COTTONWOOD HEIGHTS

ORDINANCE NO. 317-A

AN ORDINANCE ENACTING THE PDD-1 (WALSH) ZONING ORDINANCE; RE-ZONING 5.9 ACRES OF REALTY AT 6784 SOUTH 1300 EAST TO PDD-1 (WALSH); AND AMENDING THE ZONING MAP

WHEREAS, the "Municipal Land Use, Development, and Management Act," UTAH CODE ANN. §10-9a-101 *et seq.*, as amended (the "*Act*"), provides that each municipality may enact a land use ordinance and a zoning map establishing regulations for land use and development; and

WHEREAS, pursuant to the Act, the municipality's planning commission shall prepare and recommend to the municipality's legislative body, following a public hearing, a proposed land use ordinance and a zoning map, or amendments thereto, that represents the planning commission's recommendations for zoning the area within the municipality; and

WHEREAS, the Act also provides certain procedures for the municipality's legislative body to adopt or amend the land use ordinance and zoning map for the City; and

WHEREAS, on 14 July 2005, the legislative body (the "*Council*") of the city of Cottonwood Heights (the "*City*") enacted its Ordinance No. 25 adopting a land use ordinance for the City; codifying such ordinance as Title 19 of the City's code of ordinances (the "*Code*"); and adopting a zoning map (the "*Zoning Map*") for the City; and

WHEREAS, thereafter, the Code was amended to include Chapter 19.51 (Planned Development District) ("*Chapter 19.51*") creating an overlay zone in the City whereunder each of the parcels of realty designated in Chapter 19.51 (each, an "*eligible parcel*") could be re-zoned to a unique "planned development" zone following development of a proposed customized zoning ordinance for each such parcel, recommendation by the City's planning commission (the "*Planning Commission*"), and approval by the Council, all as provided in Chapter 19.51, the balance of the Code, and the Act; and

WHEREAS, the approximately 5.9 acres parcel of realty located at approximately 6784 South 1300 East in the City (the "*Property*"), which currently is zoned R-1-8, is an eligible parcel for which a customized "planned development" zoning ordinance may be created and imposed on the Property as provided in Chapter 19.51; and

WHEREAS, following application by or on behalf of the owner of the Property, a customized "planned development" zoning ordinance (the "*PDD-1 Ordinance*") for the "PDD-1 (Walsh)" zone (the "*Zone*") was developed for possible enactment and imposition on the Property as provided in Chapter 19.51; and

WHEREAS, a public hearing was held before the Planning Commission where citizens were given the opportunity to provide written or oral comment concerning the proposed PDD-1 Ordinance and application of the Zone to the Property; and

WHEREAS, such public hearing before the Planning Commission was preceded by all required legal notices; and

WHEREAS, following the public hearing, the Planning Commission recommended that the Council deny enactment of the PDD-1 Ordinance and imposition of the Zone on the Property; and

WHEREAS, the Council subsequently took additional public comment concerning the PDD-1 Ordinance and application of the Zone to the Property; and

WHEREAS, the Council has reviewed and is familiar with the PDD-1 Ordinance, a copy of which is annexed as an exhibit to this ordinance, and has formulated various revisions to the PDD-1 Ordinance following its receipt from the Planning Commission as authorized by UTAH CODE ANN. 10-9a-502(2); and

WHEREAS, on 19 February 2019, the Council met in regular meeting to consider, among other things, enacting the PDD-1 Ordinance, as revised, and re-zoning the Property from R-1-8 to the PDD-1 (Walsh) Zone; and

WHEREAS, after careful consideration of the recommendations of the Planning Commission, comments at the public hearing and other public meetings, and other relevant input, the Council has determined that it is in the best interest of the health, safety and welfare of the citizens of the City to enact the PDD-1 Ordinance and to re-zone the Property from R-1-8 to the PDD-1 (Walsh) Zone as proposed;

NOW, THEREFORE, BE IT ORDAINED by the city council of the city of Cottonwood Heights as follows:

Section 1. ***Enactment and Re-zone***. The Council hereby enacts the PDD-1 Ordinance and re-zones the Property from R-1-8 to the PDD-1 (Walsh) Zone.

Section 2. ***Action of Officers***. All actions of the officers, agents and employees of the City that are in conformity with the purpose and intent of this Ordinance No. 317-A (this "*Ordinance*"), whether taken before or after the adoption hereof, are hereby ratified, confirmed and approved.

Section 3. ***Severability***. It is hereby declared that all parts of this Ordinance are severable, and if any section, paragraph, clause or provision of this Ordinance shall, for any reason, be held to be invalid or unenforceable, the invalidity or unenforceability of any such section, paragraph, clause or provision shall not affect the remaining sections, paragraphs, clauses or provisions of this Ordinance.

Section 4. ***Repealer***. All ordinances or parts thereof in conflict with this Ordinance are, to the extent of such conflict, hereby repealed.

Section 5. ***Effective Date***. This Ordinance, assigned no. 317-A, shall take immediate effect as soon as it shall be published or posted as required by law and deposited and recorded in the office of the City's Recorder, or such later date as may be required by Utah statute.

PASSED AND APPROVED this 19th day of February 2019.

ATTEST:

By: _____
Paula Melgar, Recorder

COTTONWOOD HEIGHTS CITY COUNCIL

By: _____
Michael J. Peterson, Mayor

VOTING:

Michael J. Peterson	Yea ✓	Nay ___
Michael L. Shelton	Yea ✓	Nay ___
J. Scott Bracken	Yea ✓	Nay ___
Tali C. Bruce	Yea ___	Nay ___ EXCUSED
Christine Watson Mikell	Yea ___	Nay ___ EXCUSED

DEPOSITED in the Recorder's office this 19th day of February 2019.

POSTED this 21 day of February 2019.

PDD-1 (WALSH) ZONE

A Planned Development District Under Cottonwood Heights Code Chapter 19.51

Section 1. Purpose.

The purpose of this ordinance (this "*ordinance*") is to create a zone (the "*PDD-1 zone*") allowing for the development of multi-family uses in an environment that reflects attention for architectural, landscaping and urban design principles. The PDD-1 zone is applicable only to the approximately 5.9 acre parcel of property (the "*site*") located at 6784 South 1300 East in the city of Cottonwood Heights (the "*city*"), as shown in Development Plan attached as Exhibit A (the "*Development Plan*") and in the official zoning records of the city. The area of the PDD-1 zone is adequately served by public streets, municipal services and public utilities of adequate capacity. The PDD-1 zone promotes the objectives set forth in Section 19.51.020 (Planned Development District; Goals and Objectives) of the Cottonwood Heights Code of Ordinances ("*Code*"); meets the requirements set forth in Code Section 19.51.020(E); and is a "PDZ ordinance" as that term is defined in Code Section 19.51.020(C). The PDD-1 zone is a Tier 2 Planned Development District project as described in Code Section 19.51.060.

Section 2. Findings.

Creation and adoption of the PDD-1 zone is based on, *inter alia*, the following findings by the city's city council (the "*Council*"):

A. Development in the PDD-1 zone will support existing retail and commercial business in and near the Fort Union Boulevard area. Development in the PDD-1 zone will include five live-work mixed-use units that are designed for remote work, home occupations, and/or small retail spaces. The development is within walking distance of more than ten UTA bus stops on two routes and many office and retail businesses.

B. The PDD-1 zone includes a mix of uses and provides for pedestrian orientation and accommodations for each of those uses. The live-work mixed-use units contain ground-level storefronts and are accessed via pedestrian walkways. The multi-family residential units have access to a variety of pedestrian amenities on the site, including pools, plazas, walkways, etc.

C. The PDD-1 zone is compatible with the city's general plan, as it provides a high-density residential land use compatible with the land use designation on the site and with most of the surrounding development.

D. Site features, uses, public amenities and aesthetic characteristics required in the PDD-1 zone encourage pedestrian activity within the site, and provide safe access to multi-modal transportation opportunities at a scale appropriate for the context of the site.

E. The PDD-1 zone properly integrates the physical characteristics of the site with the proposed development by preserving existing mature trees where possible and by improving the preservation of the natural waterway through the property. The building height, architectural massing, and spatial relationship of proposed structures is appropriate for the area, and the most buffering provisions have been proposed adjacent to the single-family subdivision.

F. With the recommended mitigations to the access road, the PDD-1 zone site is properly served by public streets and services. Issuance of a building permit is contingent upon implementation of traffic mitigation measures and formal approval by all applicable utility services. Such improvements will be subject to any applicable bonding requirements to ensure proper completion.

Section 3. Permitted uses.

A. Permitted uses in the PDD-1 zone are as follows:

1. Multi-family residential dwellings, in the quantity and location as shown in the Development Plan.

2. Live-work mixed-use units, in the quantity and location as shown in the Development Plan. Uses allowed in live-work units are as follows:

(a) Residential;
(b) Home office;
(c) Home occupation;
(d) Administrative/professional office; and
(e) Studio.

Provided, however, that a live-work mixed use unit may not be used solely for residential purposes. Instead, a business use of type (b), (c), (d) or (e) of this Section (A)(2) also shall be actively conducted in each live-work unit; any required business license shall be continuously maintained by the tenant for such business use; and the owner or manager of the project (the "*operator*") shall assure that such business use is continuously conducted in each live-work unit and quarterly shall provide written verification of such use to the city.

3. Home occupations, as defined by and in accordance with Code Section 19.76.040(F).

B. Uses not listed as permitted by this section shall be prohibited.

Section 4. Development requirements.

Property in the PDD-1 zone shall be developed in conformance with this ordinance, including the Development Plan attached as Exhibit A and incorporated herein by reference; the requirements of Code Chapter 19.51 (Planned Development District) ("*Chapter 19.51*"), including all applicable base Tier-2 regulations set forth in Table 1 of Chapter 19.51 attached as Exhibit B; the balance of the Code, including Title 12 (Subdivisions); all applicable APWA standards; the International Building Code; the International Fire Code; such other city standards as may be applicable to development in the PDD-1 zone as determined by the city's Development Review Committee; and the following additional standards:

A. *Height*. Buildings may contain up to four stories. Maximum building height shall be 50 feet measured from the grade plane as defined in the city's building code as provided in Code Section 19.51.060(B)(3) (the "*grade plane*"). Architectural appurtenances shall not be included in the 50-foot height limitation, but in no case shall any architectural appurtenance as shown on in the Development Plan exceed a maximum height of 54 feet from the grade plane. The maximum height for all accessory buildings shown in the Development Plan shall be twenty (20) feet, measured from the grade plane.

B. *Setbacks*. The setbacks for all buildings in the PDD-1 zone shall be as shown in the Development Plan, which shall comply with Code Section 19.51.060. The eastern boundary of the PDD-1 zone site shall be considered the front yard.

C. *Units*. The PDD-1 zone shall contain 204 total units, including multi-family residential units and live-work mixed-use units. No units shall be added to or removed from the PDD-1 zone without a Council-approved amendment to this ordinance and revision to the Development Plan.

D. *Coverage*. The maximum lot coverage for in the PDD-1 zone shall be 30% and shall be developed as depicted in the Development Plan.

E. *Lot dimensions*. The minimum lot dimensions shall be as shown in the Development Plan.

F. *Storefronts and access (retail and commercial areas)*. A minimum of 50% of the height and width of the ground-floor frontage or principal buildings shall consist of windows, window displays, doors, or a combination thereof. Such windows, window displays, or doors shall be provided between two and eight feet above grade adjacent to the principal building frontage.

G. *Parking*.

1. The PDD-1 zone shall include 370 parking stalls, at a parking ratio of 1.81 stalls per unit. 175 stalls shall be structured podium parking, 165 stalls shall be external surface stalls, and 30 stalls shall be external surface stalls covered by a carport structure. Stalls shall be configured as shown in the Development Plan. All required accessible parking stalls shall be designed in accordance with applicable building code standards.

2. Parking setbacks shall be a minimum 20' when abutting land is zoned or used for single-family residential.

H. *Amenities*. Amenities in the PDD-1 zone shall be as shown in the Development Plan and shall include the following:

1. Swimming pool;
2. Fitness center;
3. Clubhouse;
4. Fire pit;
5. Barbeque area;
6. Picnic areas;
7. Bicycle parking/storage areas; and
8. Common green areas.

I. *Pedestrian circulation*. Pedestrian circulation in the PDD-1 zone shall comply with the following requirements:

1. Sidewalks and pedestrian walkways shall be provided in accordance with a submitted pedestrian circulation plan approved as part of the PDD-1 zone.

2. Minimum requirements for public sidewalks in the PDD-1 zone include:

(a) Continuous sidewalks with a width of six feet shall be located along both sides of both collector and arterial public streets and both sides of internal private street(s);

(b) Sidewalk(s) along the private street(s) shall be located as shown on the Development Plan; and

(c) A six-foot wide pedestrian trail with an appropriate surface (such as asphalt, concrete or crushed stone) shall be located along Little Cottonwood Creek as shown on the Development Plan (the "*Creek Trail*"). The Creek Trail shall be improved and maintained at the operator's cost; shall be perpetually open to the public, allowing the public to traverse the site from one side to the other; and may in the future be included in a public trail system sponsored by the city. If requested by the city as part of a city-sponsored trail system involving trail improvements and a trail easement on either or both sides of the site, so long as one side connects to a trailhead or access point accessible to the general public, the then owner of the project shall grant a non-exclusive public trail easement to the city in the location of the Creek Trail, in which event the city shall assume responsibility for the trail

improvements and their maintenance. The form of such easement grant shall be one that is reasonably proposed by the city and reasonably acceptable to such owner.

3. Minimum requirements for private pedestrian walkways in the PDD-1 zone include:

(a) Hard-surfaced sidewalks with a minimum width of five feet;

(b) Readily visible sidewalks free of encroachment by parked vehicles;

(c) Paving consisting of concrete or other masonry materials differentiated from the driveway and parking areas through the use of color, texture, or materials;

(d) Shade provided by deciduous shade trees spaced at one per 30 linear feet of walkway or building canopy; and

(e) Lighting with pedestrian-scaled fixtures.

4. In order to create a safe pedestrian environment, multifamily residential buildings shall be placed and sited so that all required internal sidewalks are in view of at least one unit's living area windows;

5. Internal sidewalks parallel and adjacent to a street or drive aisle shall be raised or separated from the street or drive aisle by a raised curb, landscaping or other physical barrier. If a raised internal sidewalk is used, the ends of the raised portions must be equipped with curb ramps.

6. When adjacent to perpendicular, head-in, or diagonal parking, a pedestrian sidewalk must be increased to a width of seven feet when parking is located on one side, and a minimum width of nine feet when parking is located on both sides.

J. *Open space*. Open space shall be provided in the form of natural areas meriting preservation, landscaping, pedestrian plazas, atriums and/or other significant spaces open to the public. Public open space shall include the Creek Trail and such other portions of the project that are so-identified on the Development Plan. Vehicular circulation and parking shall not qualify as open space but are required to meet parking and landscaping requirements.

K. *Landscaping*. Prior to the use or occupancy of any premises in the PDD-1 zone, the following landscaping requirements shall be met:

1. Provide a total landscaped area equal to at least 25% of the gross land area in the PDD-1 zone. The landscaped area may be provided at ground level or on upper-level balconies, decks or roofs, or any combination thereof. At least 60% of the landscaped area shall be vegetated.

2. Provide a ground-level landscaped area equal to at least 15% of the gross land area in the PDD-1 zone.

3. For landscaped areas designed as buffers, setbacks or visual backdrops, 40% of the area shall be vegetated with a combination of groundcover, vines, shrubs, and trees. These areas must be at least eight feet wide.

4. For large paved pedestrian spaces such as courtyards or plazas, a 12-foot tall/two-inch caliper conifer or a 15-gallon/eight-foot tall deciduous tree shall be required for every 200 square feet of paved area. A 50% reduction in the number of trees in such areas may be permitted if at least 25% of the ground plane is vegetated with potted plants, vines, shrubs, or groundcover.

5. Landscaping shall be installed in accordance with the Development Plan. Care should be taken to preserve as many healthy mature trees as possible. Prior to development, a tree protection plan shall be submitted for approval by the city that identifies existing trees that can be saved. If trees cannot be saved, rationale shall be provided in the tree protection plan. The tree protection plan shall be (a) prepared by an arborist who is certified by the International Society of Arborists, and (b) subject to review and approval by the Community and Economic Development Director (the "*Director*").

6. Except as otherwise provided in this Subsection (L), all new deciduous trees shall have a minimum caliper size of two inches and all evergreen trees shall be planted at a minimum height of five (5) feet.

L. *Access*. Access to all development in the PDD-1 zone shall be constructed as depicted in the Development Plan.

M. *Fencing*. Fencing shall be constructed around the perimeter of the site. All fencing shall consist of vinyl fencing at a minimum height of six feet. When adjacent to land used or zoned for single-family residential use, the minimum fence height shall be increased to eight feet (and be of steel reinforced vinyl material) if fencing or a wall of that height does not exist at the time of building permit issuance.

N. *Stream corridor*. The Creek Trail and other improvements to the Little Cottonwood Creek corridor shall be constructed as shown in the Development Plan and shall be subject to approval by all applicable outside agencies (e.g. Salt Lake County Flood Control, etc.) prior to issuance of any building permit in the PDD-1 zone.

Section 5. Architectural standards.

Development in the PDD-1 zone shall include exterior building materials and architectural style in compliance with the Development Plan. The use of aluminum and vinyl siding shall be prohibited. Materials depicted in the Development Plan shall be allowed. The project in the PDD-1 zone (the "*project*") shall be constructed using best building practices as outlined by building agencies and the U.S. Green Building Council. No certification from such organizations shall be required. Prior to issuance of building permits, the applicant shall submit a written narrative demonstrating general compliance with standards and practices outlined by the U.S. Green Building Council, subject to review and approval by the Director.

Section 6. BMR units.

A. The provisions of this Section 6 shall control and supersede any contrary provisions concerning BMR units contained in Chapter 19.51.

B. For the purposes of this Subsection, the following definitions shall be used:

1. "*Affordable.*" Housing costs that are affordable to households earning not more than 50 percent of the AMI.

2. "*Area median income*" or "*AMI.*" As described in the city's affordable housing plan dated 25 April 2017 by GSBS Consulting (the "*Housing Plan*"), area median income is the annual median income of households within the city. AMI shall be updated annually using the most recent U.S. Census Bureau statistics for the area within the city, using the methodology used in the Housing Plan (pertinent excerpts of which are attached hereto as Exhibit C) or such other methodology as both the operator and the city approve in writing as an appropriate substitute protocol for determining the AMI. The operator shall reimburse all costs reasonably incurred by the city to engage experts to advise the city concerning such updates, so long as the City gives the operator reasonable prior written notice of its intent to so engage an expert.

3. "*Bedroom.*" A room designed to be used for sleeping purposes and which contains closet(s) and meets all applicable city building code requirements for light, ventilation, sanitation and egress.

4. "*BMR units.*" Dwelling units that are BMR units required by Chapter 19.51 and are deed restricted to the housing size and type for individuals meeting occupancy guidelines approved by the city.

5. "*Deed restriction.*" The recording, as an encumbrance on legal title to the realty in the PDD-1 zone, of this ordinance or a notice of this ordinance, as determined by the city.

6. "*Household.*" All related and unrelated individuals occupying a unit.

7. "*Market units.*" Dwelling units in the PP-1 zone that are not defined as BMR units and are subject to rental at full market rates.

8. "*Qualifying household.*" A household earning not more than 50% of the AMI.

C. Ten percent of the total number of dwelling units contained in the PDD-1 zone shall be BMR units. Consequently, based on the current Development Plan, 20 of the project's units shall be BMR units. BMR units shall be rented to qualifying households at a price which is affordable. The

maximum rent shall be adjusted annually in accordance with changes to the city's AMI. As applied to qualifying households, the lease term shall be one year, and shall be renewable at the tenant's option if tenant remains a qualifying household and has complied with other provisions of the lease.

D. BMR units developed in compliance with the requirements of this ordinance are not included in the density calculation for the project. Further:

1. BMR units shall be disbursed throughout all buildings in the PDD-1 zone, with one or more contained within each of the proposed buildings.

2. In order to assure livability, all BMR units shall be no smaller than the minimum gross square footages for the following unit types:

(a) Studio -- 500 sq. ft. minimum.

(b) 1-bedroom unit – 650 sq. ft. minimum.

(c) 2-bedroom unit – 900 sq. ft. minimum.

(d) 3-bedroom unit – 1,150 sq. ft. minimum.

3. The operator shall reasonably determine which units are BMR units, provided that each of the four unit types described in Subsection 6(D)(2) shall be included among the project's BMR units in the same proportion as each of such unit types is included among the project's market units unless otherwise agreed by the city in writing based on a competent, third-party market analysis.

E. BMR units may differ from the project's market units with regard to interior amenities and gross floor area, provided that:

1. Such differences are not apparent in the general exterior appearances of the project's dwelling units;

2. Such differences do not include insulation, windows, heating systems and other improvements related to the energy efficiency of the project's dwelling units; and

3. The square footage of the BMR units shall not be less than the minimums listed above.

F. All BMR units shall be constructed and made ready for occupancy on approximately the same schedule as the project's market units; provided that certificates of occupancy (whether temporary or permanent) for the last ten percent of the market units shall be withheld by the city until certificates of occupancy have been issued for all of the BMR units. If market units are to be developed in phases, all BMR units shall be developed proportionately. In the required schedule for phased development, details shall be included for all BMR units.

G. Prior to issuance of a building permit:

1. A deed restriction approved by the city shall be recorded in the office of the Salt Lake County Recorder against legal title to the site; and

2. The city shall have reasonably determined that, due to its senior priority against legal title to the project (achieved as a result of recording priority, subordination of senior lienholders, or similar), as evidenced by a title commitment provided at the operator's cost and issued by a licensed title insurer reasonably acceptable to the city, the deed restriction is not subject to being voided by foreclosure or other legal action.

H. The operator shall:

1. Use commercially reasonable efforts to advise the public of the existence and possible availability of the project's BMR units, including, without limitation, annually so informing public and quasi-public bodies in Salt Lake County which provide affordable housing counseling or similar services to qualifying household populations, such as the Housing Authority of the County of Salt Lake and Utah Community Action.

2. Maintain a list, and allow the city to maintain a list, of those who have indicated interest in renting a BMR unit in the project after the operator has verified each such person's status as a qualifying household under applicable AMI requirements.

3. Promptly contact the Director and such persons, based on their relative priority on such lists, when a BMR unit becomes available to rent.

4. Use all diligent, commercially reasonable efforts to endeavor to rent a vacant BRM unit to a qualifying household tenant before renting the vacant BMR unit to a non-qualifying household tenant, including holding such BMR unit available for at least 45 calendar days (the "*Hold Period*") while diligently seeking a qualifying household tenant.

(a) The Hold Period shall commence immediately upon the operator receiving notice from the tenant of a BMR unit indicating the tenant's intent to not renew the lease. The Hold Period shall not expire before the subject unit becomes vacant and ready for occupancy by a replacement tenant.

(b) If a qualifying household tenant is not located within the Hold Period, then the vacant BMR unit may be rented to a non-qualifying household tenant for a lease term not exceeding six months in duration, whereupon the BMR unit shall again be made available to qualifying household tenants for a new 45-day Hold Period before it may be rented to a non-qualifying household tenant as provided in this Section.

(c) Because the maximum lease term to a non-qualifying tenant is half the duration of the standard lease term to a qualifying tenant, it is anticipated that the rental of BMR units to non-qualifying tenants (in the absence of available qualifying tenants as provided in this Subsection 4) will result in more frequent "roll-over" of tenants in the BMR units, which in turn will necessitate more frequent readying of the BMR units for occupancy by replacement tenants. To provide a source of maintenance funds to the operator to repair any damage, clean carpets, etc. of a vacated BMR unit to ready it for occupancy by a replacement tenant, the rental for a BMR unit charged to a non-qualifying household tenant (who comes to occupy such unit as provided in this Subsection 4) may exceed the rental charged to a qualifying tenant, but only to the extent reasonably necessary to generate such maintenance funding for the BMR units after taking into account other sources of maintenance funding such as forfeited deposits from the prior tenant(s). The city shall be entitled to verify that such additional rental amounts are both reasonable and being used only to defray such increased maintenance costs (also called "direct unit turn costs") of the BMR units, and the operator shall cooperate in such verification process by providing a ledger of (i) the direct unit turn costs associated with the tenant replacement of BMR units if rented to non-qualifying households, and (ii) the increased rental amounts charged to such non-qualifying households occupying BMR units.

I. At the end of each calendar quarter, the operator shall file with the Director a written report in such form as the Director reasonably may require, including a log of the project's BMR units with details on rents charged, tenant qualifications and rental status of each BMR unit. The city shall be entitled to further verify compliance with this ordinance at any time or from time to time, and the operator shall cooperate in such verification process in all reasonable ways.

J. Future conversion of rental units to for-sale units shall require a Council-approved amendment to this ordinance, subject to all applicable city hearings and approvals.

Section 7. Outdoor lighting.

Outdoor lighting shall be located and installed as shown in the Development Plan. LED light sources shall be used for all outdoor lighting. All site lighting shall be designed to be full cut-off and shielded from adjacent residential land uses. Building lighting shall be designed to with no light distributed above the horizontal plane of the light source. All outdoor lighting except lighting needed for security (as identified in the Development Plan) shall be turned off between 10:00 p.m. and 7:00 a.m. each day. Outdoor lighting shall also comply with the following additional standards:

A. The light uniformity ratio of site lighting shall be 4:1 or greater in parking areas, excluding main building entrances.

B. Light pole structure height shall be measured from the finished parking lot surface to the highest point of the lighting structure, and shall not exceed a maximum height of 18 feet.

C. Where possible, the base of site lighting structures should be located within landscaping areas, in accordance with the Development Plan.

D. Wall-mounted lighting fixtures shall not be installed above 18 feet in height. Fixture styles and finishes shall compliment the architectural design and materials represented in the Development Plan.

E. Lighting located along pedestrian pathways or in activity centers shall not exceed 12 feet in height and shall be full-cut off.

Section 8. Signage.

In accordance with the Development Plan, development in the PDD-1 zone may include two monument signs. Each sign may be constructed to a maximum size of 32 square feet, measured in accordance with Code Chapter 19.82 (Signs). Interior directional signage shall be allowed as necessary. A wall sign may be constructed on the first story of any of the five designated live-work mixed-use units. Two additional wall signs shall be permitted as project identification signs, one of which shall be allowed on Building A facing East, and the other of which shall be allowed on Building C facing West. A maximum of seven wall signs, as identified in this Section, shall be allowed for the entire project. The size and specifications of each wall sign shall comply with Code Chapter 19.82.

Section 9. Reversionary clause.

If a building permit is not issued for the principal improvements to be constructed in the PDD-1 zone within three years after the effective date of this ordinance, this ordinance shall be deemed retroactively repealed and the subject property shall revert back to its zoning designation in effect immediately prior to the passage of this ordinance (or the equivalent of such zoning designation that is in existence on the date of such reversion), subject to all applicable city processes for repealing ordinances and modifying zoning designations. A one-year extension may be granted by the Director provided that the extension is applied for at least 60 days prior to the third anniversary of the effective date of this ordinance.

Section 10. Contrary law.

This ordinance is subject to any contrary federal or Utah state law.

EXHIBIT "A"
TO PDD-1 (WALSH) ORDINANCE

EXHIBIT "B"
TO PDD-1 (WALSH) ORDINANCE

Table 1: Site Development Regulations – Planned Development Districts

Standards	Tier 1	Tier 2	Tier 3	Additional Regulations
Area Requirement (in contiguous acres)	10	3	1*	(B)(1)
Lot Coverage	No Min. or Max.	65%	65%	(B)(2)
Building Height				
Minimum Bldg. Height (ft.)	25'	No Minimum	No Minimum	
Maximum Bldg. Height (ft.)	Varies from 50'-300' from Wasatch Blvd. elevation	50'	35'*	(B)(3)

Table 1: Site Development Regulations – Planned Development Districts

Standards	Tier 1	Tier 2	Tier 3	Additional Regulations
Min Bldg. Setback (ft.)				(B)(4)
Front	0	0	0	
Side (Street)	0	0	0	
Side (Residential)	50' from adjacent residential properties outside project area	Same as adjacent residential zone	Same as adjacent residential zone	
Side (Nonresidential)	0	0	0	
Rear (Residential)	50' from adjacent residential properties outside project area	Same as adjacent residential zone	Same as adjacent residential zone	
Rear (Nonresidential)	0	0	0	
Storefronts & Access	Yes	Yes	Yes	(B)(5)
Building Transparency	Yes	Yes	Yes	(B)(6)

Open Space	25%* gross lot area	15% gross lot area	15% gross lot area	(B)(7)
Landscape				(B)(8)
Off-Street Parking and Loading	The development plan may require the provision of a minimum number of on-site parking and loading spaces.			(B)(9)
Parking setback				
Pedestrian Circulation	Yes	Yes	Yes	(B)(10)
Signage	Master sign program required			(B)(11)
Below Market Rate (BMR)/ Senior/ Disabled Housing	10% of total residential for projects with 50 or more units	10% of total residential for projects with 25 or more units	10% of total residential for projects with 25 or more units	(B)(12)
Exterior Lighting Standards	Yes	Yes	Yes	(B)(13)
Residential Density - Dwelling Units / Acre	Based on IBC/IRC Occupancy	35 dwelling units/acre	20 dwelling units/acre	

EXHIBIT "C"
TO PDD-1 (WALSH) ORDINANCE

Executive Summary

Cottonwood Heights City requested GSBS Consulting update the City's 2005 Affordable Housing Plan in compliance with the requirements of Utah Code Annotated 1-91-408. The update used the Utah Affordable Housing Forecast Tool developed by the State of Utah to complete the analysis of current and projected need. Housing affordability is defined as housing the costs no more than 30 percent of the household's annual income.

Cottonwood Heights continues to meet the statutory minimum requirement

> *That there currently exists a reasonable opportunity for individuals of moderate (80% AMI) income to obtain affordable, quality housing in Cottonwood Heights.*

However, households in and below the ≤ 30% - ≤ 50% AMI band experience a significant deficit of available housing in Cottonwood Heights. These households make no more than $40,000 annually and an affordable monthly rent/mortgage payment is no more than $998. This group makes up 12 percent of all households in Cottonwood heights.

The City also has a high rate of cost-constrained and severely cost-constrained households. Cost constrained households pay more than 30 percent of their household income for housing costs. Severely cost constrained households pay more than 50 percent of their household income for housing costs. These households are at a higher risk to lose their housing.

The plan recommends that Cottonwood Heights focus affordable housing policies and activities on increasing the number of units affordable to households making 50 percent AMI or lower as well as maintaining access to units affordable to households making between 50 and 80 percent AMI. Specifically, the plan recommends that the City:

1. Update the provisions and requirements of the density bonus included in the PDD ordinance to create set-asides at particular income levels rather than just 80 percent AMI and below.
2. Identify areas of the City where additional, infill units may be appropriate.
3. Create an accessory dwelling unit provision to allow the additional of units within existing structures.
4. Work with other jurisdictions to create funding sources for extremely-low income housing units where appropriate.

GSBS CONSULTING

Section 3 UAHFT Results

UAHFT Model

Appendix A is the list of Cottonwood Heights "inputs" to the housing needs forecasting model created by the State of Utah. The inputs focus on two basic categories:

- Housing stock
- Households

Within each of the categories the model identifies the number of housing units and the number of households in Cottonwood Heights by affordability "band". An affordability band is price points that are affordable to households making a certain amount of money. In the analysis, the bands are:

- less than 30 percent of area median income (AMI),
- between 30-50 percent of AMI,
- between 50-80 percent of AMI,
- between 80-100 percent of AMI and
- over 100 percent of AMI.

AMI is the median income of all households in the City. The Cottonwood Heights 2015 median household income was $79,823. This is the most current data available.

The model then estimates how many households in Cottonwood Heights fall into the various income "bands" relative to the median household income.

Using the two estimates, the model then calculates the "gap" or surplus in each "band" to identify the availability of housing units to households at a range of income levels.

Cottonwood Heights Results

Housing Stock

Cottonwood Heights has 13,387 dwelling units[1]. Of these, 93 percent are occupied. Figure 3-1 summarizes the City's housing stock by renter or owner-occupied and value or rent.

[1] 2011-2015 American Community Survey 5-Year Estimates

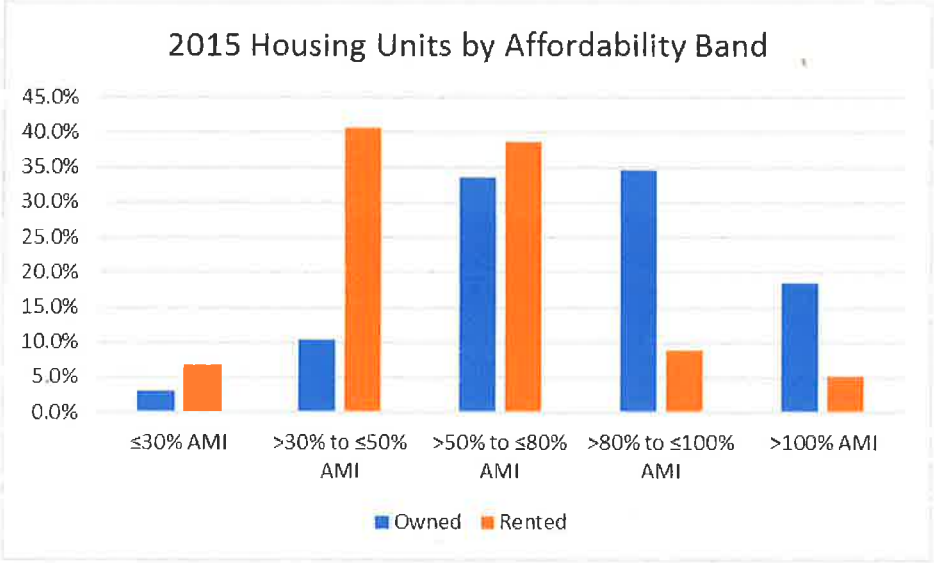


Figure 3-1 2015 Housing Stock

Cottonwood Heights owned housing units range in value from less than $50,000 (178 units) to greater than $1,000,000 (131 units). More than 68 percent of the City's owned units are affordable to households making between approximately $40,000 and $80,000 annually.

Almost 80 percent of the City's rented units are affordable to households making between approximately $24,000 and $64,000 annually.

Households

The median household income in Cottonwood Heights is almost $80,000.[2] Of these, almost 63 percent have household incomes greater than the median. Table 3-2 is the distribution of households in the City by income band.

[2] 2011-2015 American Community Survey 5-Year Estimates

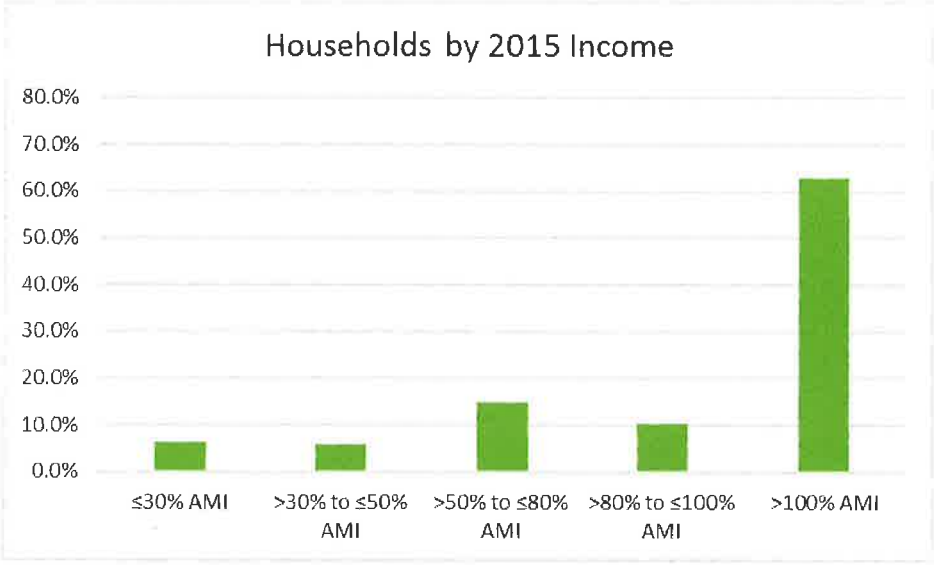


Figure 3-2 2015 Household Incomes

Affordability

The U.S. Housing and Urban Development definition of housing affordability is housing-related expenses[3] that area 30 percent of your gross household income or less. If your housing-related costs are more than 30 percent of your gross income your household is considered "cost-burdened". If your housing-related costs are more than 50 percent of your gross income your household is considered "severely cost-burdened." In Cottonwood Heights housing-related expenses affordable to the various income bands are estimated in Table 3-1.

[3] Housing-related expenses include all costs of housing (e.g. rent/mortgage payment, utilities, HOA fees)

Table 3-1: Affordable Housing-Related Costs

	Maximum Affordable Cost *	Maximum Mortgage Loan **
≤30% AMI	$599	$79,752
>30% to ≤50% AMI	$998	$160,386
>50% to ≤80% AMI	$1,596	$281,336
>80% to ≤100% AMI	$1,996	$361,970

** Includes rent/mortgage payment + related costs*

*** Includes mortgage insurance cost*

In Cottonwood Heights in 2015, 15 percent of all households in the City were cost burdened. Of the cost-burdened households, 58 percent were renting and 42 percent paid mortgages. Figure 3-3 identifies the cost burdened status of households in the City with incomes at 80 percent AMI or lower (approximately $64,000 annually.)

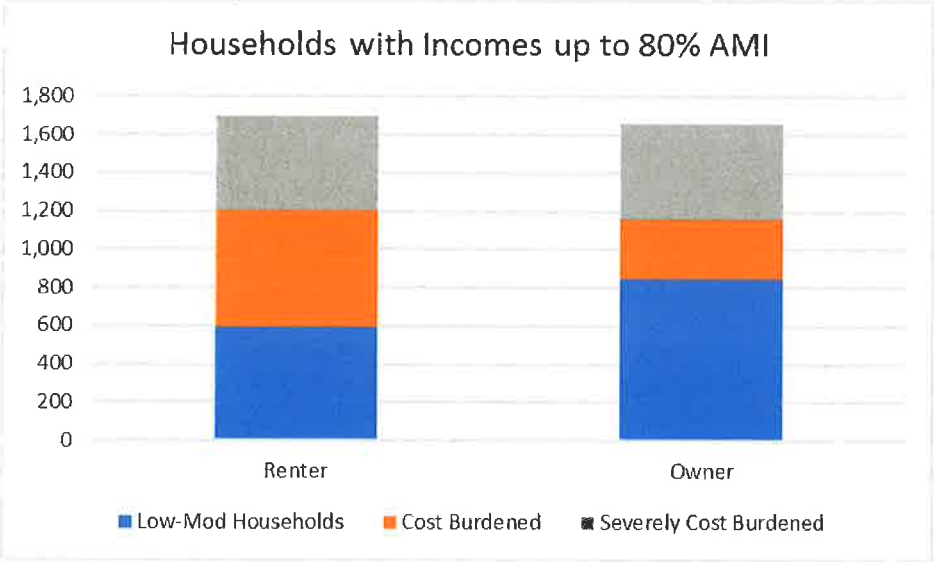


Figure 3-3 Low-Mod Households 2015

Cost-burdened renter households represent 65 percent of all low-mod renter households, 31 percent of all renter households and 9 percent of all households in Cottonwood Heights. Cost-burdened owner households represent 49 percent of all low-mod owner households, 9 percent of all owner households and 7 percent of all households in the City. Table 3-2 identifies the income levels of the various cost-burdened renter households.

Table 3-2: Cost-Burdened Status Low-Mod Renter Households

	Households in Category	Cost Burdened Households	Severely Cost Burdened Households	% At Risk
≤30% AMI	440	380	365	86%
>30% to ≤50% AMI	415	350	90	84%
>50% to ≤80% AMI	845	380	40	45%
Total Low-Mod	1,700	1,110	495	65%

Households paying more than 30 percent of their annual income for housing costs are considered at risk for losing their housing. In the case of Cottonwood Heights, of the cost-burdened renter households, 86 percent of households making $24,000 or less annually are at risk. Of those, 96 percent pay 50 percent or more of their annual income for housing putting them at significantly higher risk. For renter households making between $24,000 and $32,000 annually, 84 percent are at risk. Of those, 26 percent pay 50 percent or more of their income for housing.

Table 3-3 identified the income level of the various cost burdened owner households.

Table 3-3: Cost-Burdened Status Low-Mod Owner Households

	Households in Category	Cost Burdened Households	Severely Cost Burdened Households	% At Risk
≤30% AMI	350	245	215	70%
>30% to ≤50% AMI	295	145	120	49%
>50% to ≤80% AMI	1,015	425	170	42%
Total Low-Mod	1,660	815	505	49%

Of the cost-burdened owner households, 70 percent of households making $24,000 or less annually are at risk. Of those, 88 percent pay 50 percent or more of their annual income for housing putting them at significantly higher risk. For owner households making between $24,000 and $32,000 annually, 49 percent are at risk. Of those, 83 percent pay 50 percent or more of their income for housing.

Housing Availability

Table 3-4 is a comparison of the number of housing units and the number of households in Cottonwood Heights by income band. According to this table, the City has a housing gap in the lowest and highest income bands. However, the household data indicates that a significant number of households making $64,000 or less annually are in housing units that are not considered affordable for their income level.

Table 3-4: Housing Units/Households by Income Band

Income Band	Housing Units	Households	Housing Surplus/ (Gap)
≤30% AMI	505	790	(285)
>30% to ≤50% AMI	2,363	710	1,653
>50% to ≤80% AMI	4,381	1,860	2,521
>80% to ≤100% AMI	3,409	1,275	2,134
>100% AMI	1,835	7,858	(6,023)

Housing affordability occurs on a spectrum. Households don't, in reality, acquire housing based strictly on their "affordability band." What this means is that when a household in the ≤ 30% AMI band "stretches"[4] for housing they are actually occupying a unit in the > 30% to ≤ 50% AMI band. To the extent that the number of units in that band are inadequate households in the > 30% to ≤ 50% AMI band may then have to stretch to the > 50% to ≤ 80% band and so on. This effect also works in reverse.

Figure 3-4 illustrates the deficit of affordable AND available housing by income band in Cottonwood Heights.

[4] 79 percent of all Cottonwood Heights households in this band.

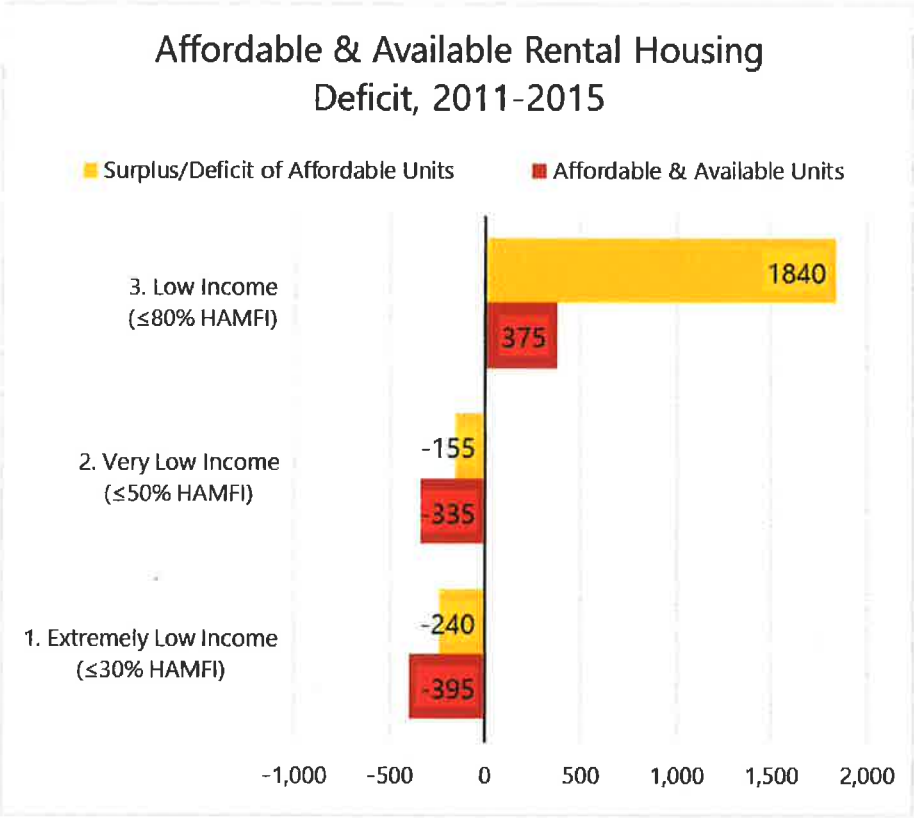


Figure 3-4 Affordable & Available Housing Deficit 2015

According to the UAHFT Model, there is a surplus of affordable and available units at the 80 percent AMI level but significant deficits at the lower income levels. This is reinforced by the number of households paying more for their rent than is considered affordable.

Although the UAHFT Model does not compute a similar number for owned housing, the presence of cost-burdened and severely cost-burdened households in the owned housing category indicates a similar deficit of available and affordable housing.

Future Growth

Cottonwood Heights is projected to grow by more than 5,800 people by 2040. At the City's average household size of 2.74 persons per household, an additional approximately 2,100 housing units will be needed. If the current distribution of household incomes is assumed, the housing deficit in the extremely low income category will increase. Figure 3-5 illustrates the projected deficit by income band based on Governor's Office of Management & Budget population projections for 2020, 2030, 2040 and 2050.

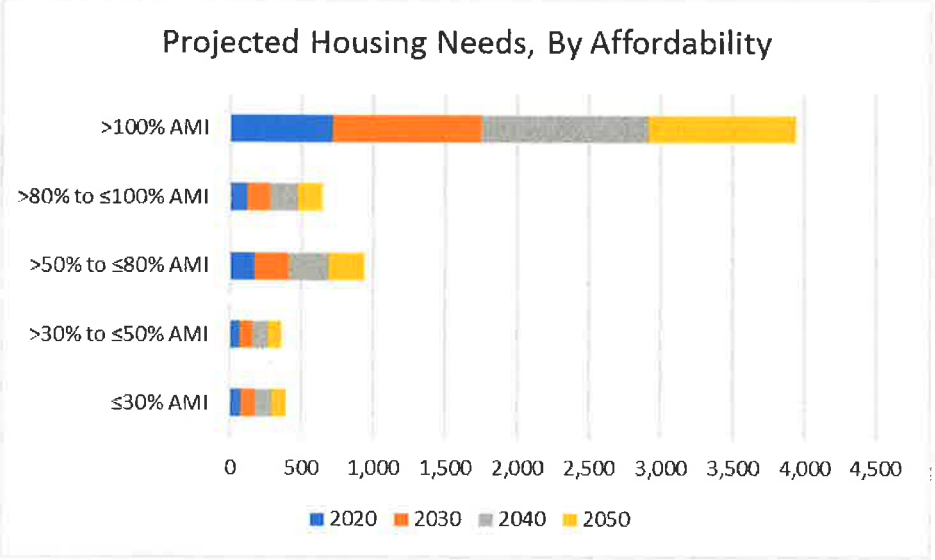


Figure 3-5 Projected Housing Needs 2020-2050

If the additional housing units are not added, Cottonwood Heights deficit will continue to increase.

APPENDIX A - METHODOLOGY

GSBS utilized the Utah Affordable Housing Forecast Tool development by the Housing & Community Development Division of the State of Utah to standardize the methodology used by local jurisdictions to evaluate the availability of affordable housing in their communities. The Tool also allows the community to assess the level to which households in their community may by cost-burdened or severely cost-burdened to estimate the risk of loss of housing to households in their area.

The Tool uses five primary data sources:

- HUD-calculated Area Median Income for Cottonwood Heights
- 2010 US Census
- 2015 5-Year American Community Survey (ACS)
- 2013 Community Housing Affordability Strategy (CHAS)
- 2015 Governor's Office of Management & Budget (GOMB) population projections

The model calculates the maximum monthly rent and mortgage payment considered affordable for each income level in the City. The model then calculates the number of units affordable to each income level in the community. The two results are then compared to identify any gaps in housing in Cottonwood Heights by affordability level.

GSBS then reviews and verifies the results of the Tool by:

- Comparing the number of units and values to Salt Lake County Assessors Data, and
- Reviewing new units added to the community based on building permit data.

The results are then reviewed and verified with local Planning Staff.

Planned Development District (PDD)

Application Number

Community & Economic Development | 2277 East Bengal Boulevard | 801-944-7000 | www.ch.utah.gov

Property Address	6784 South 1300 East
Project Description	Multi Family / Live-Work Development (Mixed-use)
Property Owner	William M. - Alice O Walsh Family Limited Partnership
Property Owner Name	William M. - Alice O Walsh Family Limited Partnership
Property Owner Mailing Address	6784 South 1300 East, Cottonwood Heights, UT 84121
Applicant (if different from owner)	ICO Multi-Family Holdings, LLC
Applicant Phone	(801) 747-7000
Applicant Mailing Address	3401 N Center Street #300, Lehi, Utah 84043
Applicant Email	Kklongson@gmail.com
Zoning Designation	PD
Overlay Zoning	PDD
Application Date	5/9/18
Fee Paid	$5,820.00
Owner / Applicant Signature	Robert W. Walsh

(3) copies 24"x36" and a digital copy with PDFs of all plans must be submitted. During the pre-application meeting a staff planner will identify which items are required for submittal. Please note that ALL items check will be required at the time of formal submittal. An application will not be considered complete until all checked items are submitted in an acceptable manner.

PDD ZONING - NARRATIVE AND DEVELOPMENT PLAN

DATE: **19 FEB 2019**

PROJECT: **RESIDENCES AT WALSH PROPERTY**

LAND AREA: **5.9 ACRES**

DEVELOPER: **ICO DEVELOPMENT**

The Residences at the WALSH Property is located at approximately 1200 East and 6750 South in the northwest corner of Cottonwood Heights in just east of the Interstate 215 westbound on-ramp. It consists of approximately 5.9 acres. The intended land use for the entire site is proposed as Class "A" apartments in a multi-family residential and mixed-use development of 204 total units.

ARCHITECTURAL SITE PLAN: (See sheet A1.1)

The site has been configured with three (3) individual detached buildings labeled Buildings "A" through "C". Building A is the east building with 72 units. Building B is the middle building with 87 units. Building C is west of the creek and has 45 units.

All buildings are 4-stories high, with the roof bearing at 42 ft above finish floor, with top of parapet varying between 46 and 50 ft with architectural tower element up to 54 ft. Each building has on-grade parking under each building with a concrete podium structure with wood framing of units above.

The main entry is off of 6720 South Street coming west off of 1300 East. This entry is proposed to be a gated wrought iron entry gate with associated knox-box for the fire department access. Fencing is proposed around the property with wrought iron or vinyl solid fencing.

The buildings have been placed at the north property adjacent to the apartment complex to the north, keeping a buffer of parking, landscape and courtyard open space to the south away from the single-family housing neighbors to the south. The building wings closest to the south property are 72 feet away from the property line, with three-quarters of the building elevations recessed back in south-facing terrace amenity areas with these facades an additional 60 ft back or 134 ft setback from the south property line.

The south property line bordering the single family homes has a 20 ft setback from the nearest parking places and is proposed to be aligned with heavily landscaped trees and vertical visual green screening as well (see landscape plan).

Setbacks include a 30 ft utility easement along the west property with UDOT, a minimum 10 ft at all other property lines (north, east and south). Setbacks of open space from Little Cottonwood Creek are proposed at 20 ft back each side from the top of creek bank.

Monument signage at the main entry gate and an additional vertical element sign along the west property (to be seen from the I-215 on-ramp) are proposed. Interior directional signage shall be allowed as necessary. A wall sign may be constructed on the first story of any of the five designated live-work mixed-use units. Two additional wall signs shall be permitted as project identification signs, one of which shall be allowed on Building A facing East, and the other of which shall be allowed on Building C facing West. A maximum of seven wall signs, as identified in this Section, shall be allowed for the entire project. The size and specifications of each wall sign shall comply with Code Chapter 19.82.

A bridge is proposed with a crossing at one point across Little Cottonwood Creek with access to the west portion of the site.

The **building lot coverage** (footprint of buildings) is as follows:

- Building A: 26,908 s.f.
- Building B: 28,322 s.f.
- Building C: 18,056 s.f.
- Total lot coverage: **73,286 s.f. (1.68 acres)**

This building coverage amounts to 28.3% of the overall site.

SITE PLAN – TRAFFIC CIRCULATION: (See sheet A1.2)

This property is extremely isolated with very limited public street access. In fact, the only street frontage is the street width at the northeast corner of the property. This entry will be gated with an ornamental wrought-iron gate with fob electronic entry system and knox-box key for the fire department access.

An emergency vehicle turn-around is proposed at the southwest end of the project to provide the ability for a fire vehicle to turn around without backing out as agreed with the city fire marshal. The access through the site will be 26 ft wide with radii meeting fire department vehicular access requirements.

There is a bridge that is proposed to cross the creek with a design to meet 7,500 pound requirements and with bottom of bridge to be 3 feet above the 100 year flood storm. This is addressed on the civil plans. This bridge also will be designed to meet emergency vehicle requirements.

There is no other public access for vehicles other than from the main entrance. Traffic will circulate through surface parking lots and have circulation access to each parking structure at the main level of each building.

SITE PLAN – PEDESTRIAN CIRCULATION: (See sheet A1.3)

The pedestrian circulation is shown on the Pedestrian Circulation plan with sidewalk access from the gated main entry through the site to each building entry, club house, amenities, and the live-work units.

The pedestrian circulation is proposed to be accessible meeting ADA requirements for building and amenity access throughout the site, along with vehicular access meeting accessibility requirements.

The sidewalks connect from the main entry to each terrace courtyard, across the bridge all the way to the picnic pavilions along the creek and to the basketball court to the west.

The sidewalks are also provided to have direct access – on-grade entry to the five (5) live-work units. See the site plan for these locations, and see the building plans for the live-work units located in the northwest and northeast corners of Buildings A, B and C.

Bikes and bike racks will be provided at each terrace courtyard with bike storage in each building at the parking structure level. A bike wash and bike lockers will also be included as part of the amenity package for the tenants.

A six-foot wide pedestrian trail with an appropriate surface (such as asphalt, concrete or crushed stone) shall be located along Little Cottonwood Creek as shown on the Development Plan (the "Creek Trail").

SITE PLAN – PARKING CIRCULATION: (See sheet A1.4)

The parking is shown on the Parking Site Plan. There are two (2) main types of parking shown with surface parking along the main road through the site, and parking within the structure of each building at the main level.

There are (194) stalls provided on surface parking and (175) structured stalls within and under each building. The total parking provided of (369) stalls provides 1.8 stalls per unit. This ratio historically works for the unit mix provided.

The structured parking totals 47.4% of the total parking. Covered canopy parking is proposed as shown to provide approximately (1) covered stall per unit, be it covered or structured stalls – (24) canopy stalls.

Accessible parking will be provided at each building and at each amenity area.

SITE PLAN – OPEN SPACE: (See sheet A1.5)

The open space and associated calculation is shown on the Open Space Site Plan. This open space includes the amenity courtyards with swimming pool and hot tub, the green space picnic areas, open space common green with paths along Little Cottonwood Creek.

Common private open space totals 98,888 s.f. or 2.27 acres. Non-common private open space (balconies) totals 0.28 acres. Combined open space totals 2.55 acres or approximately 43.1% of the total site (non-building and non-parking).

The Creek Trail: If requested by the city as part of a city-sponsored trail system involving trail improvements and a trail easement on either or both sides of the site, so long as one side connects to a trailhead or access point accessible to the general public, the then owner of the project shall grant a non-exclusive public trail easement to the city in the location of the Creek Trail, in which event the city shall assume responsibility for the trail improvements and their maintenance. The form of such easement grant shall be one that is reasonably proposed by the city and reasonably acceptable to such owner.

SITE PLAN – AMENITIES: (See sheet A1.6)

The amenities are shown on the Site Amenity Plan.

It is proposed to have a 2-story Community Center element incorporated into the southeast end wing of Building A. This community center / club house will include the following functions:

1. Entry Lounge with large -2story vaults and fireplace element
2. Management offices
3. Leasing offices
4. Community Center Room w/ serving kitchen and pool table game room area
5. Internet Café
6. Large Fitness Center
7. Conference Room / Meeting Room
8. Multi-purpose room / small theater
9. Community restrooms with showers
10. Common mail center

Outdoor amenities associated with the Community Center and on site include:

1. Large swimming pool
2. Sun Deck
3. Double diamond hot tub / spa
4. Fire pit with outdoor seating
5. Barbecue pavilion at the pool area
6. A picnic pavilion along the Little Cottonwood Creek open space common green area.
7. Creekside Park with The Creek Trail along Little Cottonwood Creek
8. Dog Park
9. Dog Wash
10. Bike Storage

SITE PLAN – PHOTOMETRICS: (See sheet E1.1)

The site lighting is proposed to be mostly done with the use of down-lights off of the building in wall sconces. Fixtures proposed are LED and are attached at the end of this narrative.

The lighting photometrics have been engineered meeting the code-conforming low-light requirements of the electrical code. See the attached Site Photometric Plan.

ARCHITECTURAL FLOOR PLANS AND ELEVATIONS (See sheets A2.1-A2.5, A3.1-A3.2, A4.1-A4.2)

The architectural building plans and elevations are included in the attached exhibits. Building floor plans include the main level that show the parking structured level as well as the corner live-work units of 1,000 s.f. on the main floor each with a 3-story unit above.

The buildings are 4-stories with 3-stories of wood construction of apartment units on a 12 ft high main level concrete podium structure with brick veneer and articulated façade wrapping the parking structure as a base to the buildings without ever seeing the parking structure.

The materials proposed are conceptual but are showing a character of richness of "contemporary rustic" articulation of cement board siding (using vertical, horizontal and flat panel elements) and some stucco high on the facades with a brick base around the perimeter.

The live-work units will have more than 50% glazing of the main level façade with on-grade pedestrian access directly to these units. See the east elevation of Building A on sheet A2.5.

Buildings A and B have a "U" or "C" shape that allow for terraces and south light to reach most units. This articulation of massing keeps from a straight façade facing the neighbors to the south, but instead an undulation of massing. Building C is linear with frontage on the creek.

A variety of earth tone and accent colors are proposed to articulate the facades as well.

There are proposed mostly flat roof elements with parapets keeping the height of the buildings down, but with some corner tower elements with a standing seam pyramidal element.

Balconies will be provided for each unit and will have opaque aluminum railings with cantilevered structures.

See the elevations on sheet A2.3, A2.4, and A2.5.

CHARACTER SKETCHES (See sheets A2.1-A2.5, A3.1-A3.2, A4.1-A4.2)

The unit mix is a combination of studio, 1-bed, 2-bed, 3-bed, and up to 3-bed live-work units. See the building plans for the unit mix of each building. See attached also at the end of this narrative the unit mix tabulation of the project as a whole.

Each unit shall be incorporated with the following design features:

1. 9 ft ceilings throughout with 10 ft ceilings at the top floor.
2. Walk-in closets
3. Built-in pantries
4. Larger bedrooms with an emphasis on double-master suites in the 2-bed and 3-bed unit types.
5. Hard surface entries
6. Luxury vinyl plank flooring
7. Granite countertops
8. Washer / Dryer in each unit
9. Vaulted ceilings at living spaces at all upper level units
10. Spacious balconies at each unit.

Each building will have central corridors with climate control and interior finishes. The corridors are provided with elevators with access from parking to each level.

BELOW MARKET RATE UNITS

The community shall include 20 units that will be Below Market Rate ("BMR") units. These shall be made available according to the terms and conditions set forth in Section 6. BMR Units. in PDD-1 (Walsh Zone).

MASSING (See sheet EX-01)

NOTE: See the massing diagrams and site sections of 3D images of the massing only. See sheet EX-01.

UTILITIES (See sheet C1.01)

See the Civil Site plan for the utilities, grading, and street improvements. Fire lines and water lines shall loop through the project with fire hydrants at each building to meet fire marshal requirements with FDC connection points and fire risers at each stairwell.

The Civil Site plan includes the concept design of the storm detention, sanitary sewer, water, fire line, gas, and power utilities.

Letters of service availability from each utility have been requested and will be provided to the city upon receipt. It is not anticipated to have any problem with utilities providing the needed services.

Gas and water demand studies have been shown below:

WALSH PROPERTY - 204 UNITS
ANTICIPATED WATER USE CALCULATIONS*

DESIGN CONDITIONS

CITY:	COTTONWOOD HEIGHTS	
WATER PRESSURE	60	psi MIN. (VERIFY)
DEVELOPED PIPE LENGTH	2,000	FEET MAXIMUM (VERIFY)
FIXTURE UNITS	2,093	SFU MAXIMUM
WATER USAGE	5900	GALLON PER DAY
PEAK WATER USAGE	285	GALLONS PER MINUTE

ANTICIPATED WATER USE CALULATIONS ARE BASED ON:
131 - ONE BATH UNITS, 73 - 2 BATH UNTS,
ESTIMATED OCCUPANCY OF 590 PEOPLE

*The community will be constructed with low-water use pluming fixtures exceeding code minimums.

** Based on this calculation the community's water usage will total 21 million gallons over 10 years.

WALSH BUILDING A - 72 UNITS
ANTICIPATED WATER USE CALCULATIONS

DESIGN CONDITIONS

CITY:	COTTONWOOD HEIGHTS	
WATER PRESSURE	60	psi MIN. (VERIFY)
DEVELOPED PIPE LENGTH	400	FEET MAXIMUM (VERIFY)
FIXTURE UNITS	540	SFU MAXIMUM
WATER USAGE	2000	GALLON PER DAY
PEAK WATER USAGE	79	GALLONS PER MINUTE

540 FIXTURE UNITS REQUIRES A:
2" METER AND A 3" DIAMETER DISTRIBUTION LINE

ANTICIPATED WATER USE CALULATIONS ARE BASED ON:
50 ONE BATH UNITS, 22 TWO BATH UNTS, ESTIMATED OCCUPANCY OF 200 PEOPLE

WALSH BUILDING B - 87 UNITS
ANTICIPATED WATER USE CALCULATIONS

DESIGN CONDITIONS

CITY:	COTTONWOOD HEIGHTS	
WATER PRESSURE	60	psi MIN. (VERIFY)
DEVELOPED PIPE LENGTH	400	FEET MAXIMUM (VERIFY)
FIXTURE UNITS	982	SFU MAXIMUM
WATER USAGE	2340	GALLON PER DAY
PEAK WATER USAGE	123	GALLONS PER MINUTE

936 FIXTURE UNITS REQUIRES A:
3" METER AND A 3" DIAMETER DISTRIBUTION LINE

ANTICIPATED WATER USE CALULATIONS ARE BASED ON:
63 ONE BATH UNITS, 24 TWO BATH UNTS, ESTIMATED OCCUPANCY OF 234 PEOPLE

WALSH BUILDING C – 45 UNITS
ANTICIPATED WATER USE CALCULATIONS

DESIGN CONDITIONS

CITY:	COTTONWOOD HEIGHTS	
WATER PRESSURE	60	psi MIN. (VERIFY)
DEVELOPED PIPE LENGTH	400	FEET MAXIMUM (VERIFY)
FIXTURE UNITS	571	SFU MAXIMUM
WATER USAGE	1560	GALLON PER DAY
PEAK WATER USAGE	83	GALLONS PER MINUTE

571 FIXTURE UNITS REQUIRES A:
2" METER AND A 3" DIAMETER DISTRIBUTION LINE

ANTICIPATED WATER USE CALULATIONS ARE BASED ON:
36 ONE BATH UNITS, 27 TWO BATH UNTS, ESTIMATED OCCUPANCY OF 156 PEOPLE

INFRASTRUCTURE (See sheet C1.01)

The Infrastructure is limited off site to the entry connection at the main entry and to looping the water line and utility lines from adjacent properties. No other public infrastructure is required.

SENSITIVE LAND PLAN (See sheet C1.01)

The Sensitive land designation is shown shaded on the Civil Site plan, including the Little Cottonwood Creek area with a setback of 20 ft each side of the high bank of the creek. Creek improvements shall include the creek bed being lined with rip rap stones and bridged by a decorated precast structure. Additionally, the bridge will feature an access ramp to the creek that will provide county flood control authorities improved maintenance access to the creek channel. The creek area shall be reconstructed per all required country flood control measures.

LANDSCAPE PLANTING PLAN (See sheet L0.01)

The landscape planting plan has been included in this proposal with perimeter plantings and tree screening as well as sensitive land preservation and creek side maintenance shown. See the attached colored illustrative site plan with proposed landscape plantings, schedules, and design shown.

GREEN BUILD

Principles of Sustainability for this project are proposed to include:

1. Conserve energy short term and explore renewable energy sources long term
2. Facilitate reuse and recycling of natural resources and synthetic materials.
3. Design sites, structures and landscapes that are resource efficient and environmentally responsible over their entire life cycle.
4. Practice eco-friendly maintenance and cleaning.
5. Optimize fuel efficiency of and minimize pollutants.
6. Use high efficient, low-toxin materials, supplies and equipment that are produced and transported responsibly.

This project is proposed to have an emphasis on sustainability, including:

1. Efficient site design with mixed-use component and density supporting sustainability principles.
2. Meeting or exceeding Energy Conservation Codes including the 2015 International Energy Conservation Code.
3. Implementing tight exterior envelopes and efficient mechanical systems with insulation, caulking and sealing methods meeting or exceeding HERS ratings of Energy Star compliance.
4. Installing full-cavity insulation in roof elements that exceed code minimums.
5. Installing high energy efficient kitchen appliances, mechanical HVAC equipment, water heaters, and electrical light fixtures, with each component having Energy Star compliance or better.
6. Installing low-water use plumbing fixtures exceeding code minimums.
7. Installing low-E high efficient double-pane window systems with tight 4-sided flashing at the exterior envelope.

ADDRESSING PROVISIONS OF 19.51.020.B.1 AND 19.51.020E AND 19.51.040

Code Requirement 19.51.20.B1	Developer Response
a. Promote employment and activity centers such as shopping, entertainment, cultural arts, recreational and community centers, health care facilities, and public transit	The development will support existing retail and commercial business along Fort Union Blvd. The development will also have 5 "live-work" units that are designed for remote work occupations or small retail spaces. The development is within walking distance of more than 10 UTA bus stops on two routes (213 and 72) and many retail businesses.

b. Provide for a range of employment uses at appropriate intensities and locations, support the integration of living and working uses, and support public transit services;	Employment uses range from small office space for attorney, accounting, and other service occupations to remote work supporting technology and programming, and beyond to small scale retail. These units will provide small business operators the opportunity to have a working space adjacent to their living space so that they will not have to commute or travel to other rented office space. This integrated "live-work" space is desirable to certain small business owners and would be unique in this sub-market, and over time could become an important use given the strong growth and increased pollution resulting from more cars on roads. These units provide some work and retail space without being disruptive to the existing and future community. The community will support local transit and other small businesses as there are >10 UTA bus stops within walking distance of the location and many retail stores.
c. Promoting more efficient use of land and public services, potentially allowing more concentrated projects in appropriate circumstances;	As growth continues across the Wasatch Front the need for high quality residential living opportunities continues to grow in demand. The proposed development is a very efficient use of the land and through design and prospective tenant mix, based on the proposed unit matrix, will minimize impacts on public services.
d. Promote layout, design and construction of development that is	The development will preserve the natural landform by maintaining the natural course of

sensitive to the natural land form and environmental conditions of the immediate and surrounding area and promote preservation of property with unique features, such as property having historical significance;	Little Cottonwood Creek. Given the development of buildings on both sides of the Creek, site design will include elements to protect the waterflow including a bridge with specifications in accordance with city code and also rip rap stone on the banks to discourage pets and tenants from entering the Creek to preserve water quality for residents downstream.
e. Ensure the adequacy of public facilities to accommodate population growth;	The surrounding areas are rich with facilities from existing public parks, shopping, services, and everyday needs to serve new residents without creating the demand or need for additional public improvements.
f. Encourage quality and variety in building and landscape design to create a vibrant pedestrian environment;	The building will be constructed of high quality materials and designed to stand the test of time. The site design includes planting a significant amount of vegetation including trees, bushes and grass and will have pedestrian walkways throughout.
g. Encourage the planned development of parcels sufficiently large to permit comprehensive site planning and building design by using master planning as a tool to achieve the goals of the general plan, project harmony, design consistency and the purposes of this chapter;	The proposed development is of a size that allows for the opportunity to master plan and design the entire project to be constructed in one phase that meets the goals and objectives of the general plan, project harmony, and design consistency and is reflected throughout the plans. ICO believes the proposed development is a first step towards the medium and higher density housing that is already standard in other parts of Salt Lake County. The quality of this development will set a high standard for future developers seeking to complete projects within Cottonwood Heights. ICO communities match the goals and guiding principles of the Cottonwood Heights' General Plan, seeking a high-quality experience for tenants, but not at the expense of the existing community around the subject property. This includes incorporating feedback from residents around the property, including seeking ways to reduce dumpster noise by relocating proposed dumpster locations, changing fencing types to provide residents with greater privacy in lieu of a more ornate fence material, increasing the height and intensity of vegetation along key property lines to both help dampen noise and

	preserve privacy, and, to the extent possible, leaving certain old growth trees in place.
h. Encourage opportunities for public transit services that promote multimodal connections at local and regional levels;	The site is located near >10 UTA bus stops on two lines (213 and 72) and our marketing of the apartments to prospective tenants will include details on bus proximity and general ease of transit from the site.
i. Encourage a mixture of uses, including complementary high density multi-family residential and loft units, retail service, office, lodging, entertainment and cultural uses, and create a vibrant pedestrian/transit-oriented environment to promote pedestrian activity;	The site, while primarily multi-family residential, has office/retail in the live work units, several studio and one bed units, and will have a full suite of amenities that will create an attractive environment for tenants and with vegetation and walkways provide maximum emphasis on transit and pedestrian orientation despite a relatively disadvantaged location. The site's proximity to transit, retail, and other services adds to the existing fabric of the mixed-use neighborhood that already exists.
j. Ensure that provision is made for public and private open space;	With only 28.3% building coverage on the site, preservation of the public waterway and the well-designed park/picnic space along the creek combined with the pool areas, and landscaped terraces with fire pits all provide for an attractive, open, and highly amenitized environment. Site to include Creek Trail which includes an agreement for a future trail easement in PDD-1 (Walsh) Zone. Section 4.I.2.(c)
k. Encourage creative approaches to the use of land through variation in siting of buildings and the appropriate mixing of several land uses, activities and dwelling types, including a variety of housing types;	The site plan includes a variety of apartment sizes, and emphases one bedroom and studio apartments which are undersupplied in the submarket. The apartment also includes "live-work" units, which we believe are a unique offering in a top tier development in the submarket. The property is creatively laid out with the front façade on the east most border of the property near the clubhouse and fitness center. Last, the site was designed creatively to include Little Cottonwood Creek as an amenity to the development winding between the buildings creating open space and trails, while preserving sensitivity to this important natural resource.
l. Achieve economic development goals concentrated in specific areas of the city by allowing higher intensity and higher quality developments that warrant greater financial investments which, in turn, provide an enhanced	In this development, ICO will build luxury apartments with a full suite of attractive new amenities that seek to create a resort-like community living environment for its residents while enhancing the existing community with a top quality new development. The high

economic base for the city;	quality building materials and design match and improve on other developments in the ICO portfolio. It is expected the tenant quality of this development to be among the highest in the ICO portfolio, which will in turn enrich the surrounding economy and act as a strong base of residents for the city. The development's luxury apartments and residents will help to drive the economically vibrant Fort Union mixed-use area as the proximity of the proposed development to the commercial and retail spaces is within walking distance. This economic benefit will come with no increased pressure on the existing infrastructure. Also, the commercial space within the development further add to the area by providing an environment where individuals can work without causing any additional impact on public infrastructure.
m. Preserve the health, safety and welfare of the public; and	The high-quality construction and a secure development will benefit the new residents to Cottonwood Heights. The secured entrances, fenced in area, and amenities are designed to offer a high quality of life, but also a secure space. Separately, the 20 ft setback from the creek, and rip rap stone lining will discourage entry into the creek and provide a pleasing setting to residents while encouraging them to use other swimming facilities, which will in turn ensure welfare of the public further downstream. Other standard safety features will be included per city code.
n. Implement the purposes and intent of this chapter, this title and the city's general plan, as determined by the city.	The proposed design and uses implement the intent of what has been outlined by the city ordinance. Specifically, ICO would highlight the following in text taken directly from Chapter 19.51 Planned Development District, Section 20 "Goals and Objectives": B.1. (D) Promote layout, design and construction of development that is *sensitive to the natural land form and environmental conditions of the immediately and surrounding*

	area and promote preservation of property with unique features, such as property having historical significance; B.1. (E) *Ensure the adequacy of public facilities to accommodate population growth*; B.1. (I) Encourage a mixture of uses including complementary *high density multi-family residential and loft units*, retail service, office, lodging, entertainment and cultural uses, and create a vibrant pedestrian / transit-oriented environment to promote pedestrian activity; B.1 (L) Achieve economic development goals concentrated in specific areas of the city *by allowing higher intensity and higher quality developments that warrant greater financial investments which, in turn, provide an enhanced economic base for the city*; B. 2 Such goals/purposes are to be ensure through the preparation and submission of comprehensive development plans *showing innovative site layout and integration with the surroundings of the proposed site*. **Emphasis Added*

Code Requirement 1951.20.E	**Developer Response**
1. An integrated mixed-use development containing two or more uses that include a pedestrian orientation as defined in Section 19.51.060(D)(1) in its design and functionality;	The development will include multi-family residential (apartments), commercial (mixed-use live-work units), and with a pedestrian-minded design and multiple UTA bus stops in close proximity, the site will encourage use of public transportation to the extent possible. Also, the site will feature the Creek Trail which includes an agreement for a future trail easement in PDD-1 (Walsh) Zone. Section 4.I.2.(c)
2. Consistency with the city's general plan ensuring a compatible and functional relationship to the area and along the major corridors;	The site is supported by great amenities from public space, public transportation, shopping, services, access to I-215 and other major arterials that access the community. Specifically, ICO would highlight two elements from Guiding Principles of the General Plan: "If developed, vacant land in the interior of low-density areas should be developed *in a manner consistent with the surrounding development*… Additionally, more intense uses, or *traffic from more intense uses, should*

	not intrude on low-density neighborhoods. The community supports new residential development that has a minimal impact on natural resources, open space, and scenic vistas." Page 1-6, *Emphasis Added* ICO has sought to develop this site consistently with surrounding developments. The site is surrounded by multi-family developments on three sides (including one for-rent apartment complex, two owned / rented apartment complexes). ICO's view is that the traffic, as illustrated in the preliminary traffic impact study (see item T1.1) show no impact to traffic in surrounding low-density neighborhoods, and no material impact on traffic in the surrounding multi-family neighborhoods. ICO's design has been particularly sensitive to the single-family homes with a 20' large densely vegetated buffer zone and solid fence to preserve privacy. Last, the proposed development has no perceived impact on natural resources, public open space, and no interference to scenic vistas that are essential to the surrounding properties.
3. Site features, uses, public amenities and aesthetic characteristics that encourage public pedestrian activity, multi-modal transportation connection points, vitality, convenience and safety in and around the development;	See item A1.7 which includes a map of UTA transit stops near the property. Also, please see appendix L1.1 which outlines the landscaping, pedestrian sidewalks and vegetation which are both designed to be aesthetically pleasing, but also to encourage multi-modal transportation (walk, bike, bus, car) to extent possible given site location. Little Cottonwood Creek also provides an aesthetically pleasing area with picnic pavilions and a walking path on each side connecting all of the community's buildings.
4. The plan coherently provides both a physical and functional integration of the site components to each other, to other properties in the PDD and to the balance of the city, including design features that will assure an appropriate transition of uses, building heights,	The site plan application includes architectural drawings that outline the location of different uses on the site, building heights no greater than 50' per code, an architectural massing exhibit, and proper setbacks in accordance with city code. Little Cottonwood Creek will be lined with rip rap stones and will be bridged

architectural massing and spatial relationships respecting nearby areas; and	by a decorated precast structure that will make it the effective center point of the development. The 20' setbacks from the creek's edge ensure that it has ample space to be uncrowded by the buildings on the site.
5. The site is fully served by public streets, municipal services and public utilities of adequate capacity; provided, however, that where infrastructure capacity is judged by the city to be inadequate: (a) The city may accept the applicant's agreement in such form as the city may require under this code insuring that suitable improvements will be installed in a timely manner; and (b) No building permit shall be issued until the city's approval and acceptance of such an agreement	Letters of coordination ("will serve") to be provided by the relevant utilities and other service providers.

Highlighted Code Requirements 19.51.40	**Developer Response**
(a) The proposed project's consistency with the city's general plan and any master plans for covering part or all of the proposed site;	The proposed development plan is a unique infill opportunity that helps the community to meet is demands to grow, while locating density in an area rich in services and close to public transportation and public arterials and freeways. It is surrounded mostly by other higher density residential development and seeks to minimize impact on the few single-family homes that border a portion of the southern property line. Also, the site's close proximity (walking distance) to retail stores and other commercial services will benefit this important economic base of the city.
(b) A statement of how the goals, objectives and specific criteria of this chapter will be satisfied;	The proposed design and uses implement the intent of what has been outlined by the city ordinance. Specifically, ICO would highlight the following in text taken directly from Chapter 19.51 Planned Development District, Section 20 "Goals and Objectives": B.1. (D) Promote layout, design and construction of development that is *sensitive to the natural land form and environmental conditions of the immediately and surrounding*

	area and promote preservation of property with unique features, such as property having historical significance; B.1. (E) *Ensure the adequacy of public facilities to accommodate population growth*; B.1. (I) Encourage a mixture of uses including complementary *high density multi-family residential and loft units*, retail service, office, lodging, entertainment and cultural uses, and create a vibrant pedestrian / transit-oriented environment to promote pedestrian activity; B.1 (L) Achieve economic development goals concentrated in specific areas of the city *by allowing higher intensity and higher quality developments that warrant greater financial investments which, in turn, provide an enhanced economic base for the city*; B. 2 Such goals/purposes are to be ensure through the preparation and submission of comprehensive development plans *showing innovative site layout and integration with the surroundings of the proposed site*. The community shall include 20 units that will be Below Market Rate ("BMR") units. These shall be made available according to the terms and conditions set forth in Section 6. BMR Units. in PDD-1 (Walsh Zone). **Emphasis Added*
(c) Disclosure of any easements or leases necessary for the proposed project and how their long term continuity will be assured;	The only required easement will be for a secondary access point for fire and emergency access through the adjacent multi-family development to the south of the site. If this is not possible, an emergency turn around can be installed.

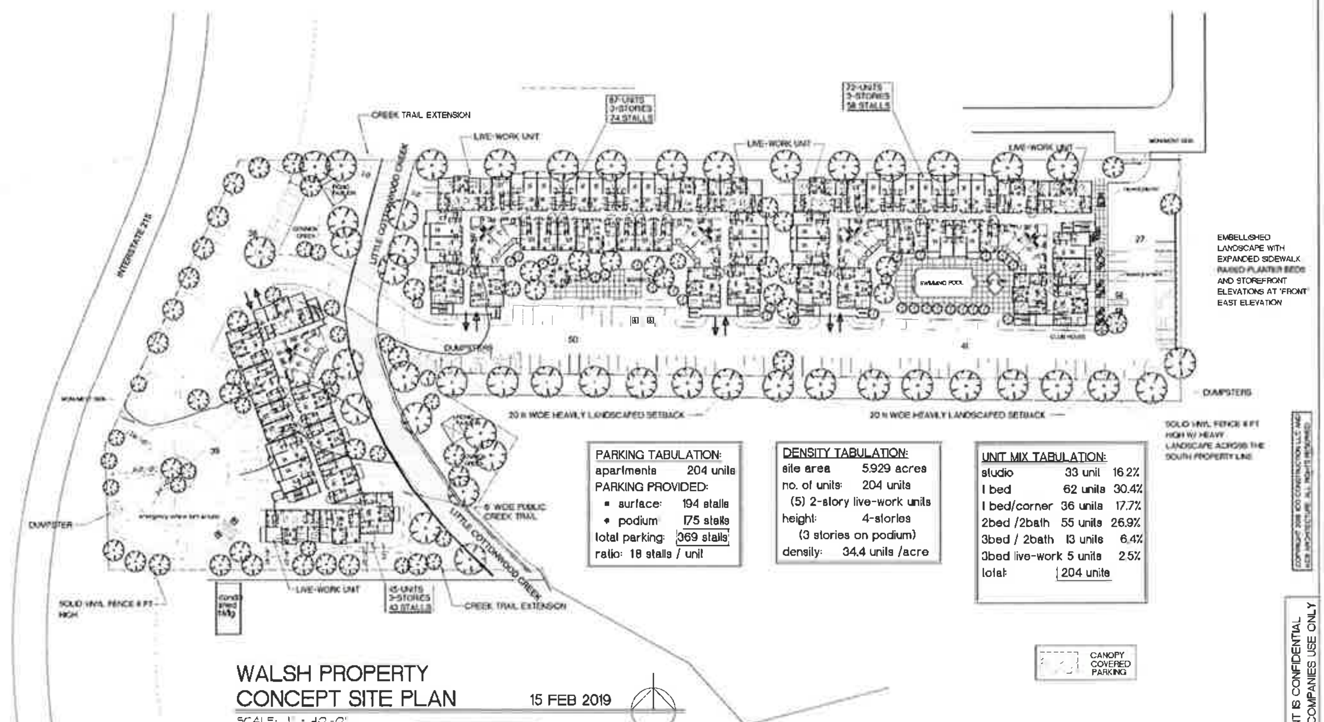
(e) The specific land uses to be permitted in the proposed PD zone and the general location and amount of land proposed for each permitted land use, such as single family residential, multi- family residential, institutional, office, commercial, industrial, common open space/recreation, street use, etc.;	The use mix shall be as follows: • Residential – 179 units, or 30.3 units / acre; this shall be located in buildings A, B, and C, and shall be on the top three floors of each building. • Commercial use – (office / live-work): 5 units x 2,480 s.f. = 12,400 s.f.; these shall be located in each building (two each in buildings A and B, one in building C), and will have the primary retail space on the ground floor, with additional retail and living space on the second floor, as determined by the tenant and business type.

	• 20 BMR units to be made available according to the terms and conditions set forth in Section 6. BMR Units. in PDD-1 (Walsh Zone). • Lease office / community center / fitness = 4,375 s.f.; these shall be located in building A. The land will also have the future use of office, but only within the building footprints for this development.
(f) The scale/intensity of each use, expressed in numbers (i.e., number of residential units, residential density, square footage of retail-commercial, square footage of office uses, etc.) and the acreage allotted to each use. For example, a table of proposed land uses including: (i) Proposed maximum and average residential densities for each residential use; (ii) The maximum total acreage of each residential use, including below market/affordable dwelling units, if applicable; (iii) The maximum allowable number of each type of residential unit requested, including affordable dwelling units, if applicable; and (iv) The maximum proposed building/lot coverage for each non- residential use	See the answer above for square footages by use and density, and a table below outlining the maximum total of each type of residential unit: • Studio 33 units 16.2% • 1bed 98 units 48% • 2bed/ 2bath 55 units 26.9% • 3bed / 2bath 13 units 6.37% • Live-work 5 units 2.45% Total units: 204 units 20 units shall be BMR and will be made available according to the terms and conditions set forth in Section 6. BMR Units. in PDD-1 (Walsh Zone).
Provide a fencing detail showing proposed size, location, and material of fencing (19.51.040.3.f)	Please see the Architectural Site Plan section and item A1.1
Submit traffic circulation plans with specific details for vehicles, pedestrians, and cyclists. Additionally, include a plan showing connections to local/regional transit (19.51.040.3.j-k)	Please see items A1.2, A1.3, and A1.7
Provide a tabulation of acreage allotted to public open space vs. common private open space vs. non-common private open space (19.51.040.3.n)	The coverage of the site in buildings is 28.32 % built area Pavement, parking and access drives = 73,905 s.f. (1.696 acres) Balconies (private non-common open space) = 12,240 s.f. (0.281 acres) The Creek Trail shall provide 10.8% of total site open space as public open space (.245 acres). All remaining space is common non-public / private open space = 2.273 acres.

Provide 4-sided architectural character renderings of each building that clearly shows colors, materials, public areas, windows/glazing, etc. (19.51.040.3.o)	Please see items A2.3, A2.4, A3.3, A3.4, A4.3, and A4.4, in addition to 18.05.22 – Cottonwood Heights Elevations
Provide an analysis of how the proposed project's scale, massing and design compliments and positively contributes to the setting buildings on adjacent properties, and how the proposal creates a pleasing visual relationship with them (19.51.040.3.p.ii)	The buildings are in the scale of the existing 3 and 4-story apartment buildings to the north and east and have stepped back significantly from the single-family units to the south in respect to massing. This will create a consistent visual relationship between the buildings from the I-215 onramp; however, the site is not visible from I-215 or the surrounding streets.
Show all existing and proposed utility easements, and the general location, size and capacity of all existing and proposed utility lines (19.51.040.3.q)	Please see items C1.1 and SURVEY
Submit a plan detailing any sensitive lands, natural hazards, geologic features, etc., and how the project's impact on such areas may preserve those features (19.51.040.3.s)	Little Cottonwood Creek will continue to run through the site in its natural course but will be more effectively preserved with 20' setbacks on each side, a lining that will discourage entry into the water, and an access ramp for County flood control that does not exist today.

Site Development Regulations	**PDD Tier 2**	**Site**
Area requirement (in contiguous acres	3 Acres	5.9 Acres
Lot Coverage	65%	28%
Building Height Minimum	N/A	N/M
Building Height Maximum	50'	50'
Min Setback • Front • Side (Street) • Side (Residential) • Side (Nonresidential) • Rear (Residential • Rear (Nonresidential)	(B)(4) 0 0 Same as residential 0 Same as residential 0	See PDX Ordinance
Storefronts & access	Yes	Yes
Building Transparency	Yes	Yes
Open space	15% gross lot area	43%
Landscape	(B)(8)	Yes
Off-Street Parking and Loading	N/A	N/A
Parking Setback	(B)(9)	Yes
Pedestrian Circulation		Yes

Signage	Master sign program required	Item S1.1
Below Market Rate (BMR) / Senior / Disabled Housing	10% of total residential for projects with 25 or more units	20 units shall be BMR and will be made available according to the terms and conditions set forth in Section 6. BMR Units. in PDD-1 (Walsh Zone).
Exterior Lighting Standards	Yes (B)(13)	Yes
Residential Density – Dwelling Units / Acre	35 dwelling units / acre	30.3 dwelling units / acre* *This calculation excludes 20 BMR units which are not included in the density calculation according to PDD-1 (Walsh) Zone Section 6 BMR Units.D.



PARKING TABULATION:

apartments	204 units
PARKING PROVIDED:	
• surface:	194 stalls
• podium	175 stalls
total parking:	369 stalls
ratio: 18 stalls / unit	

DENSITY TABULATION:

site area	5.929 acres
no. of units:	204 units
(5) 2-story live-work units	
height:	4-stories
(3 stories on podium)	
density:	34.4 units /acre

UNIT MIX TABULATION:

studio	33 unit	16.2%
1 bed	62 units	30.4%
1 bed/corner	36 units	17.7%
2bed /2bath	55 units	26.9%
3bed / 2bath	13 units	6.4%
3bed live-work	5 units	2.5%
total:	204 units	

WALSH PROPERTY CONCEPT SITE PLAN

15 FEB 2019

SCALE: 1" = 40'-0"

204 UNITS

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17-C46

CONCEPT SITE PLAN
SCHEME 204
SCALE: 1" = 40'-0"

WALSH PARCEL
COTTONWOOD HEIGHTS, UT

KCB architecture
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layton utah 84040
(801) 593-9338
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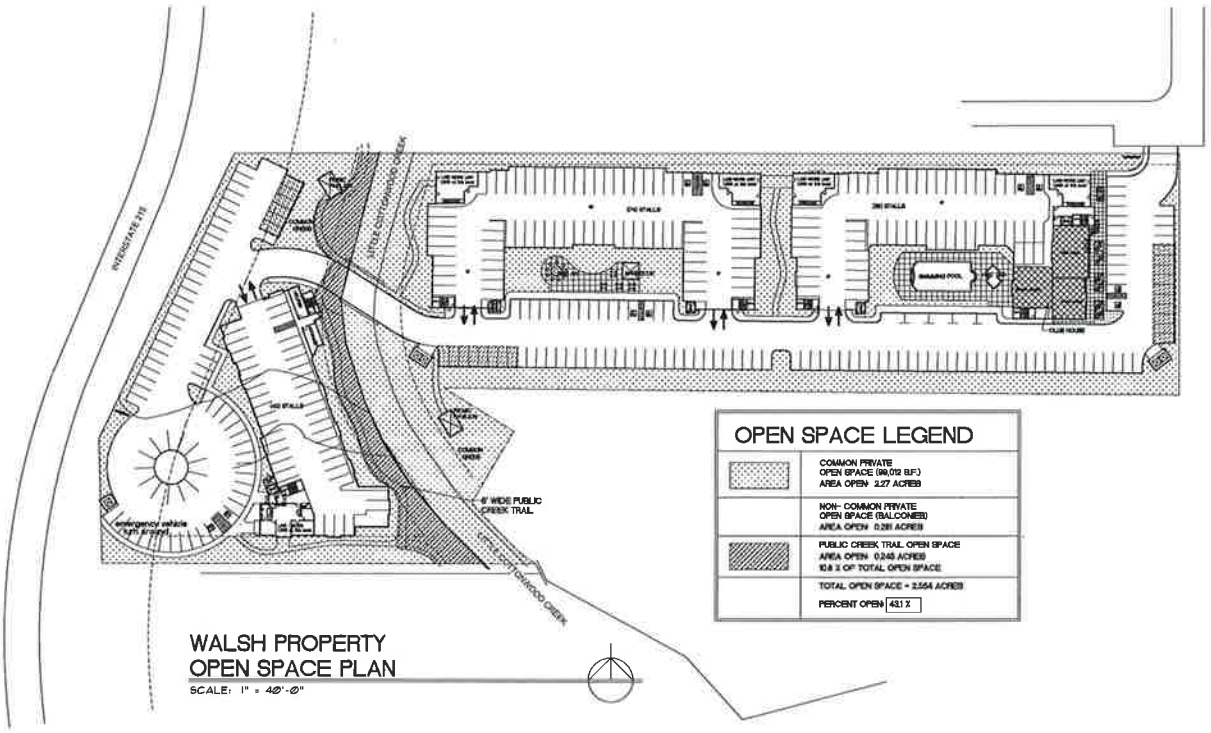
5 FEB 2019

31 AUG 2018

A1.1



WALSH PROPERTY
OPEN SPACE PLAN

SCALE: 1" = 40'-0"

PROJECT NUMBER
17-046

SHEET TITLE
OPEN SPACE PLAN
SCALE: 1" = 40'-0"

PROJECT/OWNER
WALSH PARCEL
COTTONWOOD HEIGHTS, UT
XX
COTTONWOOD HEIGHTS, UTAH
ICO DEVELOPMENT

ARCHITECT

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REVISION DATE
15 FEB 2016

DATE
31 AUG 2016

SHEET NUMBER
A1.5


PLANT SCHEDULE
POOL
Call
Dig
NORTH
McNEIL ENGINEERING
Civil Engineering • Consulting & Landscape Architecture
Structural Engineering • Land Surveying & HDS
STATE OF UTAH
SCOTT A. SCHOONOVER
WALSH PARCEL
6784 SOUTH 1300 EAST
COTTONWOOD HEIGHTS, UTAH
REVISIONS
PRELIMINARY
LANDSCAPE
PLAN
L0.01

HALES ENGINEERING
Innovative transportation solutions

Apartments
Traffic Impact Study

Cottonwood Heights, Utah

May 2018

UT17-1167

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HALES ENGINEERING
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EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed apartments development located in Cottonwood Heights, Utah. The proposed project is located just south of 6720 South, just west of 1300 East.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways near the site.

The evening peak hour level of service (LOS) was computed for each study intersection. The results of this analysis are shown in Table ES-1. Recommended storage lengths are shown in Table ES-2.

TABLE ES-1
LOS Analysis - Evening Peak Hour
Cottonwood Heights - Apartments TIS

Intersection	Level of Service (Sec/Veh)[1]	
	Existing (2017) Background	Existing (2017) Plus Project
6720 South / 1300 East	C (23.0) / EB	D (26.8) / EB

1. Intersection LOS and delay (seconds/vehicle) values represent the overall intersection average for roundabout, signalized, all-way stop controlled intersections and the worst approach for all other unsignalized intersections.

Source: Hales Engineering, May 2018

TABLE ES-2
Recommended Storage Lengths
Cottonwood Heights - Apartments TIS

Intersection	Storage Length (feet)							
	Northbound		Southbound		Eastbound		Westbound	
	LT	RT	LT	RT	LT	RT	LT	RT
6720 South / 1300 East	-	-	-	-	100	-	-	-

Source: Hales Engineering, May 2018

SUMMARY OF KEY FINDINGS/RECOMMENDATIONS

The following is a summary of key findings and recommendations:

- All study intersections are currently operating at an acceptable LOS during the evening peak hour in existing background conditions.
- The development will consist of 204 residential apartment units. It is anticipated that the project will generate 1,112 daily trips, 74 morning peak hour trips, and 90 evening peak hour trips.
- All study intersections are anticipated to operate at an acceptable LOS during the evening peak hour with project traffic added.
- It is recommended that the eastbound approach to the study intersection be restriped so that the left-turn lane has a storage length of 100 feet to accommodate the anticipated queueing. This length does not include the taper length.

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I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed apartments development located in Cottonwood Heights, Utah. The proposed project is located just south of 6720 South, just west of 1300 East. Figure 1 shows a vicinity map of the proposed development.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways near the site.

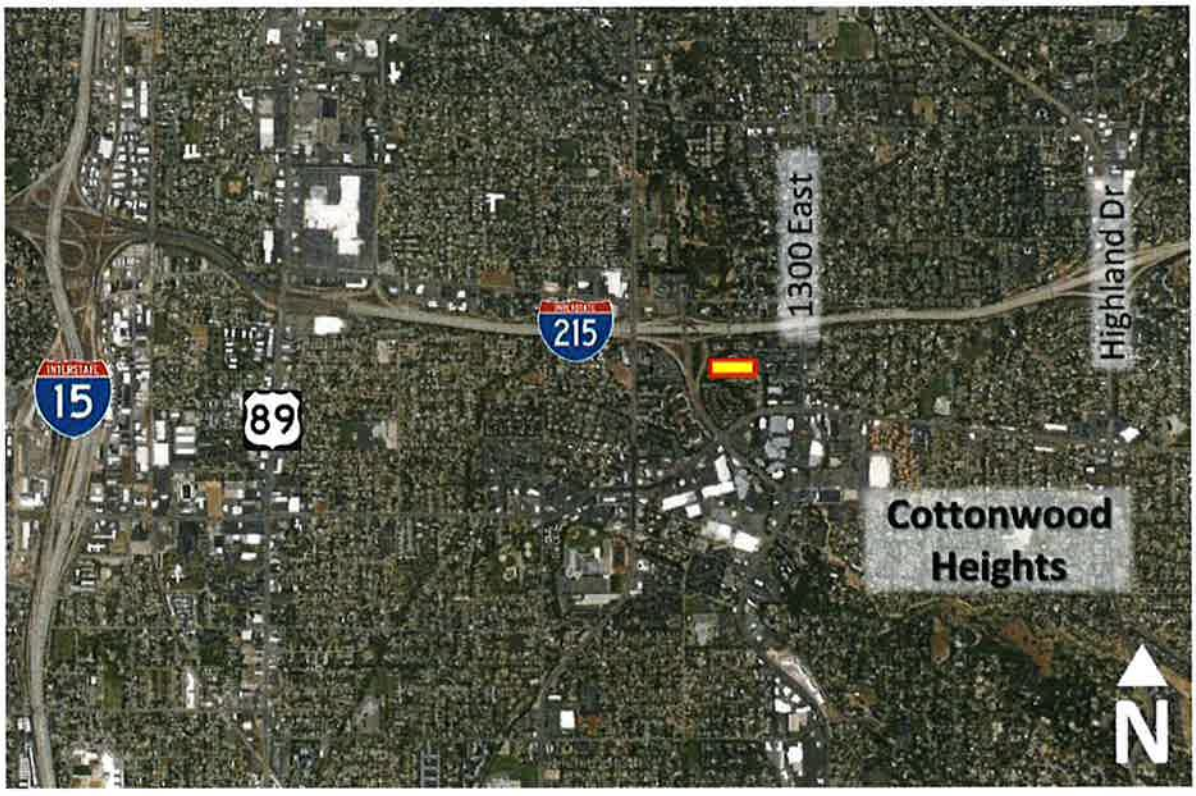


Figure 1 Vicinity map showing the project location in Cottonwood Heights, Utah

B. Scope

The study area was defined based on conversations with the development team. This study was scoped to evaluate the traffic operational performance impacts of the project on the following intersections:

- 6720 South / 1300 East

C. Analysis Methodology

Level of service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 1 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections. Figure 2 provides a visual representation of each LOS letter designation.

The Highway Capacity Manual (HCM) 6th edition methodology was used in this study to remain consistent with "state-of-the-practice" professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized and all-way stop intersections, the LOS is provided for the overall intersection (weighted average of all approach delays). For all other unsignalized intersections LOS is reported based on the worst approach.

D. Level of Service Standards

For the purposes of this study, a minimum overall intersection performance for each of the study intersections was set at LOS D. However, if LOS E or F conditions exist, an explanation and/or mitigation measures will be presented. An LOS D threshold is consistent with "state-of-the-practice" traffic engineering principles for urbanized areas.

Table 1 Level of Service Description

Level of Service	Description of Traffic Conditions	Average Delay (seconds/vehicle)
	Signalized Intersections	**Overall Intersection**
A	Extremely favorable progression and a very low level of control delay. Individual users are virtually unaffected by others in the traffic stream.	0 ≤ 10.0
B	Good progression and a low level of control delay. The presence of other users in the traffic stream becomes noticeable.	> 10.0 and ≤ 20.0
C	Fair progression and a moderate level of control delay. The operation of individual users becomes somewhat affected by interactions with others in the traffic stream.	>20.0 and ≤ 35.0
D	Marginal progression with relatively elevated levels of control delay. Operating conditions are noticeably more constrained.	> 35.0 and ≤ 55.0
E	Poor progression with unacceptably elevated levels of control delay. Operating conditions are at or near capacity.	> 55.0 and ≤ 80.0
F	Unacceptable progression with forced or breakdown operating conditions.	> 80.0
	Unsignalized Intersections	**Worst Approach**
A	Free Flow / Insignificant Delay	0 ≤ 10.0
B	Stable Operations / Minimum Delays	>10.0 and ≤ 15.0
C	Stable Operations / Acceptable Delays	>15.0 and ≤ 25.0
D	Approaching Unstable Flows / Tolerable Delays	>25.0 and ≤ 35.0
E	Unstable Operations / Significant Delays Can Occur	>35.0 and ≤ 50.0
F	Forced Flows / Unpredictable Flows / Excessive Delays Occur	> 50.0

Source: Hales Engineering Descriptions, based on Highway Capacity Manual, 2016 Methodology (Transportation Research Board, 2016)

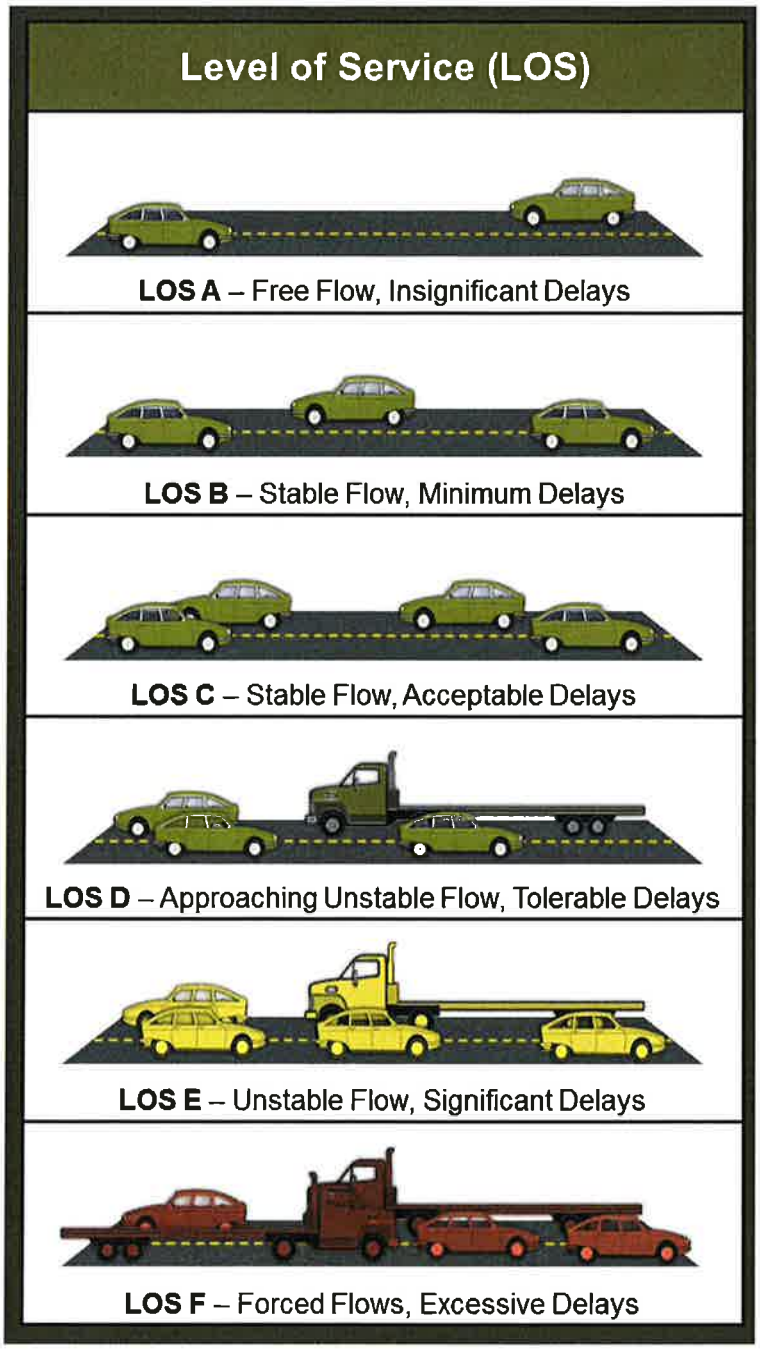


Figure 2 LOS Letter Designation

II. EXISTING (2017) BACKGROUND CONDITIONS

A. Purpose

The purpose of the background analysis is to study the intersections and roadways during the peak travel periods of the day with background traffic and geometric conditions. Through this analysis, background traffic operational deficiencies can be identified, and potential mitigation measures recommended. This analysis will provide a baseline condition that may be compared to the build conditions to identify the impacts of the development.

B. Roadway System

The primary roadways that will provide access to the project site are described below:

1300 East – is a city-maintained roadway which is classified by the Cottonwood Heights General Plan as a "city arterial" roadway. The roadway has two travel lanes in each direction separated by a center two-way left-turn lane (TWLTL). The posted speed limit is 35 mph in the study area.

6720 South – is a city-maintained roadway which is classified by the Cottonwood Heights General Plan as a "city local" roadway. The roadway has one travel lane in each direction. The posted speed limit is 25 mph in the study area.

C. Traffic Volumes

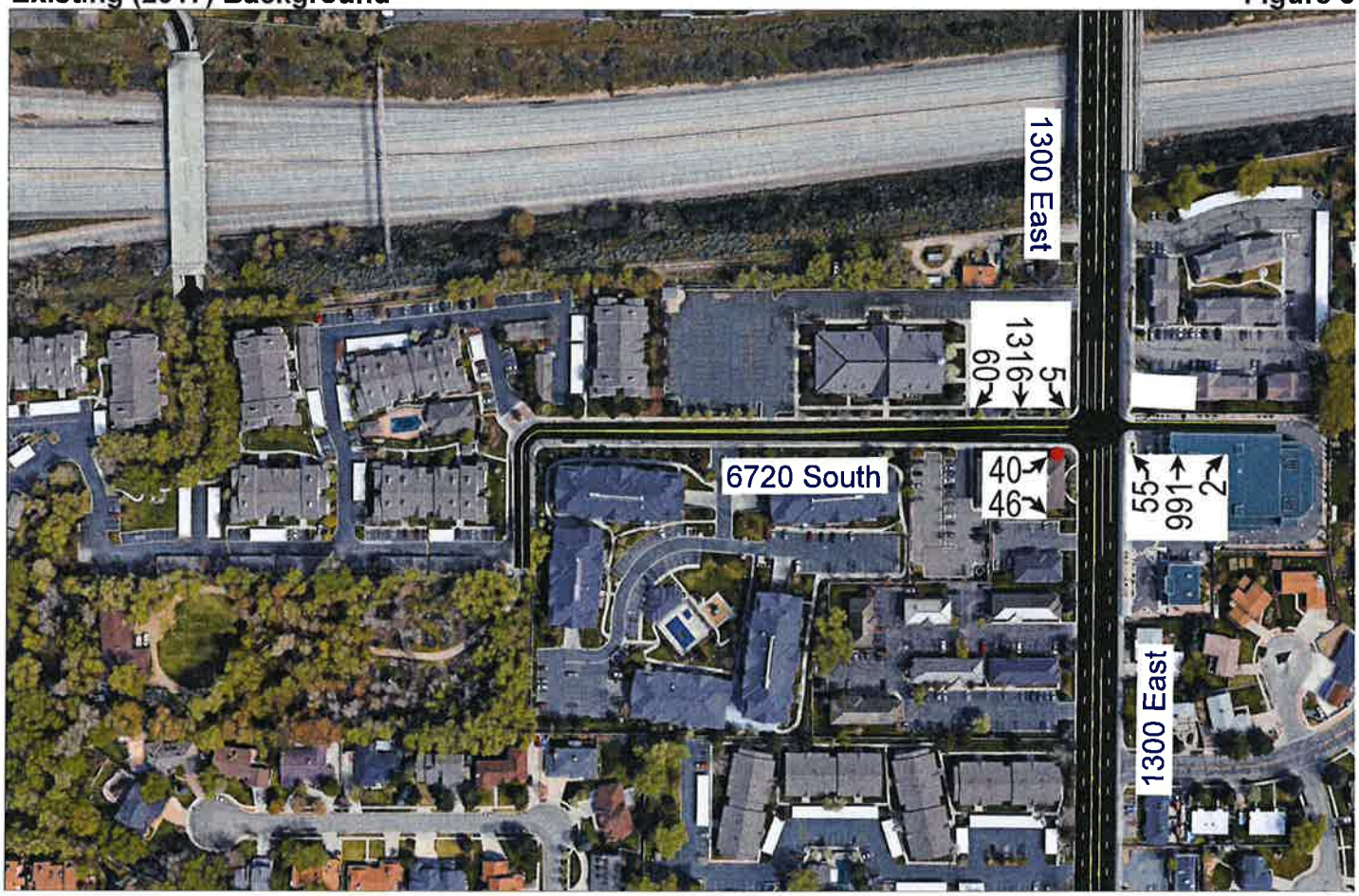
Weekday morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak period traffic counts were performed at the following intersection:

- 6720 South / 1300 East

The counts were performed on Tuesday, December 19, 2017. The morning peak hour was determined to be between 8:00 and 9:00 a.m. and the evening peak hour was determined to be between 5:00 and 6:00 p.m. The evening peak hour volumes were approximately 130% higher than the morning peak hour volumes. Therefore, the evening peak hour volumes were used in the analysis to represent the worst-case conditions. Detailed count data are included in Appendix A.

Figure 3 shows the existing evening peak hour volumes as well as intersection geometry at the study intersections.

Cottonwood Heights Apartments TIS **Evening Peak Hour**
Existing (2017) Background **Figure 3**



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D. Level of Service Analysis

Using Synchro/SimTraffic, which follow the *Highway Capacity Manual* (HCM) 6th Edition methodology introduced in Chapter I, the evening peak hour LOS was computed for each study intersection. The results of this analysis are reported in Table 2 (see Appendix B for the detailed LOS reports). Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2017) conditions. As shown in Table 2, the study intersection is currently operating at an acceptable LOS during the evening peak hour.

Table 2 Existing (2017) Background Evening Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach[1,3]	Aver. Delay (Sec/Veh)[1]	LOS[1]	Aver. Delay (Sec/Veh)[2]	LOS[2]
6720 South / 1300 East	EB Stop	EB	23.0	C	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal controlled intersections.
3. SB = Southbound approach, etc.

Source: Hales Engineering, December 2017

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. The queue reports can be found in Appendix C. A 95th percentile queue length of 65 feet was observed on the eastbound approach of the study intersection. No other significant queueing was observed during the evening peak hour.

F. Mitigation Measures

No mitigation measures are recommended.

III. PROJECT CONDITIONS

A. Purpose

The project conditions analysis explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in the Introduction.

B. Project Description

This study addresses the traffic impacts associated with the proposed apartments development located in Cottonwood Heights, Utah. The proposed project is located just south of 6720 South, just west of 1300 East. The development will consist of 204 residential apartment units.

The proposed land use for the development has been identified as follows:

- Apartments 204 Units

C. Trip Generation

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation* (10th Edition, 2017). Trip Generation for the proposed project is included in Table 3.

The total trip generation for the development is as follows:

- Daily Trips: 1,112
- Morning Peak Hour Trips: 74
- Evening Peak Hour Trips: 90

D. Trip Distribution and Assignment

Project traffic is assigned to the roadway network based on the type of trip and the proximity of project access points to major streets, high population densities, and regional trip attractions. Existing travel patterns observed during data collection also provide helpful guidance to establishing these distribution percentages, especially in close proximity to the site. The resulting distribution of project generated trips during the evening peak hour is as follows:

To/From Project:

- 70% South
- 30% North

These trip distribution assumptions were used to assign the evening peak hour generated traffic at the study intersections to create trip assignment for the proposed development. Trip assignment for the development is shown in Figure 4.

Table 3
Cottonwood Heights - Apartments TIS
Trip Generation

Weekday Daily Land Use[1]	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total Daily Trips
Multifamily Housing (Mid-Rise) (221)	204	Dwelling Units	1,112	50%	50%	556	556	1,112
Project Total Daily Trips						**556**	**556**	**1,112**
A.M. Peak Hour Land Use[1]	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total a.m. Trips
Multifamily Housing (Mid-Rise) (221)	204	Dwelling Units	74	26%	74%	19	55	74
Project Total a.m. Peak Hour Trips						**19**	**55**	**74**
P.M. Peak Hour Land Use[1]	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total p.m. Trips
Multifamily Housing (Mid-Rise) (221)	204	Dwelling Units	90	61%	39%	55	35	90
Project Total p.m. Peak Hour Trips						**55**	**35**	**90**

1. Land Use Code from the Institute of Transportation Engineers Trip Generation Manual (10th Edition - 2017)

SOURCE: Hales Engineering, May 2018

E. Access

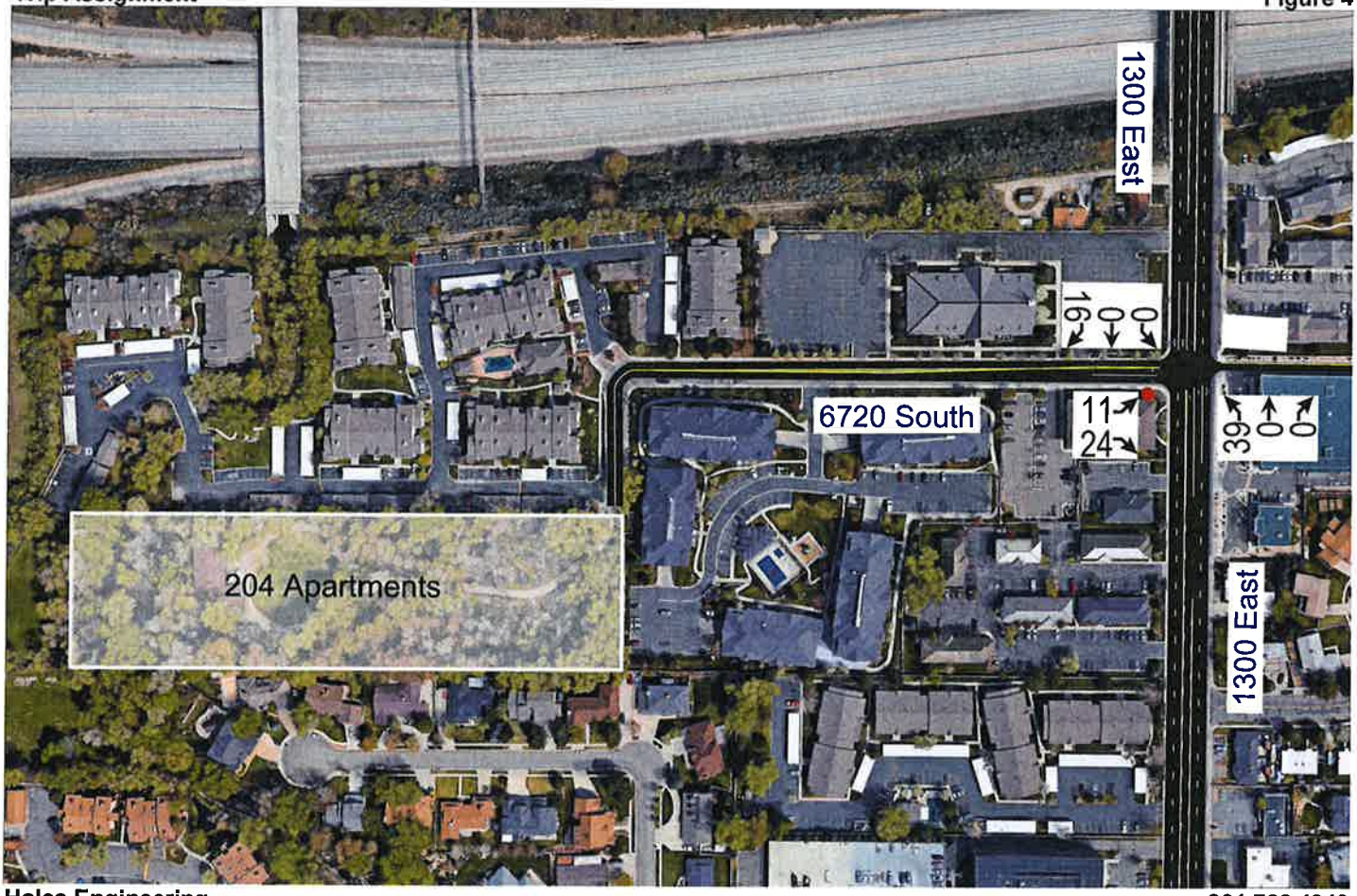
The proposed access for the site will be gained at the following locations (see also concept plan in Appendix C):

6720 South:

- It is anticipated that the project will access the roadway network via 6720 South. Therefore, the 6720 South / 1300 East intersection will preform and function as the primary access to the site.

Cottonwood Heights Apartments TIS
Trip Assignment

Evening Peak Hour
Figure 4



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IV. EXISTING (2017) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the existing (2017) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for existing background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on background traffic conditions.

B. Traffic Volumes

Project trips were assigned to the study intersections based on the trip distribution percentages discussed in Chapter III and permitted intersection turning movements. The existing (2017) plus project evening peak hour volumes were generated for the study intersections and are shown in Figure 5.

C. Level of Service Analysis

Using Synchro/SimTraffic, which follow the *Highway Capacity Manual* (HCM) 6th edition methodology introduced in Chapter I, the evening peak hour LOS was computed for each study intersection. The results of this analysis are reported in Table 4 (see Appendix B for the detailed LOS reports). Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. As shown in Table 4, the study intersection is anticipated to operate at an acceptable LOS during the evening peak hour with project traffic added.

D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. The queue reports can be found in Appendix C. A 95th percentile queue length of approximately 100 feet is anticipated on the eastbound approach of the study intersection. No other significant queuing is anticipated during the evening peak hour.

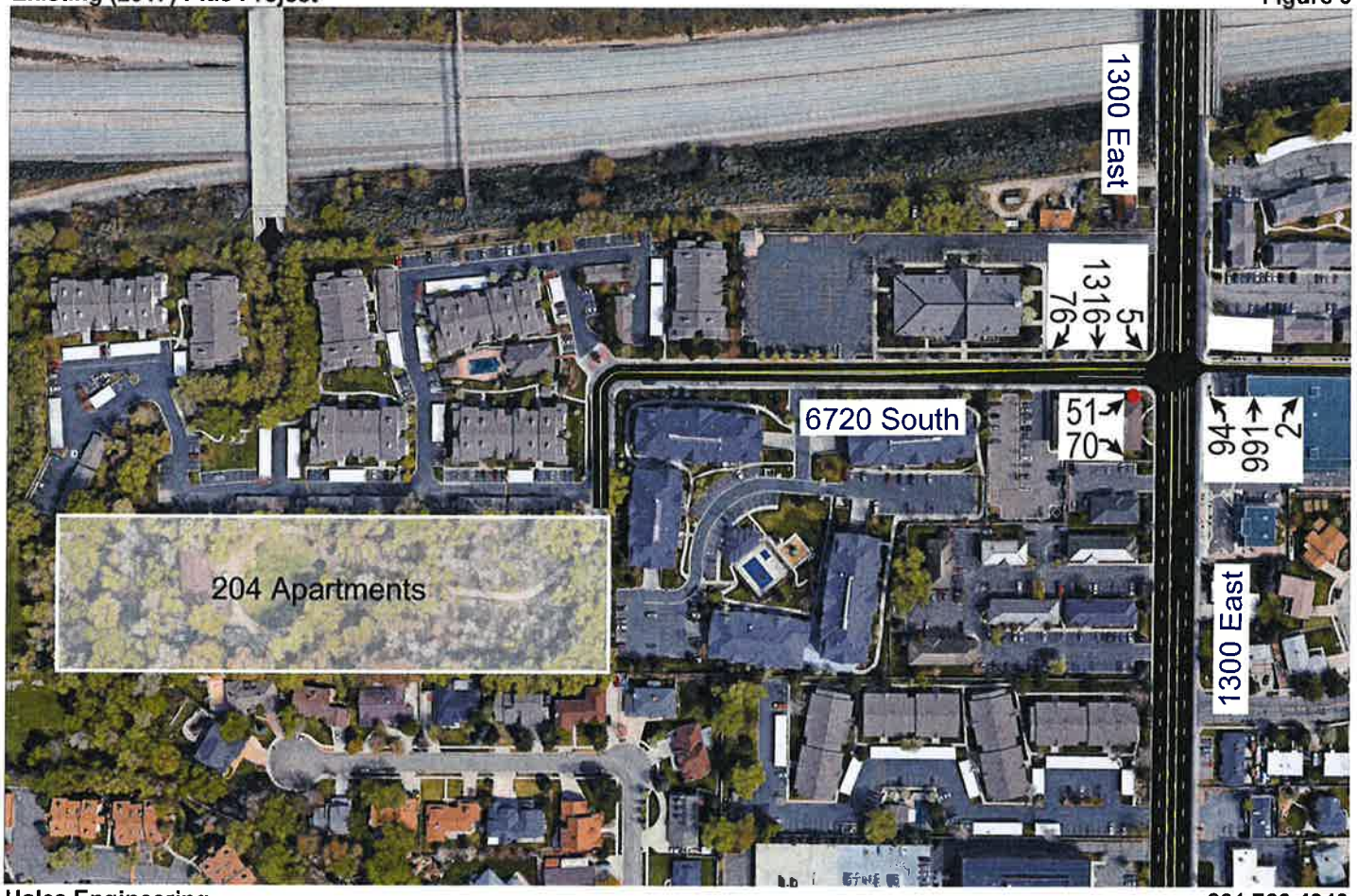
E. Mitigation Measures

It is recommended that the eastbound approach to the study intersection be restriped so that the left-turn lane has a storage length of 100 feet to accommodate the anticipated queueing. This length does not include the taper length.

No other mitigation measures are recommended.

Cottonwood Heights Apartments TIS
Existing (2017) Plus Project

Evening Peak Hour
Figure 5



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05/03/2018

Table 4 Existing (2017) Plus Project Evening Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach[1,3]	Aver. Delay (Sec/Veh)[1]	LOS[1]	Aver. Delay (Sec/Veh)[2]	LOS[2]
6720 South / 1300 East	EB Stop	EB	26.8	D	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal controlled intersections.
3. SB = Southbound approach, etc.

Source: Hales Engineering, May 2018

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APPENDIX A

Turning Movement Counts

TrafficCounts

2364 North 1450 East
Lehi, UT 84043
801.636.0891

Intersection Turning Movement Summary

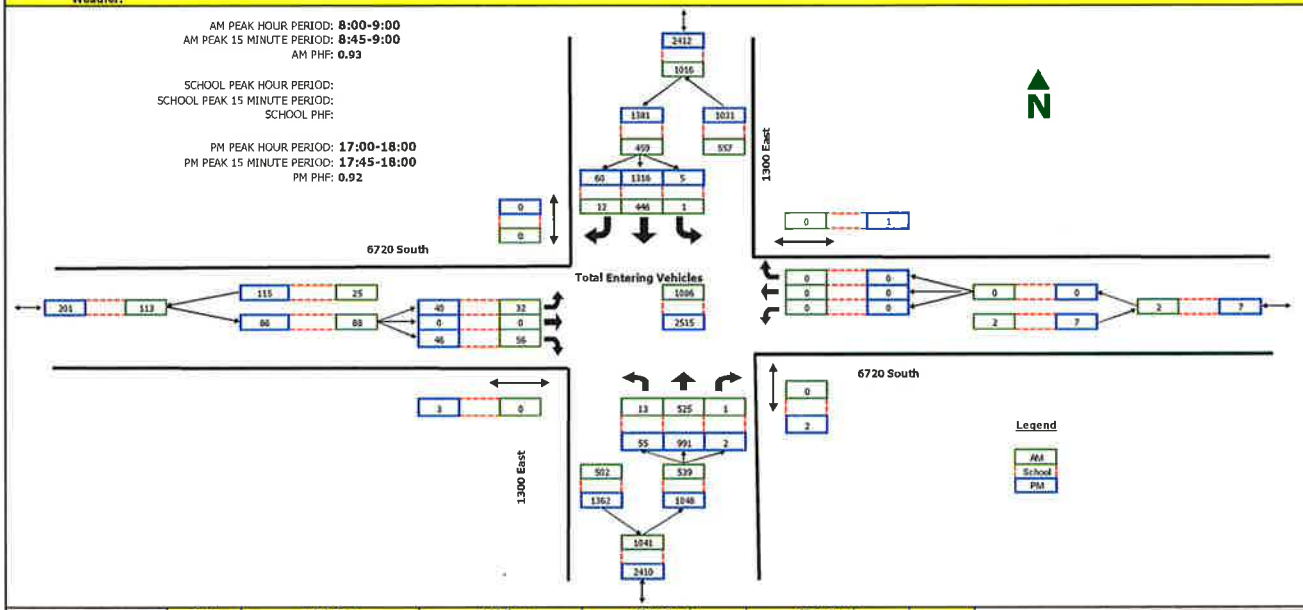
Intersection: 1300 East / 6720 South
North/South: 1300 East
East/West: 6720 South
Jurisdiction: Cottonwood Heights
Project Title: Apartments TIS
Project No: UT17-1167
Weather:

Date: 12-19-17, Tue
Day of Week Adjustment: 100.0%
Month of Year Adjustment: 100.0%
Adjustment Station #: 0
Growth Rate: 0.0%
Number of Years: 0

AM PEAK HOUR PERIOD: **8:00-9:00**
AM PEAK 15 MINUTE PERIOD: **8:45-9:00**
AM PHF: **0.93**

SCHOOL PEAK HOUR PERIOD:
SCHOOL PEAK 15 MINUTE PERIOD:
SCHOOL PHF:

PM PEAK HOUR PERIOD: **17:00-18:00**
PM PEAK 15 MINUTE PERIOD: **17:45-18:00**
PM PHF: **0.92**



RAW COUNT SUMMARIES	1300 East Northbound				1300 East Southbound				6720 South Eastbound				6720 South Westbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
7:00-7:15	1	76	0	0	0	50	2	0	4	0	7	0	0	0	0	0	140
7:15-7:30	2	82	0	0	0	57	5	0	14	0	11	0	0	0	0	0	171
7:30-7:45	2	99	0	0	0	75	2	0	5	0	11	0	0	0	0	0	194
7:45-8:00	2	122	0	0	0	89	3	0	5	0	15	0	0	0	0	0	236
8:00-8:15	5	111	0	0	0	92	3	0	10	0	15	0	0	0	0	0	236
8:15-8:30	1	133	0	0	1	101	5	0	9	0	19	0	0	0	0	0	269
8:30-8:45	1	132	0	0	0	135	1	0	7	0	13	0	0	0	0	0	289
8:45-9:00	6	149	1	0	0	118	3	0	6	0	9	0	0	0	0	0	292
MIDDAY PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
9:00-9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15-9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30-9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45-10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00-10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15-10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30-10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45-11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00-11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15-11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30-11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45-12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00-12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15-12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30-12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45-13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00-13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15-13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30-13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45-14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00-14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15-14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30-14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45-15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00-15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15-15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30-15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45-16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
16:00-16:15	12	212	1	0	0	254	5	0	9	0	12	3	1	3	0	0	509
16:15-16:30	15	209	1	0	1	236	7	0	5	1	9	0	0	0	0	0	484
16:30-16:45	16	200	0	0	2	293	17	0	13	0	4	0	0	0	0	0	545
16:45-17:00	11	228	1	0	1	259	8	0	6	0	11	0	0	0	0	0	525
17:00-17:15	10	232	2	1	2	295	15	0	14	0	11	0	0	0	0	1	581
17:15-17:30	17	264	0	0	1	340	20	0	4	0	6	0	0	0	0	0	652
17:30-17:45	10	260	0	0	0	297	9	0	6	0	17	1	0	0	0	0	599
17:45-18:00	18	235	0	1	2	384	16	0	16	0	12	2	0	0	0	0	683

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APPENDIX B

LOS Results

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SimTraffic LOS Report

Project: Cottonwood Heights Apartments TIS
Analysis Period: *Existing (2017) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT17-1167*

Intersection: 1300 East & 6720 South
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	55	56	102	20.0	*C*
	T	992	987	100	2.7	*A*
	R	2	2	100	2.6	*A*
	Subtotal	1,049	1,045	100	3.6	*A*
SB	L	5	5	100	11.2	*B*
	T	1,316	1,311	100	4.1	*A*
	R	60	62	104	3.7	*A*
	Subtotal	1,381	1,378	100	4.1	*A*
EB	L	40	37	92	36.4	*E*
	R	46	47	102	12.5	*B*
	Subtotal	***86***	***84***	***98***	***23.0***	***C***
Total		2,516	2,507	100	4.5	*A*

1: 1300 East & 6720 South Performance by movement Interval #1 4:45

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1	0.2	0.0	0.0	0.4	0.0	0.8
Total Del/Veh (s)	35.8	11.6	18.6	2.7	1.8	8.0	3.9	3.9	4.4
Vehicles Entered	10	12	13	250	1	1	319	14	620
Vehicles Exited	11	12	11	242	1	1	317	14	609
Hourly Exit Rate	44	48	44	968	4	4	1268	56	2436
Input Volume	39	45	53	963	2	5	1278	58	2443
% of Volume	113	107	83	101	200	80	99	97	100

1: 1300 East & 6720 South Performance by movement Interval #2 5:00

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1	0.2	0.0	0.0	0.4	0.0	0.8
Total Del/Veh (s)	35.4	11.2	14.7	2.6		13.9	4.0	3.6	4.4
Vehicles Entered	10	13	13	237	0	1	318	16	608
Vehicles Exited	10	12	14	244	0	1	320	16	617
Hourly Exit Rate	40	48	56	976	0	4	1280	64	2468
Input Volume	39	45	53	963	2	5	1278	58	2443
% of Volume	103	107	106	101	0	80	100	110	101

1: 1300 East & 6720 South Performance by movement Interval #3 5:15

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1	0.2	0.0	0.0	0.4	0.0	0.9
Total Del/Veh (s)	38.5	12.5	22.8	2.9	2.1	13.1	4.2	4.0	4.7
Vehicles Entered	8	12	16	264	1	1	358	17	677
Vehicles Exited	8	12	15	256	1	1	351	17	661
Hourly Exit Rate	32	48	60	1024	4	4	1404	68	2644
Input Volume	43	50	60	1077	2	5	1431	65	2733
% of Volume	74	96	100	95	200	80	98	105	97

1: 1300 East & 6720 South Performance by movement Interval #4 5:30

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1	0.2	0.0	0.0	0.3	0.0	0.7
Total Del/Veh (s)	28.3	10.5	18.2	2.4	0.9	10.4	3.7	3.2	4.0
Vehicles Entered	8	10	14	237	1	1	318	15	604
Vehicles Exited	8	10	15	246	1	2	323	15	620
Hourly Exit Rate	32	40	60	984	4	8	1292	60	2480
Input Volume	39	45	53	963	2	5	1278	58	2443
% of Volume	82	89	113	102	200	160	101	103	102

1: 1300 East & 6720 South Performance by movement Entire Run

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.2	0.3	0.8	0.0	0.0	1.5	0.1	3.2
Total Del/Veh (s)	36.4	12.5	20.0	2.7	2.6	11.2	4.1	3.7	4.5
Vehicles Entered	36	47	56	988	2	5	1314	62	2510
Vehicles Exited	37	47	56	987	2	5	1311	62	2507
Hourly Exit Rate	37	47	56	987	2	5	1311	62	2507
Input Volume	40	46	55	992	2	5	1316	60	2516
% of Volume	92	102	102	100	100	100	100	104	100

Total Zone Performance By Interval

Interval Start	4:45	5:00	5:15	5:30	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)					
Total Delay (hr)	0.8	0.8	0.9	0.7	3.2
Total Del/Veh (s)	122.1	230.8	112.9	183.3	761.3
Vehicles Entered	0	0	0	0	0
Vehicles Exited	0	0	0	0	1
Hourly Exit Rate	0	0	0	0	1
Input Volume	2443	2443	2733	2443	2516
% of Volume	0	0	0	0	0

Intersection: 1: 1300 East & 6720 South, Interval #1

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	L	TR
Maximum Queue (ft)	61	58	51	12	11
Average Queue (ft)	34	33	18	2	2
95th Queue (ft)	70	63	45	15	20
Link Distance (ft)		784			827
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100		150	100	
Storage Blk Time (%)	1	0			
Queuing Penalty (veh)	0	0			

Intersection: 1: 1300 East & 6720 South, Interval #2

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	L	TR
Maximum Queue (ft)	63	55	51	14	4
Average Queue (ft)	34	34	23	4	1
95th Queue (ft)	65	63	55	19	6
Link Distance (ft)		784			827
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100		150	100	
Storage Blk Time (%)	0				
Queuing Penalty (veh)	0				

Intersection: 1: 1300 East & 6720 South, Interval #3

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	L	TR
Maximum Queue (ft)	62	61	60	17	9
Average Queue (ft)	29	32	31	3	2
95th Queue (ft)	67	68	64	17	13
Link Distance (ft)		784			827
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100		150	100	
Storage Blk Time (%)	0	0			
Queuing Penalty (veh)	0	0			

Intersection: 1: 1300 East & 6720 South, Interval #4

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	L	TR
Maximum Queue (ft)	50	61	55	13	22	8
Average Queue (ft)	29	29	27	2	5	2
95th Queue (ft)	58	65	62	27	21	10
Link Distance (ft)		784		1019		827
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100		150		100	
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 1: 1300 East & 6720 South, All Intervals

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	L	TR
Maximum Queue (ft)	80	79	71	13	29	24
Average Queue (ft)	32	32	25	0	3	1
95th Queue (ft)	65	65	57	13	18	13
Link Distance (ft)		784		1019		827
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100		150		100	
Storage Blk Time (%)	0	0				
Queuing Penalty (veh)	0	0				

Zone Summary

Zone wide Queuing Penalty, Interval #1: 0
Zone wide Queuing Penalty, Interval #2: 0
Zone wide Queuing Penalty, Interval #3: 0
Zone wide Queuing Penalty, Interval #4: 0
Zone wide Queuing Penalty, All Intervals: 0

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SimTraffic LOS Report

Project: Cottonwood Heights Apartments TIS
Analysis Period: *Existing (2017) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT17-1167*

Intersection: 1300 East & 6720 South
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	94	98	105	21.9	C
	T	992	974	98	2.8	A
	R	2	2	100	3.6	A
	Subtotal	1,088	1,074	99	4.5	A
SB	L	5	4	80	11.6	B
	T	1,317	1,332	101	4.4	A
	R	76	74	97	4.2	A
	Subtotal	1,398	1,410	101	4.4	A
EB	L	51	52	101	44.1	E
	R	70	70	100	13.9	B
	Subtotal	***121***	***122***	***101***	***26.8***	***D***
Total		2,608	2,606	100	5.5	A

1: 1300 East & 6720 South Performance by movement Interval #1 4:45

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (hr)	0.2	0.1	0.2	0.2	0.0	0.0	0.4	0.0	1.0
Total Del/Veh (s)	43.6	12.3	23.1	2.7		12.9	4.1	4.6	5.4
Vehicles Entered	11	18	25	241	0	1	329	19	644
Vehicles Exited	12	18	23	235	0	1	330	19	638
Hourly Exit Rate	48	72	92	940	0	4	1320	76	2552
Input Volume	50	68	91	964	2	5	1279	74	2533
% of Volume	96	106	101	98	0	80	103	103	101

1: 1300 East & 6720 South Performance by movement Interval #2 5:00

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (hr)	0.2	0.1	0.1	0.2	0.0	0.0	0.4	0.0	0.9
Total Del/Veh (s)	40.5	11.7	17.7	2.6		8.0	4.2	4.2	5.1
Vehicles Entered	13	16	24	225	0	1	325	19	623
Vehicles Exited	13	17	25	230	0	1	326	19	631
Hourly Exit Rate	52	68	100	920	0	4	1304	76	2524
Input Volume	50	68	91	964	2	5	1279	74	2533
% of Volume	104	100	110	95	0	80	102	103	100

1: 1300 East & 6720 South Performance by movement Interval #3 5:15

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (hr)	0.2	0.1	0.2	0.2	0.0	0.0	0.4	0.0	1.1
Total Del/Veh (s)	45.8	15.2	22.0	2.9		10.2	4.4	4.0	5.6
Vehicles Entered	14	18	25	266	0	1	355	18	697
Vehicles Exited	14	17	23	258	0	1	349	18	680
Hourly Exit Rate	56	68	92	1032	0	4	1396	72	2720
Input Volume	55	76	102	1077	2	5	1432	83	2832
% of Volume	102	89	90	96	0	80	97	87	96

1: 1300 East & 6720 South Performance by movement Interval #4 5:30

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.1	0.2	0.2	0.0	0.0	0.4	0.0	1.0
Total Del/Veh (s)	34.3	14.7	20.1	2.9	2.2	15.3	4.4	3.6	5.4
Vehicles Entered	13	18	24	242	1	1	323	19	641
Vehicles Exited	13	18	26	251	1	1	327	19	656
Hourly Exit Rate	52	72	104	1004	4	4	1308	76	2624
Input Volume	50	68	91	964	2	5	1279	74	2533
% of Volume	104	106	114	104	200	80	102	103	104

1: 1300 East & 6720 South Performance by movement Entire Run

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.6	0.3	0.6	0.8	0.0	0.0	1.6	0.1	4.0
Total Del/Veh (s)	44.1	13.9	21.9	2.8	3.6	11.6	4.4	4.2	5.5
Vehicles Entered	51	70	98	974	2	4	1333	75	2607
Vehicles Exited	52	70	98	974	2	4	1332	74	2606
Hourly Exit Rate	52	70	98	974	2	4	1332	74	2606
Input Volume	51	70	94	992	2	5	1317	76	2608
% of Volume	101	100	105	98	100	80	101	97	100

Total Zone Performance By Interval

Interval Start	4:45	5:00	5:15	5:30	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)					0.6
Total Delay (hr)	1.0	0.9	1.1	1.0	4.0
Total Del/Veh (s)	161.6	221.7	117.0	201.6	689.9
Vehicles Entered	0	0	0	0	1
Vehicles Exited	1	0	1	1	4
Hourly Exit Rate	4	0	4	4	4
Input Volume	2533	2533	2832	2533	2608
% of Volume	0	0	0	0	0

Intersection: 1: 1300 East & 6720 South, Interval #1

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	L	TR
Maximum Queue (ft)	81	77	90	14	4
Average Queue (ft)	45	41	43	2	1
95th Queue (ft)	87	83	94	14	7
Link Distance (ft)		784			827
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100		150	100	
Storage Blk Time (%)	2	1	0		
Queuing Penalty (veh)	1	0	2		

Intersection: 1: 1300 East & 6720 South, Interval #2

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	L	TR
Maximum Queue (ft)	71	65	80	11	21
Average Queue (ft)	44	37	39	2	3
95th Queue (ft)	83	70	82	12	20
Link Distance (ft)		784			827
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100		150	100	
Storage Blk Time (%)	3	0			
Queuing Penalty (veh)	2	0			

Intersection: 1: 1300 East & 6720 South, Interval #3

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	L	TR
Maximum Queue (ft)	76	87	89	8	24
Average Queue (ft)	48	42	42	1	4
95th Queue (ft)	86	81	93	11	27
Link Distance (ft)		784			827
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100		150	100	
Storage Blk Time (%)	1	1			
Queuing Penalty (veh)	1	0			

Intersection: 1: 1300 East & 6720 South, Interval #4

Movement	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	L	T	TR
Maximum Queue (ft)	71	66	81	24	14	4	12
Average Queue (ft)	41	41	42	5	3	1	2
95th Queue (ft)	74	73	90	44	19	8	15
Link Distance (ft)		784		1019		827	827
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100		150		100		
Storage Blk Time (%)	0	0					
Queuing Penalty (veh)	0	0					

Intersection: 1: 1300 East & 6720 South, All Intervals

Movement	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	L	T	TR
Maximum Queue (ft)	99	100	108	24	31	4	41
Average Queue (ft)	45	40	41	1	2	0	2
95th Queue (ft)	83	77	90	21	14	4	18
Link Distance (ft)		784		1019		827	827
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100		150		100		
Storage Blk Time (%)	1	1	0				
Queuing Penalty (veh)	1	0	0				

Zone Summary

Zone wide Queuing Penalty, Interval #1: 3
Zone wide Queuing Penalty, Interval #2: 2
Zone wide Queuing Penalty, Interval #3: 1
Zone wide Queuing Penalty, Interval #4: 0
Zone wide Queuing Penalty, All Intervals: 2

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APPENDIX C

95th Percentile Queue Length Reports

SimTraffic Queueing Report

Project: Cottonwood Heights Apartments TIS

Analysis: Existing (2017) Background

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet)

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Project #: UT17-1167

Intersection	EB		NB		SB	
	L	R	L	T	L	TR
1300 East & 6720 South	65	65	57	13	18	13

SimTraffic Queueing Report
Project: Cottonwood Heights Apartments TIS
Analysis: Existing (2017) Plus Project
Time Period: Evening Peak Hour
95th Percentile Queue Length (feet)

HALES ENGINEERING
Innovative transportation solutions

Project #: UT17-1167

Intersection	EB		NB		SB		
	L	R	L	T	L	T	TR
1300 East & 6720 South	83	77	90	21	14	4	18

HALES ENGINEERING
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MEMORANDUM

Date: July 31, 2018

To: Mike Johnson, Senior Planner
Cottonwood Heights Community & Economic Development

From: Hales Engineering

Subject: Cottonwood Heights Apartments TIS Comments Response

UT17-1167

The purpose of this memorandum is to address the comments submitted to Michael Johnson, Planning Director for Cottonwood Heights, dated June 21, 2018 regarding the Cottonwood Heights Apartments (Walsh Property) Traffic Impact Study.

For ease of review, each comment has been reproduced in this memorandum and italicized, followed by the Hales Engineering response.

1. LOS breakdown needs to include the following:

- *Analysis for both AM Peak and PM Peak. Worst case for exiting the site should be the AM peak.*
- *Show delay by movement not approach.*
- *Analysis for each individual leg movement during peak periods.*

The number of vehicles turning from 6720 South onto 1300 East were observed to be approximately the same in the morning and evening peak hours. The traffic volumes on 1300 East, both turning onto 6720 South and through the intersection, are significantly higher during the evening peak hour. See Appendix A in the TIS for details. The higher traffic on 1300 East during the evening peak hour would result in fewer and/or smaller gaps in traffic to execute turn movements from 6720 South, especially for left-turning vehicles. For this reason, the evening peak hour was selected for analysis.

An analysis of the morning peak hour was added to the TIS. The 6720 South / 1300 East access is operating at LOS A during the morning peak hour, as opposed to LOS C during the evening peak hour.

Since the study intersection is stop controlled, the delay for the worst approach is used for analysis purposes as is industry standard. Additional details, including delay for each movement and approach, is provided in Appendix B.

2. Prepare a signal warrant analysis for at least the peak periods, for each movement.

To satisfy the volume requirements for Warrant 3 (Peak Hour Warrant) as outlined in the Utah MUTCD the minor approach to the intersection must have a minimum of 100 vehicles. The required number of vehicles on the minor approach increases as the total volume on the major approaches decreases.

The highest minor approach volume observed during the evening peak hour was 86 vehicles, which is below the 100 vph minimum. The highest minor approach volume observed during the morning peak hour was 93 vehicles. The minor street volume during the overall (accounting for all approaches) morning peak hour was 88 vehicles. With the morning volumes on 1300 East the required minimum minor street volume is approximately 200 vph. Based on these volumes, a traffic signal is not warranted at this intersection based on peak hour volumes.

With project traffic added, the minor street approach volumes are anticipated to be 143 vph and 121 vph during the morning and evening peak hours, respectively. It is anticipated that with the corresponding major street volumes, that Warrant 3 (Peak Hour) will be met during the evening peak hour. The Warrant 3 plots are included in the appendix to this memorandum.

The peak hour signal warrant is generally only used in special circumstances and traffic signals are not usually installed based on the peak hour warrant alone. A full warrant analysis would require additional data collection that was not included in the scope of the TIS. The 6720 South /1300 East intersection is anticipated to continue to operate at an acceptable level of service during the morning and evening peak hours with project traffic added, no mitigation measures were recommended.

It is recommended that a full signal warrant analysis be completed before a traffic signal is considered at this intersection.

3. Queue analysis shows 100-ft but the EBL storage pocket is only 40-ft long.

Yes, the left-turn queue is anticipated to extend beyond the provided left-turn storage. The TIS recommended extending this left-turn storage. (See Table ES-2, and Chapter IV Section E)

4. Prepare a queue analysis for the AM peak.

A queue analysis for the morning peak hour was added to the TIS. Queues in the evening peak hour are anticipated to be longer than in the morning.

5. Is there a need to restripe the pocket on 6720 South to increase the turn left storage?

Yes. This recommendation was included in the TIS. (See the Executive Summary, Table ES-2, and Chapter IV Section E)

6. Should there be a section of "No parking" along 6720 South to protect the auxiliary lanes?

Assuming that "auxiliary lanes" in this context refers to the eastbound left- and right-turn lanes at the 6720 South / 1300 East intersection, if the pavement is not wide enough to accommodate the auxiliary lanes in addition to on-street parking, then yes.

7. Analyze the impact the proposed development will have on 6720 South. Include the following in the analysis:

- *Existing and predicted ADT volume of local road.*
- *Does the increased traffic volume and narrow roadway widths warrant changes to the on-street parking?*
- *Predicted Emergency response time.*
- *Impact to traffic flow and safety.*
- *Include all roadway improvements needed.*

The existing and predicted ADT of 6720 South have been added to the TIS. (See Chapter III and the Executive Summary.)

On street parking has been addressed in a recently submitted memorandum dated July 13, 2018. Recommendations for on-street parking are stated in the memorandum but are not a result of the projected added traffic from the proposed apartments.

Assuming an emergency is responding from the Unified Fire Authority station located at 1790 Fort Union Boulevard, the distance to reach the proposed development is approximately 1.1 miles. Assuming an average speed of 45 mph, the travel time would be approximately 1.5 minutes. This does not account for delays navigating through intersections. It is also likely that an emergency vehicle would be severely impeded on 6720 South with vehicles parallel parked on either side. If an eastbound vehicle were traveling at the same time as a westbound emergency vehicle, there would significant delays. If on-street parking is restricted as recommended, it is likely that emergency response times will improve.

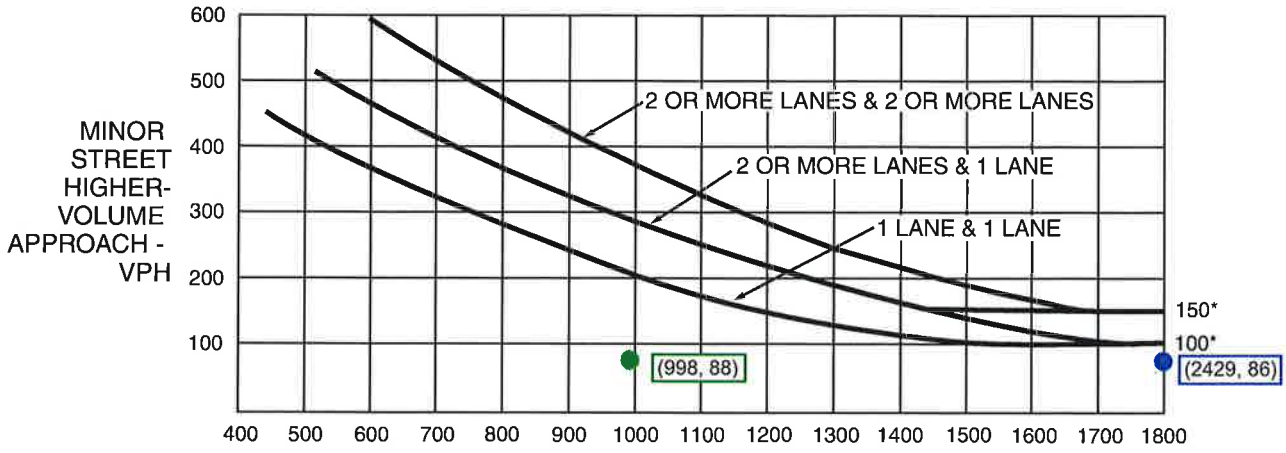
We anticipate that the project's impact to traffic flow and safety will be negligible.

All recommended roadway improvements are included in the TIS. (See Chapter IV and the Executive Summary.)

If you have any questions regarding this memorandum, please feel free to contact us.

6720 South / 1300 East
Background Conditions

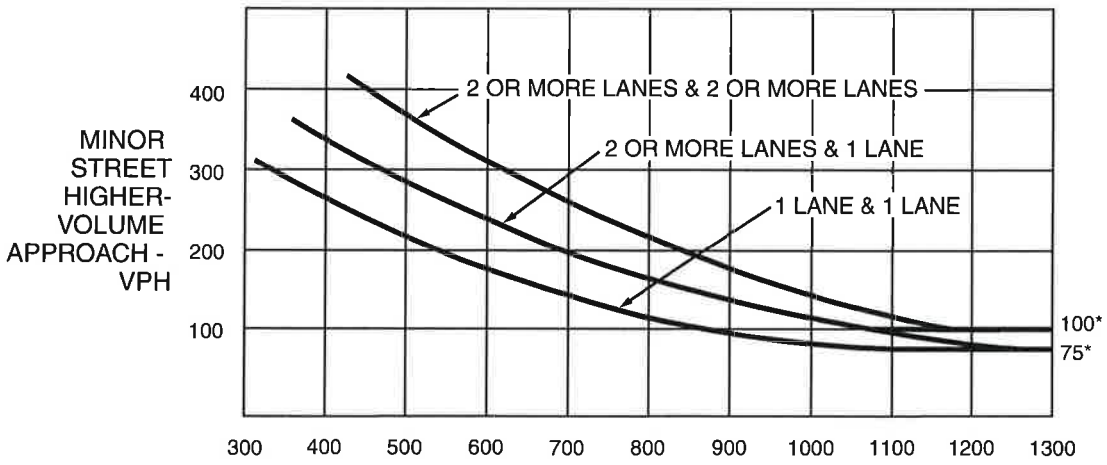
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

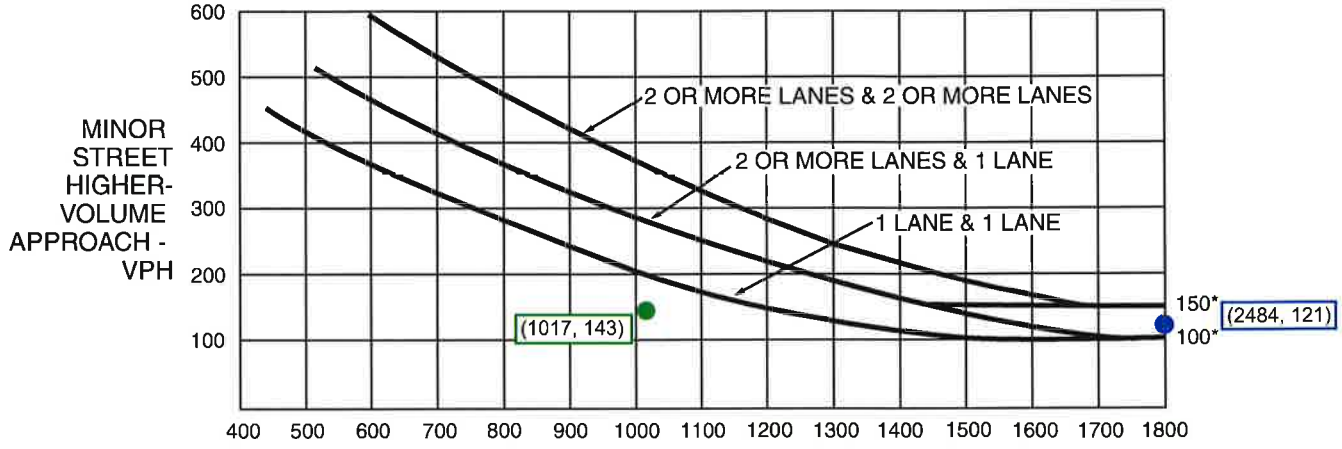
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

6720 South / 1300 East
With Project Traffic Added

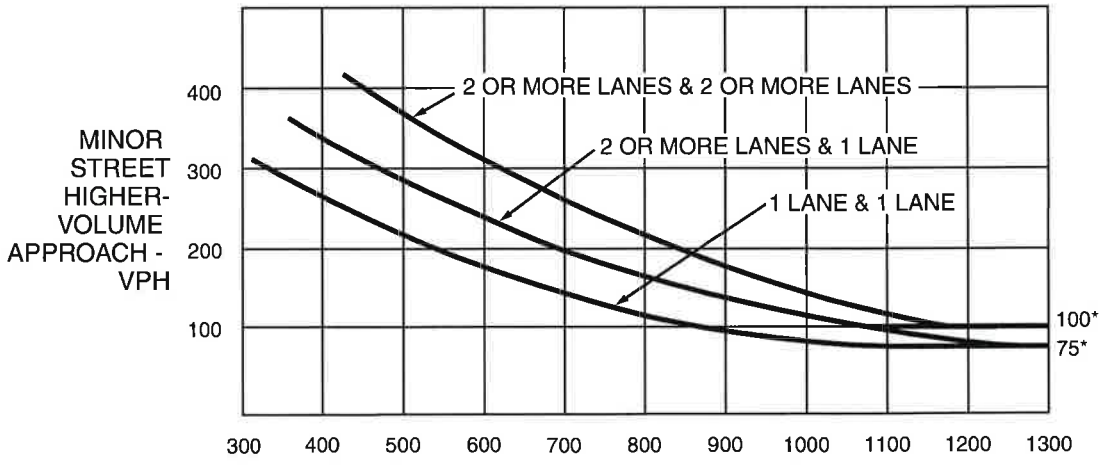
Figure 4C-3. Warrant 3, Peak Hour



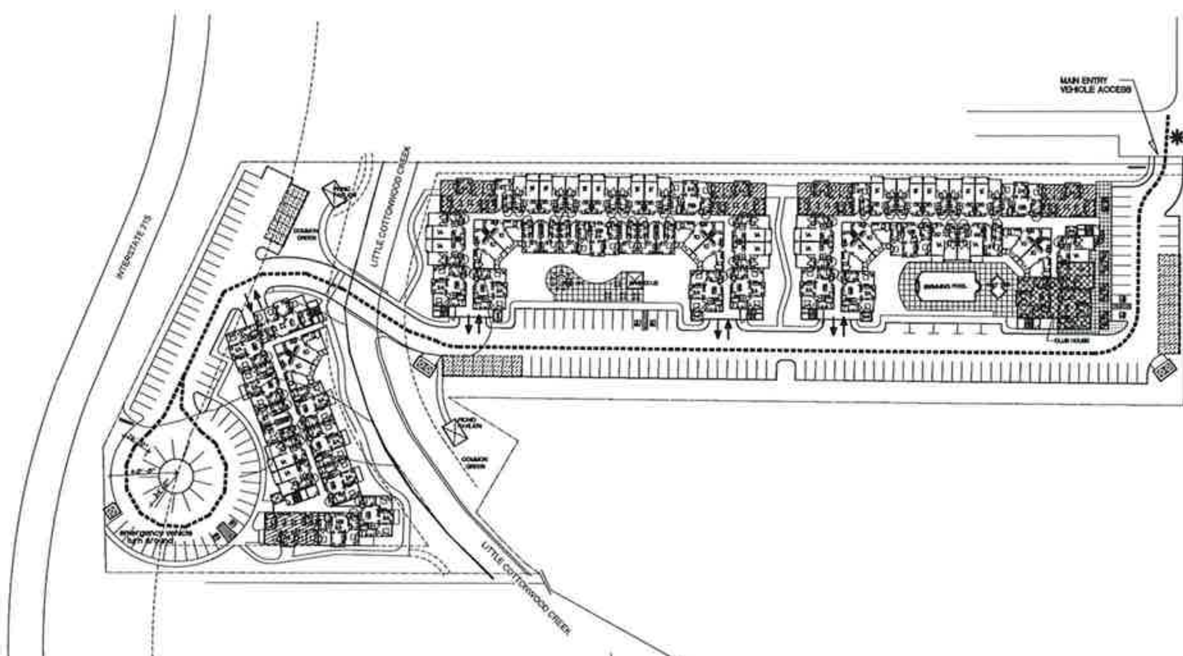
*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



CIRCULATION SITE PLAN - TRAFFIC

SCALE: 1" = 40'-0"

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AND FOR ICO COMPANIES USE ONLY

PROJECT NUMBER
17-046

SHEET TITLE
CONCEPT SITE PLAN
CIRCULATION TRAFFIC PLAN
SCALE: 1" = 40'-0"

PROJECT/OWNER
WALSH PARCEL
COTTONWOOD HEIGHTS, UT
XX
COTTONWOOD HEIGHTS, UTAH
ICO DEVELOPMENT

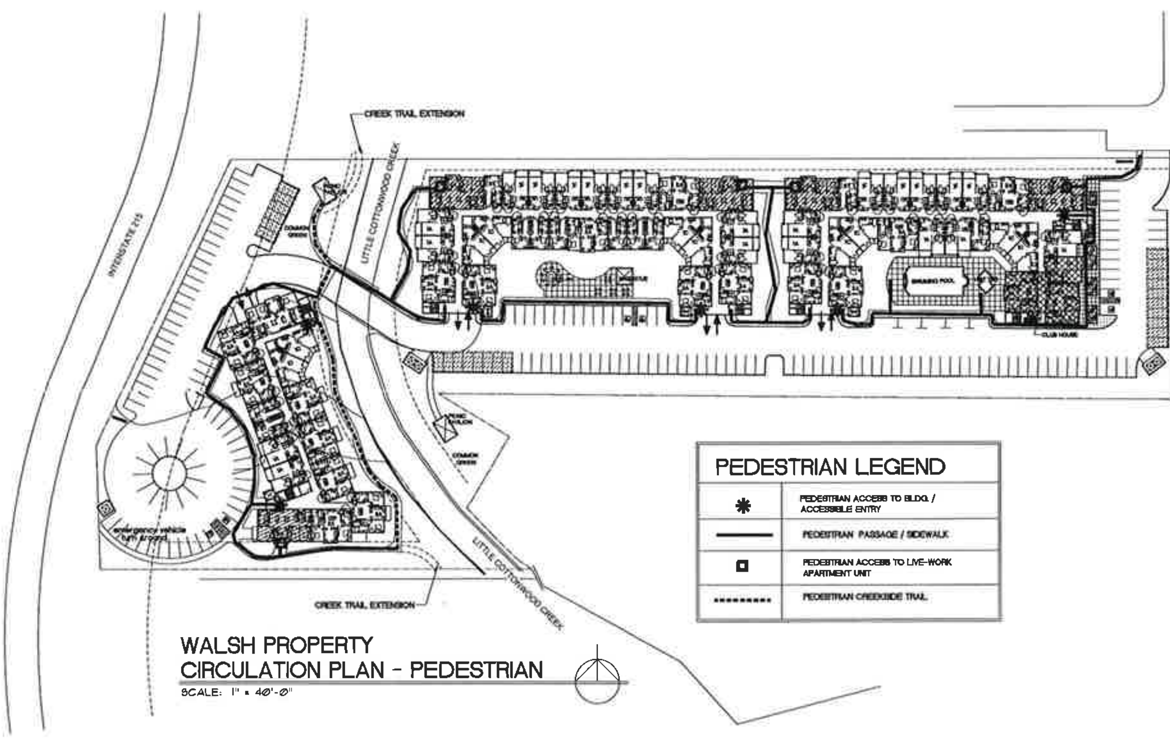
ARCHITECT

KCB architecture
2033 dan drive
layton, utah 84040
(801) 593-9336
(801) 593-9328 FAX

REVISION DATE
15 FEB 2019

DATE
31 AUG 2018

SHEET NUMBER
A1.2



PEDESTRIAN LEGEND

✱	PEDESTRIAN ACCESS TO BLDG. / ACCESSIBLE ENTRY
———	PEDESTRIAN PASSAGE / SIDEWALK
◘	PEDESTRIAN ACCESS TO LIVE-WORK APARTMENT UNIT
--------	PEDESTRIAN CREEKSIDE TRAIL

WALSH PROPERTY
CIRCULATION PLAN - PEDESTRIAN

SCALE: 1" = 40'-0"

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PROJECT NUMBER: 17-046

SHEET TITLE: CIRCULATION SITE PLAN PEDESTRIAN PATH SCALE: 1" = 40'-0"

PROJECT/OWNER: WALSH PARCEL COTTONWOOD HEIGHTS, UT

XX COTTONWOOD HEIGHTS, UTAH

ICO DEVELOPMENT

ARCHITECT

KC8 architecture

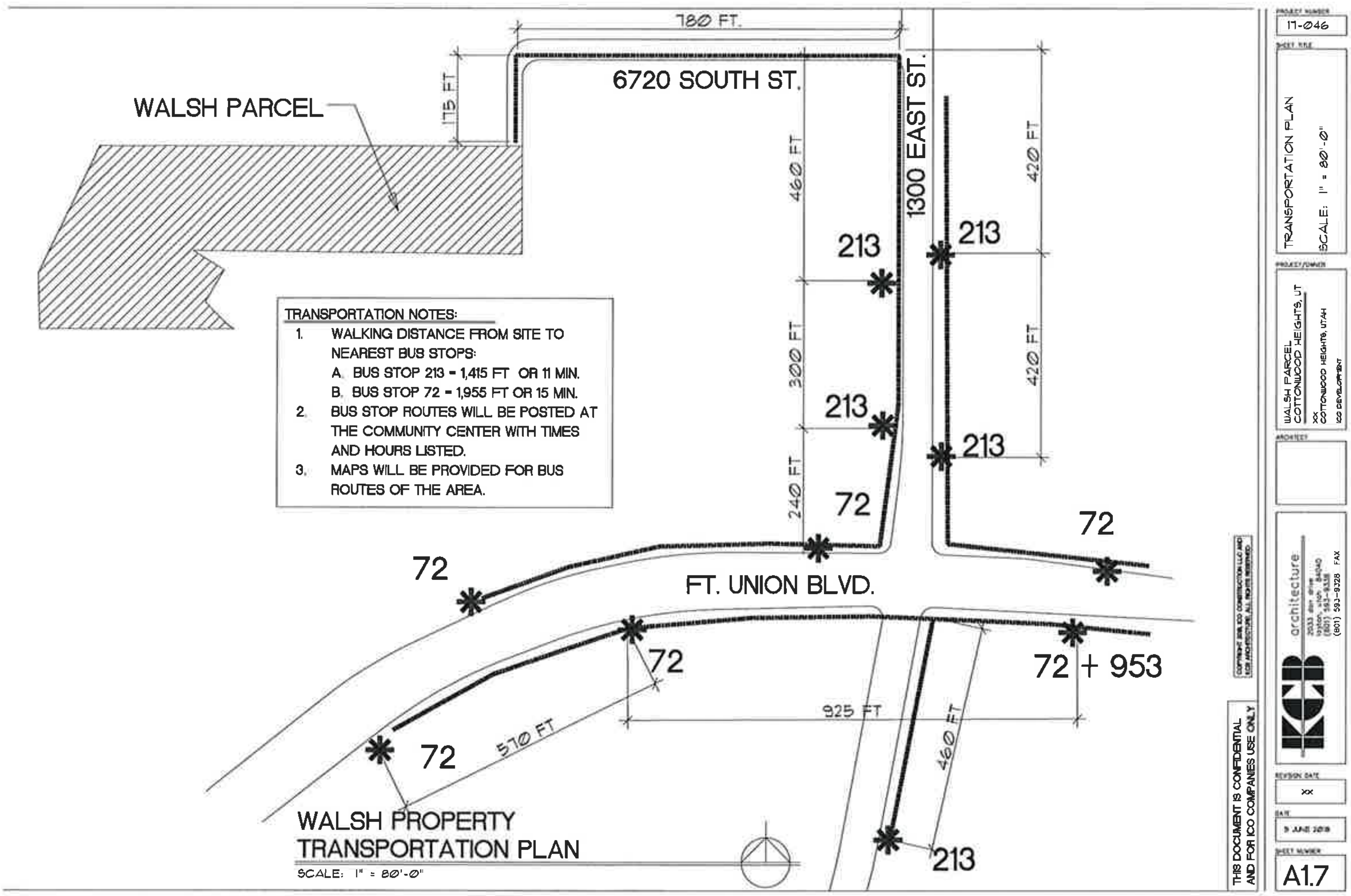
(801) 593-9338

(801) 593-9328 FAX

REVISION DATE: 15 FEB 2019

DATE: 31 AUG 2018

SHEET NUMBER: A1.3


780 FT.
175 FT.
WALSH PARCEL
6720 SOUTH ST.
1300 EAST ST.
460 FT
420 FT
213
213
420 FT
300 FT
213
213
240 FT
72
72
72
FT. UNION BLVD.
72
925 FT
72 + 953
570 FT
72
460 FT
213
TRANSPORTATION NOTES:
1. WALKING DISTANCE FROM SITE TO NEAREST BUS STOPS:
A. BUS STOP 213 = 1,415 FT OR 11 MIN.
B. BUS STOP 72 = 1,955 FT OR 15 MIN.
2. BUS STOP ROUTES WILL BE POSTED AT THE COMMUNITY CENTER WITH TIMES AND HOURS LISTED.
3. MAPS WILL BE PROVIDED FOR BUS ROUTES OF THE AREA.
WALSH PROPERTY
TRANSPORTATION PLAN
SCALE: 1" = 80'-0"
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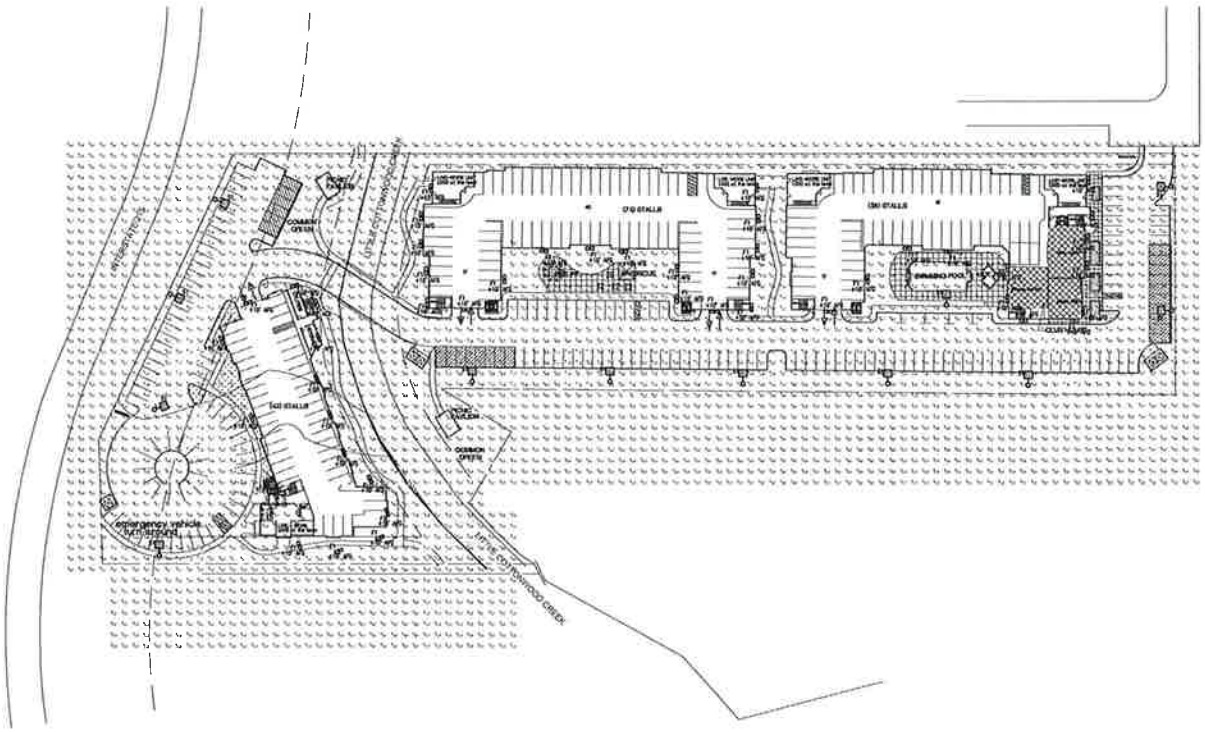
PROJECT NUMBER
17-046
SHEET TITLE
TRANSPORTATION PLAN
SCALE: 1" = 80'-0"
PROJECT/OWNER
WALSH PARCEL
COTTONWOOD HEIGHTS, UT
XX
COTTONWOOD HEIGHTS, UTAH
ICO DEVELOPMENT
ARCHITECT
architecture
(801) 593-9328 FAX
REVISION DATE
XX
DATE
SHEET NUMBER
A1.7



CONCEPT PHOTOMETRIC PLAN
SCALE: 1" = 40'-0"

PROJECT NUMBER
17-046

SHEET TITLE
CONCEPT PHOTOMETRIC PLAN
SCHEME 2A4
SCALE: 1" = 40'-0"

PROJECT/OWNER
WALSH PARCEL
COTTONWOOD HEIGHTS, UT
XX
COTTONWOOD HEIGHTS, UTAH
MPD DEVELOPMENT

ARCHITECT

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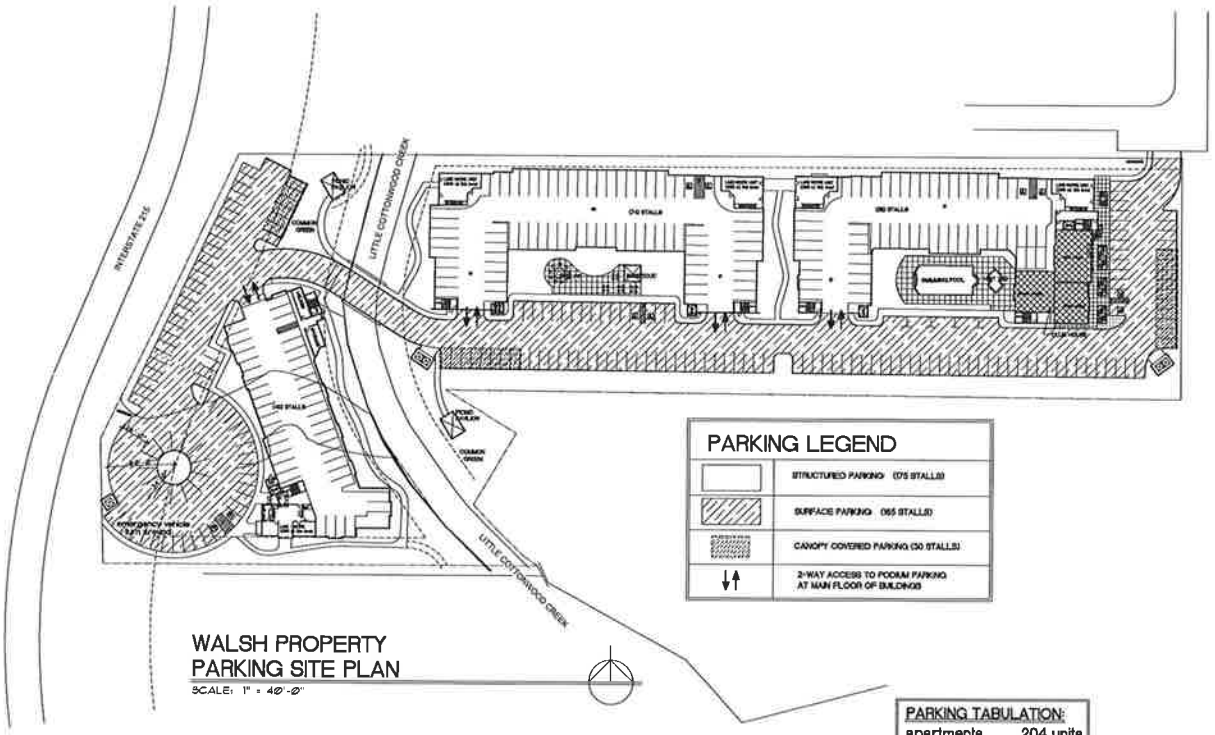
REVISION DATE
XX

DATE
22 DEC 2017

SHEET NUMBER
E1.1



PARKING LEGEND

	STRUCTURED PARKING (275 STALLS)
	SURFACE PARKING (165 STALLS)
	CANOPY COVERED PARKING (30 STALLS)
↓↑	2-WAY ACCESS TO PODIUM PARKING AT MAIN FLOOR OF BUILDINGS

WALSH PROPERTY
PARKING SITE PLAN

SCALE: 1" = 40'-0"

PARKING TABULATION:

apartments 204 units

PARKING PROVIDED:

- surface: 164 stalls
- podium: 175 stalls
- carport: 30 stalls

total parking: 369 stalls

ratio: 1.8 stalls / unit

PROJECT NUMBER
17-046

SHEET TITLE
CIRCULATION SITE PLAN
PARKING PLAN
SCALE: 1" = 40'-0"

PROJECT/OWNER
WALSH PARCEL
COTTONWOOD HEIGHTS, UT
XX
COTTONWOOD HEIGHTS, UT44
ICO DEVELOPMENT

ARCHITECT

architecture
2033 4th Street
San Rafael, CA 94901
(801) 593-8338
(801) 593-8326 FAX

REVISION DATE
15 FEB 2019

DATE
31 AUG 2018

SHEET NUMBER
A1.4

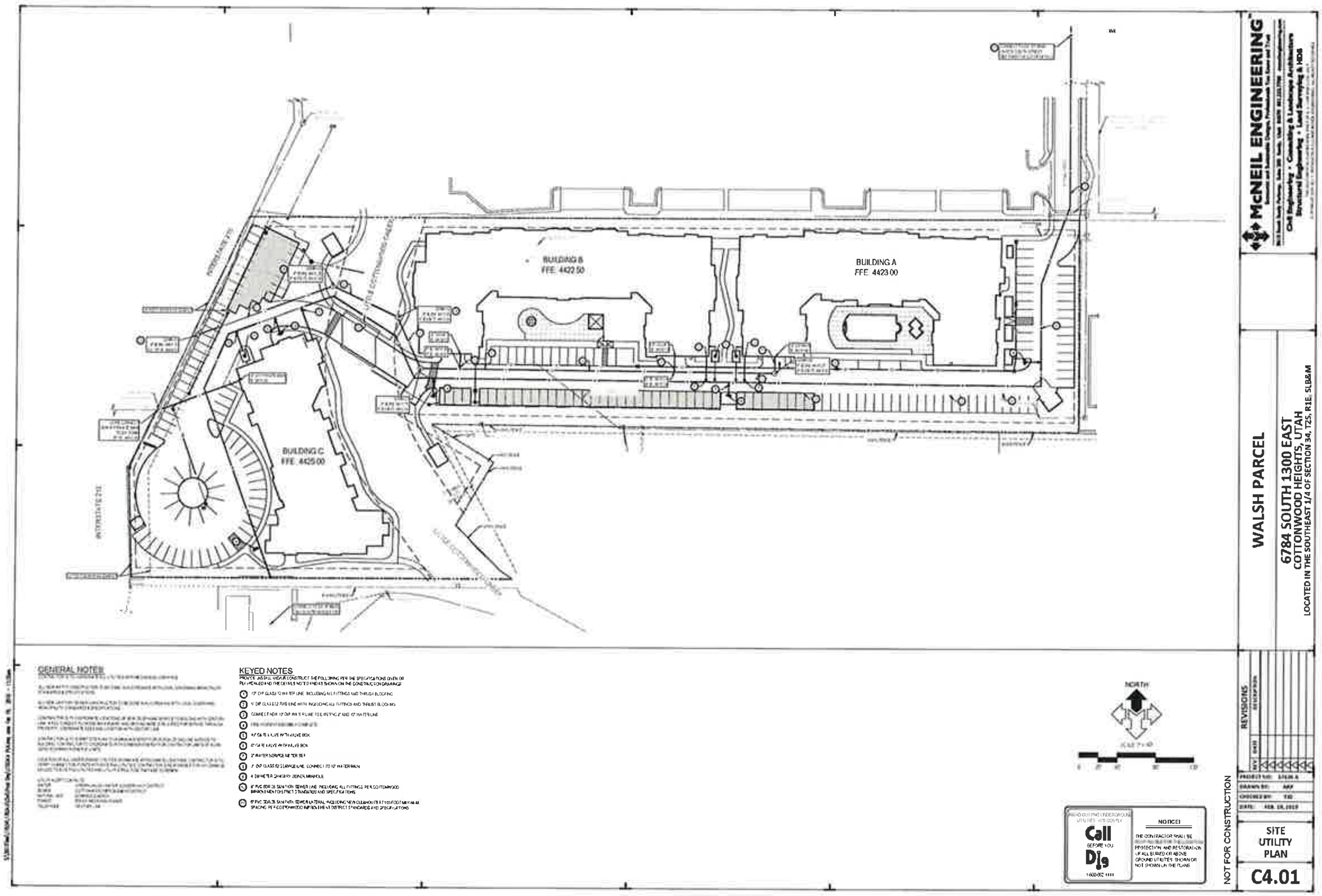
BUILDING A SOUTH ELEVATION

BUILDING B SOUTH ELEVATION

BUILDING C EAST ELEVATION

KCB architecture

COTTONWOOD HEIGHTS APARTMENTS


BUILDING B
FFE 4422.50
BUILDING A
FFE 4423.00
BUILDING C
FFE 4425.00
INTERSTATE 215
GENERAL NOTES
KEYED NOTES
NORTH
Call before you Dig
NOTICE!
NOT FOR CONSTRUCTION
McNEIL ENGINEERING
Civil Engineering • Consulting & Landscape Architecture
Structural Engineering • Land Surveying & HDS
WALSH PARCEL
6784 SOUTH 1300 EAST
COTTONWOOD HEIGHTS, UTAH
LOCATED IN THE SOUTHEAST 1/4 OF SECTION 34, T2S, R1E, SLB&M
REVISIONS
SITE
UTILITY
PLAN
C4.01