zoning standards.				
<b>Minimum Open Space Area:</b> The minimum open space area for any use shall not be less than forty percent (40%) of the lot area.	Complies	The applicant has shown in their plans that the impervious areas of the property, including the building and parking areas, do not exceed 60% of the lot area. In other words, the open space on the property exceeds the required 40%.				
Minimum Yard Requirements:	Complies	The minimum yard requirement for the building and accessory structures is irrelevant in this instance as the				
<ul> <li>Front Yard: Twenty feet (20').</li> <li>Corner Side Yard: Twenty feet (20').</li> <li>Interior Side Yard: Twenty feet (20').</li> </ul>		building existed prior to the implementation of the current zoning standards. In terms of the proposed parking lot, the required landscape				
- Rear Yard: Twenty five feet (25').		yard of fifteen feet (15') is proposed because the property is zoned Institutional and abuts residentially zoned properties on all sides.				
- Accessory Buildings And Structures In Yards: Accessory buildings and structures may be located in required yard areas subject to section <u>21A.36.020</u> , table <u>21A.36.020</u> B of this title.						

<ul> <li>Landscape Yard Requirements: Landscape yards, as specified below, shall be required for each use in the I Institutional District and shall be improved in conformance with the requirements of chapter 21A.48 of this title.</li> <li>Front Yard: Twenty feet (20').</li> <li>Corner Side Yard: Twenty feet (20').</li> <li>Interior Side Yard: Eight feet (8').</li> <li>Rear Yard: Eight feet (8').</li> </ul>	Complies	The minimum landscape yard requirements for the building and accessory structures is irrelevant in this instance as the building existed prior to the implementation of the current zoning standards. In terms of the proposed parking lot, the required landscape yard of fifteen feet (15') is proposed because the property is zoned Institutional and abuts residentially zoned properties on all sides.
<b>Landscape Buffers:</b> Landscape buffers shall be provided where a use in the I Institutional District abuts a lot in a Residential District, as specified in chapter 21A.48 of this title.	Complies	As mentioned previously, the required landscape buffer yard of fifteen feet (15') is proposed to meet this standard.
<b>Traffic And Parking Impact:</b> The traffic and parking characteristics of institutional uses can have a significant impact on the nearby residential neighborhoods. To ensure that these characteristics do not impair the safety or enjoyment of property in nearby areas, a traffic and parking study shall be submitted to the City in conjunction with the site plan review provisions of this title whenever an expansion of an existing use or an expansion of the mapped district is proposed. New institutional uses or expansions/intensifications of existing institutional uses shall not be permitted unless the traffic and parking study provides clear and convincing evidence that no significant impacts will occur. The Zoning Administrator may, upon recommendation of the development review team waive the requirement for a traffic and parking study if site conditions clearly indicate that no impact would result from the proposed development.	Complies	A traffic study was completed on 4/16/20 by A-Trans Transportation Engineering, and reviewed by the City Transportation Division. The traffic study indicated that the surrounding infrastructure has more than sufficient capacity to accommodate all Ward related traffic. The traffic study in attached for review (Attachment I).
<b>Lighting:</b> All uses and developments shall provide adequate lighting so as to assure safety and security. Lighting installations shall not have an adverse impact on traffic safety or on surrounding properties and uses. Light sources shall be shielded to minimize light spillover onto adjacent properties.	Will comply	The applicant is proposing lighting for the pavilion and the new portion of the parking lot. The plans show that there will be two light poles located in each of the landscape islands in the lot. These poles are approximately 16'- 18' in height with the light shielded and pointing in a downward direction to minimize light spillover to adjacent

	properties. The lighting for the pavilion will be used on an as needed basis.
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# ATTACHMENT F: ANALYSIS OF STANDARDS

# H Historic Preservation Overlay District – Standards for Certificate of Appropriateness for Altering of a Landmark Site or Contributing Structure (21A.34.020.G)

In considering an application for a Certificate of Appropriateness for alteration of a landmark site or contributing structure, 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.

Standard	Finding	Rationale
<b>Standard 1:</b> A property shall be used for its historic purpose or be used for a purpose that requires minimal change to the defining characteristics of the building and its site and environment;	Complies	The property will be used for its historic purpose; a church or meeting house. The changes proposed to the building and site are to better accommodate the congregations that will use the building. No changes to the defining characteristics of the building or site are proposed. All proposed changes to the building and site are at the rear of the building and/or property and are not readily visible from the public right-of-way.
<b>Standard 2:</b> The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided;	Complies	The historic character of the property will be retained and preserved. The property is characterized by its use as a church/meeting house. The garden area is an ancillary use on the property associated with the primary institutional/religious use. The property is not characterized by its use as a community garden, nor is it reasonable to consider the diminution of the community garden area a removal of historic material. The property is characterized by its institutional/religious use and purpose.
<b>Standard 3:</b> All sites, structure and objects shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create a false sense of history or architecture are not allowed.	Not Applicable	No changes are proposed which seek to create a false sense of history or architecture. This standard does not apply to this proposal.
<b>Standard 4:</b> Alterations or additions that have acquired historic significance in their own right shall be retained and preserved.	Not Applicable	There are no additions or alterations that have acquired historic significance on the site. This standard does not relate to this proposal.
<b>Standard 5:</b> Distinctive features, finishes and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.	Complies	No distinctive features, finishes, construction techniques or example of craftmanship that characterize the building or property will be disturbed.
<b>Standard 6:</b> Deteriorated architectural features shall be repaired rather than replaced wherever feasible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, texture and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other structures or objects.	Not Applicable	The proposal does not include replacement or repair of any deteriorated architectural features. This standard does not relate to this proposal.
<b>Standard 7:</b> Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.	Not Applicable	The proposal does not include cleaning treatments of existing historic materials. This standard does not relate to this proposal.

<b>Standard 8:</b> Contemporary designs for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant cultural, historical, architectural or archaeological material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.	Not Applicable	This standard does not relate to this proposal.
<b>Standard 9:</b> Additions or alterations to structures and objects shall be done in such a manner that if such additions or alteration were to be removed in the future, the essential form and integrity of the structure would be unimpaired. The new work shall be differentiate from the old and shall be compatible in massing, size, scale and architectural features to protect the historic integrity of the property and its environment.	Complies	The only addition or alteration to the building itself is the reconstruction and reconfiguration of the ADA access in the rear of the building. This feature does not alter the integrity of the structure nor is it visible from the public right-of-way.
<b>Standard 10:</b> Certain building materials are prohibited including the following: vinyl, asbestos, or aluminum cladding when applied directly to an original or historic material.	Not Applicable	The proposal does not include the use of vinyl, asbestos, or aluminum cladding applied to the original material. This standard is not applicable.
<b>Standard 11:</b> Any new sign and any change in the appearance of any existing sign located on a landmark site or within the H historic preservation overlay district, which is visible from any public way or open space shall be consistent with the historic character of the landmark site or H historic preservation overlay district and shall comply with the standards outlined in part IV, Chapter 21A.46 of this title.	Not Applicable	This proposal does not pertain to an existing sign or a new sign. This standard is not applicable to the project.

# ATTACHMENT G: PUBLIC PROCESS AND COMMENTS

It is Planning Staff's understanding that the applicant met with the East Central Community Council on at least two occasions to discuss plans and to field neighbor concerns and comments. Planning Staff was not involved with these meetings as an application for a Certificate of Appropriateness had yet to be applied for or received by the City, and further, the Zoning Ordinance does not require that an applicant and Planning Staff meet with a given Community Council for Minor Alterations applications.

## Notice of the Historic Landmark Commission public hearing for the proposal include:

- Notices mailed on April 24, 2020.
- Property posted on April 24, 2020.
- Agenda posted on the Planning Division and Utah Public Meeting Notice websites on April 27, 2020.

# Written public comments received as of the preparation and distribution of this staff report are on the pages following.

Public comment on: PLNHLC2020-00103

Submitted by: Christy Porucznik,

April 27, 2020

As a neighbor to the property, I have several concerns about the proposed project. While the alterations to the 33<sup>rd</sup> Ward building itself may be minor, the proposed changes to the site are extensive. I am glad that there is opportunity for public comment. The impact on the character of the neighborhood will be significant.

The proposal will eliminate land that has been productively gardened for years, with permission, for a large parking lot. The proposed large pavilion will also eliminate green space in the neighborhood. These changes are unfortunate and will negatively affect the neighborhood community, but the scope is not within that of the Historic Landmark Commission.

I write to you for two items that are within scope: 1) the lighting for the parking lot, and 2) the form and materials of the pavilion.

Regarding the lighting, I am concerned about light pollution encroaching from the proposed tall poles onto neighboring properties. The current parking lot is not frequently used during times of darkness, so on/off switches in addition to downward-shielded lights will support dark skies and limit the impact of new lighting in the neighborhood.

The pavilion is a completely new structure. The proposed footprint is larger than some neighboring homes, and it will almost completely fill the current green yard-area of the site. In addition to required setbacks etc, please consider how the materials, utilities, size, and proposed use will impact the community.

I understand that development is allowed within the Institutional zoning designation for this site. I ask that this project be held to the same standards as any other property owner in this historic district. All planning and zoning standards should be followed, and any exceptions or variances should go through the usual process.

Thank you for your service,

Christy Porucznik

# ATTACHMENT H: CITY COMMENTS

## PLNHLC2020-00103 – 33rd Ward Minor Alterations – City Comments

## 2/28/20 - Engineering Comments

I see nothing affecting the public way of 1100 East for this. Engineering has no objection to the proposed minor alterations application.

## 3/12/20 - Fire Comments

A brief summary of Fire Code related items to this submission are the following:

- The fire department access roads meet the required minimum width of 20-feet
- The proposed turn-a-round does not meet the minimum dimensions required for SLCFD apparatus, which are 80-feet turn areas (160-feet total), not 60 or 70-feet as specified in the IFC for the hammerhead. However, the turn-a-round may not be necessary if all portions of the building and pavilion can be reached without driving down the access road more than 150-feet. If it is necessary to drive more than 150-feet down the access road to reach within 150-feet of all first story exterior portions of the building, then turn-a-round would be required.

Planning Staff note: These requirements will be met at the time that the applicant obtains a building permit.

## 2/28/20 - Police Comments

The police department has no concerns or issues with the proposal.

## 3/2/20 – Public Utility Comments

Plans will need to be submitted for review and approval. The grading and drainage plan will need to include a technical drainage memo to address current standards. The stormwater from the new parking area will need to be treated prior to discharge. The plan can be submitted as part of the building permit process. I don't see anything on the plans that should hold up the HLC approval.

#### 3/2/20 – Transportation Comments

The parking calculations on the site plan indicate that they are not over the maximum parking allowance. The parking lot layout is acceptable. When the parking study comes back, we would like to look at it.

#### 4/20/20 – Transportation Comments

The parking study looks good

April 16, 2020



RE: Thirty-Third Ward Trip Generation and Parking Demand – Salt Lake City, UT

The following discusses the proposed parking expansion for the Thirty-Third Ward located at 453 South 1100 East in Salt Lake City, UT. The facility currently houses two Wards separated by a one hour allowing the parking to be fully utilized by each Ward with little overlap. In the near future, a third Ward may begin utilizing the facility and additional parking will be needed as the temporal separation between Wards will require an overlap of the facility. Normally, a count of operations of the facility would occur on a Sunday however with the current Covin-19 situation, all church activities at the Ward have been suspended and therefore a calculated instead of an empirical approach must be taken.

Currently, the site includes 51 parking spaces with a proposed expansion to 95spaces. The largest Ward at the Thirty-Third Ward is 125 members. According to Church officials, an estimated 30 members walk to church. This indicates 95 members driving to the facility. Church empirical data indicates that an average 2.3 members per vehicle is a typical vehicle occupancy rate for LDS facilities. This would indicate that the 95 members would produce 41 vehicles.



Figure 1: Proposed Site



Figure 2: Street View of Thirty-Third Ward

As a comparison for parking demand, the Institute of Transportation Engineer's Parking Generation Manual was reviewed and for a Church, Land Use 560, the average is 0.45 spaces per attendee and the 85<sup>th</sup> percentile parking demand is 0.6 spaces per attendee. This would indicate that for the 125 attendees, the parking demand would average 56 spaces with the 85<sup>th</sup> percentile being 75 spaces.

Therefore, the need for the expanded parking is due to the temporal proximity of Wards. When Wards are timed with back-to-back sessions, then the parking demand needs to be designed for two Ward sessions. It should be noted that street parking is also available along 1100 East for Sunday services.

#### Trip Generation

Trip generation for the site is typically calculated using the Institute of Transportation Engineers (ITE) *Trip Generation* handbook. Based on the land use assumptions and size of the building, the projected traffic generated by the site can be determined for a "typical" church. The projected traffic by time period is shown in Table 1 for the proposed 15,943 sf Thirty-Third Ward.

			Trip Rate				Trips			
		Sunday Sunday				Sun				
ITE 10th Ed	Size	Land Use	AM	PM	Peak	Daily	AM	PM	Peak	Sunday
33rd Ward	15.943	560	0.33	0.49	9.99	27.63	5	8	159	441

#### Table 1: Site Trip Generation

The results indicate that the church would be projected to generate 159 Sunday peak hour trips and 441 Sunday daily trips. Since this is an existing facility, another option is to empirically estimate the traffic.

As identified in the parking analysis, the largest Ward at the Thirty-Third Ward is 125 members. According to Church officials, an estimated 30 members walk to church. This indicates 95 members driving to the facility. Church empirical data indicates that an average 2.3 members per vehicle is a typical vehicle occupancy rate for LDS facilities. This would indicate that the 95 members would produce 41 vehicles. If a third Ward does begin to utilize the facility and assuming they are of similar membership and travel mode, then during the overlap time between Wards, 41 arriving and departing vehicles would be expected in an hour period. This would be 82 vehicles in the peak hour instead of the 159 projected through ITE average rates shown in Table 1. With a projected 41 vehicles per Ward, this represents 82 vehicle trips per Ward (1 in and 1 out) and if three Wards operate per day, then the projected traffic is 246 daily trips instead of the ITE projected rate of 441 Sunday daily trips.

Sunday's are always lower traffic days. In order to review the difference between a typical weekday and a Sunday, the UDOT Signal Performance Measures (SPM) database for review to compare a Wednesday when the University was in and a Sunday in February, 2020. The results come from intersection Signal #7253 located at 1100 East and SR 186 (500 S) immediately adjacent to the Thirty-Third Ward. The UDOT SPM only recorded east-west traffic on SR 186 but the results indicated that the peak weekday hour volume is 1,598. The Sunday peak hour volume is 1,018 indicating that traffic is approximately 63.7% of the typical weekday traffic.

1100 East is a two-lane Collector with a projected capacity of 13,500 average daily trips. Therefore, 1100 East and the surrounding infrastructure have more than sufficient capacity to accommodate all three potential Ward related traffic.

Please let me know if you have any questions.

Sincerely, A-Trans Engineering

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