STAFF REPORT
Hearing Officer

July 10, 2017

PROJECT NAME

SALUD FAMILY HEALTH CENTER – PDP160015

STAFF

Jason Holland, City Planner

PROJECT INFORMATION

PROJECT DESCRIPTION: This is a Project Development Plan (PDP) request for a new medical and dental outpatient clinic. The proposal includes an updated boundary plat that divides the property into 7 lots. Lot 1 contains an existing building that is Salud's current location. The proposed Salud Family Health Center PDP is located on Lot 4 which is approximately 8 acres. An existing 38,000 square foot industrial building on Lot 4 will be re-purposed and renovated to house Salud's permanent clinic. Additional off-street parking is proposed surrounding the renovated building. A new public street is proposed to provide access from Laporte Avenue. The site is located in the Limited Commercial (C-L) and Low Density Mixed-Use Neighborhood (L-M-N) zone districts. The proposed use is permitted subject to a "Type 1" Public Hearing.

APPLICANT:
Stephanie Hansen
Ripley Design Inc.
419 Canyon Avenue, Suite 200
Fort Collins, CO 80521

OWNER:
John Santisteven
203 Rollie Avenue
Fort Lupton, CO 80621

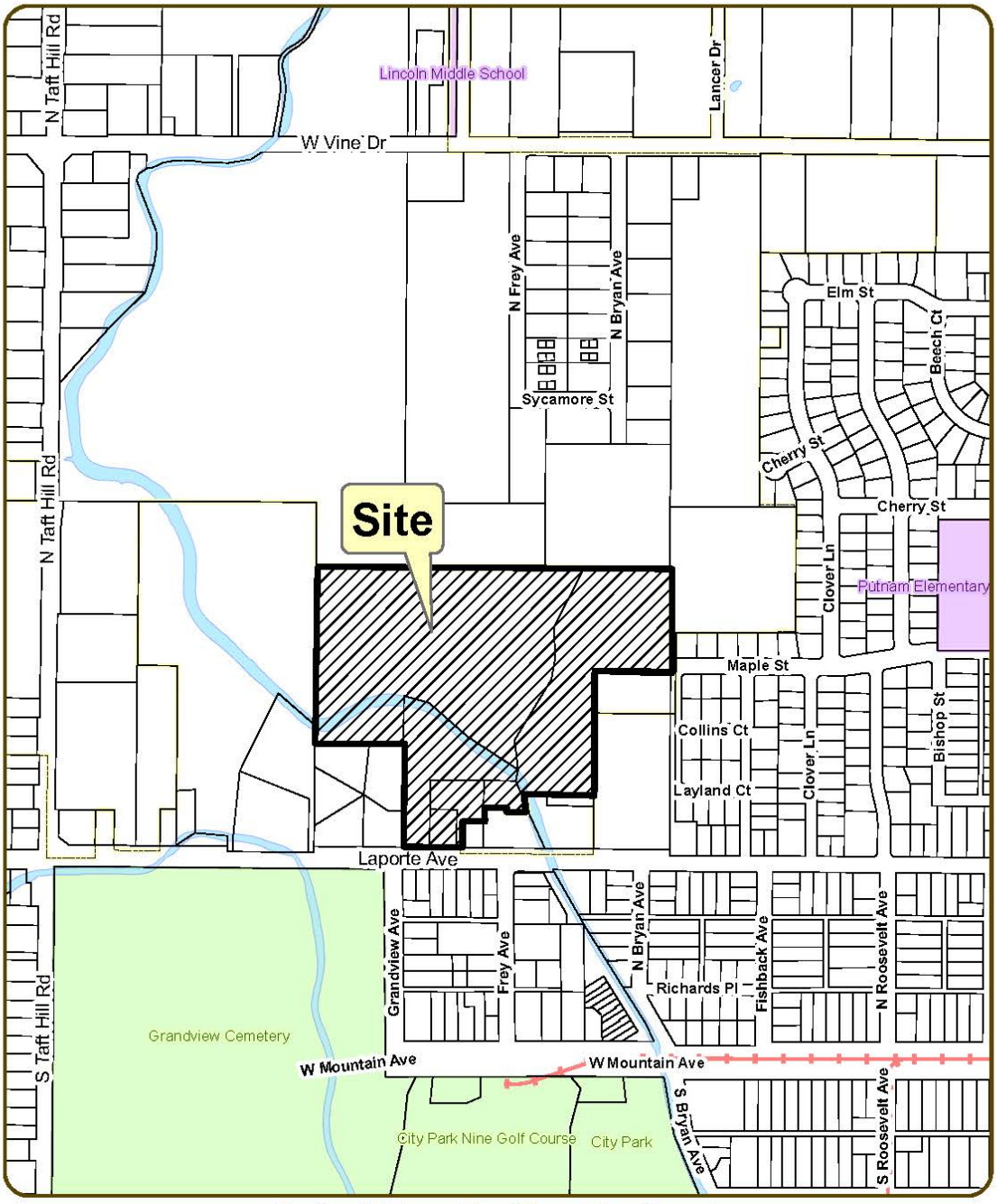
RECOMMENDATION: Approval

EXECUTIVE SUMMARY

The Salud Family Health Center Project Development Plan complies with the applicable requirements of the City of Fort Collins Land Use Code (LUC), more specifically:

- The PDP complies with process located in Division 2.2 – Common Development Review Procedures for Development Applications of Article 2 – Administration.
- The PDP complies with relevant standards located in Division 4.5, Low Density Mixed-Use Neighborhood District (L-M-N) of Article 4.
- The PDP complies with relevant standards located in Division 4.24, Limited Commercial District (C-L) of Article 4.
- The PDP complies with relevant standards located in Article 3 – General Development Standards.
- The PDP continues to comply with the Salud Family Health Center Overall Development Plan (ODP) that was approved by the Planning and Zoning Board on May 12, 2016.

VICINITY MAP



1. Background:

Surrounding zoning and land uses:

Direction	Zone District	Existing Land Uses
North	Larimer County FA-1	Radio transmission towers; City regional detention pond.
South	Neighborhood Conservation, Low Density District (N-C-L)	Residential
East	Low Density Mixed-Use Neighborhood (L-M-N)	Residential
West	Low Density Mixed-Use Neighborhood (L-M-N)	Residential, solar facility

Zoning and Land Use History:

In 1945, the property was developed in Larimer County as the main office, warehouse and manufacturing facility for Forney Industries, which makes metalworking and welding products.

In October 2012, the 23 acre property was annexed and zoned with the Forney Annexation. The property was held in the Transition (T) zone at the time of annexation, as the owner was uncertain what zoning designations would be proposed with future development of the site.

In August, 2015, the 23 acre property was rezoned, as requested by Salud, to include 12.5 acres within the (LMN) Low Density Mixed Use Neighborhood zone district and 10.5 acres within the (CL) Limited Commercial zone district, consistent with the City Structure Plan Map.

In 2015, Forney Industries sold the property to Salud and relocated the Forney headquarters to 2057 Vermont Ave.

In September 2015, an existing building on the site was renovated to temporarily house the Salud medical and dental clinic. The building is located on Lot 1 of the proposed plat and site plan, and was formerly the office and headquarters of Forney Industries.

On May 12, 2016, the Planning and Zoning Board approved Salud Family Health Center Overall Development Plan (ODP), which establishes the general planning and development parameters for future PDP phases.

2. Compliance with Division 4.24 of the Land Use Code – Limited Commercial (C-L):

The project complies with all applicable Division 4.24 Limited Commercial standards:

A. Section 4.24(B) – Permitted Uses

The proposed use is designated in Section 4.24(B) of the Land Use Code as *Offices, Financial Services and Clinics*, and the clinic use proposed is permitted subject to a *Basic Development Review (BDR)*. The BDR process is outlined in Division 2.18.3, and does not require a public hearing. However, because the PDP proposes a plat containing seven lots, a Type 1 review of the Salud PDP applies.

B. Section 4.24(D) – Land Use Standards

The building height proposed is one story which meets the requirements of this section which permits a maximum height of three stories.

C. Section 4.24(E) – Development Standards

This section requires that non-residential buildings meet the requirements in Section 3.5.3, which is discussed later in the staff report.

Section 4.24(D)(1)(b) requires that no buildings have an undifferentiated mass with a footprint greater than 10,000 square feet. For any building with a footprint in excess of 10,000 square feet, the building shall be differentiated into multiple sections of mass in order to achieve proportions that are compatible in scale with adjacent residential neighborhoods.

The proposed building meets the requirements of this section and proposes a full exterior renovation of the existing building footprint. The proposed building renovation is articulated with wall plane projections, including wide projecting masonry ribs, sandstone column projections, and a large clerestory roof element. The majority of the building footprint incorporates this clerestory roof element, which is recessed from the base wall plane and defined by gable roof elements and corrugated metal siding. Projecting eaves with soffit brackets further define the clerestory roof, adding significant detail and wall plane modulation. Additional detail is provided using projecting metal canopies and deep soffits along the south elevation with base brackets below the soffits. Window patterns along the building base are well-proportioned and include transom windows at the base level that further articulate the building's wall planes. The overall "L" shape of the building footprint also helps break up the apparent mass of the building. The PDP provides a cohesive overall architectural theme that proposes a creative solution to retrofit and repurpose a large existing building footprint in a manner that achieves an appropriate proportion and compatible scale in conformance with the standard.

3. Compliance with Divisions 4.5 of the Land Use Code – Low Density Mixed-Use Neighborhood District (LMN):

The project complies with all applicable Division 4.5 Low Density Mixed-Use Neighborhood standards:

A. Section 4.5(B) – Permitted Uses

Portions of the Salud Project Development Plan on Lot 4 are located in the L-M-N zone district and include the water quality detention area and portions of the Salud parking areas. Both of these uses are considered accessory and are permitted in the zone district subject to a Basic Development Review. However, as stated previously, because the PDP proposes a plat containing seven lots, a Type 1 review of the PDP is applicable.

4. Compliance with Article 3 of the Land Use Code – General Development Standards

The project complies with all applicable General Development Standards; with the following comments provided:

***A.* Section 3.2.1 – Landscaping and Tree Protection**

Street trees are provided along Salud Parkway at approximately 40-foot intervals in accordance with the required spacing requirements of this section. The project also meets the minimum tree species diversity requirement of this section.

Parking areas are adequately landscaped and include interior islands and perimeter landscape areas that buffer the parking areas from Salud Parkway. Interior shade trees are provided with the parking areas in accordance with the standards.

“Full Tree Stocking” is provided along all high use and high visibility areas of the development with tree grate plantings provided around the south of the building perimeter along the connecting walkway that leads to the secondary entrances of the building.

***B.* 3.2.2 – Access, Circulation and Parking:**

Parking requirements in terms of quantity and dimensions of parking stalls are provided in accordance with the standards. A total of 166 parking spaces are provided.

An existing Transfort bus stop along Laporte Avenue is in close proximity to the project and will remain in its current location.

The parking and circulation of the development is well designed with regard to safety, efficiency and convenience for vehicles, bicycles, pedestrians and transit, both within the development and to and from surrounding areas. Sidewalk connections are direct and contribute to the attractiveness of the development. Salud Parkway provides the required street connectivity and is designed in accordance with the City’s street standards with a detached walk and tree lawn. A wide entrance plaza forms a connecting walkway to the building entrance from Salud Parkway.

The PDP provides an 8’ wide concrete trail which will connect the development to the future Soldier Creek regional trail, which will be constructed off-site by the City to the north of the project.

***C.* 3.2.4 – Site Lighting:**

A photometric plan was submitted for the project. As proposed, the project complies with the lighting design standards in Section 3.2.4. Parking lot and building lighting is provided by down-directional and sharp cut-off fixtures.

***D.* Section 3.3.1 – Plat Standards**

All lots have direct access to a public street. The layout of roads, driveways, utilities, drainage facilities, and other services are designed in a way that enhances an interconnected system within and between potential developments to the south. The plat demonstrates proper dedication of public rights-of-way, drainage easements and utility easements that are needed to serve the area being developed.

E. Section 3.4.1 – Natural Habitats and Features.

The project's Ecological Characterization Study reports that the property contains several natural habitats and features, predominately a series of significant existing tree groups and the Larimer #2 Irrigation Canal corridor that bisects the property. The PDP identifies the significant existing tree groves and designates appropriate buffer areas to be preserved and protected with the PDP plans. A detailed mitigation plan is provided that identifies these tree protection areas as natural habitat buffer zones. To meet the standards associated with Section 3.4.1, the project proposes to apply the performance standards contained in Section 3.4.1(E) of the Land Use Code by providing a variable buffer line along these natural features. Staff finds that the project meets the performance standards by incorporating additional tree plantings to enhance the ecological value of the adjacent natural habitat.

F. Section 3.5.3 – Mixed-Use, Institutional and Commercial Buildings

The existing building is oriented towards Salud Parkway in conformance with the "build-to" line requirement of this section;

The building form provides the required variation in massing, wall articulation and changes in mass related to the building's entrances;

Entrances are clearly identified and articulated with a metal canopy as a defining element;

All facades are subdivided and proportioned using features such as clerestory windows, architectural columns, changes in texture and material, cornice treatments, and pitched roof elements.

G. 3.6.4 – Transportation Level of Service Requirements

The Traffic Operations and Engineering Departments have reviewed the Transportation Impact Study (T.I.S.) that was submitted to the City for review and have determined that the vehicular, pedestrian and bicycle facilities proposed with this P.D.P. are consistent with the standards contained in Part II of the City of Fort Collins Multi-modal Transportation Level of Service Manual. Additionally, an acceptable level of service is achieved for pedestrian, bicycle, and transit modes based upon the measures in the City multi-modal transportation guidelines.

Street improvements to be constructed meet the Level of Service requirements for the Salud PDP. These improvements include the construction of Salud Parkway, a detached sidewalk and tree lawn along the project's Laporte Avenue frontage and a center turn lane on Laporte Avenue.

5. Neighborhood Meeting

A City neighborhood meeting was not required for this project and a meeting was not held for the PDP. A neighborhood meeting was held for the ODP on September 16, 2015 at the LaPorte Outreach Church and the meeting notes are attached with this staff report. The main concerns at that time included additional vehicular traffic in the area and concerns that the proposed use could increase crime in the area.

6. Findings of Fact/Conclusion

In evaluating the Salud Family Health Center Project Development Plan (PDP), staff makes the following findings of fact:

A. The PDP complies with process located in Division 2.2 – Common Development Review Procedures for Development Applications of Article 2 – Administration.

B. The PDP complies with relevant standards located in Division 4.24, Limited Commercial District (C-L) of Article 4.

C. The PDP complies with relevant standards located in Division 4.5, Low Density Mixed-Use Neighborhood District (L-M-N) of Article 4.

D. The PDP complies with the relevant standards located in Article 3 – General Development Standards.

E. The PDP continues to comply with the Salud Family Health Center Overall Development Plan (ODP) that was approved by the Planning and Zoning Board on May 12, 2016.

RECOMMENDATION:

Approval of the Salud Family Health Center Project Development Plan – PDP160015.

ATTACHMENTS

1. Applicant's Narrative and Planning Objectives
2. PDP plan set:
    a. Site Plan
    b. Landscape Plan
    c. Landscape Habitat Buffer Mitigation Plan
3. Building Elevations with representative colors
4. Detailed Building Elevations

5. Plat
6. Lighting Photometric plan
7. Lighting Details
8. Signed Letter of Intent
9. Approved Overall Development Plan (ODP)
10. PDP Utility Plans
11. Ecological Study
12. Traffic Impact Report
13. ODP Neighborhood Meeting Summary

RIPLEY DESIGN INC.

land planning ■ landscape architecture ■ urban design ■ entitlement

May 18, 2016

Salud Family Health Center
PROJECT DEVELOPMENT PLAN (PDP)

Planning Objectives

The applicant, Salud Family Health Center, provides medical and dental care for all community members with a priority for the low-income, medically underserved population, as well as migrant and seasonal farm workers. Since 1970, Salud has maintained a firm commitment to provide care to all community members and does not turn patients away based on finances, insurance coverage, or ability to pay. They purchased 12.5 acres (the former home of Forney Industries on Laporte Avenue) in 2015 for a second Fort Collins location. A re-zone was completed in July of 2015 and an Overall Development Plan (ODP) was approved in May of 2016.

The ODP divided the entire site into six lots. This first Project Development Plan (PDP) will include lot 4 with access from a commercial local road extending from Laporte Avenue north into the site. In the interim the access will terminate in a gravel turn around, however, with future development the road will connect to Maple Street which is currently a dead-end. Within lot 4 there is an existing 38,000 square foot, one-story building, that will be renovated to accomodate Salud's permanent clinic. At full build out, Salud will employ approximately 80 employees. In order to secure federal funding, Salud opened a temporary clinic on-site in an existing smaller building along Laporte Avenue. They will remain in this space until the larger on-site building is renovated. At that time, the temporary clinic will be demolished to make room for future development.

Lot 4 consists of 7.9 acres and is bisected into two zone districts: Low Density Mixed-Use Neighborhood and Limited Commercial. The southern boundary of lot 4 is the Larimer Canal No. 2 irrigation ditch. City of Fort Collins owns the land adjacent to the north with plans to construct the West Vine Regional Detention Pond. The lots to the east and west are currently owned by Salud and will be developed with future PDP's.

Detached sidewalks and tree lawns will be installed along the proposed local street and along the property frontage on Laporte Avenue. There are three parking lots proposed for a total of 167 parking spaces. Additional on-street parking will be available along Maple Street. There are bus stops on both sides of Laporte Avenue within two blocks of the property. There is a gravel social path leading from North Star Mobile Home Park, through Salud and City of Fort Collins land, connecting to the neighborhood north of the site. This project proposes to replace the gravel path with a permanent eight foot wide hard surface pedestrian and bicycle trail from Maple Street to the north edge of the Salud property.

There are several tree groupings on site which are analyzed within the Ecological Characterization Study. During the ODP process it was determined that Tree Groups G,H, O and F did not require a natural habitat buffer zone. Tree Group K and I require a 25' buffer zone and Tree Group C,D, and E require a 50' buffer zone. To construct Maple Street Tree Group K and the associated buffer zone will have to be removed. This project proposes mitigating that buffer area along the northern property boundary which will improve connectivity between Tree Group C, H and I. Enhancement of the Larimer Canal No. 2 irrigation ditch will be accomplished by removing several small buildings and parking areas which will reduce vehicular lights and glare into the ditch. In addition, understory vegetation is proposed to provide better habitat through the corridor and provide more species diversity.

Domestic water proposed for this development will be provided by the City of Fort Collins. Existing water lines are located within Laporte Avenue and Cherry Street. The existing water main within Laporte Avenue is a 20" cast iron pipe and the existing water main within Cherry Street is a 6" PVC pipe. The proposed design is to connect at each of these locations and run a public water line through the site in alignment with the proposed road. Services to each of the lots will be connected to this proposed water line. The domestic water system will also include fire hydrants located throughout the site to accommodate for Poudre Fire Authority's current code requirements.

Sanitary Sewer proposed for this development will be provided by the City of Fort Collins. There currently is an existing sanitary sewer main running through the site, entering at the northwest corner. This line was installed a few years ago to better serve this area and connects to an existing 15" trunk line located within the City owned parcel to the north of the property. Services to each of the lots will be connected to this existing line and will adequately service this area.

A portion of the project is currently located within the West Vine Flood zone. A notable feature of the West Vine flood zone is the spill entering the floodplain in vicinity of the current project site from the Larimer Canal No. 2 irrigation ditch. Current floodplain mapping changes are under way by the City of Fort Collins, and the applicant is working with City Stormwater Utility Staff to incorporate these changes regarding this spill from the Larimer Canal No. 2 into the proposed site. The West Vine flood zone is a City-designated floodplain; there is no FEMA designated flood zone in vicinity of the project site.

Per the requirements of the City of Fort Collins, stormwater runoff from this development will need to bemitigated, both from a volumetric standpoint, and a water quality aspect. The project is located within the City of Fort Collins West Vine Master Plan. The project drains both to the north and south and is divided into two basins by the Larimer Canal No. 2 running through the site. Detention requirements for this master basin are to detain the difference between the 100-year developed inflow rate and the historic 2-year release rate. The area draining to the south is proposed to detain at the historic 2-year runoff rate, however the area to the south is proposed to be detained by an interim pumped detention pond due to site constraints. The pond is to be located so that in the future, a gravity connection into a future City of Fort Collins Regional Pond can be constructed. This Regional Pond is anticipated to be constructed just northwest of the project site. The pump will be sized to discharge at a rate that can adequately evacuate all storm runoff from the pond to meet State of Colorado revised Statute 37-92-602(8). All water quality treatment requirements and LID requirements will be satisfied with the proposed development.

A neighborhood meeting for the Overall Development Plan was held on September 30th where approximately 12 neighbors attended. There were questions regarding traffic and how many employees the Salud clinic would have. A traffic study was completed and submitted with the ODP.

This is the first phase of the Overall Development Plan. It is anticipated that construction will begin within two years of approved plans. As Maple Street is constructed, the back half of the temporary clinic will be demolished leaving the front half operational. A new driveway will be constructed off of Maple Street and the driveways along Laporte Avenue will be replaced with tree lawn and sidewalk. It is unknown at this time when the future phases of the ODP will be developed.

SALUD FAMILY HEALTH CENTER

Project Development Plan

PLANNING CERTIFICATE

APPROVED BY THE DIRECTOR OF COMMUNITY DEVELOPMENT AND NEIGHBORHOOD SERVICES OF THE CITY OF FORT COLLINS, COLORADO ON THIS _____ DAY OF _____, 20__.

_____
Director Signature

OWNER'S CERTIFICATION

THE UNDERSIGNED DOES/DO HEREBY CERTIFY THAT I/WE ARE THE LAWFUL OWNERS OF THE REAL PROPERTY DESCRIBED ON THIS SITE PLAN AND DO HEREBY CERTIFY THAT I/WE ACCEPT THE CONDITIONS AND RESTRICTIONS SET FORTH ON SAID SITE PLAN.

_____ _____
OWNER (SIGNED) Date

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME

THIS _____ DAY OF _____ A.D., 20 _____. BY

_____
(PRINT NAME)

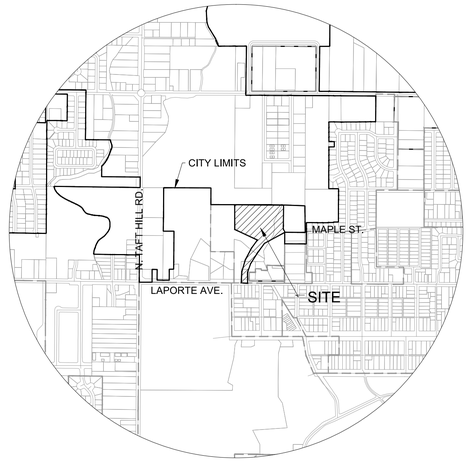
AS _____.

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL.

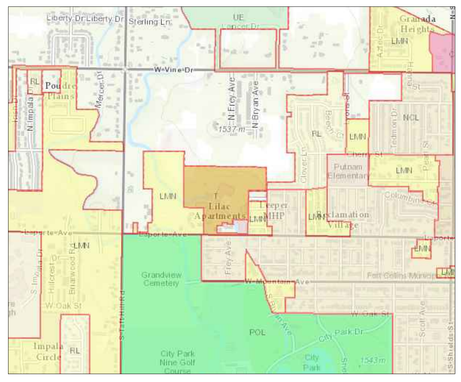
_____ _____
NOTARY PUBLIC ADDRESS

Sheet List Table	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	SITE PLAN
3	NATURAL HABITAT BUFFER ZONES
4	TREE MITIGATION
5	LANDSCAPE PLAN
6	LANDSCAPE DETAILS



LOCATION MAP

ZONING MAP



LEGAL DESCRIPTION

A tract of land located in the Northwest Quarter of Section 10, Township 7 North, Range 69 West of the 6th Principal Meridian, City of Fort Collins, County of Larimer, State of Colorado being more particularly described as follows:

Considering the South line of the Northwest Quarter of Section 10, Township 7 North, Range 69 West of the 6th P.M., City of Fort Collins, County of Larimer, State of Colorado, as bearing South 89° 14' 44" East, and with all bearings herein relative thereto:

Commencing at the West Quarter corner of said Section 10; thence along the South line of said Northwest Quarter, South 89° 14' 44" East, 1325.02 feet; thence, North 00° 42' 01" East, 30.00 feet to the POINT OF BEGINNING;
thence, North 00° 38' 41" East, 405.71 feet; thence, North 89° 14' 49" West, 330.72 feet; thence, North 00° 42' 46" East, 656.12 feet; thence, South 89° 24' 33" East, 1320.17 feet; thence, South 00° 23' 46" West, 377.97 feet; thence, North 89° 14' 44" West, 285.00 feet; thence, South 00° 23' 46" West, 472.81 feet; thence, North 87° 54' 20" West, 249.40 feet; thence, South 07° 37' 19" East, 72.44 feet; thence, North 89° 14' 44" West, 86.39 feet; thence, North 00° 23' 46" East, 21.00 feet; thence, North 89° 14' 44" West, 83.00 feet; thence, South 00° 23' 46" West, 50.00 feet; thence, North 89° 14' 30" West, 85.50 feet; thence, South 00° 45' 13" West, 120.00 feet; thence, North 89° 14' 44" West, 215.03 feet to the Point of Beginning, contains 987,453 square feet or 22.669 acres, more or less.

For themselves and their successors in interest (collectively "Owner") have caused the above described land to be surveyed and subdivided into lots, tracts and streets as shown on this Plat to be known as Salud Family Health Center (the "Development"), subject to all easements and rights-of-way now of record or existing or indicated on this Plat. The rights and obligations of this Plat shall run with the land.

LAND USE CHART

EXISTING ZONING	LMN-CL

AREA COVERAGE

GROSS	AREA (SF)	%
BUILDING COVERAGE	38,550	9.28
DRIVES AND PARKING (EXCLUDES PUBLIC ROW)	59,277	14.27
OPEN SPACE AND LANDSCAPE (EXCLUDES PUBLIC ROW)	239347	57.64
HARDSCAPE (EXCLUDES PUBLIC ROW)	7,093	1.71
**PUBLIC STREET RIGHT-OF-WAY	71,012.00	17.10
DRIVES AND PARKING	62,757	
LANDSCAPE	8,255	
TOTAL GROSS COVERAGE	**415,279.00 SF (9.53 AC)**	**100.00**

NET	AREA (SF)	%
BUILDING COVERAGE	38,550	11.20
DRIVES AND PARKING	59,227	17.21
OPEN SPACE AND LANDSCAPE	239,347	69.53
HARDSCAPE (WALKS & PLAZAS)	7,093	2.06
TOTAL NET COVERAGE	**344,217.00 SF (7.90 AC)**	**100.00**

FLOOR AREA RATIO	
LOT 4	
BUILDING AREA (SF)	38,550
LOT AREA (SF)	344,515
FLOOR AREA RATIO	0.11

BUILDING HEIGHT	MAXIMUM HEIGHT	STORIES
BUILDING 01	30	1

PROJECT PARKING	PROVIDED	REQUIRED MIN.	REQUIRED MAX.
STANDARD PARKING STALLS	160	78	174
HANDICAP	6		
TOTAL	**166**	**78**	**174**

* REQUIRED SPACES ARE CALCULATED AS FOLLOWED:
1 SPACE PER 1,000 SQ.FT. MINIMUM AND 4.5 SPACES PER 1,000 SQ.FT. MAXIMUM

BICYCLE PARKING	PROVIDED	REQUIRED *
BICYCLE SPACES	**10**	10

* REQUIRED BICYCLE SPACES ARE CALCULATED AS FOLLOWED:
1 SPACE PER 4,000 SQ.FT. OF MEDICAL OFFICE. 20% REQUIRED TO BE ENCLOSED, 80% FIXED.

SALUD FAMILY HEALTH CENTER

PDP SUBMITTAL

FORT COLLINS, CO

PREPARED BY:

RIPLEY DESIGN INC.

■ land planning ■ landscape architecture ■
■ urban design ■ entitlement ■

419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT

RIPLEY DESIGN INC.
Stephanie Van Dyken
419 Canyon Ave, Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER

SALUD FAMILY HEALTH CENTER
John Santistevan
203 S. Rollie Avenue
Fort Lupton, CO 80621
(303) 892-6401

ARCHITECT

TW BECK ARCHITECTS
Thomas Beck
PO Box 57
Estes Park, CO 80517
p. 970.586.3913

ENGINEER

NORTHERN ENGINEERING
Cody Snowden
301 Howes St. #100
Fort Collins, CO 80521
p. 970.568.5409

NORTH SCALE: 1"=10'-0" (0, 05, 10, 20)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
1	PROJECT DEVELOPMENT PLAN	5/18/2016

REVISIONS

No.	DESCRIPTION	DATE
02	CITY COMMENTS	5/31/2017

COVER SHEET

SEAL:

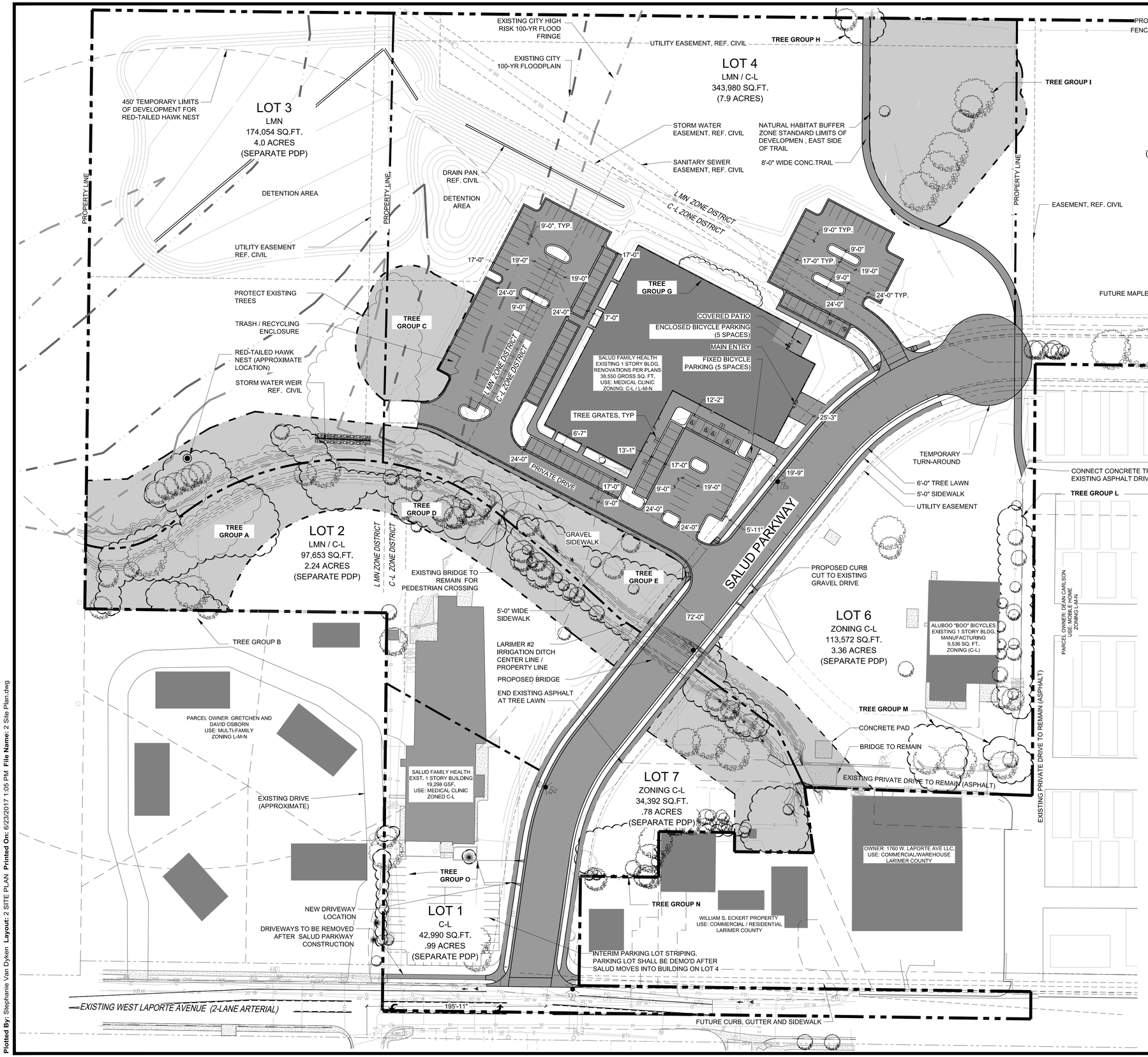
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R15-024
DRAWN BY:	DS/SV
REVIEWED BY:	SV

DRAWING NUMBER:

1 OF 5

Plotted By: Stephanie Van Dyken **Layout:** 1 COVER SHEET **Printed On:** 6/23/2017 1:02 PM **File Name:** 1 COVER SHEET.dwg



SALUD FAMILY HEALTH CENTER

PDP SUBMITTAL

FORT COLLINS, CO

PREPARED BY:

RIPLEY DESIGN INC.

■ land planning ■ landscape architecture ■ ■ urban design ■ entitlement ■

419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT

RIPLEY DESIGN INC.
Stephanie Van Dyken
419 Canyon Ave, Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER

SALUD FAMILY HEALTH CENTER
John Santistevan
203 S. Rollie Avenue
Fort Lupton, CO 80621
(303) 892-6401

ARCHITECT

TW BECK ARCHITECTS
Thomas Beck
PO Box 57
Estes Park, CO 80517
p. 970.586.3913

ENGINEER

NORTHERN ENGINEERING
Cody Snowden
301 Howes St. #100
Fort Collins, CO 80521
p. 970.568.5409

LEGEND

- = STORM DRAIN MANHOLE
- = SANITARY SEWER CLEAN-OUT
- = SANITARY SEWER MANHOLE
- = FIRE HYDRANT
- = ELECTRIC VAULT
- = WATER VALVE
- = AIR CONDITIONING UNIT
- = GAS METER
- = EXISTING TREES
- = POWER POLE
- = PROPERTY BOUNDARY
- = DRAINAGE OR UTILITY EASEMENT
- = EXISTING FENCE
- = RETAINING WALL
- = FIBER OPTIC UTILITY
- = GAS UTILITY
- = LIGHTING UTILITY
- = STORM DRAIN UTILITY
- = SANITARY SEWER UTILITY
- = TELEPHONE UTILITY
- = CABLE UTILITY
- = WATER LINE UTILITY

NOTES

1. THE NATURAL HABITAT BUFFER ZONES ARE INTENDED TO BE MAINTAINED IN A NATIVE LANDSCAPE. PLEASE SEE SECTION 3.4.1 OF THE LAND USE CODE FOR ALLOWABLE USES WITHIN THE NATURAL HABITAT BUFFER ZONES.

NORTH

0 25 50 100
SCALE: 1"=50'-0"

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
1	PROJECT DEVELOPMENT PLAN	5/18/2016

REVISIONS

No.	DESCRIPTION	DATE
02	CITY COMMENTS	5/31/2017

SITE PLAN

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

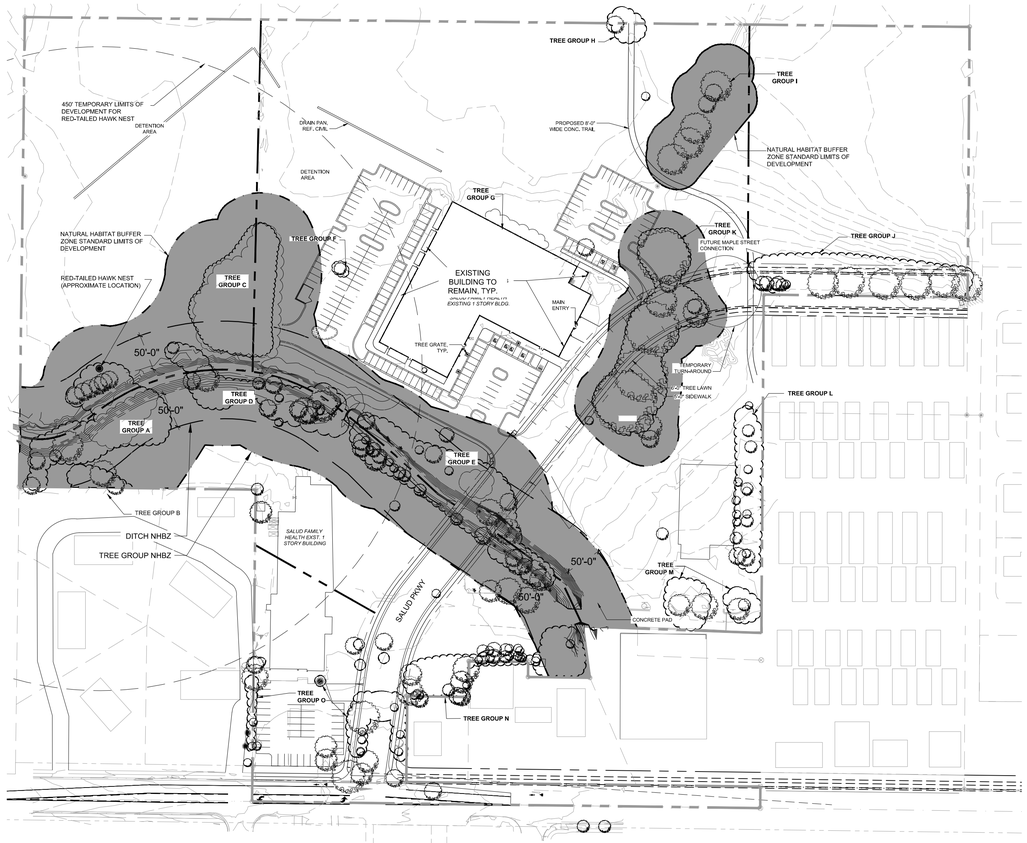
PROJECT No.:	R15-024
DRAWN BY:	DS/SV
REVIEWED BY:	SV

DRAWING NUMBER:

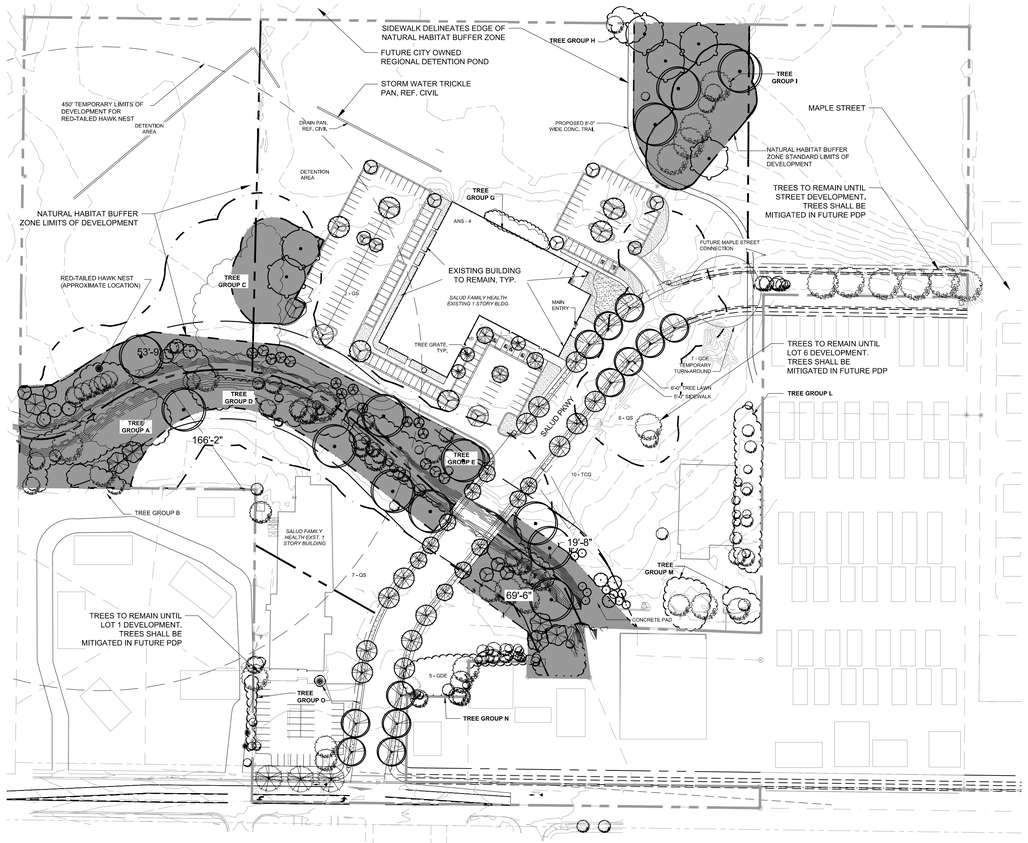
2 OF 5

Plotted By: Stephanie Van Dyken **Layout:** 2 SITE PLAN **Printed On:** 6/23/2017 1:05 PM **File Name:** 2 Site Plan.dwg

NATURAL HABITAT BUFFER ZONES (NHBZ) BASED ON CODE REQUIREMENTS



PROPOSED NATURAL HABITAT BUFFER ZONES (NHBZ)



TREE PROTECTION NOTES

1. ALL EXISTING TREES WITHIN THE LIMITS OF THE DEVELOPMENT AND WITHIN ANY NATURAL AREA BUFFER ZONES SHALL REMAIN AND BE PROTECTED UNLESS NOTED ON THESE PLANS FOR REMOVAL.
2. WITHIN THE DRIP LINE OF ANY PROTECTED EXISTING TREE, THERE SHALL BE NO CUT OR FILL OVER A FOUR-INCH DEPTH UNLESS A QUALIFIED ARBORIST OR FORESTER HAS EVALUATED AND APPROVED THE DISTURBANCE.
3. ALL PROTECTED EXISTING TREES SHALL BE PRUNED TO THE CITY OF FORT COLLINS FORESTRY STANDARDS. TREE PRUNING AND REMOVAL SHALL BE PERFORMED BY A BUSINESS THAT HOLDS A CURRENT CITY OF FORT COLLINS ARBORIST LICENSE WHERE REQUIRED BY CODE.
4. PRIOR TO AND DURING CONSTRUCTION, BARRIERS SHALL BE ERECTED AROUND ALL PROTECTED EXISTING TREES WITH SUCH BARRIERS TO BE OF ORANGE FENCING A MINIMUM OF FOUR (4) FEET IN HEIGHT, SECURED WITH METAL T-POSTS, NO CLOSER THAN SIX (6) FEET FROM THE TRUNK OR ONE-HALF (½) OF THE DRIP LINE, WHICHEVER IS GREATER. THERE SHALL BE NO STORAGE OR MOVEMENT OF EQUIPMENT, MATERIAL, DEBRIS OR FILL WITHIN THE FENCED TREE PROTECTION ZONE.
5. DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE APPLICANT SHALL PREVENT THE CLEANING OF EQUIPMENT OR MATERIAL OR THE STORAGE AND DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OILS, SOLVENTS, ASPHALT, CONCRETE, MOTOR OIL OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY PROTECTED TREE OR GROUP OF TREES.
6. NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
7. LARGE PROPERTY AREAS CONTAINING PROTECTED TREES AND SEPARATED FROM CONSTRUCTION OR LAND CLEARING AREAS, ROAD RIGHTS-OF-WAY AND UTILITY EASEMENTS MAY BE "RIBBONED OFF," RATHER THAN ERECTING PROTECTIVE FENCING AROUND EACH TREE AS REQUIRED IN SUBSECTION (G)(3) ABOVE. THIS MAY BE ACCOMPLISHED BY PLACING METAL T-POST STAKES A MAXIMUM OF FIFTY (50) FEET APART AND TYING RIBBON OR ROPE FROM STAKE-TO-STAKE ALONG THE OUTSIDE PERIMETERS OF SUCH AREAS BEING CLEARED.
8. THE INSTALLATION OF UTILITIES, IRRIGATION LINES OR ANY UNDERGROUND FIXTURE REQUIRING EXCAVATION DEEPER THAN SIX (6) INCHES SHALL BE ACCOMPLISHED BY BORING UNDER THE ROOT SYSTEM OF PROTECTED EXISTING TREES AT A MINIMUM DEPTH OF TWENTY-FOUR (24) INCHES. THE AUGER DISTANCE IS ESTABLISHED FROM THE FACE OF THE TREE (OUTER BARK) AND IS SCALED FROM TREE DIAMETER AT BREAST HEIGHT AS DESCRIBED IN THE CHART BELOW:

TREE DIAMETER AT BREAST HEIGHT (INCHES)	AUGER DISTANCE FROM FACE OF TREE (FEET)
0-2	1
3-4	2
5-9	5
10-14	10
15-19	12
OVER 19	15

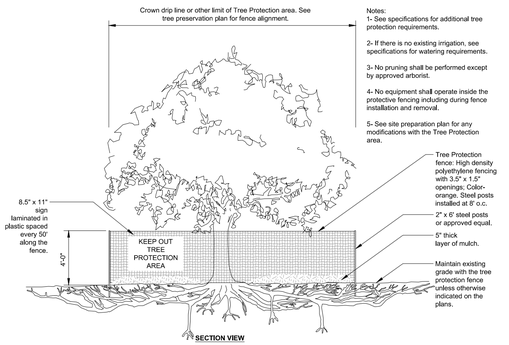
9. ALL TREE REMOVAL SHOWN SHALL BE COMPLETED OUTSIDE OF THE SONGBIRD NESTING SEASON (FEB 1 - JULY 31) OR CONDUCT A SURVEY OF TREES ENSURING NO ACTIVE NESTS IN THE AREA.

NATURAL AREA BUFFER NOTES

1. STANDARDS FOR PROTECTION DURING CONSTRUCTION - THE DIRECTOR SHALL ESTABLISH A "LIMITS OF DEVELOPMENT" ("LOD") LINE(S) TO ESTABLISH THE BOUNDARY OF THE PROJECT OUTSIDE OF WHICH NO LAND DISTURBANCE ACTIVITIES WILL OCCUR DURING THE CONSTRUCTION OF THE PROJECT.
2. SEE SECTION 3.4.1 OF THE LAND USE CODE FOR ALLOWABLE USES WITHIN THE BUFFER ZONE.
3. CONSTRUCTION SHALL BE ORGANIZED AND TIMED TO MINIMIZE THE DISTURBANCE OF SENSITIVE SPECIES OCCUPYING OR USING ON-SITE AND ADJACENT NATURAL HABITATS OR FEATURES.
4. CONSTRUCTION OF BARRIER FENCING SHALL BE PROVIDED AT THE LIMITS OF THE DEVELOPMENT DURING CONSTRUCTION.
5. TREE GROUP LETTERS ARE BASED ON ECOLOGICAL CHARACTERIZATION STUDY REPORT DATED AUGUST 26, 2015

NATURAL HABITAT BUFFER ZONES	REQUIRED			
TYPE	AREA (SQ.FT.)	TREE CANOPY TO BE REMOVED (SQ.FT.)	TREE CANOPY PROPOSED (SQ.FT.)	DIFFERENCE
TREE GROUP A	17,447			
TREE GROUP B	2,087			
TREE GROUP C	16,314	9,066	5,654	-3412
TREE GROUP D	12,581			
TREE GROUP E	22,639	6,353		-6353
TREE GROUP F	408	408		-408
TREE GROUP G	2,041			
TREE GROUP H	2,011			
TREE GROUP I	5,989	0	19789	19789
TREE GROUP J	16,091	16091		-16091
TREE GROUP K	22,241	21185		-21185
TREE GROUP L	8,323			
TREE GROUP M	5,933			
TREE GROUP N	10,487			
TREE GROUP O	7,606	5583		
LARIMER #2 IRRIGATION DITCH	133,126	5099	40489	35390
TOTAL	**285,324**	**63,785**	**65,932**	2147

NATURAL HABITAT BUFFER ZONES HAVE BEEN MITIGATED FOR LOTS 1-7 WITH THIS PDP. MITIGATION FOR INDIVIDUAL TREES TO BE REMOVED WITH FUTURE PDP'S SHALL BE REQUIRED AT TIME OF FUTURE PDPD'S.



1 PROTECTION FENCING

NOT TO SCALE L-PL-ISA-PROT-02

A PERMIT MUST BE OBTAINED FROM THE CITY FORESTER BEFORE ANY TREES OR SHRUBS AS NOTED ON THIS PLAN ARE PLANTED, PRUNED OR REMOVED IN THE PUBLIC RIGHT-OF-WAY. THIS INCLUDES ZONES BETWEEN THE SIDEWALK AND CURB, MEDIANS AND OTHER CITY PROPERTY. THIS PERMIT SHALL APPROVE THE LOCATION AND SPECIES TO BE PLANTED. FAILURE TO OBTAIN THIS PERMIT IS A VIOLATION OF THE CITY OF FORT COLLINS CODE SUBJECT TO CITATION (SECTION 27-31) AND MAY ALSO RESULT IN REPLACING OR RELOCATING TREES AND A HOLD ON CERTIFICATE OF OCCUPANCY.

SALUD FAMILY HEALTH CENTER

PDP SUBMITTAL

FORT COLLINS, CO

PREPARED BY:

RIPLEY DESIGN INC.

■ land planning ■ landscape architecture ■ ■ urban design ■ entitlement ■

419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT

RIPLEY DESIGN INC.
Stephanie Van Dyken
419 Canyon Ave, Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER

SALUD FAMILY HEALTH CENTER
John Santistevan
203 S. Rollie Avenue
Fort Lupton, CO 80621
(303) 892-6401

ARCHITECT

TW BECK ARCHITECTS
Thomas Beck
PO Box 57
Estes Park, CO 80517
p. 970.586.3913

ENGINEER

NORTHERN ENGINEERING
Cody Snowden
301 Howes St. #100
Fort Collins, CO 80521
p. 970.568.5409

NORTH SCALE: 1"=10'-0" (0, 05, 10, 20)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
1	PROJECT DEVELOPMENT PLAN	5/18/2016

REVISIONS

No.	DESCRIPTION	DATE
02	CITY COMMENTS	5/31/2017

NATURAL HABITAT BUFFER ZONES

SEAL:

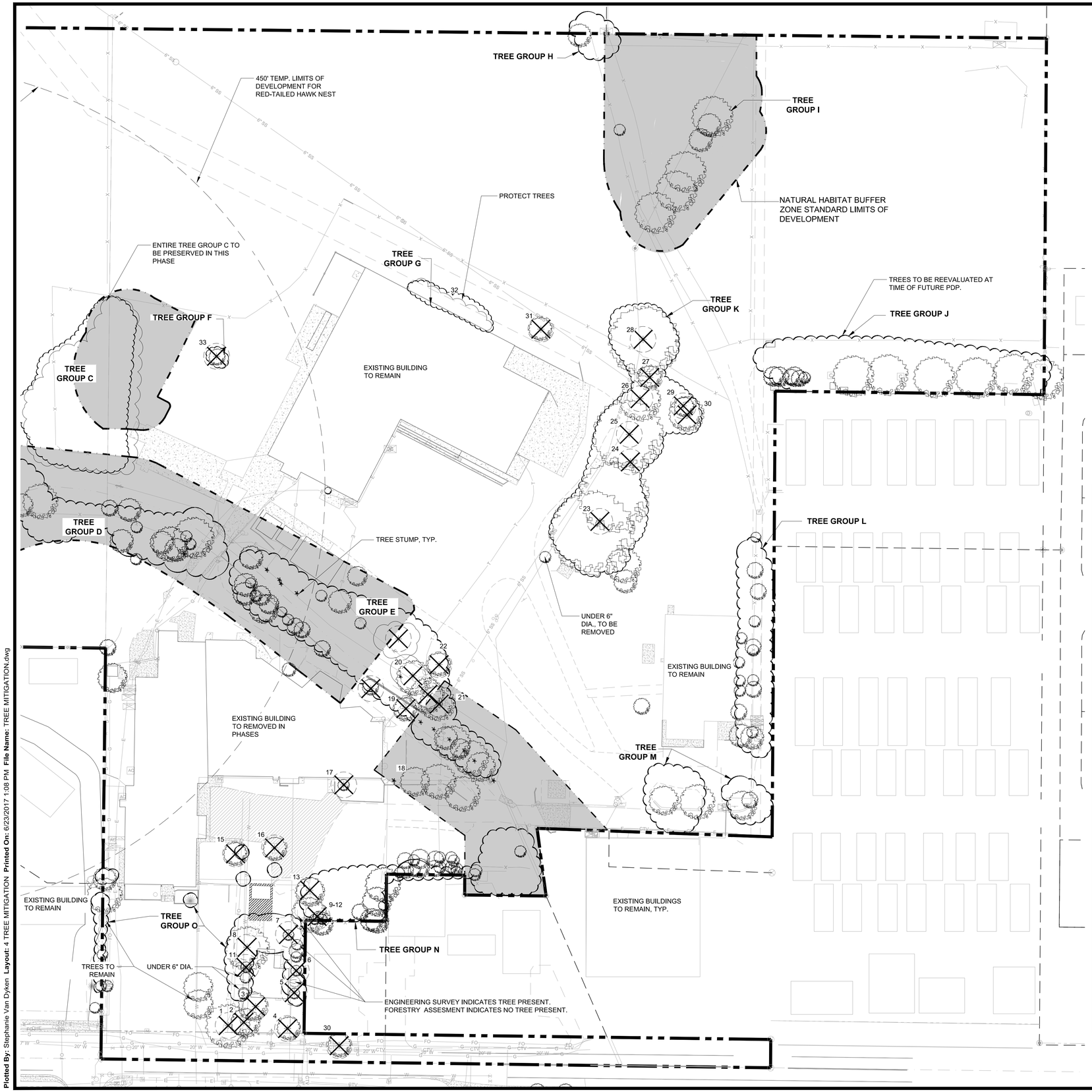
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R15-024
DRAWN BY:	DS/SV
REVIEWED BY:	SV

DRAWING NUMBER:

3 OF 5

Plotted By: Stephanie Van Dyken **Layout:** 3 NATURAL HABITAT BUFFER ZONES **Printed On:** 6/23/2017 1:07 PM **File Name:** 3 NATURAL HABITAT BUFFER ZONES.dwg



TREE MITIGATION LEGEND

XXX EXISTING TO SAVE IN PLACE

XXX EXISTING TO BE REMOVED

NATURAL HABITAT BUFFER ZONES (PROPOSED)

TREE GROUP LIMITS PER ENVIRONMENTAL CHARACTERIZATION STUDY

PROVIDED TREE MITIGATION

LOCATION	COUNT
MITIGATION TREES PROPOSED TO BE PLANTED *ON-SITE*	23
MITIGATION TREES PROPOSED TO BE PLANTED *OFF-SITE*	0
PAYMENT IN LIEU (ASSUMES $450 PER TREE)	-
TOTAL REMAINING REQUIRED	**0**

NOTES
TREE REPLACEMENT VALUES WHERE DETERMINED DURING A SITE VISIT BY CITY ARBORIST ON 12/29/15.

REPLACEMENT TREES SHALL MEET THE FOLLOWING REQUIREMENTS:
A. CANOPY SHADE TREES: 3.0" CALIPER BALLED AND BURLAP OR EQUIVALENT.
B. ORNAMENTAL TREES: 2.5" CALIPER BALLED AND BURLAP OR EQUIVALENT.
C. EVERGREEN TREES: 8' HEIGHT BALLED AND BURLAP OR EQUIVALENT.

TREE INVENTORY WAS FOR POTENTIAL IMPACTS OF LOT 4 CONSTRUCTION. ALL OTHER LOTS SHALL COMPELTE A TREE INVENTORY AND PROVIDE MITIGATION AT TIME OF FUTURE PDP'S.

#	TYPE	DBH (INCHES)	CONDITION	REQUIRED MITIGATION TREES IF REMOVED	REASON FOR REMOVAL
1	SIBERIAN ELM	31	FAIR	2.0	ROADWAY
2	SIBERIAN ELM	31	FAIR	2.0	ROADWAY
3	WHITE POPLAR	18	FAIR -	2.0	ROADWAY
4	SIBERIAN ELM	22	POOR	0.0	ROADWAY
5	GREEN ASH	7	POOR	0.0	ROADWAY
6	SIBERIAN ELM	15	POOR	0.0	ROADWAY
7	SIBERIAN ELM / MULTISTEM	14 18	POOR	0.0	ROADWAY
8	WHITE POPLAR	70	HAZARD	0.0	ROADWAY
9	SIBERIAN ELM	17	POOR	0.0	ROADWAY
10	SIBERIAN ELM	18	POOR	0.0	ROADWAY
11	SIBERIAN ELM	5	POOR	0.0	ROADWAY
12	SIBERIAN ELM	5	POOR	0.0	ROADWAY
13	SIBERIAN ELM	17	POOR	0.0	ROADWAY
14	BOXELDER	7	FAIR	1.0	ROADWAY
15	SIBERIAN ELM	13	POOR	0.0	
16	BOXELDER	8	FAIR -	1.0	ROADWAY
17	ASPEN	7	FAIR -	1.0	ROADWAY
18	SIBERIAN ELM	24	POOR	0.0	ROADWAY
19	BOXELDER / MULTISTEM	16 14	FAIR -	1.5	ROADWAY
20	COTTONWOOD / MULTISTEM	37 27	FAIR	3.5	ROADWAY
21	BLACK LOCUST	15	FAIR	2.0	ROADWAY
22	COTTONWOOD / MULTISTEM	25 22	FAIR -	2.0	ROADWAY
23	CRACKED WILLOW / MULTISTEM	88 60 120	HAZARD	0.0	HAZARD
24	CRACKED WILLOW / MULTISTEM	9 12	HAZARD	0.0	ROADWAY
25	NAT. COTTONWOOD	74	HAZARD	0.0	ROADWAY
26	CRACKED WILLOW / MULTISTEM	37 22	HAZARD	0.0	HAZARD
27	SIBERIAN ELM	11	FAIR	0.0	ROADWAY
28	CRACKED WILLOW	40	HAZARD	0.0	HAZARD
29	SIBERIAN ELM	21	FAIR -	1.0	ROADWAY
30	SIBERIAN ELM	37	FAIR -	2.0	ROADWAY
31	SIBERIAN ELM	13	DEAD	0.0	PARKING
32	SIBERIAN ELM / 25-30 STEMS	4-11	DEAD - FAIR	1.5	PARKING
33	GREEN ASH	8	FAIR	0.0	ROADWAY
			REQUIRED TREES	22.5	

SALUD FAMILY HEALTH CENTER

PDP SUBMITTAL

FORT COLLINS, CO

PREPARED BY:

RIPLEY DESIGN INC.
■ land planning ■ landscape architecture ■ ■ urban design ■ entitlement ■
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT
RIPLEY DESIGN INC.
Stephanie Van Dyken
419 Canyon Ave, Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER
SALUD FAMILY HEALTH CENTER
John Santistevan
203 S. Rollie Avenue
Fort Lupton, CO 80621
(303) 892-6401

ARCHITECT
TW BECK ARCHITECTS
Thomas Beck
PO Box 57
Estes Park, CO 80517
p. 970.586.3913

ENGINEER
NORTHERN ENGINEERING
Cody Snowden
301 Howes St. #100
Fort Collins, CO 80521
p. 970.568.5409

NORTH SCALE: 1"=50'-0" (0, 25, 50, 100)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
1	PROJECT DEVELOPMENT PLAN	5/18/2016

REVISIONS

No.	DESCRIPTION	DATE
02	CITY COMMENTS	5/31/2017

TREE MITIGATION

SEAL:

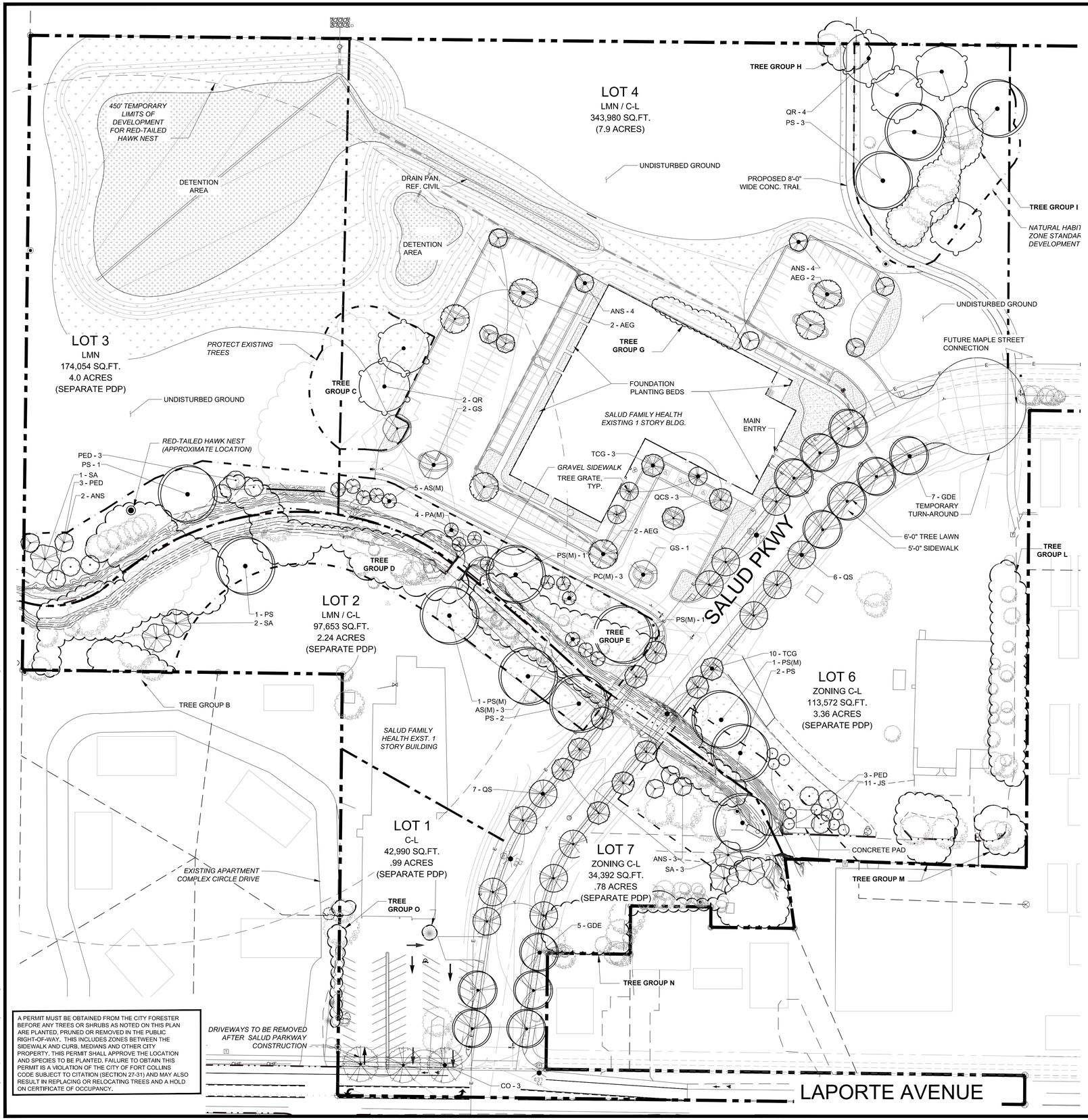
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R15-024
DRAWN BY:	DS/SV
REVIEWED BY:	SV

DRAWING NUMBER:

4 OF 5

Plotted By: Stephanie Van Dyken **Layout:** 4 TREE MITIGATION **Printed On:** 6/23/2017 1:08 PM **File Name:** TREE MITIGATION.dwg



GENERAL LANDSCAPE NOTES

1. PLANT QUALITY: ALL PLANT MATERIAL SHALL BE A-GRADE OR NO. 1 GRADE - FREE OF ANY DEFECTS, OF NORMAL HEALTH, HEIGHT, LEAF DENSITY AND SPREAD APPROPRIATE TO THE SPECIES AS DEFINED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS. ALL TREES SHALL BE BALL AND BURLAP OR EQUIVALENT.

2. IRRIGATION: ALL LANDSCAPE AREAS WITHIN THE SITE INCLUDING TURF, SHRUB BEDS AND TREE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM. THE IRRIGATION PLAN MUST BE REVIEWED AND APPROVED BY THE CITY OF FORT COLLINS WATER UTILITIES DEPARTMENT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. ALL TURF AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC POP-UP IRRIGATION SYSTEM. ALL SHRUB BEDS AND TREES, INCLUDING IN NATIVE SEED AREAS, SHALL BE IRRIGATED WITH AN AUTOMATIC DRIP (TRICKLE) IRRIGATION SYSTEM, OR WITH AN ACCEPTABLE ALTERNATIVE APPROVED BY THE CITY WITH THE IRRIGATION PLANS. THE IRRIGATION SYSTEM SHALL BE ADJUSTED TO MEET THE WATER REQUIREMENTS OF THE INDIVIDUAL PLANT MATERIAL.

3. TOPSOIL: TO THE MAXIMUM EXTENT FEASIBLE, TOPSOIL THAT IS REMOVED DURING CONSTRUCTION ACTIVITY SHALL BE CONSERVED FOR LATER USE ON AREAS REQUIRING REVEGETATION AND LANDSCAPING.

4. SOIL AMENDMENTS: THE SOIL IN ALL LANDSCAPE AREAS, INCLUDING PARKWAYS AND MEDIANS, SHALL BE THOUGHLY LOOSENED TO A DEPTH OF NOT LESS THAN EIGHT(8) INCHES AND SOIL AMENDMENT SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL OF ALL LANDSCAPE AREAS TO A DEPTH OF AT LEAST SIX(6) INCHES BY TILLING, DISCING OR OTHER SUITABLE METHOD, AT A RATE OF AT LEAST THREE (3) CUBIC YARDS OF SOIL AMENDMENT PER ONE THOUSAND (1,000) SQUARE FEET OF LANDSCAPE AREA.

5. INSTALLATION AND GUARANTEE: ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND HORTICULTURAL PRACTICES IN A MANNER DESIGNED TO ENCOURAGE QUICK ESTABLISHMENT AND HEALTHY GROWTH. ALL LANDSCAPING FOR EACH PHASE MUST BE EITHER INSTALLED OR THE INSTALLATION MUST BE SECURED WITH AN IRREVOCABLE LETTER OF CREDIT, PERFORMANCE BOND, OR ESCROW ACCOUNT FOR 125% OF THE VALUATION OF THE MATERIALS AND LABOR PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR ANY BUILDING IN SUCH PHASE.

6. MAINTENANCE: TREES AND VEGETATION, IRRIGATION SYSTEMS, FENCES, WALLS AND OTHER LANDSCAPE ELEMENTS WITH THESE FINAL PLANS SHALL BE CONSIDERED AS ELEMENTS OF THE PROJECT IN THE SAME MANNER AS PARKING, BUILDING MATERIALS AND OTHER SITE DETAILS. THE APPLICANT, LANDOWNER OR SUCCESSORS IN INTEREST SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE REGULAR MAINTENANCE OF ALL LANDSCAPING ELEMENTS IN GOOD CONDITION. ALL LANDSCAPING SHALL BE MAINTAINED FREE FROM DISEASE, PESTS, WEEDS AND LITTER, AND ALL LANDSCAPE STRUCTURES SUCH AS FENCES AND WALLS SHALL BE REPAIRED AND REPLACED PERIODICALLY TO MAINTAIN A STRUCTURALLY SOUND CONDITION.

7. REPLACEMENT: ANY LANDSCAPE ELEMENT THAT DIES, OR IS OTHERWISE REMOVED, SHALL BE PROMPTLY REPLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS.

8. THE FOLLOWING SEPARATIONS SHALL BE PROVIDED BETWEEN TREES/SHRUBS AND UTILITIES:

   40 FEET BETWEEN CANOPY TREES AND STREET LIGHTS
   15 FEET BETWEEN ORNAMENTAL TREES AND STREETLIGHTS
   10 FEET BETWEEN TREES AND PUBLIC WATER, SANITARY AND STORM SEWER MAIN LINES
   6 FEET BETWEEN TREES AND PUBLIC WATER, SANITARY AND STORM SEWER SERVICE LINES.
   4 FEET BETWEEN SHRUBS AND PUBLIC WATER AND SANITARY AND STORM SEWER LINES
   4 FEET BETWEEN TREES AND GAS LINES

9. ALL STREET TREES SHALL BE PLACED A MINIMUM EIGHT (8) FEET AWAY FROM THE EDGES OF DRIVEWAYS AND ALLEYS PER LUC 3.2.1(D)(2)(a).

10. PLACEMENT OF ALL LANDSCAPING SHALL BE IN ACCORDANCE WITH THE SIGHT DISTANCE CRITERIA AS SPECIFIED BY THE CITY OF FORT COLLINS. NO STRUCTURES OR LANDSCAPE ELEMENTS GREATER THAN 24" SHALL BE ALLOWED WITHIN THE SIGHT DISTANCE TRIANGLE OR EASEMENTS WITH THE EXCEPTION OF DECIDUOUS TREES PROVIDED THAT THE LOWEST BRANCH IS AT LEAST 6' FROM GRADE. ANY FENCES WITHIN THE SIGHT DISTANCE TRIANGLE OR EASEMENT MUST BE NOT MORE THAN 42" IN HEIGHT AND OF AN OPEN DESIGN.

11. COMMON OPEN SPACE AREAS AND LANDSCAPING WITHIN RIGHT OF WAYS, STREET MEDIANS, AND TRAFFIC CIRCLES ADJACENT TO COMMON OPEN SPACE AREAS ARE REQUIRED TO BE MAINTAINED BY A PROPERTY OWNERS ASSOCIATION. THE PROPERTY OWNERS ASSOCIATION IS RESPONSIBLE FOR SNOW REMOVAL ON ALL ADJACENT STREET SIDEWALKS AND SIDEWALKS IN COMMON OPEN SPACE AREAS.

12. LANDSCAPING WITHIN RIGHT OF WAYS, STREET MEDIANS AND TRAFFIC CIRCLES ADJACENT TO RESIDENTIAL LOTS ARE REQUIRED TO BE MAINTAINED BY THE PROPERTY OWNER OF THE RESIDENTIAL LOT, AND THE PROPERTY OWNER IS RESPONSIBLE FOR SNOW REMOVAL ON ALL ADJACENT STREET SIDEWALKS.

13. THE DEVELOPER SHALL ENSURE THAT THE FINAL LANDSCAPE PLAN IS COORDINATED WITH ALL OTHER FINAL PLAN ELEMENTS SO THAT THE PROPOSED GRADING, STORM DRAINAGE, AND OTHER DEVELOPMENT IMPROVEMENTS DO NOT CONFLICT WITH NOR PRECLUDE INSTALLATION AND MAINTENANCE OF LANDSCAPE ELEMENTS ON THIS PLAN.

14. MINOR CHANGES IN SPECIES AND PLANT LOCATIONS MAY BE MADE DURING CONSTRUCTION – AS REQUIRED BY SITE CONDITIONS OR PLANT AVAILABILITY. OVERALL QUANTITY, QUALITY, AND DESIGN CONCEPT MUST BE CONSISTENT WITH THE APPROVED PLANS. IN THE EVENT OF CONFLICT WITH THE QUANTITIES INCLUDED IN THE PLANT LIST, SPECIES AND QUANTITIES ILLUSTRATED SHALL BE PROVIDED. ALL CHANGES OF PLANT SPECIES AND LOCATION MUST HAVE WRITTEN APPROVAL BY THE CITY PRIOR TO INSTALLATION.

15. ALL PLANTING BEDS SHALL BE MULCHED TO A MINIMUM DEPTH OF THREE INCHES.

16. IRRIGATED TURF SHALL BE TEXAS BLUEGRASS/KENTUCKY BLUEGRASS HYBRID REVEILLE OR APPROVED EQUAL.

17. EDGING BETWEEN GRASS AND SHRUB BEDS SHALL BE 18" X 4" ROLLED TOP STEEL SET LEVEL WITH TOP OF SOD OR APPROVED EQUAL.

18. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RE-SEEDED TO ESTABLISHMENT

NATURAL AREA BUFFER NOTES

1. STANDARDS FOR PROTECTION DURING CONSTRUCTION - THE DIRECTOR SHALL ESTABLISH A "LIMITS OF DEVELOPMENT" ("LOD") LINE(S) TO ESTABLISH THE BOUNDARY OF THE PROJECT OUTSIDE OF WHICH NO LAND DISTURBANCE ACTIVITIES WILL OCCUR DURING THE CONSTRUCTION OF THE PROJECT.

2. SEE SECTION 3.4.1 OF THE LAND USE CODE FOR ALLOWABLE USES WITHIN THE BUFFER ZONE.

3. CONSTRUCTION SHALL BE ORGANIZED AND TIMED TO MINIMIZE THE DISTURBANCE OF SENSITIVE SPECIES OCCUPYING OR USING ON-SITE AND ADJACENT NATURAL HABITATS OR FEATURES.

4. CONSTRUCTION OF BARRIER FENCING SHALL BE PROVIDED AT THE LIMITS OF THE DEVELOPMENT DURING CONSTRUCTION.

LEGEND

SYMBOL	DESCRIPTION
	SHREDDED CEDAR MULCH. 3" AVERAGE DEPTH WITH PINNED WEED BARRIER FABRIC.
	NRCS STREAMBANK MIX
	PICKSEED MFG. FLOWERS N' GRASS MIX
	NATURAL AREA BUFFER ZONE
73 LED	STREET LIGHT

SALUD FAMILY HEALTH CENTER

PDP SUBMITTAL

FORT COLLINS, CO

PREPARED BY:

RIPLEY DESIGN INC.

■ land planning ■ landscape architecture ■ ■ urban design ■ entitlement ■

419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT

RIPLEY DESIGN INC.
Stephanie Van Dyken
419 Canyon Ave, Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER

SALUD FAMILY HEALTH CENTER
John Santistevan
203 S. Rollie Avenue
Fort Lupton, CO 80517
(303) 892-6401

ARCHITECT

TW BECK ARCHITECTS
Thomas Beck
PO Box 57
Estes Park, CO 80517
p. 970.586.3913

ENGINEER

NORTHERN ENGINEERING
Cody Snowden
301 Howes St. #100
Fort Collins, CO 80521
p. 970.569.5409

NORTH SCALE: 1"=50'-0" (0, 25, 50, 100)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
1	PROJECT DEVELOPMENT PLAN	5/18/2016

REVISIONS

No.	DESCRIPTION	DATE
02	CITY COMMENTS	5/31/2017

LANDSCAPE PLAN

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R15-024
DRAWN BY:	DS/SV
REVIEWED BY:	SV

DRAWING NUMBER:

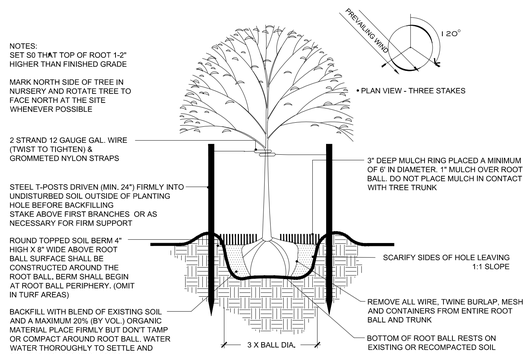
5 OF 5

Plotted By: Stephanie Van Dyken **Layout:** 5 LANDSCAPE PLAN **Printed On:** 6/23/2017 1:09 PM **File Name:** 4 Landscape Plan.dwg

PLANT SCHEDULE

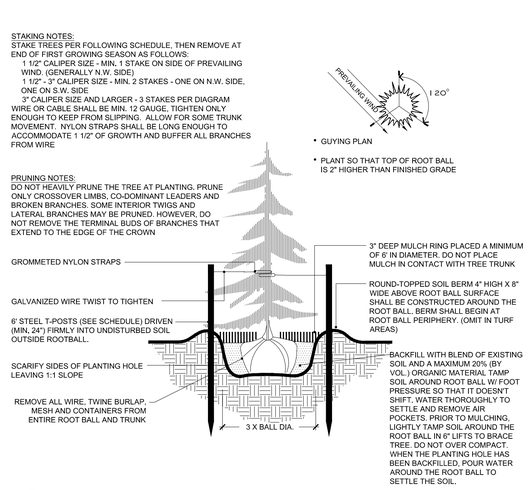
EVERGREEN TREES	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE
	JS	11	JUNIPERUS SCOPULORUM / ROCKY MOUNTAIN JUNIPER	-	-	6` HT.
	PED	9	PINUS EDULIS / PINON PINE	-	-	6` HT
ORNAMENTAL TREE	**CODE**	**QTY**	**BOTANICAL NAME / COMMON NAME**	**CONT**	**CAL**	**SIZE**
	AS(M)	8	AMELANCHIER ALNIFOLIA / SERVICEBERRY	CONTAINER		15 GAL. MULTI-STEM
	PA(M)	4	PRUNUS AMERICANA / AMERICAN PLUM	B & B	2.5"CAL	
	PC(M)	3	PRUNUS VIRGINIANA / CHOKECHERRY	CONTAINER		15 GAL. MULTI-STEM
	SA	6	SALIX AMYGDALIODES / PEACH LEAF WILLOW	B & B	2"	
SHADE TREE	**CODE**	**QTY**	**BOTANICAL NAME / COMMON NAME**	**CONT**	**CAL**	**SIZE**
	ANS	13	ACER NEGUNDO `SENSATION` / SENSATION BOXELDER	B & B	2"	-
	AEG	6	AESCULUS GLABRA / OHIO BUCKEYE	B & B	2"	
	CO	3	CELTIS OCCIDENTALIS / COMMON HACKBERRY	B & B	2"	
	GS	3	GLEDITSIA TRIACANTHOS `SKYLINE` / SKYLINE HONEY LOCUST	B & B	2"	
	GDE	12	GYMNOCLADUS DIOICA `ESPRESSO` / SEEDLESS KENTUCKY COFFEETREE	B & B	2"	-
	PS	9	POPULUS SARGENTII / PLAINS COTTONWOOD	B & B	2"	
	PS(M)	4	POPULUS SARGENTII / PLAINS COTTONWOOD	B & B	3"	
	QR	6	QUERCUS RUBRA / NORTHERN RED OAK	B & B	2"	
	QS	13	QUERCUS SHUMARDII / SHUMARD RED OAK	B & B	2"	
	QCS	3	QUERCUS `CRIMSON SPIRE` / CRIMSON SPIRE OAK	-	2"	-
	TCG	13	TILIA CORDATA `GREENSPIRE` / GREENSPIRE LINDEN	B & B	2"	-
SEED & WILDFLOWER	**CODE**	**QTY**	**BOTANICAL NAME / COMMON NAME**	**CONT**		
		55,193 SF	DETENTION BASIN SEED MIX SEE SEED MIX SHEET	FLAT		
	SMI	16,974 SF	NRCS STREAMBANK MIX / NRCS STREAMBANK MIX (SEE PLANT SCHEDULE FOR TYPES)	SEED		
	FNG	132,597 SF	PICKSEED MFG / FLOWERS `N` GRASS MIX MAY-JUNE, 2LB/1000, 14-30 DAYS	SEED		
SOD/SEED	**CODE**	**QTY**	**BOTANICAL NAME / COMMON NAME**	**CONT**		
	PPL	10,727 SF	POA PRATENSIS / LOLIUM PERENNE / BLUEGRASS / PERENNIAL RYE MIX EVERGREEN	SOD		

NOTE: ALL PLANT CODES FOLLOWED BY AN (M) IS A MITIGATION TREE AND SHALL BE SIZED AS SHOWN



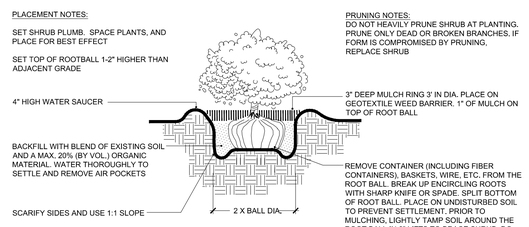
1 TREE PLANTING DETAIL - STEEL POSTS

SCALE: NTS L-PL-12



2 CONIFER TREE PLANTING DETAIL - STEEL POSTS

SCALE: NTS L-PL-13



3 SHRUB PLANTING DETAIL

SCALE: NTS L-PL-14

TREE SPECIES DIVERSITY

PER CITY OF FORT COLLINS 3.2.1(D)3 PROPOSED PLAN MUST HAVE A SPECIES DIVERSITY OF (10-19 TREES > 50%, 20-39 TREES > 33%, 40-59 TREES > 25%, 60+ TREES > 15%). OF THE XX TOTAL TREES SURVEYED AND PROPOSED ON SITE, NO SPECIES MAY HAVE MORE THAN XX QUANTITY.

*TYPE (PROPOSED & EXISTING TO REMAIN)	COUNT	60+ TREES > 15%
Juniperus scopulorum	11	10
Pinus edulis	9	8
Amalanchier alnifolia	8	8
Prunus americana	4	4
Prunus virginiana	3	3
Salix amygdaloises	6	6
Acer negundo 'Sensation'	13	12
Aesculus glabra	6	6
Celtis occidentalis	3	3
Gleditsia triacanthos 'Skyline'	3	3
Glymnocladus dioica 'Espresso'	12	11
Populus sargentii	13	12
Quercus rubra	6	6
Quercus shumardii	13	12
Quercus 'Crimson Spire'	3	3
Tilia cordata 'Greenspire'	13	12
TOTAL TREES	106	
*CITY OF FORT COLLINS CODE SECTION 3.2.1(D)3 MINIMUM SPECIES DIVERSITY		

WATER USE TABLE

HYDROZONE	AREA (SF)	WATER NEEDED (GALLONS/SF)	ANNUAL WATER USE (GALLONS)
HIGH	10727.00	18	193,086.00
MODERATE	13428.00	10	134,280.00
LOW	0.00	3	0.00
TOTAL	24,155	13.5527	327,366
ANNUAL WATER USE NOT TO EXCEED 15 GAL./SF. AVERAGE OVER THE SITE			

STREET TREE NOTES

1. A PERMIT MUST BE OBTAINED FROM THE CITY FORESTER BEFORE ANY TREES OR SHRUBS AS NOTED ON THIS PLAN ARE PLANTED, PRUNED OR REMOVED IN THE PUBLIC RIGHT-OF-WAY. THIS INCLUDES ZONES BETWEEN THE SIDEWALK AND CURB, MEDIANS AND OTHER CITY PROPERTY. THIS PERMIT SHALL APPROVE THE LOCATION AND SPECIES TO BE PLANTED. FAILURE TO OBTAIN THIS PERMIT IS A VIOLATION OF THE CITY OF FORT COLLINS CODE SUBJECT TO CITATION (SECTION 27-31) AND MAY ALSO RESULT IN REPLACING OR RELOCATING TREES AND A HOLD ON CERTIFICATE OF OCCUPANCY.
2. CONTACT THE CITY FORESTER TO INSPECT ALL STREET TREE PLANTINGS AT THE COMPLETION OF EACH PHASE OF THE DEVELOPMENT, ALL MUST BE INSTALLED AS SHOWN ON THE LANDSCAPE PLAN. APPROVAL OF STREET TREE PLANTING IS REQUIRED BEFORE FINAL APPROVAL OF EACH PHASE.
3. STREET LANDSCAPING, INCLUDING STREET TREES, SHALL BE SELECTED IN ACCORDANCE WITH ALL CITY CODES AND POLICIES. ALL TREE PRUNING AND REMOVAL WORKS SHALL BE PERFORMED BY A CITY OF FORT COLLINS LICENSED ARBORS WHERE REQUIRED BY CODE.STREET TREES SHALL BE SUPPLIED AND PLANTED BY THE DEVELOPER USING A QUALIFIED LANDSCAPE CONTRACTOR.
4. THE DEVELOPER SHALL REPLACE DEAD OR DYING STREET TREES AFTER PLANTING UNTIL FINAL MAINTENANCE INSPECTION AND ACCEPTANCE BY THE CITY OF FORT COLLINS FORESTRY DIVISION. ALL STREET TREES IN THE PROJECT MUST BE ESTABLISHED, WITH AN APPROVED SPECIES AND OF ACCEPTABLE CONDITION PRIOR TO ACCEPTANCE.
5. SUBJECT TO APPROVAL BY THE CITY FORESTER – STREET TREE LOCATIONS MAY BE ADJUSTED TO ACCOMMODATE DRIVEWAY LOCATIONS, UTILITY SEPARATIONS BETWEEN TREES, STREET SIGNS AND STREET LIGHTS. STREET TREES TO BE CENTERED IN THE MIDDLE OF THE LOT TO THE EXTENT FEASIBLE. QUANTITIES SHOWN ON PLAN MUST BE INSTALLED UNLESS A REDUCTION IS APPROVED BY THE CITY TO MEET SEPARATION STANDARDS.

LANDSCAPE CONCEPT STATEMENT

THE INTENT OF THE PLANTING DESIGN IS TO FOCUS LOW WATER USE NATIVE ENHANCEMENT ALONG THE IRRIGATION DITCH CORRIDOR, POCKETS OF LAYERED VEGETATION: SEED, SHRUBS AND TREES, WILL PROVIDE HABITAT ALONG THE BANKS. MORE FORMAL PLANTINGS SHALL SURROUND BUILDINGS, CANOPY TREES WILL FRAME THE PROPOSED STREET AND DIVERSE FOUNDATION PLANTINGS WILL SOFTEN THE ARCHITECTURE.

SALUD FAMILY HEALTH CENTER

PDP SUBMITTAL

FORT COLLINS, CO

PREPARED BY:

RIPLEY DESIGN INC.

■ land planning ■ landscape architecture ■
■ urban design ■ entitlement ■

419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT

RIPLEY DESIGN INC.
Stephanie Van Dyken
419 Canyon Ave, Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER

SALUD FAMILY HEALTH CENTER
John Santistevan
203 S. Rollie Avenue
Fort Lupton, CO 80621
(303) 892-6401

ARCHITECT

TW BECK ARCHITECTS
Thomas Beck
PO Box 57
Estes Park, CO 80517
p. 970.586.3913

ENGINEER

NORTHERN ENGINEERING
Cody Snowden
301 Howes St. #100
Fort Collins, CO 80521
p. 970.568.5409

NORTH SCALE: 1"=10'-0" (0, 05, 10, 20)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
1	PROJECT DEVELOPMENT PLAN	5/18/2016

REVISIONS

No.	DESCRIPTION	DATE
02	CITY COMMENTS	5/31/2017

LANDSCAPE DETAILS

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R15-024
DRAWN BY:	DS/SV
REVIEWED BY:	SV

DRAWING NUMBER:

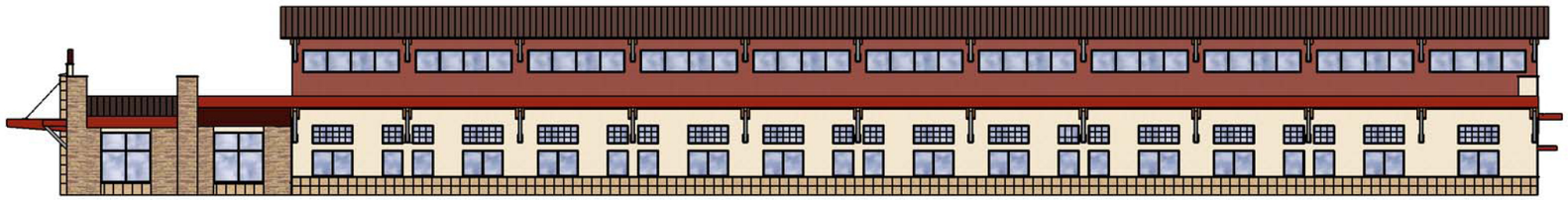
6 OF 5

Plotted By: Stephanie Van Dyken **Layout:** 6 LANDSCAPE DETAILS **Printed On:** 6/23/2017 1:10 PM **File Name:** LANDSCAPE DETAILS.dwg

A4 PDP1

PROPOSED WEST ELEVATION

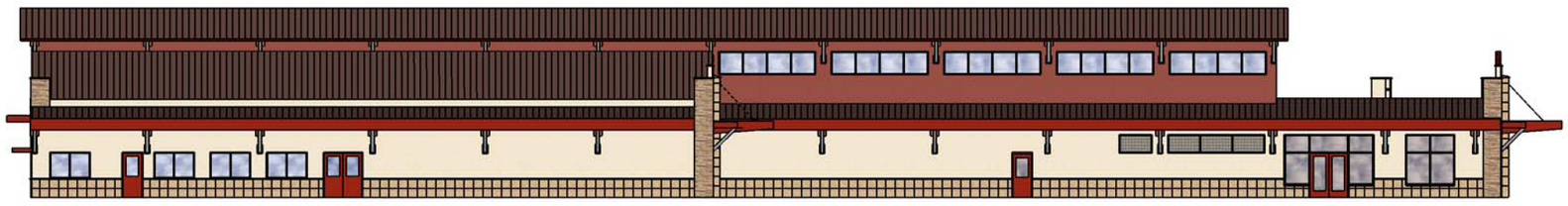
SCALE: 1" = 24'-0"



A2 PDP1

PROPOSED NORTH ELEVATION

SCALE: 1" = 24'-0"



A3 PDP1

PROPOSED SOUTH ELEVATION

SCALE: 1" = 24'-0"

A4 PDP1

PROPOSED EAST ELEVATION

SCALE: 1" = 24'-0"

Salud Fort Collins LaPorte
1830 LaPorte Ave
Fort Collins, CO 80521

TW Beck Architects,
Architecture,
Planning and Interiors

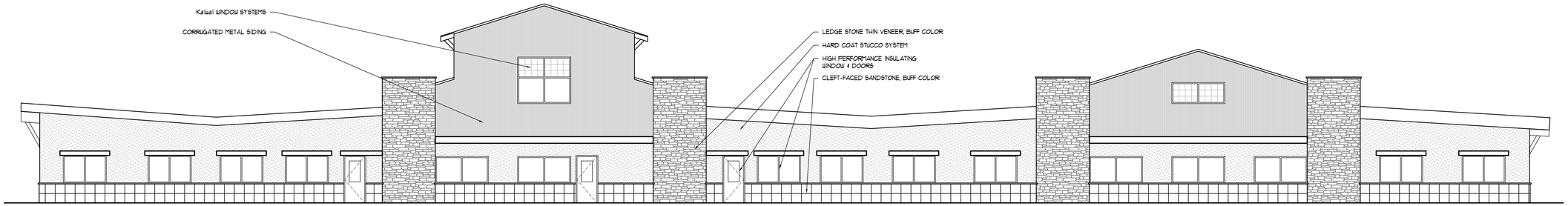
170 S. St. Vrain Ave.
PO Box 57
Estes Park CO 80517
(970) 586.3913 phone
(970) 586.4211 fax

SHEET NUMBER:

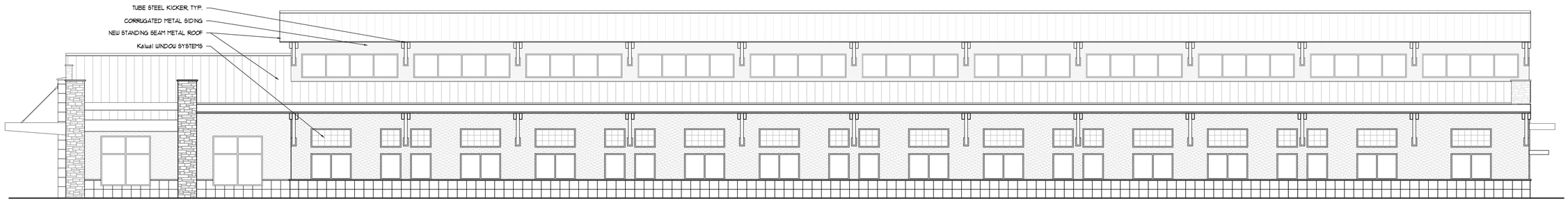
PDP1

PROJECT NUMBER: 1427

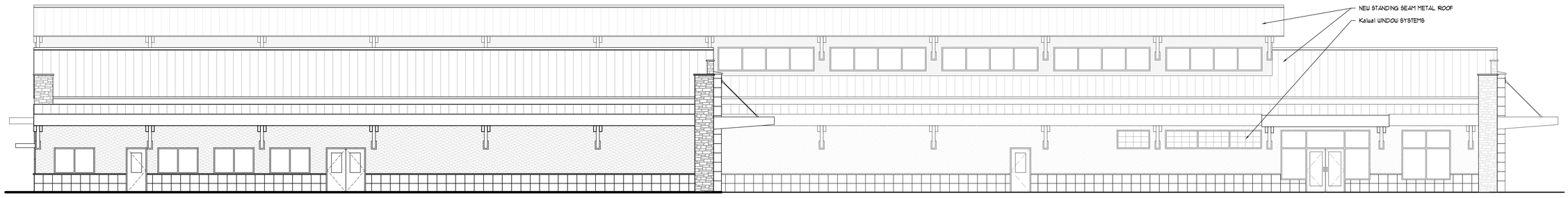
MAY 17, 2016



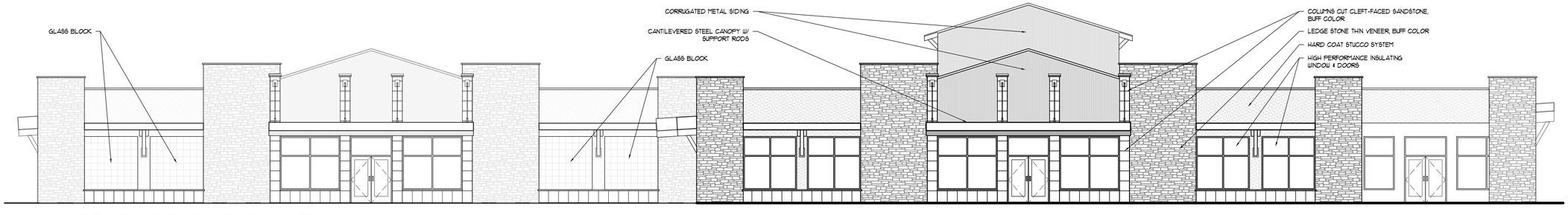
A1 / A31 PROPOSED WEST ELEVATION
SCALE: 1/8" = 1'-0"



A2 / A31 PROPOSED NORTH ELEVATION
SCALE: 1/8" = 1'-0"



A3 / A31 PROPOSED SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



A4 / A31 PROPOSED EAST ELEVATION
SCALE: 1/8" = 1'-0"

"Salud" Family Health Center

Remodel

1830 LaPorte Road, Fort Collins CO 80521

TW Beck Architects, pc
Architecture, Planning and Interiors
170 S. St. Vrain Ave.
PO Box 57
Estes Park CO 80517
(970) 586.3913 phone
(970) 586.4211 fax

SHEET TITLE:
PROPOSED ELEVATIONS

SHEET NUMBER:
A31
OF 20

PROJECT NUMBER: 1427

DATE:
MAY 17, 2016

REVISIONS:

SALUD FAMILY HEALTH CENTER

A TRACT OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF FORT COLLINS, COUNTY OF LARIMER, STATE OF COLORADO

STATEMENT OF OWNERSHIP AND SUBDIVISION:

Know all persons by these presents, that the undersigned owner(s) of the following described land:

A tract of land located in the Northwest Quarter of Section 10, Township 7 North, Range 69 West of the 6th Principal Meridian, City of Fort Collins, County of Larimer, State of Colorado being more particularly described as follows:

Considering the South line of the Northwest Quarter of Section 10, Township 7 North, Range 69 West of the 6th P.M., City of Fort Collins, County of Larimer, State of Colorado, as bearing South 89° 14' 44" East, and with all bearings herein relative thereto:

Commencing at the West Quarter corner of said Section 10; thence along the South line of said Northwest Quarter, South 89° 14' 44" East, 1325.02 feet; thence, North 00° 42' 01" East, 30.00 feet to the POINT OF BEGINNING; thence, North 00° 38' 41" East, 405.71 feet; thence, North 89° 14' 49" West, 330.72 feet; thence, North 00° 42' 46" East, 656.12 feet; thence, South 89° 24' 33" East, 1320.17 feet; thence, South 00° 23' 46" West, 377.97 feet; thence, North 89° 14' 44" West, 285.00 feet; thence, South 00° 23' 46" West, 472.81 feet; thence, North 87° 54' 20" West, 249.40 feet; thence, South 07° 37' 19" East, 72.44 feet; thence, North 89° 14' 44" West, 86.39 feet; thence, North 00° 23' 46" East, 21.00 feet; thence, North 89° 14' 44" West, 83.00 feet; thence, South 00° 23' 46" West, 50.00 feet; thence, North 89° 14' 30" West, 85.50 feet; thence, South 00° 45' 13" West, 120.00 feet; thence, North 89° 14' 44" West, 215.03 feet to the Point of Beginning, contains 987,453 square feet or 22.669 acres, more or less.

For themselves and their successors in interest (collectively "Owner") have caused the above described land to be surveyed and subdivided into lots, tracts and streets as shown on this Plat to be known as Salud Family Health Center (the "Development"), subject to all easements and rights-of-way now of record or existing or indicated on this Plat. The rights and obligations of this Plat shall run with the land.

CERTIFICATE OF DEDICATION:

The Owner does hereby dedicate and convey to the City of Fort Collins, Colorado (hereafter "City"), for public use, forever, the "Easements" as laid out and designated on this Plat; provided, however, that acceptance by the City of this dedication of Easements does not impose upon the City a duty to maintain the Easements so dedicated. The City's rights under the Easements include the right to install, operate, access, maintain, repair, reconstruct, remove and replace within the Easements public improvements consistent with the intended purpose of the Easements; the right to install, maintain and use gates in any fences that cross the Easements; the right to mark the location of the Easements with suitable markers; and the right to permit other public utilities to exercise these same rights. Owner reserves the right to use the Easements for purposes that do not interfere with the full enjoyment of the rights hereby granted. The City is responsible for maintenance of its own improvements and for repairing any damage caused by its activities in the Easements, but by acceptance of this dedication, the City does not accept the duty of maintenance of the Easements, or of improvements in the Easements that are not owned by the City. Owner will maintain the surface of the Easements in a sanitary condition in compliance with any applicable weed, nuisance or other legal requirements.

Except as expressly permitted in an approved plan of development or other written agreement with the City, Owner will not install on the Easements, or permit the installation on the Easements, of any building, structure, improvement, fence, retaining wall, sidewalk, tree or other landscaping (other than usual and customary grasses and other ground cover). In the event such obstacles are installed in the Easements, the City has the right to require the Owner to remove such obstacles from the Easements. If Owner does not remove such obstacles, the City may remove such obstacles without any liability or obligation for repair and replacement thereof, and charge the Owner the City's costs for such removal. If the City chooses not to remove the obstacles, the City will not be liable for any damage to the obstacles or any other property to which they are attached.

The rights granted to the City by this Plat inure to the benefit of the City's agents, licensees, permittees and assigns.

OWNER:

BY: _____

STATE OF COLORADO)
)ss.
COUNTY OF LARIMER)

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by

_____, as _____ of _____.

Witness my hand and official seal

My commission expires: _____

_____
Notary Public

MAINTENANCE GUARANTEE:

The Owner hereby warrants and guarantees to the City, for a period of two (2) years from the date of completion and first acceptance by the City of the improvements warranted hereunder, the full and complete maintenance and repair of the improvements to be constructed in connection with the Development which is the subject of this Plat. This warranty and guarantee is made in accordance with the City Land Use Code and/or the Transitional Land Use Regulations, as applicable. This guarantee applies to the streets and all other appurtenant structures and amenities lying within the rights-of-way, Easements and other public properties, including, without limitation, all curbing, sidewalks, bike paths, drainage pipes, culverts, catch basins, drainage ditches and landscaping. Any maintenance and/or repair required on utilities shall be coordinated with the owning utility company or department.

The Owner shall maintain said improvements in a manner that will assure compliance on a consistent basis with all construction standards, safety requirements and environmental protection requirements of the City. The Owner shall also correct and repair, or cause to be corrected and repaired, all damages to said improvements resulting from development-related or building-related activities. In the event the Owner fails to correct any damages within thirty (30) days after written notice thereof, then said damages may be corrected by the City and all costs and charges billed to and paid by the Owner. The City shall also have any other remedies available to it as authorized by law. Any damages which occurred prior to the end of said two (2) year period and which are unrepaired at the termination of said period shall remain the responsibility of the Owner.

REPAIR GUARANTEE:

In consideration of the approval of this final Plat and other valuable consideration, the Owner does hereby agree to hold the City harmless for a five (5) year period, commencing upon the date of completion and first acceptance by the City of the improvements to be constructed in connection with the development which is the subject of this Plat, from any and all claims, damages, or demands arising on account of the design and construction of public improvements of the property shown herein; and the Owner furthermore commits to make necessary repairs to said public improvements, to include, without limitation, the roads, streets, fills, embankments, ditches, cross pans, sub-drains, culverts, walls and bridges within the right-of-way, Easements and other public properties, resulting from failures caused by design and/or construction defects. This agreement to hold the City harmless includes defects in materials and workmanship, as well as defects caused by or consisting of settling trenches, fills or excavations.

Further, the Owner warrants that he/she owns fee simple title to the property shown hereon and agrees that the City shall not be liable to the Owner or his/her successors in interest during the warranty period, for any claim of damages resulting from negligence in exercising engineering techniques and due caution in the construction of cross drains, drives, structures or buildings, the changing of courses of streams and rivers, flooding from natural creeks and rivers, and any other matter whatsoever on private property. Any and all monetary liability occurring under this paragraph shall be the liability of the Owner. I further warrant that I have the right to convey said land according to this Plat.

NOTICE OF OTHER DOCUMENTS:

All persons take notice that the Owner has executed certain documents pertaining to this Development which create certain rights and obligations of the Development, the Owner and/or subsequent Owners of all or portions of the Development site, many of which obligations constitute promises and covenants that, along with the obligations under this Plat, run with the land. The said documents may also be amended from time to time and may include, without limitation, the Development Agreement, Site And Landscape Covenants, Final Site Plan, Final Landscape Plan, and Architectural Elevations, which documents are on file in the office of the Clerk of the City and should be closely examined by all persons interested in purchasing any portion of the Development site.

ATTORNEY'S CERTIFICATION

I hereby certify that this Subdivision Plat has been duly executed as required pursuant to Section 2.2.3(C)(3)(a) through (e) inclusive of the Land Use Code of the City of Fort Collins and that all persons signing this Subdivision Plat on behalf of a corporation or other entity are duly authorized signatories under the laws of the State of Colorado. This Certification is based upon the records of the Clerk and Recorder of Larimer County, Colorado as of the date of execution of the Plat and other information discovered by me through reasonable inquiry and is limited as authorized by Section 2.2.3(C)(3)(f) of the Land Use Code.

Attorney:_____

Address: _____

_____

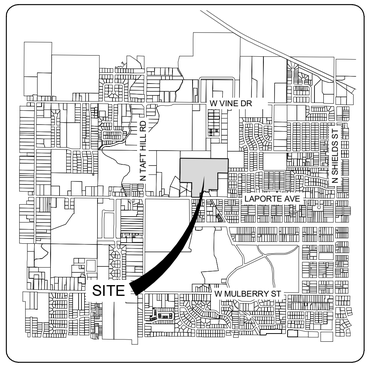
Registration No.:_____

SURVEYOR'S STATEMENT

I, Robert C. Tessely, a Colorado Registered Professional Land Surveyor, do hereby state that this Subdivision Plat was prepared from an actual survey under my personal supervision, that the monumentation as indicated hereon were found or set as shown, and that the foregoing plat is an accurate representation thereof, all this to the best of my knowledge, information and belief.

DRAFT
10-5-16

For and on Behalf of Northern Engineering
Robert C. Tessely
Colorado Registered Professional
Land Surveyor No. 38470



NORTH

VICINITY MAP
1"=2000'

APPROVED AS TO FORM, CITY ENGINEER

By the City Engineer of the City of Fort Collins, Colorado this _____day of _____ A.D., 20_____.

_____
City Engineer

PLANNING APPROVAL

By the Director of Community Development and Neighborhood Services of the City of Fort Collins, Colorado this _____ day of _____ A.D., 20_____.

_____
Director of Community Development and Neighborhood Services

NOTES:

1. The Basis of Bearings is the South line of the Northwest Quarter of Section 10, Township 7 North Range 69 West of the 6th P.M. as bearing South 89° 14' 44" East, and monumented as shown on drawing.

2. All information regarding easements, rights-of-way or Title of Record, Northern Engineering relied upon Commitment Number FCC25125833-6, prepared by Land Title Guarantee Company, dated March 12, 2015 and Commitment Number FCC25125834-8, prepared by Land Title Guarantee Company, dated March 12, 2015

3. The lineal unit of measurement for this plat is U. S. Survey Feet.

4. There shall be no private conditions, covenants or restrictions that prohibit or limit the installation of resource conserving equipment or landscaping that are allowed by Sections 12-120 - 12-122 of the City code.

NOTICE

ALL RESPONSIBILITIES AND COSTS OF OPERATION, MAINTENANCE AND RECONSTRUCTION OF THE PRIVATE STREETS AND/OR DRIVES LOCATED ON THE PRIVATE PROPERTY THAT IS THE SUBJECT OF THIS PLAT SHALL BE BORNE BY THE OWNERS OF SAID PROPERTY, EITHER INDIVIDUALLY, OR COLLECTIVELY, THROUGH A PROPERTY OWNERS' ASSOCIATION, IF APPLICABLE. THE CITY OF FORT COLLINS SHALL HAVE NO OBLIGATION OF OPERATION, MAINTENANCE OR RECONSTRUCTION OF SUCH PRIVATE STREETS AND/OR DRIVES NOR SHALL THE CITY HAVE ANY OBLIGATION TO ACCEPT SUCH STREETS AND/OR DRIVES AS PUBLIC STREETS OR DRIVES.

NOTICE:
According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years after the date of the certificate shown hereon.

SECTION: 10
TOWNSHIP: 7N
RANGE: 69 W of the 6th PM

NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
PHONE: 970.221.4158
www.northernengineering.com

DATE: 10/5/16
SCALE: N.A.
REVIEWED BY: R. Tessely
PROJECT: 1087-001
DESIGNED BY:
DRAWN BY: L. Smith

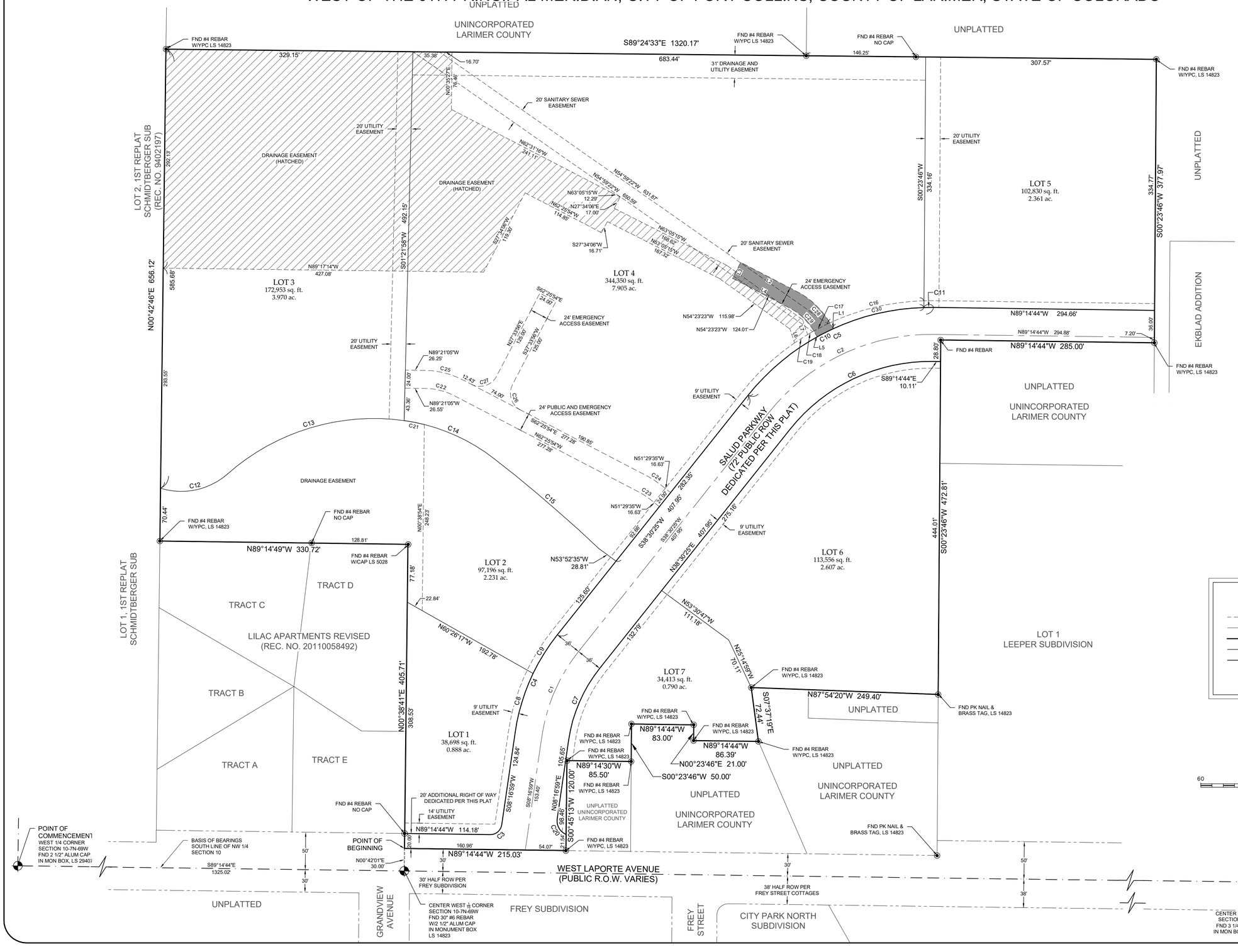
SALUD FAMILY HEALTH CENTER

CITY OF FORT COLLINS
STATE OF COLORADO

Sheet
1
Of 2 Sheets

SALUD FAMILY HEALTH CENTER

A TRACT OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF FORT COLLINS, COUNTY OF LARIMER, STATE OF COLORADO



CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	BEARING	CHORD
C1	30°13'26"	236.00'	124.49'	S23°23'42"W	123.05'
C2	52°14'51"	275.00'	250.77'	S64°37'51"W	242.17'
C3	82°28'17"	15.00'	21.59'	S49°31'08"W	19.77'
C4	30°13'26"	272.00'	143.48'	S23°23'42"W	141.82'
C5	52°14'51"	311.00'	283.60'	S64°37'51"W	273.87'
C6	52°14'51"	239.00'	217.94'	N64°37'51"E	210.47'
C7	30°13'26"	200.00'	105.50'	N23°23'42"E	104.28'
C8	17°21'43"	272.00'	82.42'	S16°57'51"W	82.11'
C9	12°51'43"	272.00'	61.06'	S32°04'34"W	60.93'
C10	49°52'02"	311.00'	270.68'	S63°26'26"W	262.22'
C11	2°22'49"	311.00'	12.92'	S89°33'52"W	12.92'
C12	59°01'32"	92.68'	95.47'	S77°57'56"W	91.31'
C13	49°26'14"	294.04'	253.71'	S73°10'17"W	245.91'
C14	29°49'36"	250.44'	130.37'	N67°02'03"W	128.91'
C15	5°33'10"	1900.92'	184.23'	N49°20'40"W	184.15'
C16	23°46'56"	320.00'	132.83'	N76°32'24"E	131.87'
C17	4°02'32"	320.00'	22.58'	N62°37'40"E	22.57'
C18	1°24'53"	320.00'	7.90'	N59°53'57"E	7.90'
C19	3°41'48"	320.00'	20.65'	N57°20'36"E	20.64'
C20	74°51'56"	20.00'	26.13'	N29°08'59"W	24.31'
C21	6°16'46"	250.51'	27.46'	N78°59'50"W	27.44'
C22	26°55'11"	88.00'	41.35'	N75°53'30"W	40.97'
C23	10°56'19"	88.00'	16.80'	N56°57'44"W	16.77'
C24	10°56'19"	112.00'	21.38'	N56°57'44"W	21.35'
C25	26°55'11"	112.00'	52.62'	N75°53'30"W	52.14'
C26	89°59'50"	25.00'	39.27'	S17°25'59"E	35.35'
C27	90°00'10"	25.00'	39.27'	N72°34'01"E	35.36'
C28	31°55'00"	112.00'	62.39'	S42°51'21"E	61.59'
C29	31°26'29"	88.00'	48.29'	N42°37'06"W	47.69'
C30	23°03'38"	311.00'	125.17'	S76°50'38"W	124.33'

NOTICE:
According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years after the date of the certificate shown hereon.

SECTION: 10
TOWNSHIP: 7N
RANGE: 69 W of the 6th PM

NORTHERN ENGINEERING
PHONE: 970.221.4158
www.northernengineering.com
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521

DATE: 10/5/16
SCALE: 1"=60'
REVIEWED BY: R. Tessely
PROJECT: 1067-001
DESIGNED BY:
DRAWN BY: L. Smith

SALUD FAMILY HEALTH CENTER
CITY OF FORT COLLINS
STATE OF COLORADO

Sheet 2
Of 2 Sheets

PRELIMINARY

Robert C. Tessely
Registered Professional Land Surveyor
Colorado Registration No. 38470
For and on behalf of Northern Engineering Services, Inc.

"Salud" Family Health Center
PDP Submittal

TW Beck Architects
Architecture,
Planning and Interiors

170 S. St. Vrain Ave.
PO Box 57
Estes Park CO 80517
(970) 586.3913 phone
(970) 586.4211 fax

SHEET TITLE:
SITE LIGHTING PLAN

SHEET NUMBER:
E1
OF 2

PROJECT NUMBER: 1427

DATE:
OCTOBER 11, 2016

REVISIONS:
DESIGN IN PROGRESS NOT FOR CONSTRUCTION

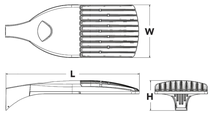
PRELIMINARY

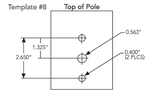
1 / E1 SITE LIGHTING PLAN
SCALE: 1"=30'-0"

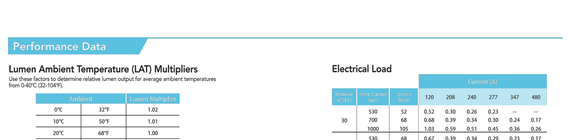
NORTH

PCD ENGINEERING SERVICES
323 3RD AVENUE, #100
LONGMONT, CO 80501
JOB NO. 16010
TEL: 303.678.1108
FAX: 303.678.1142
PCDENGINEERING.COM

PLOT DATE: 2016-10-10 11:53:40 AM







D-Series Size 1
LED Area Luminaire

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	1.2 ft² (0.11 m²)
Length:	33″ (83.8 cm)
Width:	13″ (33.0 cm)
Height:	7-1/2″ (19.0 cm)
Weight (max):	27 lbs (12.2 kg)

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing 100 – 400W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED 60C 1000 40K T3M MVOLT SPA DDBXD

DSX1LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** 30C 30 LEDs (one engine) 40C 40 LEDs (two engines) 60C 60 LEDs (two engines) **Rotated optics**[1] 60C 60 LEDs (two engines)	530 530 mA 700 700 mA 1000 1000 mA (1 A)	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted[2]	T1S Type I Short T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium T5VS Type V Very Short T5S Type V Short T5M Type V Medium T5W Type V Wide	MVOLT[3] 120[3] 208[3] 240[3] 277[3] 347[4] 480[4]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor[5] RPUMBA Round pole universal mounting adaptor[5] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[6]

Control options		Other options	Finish *(required)*
Shipped installed PER NEMA twist-lock receptacle only (no controls)[7] PER5 Five-wire receptacle only (no controls)[7,8] PER7 Seven-wire receptacle only (no controls)[7,8] DMG 0-10V dimming driver (no controls)[9] DCR Dimmable and controllable via ROAM® (no controls)[10] DS Dual switching[11,12] PIR Motion/ambient sensor, 8-15′ mounting height, ambient sensor enabled at 5fc[13] PIRH Motion/ambient sensor, 15-30′ mounting height, ambient sensor enabled at 5fc[13]	PIR1FC3V Motion/ambient sensor, 8-15′ mounting height, ambient sensor enabled at 1fc[13] PIRH1FC3V Motion/ambient sensor, 15-30′ mounting height, ambient sensor enabled at 1fc[13] BL30 Bi-level switched dimming, 30%[12,14] BL50 Bi-level switched dimming, 50%[12,14] PNMTDD3 Part night, dim till dawn[15] PNMT5D3 Part night, dim 5 hrs[15] PNMT6D3 Part night, dim 6 hrs[15] PNMT7D3 Part night, dim 7 hrs[15]	**Shipped installed** HS House-side shield[16] WTB Utility terminal block[17] SF Single fuse (120, 277, 347V)[18] DF Double fuse (208, 240, 480V)[18] L90 Left rotated optics[19] R90 Right rotated optics[19]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Accessories

Ordered and shipped separately.

Controls & Shields

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V)[20]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V)[20]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V)[20]
SC U	Shorting cap[20]
DSX1HS 30C U	House-side shield for 30 LED unit
DSX1HS 40C U	House-side shield for 40 LED unit
DSX1HS 60C U	House-side shield for 60 LED unit
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish)
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish)[6]

For more control options, visit DTL and ROAM online.

NOTES
1 Rotated optics available with 60C only.
2 AMBPC only available with 530mA or 700mA.
3 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options).
4 Not available with single board, 530mA product (30C 530 or 60C 530 DS). Not available with BL30, BL50 or PNMT options.
5 Available as a separate combination accessory: PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31.
6 Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8″ mast arm (not included).
7 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option.
8 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR.
9 DMG option for 347V or 480V requires 1000mA.
10 Specifies a ROAM® enabled luminaire with 0-10V dimming capability; PER option required. Additional hardware and services required for ROAM® deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net. N/A with DS, PER5, PER7, BL30, BL50 or PNMT options.
11 Requires 40C or 60C. Provides 50/50 luminaire operation via two independent drivers on two separate circuits. N/A with PER, DCR, WTB, PIR or PIRH.
12 Requires an additional switched circuit.
13 PIR and PIR1FC3V specify the SensorSwitch SBGR-10-ODP control; PIRH and PIRH1FC3V specify the SensorSwitch SBGR-6-ODP control; see Motion Sensor Guide for details. Dimming driver standard. Not available with PER5 or PER7. Ambient sensor disabled when ordered with DCR. Separate on/off required.
14 Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, DS, PER5, PER7 or PNMT options.
15 Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, DS, PER5, PER7, BL30 or BL50.
16 Also available as a separate accessory; see Accessories information.
17 WTB not available with DS.
18 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
19 Available with 60 LEDs (60C option) only.
20 Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.

Drilling

DSX1 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

DM19AS	Single unit	**DM29AS**	2 at 90° *
DM28AS	2 at 180°	**DM39AS**	3 at 90° *
DM49AS	4 at 90° *	**DM32AS**	3 at 120° **

Example: SSA 20 4C **DM19AS** DDBXD

Visit Lithonia Lighting's POLES CENTRAL to see our wide selection of poles, accessories and educational tools.
**Round pole top must be 3.25″ O.D. minimum.*
***For round pole mounting (RPA) only.*

Tenon Mounting Slipfitter **

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8″	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8″	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4″	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (20′).

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	**77°F**	**1.00**
30°C	86°F	1.00
40°C	104°F	0.99

Electrical Load

Number of LEDs	Drive Current (mA)	System Watts	Current (A) 120	208	240	277	347	480
30	530	52	0.52	0.30	0.26	0.23	--	--
	700	68	0.68	0.39	0.34	0.30	0.24	0.17
	1000	105	1.03	0.59	0.51	0.45	0.36	0.26
40	530	68	0.67	0.39	0.34	0.29	0.23	0.17
	700	89	0.89	0.51	0.44	0.38	0.31	0.22
	1000	138	1.35	0.78	0.67	0.58	0.47	0.34
60	530	99	0.97	0.56	0.48	0.42	0.34	0.24
	700	131	1.29	0.74	0.65	0.56	0.45	0.32
	1000	209	1.98	1.14	0.99	0.86	0.69	0.50

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	DSX1 LED 60C 1000			
	1.0	0.98	0.96	0.91
	DSX1 LED 60C 700			
	1.0	0.99	0.99	0.99

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI) Lumens	B	U	G	LPW	40K (4000 K, 70 CRI) Lumens	B	U	G	LPW	50K (5000 K, 70 CRI) Lumens	B	U	G	LPW	AMBPC (Amber Phosphor Converted) Lumens	B	U	G	LPW
30C (30 LEDs)	700 mA	68 W	T1S	7,554	1	0	1	111	8,112	2	0	2	119	8,163	2	0	2	120	4,561	1	0	1	67
			T2S	7,789	2	0	2	115	8,364	2	0	2	123	8,416	2	0	2	124	4,777	1	0	1	70
			T2M	7,610	1	0	2	112	8,172	2	0	2	120	8,223	2	0	2	121	4,622	1	0	2	68
			T3S	7,601	1	0	2	112	8,162	2	0	2	120	8,213	2	0	2	121	4,724	1	0	1	69
			T3M	7,670	1	0	2	113	8,236	2	0	2	121	8,288	2	0	2	122	4,701	1	0	2	69
			T4M	7,774	1	0	2	114	8,348	2	0	2	123	8,400	2	0	2	124	4,709	1	0	2	69
			TFTM	7,658	1	0	2	113	8,223	1	0	2	121	8,275	1	0	2	122	4,638	1	0	2	68
			T5VS	8,090	2	0	0	119	8,687	3	0	1	128	8,742	3	0	1	129	4,922	2	0	0	72
			T5S	8,150	2	0	0	120	8,751	3	0	0	129	8,806	3	0	0	130	4,863	2	0	0	72
			T5M	8,164	3	0	1	120	8,767	3	0	2	129	8,821	3	0	2	130	4,924	3	0	1	72
			T5W	8,044	3	0	1	118	8,638	3	0	2	127	8,692	3	0	2	128	4,787	3	0	1	70
	1000 mA	105 W	T1S	10,331	2	0	2	98	11,094	2	0	2	106	11,163	2	0	2	106					
			T2S	10,652	2	0	2	101	11,438	2	0	2	109	11,510	2	0	2	110					
			T2M	10,408	2	0	2	99	11,176	2	0	3	106	11,246	2	0	3	107					
			T3S	10,395	2	0	2	99	11,163	2	0	2	106	11,233	2	0	2	107					
			T3M	10,490	2	0	2	100	11,264	2	0	2	107	11,335	2	0	2	108					
			T4M	10,632	2	0	2	101	11,417	2	0	2	109	11,488	2	0	2	109					
			TFTM	10,473	2	0	2	100	11,247	2	0	3	107	11,317	2	0	3	108					
			T5VS	11,064	3	0	1	105	11,881	3	0	1	113	11,955	3	0	1	114					
			T5S	11,145	3	0	1	106	11,968	3	0	1	114	12,043	3	0	1	115					
			T5M	11,165	3	0	2	106	11,989	4	0	2	114	12,064	4	0	2	115					
			T5W	11,001	3	0	2	105	11,813	4	0	2	113	11,887	4	0	2	113					
40C (40 LEDs)	700 mA	89 W	T1S	9,984	2	0	2	112	10,721	2	0	2	120	10,788	2	0	2	103	6,014	1	0	1	68
			T2S	10,294	2	0	2	116	11,054	2	0	2	124	11,123	2	0	2	106	6,299	2	0	2	71
			T2M	10,059	2	0	2	113	10,801	2	0	3	121	10,869	2	0	3	104	6,094	2	0	2	68
			T3S	10,046	2	0	2	113	10,788	2	0	2	121	10,855	2	0	2	103	6,229	1	0	2	70
			T3M	10,137	2	0	2	114	10,886	2	0	2	122	10,954	2	0	2	104	6,198	2	0	2	70
			T4M	10,275	2	0	2	115	11,033	2	0	2	124	11,102	2	0	2	106	6,209	1	0	2	70
			TFTM	10,122	2	0	2	114	10,869	2	0	2	122	10,937	2	0	2	104	6,115	1	0	2	69
			T5VS	10,693	3	0	1	120	11,482	3	0	1	129	11,554	3	0	1	110	6,490	2	0	0	73
			T5S	10,771	3	0	1	121	11,566	3	0	1	130	11,639	3	0	1	111	6,411	2	0	0	72
			T5M	10,790	3	0	2	121	11,587	4	0	2	130	11,659	4	0	2	111	6,492	3	0	1	73
			T5W	10,632	3	0	2	119	11,417	4	0	2	128	11,488	4	0	2	109	6,311	3	0	2	71
	1000 mA	138 W	T1S	13,655	2	0	2	99	14,663	3	0	3	106	14,754	3	0	3	107					
			T2S	14,079	2	0	2	102	15,118	3	0	3	110	15,212	3	0	3	110					
			T2M	13,756	2	0	3	100	14,772	3	0	3	107	14,864	3	0	3	108					
			T3S	13,739	2	0	2	100	14,754	2	0	2	107	14,846	3	0	3	108					
			T3M	13,864	2	0	2	100	14,888	3	0	3	108	14,981	3	0	3	109					
			T4M	14,052	2	0	2	102	15,090	3	0	3	109	15,184	3	0	3	110					
			TFTM	13,842	2	0	3	100	14,864	2	0	3	108	14,957	2	0	3	108					
			T5VS	14,623	3	0	1	106	15,703	4	0	1	114	15,801	4	0	1	115					
			T5S	14,731	3	0	1	107	15,818	3	0	1	115	15,917	3	0	1	115					
			T5M	14,757	4	0	2	107	15,846	4	0	2	115	15,945	4	0	2	116					
			T5W	14,540	4	0	2	105	15,614	4	0	2	113	15,711	4	0	2	114					
60C (60 LEDs)	700 mA	131 W	T1S	14,694	2	0	2	106	15,779	3	0	3	114	15,877	3	0	3	115	8,952	2	0	2	68
			T2S	15,150	3	0	3	110	16,269	3	0	3	118	16,370	3	0	3	119	9,377	2	0	2	72
			T2M	14,803	2	0	3	107	15,896	3	0	3	115	15,995	3	0	3	116	9,072	2	0	2	69
			T3S	14,785	2	0	2	107	15,877	3	0	3	115	15,976	3	0	3	116	9,273	2	0	2	71
			T3M	14,919	2	0	2	108	16,021	3	0	3	116	16,121	3	0	3	117	9,227	2	0	2	70
			T4M	15,122	2	0	2	110	16,238	3	0	3	118	16,340	3	0	3	118	9,243	2	0	2	71
			TFTM	14,896	2	0	3	108	15,996	2	0	3	116	16,096	2	0	3	117	9,103	2	0	2	69
			T5VS	15,736	3	0	1	114	16,898	4	0	1	122	17,004	4	0	1	123	9,661	3	0	1	74
			T5S	15,852	3	0	1	115	17,022	4	0	1	123	17,129	4	0	1	124	9,544	3	0	1	73
			T5M	15,880	4	0	2	115	17,052	4	0	2	124	17,159	4	0	2	124	9,665	3	0	2	74
			T5W	15,647	4	0	2	113	16,802	4	0	2	122	16,907	4	0	2	123	9,395	4	0	2	72
	1000 mA	209 W	T1S	20,095	3	0	3	96	21,579	3	0	3	103	21,714	3	0	3	104					
			T2S	20,720	3	0	3	99	22,249	3	0	3	106	22,388	3	0	3	107					
			T2M	20,245	3	0	3	97	21,740	3	0	3	104	21,876	3	0	3	105					
			T3S	20,220	3	0	3	97	21,713	3	0	3	104	21,849	3	0	3	105					
			T3M	20,404	3	0	3	98	21,910	3	0	4	105	22,047	3	0	4	105					
			T4M	20,681	3	0	3	99	22,207	3	0	4	106	22,346	3	0	4	107					
			TFTM	20,372	3	0	3	97	21,876	3	0	4	105	22,013	3	0	4	105					
			T5VS	21,521	4	0	1	103	23,110	4	0	1	111	23,254	4	0	1	111					
			T5S	21,679	4	0	1	104	23,280	4	0	1	111	23,425	4	0	1	112					
			T5M	21,717	4	0	2	104	23,321	5	0	3	112	23,466	5	0	3	112					
			T5W	21,399	4	0	3	102	22,979	5	0	3	110	23,122	5	0	3	111					

FEATURES & SPECIFICATIONS

INTENDED USE
The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION
Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.2 ft²) for optimized pole wind loading.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 4000 K (70 minimum CRI) or optional 3000 K (70 minimum CRI) or 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine configurations consist of 30, 40 or 60 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L96/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV or 6kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

INSTALLATION
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern. Optional terminal block, tool-less entry, and NEMA photocontrol receptacle are also available.

LISTINGS
UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are qualified.

WARRANTY
5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

ALL CONSTRUCTION SHALL CONFORM TO CURRENT INTERNATIONAL BUILDING CODE AND ALL OTHER APPLICABLE CODES.

DO NOT SCALE DRAWINGS FOR DIMENSIONS.

"Salud" Family Health Center
PDP Submittal

TW Beck
Architects
Architecture,
Planning and Interiors
170 S. St. Vrain Ave.
PO Box 57
Estes Park CO 80517
(970) 586.3913 phone
(970) 586.4211 fax

SHEET TITLE:
SITE LIGHTING
FIXTURE DETAILS

SHEET NUMBER:
E2
OF 2

PROJECT NUMBER: 1427

DATE:
OCTOBER 11, 2016

REVISIONS:
DESIGN IN
PROGRESS
NOT FOR
CONSTRUCTION

PCD
ENGINEERING
SERVICES
323 3RD AVENUE, #100 TEL: 303.678.1108
LONGMONT, CO 80501 FAX: 303.678.1142
JOB NO. 16010 PCDENGINEERING.COM

PRELIMINARY

PLOT DATE: 2016-10-10 11:45:08 AM

Letter of Intent for Emergency Access Forney Street

Salud Family Health Center

PDP Submittal 10/11/16

We, Dean Carlson and Ann Shannon

are the property owners of North Star Mobile Home and RV Park, located at 1700 LaPorte Ave, Fort Collins, CO. We intend to allow an emergency access easement centered on our western property line from LaPorte Ave to the northern boundary of our property. There is exiting pavement in this location formally known as Forney Street.

Ann Shannon — 10-5-16

Owner Signature — Date

Dean Carlson — 10-6-16

Owner Signature — Date

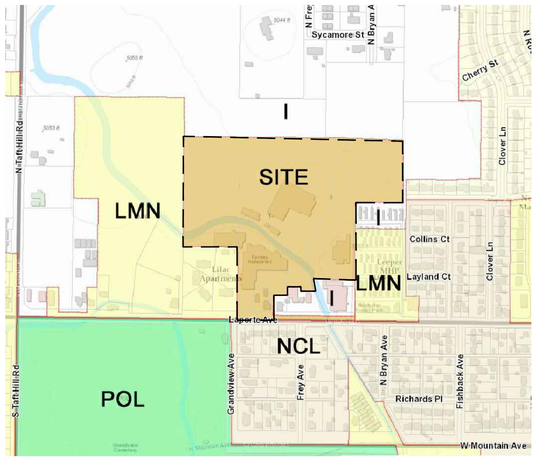
SALUD

OVERALL DEVELOPMENT PLAN

NOTES

1. THE PURPOSE OF THE OVERALL DEVELOPMENT PLAN IS TO ESTABLISH GENERAL PLANNING AND DEVELOPMENT CONTROL PARAMETERS FOR PROJECTS THAT WILL BE DEVELOPED IN PHASES WITH MULTIPLE SUBMITTALS WHILE ALLOWING SUFFICIENT FLEXIBILITY TO PERMIT DETAILED PLANNING IN SUBSEQUENT SUBMITTALS. APPROVAL OF AN OVERALL DEVELOPMENT PLAN DOES NOT ESTABLISH ANY VESTED RIGHT TO DEVELOP PROPERTY IN ACCORDANCE WITH THE PLAN.
2. THE SALUD OVERALL DEVELOPMENT PLAN IS PROPOSED TO BE MIXED USE DEVELOPMENT. PARCELS WITH LOW DENSITY MIXED-USE NEIGHBORHOOD DISTRICT ZONING (LMN) MAY INCLUDE: PARKS, OPEN SPACE, TRAILS, SINGLE FAMILY DETACHED OR ATTACHED DWELLINGS, TWO FAMILY DWELLINGS, GROUP HOMES, PLACES OF WORSHIP, COMMUNITY FACILITIES, RECREATION FACILITIES, CHILD CARE CENTERS, NEIGHBORHOOD CENTERS OR OTHER USES PERMITTED IN THE L-M-N DISTRICT; PARCELS WITH LIMITED COMMERCIAL DISTRICT ZONING (C-L) MAY INCLUDE: SINGLE-FAMILY DETACHED OR ATTACHED DWELLINGS, TWO-FAMILY DWELLINGS, MULTI-FAMILY DWELLINGS, MIXED-USE DWELLINGS, GROUP HOMES, PLACES OF WORSHIP, SCHOOLS, COMMUNITY FACILITIES, PUBLIC FACILITIES, CONVENIENCE RETAIL STORES, ARTISAN GALLERIES, CHILD CARE CENTERS ADULT DAY CARE CENTERS, RESTAURANTS, OR OTHER USES PERMITTED IN THE CL DISTRICT.
3. ALL DEVELOPMENT MUST COMPLY WITH THE APPLICABLE STANDARDS IN ARTICLE 4 OF THE LAND USE CODE. ALLOWED LAND USES IN EACH PARCEL ARE PER THE L-M-N AND C-L ZONE DISTRICTS AS APPLICABLE.
4. FIRE HYDRANTS WILL BE PROVIDED AS REQUIRED BY THE POUDRE FIRE AUTHORITY STANDARDS.
5. BOUNDARY CONNECTIONS SHALL BE IN COMPLIANCE WITH APPLICABLE LAND USE CODE AND LARIMER COUNTY URBAN AREA STREET STANDARDS IN PLACE AT THE TIME OF DEVELOPMENT APPLICATION SUBMITTAL
6. ALL DEVELOPMENT MUST COMPLY WITH APPLICABLE STANDARDS CONTAINED IN THE LAND USE CODE ARTICLE 3, CITY CODE CHAPTER 10 AT THE TIME OF APPLICATION FOR A PROJECT DEVELOPMENT PLAN UNLESS MODIFICATIONS AND/OR ENGINEERING VARIANCES ARE APPROVED.
7. THIS OVERALL DEVELOPMENT PLAN SHOWS THE GENERAL LOCATION AND APPROXIMATE SIZE OF ALL NATURAL AREAS, HABITATS AND FEATURES WITHIN ITS BOUNDARIES. DETAILED MAPPING OF A SITE'S NATURAL AREAS, HABITATS AND FEATURES WILL BE PROVIDED AT THE TIME INDIVIDUAL PROJECT DEVELOPMENT PLANS (PDP) ARE SUBMITTED FOR REVIEW. ALL DEVELOPMENT WITHIN THIS OVERALL DEVELOPMENT PLAN SHALL CONFORM TO APPLICABLE STANDARDS CONTAINED IN DIVISION 3.4, ENVIRONMENTAL, NATURAL AREA, RECREATIONAL AND CULTURAL RESOURCE, OF THE LAND USE CODE UNLESS MODIFICATIONS AND/OR ENGINEERING VARIANCES ARE APPROVED.
8. GENERAL BUFFER ZONES SHOWN ON THIS ODP MAY BE REDUCED OR ENLARGED BY THE DECISION MAKER DURING THE PDP PROCESS. REFERENCE SECTION 2.3.2(H)(3)(5)
9. EXISTING TREE GROVES A,C,D,E,K, AND I, AS WELL AS THE LARIMER NO. 2 DITCH AND ASSOCIATED WETLANDS ARE NATURAL HABITATS AND FEATURE BUFFERS RANGING FROM 25' - 100'. NATURAL HABITAT BUFFER ZONE BOUNDARIES AND MITIGATION, IF NEEDED, WILL BE ESTABLISHED AT TIME OF FUTURE PROJECT DEVELOPMENT PLANS. (PDP)
10. THE EXACT LOCATION AND TYPE OF ACCESS POINTS ONTO LOTS WILL BE DETERMINED AT THE TIME OF PDP SUBMITTALS. LOCATION AND TYPE OF ACCESS POINTS WITH PDP SUBMITTALS NEED TO COMPLY WITH THE CITY OF FORT COLLINS LAND USE CODE AND THE LARIMER COUNTY URBAN AREA STREET STANDARDS UNLESS A MODIFICATION IS GRANTED.
11. STREET STANDARDS WILL BE SUBJECT TO THE DESIGN STANDARDS IN EFFECT AT THE TIME OF APPLICATION FOR PROJECT DEVELOPMENT PLANS (PDP).
12. COMMON OPEN SPACE AREAS, STREETSCAPES, SIDEWALKS, AND BICYCLE/PEDESTRIAN TRAILS, OUTSIDE OF PUBLIC RIGHT-OF-WAYS WILL BE MAINTAINED BY THE OWNER/DEVELOPER INCLUDING SNOW REMOVAL.
13. OFF-SITE IMPROVEMENTS MAY BE REQUIRED AT THE TIME OF PDP IN ORDER TO MEET LEVEL OF SERVICE FOR ALL MODES OF TRANSPORTATION.
14. SIGHT DISTANCE EASEMENTS MAY BE REQUIRED ALONG THE PUBLIC ROADWAYS AT THE TIME OF PDP REVIEW.
15. AT THE TIME OF THIS ODP, THE DRAINAGE BASIN MASTER PLAN HAD NOT BEEN UPDATED FOR THIS DRAINAGE BASIN. THEREFORE, FLOODPLAIN AND FLOODWAY LOCATIONS ARE SUBJECT TO CHANGE. ANY DEVELOPMENT WITHIN THE FLOODPLAIN OR FLOODWAY SHALL COMPLY WITH ALL FLOODPLAIN REGULATIONS AT THE TIME OF THE PDP.
    a) PORTIONS OF THIS PROPERTY ARE LOCATED IN THE FLOODWAY AND HIGH-RISK FLOOD FRINGE.
    b) ALL DEVELOPMENT WITHIN THE FLOODPLAIN MUST COMPLY WITH THE FLOODPLAIN REGULATIONS OF CHAPTER 10 OF CITY OF FORT COLLINS MUNICIPAL CODE.
    c) CONSTRUCTION OF RESIDENTIAL STRUCTURES IS NOT ALLOWED IN THE 100-YEAR FLOODWAY.
    d) RESIDENTIAL STRUCTURES ARE ALLOWED IN THE 100-YEAR FLOOD FRINGE PROVIDED THEY MEET ALL ELEVATION REQUIREMENTS OF CHAPTER 10 OF CITY MUNICIPAL CODE.
16. TREE GROUPINGS K AND I WILL REQUIRE A HABITAT MITIGATION PLAN AND TREE MITIGATION TABLE. THESE SHALL BE DETERMINED AT TIME OF PDP IN EVALUATION WITH THE CITY OF FORT COLLINS FORESTRY AND ENVIRONMENTAL PLANNING STAFF.
17. "NATURAL HABITAT BUFFER ZONE PROPOSED ALTERNATIVE LIMITS OF DEVELOPMENT (LOD)" IS THE ANTICIPATED MITIGATION AREA OF THE NATURAL HABITATS AS REQUIRED BY CODE. ("NATURAL HABITAT BUFFER ZONE STANDARD LOD") THEY MAY BE ADJUSTED AT TIME OF FUTURE PDP'S
18. WITHIN THE NATURAL HABITAT BUFFER ZONES, ACCORDING TO ARTICLE 3.4.1.(E)(1)(G), THE CITY HAS THE ABILITY TO DETERMINE IF THE EXISTING LANDSCAPING WITHIN THE BUFFER ZONE IS INCOMPATIBLE WITH THE PURPOSE OF THE BUFFER ZONE.
19. PRIOR TO THE APPROVAL OF ANY PDP, THE PROPERTY OWNER OR APPLICANT SHALL COORDINATE ANY ROAD CROSSING, DISCHARGE, OR OTHER PROPOSED WORK REQUIRING APPROVAL FROM THE LARIMER COUNTY CANAL NO. 2, WITHIN THAT PDP BOUNDARY.

VICINITY MAP



LEGAL DESCRIPTION

PARCEL I:

CONSIDERING THE SOUTH LINE OF THE NW 1/4 OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF LARIMER, STATE OF COLORADO AS BEARING N 89° 50' 30" E 2650.16 FEET, AND WITH ALL BEARINGS HEREIN RELATIVE THERETO: BEGINNING AT A POINT ON THE EAST LINE OF THE SW 1/4 OF THE NW 1/4 OF SAID SECTION 10, WHICH POINT BEARS N 00° 16' W 435.71 FEET FROM THE W 1/16 CORNER, ON THE CENTER LINE OF SAID SECTION 10, (WHICH W 1/16 CORNER BEARS N 89° 50' 30" E 1325.08 FEET FROM THE W 1/4 CORNER OF SAID SECTION 10); THENCE N 00° 16' W 890.51 FEET TO THE NW 1/16 CORNER OF SAID SECTION 10; THENCE ALONG THE NORTH LINE OF THE SW 1/4 OF THE NW 1/4 OF SAID SECTION 10, S 89° 40' W 329.81 FEET TO THE NW CORNER OF THE EAST 1/4 OF SAID SW 1/4 OF THE NW 1/4; THENCE ALONG THE WEST LINE OF SAID EAST 1/4, S 00° 12' E 889.51 FEET; THENCE N 89° 50' 30" E 330.79 FEET TO THE POINT OF BEGINNING. EXCEPTING THEREFROM THAT PARCEL DESCRIBED IN DEED RECORDED FEBRUARY 27, 2012 AT RECEPTION NO. 20120012755

AND
CONSIDERING THE SOUTH LINE OF THE NW 1/4 OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF LARIMER, STATE OF COLORADO, AS BEARING N 89° 50' 30" E 2650.16 FEET, AND WITH ALL BEARINGS HEREIN RELATIVE THERETO: BEGINNING AT A POINT ON THE WEST LINE OF THE SE 1/4 OF THE NW 1/4 OF SAID SECTION 10, WHICH POINT BEARS N 00° 16' W 611.28 FEET FROM THE W 1/16 CORNER, ON THE CENTER LINE, OF SID SECTION 10, (WHICH W 1/16 BEARS N 89° 50' 30" E 1325.08 FEET FROM THE W 1/4 CORNER OF SAID SECTION 10); THENCE N 00° 16' W 714.94 FEET TO THE NW 1/16 CORNER OF SAID SECTION 10; THENCE ALONG THE NORTH LINE OF THE SE 1/4 OF THE NW 1/4 OF SAID SECTION 10, N 89° 40' E 523.02 FEET; THENCE S 00° 23' E 246.09 FEET; THENCE N 89° 35' E 139.98 FEET; THENCE S 26° 20' W 240.25 FEET; THENCE S 04° 00' E 107.68 FEET; THENCE S 09° 10' W 84.79 FEET; THENCE S 30° 49' W 262.44 FEET; THENCE S 07° 11' E 110.60 FEET; THENCE N 57° 29' W 224.73 FEET; THENCE N 49° 30' W 189.01 FEET; THENCE N 75° 12' W 98.16 FEET TO THE POINT OF BEGINNING. EXCEPTING THEREFROM THAT PARCEL DESCRIBED IN DEED RECORDED FEBRUARY 27, 2012 AT RECEPTION NO. 20120012755.

AND
CONSIDERING THE EAST LINE OF THE SE 1/4 OF THE NW 1/4 OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF LARIMER, STATE OF COLORADO, AS BEARING N 00° 31' W WITH ALL BEARINGS HEREIN RELATIVE THERETO; BEGINNING AT A POINT WHICH BEARS S 89° 40' W 796.70 FEET AND AGAIN S 00° 31' E 233.35 FEET FROM THE CN 1/16 CORNER OF SAID SECTION 10; THENCE N 89° 40' E 146.29 FEET; THENCE S 26° 20' W 14.02 FEET; THENCE S 89° 35' W 139.98 FEET; THENCE N 00° 23' W 12.74 FEET TO THE POINT OF BEGINNING.

PARCEL II:

THE WEST 3/4TH OF THE SE 1/4 OF THE NW 1/4 OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF LARIMER, STATE OF COLORADO
EXCEPT THAT PORTION LYING SOUTH AND WEST OF THAT CERTAIN EXISTING IRRIGATING CANAL REFERRED TO IN DEED RECORDED MARCH 27, 1946 IN BOOK 807 AT PAGE 562;
ALSO EXCEPT THOSE PARCELS CONVEYED BY DEEDS RECORDED DECEMBER 1, 1949 IN BOOK 883 AT PAGE 496 AND DECEMBER 7, 1955 IN BOOK 1008 AT PAGE 161 AND MARCH 23, 1955 IN BOOK 990 AT PAGE 194 AND AUGUST 7, 1956 IN BOOK 1024 AT PAGE 233 AND AUGUST 18, 1959 IN BOOK 1101 AT PAGE 124 AND SEPTEMBER 5, 1973 IN BOOK 1570 AT PAGE 546

PARCEL III:

BEGINNING AT THE SW CORNER OF THE SE 1/4 OF THE NW 1/4 OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF LARIMER, STATE OF COLORADO; THENCE EAST 100 FEET; THENCE NORTH 300 FEET; THENCE EAST 318 FEET, MORE OR LESS, TO THE CENTER OF THE EXISTING IRRIGATION CANAL; THENCE NORTHWESTERLY ALONG THE CENTER LINE OF SAID CANAL TO THE WEST LINE OF SAID SE 1/4 OF THE NW 1/4 OF SECTION 10; THENCE SOUTH ALONG SAID WEST LINE OF THE SE 1/4 OF THE NW 1/4 586 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

AND
THE WEST 15 FEET AND THE NORTH 150 FEET OF THE FOLLOWING:
BEGINNING AT A POINT 200 FEET EAST OF THE SW CORNER OF THE SE 1/4 OF THE NW 1/4 OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF LARIMER, STATE OF COLORADO; THENCE NORTH 300 FEET; THENCE EAST 100 FEET; THENCE SOUTH 300 FEET; THENCE WEST 100 FEET TO THE POINT OF BEGINNING.

PARCEL IV:

BEGINNING AT A POINT 150 FEET EAST OF THE SW CORNER OF THE SE 1/4 OF THE NW 1/4 OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF LARIMER, STATE OF COLORADO; THENCE EAST 50 FEET; THENCE NORTH 300 FEET; THENCE WEST 100 FEET; THENCE SOUTH 60 FEET; THENCE SOUTHEASTERLY TO A POINT 230 FEET NORTH OF THE POINT OF BEGINNING, AND 50 FEET FROM THE EAST BOUNDARY LINE; THENCE SOUTH 230 FEET TO THE POINT OF BEGINNING.
EXCEPTING THEREFROM THAT PARCEL DESCRIBED IN DEED RECORDED FEBRUARY 5, 1964 IN BOOK 1236 AT PAGE 446

AND
BEGINNING AT A POINT 150 FEET EAST OF THE SW CORNER OF THE SE 1/4 OF THE NW 1/4 OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF LARIMER, STATE OF COLORADO ; THENCE NORTH PARALLEL TO NORTH AND SOUTH CENTER LINE OF SECTION, 230 FEET; THENCE IN A NORTHWESTERLY DIRECTION TO A POINT 50 FEET WEST AND 240 FEET NORTH OF POINT OF BEGINNING; THENCE SOUTH 240 FEET; THENCE EAST 50 FEET TO POINT OF BEGINNING.
EXCEPTING THEREFROM THAT PARCEL DESCRIBED IN DEED RECORDED FEBRUARY 5, 1964 IN BOOK 1236 AT PAGE 446

SITE DATA*

LOT	ZONE DISTRICT	APPROXIMATE GROSS AREA (ACRES)
1	LIMITED COMMERCIAL (C-L)	.9
2	LOW DENSITY MIXED-USE NEIGHBORHOOD (LMN) / LIMITED COMMERCIAL (C-L)	1 (LMN) 1.2 (CL)
3	LIMITED COMMERCIAL (C-L)	3.4
4	LOW DENSITY MIXED-USE NEIGHBORHOOD (LMN) / LIMITED COMMERCIAL (C-L)	5.0 (LMN) 2.9 (CL)
5	LOW DENSITY MIXED-USE NEIGHBORHOOD (LMN)	2.4
6	LOW DENSITY MIXED-USE NEIGHBORHOOD (LMN)	4.0
CITY DEDICATED RIGHT-OF-WAY		1.8
	TOTAL:	12.5

* BUSINESS TYPES, HEIGHT AND FLOOR AREA SHALL COMPLY WITH CURRENT ZONING REGULATIONS AT TIME OF DEVELOPMENT. LAND USE ACREAGE MAY CHANGE BASED ON FUTURE PDP SUBMITTALS. OPEN SPACE AREA WILL CONFORM WITH CURRENT LAND USE CODE AND REGULATIONS AT TIME OF PROJECT DEVELOPMENT PLAN SUBMITTAL.

LAND USES*

LOT #	LAND USE POSSIBILITIES
1, 2, 3, 4	MIXED USE DWELLING, SHELTERS, PLACES OF WORSHIP, PUBLIC AND PRIVATE SCHOOLS, MINOR PUBLIC FACILITIES, MINOR OR MAJOR VEHICLE REPAIR, VEHICLE SALES, CHILD CARE CENTER, ENTERTAINMENT FACILITIES, OFFICES, SERVICE SHOPS, RESTAURANTS, RETAIL, FROZEN FOOD LOCKERS, DOG DAYCARE FACILITIES, PRINT SHOPS, EXHIBIT HALLS, BARS AND TAVERNS, FUNERAL HOMES, FOOD CATERING, INDOOR KENNELS, ARTISAN STUDIO AND GALLERIES, MICROBREWERY/DISTILLERY/WINERY, FOOD TRUCK RALLY, WORKSHOPS, WAREHOUSES, MEDICAL AND RETAIL MARIJUANA OPTIONAL PREMISES CULTIVATION OPERATIONS, MEDICAL AND RETAIL MARIJUANA-INFUSED PRODUCT MANUFACTURERS, RETAIL AND MEDICAL MARIJUANA TESTING FACILITY, SOLAR ENERGY SYSTEMS, WIRELESS TELECOMMUNICATIONS EQUIPMENT AND FACILITIES
2,4,5,6	SINGLE FAMILY, TWO FAMILY, MIXED-USE DWELLINGS, PLACES OF WORSHIP, MINOR PUBLIC FACILITIES, PARKS, CEMETERIES, COMMUNITY FACILITIES, NEIGHBORHOOD SUPPORT/RECREATIONAL FACILITIES, BED AND BREAKFAST, CHILD CARE CENTERS, NEIGHBORHOOD CENTER, PUBLIC AND PRIVATE SCHOOLS, LONG-TERM FACILITIES, OFFICES, FINANCIAL SERVICES, CLINICS AND ARTISAN AND PHOTOGRAPHY STUDIOS AND GALLERIES, WORKSHOPS AND CUSTOM SMALL INDUSTRY, LIGHT INDUSTRIAL, SMALL SCALE AND MEDIUM SCALE SOLAR ENERGY SYSTEMS, AND WIRELESS TELECOMMUNICATION EQUIPMENT

* OR OTHER USES PERMITTED BY THE LAND USE CODE WITHIN THE ZONE DISTRICTS

OWNER'S CERTIFICATION

THE UNDERSIGNED DOES/DO HEREBY CERTIFY THAT I/WE ARE THE LAWFUL OWNERS OF THE REAL PROPERTY DESCRIBED ON THIS SITE PLAN AND DO HEREBY CERTIFY THAT I/WE ACCEPT THE CONDITIONS AND RESTRICTIONS SET FORTH ON SAID SITE PLAN.

_____ _____
OWNER (SIGNED) Date

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS

_____ DAY OF _____ 20___ A.D.,

BY_____
(PRINT NAME)

AS _____

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL.

_____ _____
NOTARY PUBLIC ADDRESS

(SEAL)

PLANNING & ZONING CERTIFICATE

APPROVED BY THE COMMUNITY DEVELOPMENT AND NEIGHBORHOOD SERVICES DIRECTOR OF

THE CITY OF FORT COLLINS, COLORADO ON THIS_____DAY OF _____,

20_____.

_____
DIRECTOR OF COMMUNITY DEVELOPMENT AND NEIGHBORHOOD SERVICES

ALTERNATIVE COMPLIANCE

LAND USE CODE

3.6.3(F) "Utilization and Provision of Sub-Arterial Street Connections to and From Adjacent Developments and Developable Parcels. All development plans shall incorporate and continue all sub-arterial streets stubbed to the boundary of the development plan by previously approved development plans or existing development. All development plans shall provide for future public street connections to adjacent developable parcels by providing a local street connection spaced at intervals not to exceed six hundred sixty (660) feet along each development plan boundary that abuts potentially developable or redevelopable land."

DUE TO UNUSUAL EXISTING DEVELOPMENT AND NATURAL AREAS IT IS NOT POSSIBLE AT THIS TIME TO PROVIDE LOCAL STREET CONNECTIONS AT 660 FOOT INTERVALS ALONG THE NORTHERN PROPERTY LINE. THERE IS A LARGE, CENTRALLY LOCATED EXISTING BUILDING THAT WILL REMAIN ON SITE WHICH MINIMIZES VEHICULAR CIRCULATION OPPORTUNITIES. THERE IS ALSO A PROPOSED REGIONAL DETENTION AREA ADJACENT TO THE PROPERTY. THE CITY HAS PLANNED THE WEST VINE REGIONAL POND TO BE LOCATED NORTH AND WEST OF THIS SITE FOR STORM WATER DETENTION AND WATER QUALITY. A LOCAL STREET CONNECTION IS PROPOSED WHERE THE REGIONAL DETENTION WON'T BE IMPACTED ON THE EASTERN SIDE OF THE PROPERTY.

INSTEAD OF TWO LOCAL STREET CONNECTIONS ALONG APPROXIMATELY 1,320 LINEAR FEET OF PROPERTY BOUNDARY, ONE LOCAL STREET AND TWO PEDESTRIAN/BICYCLE TRAIL CONNECTIONS ARE PROPOSED.

SALUD

ODP SUBMITTAL

FORT COLLINS, CO

PREPARED BY:

RIPLEY DESIGN INC.

■ land planning ■ landscape architecture ■
■ urban design ■ entitlement ■

419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT
RIPLEY DESIGN INC.
Stephanie Van Dyken
419 Canyon Ave. Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER
SALUD FAMILY HEALTH CENTERS
John Santistevan
203 S. Rollie Ave.
Fort Lupton, CO 80621
p. 720.322.9402

ARCHITECT
THOMAS BECK ARCHITECTS
Thomas Beck
170 South St. Vrain Ave.
PO Box 57
Estes Park, CO 80517
p. 970.586.3913

ENGINEER
NORTHERN ENGINEERING
Cody Snowden
301 N. Howes St. Suite #100
Fort Collins, CO 80521
p. 970.221.4158

NORTH SCALE: 1"=10'-0" (0, 05, 10, 20)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	ODP	11/18/2015

REVISIONS

No.	DESCRIPTION	DATE
01	CITY COMMENTS	3/8/2016
2	P&Z	4/15/2016

COVER SHEET

SEAL:

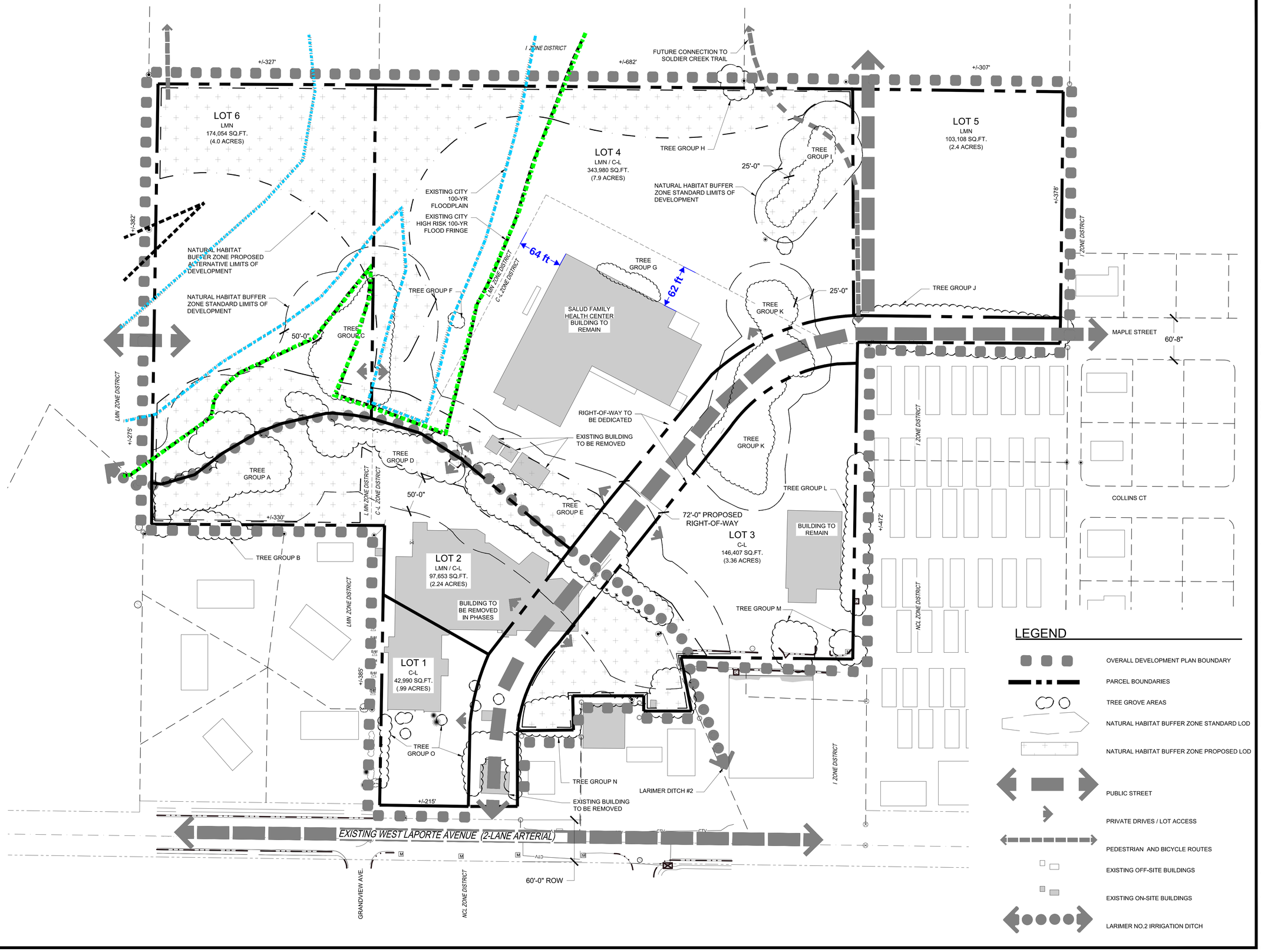
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R15-024
DRAWN BY:	SV
REVIEWED BY:	RL

DRAWING NUMBER:

1

Plotted By: Stephanie Van Dyken **Layout:** 1 Cover Sheet **Printed On:** 4/27/2016 4:13 PM **File Name:** 1 Cover Sheet.dwg



SALUD

ODP SUBMITTAL

FORT COLLINS, CO

PREPARED BY:

RIPLEY DESIGN INC.

■ land planning ■ landscape architecture ■
■ urban design ■ entitlement ■

419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT

RIPLEY DESIGN INC.
Stephanie Van Dyken
419 Canyon Ave. Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER

SALUD FAMILY HEALTH CENTERS
John Santistevan
203 S. Rollie Ave.
Fort Lupton, CO 80621
p. 720.322.9402

ARCHITECT

THOMAS BECK ARCHITECTS
Thomas Beck
170 South St. Vrain Ave.
PO Box 67
Estes Park, CO 80517
p. 970.586.3913

ENGINEER

NORTHERN ENGINEERING
Cody Snowden
301 N. Howes St. Suite #100
Fort Collins, CO 80521
p. 970.221.4158

NORTH SCALE: 1"=60'-0" (0 30 60 120)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	ODP	11/18/2015

REVISIONS

No.	DESCRIPTION	DATE
01	CITY COMMENTS	3/8/2016
2	P&Z	4/15/2016

ODP

SEAL:

PROJECT No.:	R15-024
DRAWN BY:	SV
REVIEWED BY:	RL

DRAWING NUMBER:

2

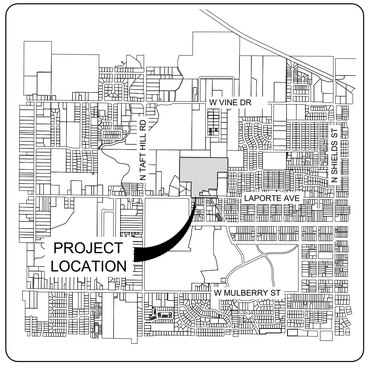
Plotted By: Stephanie Van Dyken **Layout:** 2 ODP **Printed On:** 4/27/2016 4:13 PM **File Name:** 2 Overall Development Plan.dwg

PRELIMINARY UTILITY PLANS FOR

SALUD FAMILY HEALTH CENTER

TRACTS OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 7 NORTH, RANGE 69 WEST OF THE 6TH P.M., CITY OF FORT COLLINS, COUNTY OF LARIMER, STATE OF COLORADO (1750, 1824, & 1830 WEST LAPORTE AVENUE)

OCTOBER 2016



NORTH

VICINITY MAP

1"=2000'

CONTACT INFORMATION

PROJECT TEAM:

DEVELOPER/APPLICANT
John Santistevan
Salud Family Health Centers
203 S. Rollie Avenue
Fort Lupton, CO 80621
(303) 892-6401

ARCHITECT
TW Beck Architects
170 South St. Vrain Ave.
PO Box 57
Estes Park, CO 80517
(970) 586-3913

PLANNER/ LANDSCAPE ARCHITECT
Ripley Design, Inc.
419 Canyon Avenue, Suite 200
Fort Collins, CO 80521
(970) 224-5828

SITE ENGINEER
Northern Engineering Services, Inc.
Roger Curtiss, PE
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
(970) 221-4158

SURVEYOR
Northern Engineering Services, Inc.
Eric Smith, PLS
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
(970) 221-4158

TRAFFIC ENGINEER
Matt Delich, PE
Delich Associates
2272 Glen Haven Drive
Loveland, Colorado 80538
(970) 669-2061

UTILITY CONTACT LIST: *

UTILITY COMPANY		PHONE NUMBER
GAS---------- Xcel Energy----------	Stephanie Rich	(970) 225-7857
ELECTRIC--------- City of Fort Collins Light & Power--	Justin Fields	(970) 224-6150
CABLE---------- Comcast----------	Don Kapperman	(970) 567-0425
TELECOM.---------CenturyLink----------	William Johnson	(970) 377-6401
WATER---------- City of Fort Collins Utilities----------	Shane Boyle	(970) 221-6339
WASTEWATER--City of Fort Collins Utilities----------	Shane Boyle	(970) 221-6339
STORMWATER- City of Fort Collins Utilities----------	Wes Lamarque	(970) 416-2418

* This list is provided as a courtesy reference only. Northern Engineering Services assumes no responsibility for the accuracy or completeness of this list. In no way shall this list relinquish the Contractor's responsibility for locating all utilities prior to commencing any construction activity. Please contact the Utility Notification Center of Colorado (UNCC) at 811 for additional information.

SHEET INDEX

PROJECT BENCHMARKS:

Project Datum: NAVD88

City of Fort Collins benchmark 10-07
Southeast corner of Taft Hill Rd. and LaPorte Ave. on the northeast wingwall of the bridge over an irrigation ditch.
Elevation=5062.84

City of Fort Collins benchmark 31-97
Southwest corner of LaPorte Ave. and Shields St. on a concrete traffic signal base.
Elevation=5023.65

Please Note: This plan set is using NAVD88 for a vertical datum. Surrounding developments have used NGVD29 Unadjusted for their vertical datums.

If NGVD29 Unadjusted datum is required for any purpose, the following equation should be used:
NGVD29 Unadjusted = NAVD88 - 3.17'.

Basis of Bearings
The Basis of Bearings is the South line of the Northwest Quarter of Section 10, Township 7 North Range 69 West of the 6th P.M. as bearing South 89°14'44" East

ORIGINAL FIELD SURVEY BY:

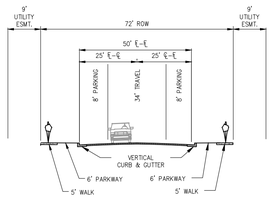
Northern Engineering Services, Inc
NE Project No. 1067-001
Date: February 13, 2015

DISCLAIMER STATEMENT:

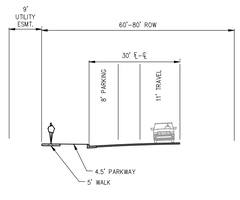
These plans have been reviewed by the City of Fort Collins for concept only. The review does not imply responsibility by the reviewing department, the City of Fort Collins Engineer, or the City of Fort Collins for accuracy and correctness of the calculations. Furthermore, the review does not imply that quantities of items on the plans are the final quantities required. The review shall not be construed for any reason as acceptance of financial responsibility by the City of Fort Collins for additional quantities of items shown that may be required during the construction phase.

CERTIFICATION STATEMENT:

I hereby affirm that these final construction plans were prepared under my direct supervision, in accordance with all applicable City of Fort Collins and State of Colorado standards and statutes, respectively; and that I am fully responsible for the accuracy of all design, revisions, and record conditions that I have noted on these plans.



LOCAL COMMERCIAL
(72' ROW)
SALUD PARKWAY



HALF ARTERIAL STREET
(60' TO 80' ROW)
LAPORTE AVENUE

LARIMER AND WELD IRRIGATION DITCH COMPANY

APPROVED: _____ PRESIDENT

DATE: _____

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811 Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED:	City Engineer	Date
CHECKED BY:	Water & Wastewater Utility	Date
CHECKED BY:	Stormwater Utility	Date
CHECKED BY:	Parks & Recreation	Date
CHECKED BY:	Traffic Engineer	Date
CHECKED BY:	Environmental Planner	Date

No. Revisions: Date:
REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

NORTHERN ENGINEERING
www.northernengineering.com
Phone: 970.221.4158
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521

DATE: OCT. 12, 2016
SCALE: N/A
REVIEWED BY: R. Curtiss
PROJECT: 1067-001
DESIGNED BY: C. Snowden
DRAWN BY: L. Seeber

SALUD FAMILY HEALTH CENTER

COVER SHEET

Sheet C0.00
Of 15 Sheets

A. GENERAL NOTES

1. All materials, workmanship, and construction of ppublic improvements shall meet or exceed the standards and specifications set forth in the Larimer County Urban Area Street Standards and applicable state and federal regulations. Where there is conflict between these plans and the specifications, or any applicable standards, the most restrictive standard shall apply. All work shall be inspected and approved by the City of Fort Collins.

2. All references to any published standards shall refer to the latest revision of said standard, unless specifically stated otherwise.

3. These public improvement construction plans shall be valid for a period of three years from the date of approval by the City of Fort Collins Engineer. Use of these plans after the expiration date will require a new review and approval process by the City of Fort Collins prior to commencement of any work shown in these plans.

4. The engineer who has prepared these plans, by execution and/or seal hereof, does hereby affirm responsibility to the City of Fort Collins, as beneficiary of said engineer's work, for any errors and omissions contained in these plans, and approval of these plans by the City of Fort Collins Engineer shall not relieve the engineer who has prepared these plans of all such responsibility. Further, to the extent permitted by law, the engineer hereby agrees to hold harmless and indemnify the City of Fort Collins, and its officers and employees, from and against all liabilities, claims, and demands which may arise from any errors and omissions contained in these plans.

5. All storm sewer construction, as well as power and other "dry" utility installations, shall conform to the City of Fort Collins standards and specifications current at the date of approval of the plans by the City of Fort Collins Engineer.

6. The type, size, location and number of all known underground utilities are approximate when shown on the drawings. It shall be the responsibility of the Developer to verify the existence and location of all underground utilities along the route of the work before commencing new construction. The Developer shall be responsible for unknown underground utilities.

7. The Developer shall contact the Utility Notification Center of Colorado (UNCC) at 1-800-922-1987, at least 2 working days prior to beginning excavation or grading, to have all registered utility locations marked. Other unregistered utility entities (i.e. ditch / irrigation company) are to be located by contacting the respective representative. Utility service laterals are also to be located prior to beginning excavation or grading. It shall be the responsibility of the Developer to relocate all existing utilities that conflict with the proposed improvements shown on these plans.

8. The Developer shall be responsible for protecting all utilities during construction and for coordinating with the appropriate utility company for any utility crossings required.

9. If a conflict exists between existing and proposed utilities and/or a design modification is required, the Developer shall coordinate with the engineer to modify the design. Design modification(s) must be approved by the City of Fort Collins prior to beginning construction.

10. The Developer shall coordinate and cooperate with the City of Fort Collins, and all utility companies involved, to assure that the work is accomplished in a timely fashion and with a minimum disruption of service. The Developer shall be responsible for contacting, in advance, all parties affected by any disruption of any utility service as well as the utility companies.

11. No work may commence within any public storm water, sanitary sewer or potable water system until the Developer notifies the utility provider. Notification shall be a minimum of 2 working days prior to commencement of any work. At the discretion of the water utility provider, a pre-construction meeting may be required prior to commencement of any work.

12. The Developer shall sequence installation of utilities in such a manner as to minimize potential utility conflicts. In general, storm sewer and sanitary sewer should be constructed prior to installation of the water lines and dry utilities.

13. The minimum cover over water lines is 4.5 feet and the maximum cover is 5.5 feet unless otherwise noted in the plans and approved by the Water Utility.

14. A State Construction Dewatering Wastewater Discharge Permit is required if dewatering is required in order to install utilities or if water is discharged into a storm sewer, channel, irrigation ditch or any waters of the United States.

15. The Developer shall comply with all terms and conditions of the Colorado Permit for Storm Water Discharge (Contact Colorado Department of Health, Water Quality Control Division, (303) 692-3590), the Storm Water Management Plan, and the Erosion Control Plan.

16. The City of Fort Collins shall not be responsible for the maintenance of storm drainage facilities located on private property. Maintenance of onsite drainage facilities shall be the responsibility of the property owner(s).

17. Prior to final inspection and acceptance by the City of Fort Collins, certification of the drainage facilities, by a registered engineer, must be submitted to and approved by the Stormwater Utility Department. Certification shall be submitted to the Stormwater Utility Department at least two weeks prior to the release of a certificate of occupancy for single family units. For commercial properties, certification shall be submitted to the Stormwater Utility Department at least two weeks prior to the release of any building permits in excess of those allowed prior to certification per the Development Agreement.

18. The City of Fort Collins shall not be responsible for any damages or injuries sustained in this Development as a result of groundwater seepage, whether resulting from groundwater flooding, structural damage or other damage unless such damage or injuries are sustained as a result of the City of Fort Collins failure to properly maintain its water, wastewater, and/or storm drainage facilities in the development.

19. All recommendations of the Preliminary Drainage Report for Salud Family Health Center dated October 12, 2016 by Northern Engineering Services, Inc., shall be followed and implemented.

20. Temporary erosion control during construction shall be provided as shown on the Erosion Control Plan. All erosion control measures shall be maintained in good repair by the Developer, until such time as the entire disturbed areas is stabilized with hard surface or landscaping.

21. The Developer shall be responsible for insuring that no mud or debris shall be tracked onto the existing public street system. Mud and debris must be removed within 24 hours by an appropriate mechanical method (i.e. machine broom sweep, light duty front-end loader, etc.) or as approved by the the City of Fort Collins street inspector.

22. No work may commence within any improved or unimproved public Right-of-Way until a Right-of-Way Permit or Development Construction Permit is obtained, if applicable.

23. The Developer shall be responsible for obtaining all necessary permits for all applicable agencies prior to commencement of construction. The Developer shall notify the the City of Fort Collins Inspector (Fort Collins - 221-6605) and the City of Fort Collins Erosion Control Inspector (Fort Collins - 221-6700) at least 2 working days prior to the start of any earth disturbing activity, or construction on any and all public improvements. If the City of Fort Collins Engineer is not available after proper notice of construction activity has been provided, the Developer may commence work in the Engineer's absence. However, the City of Fort Collins reserves the right not to accept the improvement if subsequent testing reveals an improper installation.

24. The Developer shall be responsible for obtaining soils tests within the Public Right-of-Way after right of way grading and all utility trench work is complete and prior to the placement of curb, gutter, sidewalk and pavement. If the final soils/pavement design report does not correspond with the results of the original geotechnical report, the Developer shall be responsible for a re-design of the subject pavement section or, the Developer may use the City of Fort Collins' default pavement thickness section(s). Regardless of the option used, all final soils/pavement design reports shall be prepared by a licensed Professional Engineer. The final report shall be submitted to the Inspector a minimum of 10 working days prior to placement of base and asphalt. Placement of curb, gutter, sidewalk, base and asphalt shall not occur until the City of Fort Collins Engineer approves the final report.

25. The contractor shall hire a licensed engineer or land surveyor to survey the constructed elevations of the street subgrade and the gutter flowline at all intersections, inlets, and other locations requested by the the City of Fort Collins inspector. The engineer or surveyor must certify in a letter to the City of Fort Collins that these elevations conform to the approved plans and specifications. Any deviations shall be noted in the letter and then resolved with the City of Fort Collins before installation of base course or asphalt will be allowed on the streets.

26. All utility installations within or across the roadbed of new residential roads must be completed prior to the final stages of road construction. For the purposes of these standards, any work except c/g above the subgrade is considered final stage work. All service lines must be stubbed to the property lines and marked so as to reduce the excavation necessary for building connections.

27. Portions of Larimer County are within overlay districts. The Larimer County Flood Plain Resolution should be referred to for additional criteria for roads within these districts.

28. All road construction in areas designated as Wild Fire Hazard Areas shall be done in accordance with the construction criteria as established in the Wild Fire Hazard Area Mitigation Regulations in force at the time of final plat approval.

29. Prior to the commencement of any construction, the contractor shall contact the Local Entity Forester to schedule a site inspection for any tree removal requiring a permit.

30. The Developer shall be responsible for all aspects of safety including, but not limited to, excavation, trenching, shoring, traffic control, and security. Refer to OSHA Publication 2226, Excavating and Trenching.

31. The Developer shall submit a Construction Traffic Control Plan, in accordance with MUTCD, to the appropriate Right-of-Way authority. (The the City of Fort Collins, Larimer County, Colorado), for approval, prior to any construction activities within, or affecting, the Right-of-Way. The Developer shall be responsible for providing any and all traffic control devices as may be required by the construction activities.

32. Prior to the commencement of any construction that will affect traffic signs of any type, the contractor shall contact the City of Fort Collins Traffic Operations Department, who will temporarily remove or relocate the sign at no cost to the contractor, however, if the contractor moves the traffic sign then the contractor will be charged for the labor, materials and equipment to reinstall the sign as needed.

33. The Developer is responsible for all costs for the initial installation of traffic signing and striping for the Development related to the Development's local street operations. In addition, the Developer is responsible for all costs for traffic signing and striping related to directing traffic access to and from the Development.

34. There shall be no site construction activities on Saturdays, unless specifically approved by the City of Fort Collins Engineer, and no site construction activities on Sundays or holidays, unless there is prior written approval by Larimer County.

35. The Developer is responsible for providing all labor and materials necessary for the completion of the intended improvements, shown on these drawings, or designated to be provided, installed, or constructed, unless specifically noted otherwise.

36. Dimensions for layout and construction are not to be scaled from any drawing. If pertinent dimensions are not shown, contact the Designer for clarification, and annotate the dimension on the as-built record drawings.

37. The Developer shall have, onsite at all times, one (1) signed copy of the approved plans, one (1) copy of the appropriate standards and specifications, and a copy of any permits and extension agreements needed for the job.

38. If, during the construction process, conditions are encountered which could indicate a situation that is not identified in the plans or specifications, the Developer shall contact the Designer and the City of Fort Collins Engineer immediately.

39. The Developer shall be responsible for recording as-built information on a set of record drawings kept on the construction site, and available to the Larimer County's Inspector at all times. Upon completion of the work, the contractor(s) shall submit record drawings to the City of Fort Collins Engineer.

40. The Designer shall provide, in this location on the plan, the location and description of the nearest survey benchmarks (2) for the project as well as the basis of bearings. The information shall be as follows:

    Project Datum: NAVD88

    City of Fort Collins benchmark 10-07
    Southeast corner of Taft Hill Rd. and LaPorte Ave. on the northeast wingwall of the bridge over an irrigation ditch.
    Elevation=5062.84

    City of Fort Collins benchmark 31-97
    Southwest corner of LaPorte Ave. and Shields St. on a concrete traffic signal base.
    Elevation=5023.65

    Please Note: This plan set is using NAVD88 for a vertical datum. Surrounding developments have used NGVD29 Unadjusted for their vertical datums.

    If NGVD29 Unadjusted datum is required for any purpose, the following equation should be used:
    NGVD29 Unadjusted = NAVD88 - 3.17'.

    Basis of Bearings
    The Basis of Bearings is the South line of the Northwest Quarter of Section 10, Township 7 North Range 69 West of the 6th P.M. as bearing South 89°14'44" East

41. All stationing is based on centerline of roadways unless otherwise noted.

42. Damaged curb, gutter and sidewalk existing prior to construction, as well as existing fences, trees, streets, sidewalks, curbs and gutters, landscaping, structures, and improvements destroyed, damaged or removed due to construction of this project, shall be replaced or restored in like kind at the Developer's expense, unless otherwise indicated on these plans, prior to the acceptance of completed improvements and/or prior to the issuance of the first Certificate of Occupancy.

43. When an existing asphalt street must be cut, the street must be restored to a condition equal to or better than its original condition. The existing street condition shall be documented by the City of Fort Collins Construction Inspector before any cuts are made. Patching shall be done in accordance with the City of Fort Collins Street Repair Standards. The finished patch shall blend in smoothly into the existing surface. All large patches shall be paved with an asphalt lay-down machine. In streets where more than one cut is made, an overlay of the entire street width, including the patched area, may be required. The determination of need for a complete overlay shall be made by the Larimer County Engineer and/or the City of Fort Collins Inspector at the time the cuts are made.

44. Upon completion of construction, the site shall be cleaned and restored to a condition equal to, or better than, that which existed before construction, or to the grades and condition as required by these plans.

45. Standard Handicap ramps are to be constructed at all curb returns and at all "T" intersections.

46. After acceptance by the City of Fort Collins, public improvements depicted in these plans shall be guaranteed to be free from material and workmanship defects for a minimum period of two years from the date of acceptance.

47. The City of Fort Collins shall not be responsible for the maintenance of roadway and appurtenant improvements, including storm drainage structures and pipes, for the following private streets: N.A.

48. Approved Variances are listed as follows: N.A.

CONSTRUCTION NOTES

A. Grading and Erosion Control Notes

1. The erosion control inspector must be notified at least twenty-four (24) hours prior to any construction on this site.

2. There shall be no earth-disturbing activity outside the limits designated on the accepted plans.

3. All required perimeter silt and construction fencing shall be installed prior to any land disturbing activity (stockpiling, stripping, grading, etc). All other required erosion control measures shall be installed at the appropriate time in the construction sequence as indicated in the approved project schedule, construction plans, and erosion control report.

4. At all times during construction, the Developer shall be responsible for preventing and controlling on-site erosion including keeping the property sufficiently watered so as to minimize wind blown sediment. The Developer shall also be responsible for installing and maintaining all erosion control facilities shown herein.

5. Pre-disturbance vegetation shall be protected and retained wherever possible. Removal or disturbance of existing vegetation shall be limited to the area(s) required for immediate construction operations, and for the shortest practical period of time.

6. All soils exposed during land disturbing activity (stripping, grading, utility installations, stockpiling, filling, etc.) shall be kept in a roughened condition by ripping or disking along land contours until mulch, vegetation, or other permanent erosion control BMPs are installed. No soils in areas outside project street rights-of-way shall remain exposed by land disturbing activity for more than thirty (30) days before required temporary or permanent erosion control (e.g. seed/mulch, landscaping, etc.) is installed, unless otherwise approved by the City/County.

7. In order to minimize erosion potential, all temporary (structural) erosion control measures shall:

    a. Be inspected at a minimum of once every two (2) weeks and after each significant storm event and repaired or reconstructed as necessary in order to ensure the continued performance of their intended function.
    b. Remain in place until such time as all the surrounding disturbed areas are sufficiently stabilized as determined by the erosion control inspector.
    c. Be removed after the site has been sufficiently stabilized as determined by the erosion control inspector.

8. When temporary erosion control measures are removed, the Developer shall be responsible for the clean up and removal of all sediment and debris from all drainage infrastructure and other public facilities.

9. The contractor shall immediately clean up any construction materials inadvertently deposited on existing streets, sidewalks, or other public rights of way, and make sure streets and walkways are cleaned at the end of each working day.

10. All retained sediments, particularly those on paved roadway surfaces, shall be removed and disposed of in a manner and location so as not to cause their release into any waters of the United States.

11. No soil stockpile shall exceed ten (10) feet in height. All soil stockpiles shall be protected from sediment transport by surface roughening, watering, and perimeter silt fencing. Any soil stockpile remaining after thirty (30) days shall be seeded and mulched.

12. The stormwater volume capacity of detention ponds will be restored and storm sewer lines will be cleaned upon completion of the project and before turning the maintenance over to the City/County or Homeowners Association (HOA).

13. City Ordinance and Colorado Discharge Permit System (CDPS) requirements make it unlawful to discharge or allow the discharge of any pollutant or contaminated water from construction sites. Pollutants include, but are not limited to discarded building materials, concrete truck washout, chemicals, oil and gas products, litter, and sanitary waste. The developer shall at all times take whatever measures are necessary to assure the proper containment and disposal of pollutants on the site in accordance with any and all applicable local, state, and federal regulations.

14. A designated area shall be provided on site for concrete truck chute washout. The area shall be constructed so as to contain washout material and located at least fifty (50) feet away from any waterway during construction. Upon completion of construction activities the concrete washout material will be removed and properly disposed of prior to the area being restored.

15. Conditions in the field may warrant erosion control measures in addition to what is shown on these plans. The Developer shall implement whatever measures are determined necessary, as directed by the City.

B. Street Improvement Notes

1. All street construction is subject to the General Notes on the cover sheet of these plans as well as the Street Improvements Notes listed here.

2. A paving section design, signed and stamped by a Colorado licensed Engineer, must be submitted to the City of Fort Collins Engineer for approval, prior to any street construction activity, (full depth asphalt sections are not permitted at a depth greater than 8 inches of asphalt). The job mix shall be submitted for approval prior to placement of any asphalt.

3. Where proposed paving adjoins existing asphalt, the existing asphalt shall be saw cut, a minimum distance of 12 inches from the existing edge, to create a clean construction joint. The Developer shall be required to remove existing pavement to a distance where a clean construction joint can be made. Wheel cuts shall not be allowed unless approved by the City of Fort Collins Engineer in Fort Collins.

4. Street subgrades shall be scarified the top 12 inches and re-compacted prior to subbase installation. No base material shall be laid until the subgrade has been inspected and approved by the City of Fort Collins Engineer.

5. Ft. Collins only. Valve boxes and manholes are to be brought up to grade at the time of pavement placement or overlay. Valve box adjusting rings are not allowed.

6. When an existing asphalt street must be cut, the street must be restored to a condition equal to or better than its original condition. The existing street condition shall be documented by the Inspector before any cuts are made. Cutting and patching shall be done in conformance with Chapter 25, Reconstruction and Repair. The finished patch shall blend smoothly into the existing surface. The determination of need for a complete overlay shall be made by the City of Fort Collins Engineer. All overlay work shall be coordinated with adjacent landowners such that future projects do not cut the new asphalt overlay work.

7. All traffic control devices shall be in conformance with these plans or as otherwise specified in M.U.T.C.D. (including Colorado supplement) and as per the Right-of-Way Work Permit traffic control plan.

8. The Developer is required to perform a gutter water flow test in the presence of the City of Fort Collins Inspector and prior to installation of asphalt. Gutters that hold more than 1/4 inch deep or 5 feet longitudinally, of water, shall be completely removed and reconstructed to drain properly.

9. Prior to placement of H.B.P. or concrete within the street and after moisture/density tests have been taken on the subgrade material (when a full depth section is proposed) or on the subgrade and base material (when a composite section is proposed), a mechanical "proof roll" will be required. The entire subgrade and/or base material shall be rolled with a heavily loaded vehicle having a total GVW of not less than 50,000 lbs. and a single axle weight of at least 18,000 lbs. with pneumatic tires inflated to not less that 90 p.s.i.g. "Proof roll" vehicles shall not travel at speeds greater than 3 m.p.h. Any portion of the subgrade or base material which exhibits excessive pumping or deformation, as determined by the City of Fort Collins Engineer, shall be reworked, replaced or otherwise modified to form a smooth, non-yielding surface. The City of Fort Collins Engineer shall be notified at least 24 hours prior to the "proof roll." All "proof rolls" shall be preformed in the presence of an Inspector.

C. Traffic Signing and Pavement Marking Construction Notes

1. All signage and marking is subject to the General Notes on the cover sheet of these plans, as well as the Traffic Signing and Marking Construction Notes listed here.

2. All symbols, including arrows, ONLYS, crosswalks, stop bars, etc. shall be pre-formed thermo-plastic.

3. All signage shall be per the City of Fort Collins Standards and these plans or as otherwise specified in MUTCD.

4. All lane lines for asphalt pavement shall receive two coats of latex paint with glass beads.

5. All lane lines for concrete pavement should be epoxy paint.

6. Prior to permanent installation of traffic striping and symbols, the Developer shall place temporary tabs or tape depicting alignment and placement of the same. Their placement shall be approved by the City of Fort Collins Traffic Engineer prior to permanent installation of striping and symbols.

7. Pre-formed thermo-plastic applications shall be as specified in these Plans and/or these Standards.

8. Epoxy applications shall be applied as specified in CDOT Standard Specifications for Road and Bridge Construction.

9. All surfaces shall be thoroughly cleaned prior to installation of striping or markings.

10. All sign posts shall utilize break-away assemblies and fasteners per the Standards.

11. A field inspection of location and installation of all signs shall be performed by the City of Fort Collins Traffic Engineer. All discrepancies identified during the field inspection must be corrected before the 2-year warranty period will begin.

12. The Developer installing signs shall be responsible for locating and protecting all underground utilities.

13. Special care shall be taken in sign location to ensure an unobstructed view of each sign.

14. Signage and striping has been determined by information available at the time of review. Prior to initiation of the warranty period,the City of Fort Collins Traffic Engineer reserves the right to require additional signage and/or striping if the City of Fort Collins Traffic Engineer determines that an unforeseen condition warrants such signage according to the MUTCD or the CDOT M and S Standards. All signage and striping shall fall under the requirements of the 2-year warranty period for new construction (except fair wear on traffic markings).

15. Sleeves for sign posts shall be required for use in islands/medians. Refer to Chapter 14, Traffic Control Devices, for additional detail.

D. Storm Drainage Notes

1. The City of Fort Collins shall not be responsible for the maintenance of storm drainage facilities located on private property. Maintenance of onsite drainage facilities shall be the responsibility of the property owner(s).

2. All recommendations of the Preliminary Drainage Report for Salud Family Health Center dated October 12, 2016 by Northern Engineering Services, Inc., shall be followed and implemented.

3. Prior to final inspection and acceptance by the City of Fort Collins, certification of the drainage facilities, by a registered engineer, must by submitted to and approved by the Stormwater Utility Department. Certification shall be submitted to the Stormwater Utility Department at least two weeks prior to the release of a certificate of occupancy for single family units. For commercial properties, certification shall by submitted to the Stormwater Utility Department at least two weeks prior to the release of any building permits in excess of those allowed prior to certification per the Development Agreement.

E. Utility Notes

1. All waterline and sanitary sewer construction shall conform to the Fort Collins Utility standards and specifications current to date of construction.

2. The minimum cover over water lines is 4.5 feet and the maximum cover is 5.5 feet unless otherwise noted in the plans and approved by the water utility.

3. Water mains shall be poly-wrapped D.I.P, or PVC with tracer wire.

4. HDPE pipe may be used for 1-1/2 and 2 inch water services. The pipe shall meet the standards of AWWA 901, NSF Standard 61 and ASTM. The HDPE pipe shall be SDR 9 having a pressure rating of 200 psi. Stiffeners shall be used at all fittings and connections. Tracer wire shall be installed with the HDPE service, and shall extend up the curb stop. The curb stop shall be covered with a metal box and tracer wire test lid per City Water Detail 25.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED:	City Engineer	Date
CHECKED BY:	Water & Wastewater Utility	Date
CHECKED BY:	Stormwater Utility	Date
CHECKED BY:	Parks & Recreation	Date
CHECKED BY:	Traffic Engineer	Date
CHECKED BY:	Environmental Planner	Date

No. | Revisions: | By: | Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

These drawings are instruments of service provided by Northern Engineering Services, Inc. and are not to be used for any type of construction unless signed and sealed by a Professional Engineer in the employ of Northern Engineering Services, Inc.

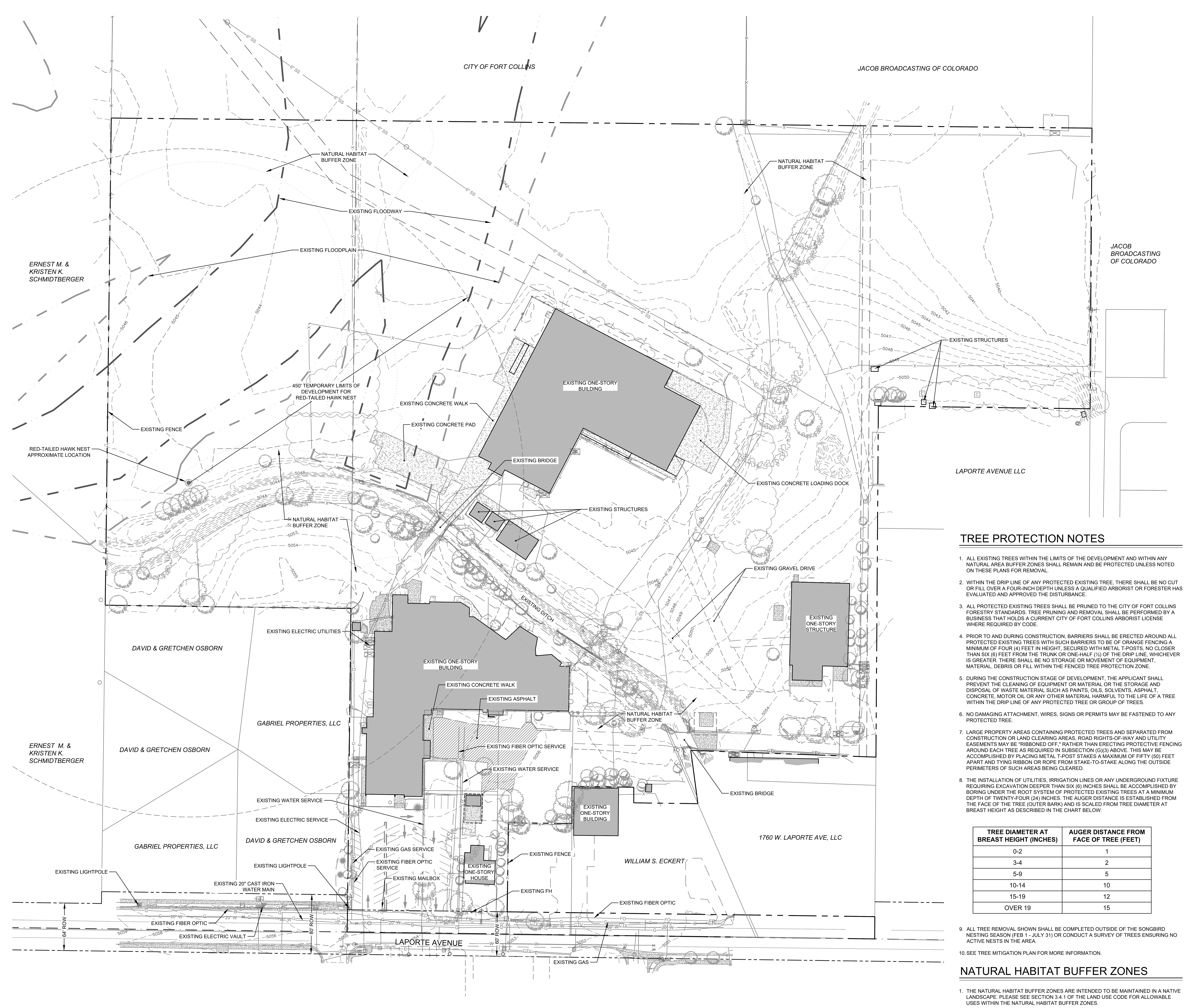
NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

PROJECT: 1067-001	DATE: OCT 12, 2016
DESIGNED BY: C. Snowden	SCALE: N/A
DRAWN BY: L. Seeber	REVIEWED BY: R. Curtiss

SALUD FAMILY HEALTH CENTER

GENERAL & CONSTRUCTION NOTES

Sheet
C0.01
Of 15 Sheets



NORTH

60 0 60 120 180

(IN FEET)
1 INCH = 60 FEET

KEYMAP

LEGEND:

- PROPERTY BOUNDARY
- EXISTING LOT LINE
- EXISTING MAJOR CONTOUR — 5015
- EXISTING MINOR CONTOUR — 5013
- EXISTING STORM SEWER
- EXISTING TELEPHONE — T
- EXISTING GAS — G
- EXISTING SANITARY SEWER — SS
- EXISTING WATER — W
- EXISTING ELECTRIC — E
- EXISTING FENCE — X
- EXISTING ELEC/TV — E/TV
- EXISTING ELECTRIC VAULT
- EXISTING FIRE HYDRANT
- EXISTING IRRIGATION BOX
- EXISTING WATER METER
- EXISTING GAS METER
- EXISTING TELEPHONE PEDESTAL
- EXISTING MONITORING WELL
- EXISTING TREES

FIELD SURVEY BY:

Northern Engineering Services, Inc
NE Project No. 1067-001
Date: February 13, 2015

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DEMOLITION, REMOVAL, REPLACEMENT, AND DISPOSAL OF ALL FACILITIES AND MATERIAL.
3. ALL SYMBOLS ARE ONLY GRAPHICALLY REPRESENTED AND ARE NOT TO SCALE.
4. CONTACT THE PROJECT SURVEYOR FOR ANY INQUIRIES RELATED TO THE EXISTING SITE SURVEY.
5. CONTRACTOR IS ENCOURAGED TO PERFORM DEMOLITION IN A MANNER THAT MAXIMIZES SALVAGE, RE-USE, AND RECYCLING OF MATERIALS. THIS INCLUDES APPROPRIATE SORTING AND STORING. IN PARTICULAR, DEMOLISHED CONCRETE, ASPHALT, AND BASE COURSE SHOULD BE RECYCLED IF POSSIBLE. THE CITY OF FORT COLLINS STREET DEPARTMENT OPERATES A CRUSHING OPERATION THAT WILL ACCEPT CONCRETE MATERIAL AT NO COST FOR CRUSHING AND RE-USE AS RECYCLED AGGREGATE. THIS OPERATION IS LOCATED AT 1380 HOFFMAN MILL ROAD AND CAN BE REACHED AT (970) 482-1249.
6. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY FIELD LOCATES AND POTHOLING OF SUBSURFACE UTILITIES. ENGINEER AND CITY SHALL BE NOTIFIED OF ANY POTENTIAL CONFLICTS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811
Know what's below.
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

TREE PROTECTION NOTES

1. ALL EXISTING TREES WITHIN THE LIMITS OF THE DEVELOPMENT AND WITHIN ANY NATURAL AREA BUFFER ZONES SHALL REMAIN AND BE PROTECTED UNLESS NOTED ON THESE PLANS FOR REMOVAL.
2. WITHIN THE DRIP LINE OF ANY PROTECTED EXISTING TREE, THERE SHALL BE NO CUT OR FILL OVER A FOUR-INCH DEPTH UNLESS A QUALIFIED ARBORIST OR FORESTER HAS EVALUATED AND APPROVED THE DISTURBANCE.
3. ALL PROTECTED EXISTING TREES SHALL BE PRUNED TO THE CITY OF FORT COLLINS FORESTRY STANDARDS. TREE PRUNING AND REMOVAL SHALL BE PERFORMED BY A BUSINESS THAT HOLDS A CURRENT CITY OF FORT COLLINS ARBORIST LICENSE WHERE REQUIRED BY CODE.
4. PRIOR TO AND DURING CONSTRUCTION, BARRIERS SHALL BE ERECTED AROUND ALL PROTECTED EXISTING TREES WITH SUCH BARRIERS TO BE OF ORANGE FENCING A MINIMUM OF FOUR (4) FEET IN HEIGHT, SECURED WITH METAL T-POSTS, NO CLOSER THAN SIX (6) FEET FROM THE TRUNK OR ONE-HALF (½) OF THE DRIP LINE, WHICHEVER IS GREATER. THERE SHALL BE NO STORAGE OR MOVEMENT OF EQUIPMENT, MATERIAL, DEBRIS OR FILL WITHIN THE FENCED TREE PROTECTION ZONE.
5. DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE APPLICANT SHALL PREVENT THE CLEANING OF EQUIPMENT OR MATERIAL OR THE STORAGE AND DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OILS, SOLVENTS, ASPHALT, CONCRETE, MOTOR OIL OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY PROTECTED TREE OR GROUP OF TREES.
6. NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
7. LARGE PROPERTY AREAS CONTAINING PROTECTED TREES AND SEPARATED FROM CONSTRUCTION OR LAND CLEARING AREAS, ROAD RIGHTS-OF-WAY AND UTILITY EASEMENTS MAY BE "RIBBONED OFF," RATHER THAN ERECTING PROTECTIVE FENCING AROUND EACH TREE AS REQUIRED IN SUBSECTION (G)(3) ABOVE. THIS MAY BE ACCOMPLISHED BY PLACING METAL T-POST STAKES A MAXIMUM OF FIFTY (50) FEET APART AND TYING RIBBON OR ROPE FROM STAKE-TO-STAKE ALONG THE OUTSIDE PERIMETERS OF SUCH AREAS BEING CLEARED.
8. THE INSTALLATION OF UTILITIES, IRRIGATION LINES OR ANY UNDERGROUND FIXTURE REQUIRING EXCAVATION DEEPER THAN SIX (6) INCHES SHALL BE ACCOMPLISHED BY BORING UNDER THE ROOT SYSTEM OF PROTECTED EXISTING TREES AT A MINIMUM DEPTH OF TWENTY-FOUR (24) INCHES. THE AUGER DISTANCE IS ESTABLISHED FROM THE FACE OF THE TREE (OUTER BARK) AND IS SCALED FROM TREE DIAMETER AT BREAST HEIGHT AS DESCRIBED IN THE CHART BELOW:

TREE DIAMETER AT BREAST HEIGHT (INCHES)	AUGER DISTANCE FROM FACE OF TREE (FEET)
0-2	1
3-4	2
5-9	5
10-14	10
15-19	12
OVER 19	15

9. ALL TREE REMOVAL SHOWN SHALL BE COMPLETED OUTSIDE OF THE SONGBIRD NESTING SEASON (FEB 1 - JULY 31) OR CONDUCT A SURVEY OF TREES ENSURING NO ACTIVE NESTS IN THE AREA.
10. SEE TREE MITIGATION PLAN FOR MORE INFORMATION.

NATURAL HABITAT BUFFER ZONES

1. THE NATURAL HABITAT BUFFER ZONES ARE INTENDED TO BE MAINTAINED IN A NATIVE LANDSCAPE. PLEASE SEE SECTION 3.4.1 OF THE LAND USE CODE FOR ALLOWABLE USES WITHIN THE NATURAL HABITAT BUFFER ZONES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED:	City Engineer	Date
CHECKED BY:	Water & Wastewater Utility	Date
CHECKED BY:	Stormwater Utility	Date
CHECKED BY:	Parks & Recreation	Date
CHECKED BY:	Traffic Engineer	Date
CHECKED BY:	Environmental Planner	Date

Revisions:
No.

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

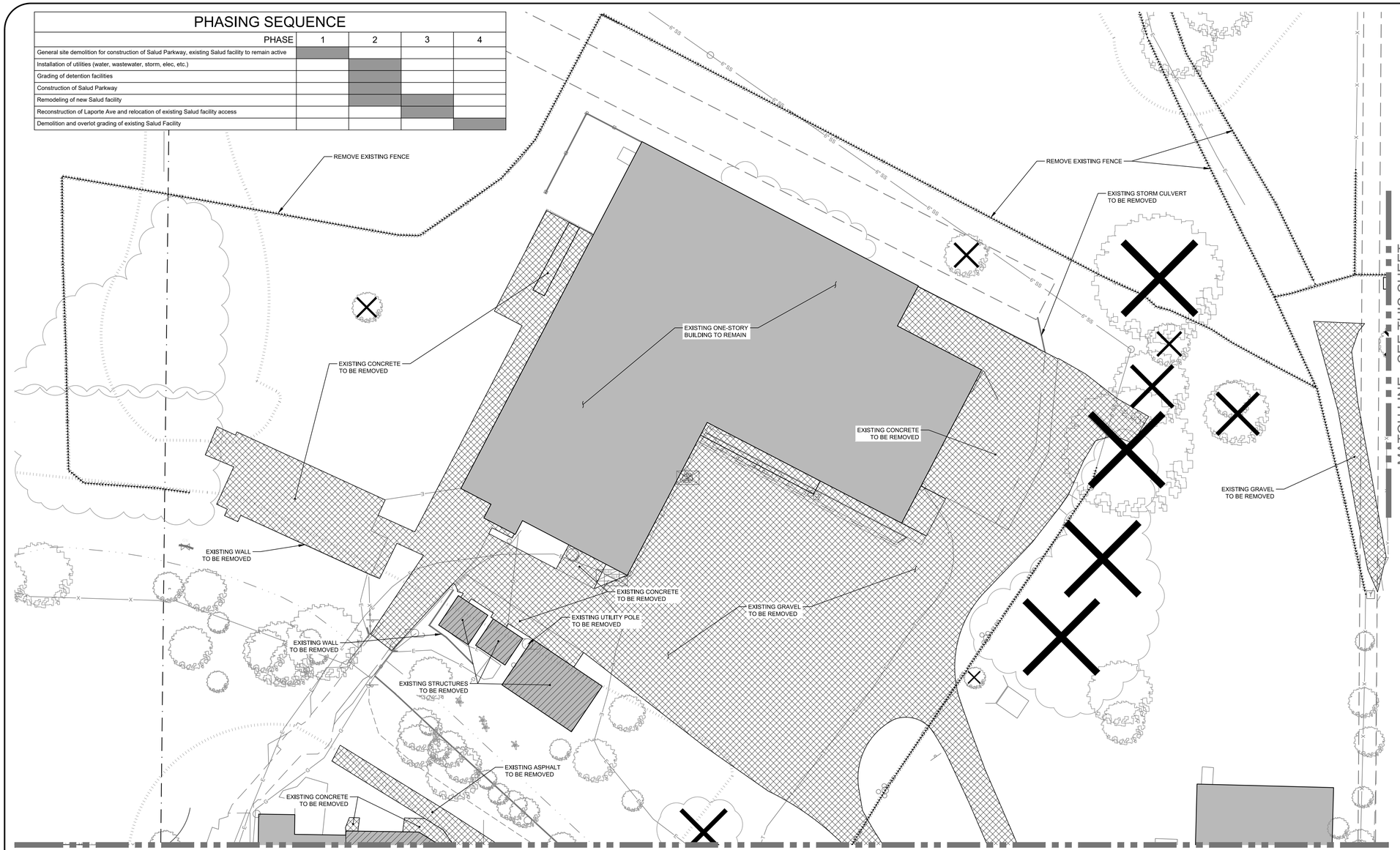
NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

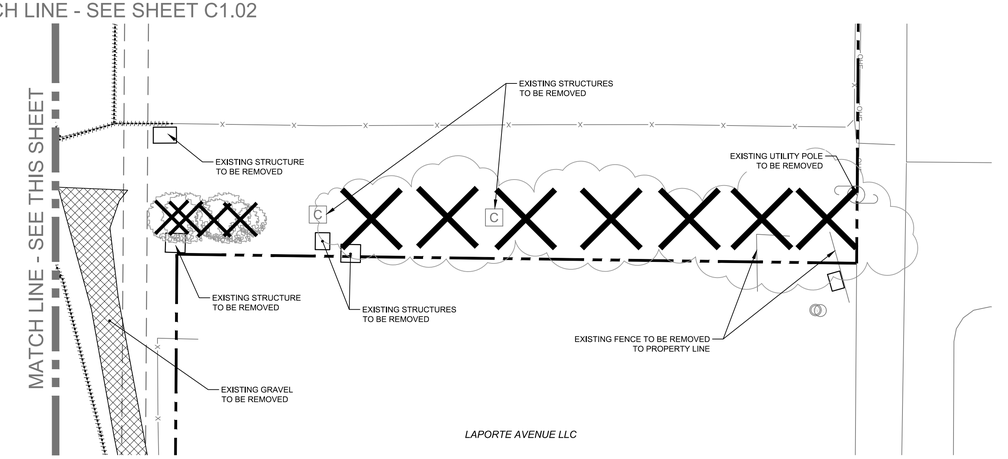
DATE: OCT 12, 2016	SCALE: 1"=60'	REVIEWED BY: R. Curtiss
PROJECT: 1067-001	DESIGNED BY: C. Snowden	DRAWN BY: L. Seeber

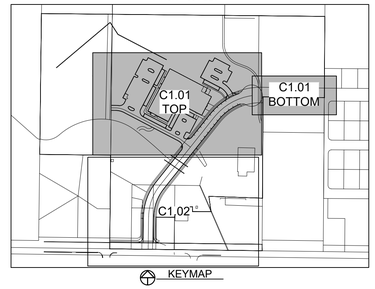
SALUD FAMILY HEALTH CENTER

EXISTING CONDITIONS

Sheet
C1.00
Of 15 Sheets







PHASING SEQUENCE

PHASE	1	2	3	4
General site demolition for construction of Salud Parkway, existing Salud facility to remain active	■			
Installation of utilities (water, wastewater, storm, elec, etc.)		■		
Grading of detention facilities		■		
Construction of Salud Parkway		■		
Remodeling of new Salud facility		■	■	
Reconstruction of Laporte Ave and relocation of existing Salud facility access			■	
Demolition and overlot grading of existing Salud Facility				■

TREE PROTECTION NOTES

1. ALL EXISTING TREES WITHIN THE LIMITS OF THE DEVELOPMENT AND WITHIN ANY NATURAL AREA BUFFER ZONES SHALL REMAIN AND BE PROTECTED UNLESS NOTED ON THESE PLANS FOR REMOVAL.
2. WITHIN THE DRIP LINE OF ANY PROTECTED EXISTING TREE, THERE SHALL BE NO CUT OR FILL OVER A FOUR-INCH DEPTH UNLESS A QUALIFIED ARBORIST OR FORESTER HAS EVALUATED AND APPROVED THE DISTURBANCE.
3. ALL PROTECTED EXISTING TREES SHALL BE PRUNED TO THE CITY OF FORT COLLINS FORESTRY STANDARDS. TREE PRUNING AND REMOVAL SHALL BE PERFORMED BY A BUSINESS THAT HOLDS A CURRENT CITY OF FORT COLLINS ARBORIST LICENSE WHERE REQUIRED BY CODE.
4. PRIOR TO AND DURING CONSTRUCTION, BARRIERS SHALL BE ERECTED AROUND ALL PROTECTED EXISTING TREES WITH SUCH BARRIERS TO BE OF ORANGE FENCING A MINIMUM OF FOUR (4) FEET IN HEIGHT, SECURED WITH METAL T-POSTS, NO CLOSER THAN SIX (6) FEET FROM THE TRUNK OR ONE-HALF (½) OF THE DRIP LINE, WHICHEVER IS GREATER. THERE SHALL BE NO STORAGE OR MOVEMENT OF EQUIPMENT, MATERIAL, DEBRIS OR FILL WITHIN THE FENCED TREE PROTECTION ZONE.
5. DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE APPLICANT SHALL PREVENT THE CLEANING OF EQUIPMENT OR MATERIAL OR THE STORAGE AND DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OILS, SOLVENTS, ASPHALT, CONCRETE, MOTOR OIL OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY PROTECTED TREE OR GROUP OF TREES.
6. NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
7. LARGE PROPERTY AREAS CONTAINING PROTECTED TREES AND SEPARATED FROM CONSTRUCTION OR LAND CLEARING AREAS, ROAD RIGHTS-OF-WAY AND UTILITY EASEMENTS MAY BE "RIBBONED OFF," RATHER THAN ERECTING PROTECTIVE FENCING AROUND EACH TREE AS REQUIRED IN SUBSECTION (G)(3) ABOVE. THIS MAY BE ACCOMPLISHED BY PLACING METAL T-POST STAKES A MAXIMUM OF FIFTY (50) FEET APART AND TYING RIBBON OR ROPE FROM STAKE-TO-STAKE ALONG THE OUTSIDE PERIMETERS OF SUCH AREAS BEING CLEARED.
8. THE INSTALLATION OF UTILITIES, IRRIGATION LINES OR ANY UNDERGROUND FIXTURE REQUIRING EXCAVATION DEEPER THAN SIX (6) INCHES SHALL BE ACCOMPLISHED BY BORING UNDER THE ROOT SYSTEM OF PROTECTED EXISTING TREES AT A MINIMUM DEPTH OF TWENTY-FOUR (24) INCHES. THE AUGER DISTANCE IS ESTABLISHED FROM THE FACE OF THE TREE (OUTER BARK) AND IS SCALED FROM TREE DIAMETER AT BREAST HEIGHT AS DESCRIBED IN THE CHART BELOW:

TREE DIAMETER AT BREAST HEIGHT (INCHES)	AUGER DISTANCE FROM FACE OF TREE (FEET)
0-2	1
3-4	2
5-9	5
10-14	10
15-19	12
OVER 19	15

9. ALL TREE REMOVAL SHOWN SHALL BE COMPLETED OUTSIDE OF THE SONGBIRD NESTING SEASON (FEB 1 - JULY 31) OR CONDUCT A SURVEY OF TREES ENSURING NO ACTIVE NESTS IN THE AREA.
10. SEE TREE MITIGATION PLAN FOR MORE INFORMATION.

NATURAL HABITAT BUFFER ZONES

1. THE NATURAL HABITAT BUFFER ZONES ARE INTENDED TO BE MAINTAINED IN A NATIVE LANDSCAPE. PLEASE SEE SECTION 3.4.1 OF THE LAND USE CODE FOR ALLOWABLE USES WITHIN THE NATURAL HABITAT BUFFER ZONES.

LEGEND:

PROJECT BOUNDARY	▬ ▬ ▬
EXISTING RIGHT-OF-WAY	— — —
EXISTING MAJOR CONTOUR	— —5015— —
EXISTING MINOR CONTOUR	— —5013— —
EXISTING STORM SEWER	——ST——
EXISTING TELEPHONE	——T——
EXISTING GAS	——G——
EXISTING SANITARY SEWER	——SS——
EXISTING WATER	——W——
EXISTING ELECTRIC	——E——
EXISTING FENCE	——X——
EXISTING ELECTRIC VAULT	☒ ELEC VAULT
EXISTING FIRE HYDRANT	✲
EXISTING IRRIGATION BOX	☒ IRR CONTROL
EXISTING WATER METER	(H2O)
EXISTING GAS METER	Ⓖ
EXISTING TELEPHONE PEDESTAL	[T]
EXISTING TREES (TO REMAIN)	○ ✳
EXISTING TREES (TO BE REMOVED)	⊗ ✳
EXISTING STRUCTURES (TO BE REMOVED)	▨
EXISTING CONCRETE / ASPHALT / GRAVEL (TO BE REMOVED)	▦

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DEMOLITION, REMOVAL, REPLACEMENT, AND DISPOSAL OF ALL FACILITIES AND MATERIAL.
3. CONTRACTOR IS ENCOURAGED TO PERFORM DEMOLITION IN A MANNER THAT MAXIMIZES SALVAGE, RE-USE, AND RECYCLING OF MATERIALS. THIS INCLUDES APPROPRIATE SORTING AND STORING. IN PARTICULAR, DEMOLISHED CONCRETE, ASPHALT, AND BASE COURSE SHOULD BE RECYCLED IF POSSIBLE. THE CITY OF FORT COLLINS STREET DEPARTMENT OPERATES A CRUSHING OPERATION THAT WILL ACCEPT CONCRETE MATERIAL AT NO COST FOR CRUSHING AND RE-USE AS RECYCLED AGGREGATE. THIS OPERATION IS LOCATED AT 1380 HOFFMAN MILL ROAD AND CAN BE REACHED AT (970) 482-1249.
4. ALL SYMBOLS ARE ONLY GRAPHICALLY REPRESENTED AND ARE NOT TO SCALE.
5. CONTACT THE PROJECT SURVEYOR FOR ANY INQUIRIES RELATED TO THE EXISTING SITE SURVEY.
6. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

Know what's **below.**
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED: ______________________ ________
City Engineer — Date

CHECKED BY: ______________________ ________
Water & Wastewater Utility — Date

CHECKED BY: ______________________ ________
Stormwater Utility — Date

CHECKED BY: ______________________ ________
Parks & Recreation — Date

CHECKED BY: ______________________ ________
Traffic Engineer — Date

CHECKED BY: ______________________ ________
Environmental Planner — Date

No.	Revisions:	By:	Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

NE | NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

PROJECT: 1067–001	DATE: OCT 12, 2016
DESIGNED BY: D. Weber	SCALE: 1"=30'
DRAWN BY: D. Weber	REVIEWED BY: R. Curtiss

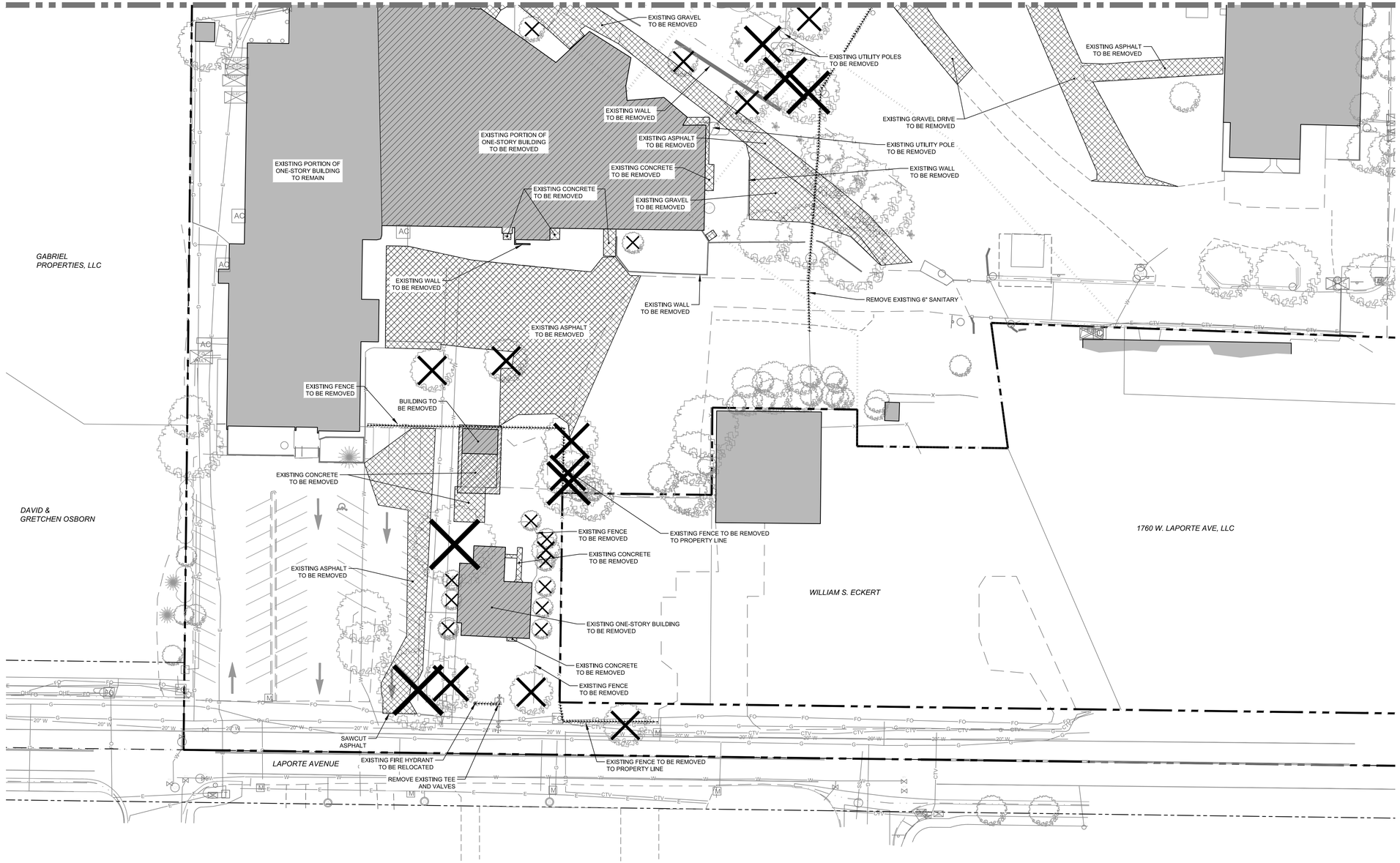
SALUD FAMILY HEALTH CENTER

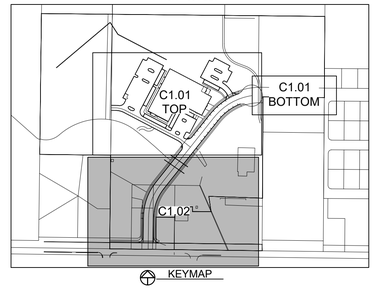
PHASE 1 DETAILS

Sheet
C1.01
Of 15 Sheets

DRAWING FILENAME: D:\Projects\1067-001\Dwg\Phasing\1067-001_PHAS_1.dwg LAYOUT NAME: C1.01 DATE: Oct 10, 2016 - 3:22pm CAD OPERATOR: danny

LIST OF XREFS: [NES-xborder] [1067-001_KEYMAP] [1067-001_xEXST] [1067-001_xPHAS_leg] [1067-001_xEXST_txt] [1067-001_xSITE] [1067-001_xAerial] [1067-001_xPHAS_Table]





LEGEND:

PROJECT BOUNDARY	▬ ▪ ▬
EXISTING RIGHT-OF-WAY	▬ · ▬
EXISTING MAJOR CONTOUR	5015
EXISTING MINOR CONTOUR	5013
EXISTING STORM SEWER	ST
EXISTING TELEPHONE	T
EXISTING GAS	G
EXISTING SANITARY SEWER	SS
EXISTING WATER	W
EXISTING ELECTRIC	E
EXISTING FENCE	X
EXISTING ELECTRIC VAULT	⊠
EXISTING FIRE HYDRANT	✕
EXISTING IRRIGATION BOX	⊠
EXISTING WATER METER	H2O
EXISTING GAS METER	G
EXISTING TELEPHONE PEDESTAL	T
EXISTING TREES (TO REMAIN)	○ ✳
EXISTING TREES (TO BE REMOVED)	⊗ ✳
EXISTING STRUCTURES (TO BE REMOVED)	▨
EXISTING CONCRETE / ASPHALT / GRAVEL (TO BE REMOVED)	▩

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DEMOLITION, REMOVAL, REPLACEMENT, AND DISPOSAL OF ALL FACILITIES AND MATERIAL.
3. CONTRACTOR IS ENCOURAGED TO PERFORM DEMOLITION IN A MANNER THAT MAXIMIZES SALVAGE, RE-USE, AND RECYCLING OF MATERIALS. THIS INCLUDES APPROPRIATE SORTING AND STORING. IN PARTICULAR, DEMOLISHED CONCRETE, ASPHALT, AND BASE COURSE SHOULD BE RECYCLED IF POSSIBLE. THE CITY OF FORT COLLINS STREET DEPARTMENT OPERATES A CRUSHING OPERATION THAT WILL ACCEPT CONCRETE MATERIAL AT NO COST FOR CRUSHING AND RE-USE AS RECYCLED AGGREGATE. THIS OPERATION IS LOCATED AT 1380 HOFFMAN MILL ROAD AND CAN BE REACHED AT (970) 482-1249.
4. ALL SYMBOLS ARE ONLY GRAPHICALLY REPRESENTED AND ARE NOT TO SCALE.
5. CONTACT THE PROJECT SURVEYOR FOR ANY INQUIRIES RELATED TO THE EXISTING SITE SURVEY.
6. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

Know what's below.
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

TREE PROTECTION NOTES

1. ALL EXISTING TREES WITHIN THE LIMITS OF THE DEVELOPMENT AND WITHIN ANY NATURAL AREA BUFFER ZONES SHALL REMAIN AND BE PROTECTED UNLESS NOTED ON THESE PLANS FOR REMOVAL.
2. WITHIN THE DRIP LINE OF ANY PROTECTED EXISTING TREE, THERE SHALL BE NO CUT OR FILL OVER A FOUR-INCH DEPTH UNLESS A QUALIFIED ARBORIST OR FORESTER HAS EVALUATED AND APPROVED THE DISTURBANCE.
3. ALL PROTECTED EXISTING TREES SHALL BE PRUNED TO THE CITY OF FORT COLLINS FORESTRY STANDARDS. TREE PRUNING AND REMOVAL SHALL BE PERFORMED BY A BUSINESS THAT HOLDS A CURRENT CITY OF FORT COLLINS ARBORIST LICENSE WHERE REQUIRED BY CODE.
4. PRIOR TO AND DURING CONSTRUCTION, BARRIERS SHALL BE ERECTED AROUND ALL PROTECTED EXISTING TREES WITH SUCH BARRIERS TO BE OF ORANGE FENCING A MINIMUM OF FOUR (4) FEET IN HEIGHT, SECURED WITH METAL T-POSTS, NO CLOSER THAN SIX (6) FEET FROM THE TRUNK OR ONE-HALF (½) OF THE DRIP LINE, WHICHEVER IS GREATER. THERE SHALL BE NO STORAGE OR MOVEMENT OF EQUIPMENT, MATERIAL, DEBRIS OR FILL WITHIN THE FENCED TREE PROTECTION ZONE.
5. DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE APPLICANT SHALL PREVENT THE CLEANING OF EQUIPMENT OR MATERIAL OR THE STORAGE AND DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OILS, SOLVENTS, ASPHALT, CONCRETE, MOTOR OIL OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY PROTECTED TREE OR GROUP OF TREES.
6. NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
7. LARGE PROPERTY AREAS CONTAINING PROTECTED TREES AND SEPARATED FROM CONSTRUCTION OR LAND CLEARING AREAS, ROAD RIGHTS-OF-WAY AND UTILITY EASEMENTS MAY BE "RIBBONED OFF," RATHER THAN ERECTING PROTECTIVE FENCING AROUND EACH TREE AS REQUIRED IN SUBSECTION (G)(3) ABOVE. THIS MAY BE ACCOMPLISHED BY PLACING METAL T-POST STAKES A MAXIMUM OF FIFTY (50) FEET APART AND TYING RIBBON OR ROPE FROM STAKE-TO-STAKE ALONG THE OUTSIDE PERIMETERS OF SUCH AREAS BEING CLEARED.
8. THE INSTALLATION OF UTILITIES, IRRIGATION LINES OR ANY UNDERGROUND FIXTURE REQUIRING EXCAVATION DEEPER THAN SIX (6) INCHES SHALL BE ACCOMPLISHED BY BORING UNDER THE ROOT SYSTEM OF PROTECTED EXISTING TREES AT A MINIMUM DEPTH OF TWENTY-FOUR (24) INCHES. THE AUGER DISTANCE IS ESTABLISHED FROM THE FACE OF THE TREE (OUTER BARK) AND IS SCALED FROM TREE DIAMETER AT BREAST HEIGHT AS DESCRIBED IN THE CHART BELOW:

TREE DIAMETER AT BREAST HEIGHT (INCHES)	AUGER DISTANCE FROM FACE OF TREE (FEET)
0-2	1
3-4	2
5-9	5
10-14	10
15-19	12
OVER 19	15

9. ALL TREE REMOVAL SHOWN SHALL BE COMPLETED OUTSIDE OF THE SONGBIRD NESTING SEASON (FEB 1 - JULY 31) OR CONDUCT A SURVEY OF TREES ENSURING NO ACTIVE NESTS IN THE AREA.
10. SEE TREE MITIGATION PLAN FOR MORE INFORMATION.

NATURAL HABITAT BUFFER ZONES

1. THE NATURAL HABITAT BUFFER ZONES ARE INTENDED TO BE MAINTAINED IN A NATIVE LANDSCAPE. PLEASE SEE SECTION 3.4.1 OF THE LAND USE CODE FOR ALLOWABLE USES WITHIN THE NATURAL HABITAT BUFFER ZONES.

PHASING SEQUENCE

PHASE	1	2	3	4
General site demolition for construction of Salud Parkway, existing Salud facility to remain active	■			
Installation of utilities (water, wastewater, storm, elec, etc.)		■		
Grading of detention facilities		■		
Construction of Salud Parkway		■		
Remodeling of new Salud facility		■	■	
Reconstruction of Laporte Ave and relocation of existing Salud facility access			■	
Demolition and overlot grading of existing Salud Facility				■

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED: ______________________ City Engineer ________ Date
CHECKED BY: ______________________ Water & Wastewater Utility ________ Date
CHECKED BY: ______________________ Stormwater Utility ________ Date
CHECKED BY: ______________________ Parks & Recreation ________ Date
CHECKED BY: ______________________ Traffic Engineer ________ Date
CHECKED BY: ______________________ Environmental Planner ________ Date

No.	Revisions:	By:	Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

These drawings are instruments of service provided by Northern Engineering Services, Inc. and are not to be used for any type of construction unless signed and sealed by a Professional Engineer in the employ of Northern Engineering Services, Inc.

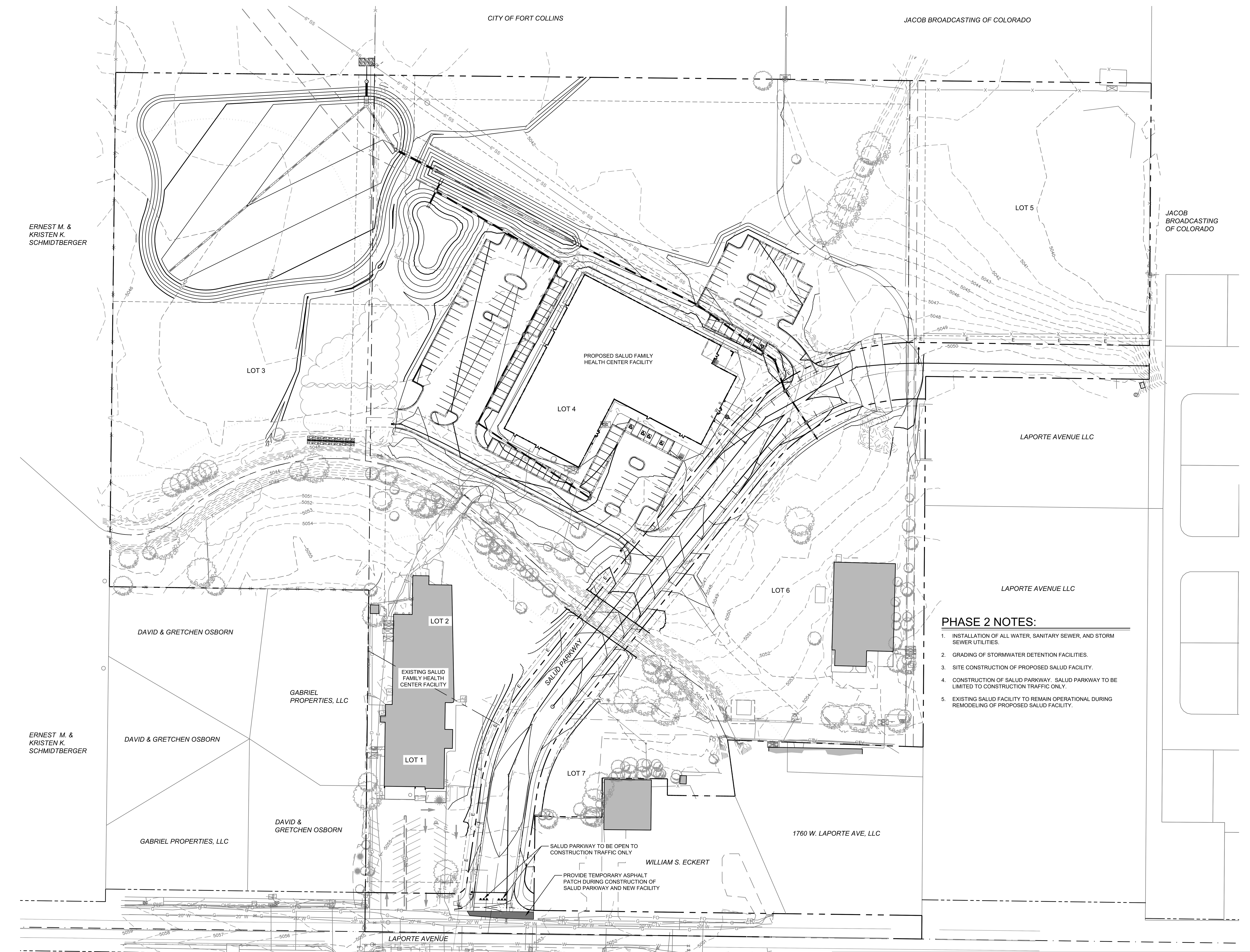
NORTHERN
ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

PROJECT: 1067-001	DATE: OCT 12, 2016	
DESIGNED BY: D. Weber	SCALE: 1"=30'	
DRAWN BY: D. Weber	REVIEWED BY: R. Curtiss	

SALUD FAMILY HEALTH CENTER

PHASE 1 DETAILS

Sheet
C1.02
Of 15 Sheets



PHASE 2 NOTES:

1. INSTALLATION OF ALL WATER, SANITARY SEWER, AND STORM SEWER UTILITIES.
2. GRADING OF STORMWATER DETENTION FACILITIES.
3. SITE CONSTRUCTION OF PROPOSED SALUD FACILITY.
4. CONSTRUCTION OF SALUD PARKWAY. SALUD PARKWAY TO BE LIMITED TO CONSTRUCTION TRAFFIC ONLY.
5. EXISTING SALUD FACILITY TO REMAIN OPERATIONAL DURING REMODELING OF PROPOSED SALUD FACILITY.

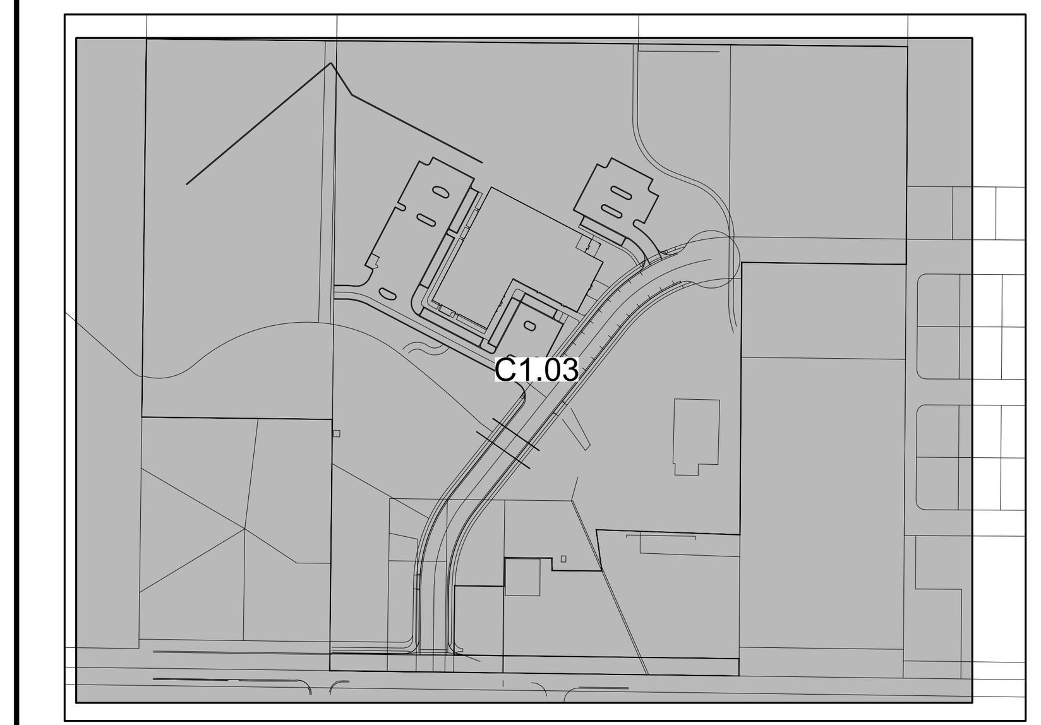
PHASING SEQUENCE

PHASE	1	2	3	4
General site demolition for construction of Salud Parkway, existing Salud facility to remain active	■			
Installation of utilities (water, wastewater, storm, elec, etc.)		■		
Grading of detention facilities		■		
Construction of Salud Parkway		■		
Remodeling of new Salud facility		■	■	
Reconstruction of Laporte Ave and relocation of existing Salud facility access			■	
Demolition and overlot grading of existing Salud Facility				■

NORTH

60 0 60 120 180

(IN FEET)
1 INCH = 60 FEET



KEYMAP

LEGEND:

- PROJECT BOUNDARY
- EXISTING RIGHT-OF-WAY
- EXISTING MAJOR CONTOUR — 5015
- EXISTING MINOR CONTOUR — 5013
- EXISTING STORM SEWER — ST
- EXISTING TELEPHONE — T
- EXISTING GAS — G
- EXISTING SANITARY SEWER — SS
- EXISTING WATER — W
- EXISTING ELECTRIC — E
- EXISTING FENCE — X
- EXISTING ELECTRIC VAULT
- EXISTING FIRE HYDRANT
- EXISTING IRRIGATION BOX
- EXISTING WATER METER
- EXISTING GAS METER
- EXISTING TELEPHONE PEDESTAL
- EXISTING TREES (TO REMAIN)
- EXISTING TREES (TO BE REMOVED)
- EXISTING STRUCTURES (TO BE REMOVED)
- EXISTING CONCRETE / ASPHALT / GRAVEL (TO BE REMOVED)

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DEMOLITION, REMOVAL, REPLACEMENT, AND DISPOSAL OF ALL FACILITIES AND MATERIAL.
3. CONTRACTOR IS ENCOURAGED TO PERFORM DEMOLITION IN A MANNER THAT MAXIMIZES SALVAGE, RE-USE, AND RECYCLING OF MATERIALS. THIS INCLUDES APPROPRIATE SORTING AND STORING. IN PARTICULAR, DEMOLISHED CONCRETE, ASPHALT, AND BASE COURSE SHOULD BE RECYCLED IF POSSIBLE. THE CITY OF FORT COLLINS STREET DEPARTMENT OPERATES A CRUSHING OPERATION THAT WILL ACCEPT CONCRETE MATERIAL AT NO COST FOR CRUSHING AND RE-USE AS RECYCLED AGGREGATE. THIS OPERATION IS LOCATED AT 1380 HOFFMAN MILL ROAD AND CAN BE REACHED AT (970) 482-1249.
4. ALL SYMBOLS ARE ONLY GRAPHICALLY REPRESENTED AND ARE NOT TO SCALE.
5. CONTACT THE PROJECT SURVEYOR FOR ANY INQUIRIES RELATED TO THE EXISTING SITE SURVEY.
6. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811 Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED: City Engineer Date
CHECKED BY: Water & Wastewater Utility Date
CHECKED BY: Stormwater Utility Date
CHECKED BY: Parks & Recreation Date
CHECKED BY: Traffic Engineer Date
CHECKED BY: Environmental Planner Date

No. Revisions: Date:

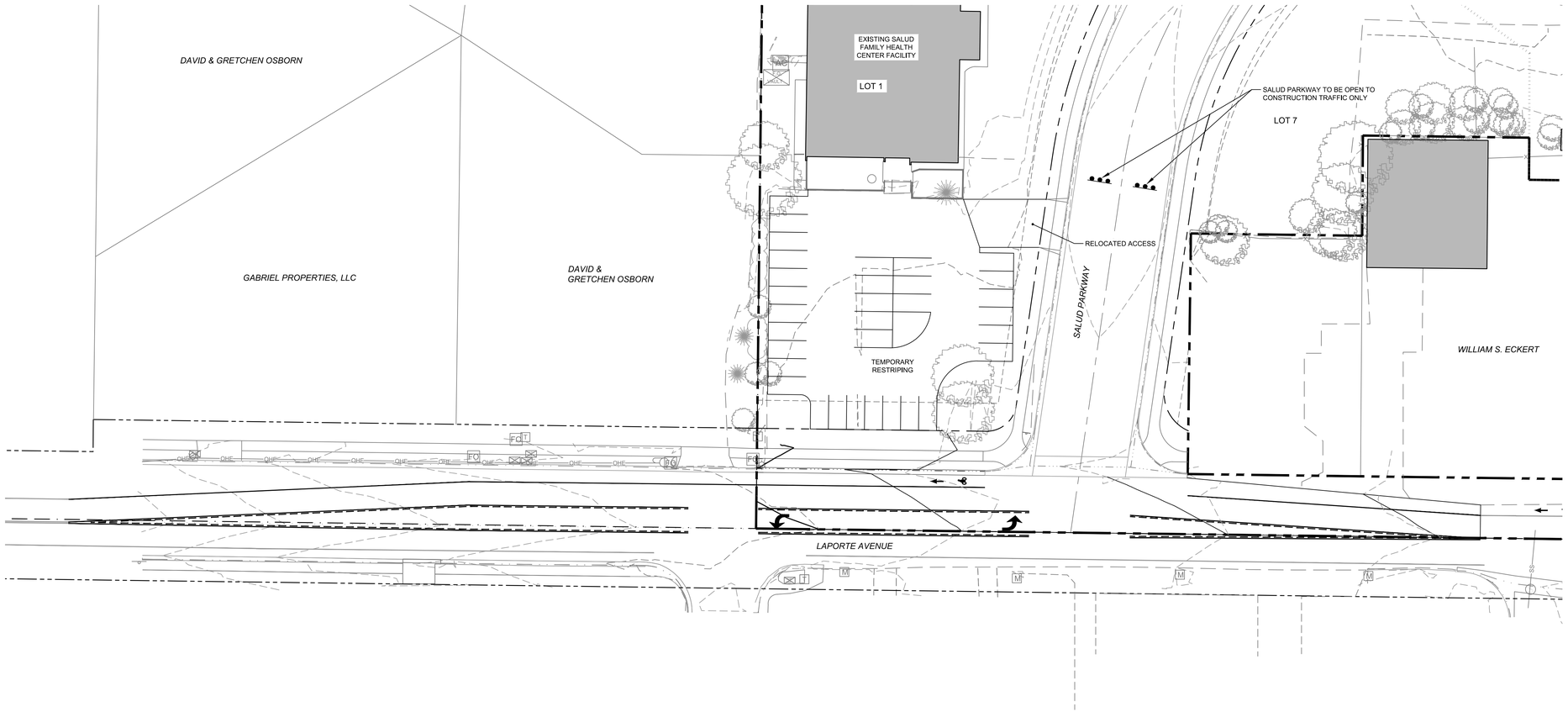
REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

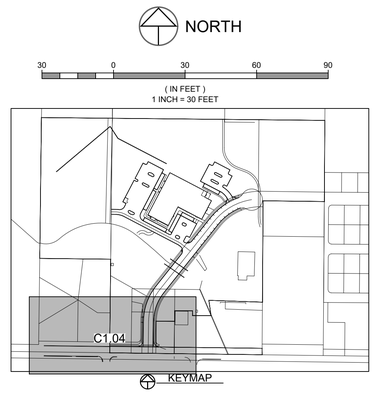
NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

PROJECT: 1067-001
DATE: OCT 12, 2016
DESIGNED BY: D. Weber
SCALE: 1"=60'
DRAWN BY: D. Weber
REVIEWED BY: R. Curtiss

SALUD FAMILY HEALTH CENTER
PHASE 2 DETAILS

Sheet C1.03
Of 15 Sheets





NORTH

LEGEND:

PROJECT BOUNDARY	
EXISTING RIGHT-OF-WAY	
EXISTING MAJOR CONTOUR	5015
EXISTING MINOR CONTOUR	5013
EXISTING STORM SEWER	ST
EXISTING TELEPHONE	T
EXISTING GAS	G
EXISTING SANITARY SEWER	SS
EXISTING WATER	W
EXISTING ELECTRIC	E
EXISTING FENCE	X
EXISTING ELECTRIC VAULT	☒
EXISTING FIRE HYDRANT	
EXISTING IRRIGATION BOX	☒
EXISTING WATER METER	H2O
EXISTING GAS METER	G
EXISTING TELEPHONE PEDESTAL	T
EXISTING TREES (TO REMAIN)	
EXISTING TREES (TO BE REMOVED)	⊗
EXISTING STRUCTURES (TO BE REMOVED)	▨
EXISTING CONCRETE / ASPHALT / GRAVEL (TO BE REMOVED)	▩

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DEMOLITION, REMOVAL, REPLACEMENT, AND DISPOSAL OF ALL FACILITIES AND MATERIAL.
3. CONTRACTOR IS ENCOURAGED TO PERFORM DEMOLITION IN A MANNER THAT MAXIMIZES SALVAGE, RE-USE, AND RECYCLING OF MATERIALS. THIS INCLUDES APPROPRIATE SORTING AND STORING. IN PARTICULAR, DEMOLISHED CONCRETE, ASPHALT, AND BASE COURSE SHOULD BE RECYCLED IF POSSIBLE. THE CITY OF FORT COLLINS STREET DEPARTMENT OPERATES A CRUSHING OPERATION THAT WILL ACCEPT CONCRETE MATERIAL AT NO COST FOR CRUSHING AND RE-USE AS RECYCLED AGGREGATE. THIS OPERATION IS LOCATED AT 1380 HOFFMAN MILL ROAD AND CAN BE REACHED AT (970) 482-1249.
4. ALL SYMBOLS ARE ONLY GRAPHICALLY REPRESENTED AND ARE NOT TO SCALE.
5. CONTACT THE PROJECT SURVEYOR FOR ANY INQUIRIES RELATED TO THE EXISTING SITE SURVEY.
6. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

Know what's below.
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

PHASING SEQUENCE

PHASE	1	2	3	4
General site demolition for construction of Salud Parkway, existing Salud facility to remain active	■			
Installation of utilities (water, wastewater, storm, elec, etc.)		■		
Grading of detention facilities		■		
Construction of Salud Parkway		■		
Remodeling of new Salud facility		■	■	
Reconstruction of Laporte Ave and relocation of existing Salud facility access			■	
Demolition and overlot grading of existing Salud Facility				■

PHASE 3 NOTES:

1. RELOCATION OF ACCESS TO THE EXISTING SALUD FACILITY FROM LAPORTE AVE TO SALUD PARKWAY WHILE REMODELING OF PROPOSED SALUD FACILITY IS OCCURING.
2. TEMPORARY RESTRIPING OF EXISTING SALUD PARKING LOT TO WORK WITH RELOCATION OF ACCESS.
3. RECONSTRUCTION OF LAPORTE AVENUE.
4. SALUD PARKWAY TO BE LIMITED TO CONSTRUCTION TRAFFIC ONLY NORTH OF RELOCATED ACCESS TO EXISTING SALUD FACILITY

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED: ______________ City Engineer ______ Date
CHECKED BY: ______________ Water & Wastewater Utility ______ Date
CHECKED BY: ______________ Stormwater Utility ______ Date
CHECKED BY: ______________ Parks & Recreation ______ Date
CHECKED BY: ______________ Traffic Engineer ______ Date
CHECKED BY: ______________ Environmental Planner ______ Date

No. Revisions: By: Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

These drawings are instruments of service provided by Northern Engineering Services, Inc. and are not to be used for any type of construction unless signed and sealed by a Professional Engineer in the employ of Northern Engineering Services, Inc.

NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

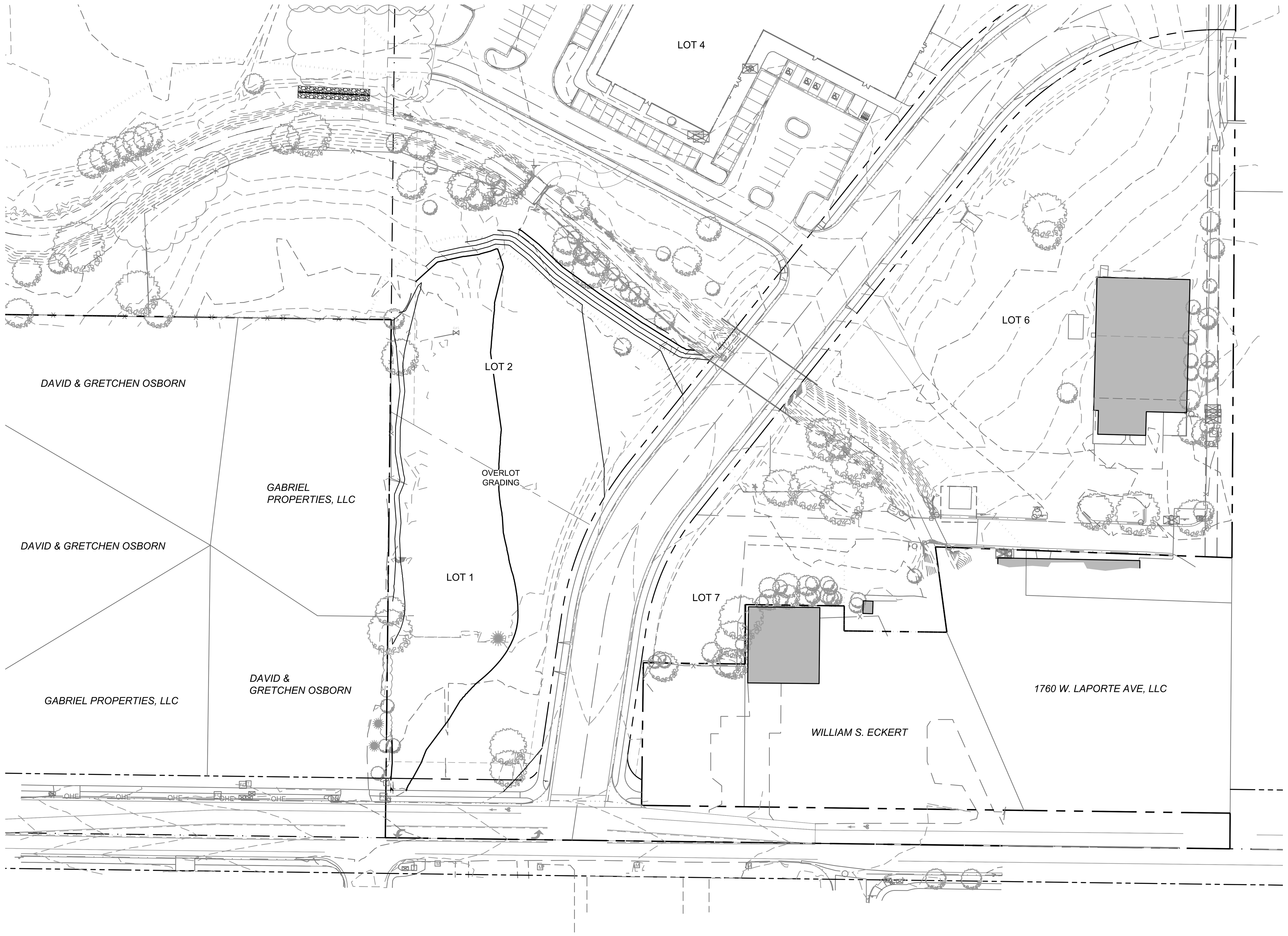
PROJECT: 1067–001	DATE: OCT 12, 2016	
DESIGNED BY: D. Weber	SCALE: 1"=30'	
DRAWN BY: D. Weber	REVIEWED BY: R. Curtiss	

SALUD FAMILY HEALTH CENTER

PHASE 3 DETAILS

Sheet
C1.04
Of 15 Sheets

DRAWING FILENAME: D:\Projects\1067-001\Dwg\Phasing\1067-001_PHAS_3.dwg LAYOUT NAME: C1.04 DATE: Oct 10, 2016 - 3:22pm CAD OPERATOR: danny
LIST OF XREFS: [NES-xborder] [1067-001_xEXST] [1067-001_xPHAS_leg] [1067-001_xEXST_txt] [1067-001_xPUTIL] [1067-001_xSITE] [1067-001_KEYMAP] [1067-001_xPHAS_Table] [1067-001_xGRAD] [1067-001_xTOPO] [1067-001_xPHAS_3]



NORTH

60 0 60 120 180
(IN FEET)
1 INCH = 60 FEET

KEYMAP

LEGEND:

PROJECT BOUNDARY	
EXISTING RIGHT-OF-WAY	
EXISTING MAJOR CONTOUR	5015
EXISTING MINOR CONTOUR	5013
EXISTING STORM SEWER	ST
EXISTING TELEPHONE	T
EXISTING GAS	G
EXISTING SANITARY SEWER	SS
EXISTING WATER	W
EXISTING ELECTRIC	E
EXISTING FENCE	X
EXISTING ELECTRIC VAULT	
EXISTING FIRE HYDRANT	
EXISTING IRRIGATION BOX	
EXISTING WATER METER	
EXISTING GAS METER	
EXISTING TELEPHONE PEDESTAL	T
EXISTING TREES (TO REMAIN)	
EXISTING TREES (TO BE REMOVED)	
EXISTING STRUCTURES (TO BE REMOVED)	
EXISTING CONCRETE / ASPHALT / GRAVEL (TO BE REMOVED)	

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DEMOLITION, REMOVAL, REPLACEMENT, AND DISPOSAL OF ALL FACILITIES AND MATERIAL.
3. CONTRACTOR IS ENCOURAGED TO PERFORM DEMOLITION IN A MANNER THAT MAXIMIZES SALVAGE, RE-USE, AND RECYCLING OF MATERIALS. THIS INCLUDES APPROPRIATE SORTING AND STORING. IN PARTICULAR, DEMOLISHED CONCRETE, ASPHALT, AND BASE COURSE SHOULD BE RECYCLED IF POSSIBLE. THE CITY OF FORT COLLINS STREET DEPARTMENT OPERATES A CRUSHING OPERATION THAT WILL ACCEPT CONCRETE MATERIAL AT NO COST FOR CRUSHING AND RE-USE AS RECYCLED AGGREGATE. THIS OPERATION IS LOCATED AT 1380 HOFFMAN MILL ROAD AND CAN BE REACHED AT (970) 482-1249.
4. ALL SYMBOLS ARE ONLY GRAPHICALLY REPRESENTED AND ARE NOT TO SCALE.
5. CONTACT THE PROJECT SURVEYOR FOR ANY INQUIRIES RELATED TO THE EXISTING SITE SURVEY.
6. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

Know what's **below.**
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

PHASING SEQUENCE

PHASE	1	2	3	4
General site demolition for construction of Salud Parkway, existing Salud facility to remain active	■			
Installation of utilities (water, wastewater, storm, elec, etc.)		■		
Grading of detention facilities		■		
Construction of Salud Parkway		■		
Remodeling of new Salud facility		■	■	
Reconstruction of Laporte Ave and relocation of existing Salud facility access			■	
Demolition and overlot grading of existing Salud Facility				■

PHASE 4 NOTES:

1. COMPLETION OF REMODEL OF PROPOSED SALUD FACILITY
2. DEMOLITION OF EXISTING SALUD FACILITY AND PARKING LOT
3. OVERLOT GRADING OF LOTS 1 AND 2
4. SALUD PARKWAY OPEN TO PUBLIC ACCESS

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED:	City Engineer	Date
CHECKED BY:	Water & Wastewater Utility	Date
CHECKED BY:	Stormwater Utility	Date
CHECKED BY:	Parks & Recreation	Date
CHECKED BY:	Traffic Engineer	Date
CHECKED BY:	Environmental Planner	Date

No. | Revisions: | By: | Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

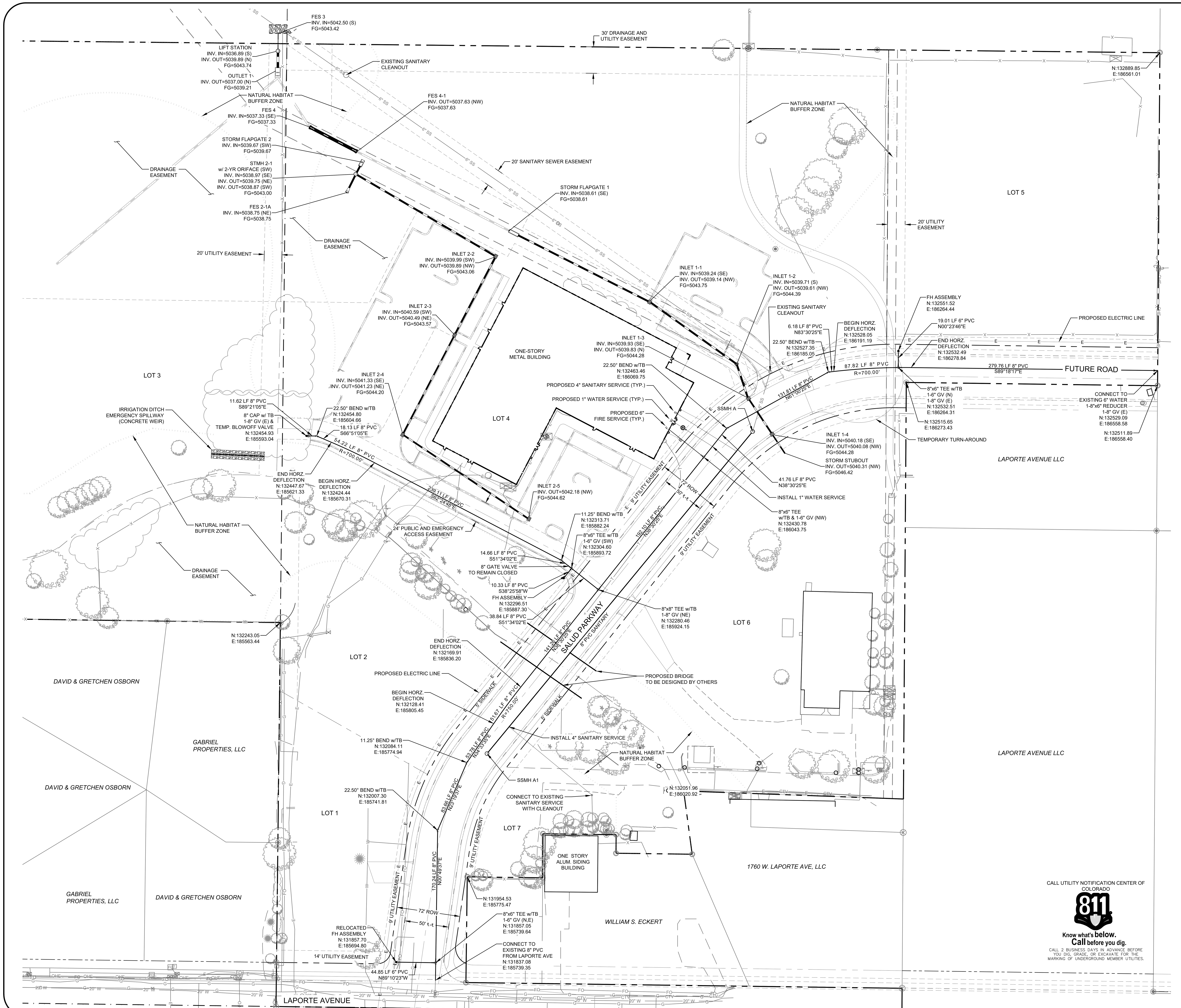
NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
Phone: 970.221.4158
www.northernengineering.com

PROJECT: 1067-001
DATE: OCT. 12, 2016
DESIGNED BY: C. Snowden
SCALE: 1"=60'
DRAWN BY: L. Seeber
REVIEWED BY: R. Curtiss

SALUD FAMILY HEALTH CENTER

PHASE 4 DETAILS

Sheet
C1.05
Of 15 Sheets



CALL UTILITY NOTIFICATION CENTER OF COLORADO

811 Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

NORTH

50 0 50 100 150

(IN FEET)
1 INCH = 50 FEET

KEYMAP

LEGEND:

- EXISTING WATER MAIN
- EXISTING SANITARY SEWER
- PROPOSED WATER SERVICE
- EXISTING FIRE HYDRANT
- PROPOSED SANITARY SEWER
- PROPOSED WATER
- PROPOSED FH
- PROPOSED ELECTRIC
- PROPOSED STORM SEWER
- EXISTING ELECTRIC
- EXISTING TELEPHONE
- EXISTING GAS
- PROPOSED CURB & GUTTER
- PROPERTY BOUNDARY
- EXISTING LOT LINES

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. ALL WATER AND SEWER CONSTRUCTION SHALL BE PER THE CITY OF FORT COLLINS STANDARD CONSTRUCTION SPECIFICATIONS LATEST EDITION.
3. ALL WATER FITTINGS AND VALVES ARE ONLY GRAPHICALLY REPRESENTED AND ARE NOT TO SCALE.
4. UTILITY SERVICES ARE SHOWN IN A SCHEMATIC FASHION ONLY. EXACT LOCATIONS SHALL BE PER THE REQUIREMENTS OF THE RESPECTIVE UTILITY PROVIDERS, AND ARE SUBJECT TO CHANGE IN THE FIELD.
5. MAINTAIN 10' HORIZONTAL AND 18" VERTICAL MINIMUM SEPARATION BETWEEN ALL SANITARY SEWER MAINS, WATER MAINS & SERVICES.
6. REFER TO THE PLAT FOR LOT AREAS, TRACT SIZES, EASEMENTS, LOT DIMENSIONS, UTILITY EASEMENTS, OTHER EASEMENTS, AND OTHER SURVEY INFORMATION.
7. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY FIELD LOCATES AND POTHOLING OF SUBSURFACE UTILITIES. ENGINEER AND CITY SHALL BE NOTIFIED OF ANY POTENTIAL CONFLICTS.
9. REFER TO PLUMBING PLANS FOR ALL WATER SERVICE AND SANITARY SEWER SERVICE LOCATIONS. IF CONFLICT OCCURS, BOTH THE PLUMBING ENGINEER AND CIVIL ENGINEER SHALL BE CONTACTED PRIOR TO INSTALLATION OR ORDERING OF MATERIALS.
10. ALL STORM SEWER IS TO BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
11. ANY DAMAGED CURB, GUTTER AND SIDEWALK EXISTING PRIOR TO CONSTRUCTION, AS WELL AS STREETS, SIDEWALKS, CURBS AND GUTTERS, DESTROYED, DAMAGED OR REMOVED DUE TO CONSTRUCTION OF THIS PROJECT, SHALL BE REPLACED OR RESTORED TO CITY OF FORT COLLINS STANDARDS AT THE DEVELOPER'S EXPENSE PRIOR TO THE ACCEPTANCE OF COMPLETED IMPROVEMENTS AND/OR PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY.
12. CONTRACTOR TO COORDINATE FINAL LOCATION OF ALL GAS AND ELECTRIC METERS WITH ARCHITECT AND UTILITY PROVIDERS.
13. CONTRACTOR TO COORDINATE FINAL LOCATION OF IRRIGATION SHUT-OFF VALVE AND BACKFLOW DEVICE WITH LANDSCAPE ARCHITECT AND SPRINKLER CONTRACTOR.
14. CONTRACTOR TO COORDINATE SITE LIGHTING (LANDSCAPE) TO ENSURE NO CONFLICTS WITH OTHER UTILITIES.
15. CONTRACTOR TO PRESSURE TEST AND TREAT PROPOSED 8" WATER LINE PER ALL CURRENT CITY INSTALLATION SPECIFICATIONS. UPON ACCEPTANCE FROM THE CITY INSPECTOR, WATER LINE SHALL BE DRAINED AND REMAIN VACANT UNTIL THE DEVELOPMENT OF LOT 6.

NATURAL HABITAT BUFFER ZONES

1. THE NATURAL HABITAT BUFFER ZONES ARE INTENDED TO BE MAINTAINED IN A NATIVE LANDSCAPE. PLEASE SEE SECTION 3.4.1 OF THE LAND USE CODE FOR ALLOWABLE USES WITHIN THE NATURAL HABITAT BUFFER ZONES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED:	City Engineer	Date
CHECKED BY:	Water & Wastewater Utility	Date
CHECKED BY:	Stormwater Utility	Date
CHECKED BY:	Parks & Recreation	Date
CHECKED BY:	Traffic Engineer	Date
CHECKED BY:	Environmental Planner	Date

No. | Revisions: | By: | Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

These drawings are instruments of service provided by Northern Engineering Services, Inc. and are not to be used for any type of construction unless signed and sealed by a Professional Engineer in the employ of Northern Engineering Services, Inc.

NORTHERN ENGINEERING

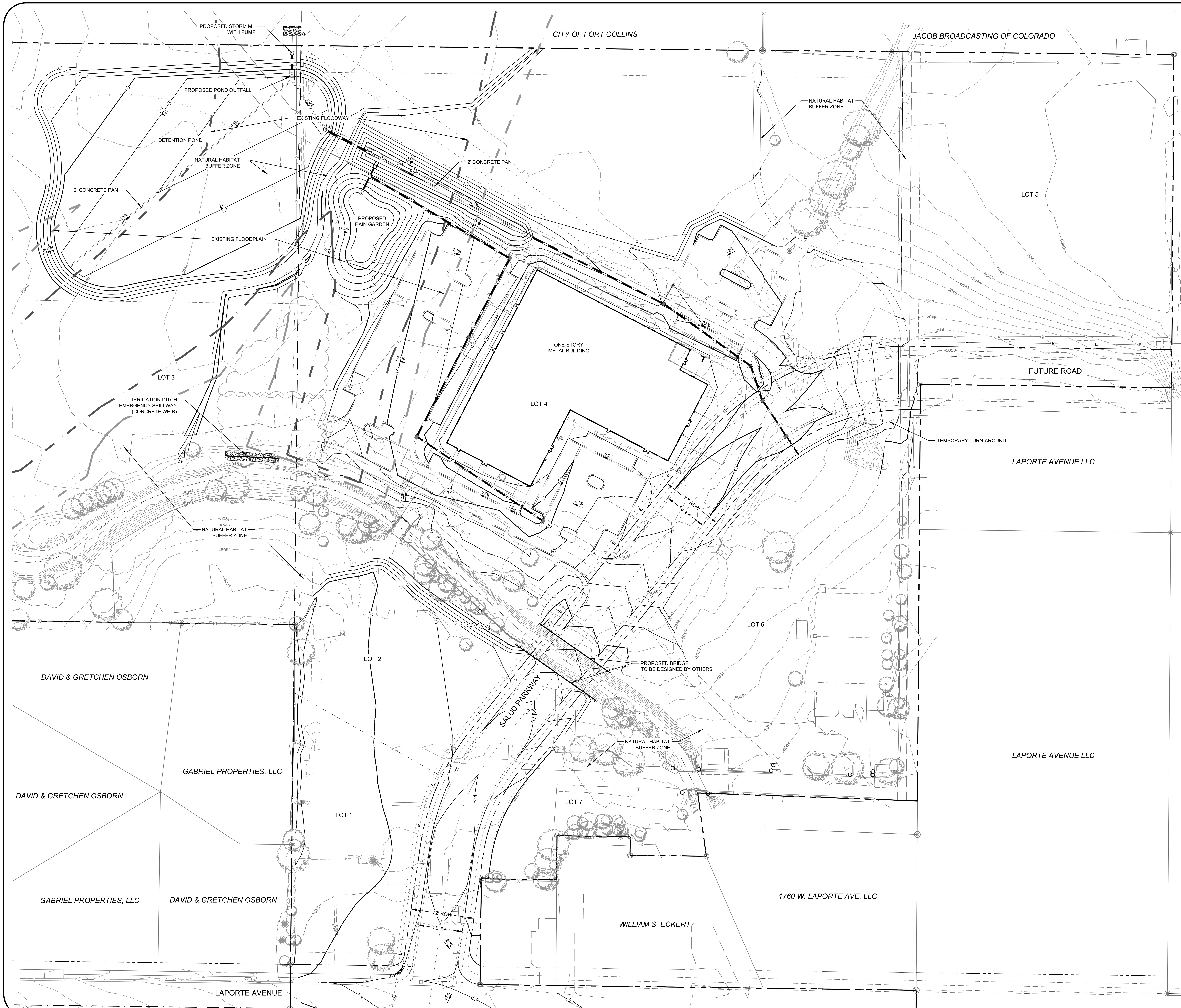
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
Phone: 970.221.4158
www.northernengineering.com

PROJECT: 1067-001	DATE: OCT. 12, 2016	
DESIGNED BY: C. Snowden	SCALE: 1"=50'	
DRAWN BY: L. Seeber	REVIEWED BY: R. Curtiss	

SALUD FAMILY HEALTH CENTER

UTILITY PLAN

Sheet
C2.00
Of 15 Sheets



NORTH

50 0 50 100 150

(IN FEET)
1 INCH = 50 FEET

KEYMAP

LEGEND:

EXISTING STORM SEWER
PROPOSED STORM SEWER
PROPOSED STORM INLET
PROPOSED CONTOUR
EXISTING CONTOUR
PROPOSED SWALE
PROPOSED VERTICAL CURB & GUTTER
PROPERTY BOUNDARY
PROPOSED LOT LINE
PROPOSED SPOT ELEVATION
EXISTING SPOT ELEVATION
PROPOSED SLOPES
PEDESTRIAN ACCESS RAMPS
SIDEWALK CHASE
APPROXIMATE LIMITS OF DEVELOPMENT
PROPOSED PAVERS

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. REFER TO THE PLAT FOR LOT AREAS, TRACT SIZES, EASEMENTS, LOT DIMENSIONS, UTILITY EASEMENTS, OTHER EASEMENTS, AND OTHER SURVEY INFORMATION.
3. ALL PROJECT ELEVATIONS ARE ON THE VERTICAL DATUM NAVD 88. SEE COVER SHEET FOR BENCHMARK REFERENCES.
4. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR ALL STRUCTURAL WALLS, RETAINING WALLS, LANDSCAPE WALLS, ETC.

FIELD SURVEY BY:

Northern Engineering Services, Inc
NE Project No. 1067-001
Date: February 13, 2015

NATURAL HABITAT BUFFER ZONES

1. THE NATURAL HABITAT BUFFER ZONES ARE INTENDED TO BE MAINTAINED IN A NATIVE LANDSCAPE. PLEASE SEE SECTION 3.4.1 OF THE LAND USE CODE FOR ALLOWABLE USES WITHIN THE NATURAL HABITAT BUFFER ZONES.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811
Know what's below.
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED:	City Engineer	Date
CHECKED BY:	Water & Wastewater Utility	Date
CHECKED BY:	Stormwater Utility	Date
CHECKED BY:	Parks & Recreation	Date
CHECKED BY:	Traffic Engineer	Date
CHECKED BY:	Environmental Planner	Date

Revisions:
No.

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

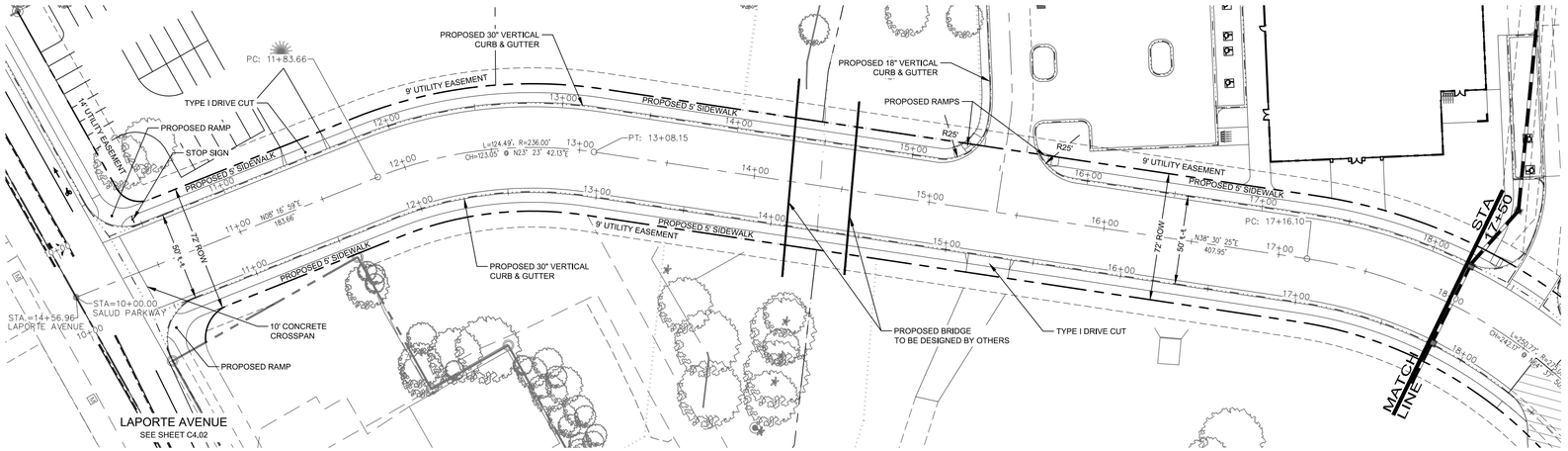
NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

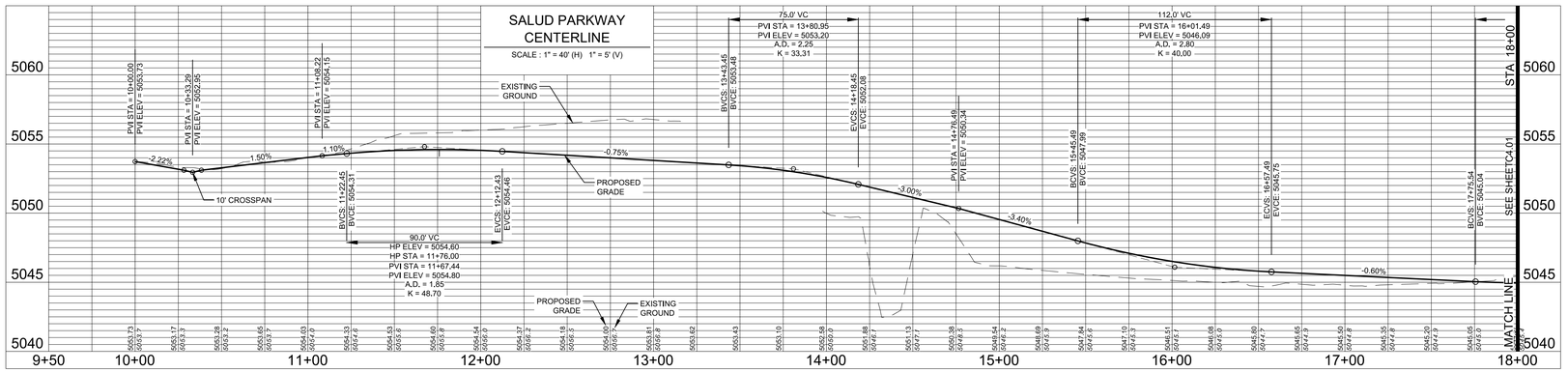
PROJECT: 1067-001
DATE: OCT 12, 2016
DESIGNED BY: D. Weber
SCALE: 1"=50'
DRAWN BY: L. Seeber
REVIEWED BY: R. Curtiss

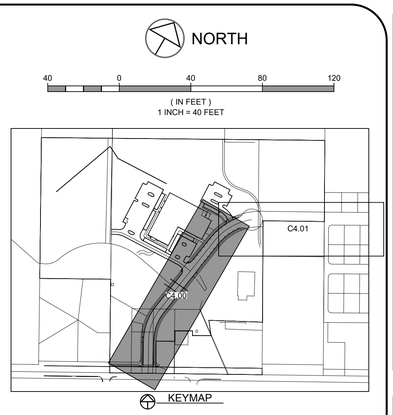
SALUD FAMILY HEALTH CENTER

OVERALL GRADING PLAN

Sheet
C3.00
Of 15 Sheets







LEGEND:

- PROPOSED CURB & GUTTER
- PROPOSED CENTERLINE
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPERTY BOUNDARY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- EASEMENT LINE
- SAWCUT LINE
- PROPOSED STORM SEWER
- PROPOSED STORM MANHOLE
- PROPOSED STORM INLET
- EXISTING STORM SEWER
- EXISTING EDGE OF ASPHALT
- PEDESTRIAN ACCESS RAMPS
- PROPOSED CONCRETE CROSSPAN (TYP.)
- PROPOSED ASPHALT ▨

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. SEE SOILS REPORT FOR PAVEMENT AND SUBGRADE PREPARATION, DESIGN AND RECOMMENDATIONS.
3. EXPANSION JOINTS SHALL BE PROVIDED IN ALL SIDEWALKS AT MAXIMUM SPACING OF 50 FEET.
4. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

Know what's below.
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED: ______________________ ________
City Engineer Date

CHECKED BY: ______________________ ________
Water & Wastewater Utility Date

CHECKED BY: ______________________ ________
Stormwater Utility Date

CHECKED BY: ______________________ ________
Parks & Recreation Date

CHECKED BY: ______________________ ________
Traffic Engineer Date

CHECKED BY: ______________________ ________
Environmental Planner Date

No.	Revisions:	By:	Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

These drawings are instruments of service provided by Northern Engineering Services, Inc. and are not to be used for any type of construction unless signed and sealed by a Professional Engineer in the employ of Northern Engineering Services, Inc.

NORTHERN
ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

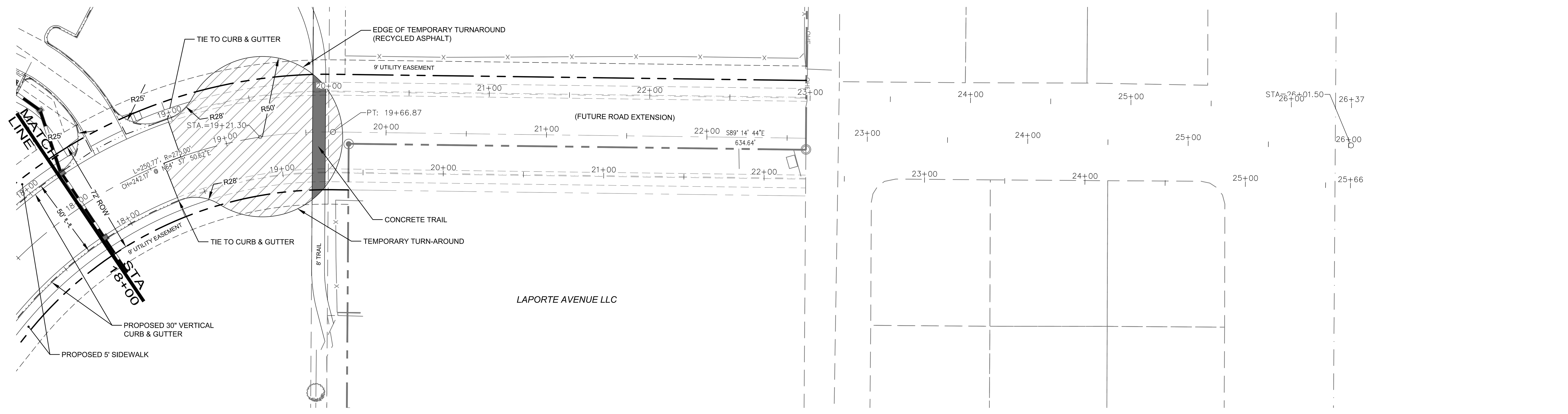
DATE: OCT 12, 2016
SCALE: 1"=40'
REVIEWED BY: R. Curtiss
PROJECT: 1067–001
DESIGNED BY: D. Weber
DRAWN BY: L. Seeber

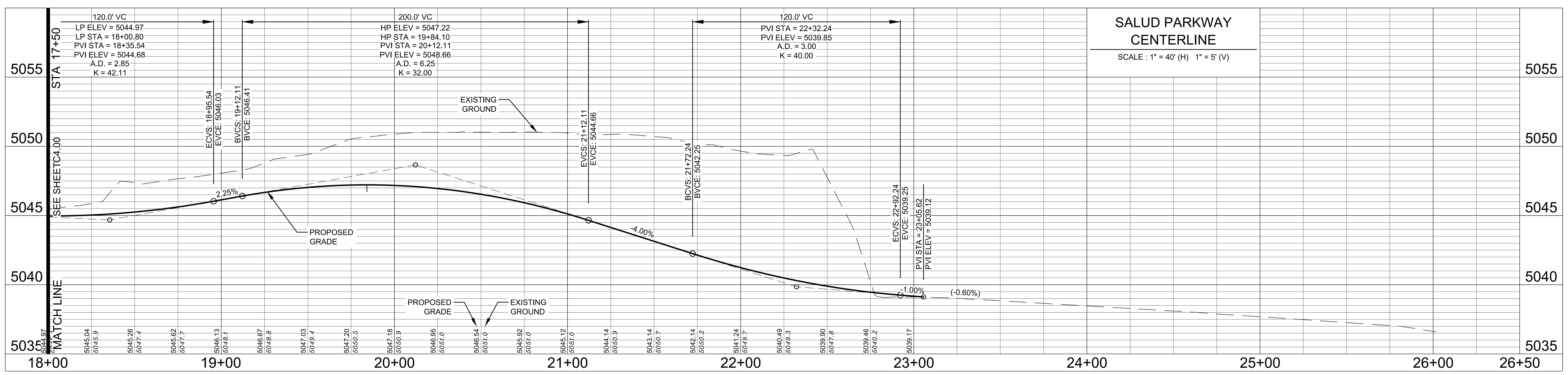
SALUD FAMILY HEALTH CENTER

SALUD PARKWAY
PLAN & PROFILE

Sheet
C4.00
Of 15 Sheets

DRAWING FILENAME: D:\Projects\1067-001\Dwg\Strt\1067-001_STREET A.dwg LAYOUT NAME: C4.00 DATE: Oct 10, 2016 - 3:23pm CAD OPERATOR: danny
LIST OF XREFS: [1067-001_xEXST] [1067-001_xSITE] [NES-xborder] [1067-001_xPUTIL] [1067-001_KEYMAP] [1067-001_xSTRT_leg]

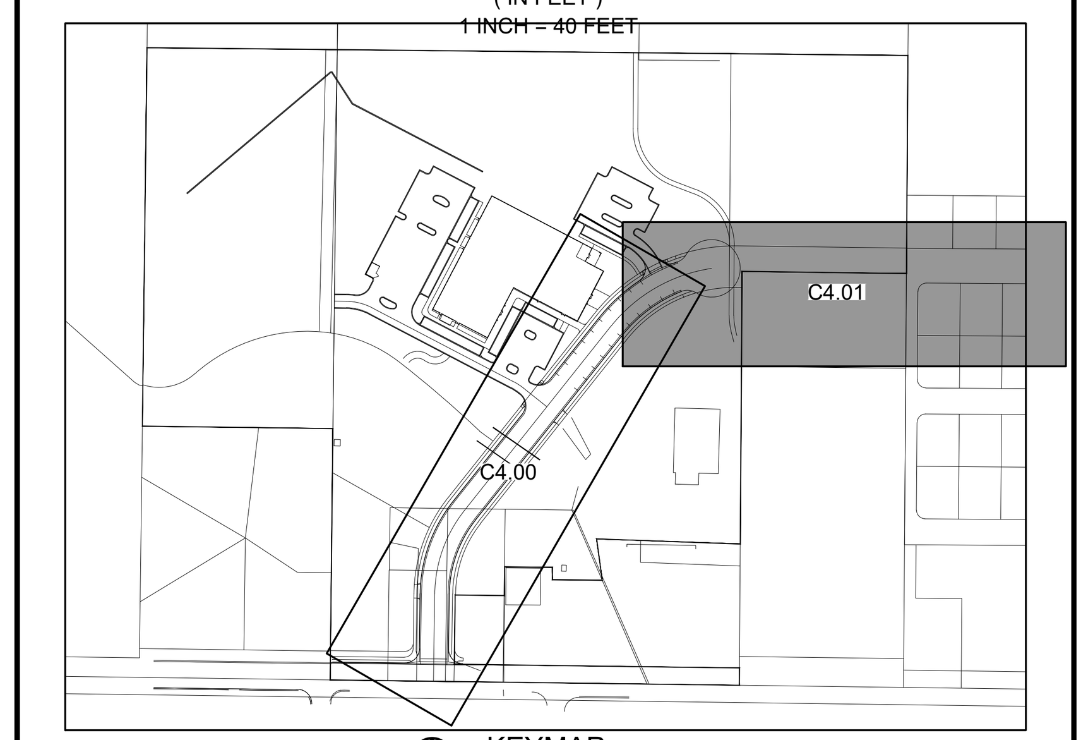




NORTH

40 0 40 80 120

(IN FEET)
1 INCH = 40 FEET



KEYMAP

LEGEND:

- PROPOSED CURB & GUTTER
- PROPOSED CENTERLINE
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPERTY BOUNDARY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- EASEMENT LINE
- SAWCUT LINE
- PROPOSED STORM SEWER
- PROPOSED STORM MANHOLE
- PROPOSED STORM INLET
- EXISTING STORM SEWER
- EXISTING EDGE OF ASPHALT
- PEDESTRIAN ACCESS RAMPS
- PROPOSED CONCRETE CROSSPAN (TYP.)
- PROPOSED ASPHALT

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. SEE SOILS REPORT FOR PAVEMENT AND SUBGRADE PREPARATION, DESIGN AND RECOMMENDATIONS.
3. EXPANSION JOINTS SHALL BE PROVIDED IN ALL SIDEWALKS AT MAXIMUM SPACING OF 50 FEET.
4. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811 Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED:	City Engineer	Date
CHECKED BY:	Water & Wastewater Utility	Date
CHECKED BY:	Stormwater Utility	Date
CHECKED BY:	Parks & Recreation	Date
CHECKED BY:	Traffic Engineer	Date
CHECKED BY:	Environmental Planner	Date

Revisions: No. Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

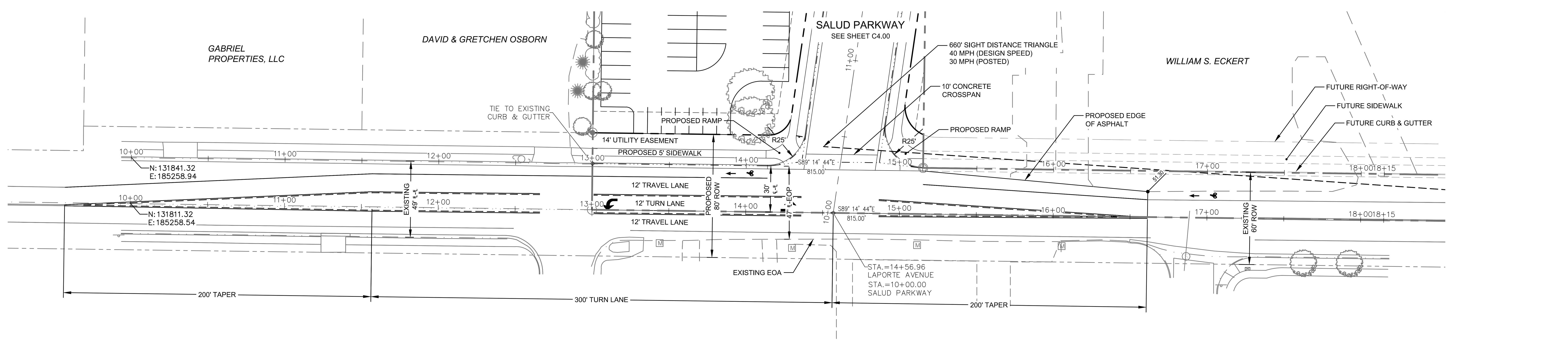
NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
Phone: 970.221.4158
www.northernengineering.com

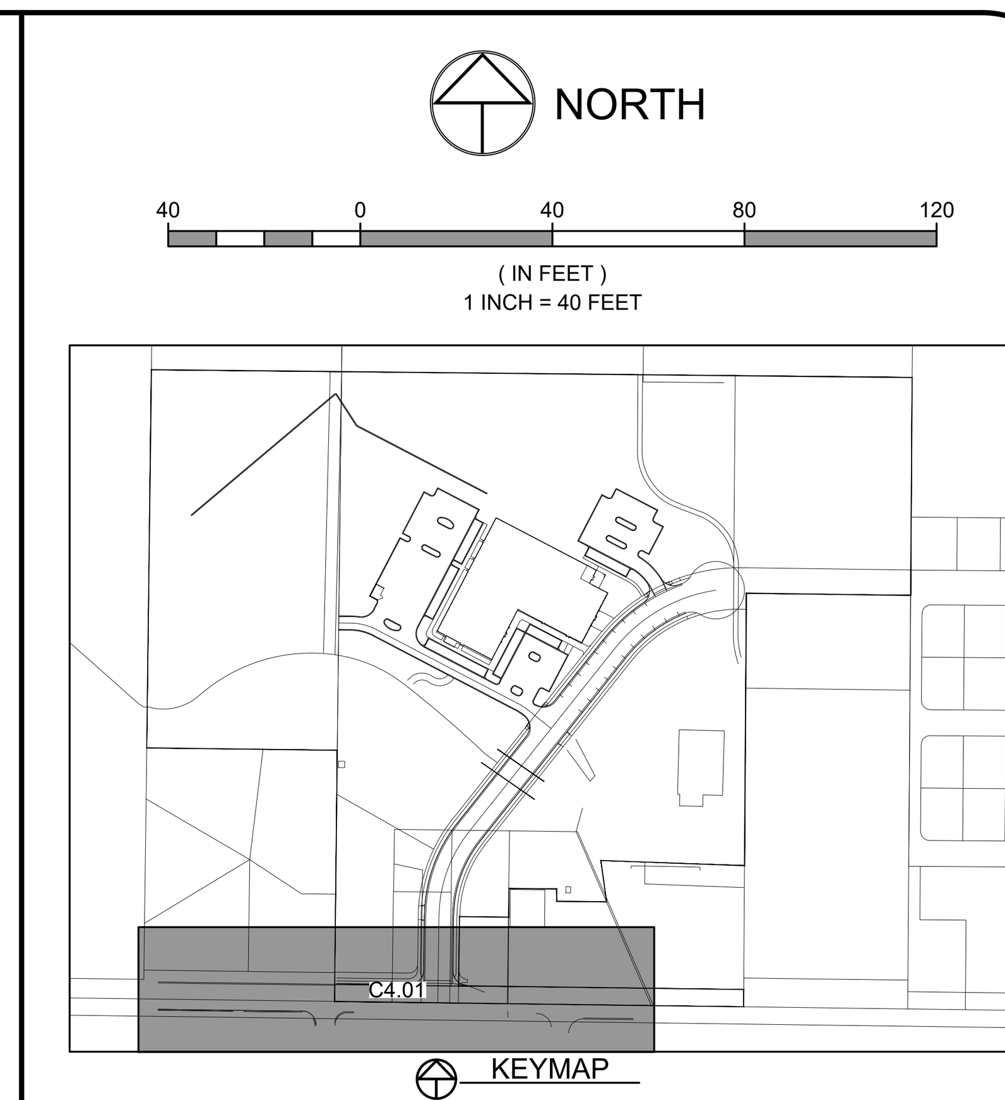
PROJECT: 1067-001
DATE: OCT. 12, 2016
DESIGNED BY: D. Weber
SCALE: 1"=40'
DRAWN BY: L. Seeber
REVIEWED BY: R. Curtiss

SALUD FAMILY HEALTH CENTER

SALUD PARKWAY PLAN & PROFILE

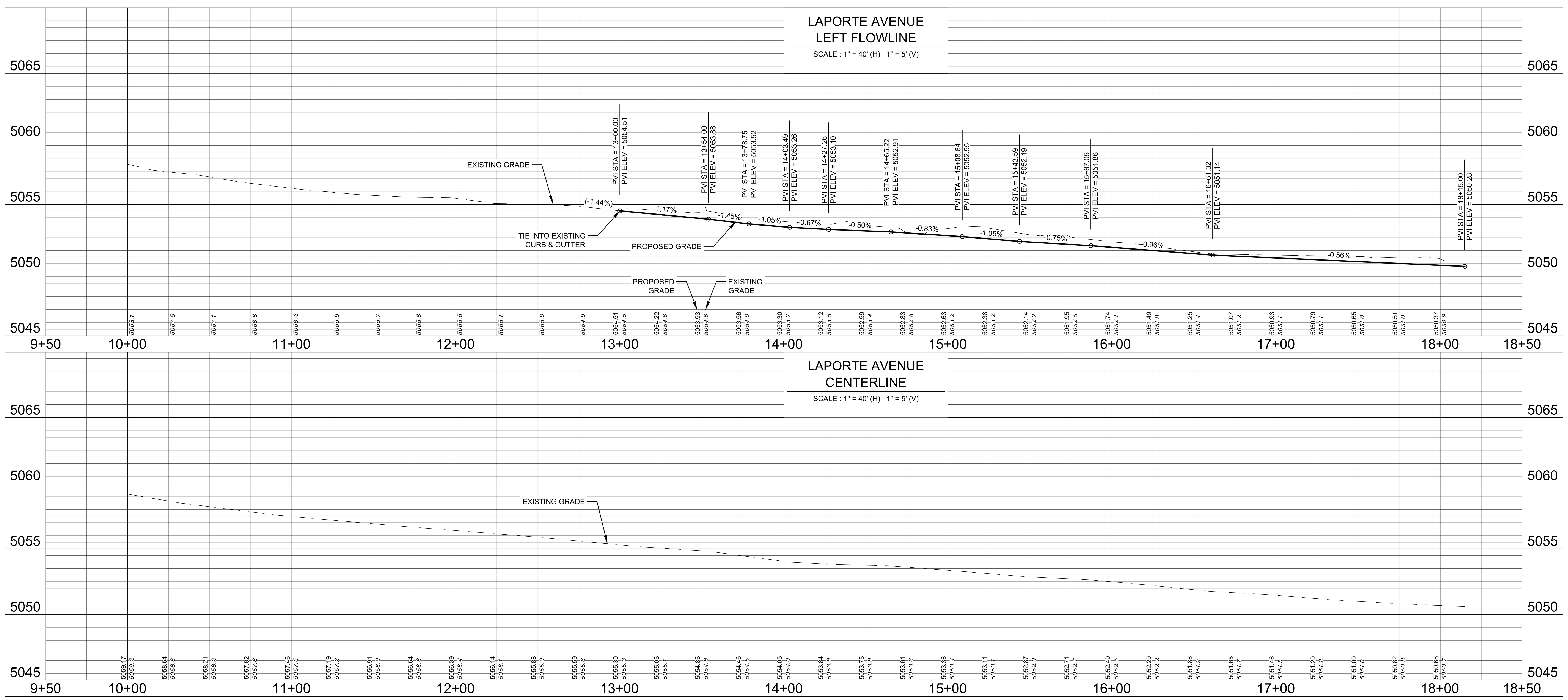
Sheet C4.01
Of 15 Sheets





LEGEND:

- PROPOSED CURB & GUTTER
- PROPOSED CENTERLINE
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPERTY BOUNDARY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- EASEMENT LINE
- SAWCUT LINE
- PROPOSED STORM SEWER
- PROPOSED STORM MANHOLE
- PROPOSED STORM INLET
- EXISTING STORM SEWER
- EXISTING EDGE OF ASPHALT
- PEDESTRIAN ACCESS RAMPS
- PROPOSED CONCRETE CROSSPAN (TYP.)
- PROPOSED ASPHALT



NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. SEE SOILS REPORT FOR PAVEMENT AND SUBGRADE PREPARATION, DESIGN AND RECOMMENDATIONS.
3. EXPANSION JOINTS SHALL BE PROVIDED IN ALL SIDEWALKS AT MAXIMUM SPACING OF 50 FEET.
4. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED:	City Engineer	Date
CHECKED BY:	Water & Wastewater Utility	Date
CHECKED BY:	Stormwater Utility	Date
CHECKED BY:	Parks & Recreation	Date
CHECKED BY:	Traffic Engineer	Date
CHECKED BY:	Environmental Planner	Date

No. Revisions: By: Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

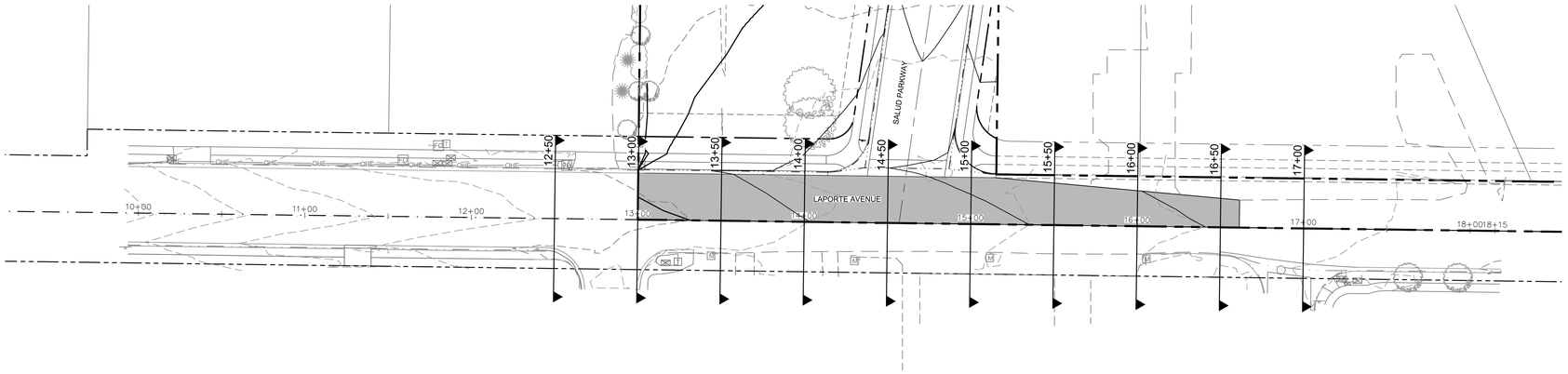
NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
Phone: 970.221.4158
www.northernengineering.com

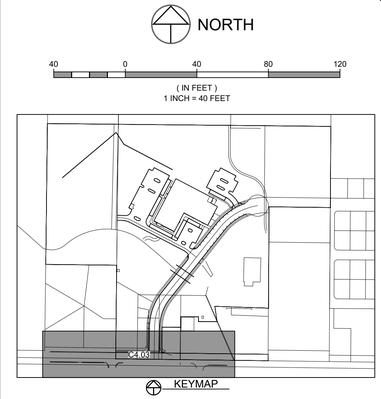
PROJECT: 1067-001
DATE: OCT 12, 2016
SCALE: 1"=40
DESIGNED BY: D. Weber
DRAWN BY: L. Seeber
REVIEWED BY: R. Curtiss

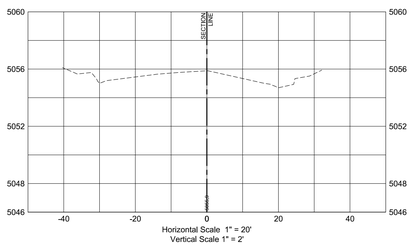
SALUD FAMILY HEALTH CENTER

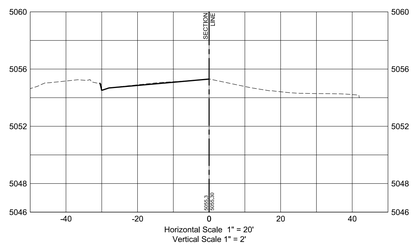
LAPORTE AVENUE PLAN & PROFILE

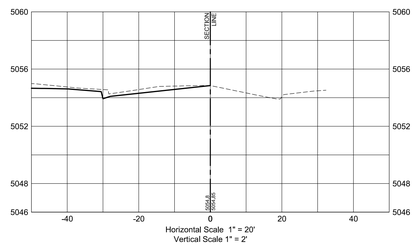
Sheet C4.02
Of 15 Sheets

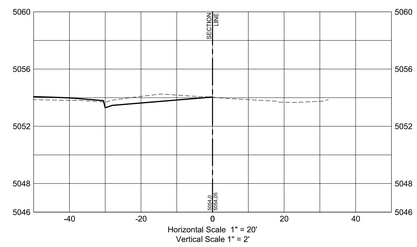


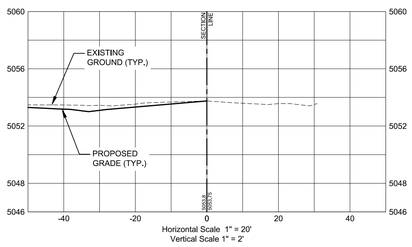


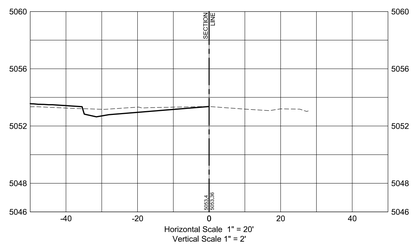


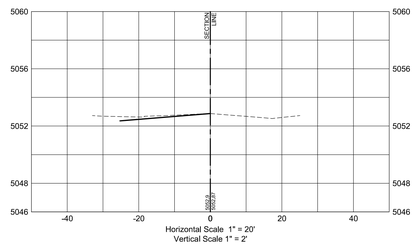


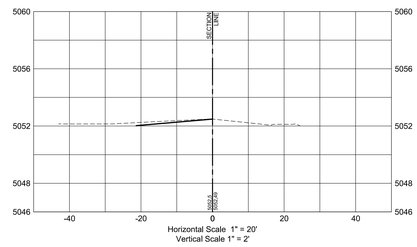


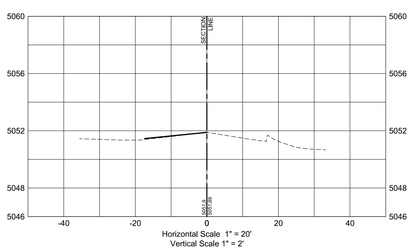


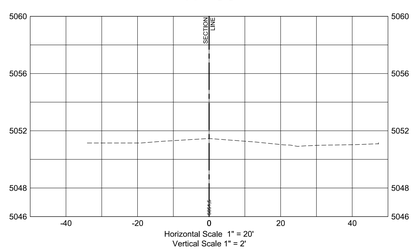












KEYMAP

LEGEND:

PROPOSED CURB & GUTTER	═══
PROPOSED CENTERLINE	— · —
PROPOSED RIGHT-OF-WAY	━━━
EXISTING RIGHT-OF-WAY	— —
PROPERTY BOUNDARY	━ · ━
PROPOSED LOT LINE	──
EXISTING LOT LINE	──
EASEMENT LINE	- - -
SAWCUT LINE	- - -
PROPOSED STORM SEWER	━━━
PROPOSED STORM MANHOLE	◎
PROPOSED STORM INLET	▭
EXISTING STORM SEWER	— ST —
EXISTING EDGE OF ASPHALT	- - -
PEDESTRIAN ACCESS RAMPS	▷
PROPOSED CONCRETE CROSSPAN (TYP.)	⌒
PROPOSED ASPHALT	▨

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.

2. SEE SOILS REPORT FOR PAVEMENT AND SUBGRADE PREPARATION, DESIGN AND RECOMMENDATIONS.

3. EXPANSION JOINTS SHALL BE PROVIDED IN ALL SIDEWALKS AT MAXIMUM SPACING OF 50 FEET.

4. LIMITS OF STREET CUT ARE APPROXIMATE. FINAL LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CITY ENGINEERING INSPECTOR. ALL REPAIRS TO BE IN ACCORDANCE WITH CITY STREET REPAIR STANDARDS.

12+50

13+00

13+50

14+00

14+50

15+00

15+50

16+00

16+50

17+00

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

Know what's below.
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED: ______________ Date ______
City Engineer

CHECKED BY: ______________ Date ______
Water & Wastewater Utility

CHECKED BY: ______________ Date ______
Stormwater Utility

CHECKED BY: ______________ Date ______
Parks & Recreation

CHECKED BY: ______________ Date ______
Traffic Engineer

CHECKED BY: ______________ Date ______
Environmental Planner

No.	Revisions:	By:	Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

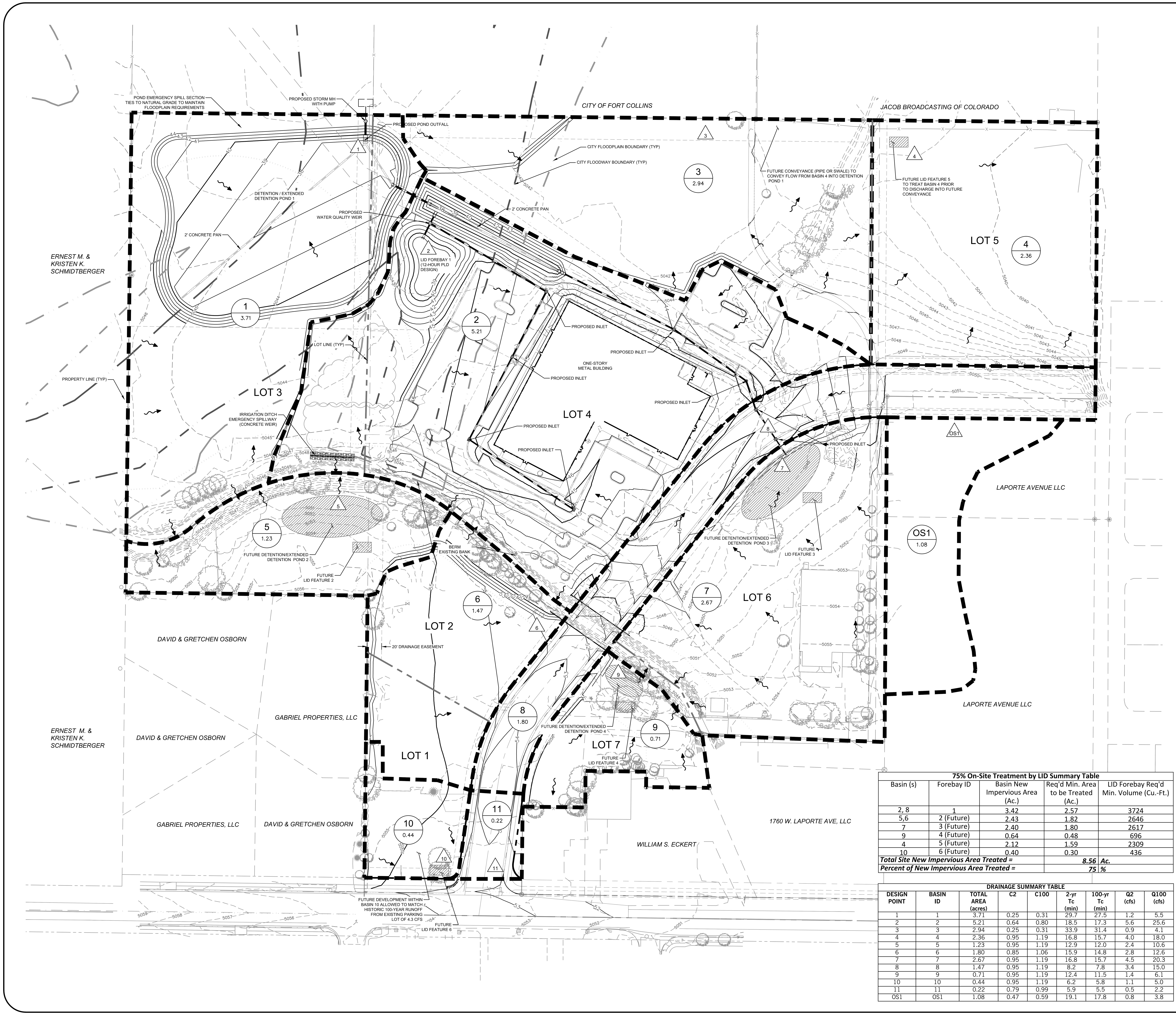
These drawings are instruments of service provided by Northern Engineering Services, Inc. and are not to be used for any type of construction unless signed and sealed by a Professional Engineer in the employ of Northern Engineering Services, Inc.

NE
NORTHERN
ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

PROJECT: 1067-001
DATE: OCT 12, 2016
DESIGNED BY: D. Weber
SCALE: 1"=40'
DRAWN BY: L. Seeber
REVIEWED BY: R. Curtiss

SALUD FAMILY HEALTH CENTER
LAPORTE AVENUE
ROADWAY CROSS SECTIONS

Sheet
C4.03
Of 15 Sheets



NORTH

60 0 60 120 180

(IN FEET)
1 INCH = 60 FEET

KEYMAP

LEGEND:

PROPERTY BOUNDARY
PROPOSED BASIN LINES
EXISTING STORM SEWER LINE
PROPOSED UNDERDRAIN
PROPOSED STORM DRAIN
EXISTING INLET GRATE
PROPOSED CONTOUR
EXISTING CONTOUR
PROPOSED SWALE
PROPOSED VERTICAL CURB & GUTTER
PROPOSED RIBBON CURB
PROPOSED OVERLAND FLOW DIRECTION
PROPOSED PERMEABLE PAVERS
BASIN DELINEATION
MAJOR RUNOFF COEFFICIENT
BASIN ACREAGE
DESIGN POINT

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. REFER TO THE PLAT FOR LOT AREAS, TRACT SIZES, EASEMENTS, LOT DIMENSIONS, UTILITY EASEMENTS, OTHER EASEMENTS, AND OTHER SURVEY INFORMATION.
3. ALL PROJECT DATA IS ON THE CITY OF FORT COLLINS VERTICAL DATUM; NAVD 88. SEE COVER SHEET FOR BENCHMARKS.

FOR DRAINAGE REVIEW ONLY
NOT FOR CONSTRUCTION

75% On-Site Treatment by LID Summary Table

Basin (s)	Forebay ID	Basin New Impervious Area (Ac.)	Req'd Min. Area to be Treated (Ac.)	LID Forebay Req'd Min. Volume (Cu.-Ft.)
2, 8	1	3.42	2.57	3724
5,6	2 (Future)	2.43	1.82	2646
7	3 (Future)	2.40	1.80	2617
9	4 (Future)	0.64	0.48	696
4	5 (Future)	2.12	1.59	2309
10	6 (Future)	0.40	0.30	436
Total Site New Impervious Area Treated =			***8.56***	***Ac.***
Percent of New Impervious Area Treated =			***75***	***%***

DRAINAGE SUMMARY TABLE

DESIGN POINT	BASIN ID	TOTAL AREA (acres)	C2	C100	2-yr Tc (min)	100-yr Tc (min)	Q2 (cfs)	Q100 (cfs)
1	1	3.71	0.25	0.31	29.7	27.5	1.2	5.5
2	2	5.21	0.64	0.80	18.5	17.3	5.6	25.6
3	3	2.94	0.25	0.31	33.9	31.4	0.9	4.1
4	4	2.36	0.95	1.19	16.8	15.7	4.0	18.0
5	5	1.23	0.95	1.19	12.9	12.0	2.4	10.6
6	6	1.80	0.85	1.06	15.9	14.8	2.8	12.6
7	7	2.67	0.95	1.19	16.8	15.7	4.5	20.3
8	8	1.47	0.95	1.19	8.2	7.8	3.4	15.0
9	9	0.71	0.95	1.19	12.4	11.5	1.4	6.1
10	10	0.44	0.95	1.19	6.2	5.8	1.1	5.0
11	11	0.22	0.79	0.99	5.9	5.5	0.5	2.2
OS1	OS1	1.08	0.47	0.59	19.1	17.8	0.8	3.8

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811
Know what's **below.**
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

City of Fort Collins, Colorado
UTILITY PLAN APPROVAL

APPROVED: City Engineer Date
CHECKED BY: Water & Wastewater Utility Date
CHECKED BY: Stormwater Utility Date
CHECKED BY: Parks & Recreation Date
CHECKED BY: Traffic Engineer Date
CHECKED BY: Environmental Planner Date

No. Revisions: By: Date:

REVIEW SET
NOT FOR CONSTRUCTION
10/12/16

These drawings are instruments of service provided by Northern Engineering Services, Inc. and are not to be used for any type of construction unless signed and sealed by a Professional Engineer in the employ of Northern Engineering Services, Inc.

NORTHERN ENGINEERING
301 North Howes Street, Suite 100
Fort Collins, Colorado 80521
www.northernengineering.com
Phone: 970.221.4158

PROJECT: 1067-001
DATE: OCT 12, 2016
DESIGNED BY: A. Cvar
SCALE: 1"=60'
DRAWN BY: L. Seeber
REVIEWED BY: R. Curtiss

SALUD FAMILY HEALTH CENTER
DRAINAGE EXHIBIT

CEDAR CREEK ASSOCIATES, INC.
916 Willshire Ave., Fort Collins, CO 80521 • (970) 493-4394

August 26, 2015

Thomas Beck
TW Beck Architects
170 South St. Vrain Avenue
P.O. Box 57
Estes Park, CO 80517

RE: Ecological Characterization Study (ECS) Report for the Salud Family Health Center Project at the Former Forney Industries Site, 1830 West Laporte Avenue

Thomas:

This letter report documents the evaluation of habitat conditions at the proposed Salud Family Health Center (Salud) development parcel. The report was prepared in accordance with Section 3.4.1 of the Land Use Code of the City of Fort Collins regarding the preparation of an Ecological Characterization Study (ECS) Report. The proposed development site is located at the former Forney Industries property at 1830 West Larporte Avenue, Fort Collins, Colorado. The property location is shown on Figure 1.

The property addressed by this ECS report includes the entire 21.4-acre parcel formerly owned by Forney Industries. The proposed Salud Family Health Center would occur in Lots 1, 2, 4, which comprise 11.6 acres of the 21.4-acre parcel. The current development proposal calls for the construction of commercial buildings, roadways, parking areas and other supporting infrastructure.

Ecological characteristics of the property were reviewed during a field survey completed on August 19, 2015. The field survey was conducted to characterize existing wildlife habitats, as well as to identify any unique or sensitive natural resource features. The field survey did not include a delineation of wetland boundaries within the Larimer County Canal No. 2 since no changes are proposed for this irrigation feature. Natural Resources Conservation Service soils mapping was reviewed, however, to determine if any known hydric (wetland) soil mapping units are located on the property. Observations recorded during the field evaluation included: major vegetation communities / wildlife habitats present within the property; dominant vegetation associated with each community / habitat; unique habitat features; and observations of wildlife species and/or definitive sign. Photographs showing representative views of existing habitats were also taken to document site conditions. Wildlife presence and habitat use was based on on-site observations and habitat presence in conjunction with the known habitat requirements of potential wildlife species. Existing habitats were also evaluated regarding their ability to support populations of threatened, endangered, and other sensitive plant and wildlife species.

The following provides a summary of information required by Fort Collins Land Use Code under 3.4.1 (D) (1) items (a) through (k).

ECOLOGICAL STUDY CHARACTERIZATION CHECKLIST

(a & i) Five habitat/land use types were identified within the Salud project area. These were Developed, Grass/Alfalfa Hayfield, Non-native Grassland/Weedy, Riparian/Larimer County Canal No. 2, and Upland Woodland (see Figure 1). In addition, there are a number of tree groupings supported within each of these habitat/land use areas (see Figure 1).

Grass/Alfalfa Hayfield. This is the largest undeveloped habitat in the Salud project area. This area was historically converted from native grassland to non-native grass/hayfield and is managed and mowed for hay production. As a result this area has low ecological value and supports no natural habitat features. Dominant

vegetation species supported in this habitat are smooth brome (*Bromus inermis*)[1] and alfalfa (*Medicago sativa*). A variety of annual weeds are also present, with field bindweed (*Convolvulus arvensis*) and common dandelion (*Taraxacum officinale*) being the most prevalent. Woody species are restricted to a few Siberian elms (*Ulmus pumila*) along the fenceline boundary since current management practices preclude the establishment of shrubs or trees in mowed hayfield areas. More diverse woodlands are supported in the adjacent Upland Woodland and Riparian/Larimer Canal No. 2 habitat parcels. Photos 1 and 2 provide representative views of Grass/Alfalfa Hayfield and surrounding tree stands.

Although Grass/Alfalfa Hayfield represents undeveloped open space for wildlife, seasonal mowing and a lack of woody vegetation cover limits its value as wildlife habitat. Vegetation cover and food sources are present primarily on a short-term basis due to mowing and occasional cultivation. The primary value of Grass/Alfalfa Hayfield as wildlife habitat is that it contributes seasonal food sources for small mammals and avian species during the growing season prior to mowing. Mule deer and white-tailed deer also may occasionally forage in hayfield habitats when areas of adjacent suitable cover are available. Mice, voles, and pocket gophers as well as songbirds such as western meadowlark and horned lark are the only species likely to establish resident populations in hayfields and weedy edge areas. Songbirds including Brewer's blackbird, common grackle, and black-billed magpie also occasionally use Grass/Alfalfa Hayfield habitat. Open-country raptors such as red-tailed hawk, Swainson's hawk, American kestrel, northern harrier, and great horned owl as well as mammalian predators like coyote, striped skunk, and red fox sporadically hunt alfalfa hayfield habitats as well. Canada geese and mule deer may also occasionally graze in this habitat. There was no evidence of prairie dogs or prairie dog burrows observed on the property.

Non-native Grassland/Weedy. There are two types of Non-native Grassland/Weedy habitat within the Salud project area, mowed and un-mowed. Mowed areas are located within the developed portions of the property, while un-mowed areas exist outside of existing development. Both types have developed after the conversion of native grassland to areas dominated by non-native grasses and a variety of weedy species. Dominant grasses include smooth brome, crested wheatgrass (*Agropyron cristatum*), and Kentucky bluegrass (*Poa pratensis*). Common weed species recorded throughout both the mowed and un-mowed areas included field bindweed, kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), prostrate knotweed (*Polygonum aviculare*), leafy spurge (*Euphorbia esula*), cheatgrass (*Bromus tectorum*), Canada thistle (*Cirsium arvense*), curlycup gumweed (*Grindelia squarrosa*), common mallow (*Malva neglecta*), common dandelion, pitseed goosefoot (*Chenopodium berlandieri*), and horseweed (*Conyza canadensis*). Minor amounts of alfalfa are also present in the un-mowed areas. Photo 3 provides a view of un-mowed Non-native Grassland/Weedy Habitat, and Photo 4 shows mowed Non-native Grassland/Weedy Habitat.

Habitat value and wildlife use of Non-native Grassland/Weedy varies between the mowed and un-mowed areas. Mowed areas within the building sites have essentially no habitat value because of adjacent development and consistent mowing that removes any vegetation cover. Wildlife use of the un-mowed stands is similar to that described for Grass/Alfalfa Hayfield, except the lack of seasonal mowing results in additional vegetation cover and may result in more consistent use by species listed for Grass/Alfalfa Hayfield.

Riparian/Larimer County Canal No. 2, Upland Woodland and Tree Stands. As indicated on Figure 1, there are a number of areas supporting trees in the Salud project area. Each tree group is identified on Figure 1 by letter designations that correspond to the tree group descriptions in Table 1. Many of the trees are 6 inches in diameter or larger and may be classified by the City Forester as significant based on the Fort Collins Land Use Code. The City Forester or a private arborist will need to evaluate the health of these trees in order for their significance status to be determined. Two views of Riparian/Larimer County Canal No. 2 habitat are provided by Photos 5 and 6. Photo 1 provides a view of the north side of Tree Groups A and C and Photo 3 provides a view

[1] Scientific nomenclature for plants follows USDA, NRCS Plants Database. Available online at: http://plants.usda.gov/java/

Table 1*

Approximate Number of Trees and Their Size Range in the Salud Project Area

Species	Number	Size Range (dbh)	Comments
Tree Grouping A - Larimer County Canal No. 2			
Boxelder, *Acer negundo*	1	10” - 12”	multi-trunked; non-native
Common buckthorn, *Rhamnus cathartica*	several	< 3”	shrub-like; non-native
Crack willow, *Salix fragilis*	2	10” - 3’	multi-trunked; non-native
Eastern cottonwood, *Populus deltoides*	9	14” - 3’	native
Green ash, *Fraxinus pennsylvanica*	several	< 3”	shrub-like; non-native
Russian olive, *Elaeagnus angustifolia*	1	1” - 8”	multi-trunked; partially decadent; non-native
Siberian elm, *Ulmus pumila*	2	10” - 2’	1 partially decadent; non-native
White poplar, *Populus alba*	2	6”	non-native
Tree Grouping B			
Eastern cottonwood, *Populus deltoides*	3	1’ - 4’	1 partially decadent
Siberian elm, *Ulmus pumila*	1	6” - 14”	multi-trunked
Tree Grouping C			
American elm, *Ulmus americana*	1	<6”	non-native
American plum, *Prunus americana*	several	< 3”	native
Apple, *Malus* sp.	1	6”	non-native
Boxelder, *Acer negundo*	1	3” - 6”	multi-trunked
Common buckthorn, *Rhamnus cathartica*	several	< 3”	
Crack willow, *Salix fragilis*	3	6” - 12”	multi-trunked
Eastern cottonwood, *Populus deltoides*	5	12” - 2.5’	some multi-trunked
Green ash, *Fraxinus pennsylvanica*	several	< 3”	
Russian olive, *Elaeagnus angustifolia*	several	3” - 12”	
Siberian elm, *Ulmus pumila*	3	4” - 16”	
Tree Grouping D - Larimer County Canal No. 2			
American elm, *Ulmus americana*	1	10”	
Boxelder, *Acer negundo*	1	6”	
Crack willow, *Salix fragilis*	3	6” - 2’	multi-trunked
Eastern cottonwood, *Populus deltoides*	13	4” - 3’	1 multi-trunked
Russian olive, *Elaeagnus angustifolia*	1	14”	some multi-trunked
Siberian elm, *Ulmus pumila*	2	3” - 12”	1 partially decadent
White poplar, *Populus alba*	1	5”	
Tree Grouping E - Larimer County Canal No. 2			
Black Locust, *Robinia pseudoacacia*	9	3” - 12”	non-native
Boxelder, *Acer negundo*	3	5” - 12”	
Green ash, *Fraxinus pennsylvanica*	1	8”	
Siberian elm, *Ulmus pumila*	29	2” - 2’	
Tree Grouping F			
Siberian elm, *Ulmus pumila*	1	12”	
Tree Grouping G			
Siberian elm, *Ulmus pumila*	15	2” - 12”	some partially decadent; 1 dead; most multi-trunked

Table 1*

Approximate Number of Trees and Their Size Range in the Salud Project Area

Species	Number	Size Range (dbh)	Comments
Tree Grouping H			
Siberian elm, *Ulmus pumila*	1	5” - 10”	
Tree Grouping I			
Crack willow, *Salix fragilis*	4	4” - 2’	multi-trunked; 2 partially decadent
Netleaf hackberry, *Celtis reticulata*	1	6”	native
Siberian elm, *Ulmus pumila*	3	4” - 9”	1 multi-trunked & mostly decadent
Tree Grouping J - Trailer Park Landscape Trees			
Boxelder, *Acer negundo*			Trees inside trailer park fence; not counted or measured
Pines, *Pinus* sp.			
Russian olive, *Elaeagnus angustifolia*			
Tree Grouping K			
Boxelder, *Acer negundo*	17+	1” - 4”	most multi-trunked
Common buckthorn, *Rhamnus cathartica*	several	< 3”	shrub-like
Crack willow, *Salix fragilis*	8	3” - 6’	all multi-trunked; some partially decadent; 1 with nest cavity
Eastern cottonwood, *Populus deltoides*	1	6’	partially decadent
Netleaf hackberry, *Celtis reticulata*	3	2” - 4”	multi-trunked
Siberian elm, *Ulmus pumila*	11	3” - 4’	2 dead; some partially decadent
Tree Grouping L			
Green ash, *Fraxinus pennsylvanica*	5	3” - 8”	multi-trunked
Common buckthorn, *Rhamnus cathartica*	1	2”	
Siberian elm, *Ulmus pumila*	15	4” - 12”	some multi-trunked & partially decadent
Tree Grouping M			
Lanceleaf cottonwood, *Populus acuminata*	2	2.5’ - 3’	1 partially decadent; native
Siberian elm, *Ulmus pumila*	1	3’	
Tree Grouping N - Residential Landscape Trees			
Boxelder, *Acer negundo*			Trees inside fencing; not counted or measured
Eastern cottonwood, *Populus deltoides*			
Green ash, *Fraxinus pennsylvanica*			
Siberian elm, *Ulmus pumila*			
Tree Grouping O - Parking Lot & Residential Trees			
American elm, *Ulmus americana*	4	8” - 3.5’	
Austrian pine, *Pinus nigra*	1	6”	non-native
Blue spruce, *Picea pungens*	1	7”	native
Boxelder, *Acer negundo*	7	2” - 6”	multi-trunked
Green ash, *Fraxinus pennsylvanica*	2	6”	
Ornamental plum (Neptune?), *Prunus cerasifera(?)*	1	5”	non-native
Siberian elm, *Ulmus pumila*	13	8” - 18”	1 partially decadent
White poplar, *Populus alba*	3	6” - 5’	

*Tree group letter designations correspond to tree groups depicted on Figure 1.

of Tree Group J. Photos 4 and 7 provide views of the east side and the south end, respectively of Tree Group K.

The Riparian/Larimer County Canal No. 2 and connected Upland Woodland habitat areas (Tree Groups A, D, and E) create a continuous woodland riparian corridor associated with the Larimer County Canal No. 2. The Upland Woodland habitat parcel (Tree Group C) essentially creates an extension of riparian habitat into an upland area not supported by the Larimer County Canal No. 2. In the understory within these tree groupings, shrubs such as American plum, common buckthorn, and chokecherry (*Prunus virginiana*) provide additional habitat diversity, cover, and food sources for wildlife. Other tree stands listed in Table 1 also provide nesting and foraging habitat for a variety of bird species but surrounding development and mowed or limited understory plants in the other tree groupings, except for K and I, reduce their overall habitat value. Tree Groups K and I support greater woody species diversity and understory cover than Tree Groups B, F, G, H, J, L, M, N, and O but lack continuity with Tree Groups A, C, D, and E.

The Riparian/Larimer County Canal No. 2 and the connected Upland Woodland habitat areas are the most valuable and unique habitat features within or near the Salud project area. In terms of vegetation and wildlife species diversity, wildlife habitat value, and potential to support sensitive plant and wildlife species, riparian, wetland, and seasonal aquatic habitat along Larimer County Canal No. 2 represent the most important habitats within or near the project area. These habitats are limited in areal extent along the Front Range and are usually only found in association with perennial and intermittent drainages and other sources of surface water. Wetlands and associated seasonal open water habitats provide foraging, resting, and breeding habitat for some urban adapted species of waterfowl such as mallard and Canada goose. Wetlands with herbaceous and woody vegetation cover also support a variety of other wildlife populations including small mammals, mammalian predators, songbirds, reptiles, and amphibians. Larger trees and snags in riparian habitats provide important foraging and/or nesting habitat for woodpeckers, variety of songbirds, and urban adapted raptors such as red-tailed hawk and great horned owl.

The field survey located a large (~3-foot diameter) stick nest in the top of a large eastern cottonwood in Tree Group A (see Figure 1 and Photos 5 and 8). The nest was in good condition but unoccupied since the timing of the field survey was beyond the active nesting season of most raptors. However, based on the size and configuration of the nest and the fact that a red-tailed hawk vocalized and was flushed from Tree Group A, the nest was likely used by a pair of red-tailed hawks nest during the 2015 nesting season. The only other evidence of possible raptor nesting activity observed during the field survey was hole opening to a possible nest cavity in a large crack willow on the west side of Tree Group K. This cavity hole was of sufficient size to possibly support nesting by eastern screech owl. It could also be used for nesting by woodpeckers or songbird cavity nesters.

Wildlife species, other than red-tailed hawk, observed in woodland habitats during the project area field survey were mourning dove, broad-tailed hummingbird, northern flicker, blue jay, black-capped chickadee, and house finch. In addition to these sighting, employees at a business adjacent to Larimer County Canal No. 2 indicated they often see and hear a great horned owl using the riparian corridor.

(b) According to the Natural Resource Conservation Service (NRCS) soils mapping for the Salud project area (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx), the predominant soils in the project area are Fort Collins loam, Nunn clay loam, and Nunn clay loam, wet. Fort Collins loam and Nunn clay loam are not classified as wetland (hydric) soils by the NRCS, but Nunn clay loam, wet is classified as a hydric soil. The Nunn clay loam, wet soils-mapping unit is located in the north central portion of Grass/Alfalfa Hayfield habitat, but no evidence of wetland vegetation or hydrology was found in this area.

The only location where evidence of all three wetland parameters (hydric soils, wetland hydrology, and wetland vegetation), required by the U.S. Army Corps of Engineers (COE) for wetland determination, was found was within the embankments of Larimer County Canal No. 2. Wetlands along Larimer County Canal No. 2 in the project area are characterized by narrow (2 to 4 feet wide), linear stands of reed canarygrass (*Phalaris*

arundinacea) supported along the inner edge of the ditch banks. The wetland/upland boundary is defined by a relatively sharp transition in vegetation dominance from reed canarygrass in the wetlands to upland plants such as smooth brome at the top of the ditch banks. Wetlands along Larimer County Canal No. 2 were not delineated since development would not impact Larimer County Canal No. 2. Based on an estimated wetland width of 2 to 4 feet on both sides of the canal, wetlands within Larimer County Canal No. 2 in the Salud project area are well under 1/3 acre in size.

Section 3.4.1 of the City's Land Use Code stipulates a non-development buffer of 50 feet for wetlands of this size. Preliminary development plans for the Salud project call for a 50-foot setback from Larimer County Canal No. 2 which would satisfy the City's wetland buffer requirement except for the development of a planned community garden adjacent to the north side of the canal. The plans also call for the removal of existing buildings within the 50-foot buffer along the south side of Larimer County Canal No. 2. The buffer setback would preclude direct impacts to wetlands within Larimer County Canal No. 2, assuming the proposed Salud Parkway bridge crossing of Larimer County Canal No. 2 would span the entire canal. However, it is uncertain if a community garden meets City standards for development activities within a buffer zone.

(c) Western and northern portions of the Salud project area provide relatively unobstructed views of the Front Range foothills.

(d) As indicated under (a & i) the project area supports little native vegetation. Native herbaceous species are restricted primarily to a few annual weeds. Eastern cottonwood, lanceleaf cottonwood, netleaf hackberry, American plum, and chokecherry are the only native woody species found in the project area. All trees 6 inches (dbh) or larger may be classified as significant by the City Forester. Siberian elm and Russian olive, however, are classified as nuisance trees by the City of Fort Collins, but all trees provide some perching, foraging, and nesting habitat value for songbirds.

(e) There are no natural drainages on or near the project area. Larimer County Canal No. 2 is a constructed irrigation ditch that passes through the property.

(f) The property was evaluated with regards to potential habitat for state and federal listed threatened and endangered species. Wetlands along Larimer County Canal No. 2 were judged to be the only areas that could possibly provide suitable habitat for three federal listed threatened species, Preble's meadow jumping mouse (*Zapus hudsonius preblei*), Colorado butterfly plant (*Gaura neomexicana coloradensis*), and Ute ladies'-tresses orchid (*Spiranthes diluvialis*). An evaluation of their potential presence is provided in the following paragraphs.

Suitable habitat for the jumping mouse is provided by low undergrowth consisting of grasses, forbs, or both in open wet meadows and riparian corridors or where tall shrubs and low trees provide adequate cover. Potential habitat includes wet meadow habitats, native hayfields, stream channels (perennial and intermittent), riparian habitats, or floodplains below 7,600 feet elevation in Colorado. Saturated wetlands supporting dense stands of cattail or bulrush do not provide suitable habitat conditions for the jumping mouse (U.S. Fish and Wildlife Service 1999; Armstrong et al. 1997)[2]. Suitable habitat conditions were judged to be absent for Preble's meadow jumping mouse because of the very narrow extent of wetlands dominated by reed canarygrass and the adjacent presence of upland, non-native grassland and developed areas instead of moist native meadow.

The Colorado butterfly plant is a short-lived, perennial herb endemic to moist soils in mesic or wet meadows of floodplain areas in southeastern Wyoming, north-central Colorado, and extreme western Nebraska. This early to mid-seral stage species occurs primarily in habitats created and maintained by streams active within their

---

[2] Armstrong, D.M., M.E. Bakeman, N.W. Clippinger, A. Deans, M. Margulies, C.A. Meaney, C. Miller, M. O'Shea-Stone, T.R. Ryon, and M. Sanders. 1997. Report on habitat findings of the Preble's meadow jumping mouse. Edited by M.E. Bakeman. Report presented to the U.S. Fish and Wildlife Service and the Colorado Division of Wildlife. 91 pp.
U.S. Fish and Wildlife Service. 1999. Interim survey guidelines for Preble's meadow jumping mouse. U.S. Fish and Wildlife Service, May 19, 1999.

floodplains with vegetation that is relatively open and not overly dense or overgrown. It is found on subirrigated, alluvial soils of drainage bottoms surrounded by mixed grass prairie at elevations of 5,000 to 6,400 feet (Spackman et al., 1997, Federal Register, 1998)[3]. Populations of this species are often found in lowdepressions or along bends in wide, active, meandering stream channels a short distance upslope of the actual channel. The plant requires early to mid-seral riparian habitats. Typical habitat is relatively open without dense or overgrown vegetation. It commonly occurs in communities dominated by redtop (*Agrostis stolonifera*) and Kentucky bluegrass on wetter sites and by wild licorice (*Glycyrrhiza lepidota*), Flodman's thistle (*Cirsium flodmanii*), curlycup gumweed (*Grindelia squarrosa*), and smooth scouring rush (*Hippochaete laevigata*) on drier sites. These areas are usually intermediate in moisture between wet, streamside communities dominated by sedges, rushes, and cattails, and dry shortgrass prairie (Federal Register 1998). Suitable streamside habitats for Colorado butterfly plant are nonexistent within the project area.

Habitat for the Ute ladies'-tresses orchid typically consists of seasonally moist soils and wet meadows near lakes, springs, or perennial streams and their associated floodplains below 6,500 feet. Associated vegetation species typically include those with a "FACW" Corps of Engineers classification (*Equisetum, Asclepias, Calamagrostis, Solidago*, etc. genera) occurring in relatively open and not overly dense, overgrown, or over-grazed areas. This species prefers comparatively well-drained, high moisture content wetland soils that are not strongly anaerobic or composed of heavy clays. Conversely, sites consisting entirely of dense stands of reed canarygrass, those characterized by standing water including monocultures of cattails or three-square, dense clayey soils, or highly saline soils supporting a dense community of inland saltgrass (*Distichlis stricta*) are not considered to be habitat for this species (U. S. Fish and Wildlife Service memorandum: Plants - *Spiranthes diluvialis*, Ute ladies'-tresses orchid, dated November 23, 1992). Wetlands supported along Larimer County Canal No. 2 are comprised primarily of dense stands of reed canarygrass that do not create suitable habitat conditions for Ute ladies'-tresses orchid.

(g) Past removal of native habitat has eliminated the potential for any special habitat features on the property other than significant trees and riparian habitat along and adjacent to Larimer County Canal No. 2. The raptor nest in Tree Group A also qualifies as a special habitat feature as well as Larimer County Canal No. 2 serving as a potential wildlife movement corridor.

(h) Larimer County Canal No. 2 could provide a wildlife movement corridor for a variety of wildlife species that would not be found in areas of urban development, and is the only wildlife movement corridor within 500 feet of the project area. This canal originates at the Cache la Poudre (Poudre) River west of Cache la Poudre Junior High School and passes through relatively undeveloped land until reaching the Salud project area. South of the Salud project area, the canal passes through mostly developed sites until it drains into Warren Lake Reservoir or Mail Creek. Its value as a movement corridor south of the project area is restricted by numerous road crossings and underground segments. Larger mammals such as coyote, striped skunk, red fox, mule deer, and white-tailed deer may occasionally move along the Larimer County Canal No. 2 corridor and hunt or forage in undeveloped habitats in the Salud project area but its primary value as a movement corridor is for songbirds, urban-adapted waterbirds, and small mammals.

Section 3.4.1 of the City's Land Use Code stipulates a non-development buffer of 50 feet for irrigation ditches that serve as wildlife movement corridor. Preliminary development plans for the Salud project call for a 50-foot setback from Larimer County Canal No. 2 except for the development of a community garden. The setback requirement is based on a distance measured from the top of the ditch banks. The plans also call for the removal of existing buildings within the 50-foot buffer along the south side of Larimer County Canal No. 2. The buffer setback would maintain Larimer County Canal No. 2 as a wildlife movement corridor. However, the

---

[3] Federal Register. 1998. Endangered and threatened wildlife and plants: proposed threatened status for the plant, *Gaura neomexicana* ssp. *coloradensis*. Federal Register: March 24, 1998 (Volume 63, Number 56) pp.14060-14065.
Spackman, S., B. Jennings, J. Coles, C. Dawson, M. Minton, A. Kratz, and C. Spurrier. 1997. Colorado rare plant field guide. Prepared for the Bureau of Land Management, the U.S. Forest Service, and the U.S. Fish and Wildlife Service by the Colorado Natural Heritage Program, Fort Collins, Colorado.

proposed Salud Parkway bridge crossing of Larimer County Canal No. 2 may have relatively minor effects on the continuity of the corridor within the project area. This conclusion is based on the current presence of two existing road crossings of the ditch within the project area. It is uncertain if a community garden meets City standards for development activities within a buffer zone, but a community garden is unlikely to have an effect on wildlife movement unless the garden is fenced.

(j) There is one issue regarding the timing of property development and ecological features or wildlife use of the project area. If the development proposal includes removal of any trees on the property or if construction occurs near an occupied bird nest during the raptor and songbird nesting season (February through July), these activities could result in the loss or abandonment of a nest and would be in violation of the federal Migratory Bird Treaty Act. Section 3.4.1 of the City's Land Use Code stipulates the following regarding red-tailed and Swainson's hawk nest sites.

(a) No tree with an active nest shall be removed unless a permit for such removal has been obtained by the developer from the United States Fish and Wildlife Service.

(b) To the extent reasonably feasible, trees that are known to have served as nest sites shall not be removed within five (5) years of the last known nesting period. If the tree is removed, it shall be mitigated in accordance with Section 3.2.1, Landscaping and Tree Protection Standards.

(c) A temporary limit of development (LOD) of a four-hundred-fifty-foot radius shall be established for Red-tailed and Swainson's hawk active nest sites during the period from February 15 through July 15 of the first year of a multi-year development construction project.

(k) Since the majority of the property proposed for development has been converted to development, Non-native Grassland/Weedy, and Grass/Alfalfa Hayfield habitats, project development would have little impact on natural habitats or important habitat features, other than existing trees on the property. Preliminary development plans indicate that trees in Tree Groupings F, G, N, and O would need to be removed for building and road development. Some trees in Group E along the north side of Larimer County Canal No. 2 would also likely be removed for development of the community garden. Trees determined to be significant on the property should be preserved to the extent possible. Removal of any trees classified as significant would need to be mitigated with replacement trees, as determined by the City Forester based on the Land Use Code. Additional mitigation plantings would also need to be made for loss of non-significant and nuisance trees providing wildlife habitat value.

Since tree removal or construction near trees during the nesting season could result in the loss or abandonment of a nest, it is recommended that tree removal or construction near raptor or songbird nests occur outside of the nesting season (February 15 – July 31), or trees on or near the project area be surveyed to ensure lack of nesting prior to removal or construction activities during the nesting season. This mitigation recommendation would preclude the possible incidental take or disturbance of occupied nests. City required stipulations for protection of the possible red-tail hawk nest and nest tree would also apply to protect nesting by this species.

Current development plans indicate a development setback of 50 feet would be maintained from Larimer County Canal No. 2 except for a community garden. Currently much of the buffer area has been adversely impacted by development and/or landscaping associated with development. It is recommended that additional plantings with native shrubs and herbaceous species be completed within these previously disturbed areas and building envelopes within the buffer to enhance habitat diversity within the buffer zone and provide additional vegetation screening between Larimer County Canal No. 2 and proposed development. Any additional plantings would need to be in compliance with the ditch companies' maintenance requirements for Larimer County Canal No. 2.

One final mitigation recommendation is based on Article 3.2.4(D)(6) in the City of Fort Collins Land Use Code that requires protection of natural areas and natural features from light spillage from off site sources. Therefore, intensity of night lighting from the sides of structures facing the Larimer County Canal No. 2 buffer zone should

be shielded or directed to preclude the intrusion of artificial nighttime light into the landscaped buffer zone and adjacent Larimer County Canal No. 2 corridor.

This concludes Cedar Creek Associates, Inc.'s evaluation of the Salud project area. If you have any questions or require additional information regarding my evaluation, please give me a call.

Sincerely,
CEDAR CREEK ASSOCIATES, INC.

T. Michael Phelan
Principal
Senior Wildlife Biologist

attachments: Photos 1-8
Figure 1, *Habitat Mapping for the Salud Family Health Center Project Area*

Photo 1. View of Grass/Alfalfa Hayfield Habitat. View is looking south from near the northwest corner of the project area.)

Photo 2. Another View of Grass/Alfalfa Hayfield Habitat. (View is looking west from east-central edge of Grass/Alfalfa Hayfield Habitat.)

Photo 3. View of Un-mowed Non-native Grassland/Weedy Habitat. (View is from north edge of project area looking south.)

Photo 4. View of Mowed Non-native Grassland/Weedy Habitat. (View is from near southeast corner of project area looking north.)

Photo 5. View of Riparian/Larimer County Canal No. 2 Habitat. (View is from the east edge of Tree Group A looking southwest.)

Photo 6. Another View of Riparian/Larimer County Canal No. 2 Habitat in Developed Portion of the Project Area. (View is looking northwest from east end of Tree Group E

Photo 7. View of East Side of Tree Group K. (View is looking northwest from eastern edge of project area.)

Photo 8. View of Raptor Stick Nest (likely red-tailed hawk nest) in Large Eastern Cottonwood. (Nest site is in Tree Group A. See Figure 1 and Photo 5.)

CEDAR CREEK ASSOCIATES, INC.
916 Willshire Ave., Fort Collins, CO 80521 • (970) 493-4394

FIGURE 1
Habitat Mapping for the Salud Family Health Center Project Area

N
W E
S

100 m
400 ft

Grass/Alfalfa Hayfield

Non-native Grassland/ Weedy

Upland Woodland

Riparian/Larimer County Canal No. 2

Raptor Nest (possible red-tailed hawk)

Developed

Landscape Trees

Non-native Grassland/ Weedy (mowed)

Non-native Grassland/ Weedy

Riparian/Larimer County Canal No. 2

Developed

Laporte Avenue

A B C D E F G H I J K L M N O

Project Area Boundary

Habitat Boundary

A Tree Group Boundary (letter corresponds to tree group descriptions in Table 1.)

Aerial Photo Source: Larimer County Landscape & Imagery Explorer - 2012 Aerial Imagery

SALUD FAMILY HEALTH
TRANSPORTATION IMPACT STUDY

FORT COLLINS, COLORADO

OCTOBER 2015

Prepared for:

Salud Family Health Centers
203 S. Rollie Avenue
Fort Lupton, CO 80621

Prepared by:

DELICH ASSOCIATES
2272 Glen Haven Drive
Loveland, CO 80538
Phone: 970-669-2061
FAX: 970-669-5034

Project #1565

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

I. INTRODUCTION

This transportation impact study (TIS) addresses the capacity, geometric, and control requirements at and near the proposed Salud Family Health facility. The proposed Salud Family Health facility is located north of Laporte Avenue, approximately 1500 feet east of Taft Hill Road in Fort Collins, Colorado. This development will be submitted as an Overall Development Plan (ODP) for the entire property and a Project Development Plan (PDP) for the Salud Family Health facility. The ODP will be submitted initially and is addressed in the long range analysis in this TIS. The PDP will be submitted a month or so later and is addressed in the short range analysis in this TIS.

During the course of the analysis, numerous contacts were made with the project planner (Ripley Design Inc.), the project architect (TW Beck), and the Fort Collins Traffic Engineering staff. This study generally conforms to the format set forth in the Fort Collins transportation impact study guidelines contained in the "Larimer County Urban Area Street Standards" (LCUASS). Appendix A contains the Transportation Impact Study Base Assumptions form and related attachments for the Salud Family Health facility. The study involved the following steps:

- Collect physical, traffic, and development data;
- Perform trip generation, trip distribution, and trip assignment;
- Determine peak hour traffic volumes;
- Conduct capacity and operational level of service analyses on key intersections;
- Analyze signal warrants;
- Conduct level of service evaluation of pedestrian, bicycle, and transit modes of transportation.

II. EXISTING CONDITIONS

The location of the Salud Family Health facility is shown in Figure 1. It is important that a thorough understanding of the existing conditions be presented.

Land Use

There are several existing buildings on the Salud Family Health site. The Salud Family Health facility will occupy one of these existing buildings. Another building is an existing bicycle manufacturing facility. Land uses in the area are primarily commercial and residential. There are residential uses to the east, west, and south of the site. There are commercial uses adjacent to the site. The center of Fort Collins lies to the southeast of the proposed Salud Family Health facility site. Land adjacent to the site is flat (<2% grade) from a traffic operations perspective.

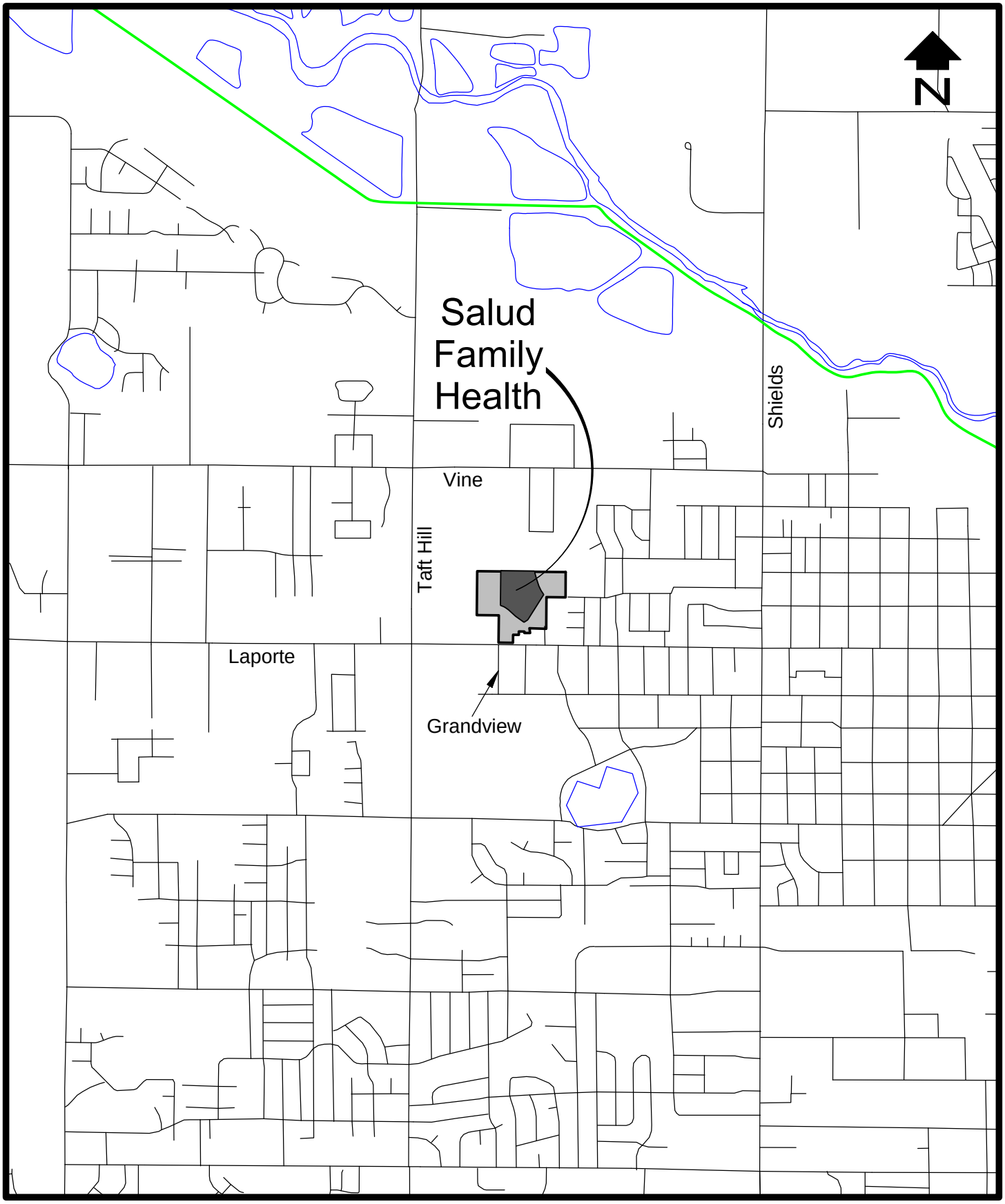
Roads

The primary arterial streets near the Salud Family Health facility site are Laporte Avenue and Taft Hill Road. Grandview Avenue is a local street to the south. The existing geometry at the key intersections is shown in Figure 2.

Laporte Avenue is to the south of the proposed Salud Family Health facility site. It is an east-west street classified as a two-lane arterial according to the Fort Collins Master Street plan. Currently, Laporte Avenue has a two-lane cross section with no center median lane. At the Taft Hill/Laporte intersection, Laporte Avenue has eastbound and westbound left-turn lanes, a through lane in each direction, and eastbound and westbound right-turn lanes. The Taft Hill/Laporte intersection has signal control. At the Laporte/Grandview-Driveway intersection, Laporte Avenue has all eastbound and westbound movements combined in single lanes. The Laporte/ Grandview-Driveway intersection has stop sign control on Grandview Avenue and the Driveway. The posted speed limit in this area of Laporte Avenue is 30 mph. It is important to note that, as an arterial street, Laporte Avenue is required to have a center (left-turn) median lane.

Taft Hill Road is to the west of the proposed Salud Family Health facility site. It is a north-south street classified as a four-lane arterial according to the Fort Collins Master Street Plan. Recently, Taft Hill Road was restriped to provide one through lane in each direction and a center median lane, south of Laporte Avenue. At the Taft Hill/Laporte intersection, Taft Hill Road has northbound and southbound left-turn lanes, one through lane in each direction, and northbound and southbound right-turn lanes. The posted speed limit in this area of Taft Hill Road is 35 mph.

Grandview Avenue is a local street that serves the neighborhood to the south. It lines up with a driveway that serves an apartment complex to the west of the Salud Family Health facility site.

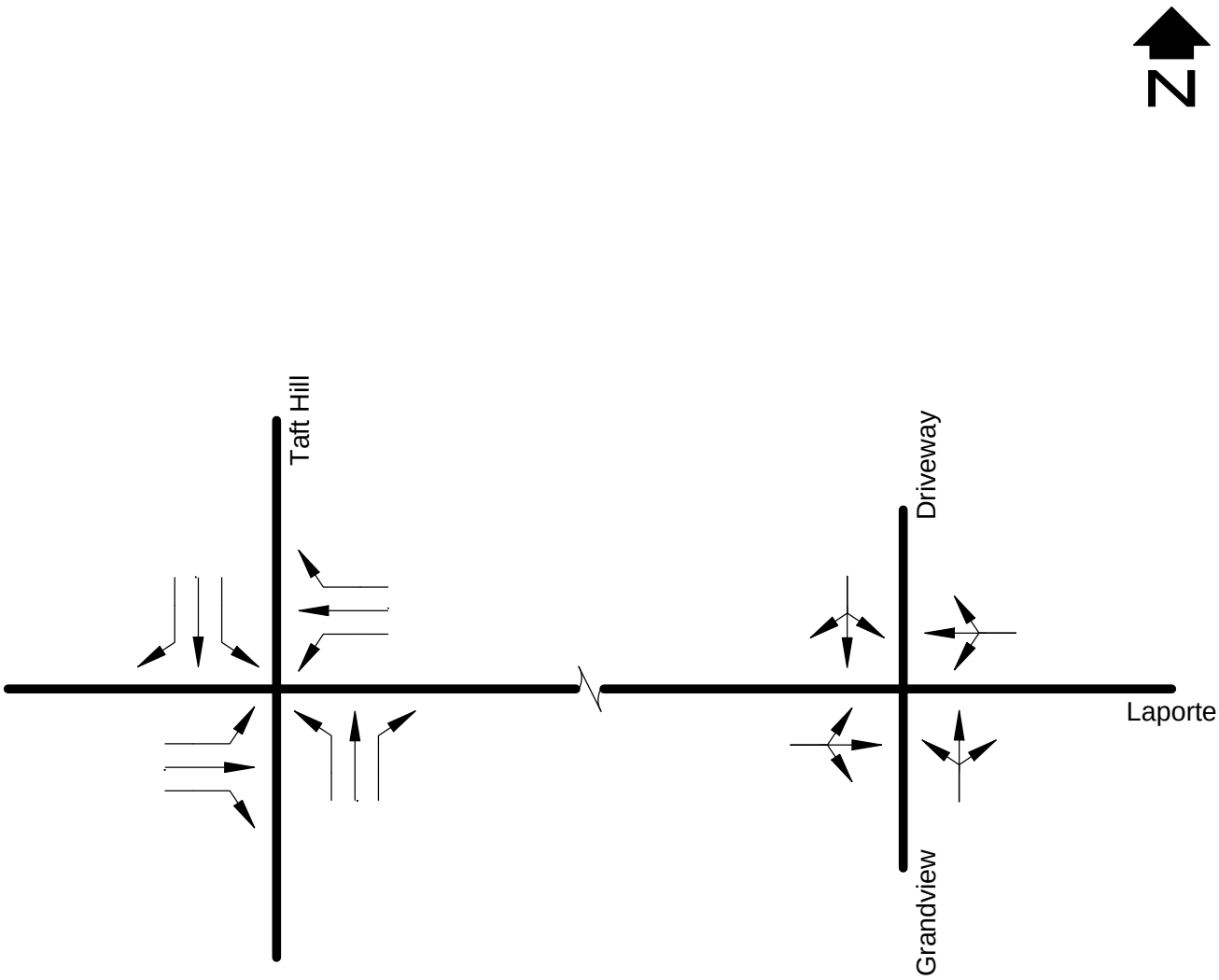


SCALE: 1"=2000'

SITE LOCATION

Figure 1

DELICH ASSOCIATES



EXISTING INTERSECTION GEOMETRY Figure 2

Existing Traffic

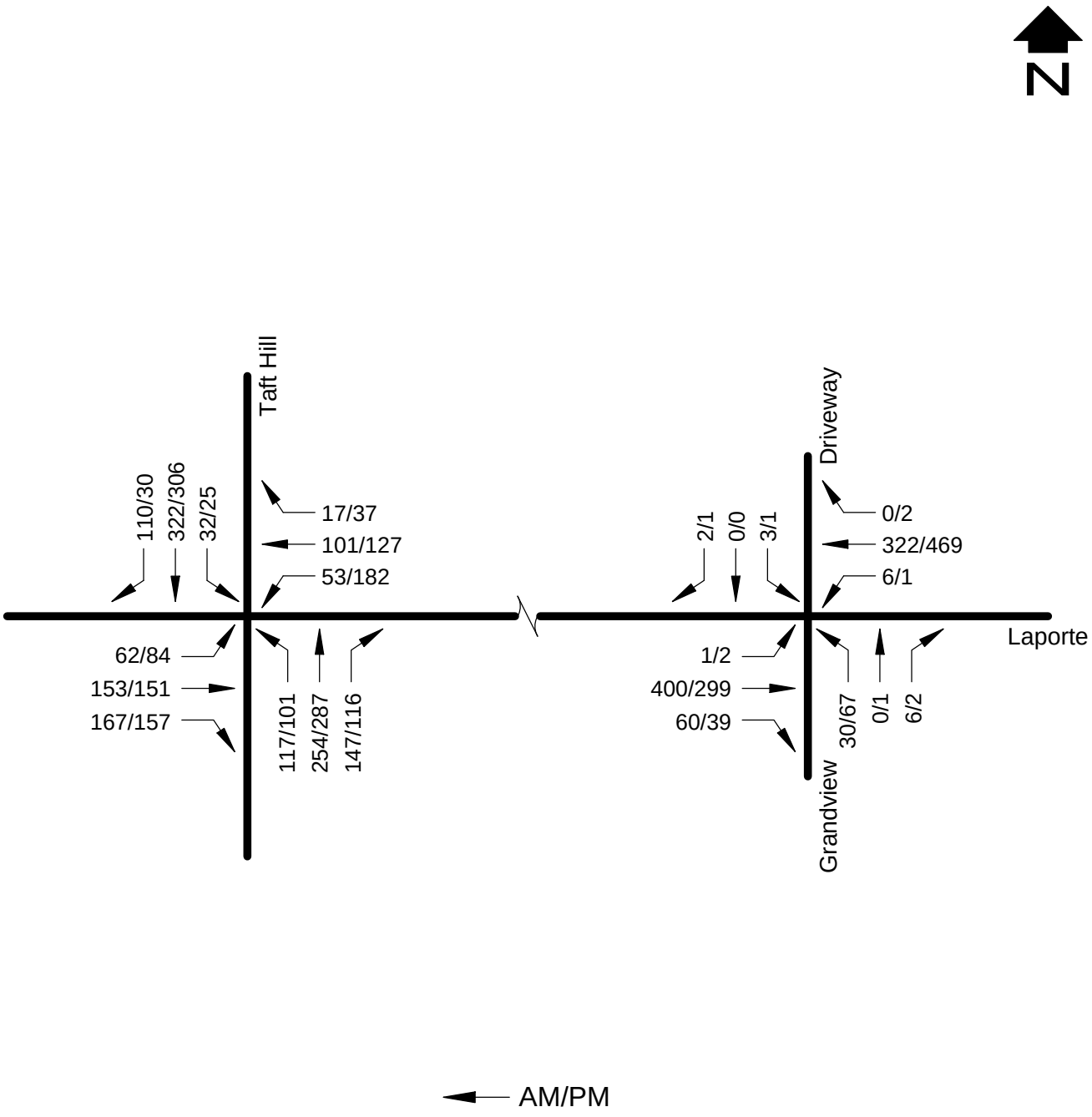
Figure 3 shows recent peak hour traffic counts at the Taft Hill/Laporte and Laporte/Grandview-Driveway intersections. The traffic counts at the Taft Hill/Laporte intersection were obtained in August 2014 by the City of Fort Collins. The traffic count at the Laporte/Grandview-Driveway intersection was obtained in September 2015. Raw traffic count data are provided in Appendix B. Since the counts were done on different days, the counts were adjusted/balanced. The adjusted/balanced recent peak hour traffic is shown in Figure 4.

Existing Operation

The Taft Hill/Laporte and Laporte/Grandview-Driveway intersections were evaluated using techniques provided in the 2010 Highway Capacity Manual. Calculation forms are provided in Appendix C. Using the morning and afternoon peak hour traffic shown in Figure 4, the peak hour operation at the key intersections is shown in Table 1. The Taft Hill/Laporte and Laporte/Grandview-Driveway intersections will meet the City of Fort Collins Motor Vehicle LOS Standard during in the morning and afternoon peak hours. A description of level of service for signalized and unsignalized intersections from the 2010 Highway Capacity Manual is provided in Appendix C. Table 4-3 (revised per staff comments regarding type of intersection) showing the Fort Collins Motor Vehicle LOS Standards (Intersections) are also provided in Appendix C. This site is in an area termed “low density mixed use” on the Fort Collins Structure Plan. In areas termed “low density mixed use,” acceptable overall operation at signalized intersections during the peak hours is defined as level of service D or better. At signalized intersections, acceptable operation of any leg and any movement is level of service D. At arterial/arterial and arterial/collector or local stop sign controlled intersections, acceptable operation is considered to be at level of service F for any approach leg. At collector/local stop sign controlled intersections, acceptable operation is considered to be at level of service C for any approach leg.

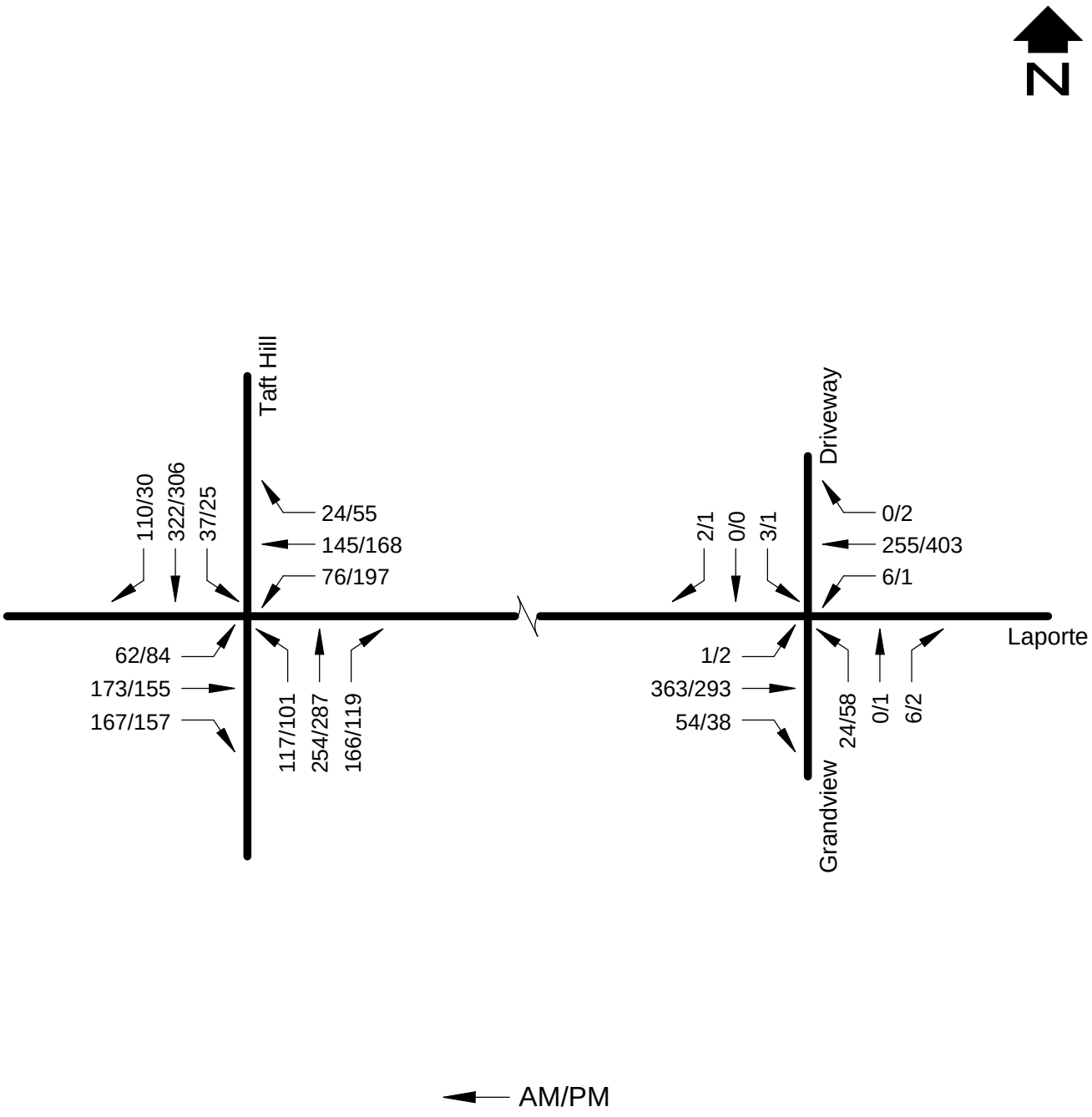
Pedestrian Facilities

There are sidewalks along both sides of Taft Hill Road, south Laporte Avenue. There are sidewalks missing along sections of Taft Hill Road, north of Laporte Avenue. Generally, there are sidewalks along Laporte Avenue adjacent to most developed properties. However, there are some gaps in the sidewalk system along Laporte Avenue. It is expected that as properties in this area are developed or redeveloped, sidewalks will be installed as part of the street/property infrastructure.



RECENT PEAK HOUR TRAFFIC

Figure 3



BALANCED RECENT PEAK HOUR TRAFFIC Figure 4

Bicycle Facilities

Bicycle lanes exist along Taft Hill Road within the study area. There are bicycle lanes on Laporte Avenue west of Bryan Avenue. East of Bryan Avenue, Laporte Avenue is considered a "Shared Roadway/Bike Route."

Transit Facilities

Currently, this area of Fort Collins is served by Transfort routes 9, 10, 91, and 92.

TABLE 1
Current Peak Hour Operation

Intersection	Movement	Level of Service	
		AM	PM
Taft Hill/Laporte (signal)	EB LT	C	C
	EB T	D	D
	EB RT	C	D
	EB APPROACH	D	D
	WB LT	C	D
	WB T	D	D
	WB RT	A	A
	WB APPROACH	C	D
	NB LT	A	A
	NB T	A	A
	NB RT	A	A
	NB APPROACH	A	A
	SB LT	B	B
	SB T	B	B
	SB RT	B	A
	SB APPROACH	B	B
	OVERALL	B	C
Laporte/Grandview-Driveway (stop sign)	NB LT/T/RT	C	C
	SB LT/T/RT	B	B
	EB LT/T/RT	A	A
	WB LT/T/RT	A	A

III. PROPOSED DEVELOPMENT

The Salud Family Health facility is a proposed medical office/clinic with commercial and residential uses on adjacent lots. Figure 5 shows a site plan of the Salud Family Health facility. The Salud Family Health facility is proposed as 38,500 square feet of medical office/clinic. The other lots will include: 10,000 square feet of retail, 20,000 square feet of general office, 9,564 square feet of industrial, and 50 single family dwelling units. The short range analysis (Year 2020) includes development of the Salud Family Health facility only and an appropriate increase in background traffic, due to normal growth, and other approved or expected developments in the area. The land uses on the other lots will be included in the long range (2035) traffic projections. Primary access to the Salud Family Health facility will be via a full-movement access (Salud Parkway) to/from Laporte Avenue. This access (Salud Parkway) will run through the site and eventually connect with Maple Street. However, this connection will not be made in the short range (2020) future.

Trip Generation

Trip generation is important in considering the impact of a development such as this upon the existing and proposed street system. A compilation of trip generation information contained in Trip Generation, 9th Edition, ITE was used to estimate trips that would be generated by the land uses on this site. A trip is defined as a one-way vehicle movement from origin to destination. Table 2 shows the expected trip generation for the Salud Family Health facility and other land uses on a daily and peak hour basis. The trip generation for the Salud Family Health facility only (short range (2020) future) resulted in 1360 daily trip ends, 92 morning peak hour trip ends, and 123 afternoon peak hour trip ends. The trip generation for full development of the entire Salud Family Health site resulted in 2566 daily trip ends, 185 morning peak hour trip ends, and 239 afternoon peak hour trip ends.

Trip Distribution

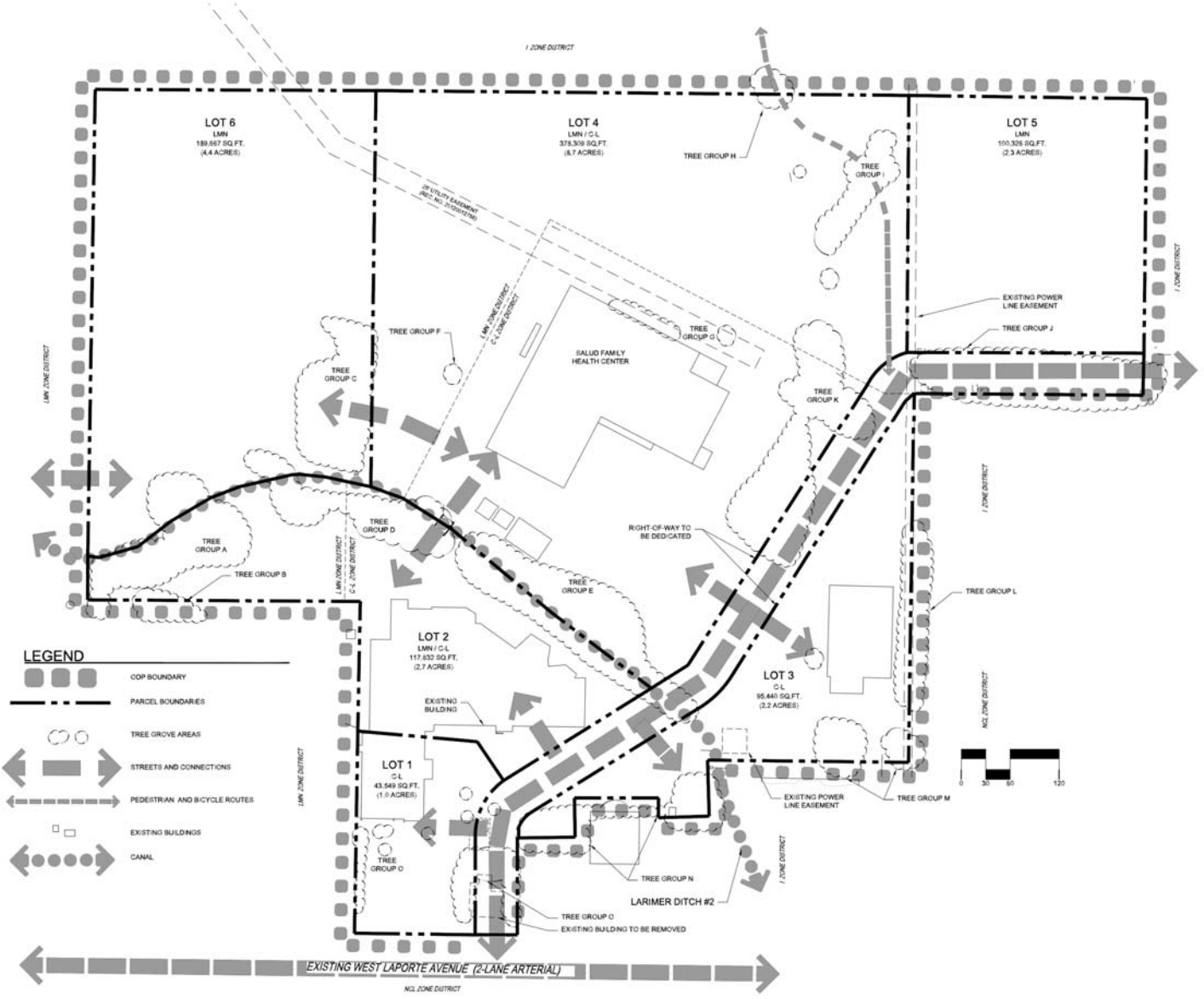
Trip distribution for the Salud Family Health facility was based on existing/future travel patterns, land uses in the area, consideration of trip attractions/productions in the area, and engineering judgment. Figure 6 shows the trip distribution for the short range (2020) and long range (2035) analysis futures. The trip distribution was agreed to by City of Fort Collins staff in the scoping emails.

Background Traffic Projections

Figures 7 and 8 show the respective short range (2020) and long range (2035) background traffic projections. The short range (2020) background traffic was developed by increasing the existing traffic counts by two percent per year. The

N

SCALE: 1"=200'

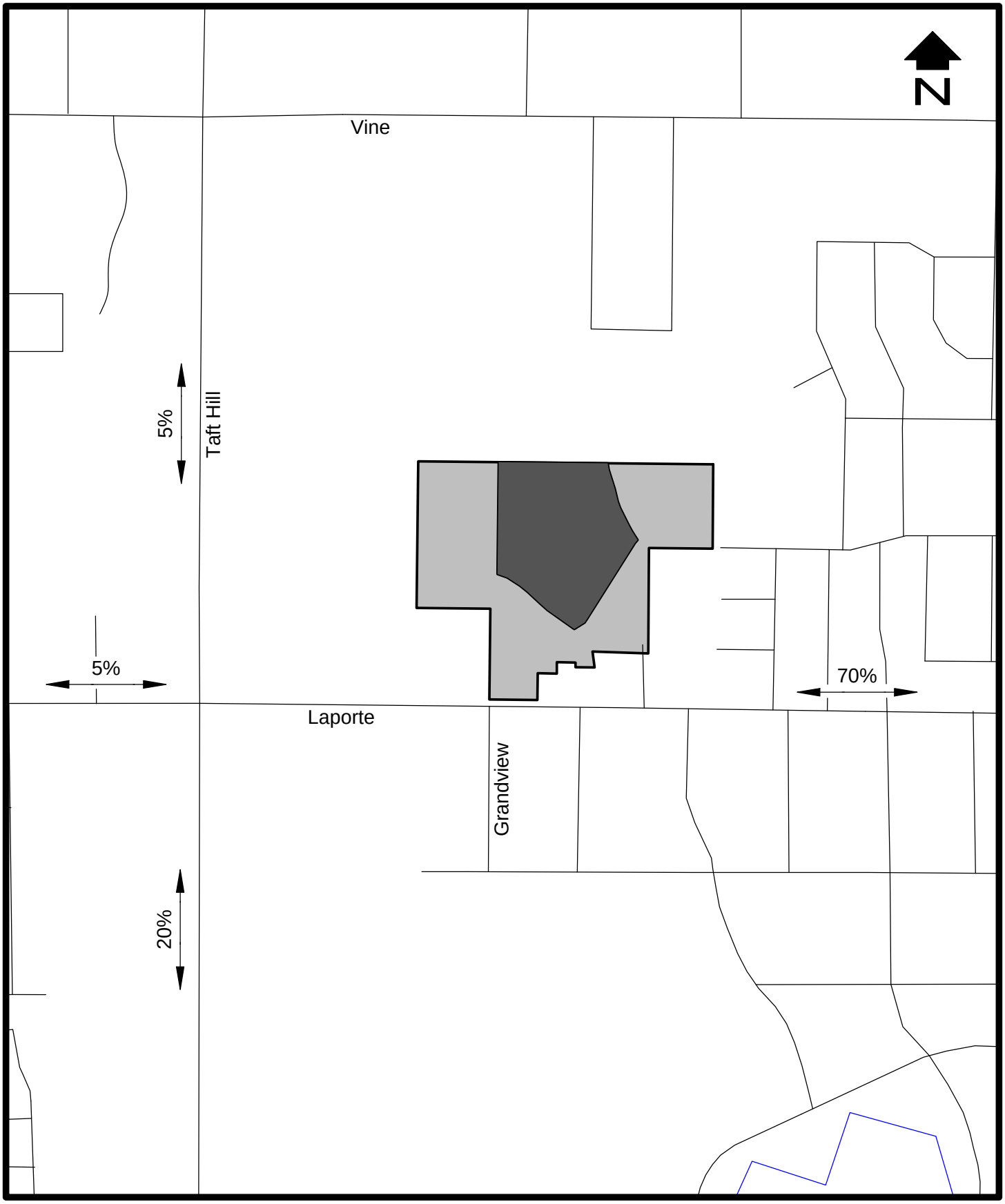


SITE PLAN

Figure 5

TABLE 2
Trip Generation

Code	Use	Size	AWDTE		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	In	Rate	Out	Rate	In	Rate	Out
PDP (Short Range)												
720	Medical/Dental Office	38.5 KSF	EQ	1360	1.89	73	0.50	19	EQ	34	EQ	89
Long Range												
Lot 1												
826	Specialty Retail	10.0 KSF	44.32	444	0.76	8	0.60	6	1.19	12	1.52	15
710	General Office	10.0 KSF	11.03	110	1.37	14	0.19	2	0.25	3	1.24	12
Lot 2												
710	General Office	10.0 KSF	11.03	110	1.37	14	0.19	2	0.25	3	1.24	12
Lot 3												
110	Light Industrial	9.564 KSF	6.97	66	0.81	8	0.11	1	0.12	1	0.85	8
Lots 5 & 6												
210	Single Family	50 D.U.	9.52	476	0.19	10	0.56	28	0.63	32	0.37	18
Long Range Subtotal				1206		54		39		51		65
Total				2566		127		58		85		154

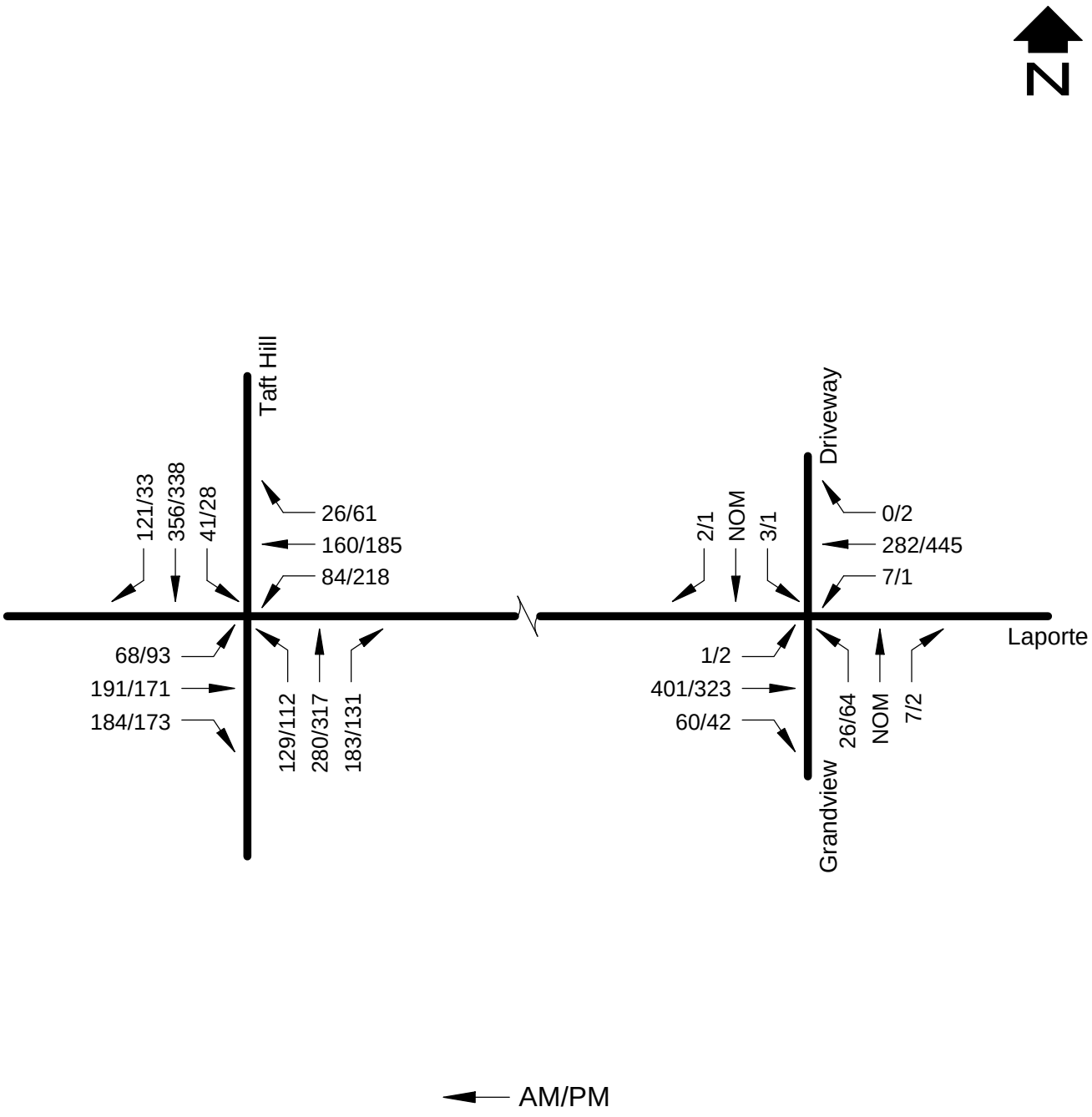


SCALE: 1"=600'

TRIP DISTRIBUTION

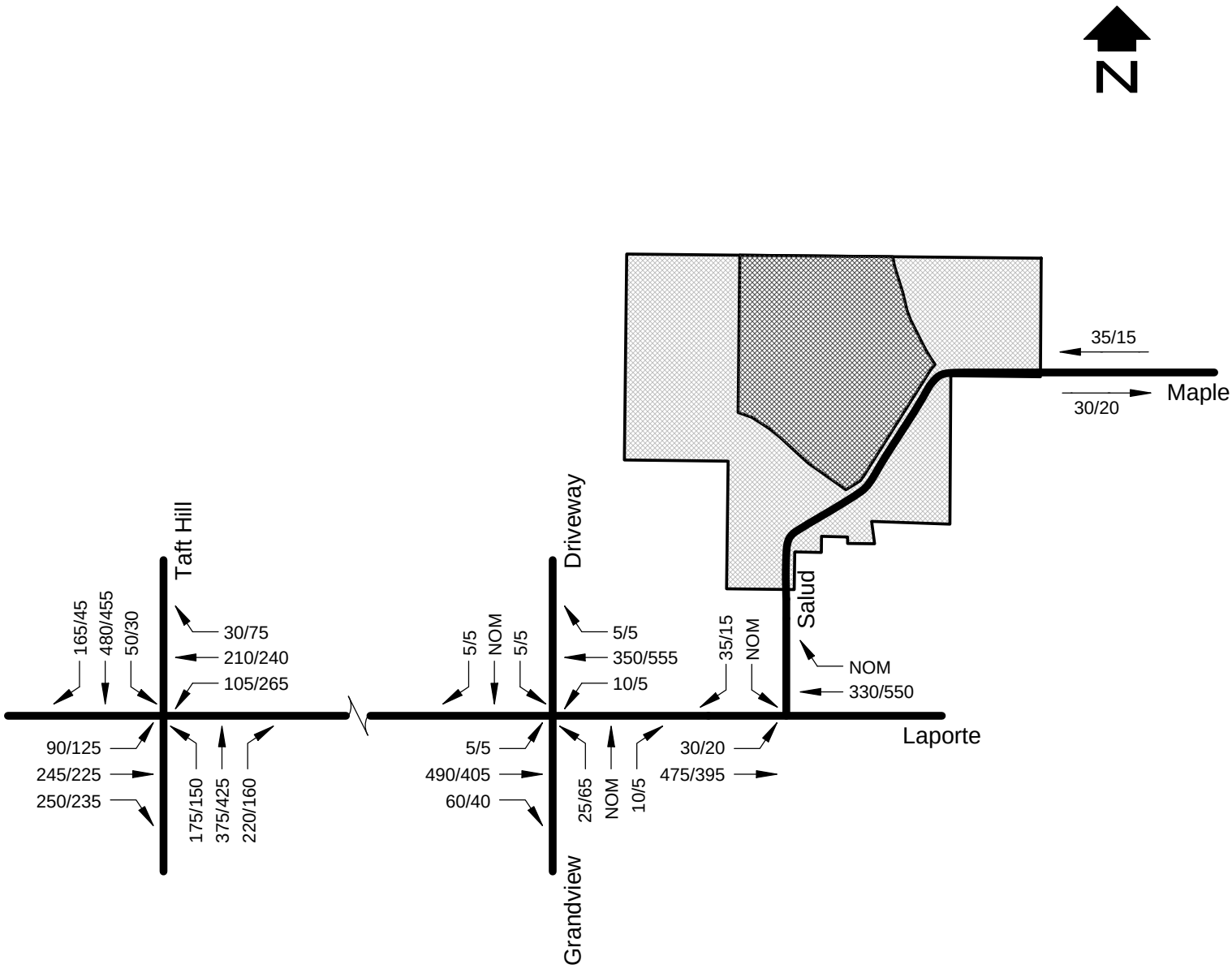
Figure 6

DELICH ASSOCIATES



SHORT RANGE (2020) BACKGROUND
PEAK HOUR TRAFFIC

Figure 7



LONG RANGE (2035) BACKGROUND PEAK HOUR TRAFFIC

Figure 8

background traffic growth was agreed to by City of Fort Collins staff in the scoping emails. In the long range (2035) future, it was assumed that Maple Street would be extended and connected to Salud Parkway. Due to the condition of the streets to the east and the circuitous route, it is not likely that much site generated traffic would use the Maple Street connection. However, it is likely that the neighborhood to the east would utilize this connection in the future.

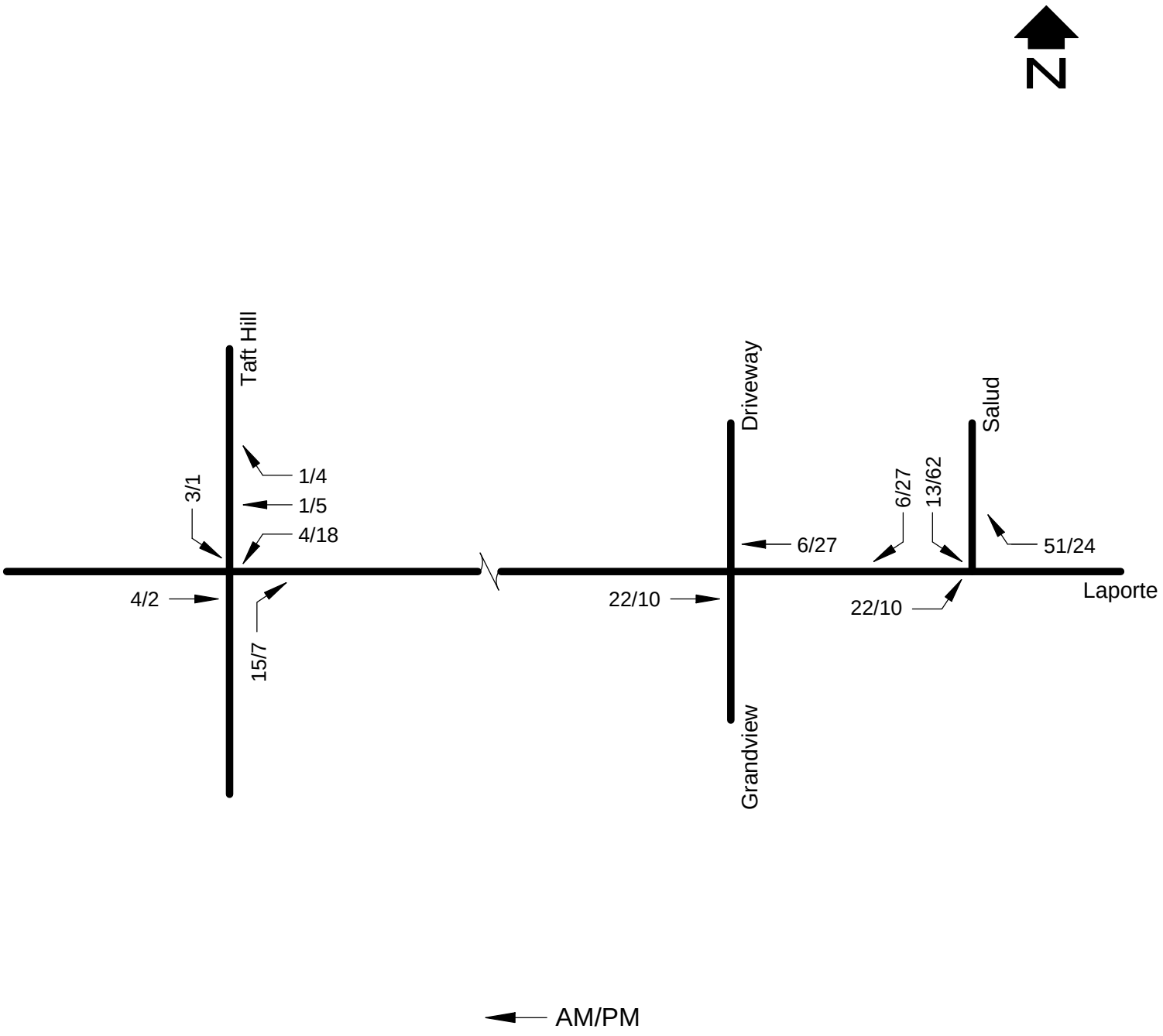
Trip Assignment

Trip assignment is how the generated and distributed trips are expected to be loaded on the street system. The assigned trips are the resultant of the trip distribution process. Using the trip distribution shown in Figure 6, Figure 9 shows the short range (2020) assignment of the site generated peak hour vehicle traffic for the Salud Family Health facility only. Maple Street is not expected to be connected through the site in the short range (2020) future. Therefore, sole public access will only be via the access to Laporte Avenue. Initially, any connection to Maple Street, to the east, would be an emergency vehicle access. Figure 10 shows the full development (long range) site generated peak hour traffic assignment. The site generated vehicle traffic was combined with the background traffic to determine the total forecasted vehicle traffic at the key intersections. Figures 11 and 12 show the respective short range (2020) and long range (2035) total (site plus background) peak hour traffic assignment.

Signal Warrants

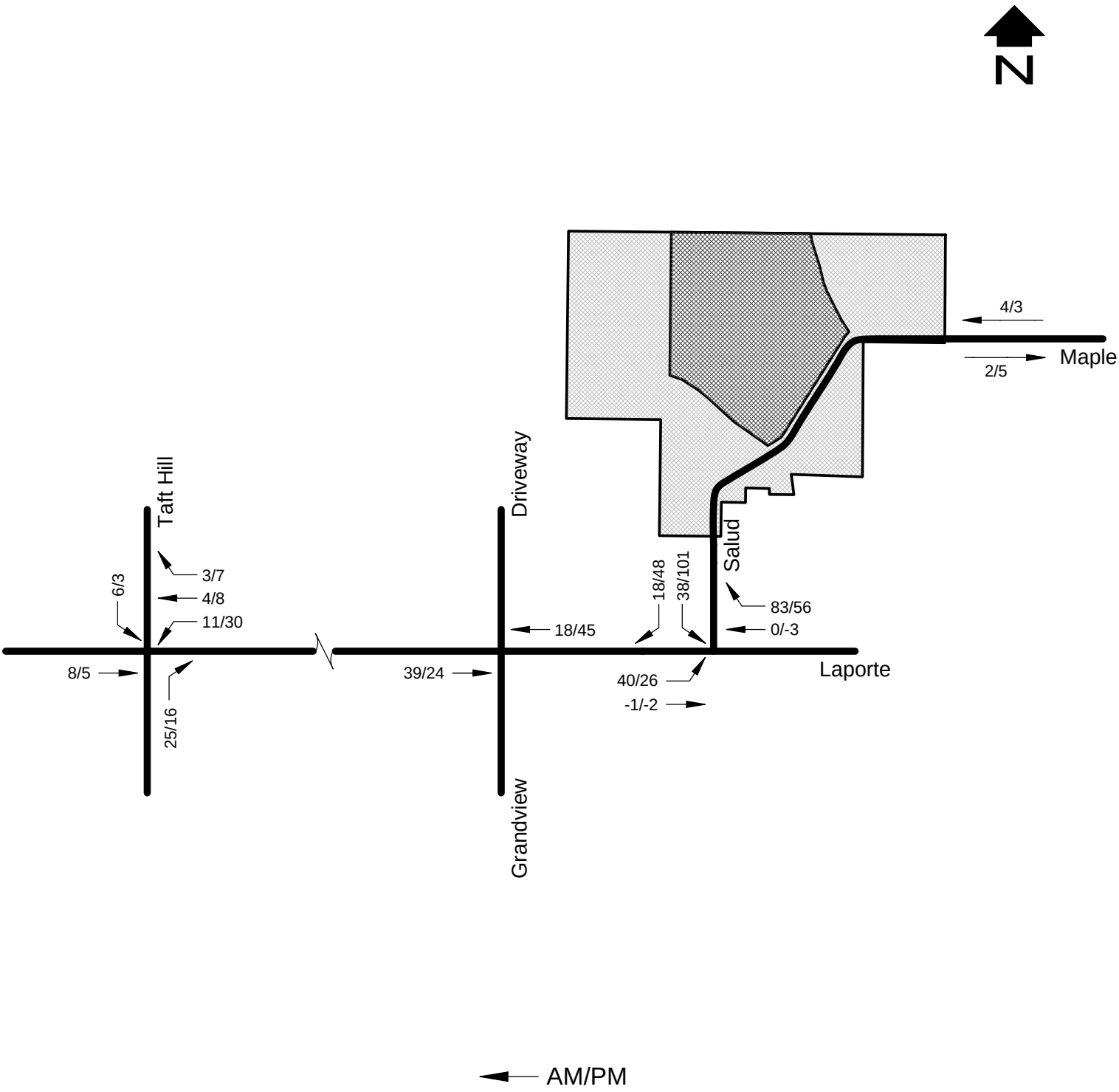
As a matter of policy, traffic signals are not installed at any location unless warrants are met according to the Manual on Uniform Traffic Control Devices. For the streets in the vicinity of the Salud Family Health facility, four hour and/or eight hour signal warrants are applicable. These warrants require much data and are applied when the traffic is actually on the area street system. It is acknowledged that peak hour signal warrants should not be applied, but since the peak hour forecasts are readily available in a traffic impact study, it is reasonable to use them to get an idea whether other signal warrants may be met. If peak hour signal warrants will not be met at a given intersection, it is reasonable to conclude that it is not likely that other signal warrants would be met. If peak hour signal warrants are met, it merely indicates that further evaluation should occur in the future as the development occurs. However, a judgment can be made that some intersections will likely meet other signal warrants.

Using the long range (2035) total peak hour traffic (Figure 12), the Laporte/ Grandview-Driveway and Laporte/Salud stop sign controlled intersections will not meet the peak hour warrant. The long range (2035) total peak hour warrant is provided in Appendix D.



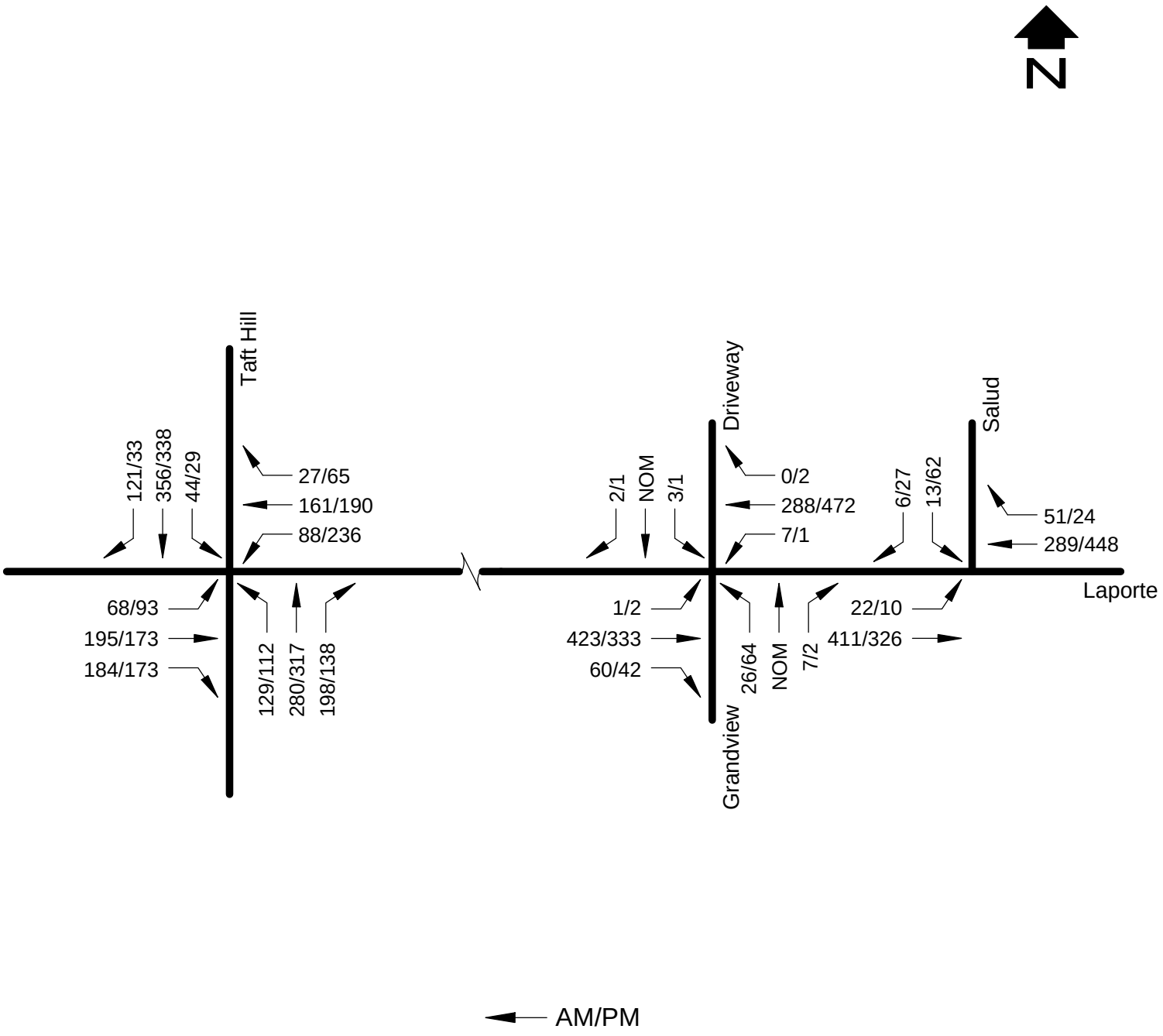
SHORT RANGE (2020) SITE GENERATED PEAK HOUR TRAFFIC

Figure 9



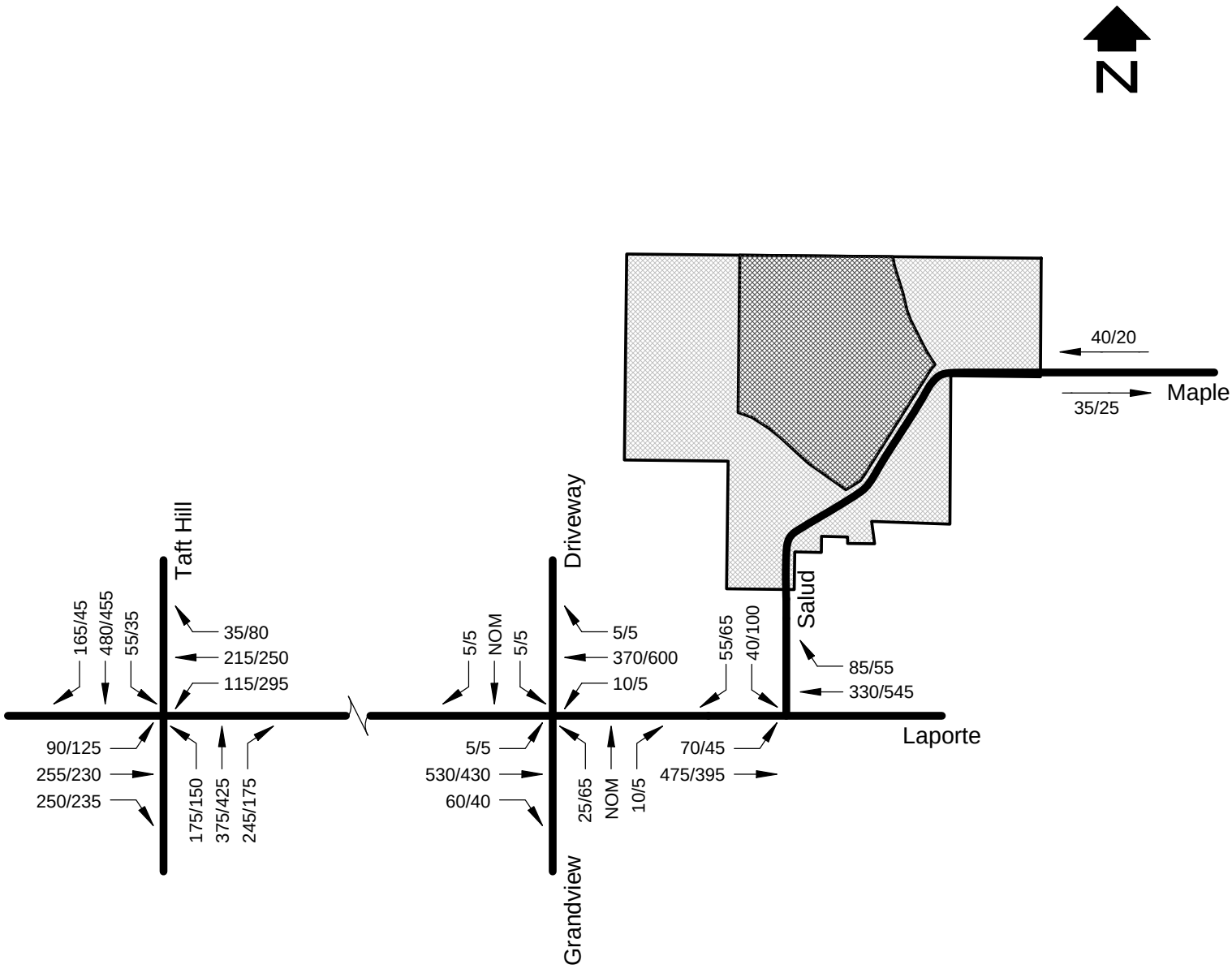
FULL DEVELOPMENT SITE
GENERATED PEAK HOUR TRAFFIC

Figure 10



SHORT RANGE (2020) TOTAL
PEAK HOUR TRAFFIC

Figure 11



AM/PM
Rounded to Nearest
5 Vehicles

LONG RANGE (2035) TOTAL PEAK HOUR TRAFFIC

Figure 12

Geometry

Figure 13 shows a schematic of the short range (2020) geometry. As mentioned earlier, Laporte Avenue is required to have a center (left-turn) median lane. Provision of a center left-turn lane will be difficult. It is recommended that a short two-way left-turn lane be considered in this area since there is limited street frontage related to this property. The Salud access cannot line up with public streets on the south side of Laporte Avenue due to property ownership. Therefore, the driveway spacing criteria on Table 7-3 in LCUASS cannot be met. This segment of Laporte Avenue was built long before LCUASS was adopted. Most street intersections along Laporte Avenue do not meet the spacing criteria. There is little that can be done to correct this. According to Figure 8-4, LCUASS, an eastbound right-turn deceleration lane is required at the Laporte/Grandview-Driveway intersection with the background traffic. The Salud Family Health facility will add no turning traffic to Grandview Avenue to the south.

Figure 14 shows a schematic of the long range (2035) geometry. With full development of the Salud Family Health site, a westbound right-turn deceleration lane is required at the Laporte/Salud intersection. In light of the earlier geometry discussion, it would appear that the only practical solution is to have a continuous two-way left-turn lane for the length of Laporte Avenue. This solution would come from the City of Fort Collins.

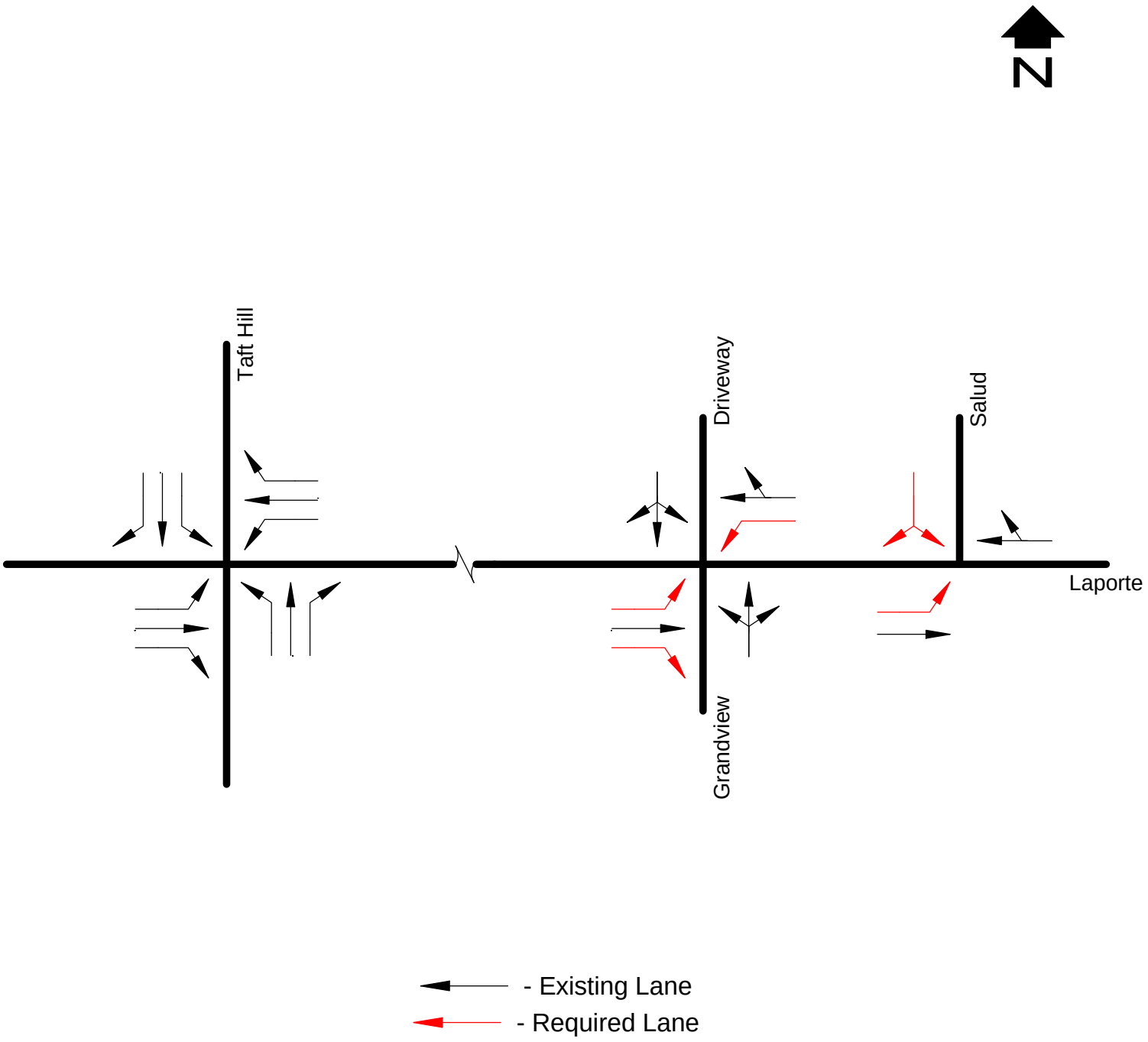
Operation Analysis

Operation analyses were performed at the Taft Hill/Laporte, Laporte/Grandview-Driveway, and Laporte/Salud intersections. The operation analyses were conducted for the short range analysis, reflecting a year 2020 condition, and for the long range, reflecting a year 2035 condition. In the intersection operation tables, the calculated delay for each movement/leg is provided when the level of service falls in the LOS E/F categories.

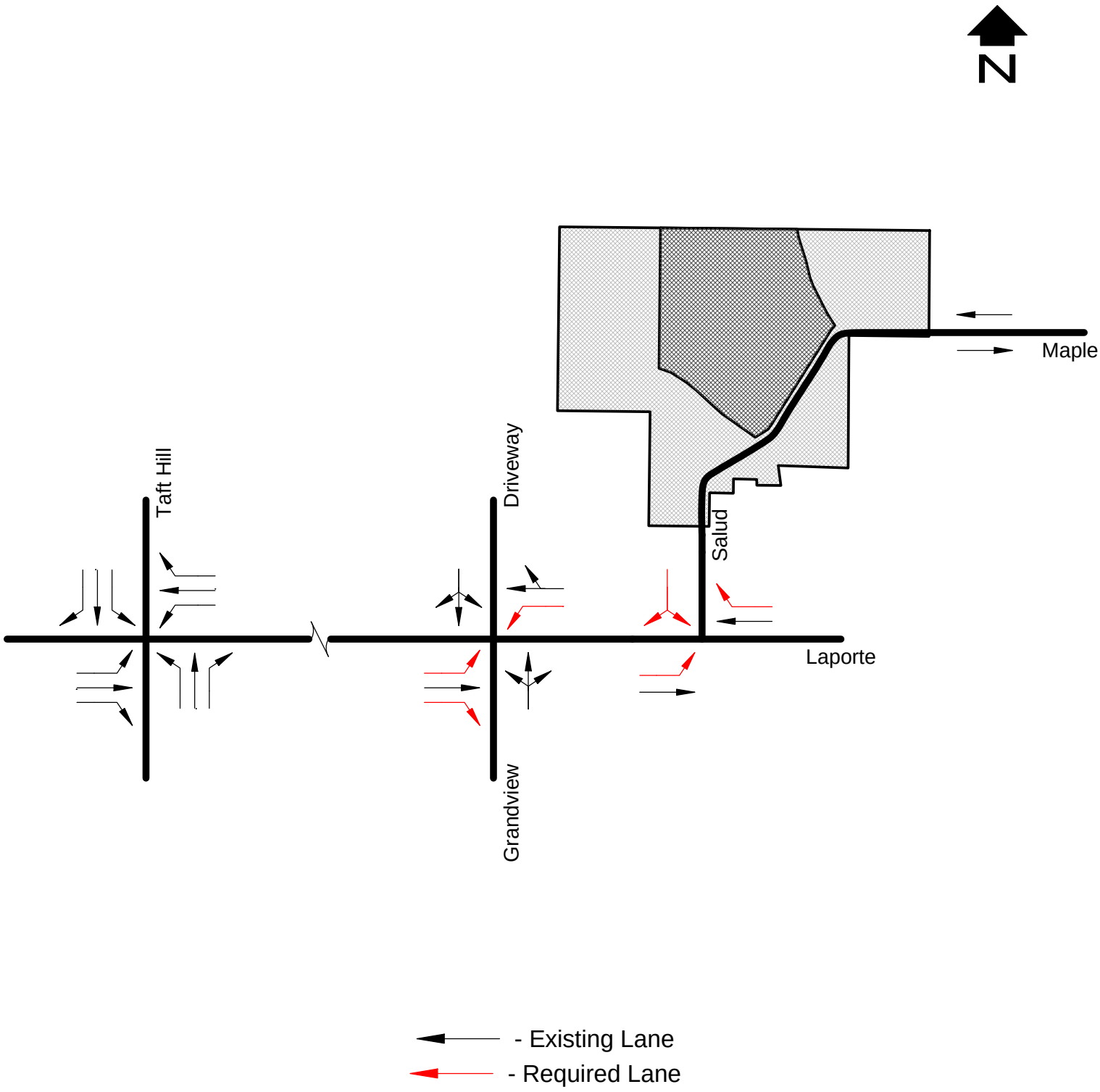
Using the short range (2020) background peak hour traffic volumes, the key intersections operate as indicated in Table 3. The background traffic analyses at the Laporte/Grandview-Driveway intersection were run with the existing geometry and with the required lanes. Calculation forms for these analyses are provided in Appendix E. The key intersections operate acceptably in the morning and afternoon peak hours with the existing geometry and with the required geometry.

Using the traffic volumes shown in Figure 8, the key intersections operate in the long range (2035) background traffic future as indicated in Table 4. Calculation forms for these analyses are provided in Appendix F. The analysis assumed the required lanes at the Laporte/Grandview-Driveway and Laporte/Salud intersections. The key intersections operate acceptably in the morning and afternoon peak hours, with a slight adjustment in the signal timing during the afternoon peak hour at the Taft Hill/Laporte intersection.

Using the traffic volumes shown in Figure 11, the key intersections operate in the short range (2020) total condition as indicated in Table 5. Calculation forms for these analyses are provided in Appendix G. As was done with the background traffic, the



SHORT RANGE (2020) GEOMETRY Figure 13



LONG RANGE (2035) GEOMETRY

Figure 14

TABLE 3 Short Range (2020) Background Peak Hour Operation			
Intersection	**Movement**	**Level of Service**	
		AM	**PM**
Taft Hill/Laporte (signal)	EB LT	C	C
	EB T	D	D
	EB RT	C	D
	EB APPROACH	D	D
	WB LT	C	D
	WB T	D	D
	WB RT	A	A
	WB APPROACH	C	D
	NB LT	B	A
	NB T	A	A
	NB RT	A	A
	NB APPROACH	A	A
	SB LT	B	B
	SB T	B	B
	SB RT	B	A
	SB APPROACH	B	B
	OVERALL	C	C
Laporte/Grandview-Driveway (stop sign with existing geometry)	NB LT/T/RT	C	C
	SB LT/T/RT	B	B
	EB LT/T/RT	A	A
	WB LT/T/RT	A	A
Laporte/Grandview-Driveway (stop sign with required geometry)	NB LT/T/RT	C	C
	SB LT/T/RT	B	B
	EB LT	A	A
	WB LT	A	A

TABLE 4 Long Range (2035) Background Peak Hour Operation			
Intersection	**Movement**	**Level of Service**	
		AM	**PM**
Taft Hill/Laporte (signal)	EB LT	C	C
	EB T	D	D
	EB RT	C	C
	EB APPROACH	D	D
	WB LT	C	D
	WB T	D	D
	WB RT	A	A
	WB APPROACH	C	D
	NB LT	B	B
	NB T	B	B
	NB RT	A	A
	NB APPROACH	B	B
	SB LT	B	B
	SB T	C	C
	SB RT	B	A
	SB APPROACH	B	C
	OVERALL	C	C
Laporte/Grandview-Driveway (stop sign)	NB LT/T/RT	C	D
	SB LT/T/RT	C	C
	EB LT	A	A
	WB LT	A	A
Laporte/Salud (stop sign)	SB LT/RT	B	B
	EB LT	A	A

TABLE 5 Short Range (2020) Total Peak Hour Operation			
Intersection	**Movement**	**Level of Service**	
		AM	**PM**
Taft Hill/Laporte (signal)	EB LT	C	C
	EB T	D	D
	EB RT	C	D
	EB APPROACH	D	D
	WB LT	C	D
	WB T	D	D
	WB RT	A	A
	WB APPROACH	C	D
	NB LT	B	A
	NB T	A	A
	NB RT	A	A
	NB APPROACH	A	A
	SB LT	B	B
	SB T	B	B
	SB RT	B	A
	SB APPROACH	B	B
	OVERALL	C	C
Laporte/Grandview-Driveway (stop sign with existing geometry)	NB LT/T/RT	C	C
	SB LT/T/RT	C	B
	EB LT/T/RT	A	A
	WB LT/T/RT	A	A
Laporte/Grandview-Driveway (stop sign with required geometry)	NB LT/T/RT	C	C
	SB LT/T/RT	B	B
	EB LT	A	A
	WB LT	A	A
Laporte/Salud (stop sign with existing geometry)	SB LT/RT	C	C
	EB LT/T	A	A
Laporte/Salud (stop sign with required geometry)	SB LT/RT	C	C
	EB LT/T	A	A

background traffic analyses at the Laporte/Grandview-Driveway and Laporte/Salud intersections were run with the existing geometry and with the required lanes. The key intersections operate acceptably in the morning and afternoon peak hours with the existing geometry and with the required geometry.

Using the traffic volumes shown in Figure 12, the key intersections operate in the long range (2035) total traffic future as indicated in Table 6. Calculation forms for these analyses are provided in Appendix H. The key intersections operate acceptably in the morning and afternoon peak hours, with a slight adjustment in the signal timing (same as background operation) during the afternoon peak hour at the Taft Hill/Laporte intersection.

Pedestrian Level of Service

Appendix I shows a map of the area that is within 1320 feet of the Salud Family Health facility site. Sidewalks will be built along Laporte Avenue and within the site with this development. There are three pedestrian destinations within 1320 feet of the Salud Family Health facility development. These are: 1) the commercial uses in the northeast quadrant of the Taft Hill/Laporte intersection; 2) the residential area to the east of the site; and 3) the residential area to the south. The Salud Family Health facility site is located within an area termed as "transit corridor," which sets the level of service threshold at LOS B for directness and security and LOS C for all other measured categories. Pedestrian level of service is achieved for all categories, except for Continuity. On the north side of Laporte Avenue, there are missing sidewalks adjacent to some properties east and west of the Salud Family Health site and on the south side of Laporte Avenue. Some of these properties were approved prior to annexation. As some of these properties redevelop, sidewalks will be required adjacent to those properties. When this occurs, the Continuity measure will be met. The Pedestrian LOS Worksheet is provided in Appendix I.

Bicycle Level of Service

There are no bicycle destinations within 1320 feet of the Salud Family Health facility site. There are bicycle lanes along Taft Hill Road and Laporte Avenue.

Transit Level of Service

This area of Fort Collins is served by Transfort routes 9, 10, 91, and 92.

TABLE 6 Long Range (2035) Total Peak Hour Operation			
Intersection	**Movement**	**Level of Service**	
		AM	**PM**
Taft Hill/Laporte (signal)	EB LT	C	C
	EB T	D	D
	EB RT	C	C
	EB APPROACH	D	D
	WB LT	C	D
	WB T	C	D
	WB RT	A	A
	WB APPROACH	C	D
	NB LT	B	B
	NB T	B	B
	NB RT	A	B
	NB APPROACH	B	B
	SB LT	B	B
	SB T	C	C
	SB RT	B	A
	SB APPROACH	C	C
	OVERALL	C	C
Laporte/Grandview-Driveway (stop sign)	NB LT/T/RT	C	D
	SB LT/T/RT	C	C
	EB LT	A	A
	WB LT	A	A
Laporte/Salud (stop sign)	SB LT/RT	C	D
	EB LT	A	A

IV. CONCLUSIONS/RECOMMENDATIONS

This study assessed the impacts of the Salud Family Health facility development on the short range (2020) and long range (2035) street system in the vicinity of the proposed development. This TIS covers both the ODP and PDP submittals. As a result of this analysis, the following is concluded:

- The development of the Salud Family Health facility site is feasible from a traffic engineering standpoint. The trip generation for the Salud Family Health facility only (short range (2020) future) resulted in 1360 daily trip ends, 92 morning peak hour trip ends, and 123 afternoon peak hour trip ends. The trip generation for full development of the entire Salud Family Health site resulted in 2566 daily trip ends, 185 morning peak hour trip ends, and 239 afternoon peak hour trip ends.

- Current operation at the Taft Hill/Laporte and Laporte/Grandview-Driveway intersections is acceptable with existing control and geometry.

- Figure 13 shows a schematic of the short range (2020) geometry. Laporte Avenue is required to have a center (left-turn) median lane. Provision of a center left-turn lane will be difficult. It is recommended that a short two-way left-turn lane be considered in this area since there is limited street frontage related to this property and most street intersections along Laporte Avenue do not meet the spacing criteria. There is little that can be done to correct this. According to Figure 8-4, LCUASS, an eastbound right-turn deceleration lane is required at the Laporte/Grandview-Driveway intersection with the background traffic. The Salud Family Health facility will add no turning traffic to Grandview Avenue to the south. Figure 14 shows a schematic of the long range (2035) geometry. It is recommended that Laporte Avenue have a continuous two-way left-turn lane for the length of Laporte Avenue. This decision would come from the City of Fort Collins.

- In the short range (2020) future, given development of the Salud Family Health facility and an increase in background traffic, The key intersections operate acceptably in the morning and afternoon peak hours with the existing geometry and with the required geometry.

- In the long range (2035) future, the key intersections operate acceptably in the morning and afternoon peak hours, with a modification of the signal timing in the afternoon peak hour.

- Acceptable level of service is achieved for bicycle and transit modes based upon the measures in the multi-modal transportation guidelines. With completion of some gaps in the sidewalk system along Laporte Avenue, the pedestrian level of service will be acceptable.

APPENDIX A

Attachment A
Transportation Impact Study
Base Assumptions

Project Information				
Project Name	SALUD FAMILY HEALTH CENTER			
Project Location	1830 LAPORTE AVENUE			
TIS Assumptions				
Type of Study	Full: YES		Intermediate: NO	
Study Area Boundaries	North: LAPORTE		South: LAPORTE	
	East:		West:	
Study Years	Short Range: 2020		Long Range: 2035	
Future Traffic Growth Rate	2%/YEAR			
Study Intersections	1. All access drives		5.	
	2. TAFT HILL/LAPORTE		6.	
	3.		7.	
	4.		8.	
Time Period for Study	(AM: 7:00-9:00)	(PM: 4:00-6:00)	Sat Noon: NO	
Trip Generation Rates	PER ITE (ATTACHED)			
Trip Adjustment Factors	Passby: N/A		Captive Market: N/A	
Overall Trip Distribution	SEE ATTACHED SKETCH			
Mode Split Assumptions	N/A			
Committed Roadway Improvements	NOT AWARE OF ANY			
Other Traffic Studies	NOT AWARE OF ANY			
Areas Requiring Special Study	- Discuss access location compared to access/roads across LaPorte. Do they align?			

Date: SEPTEMBER 22, 2015

Traffic Engineer: DELICH ASSOCIATES

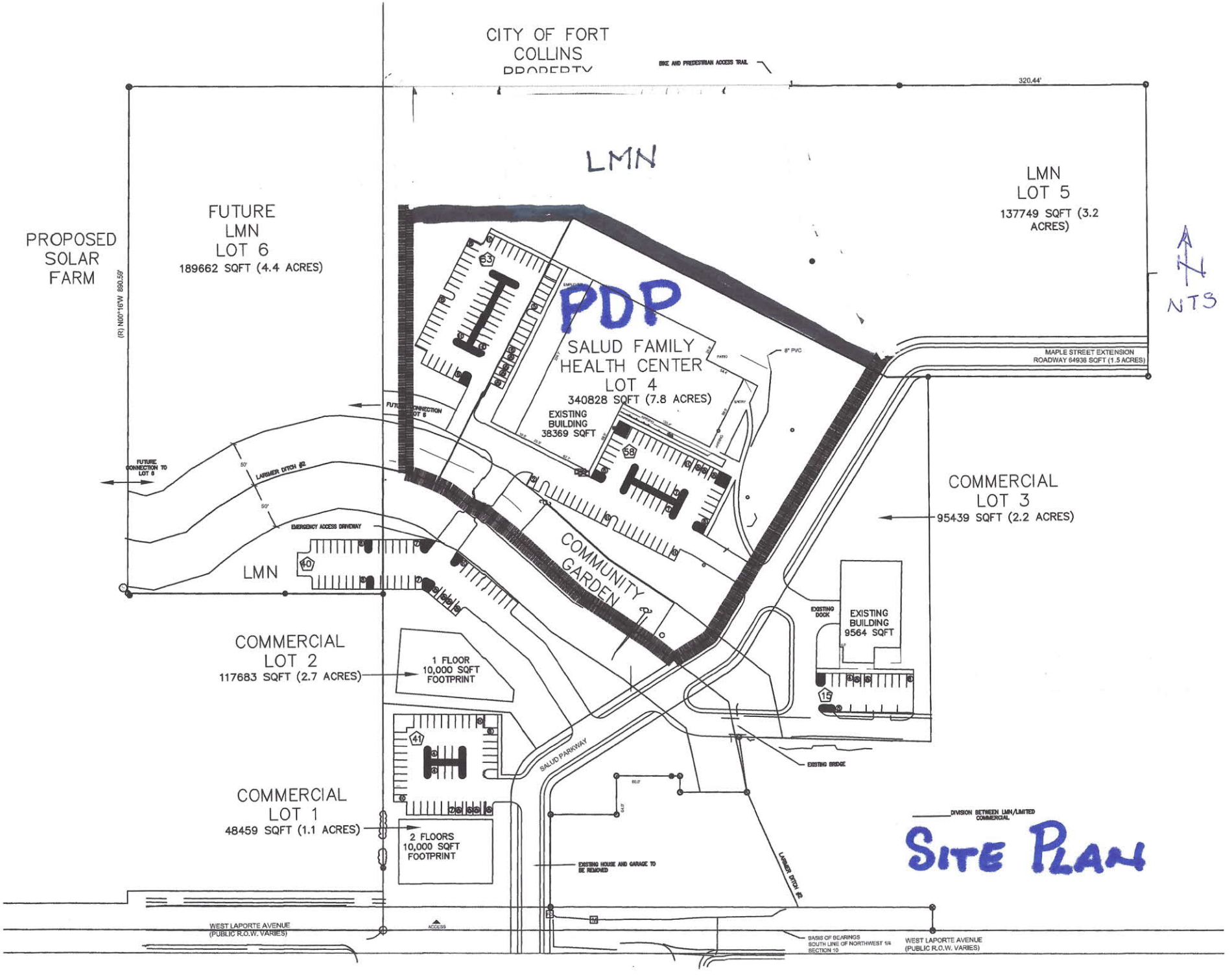
- Discuss anticipated traffic on Maple.

Local Entity Engineer: 9.24.15

1565 BAF

Google earth feet 1000 meters 500

SITE LOCATION


CITY OF FORT COLLINS PROPERTY
BIKE AND PEDESTRIAN ACCESS TRAIL
320.44'
LMN
PROPOSED SOLAR FARM
FUTURE LMN LOT 6
189662 SQFT (4.4 ACRES)
(R) N00°16'W 660.59'
LMN LOT 5
137749 SQFT (3.2 ACRES)
PDP
SALUD FAMILY HEALTH CENTER
LOT 4
340828 SQFT (7.8 ACRES)
EXISTING BUILDING 38369 SQFT
MAPLE STREET EXTENSION
ROADWAY 64936 SQFT (1.5 ACRES)
FUTURE CONNECTION TO LOT 6
LARIMER DITCH #2
EMERGENCY ACCESS DRIVEWAY
COMMUNITY GARDEN
COMMERCIAL LOT 3
95439 SQFT (2.2 ACRES)
EXISTING DOCK
EXISTING BUILDING 9564 SQFT
COMMERCIAL LOT 2
117683 SQFT (2.7 ACRES)
1 FLOOR 10,000 SQFT FOOTPRINT
SALUD PARKWAY
EXISTING BRIDGE
COMMERCIAL LOT 1
48459 SQFT (1.1 ACRES)
2 FLOORS 10,000 SQFT FOOTPRINT
DIVISION BETWEEN LMN/LIMITED COMMERCIAL
EXISTING HOUSE AND GARAGE TO BE REMOVED
WEST LAPORTE AVENUE (PUBLIC R.O.W. VARIES)
ACCESS
BASIS OF BEARINGS SOUTH LINE OF NORTHWEST 1/4 SECTION 10
WEST LAPORTE AVENUE (PUBLIC R.O.W. VARIES)
NTS
SITE PLAN

SALUD FAMILY HEALTH CENTER

Trip Generation												
Code	Use	Size	AWDTE		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	In	Rate	Out	Rate	In	Rate	Out
	PDP											
	LOT 4											
720	MEDICAL/DENTAL OFFICE	38.369 KSF	EQ	1354	1.89	73	0.50	19	EQ	34	EQ	89
	LONG RANGE											
	LOT 1											
826	RETAIL	10.0KSF	44.32	444	0.76	8	0.60	6	1.19	12	1.52	15
710	OFFICE	10.0KSF	11.03	110	1.37	14	0.19	2	0.25	3	1.24	12
	LOT 2											
710	OFFICE	10.0KSF	11.03	110	1.37	14	0.19	2	0.25	3	1.24	12
	LOT 3											
110	LIGHT INDUSTRIAL	9.564 KSF	6.97	66	0.81	8	0.11	1	0.12	1	0.85	8
	LOTS 5 & 6											
210	S.F. RESIDENTIAL	50 D.U.	9.52	476	0.19	10	0.56	28	0.63	32	0.37	18
	LONG RANGE SUBTOTAL			1206		54		38		51		65
	TOTAL			2560		127		57		85		154

Google earth

feet 4000

km 1

TRIP DISTRIBUTION

APPENDIX B

DELICH ASSOCIATES
2272 GLEN HAVEN DRIVE
LOVELAND, CO 80538
Phone: (970) 669-2061

TABULAR SUMMARY OF VEHICLE COUNTS

Date: 8/21/2014 Observer: City of Fort Collins

Day: Thursday Jurisdiction: Fort Collins

Intersection: Taft Hill/Laporte

R = right turn
S = straight
L = left turn

Time	Northbound: Taft Hill				Southbound: Taft Hill				Total	Eastbound: Laporte				Westbound: Laporte				Total	Total
Begins	L	S	R	Total	L	S	R	Total	north/south	L	S	R	Total	L	S	R	Total	east/west	All
7:30	30	55	37	122	7	89	71	167	289	36	70	68	174	7	39	3	49	223	512
7:45	36	67	50	153	8	81	17	106	259	12	34	40	86	15	25	7	47	133	392
8:00	31	64	30	125	9	81	16	106	231	9	34	35	78	25	20	5	50	128	359
8:15	20	68	30	118	8	71	6	85	203	5	15	24	44	6	17	2	25	69	272
7:30-8:30	117	254	147	518	32	322	110	464	982	62	153	167	382	53	101	17	171	553	1535
PHF	0.81	0.93	0.74	0.85	0.89	0.9	0.39	0.69		0.43	0.55	0.61	0.55	0.53	0.65	0.61	0.86		0.75
4:30	28	71	30	129	5	81	6	92	221	17	42	42	101	32	23	10	65	166	387
4:45	25	87	28	140	6	68	3	77	217	25	35	30	90	38	31	5	74	164	381
5:00	24	58	29	111	5	90	8	103	214	22	38	41	101	55	26	14	95	196	410
5:15	24	71	29	124	9	67	13	89	213	20	36	44	100	57	47	8	112	212	425
4:30-5:30	101	287	116	504	25	306	30	361	865	84	151	157	392	182	127	37	346	738	1603
PHF	0.9	0.82	0.97	0.9	0.69	0.85	0.58	0.88		0.84	0.9	0.89	0.97	0.8	0.68	0.66	0.77		0.94

DELICH ASSOCIATES
2272 GLEN HAVEN DRIVE
LOVELAND, CO 80538
Phone: (970) 669-2061

TABULAR SUMMARY OF VEHICLE COUNTS

Date: 9/23/2015 Observer: Sue

Day: Wednesday Jurisdiction: Fort Collins

Intersection: Laporte/Grandview-Driveway

R = right turn
S = straight
L = left turn

Time	Northbound: Grandview				Southbound: Driveway				Total	Eastbound: Laporte				Westbound: Laporte				Total	Total
Begins	L	S	R	Total	L	S	R	Total	north/south	L	S	R	Total	L	S	R	Total	east/west	All
7:30	4	0	0	4	1	0	0	1	5	0	77	10	87	0	54	0	54	141	146
7:45	5	0	1	6	1	0	0	1	7	0	114	20	134	4	78	0	82	216	223
8:00	10	0	0	10	0	0	2	2	12	0	94	18	112	1	110	0	111	223	235
8:15	11	0	5	16	1	0	0	1	17	1	115	12	128	1	80	0	81	209	226
7:30-8:30	30	0	6	36	3	0	2	5	41	1	400	60	461	6	322	0	328	789	830
PHF	0.68	n/a	0.3	0.56	0.75	n/a	0.25	0.63		0.25	0.87	0.75	0.86	0.38	0.73	n/a	0.74		0.88
4:30	10	0	0	10	1	0	0	1	11	1	79	6	86	0	122	0	122	208	219
4:45	16	1	0	17	0	0	0	0	17	0	89	15	104	0	99	0	99	203	220
5:00	24	0	1	25	0	0	1	1	26	0	67	10	77	0	121	2	123	200	226
5:15	17	0	1	18	0	0	0	0	18	1	64	8	73	1	127	0	128	201	219
4:30-5:30	67	1	2	70	1	0	1	2	72	2	299	39	340	1	469	2	472	812	884
PHF	0.7	0.25	0.5	0.7	0.25	n/a	0.25	0.5		0.5	0.84	0.65	0.82	0.25	0.92	0.25	0.92		0.98

APPENDIX C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	173	167	76	145	24	117	254	166	37	322	110
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	73	204	7	89	171	0	138	299	103	44	379	33
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	276	235	252	294	250	579	1170	994	587	965	820
Arrive On Green	0.06	0.15	0.15	0.07	0.16	0.00	0.07	0.63	0.63	0.52	0.52	0.52
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	979	1863	1583
Grp Volume(v), veh/h	73	204	7	89	171	0	138	299	103	44	379	33
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	979	1863	1583
Q Serve(g_s), s	3.1	9.4	0.3	3.7	7.7	0.0	3.0	6.4	2.3	2.0	11.1	0.9
Cycle Q Clear(g_c), s	3.1	9.4	0.3	3.7	7.7	0.0	3.0	6.4	2.3	2.0	11.1	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	276	235	252	294	250	579	1170	994	587	965	820
V/C Ratio(X)	0.27	0.74	0.03	0.35	0.58	0.00	0.24	0.26	0.10	0.07	0.39	0.04
Avail Cap(c_a), veh/h	326	486	413	288	486	413	621	1170	994	587	965	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	36.7	32.8	29.6	35.1	0.0	8.7	7.4	6.7	10.9	13.1	10.7
Incr Delay (d2), s/veh	0.5	3.9	0.1	0.8	1.8	0.0	0.2	0.5	0.2	0.2	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.2	0.2	1.9	4.1	0.0	1.5	3.4	1.1	0.6	6.0	0.4
LnGrp Delay(d),s/veh	30.3	40.5	32.8	30.5	37.0	0.0	8.9	7.9	6.9	11.2	14.3	10.8
LnGrp LOS	C	D	C	C	D		A	A	A	B	B	B
Approach Vol, veh/h		284			260			540			456	
Approach Delay, s/veh		37.7			34.7			8.0			13.8	
Approach LOS		D			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	9.9	52.1	9.1	18.8		62.0	8.3	19.7
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	7.0	31.5	7.0	22.5		43.5	7.0	22.5
Max Q Clear Time (g_c+I1), s	5.0	13.1	5.7	11.4		8.4	5.1	9.7
Green Ext Time (p_c), s	0.1	2.9	0.0	0.9		3.1	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B

Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	12	38	11	29	50	11	29
Maximum Split (%)	13.3%	42.2%	12.2%	32.2%	55.6%	12.2%	32.2%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	60	72	20	31	60	20	31
End Time (s)	72	20	31	60	20	31	60
Yield/Force Off (s)	67	13.5	27	53.5	13.5	27	53.5
Yield/Force Off 170(s)	67	1.5	27	43.5	89.5	27	39.5
Local Start Time (s)	40	52	0	11	40	0	11
Local Yield (s)	47	83.5	7	33.5	83.5	7	33.5
Local Yield 170(s)	47	71.5	7	23.5	69.5	7	19.5

Intersection Summary

Cycle Length		90
Control Type		Actuated-Coordinated
Natural Cycle		80

Offset: 20 (22%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	84	155	157	197	168	55	101	287	119	25	306	30
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	89	165	16	210	179	0	107	305	72	27	326	0
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	235	200	312	304	258	618	1157	984	601	976	830
Arrive On Green	0.07	0.13	0.13	0.11	0.16	0.00	0.06	0.62	0.62	0.52	0.52	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1002	1863	1583
Grp Volume(v), veh/h	89	165	16	210	179	0	107	305	72	27	326	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1002	1863	1583
Q Serve(g_s), s	4.0	8.1	0.8	9.5	8.5	0.0	2.4	7.0	1.7	1.3	9.6	0.0
Cycle Q Clear(g_c), s	4.0	8.1	0.8	9.5	8.5	0.0	2.4	7.0	1.7	1.3	9.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	235	200	312	304	258	618	1157	984	601	976	830
V/C Ratio(X)	0.31	0.70	0.08	0.67	0.59	0.00	0.17	0.26	0.07	0.04	0.33	0.00
Avail Cap(c_a), veh/h	314	461	392	312	500	425	669	1157	984	601	976	830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	39.8	36.7	30.8	36.8	0.0	8.9	8.1	7.1	11.1	13.0	0.0
Incr Delay (d2), s/veh	0.6	3.8	0.2	5.6	1.8	0.0	0.1	0.6	0.1	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	4.4	0.4	5.1	4.5	0.0	1.2	3.7	0.8	0.4	5.1	0.0
LnGrp Delay(d),s/veh	33.2	43.6	36.8	36.4	38.6	0.0	9.0	8.7	7.3	11.2	14.0	0.0
LnGrp LOS	C	D	D	D	D		A	A	A	B	B	
Approach Vol, veh/h		270			389			484			353	
Approach Delay, s/veh		39.8			37.4			8.6			13.7	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	9.2	55.3	13.0	17.5		64.5	9.5	21.0
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	7.0	34.5	9.0	22.5		46.5	7.0	24.5
Max Q Clear Time (g_c+I1), s	4.4	11.6	11.5	10.1		9.0	6.0	10.5
Green Ext Time (p_c), s	0.1	2.4	0.0	0.9		2.5	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	12	41	13	29	53	11	31
Maximum Split (%)	12.6%	43.2%	13.7%	30.5%	55.8%	11.6%	32.6%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	93	10	51	64	93	51	62
End Time (s)	10	51	64	93	51	62	93
Yield/Force Off (s)	5	44.5	60	86.5	44.5	58	86.5
Yield/Force Off 170(s)	5	32.5	60	76.5	30.5	58	72.5
Local Start Time (s)	42	54	0	13	42	0	11
Local Yield (s)	49	88.5	9	35.5	88.5	7	35.5
Local Yield 170(s)	49	76.5	9	25.5	74.5	7	21.5

Intersection Summary

Cycle Length	95	
Control Type	Actuated-Coordinated	
Natural Cycle	80	

Offset: 51 (54%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte

Intersection

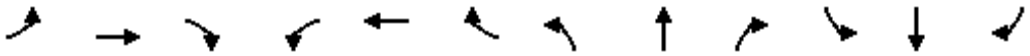
Int Delay, s/veh 0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	363	54	6	255	0	24	0	6	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	412	61	7	290	0	27	0	7	3	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	290	0	0	474	0	0	750	748	443	752	779	290
Stage 1	-	-	-	-	-	-	445	445	-	303	303	-
Stage 2	-	-	-	-	-	-	305	303	-	449	476	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1272	-	-	1088	-	-	328	341	615	327	327	749
Stage 1	-	-	-	-	-	-	592	575	-	706	664	-
Stage 2	-	-	-	-	-	-	705	664	-	589	557	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1272	-	-	1088	-	-	325	338	615	321	324	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	325	338	-	321	324	-
Stage 1	-	-	-	-	-	-	591	574	-	705	659	-
Stage 2	-	-	-	-	-	-	697	659	-	582	556	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	16.1	13.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	359	1272	-	-	1088	-	-	416
HCM Lane V/C Ratio	0.095	0.001	-	-	0.006	-	-	0.014
HCM Control Delay (s)	16.1	7.8	0	-	8.3	0	-	13.8
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.983						0.972			0.946	
Flt Protected					0.999			0.962			0.971	
Satd. Flow (prot)	0	1831	0	0	1861	0	0	1742	0	0	1711	0
Flt Permitted					0.999			0.962			0.971	
Satd. Flow (perm)	0	1831	0	0	1861	0	0	1742	0	0	1711	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			616			254			235	
Travel Time (s)		29.9			14.0			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	293	38	1	403	2	58	1	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	299	39	1	411	2	59	1	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	413	0	0	338	0	0	737	737	318	738	756	412
Stage 1	-	-	-	-	-	-	322	322	-	414	414	-
Stage 2	-	-	-	-	-	-	415	415	-	324	342	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1146	-	-	1221	-	-	334	346	723	334	337	640
Stage 1	-	-	-	-	-	-	690	651	-	616	593	-
Stage 2	-	-	-	-	-	-	615	592	-	688	638	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1146	-	-	1221	-	-	333	345	723	332	336	640
Mov Cap-2 Maneuver	-	-	-	-	-	-	333	345	-	332	336	-
Stage 1	-	-	-	-	-	-	689	650	-	615	592	-
Stage 2	-	-	-	-	-	-	613	591	-	684	637	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	18	13.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	339	1146	-	-	1221	-	-	437
HCM Lane V/C Ratio	0.184	0.002	-	-	0.001	-	-	0.005
HCM Control Delay (s)	18	8.1	0	-	8	0	-	13.3
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.985			0.999			0.996			0.932	
Flt Protected								0.955			0.976	
Satd. Flow (prot)	0	1835	0	0	1861	0	0	1772	0	0	1694	0
Flt Permitted								0.955			0.976	
Satd. Flow (perm)	0	1835	0	0	1861	0	0	1772	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			616			254			235	
Travel Time (s)		29.9			14.0			5.8			5.3	

Intersection Summary

Area Type: Other

UNSIGNALIZED INTERSECTIONS

Level-of-Service	Average Total Delay sec/veh
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

SIGNALIZED INTERSECTIONS

Level-of-Service	Average Total Delay sec/veh
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Table 4-3
Fort Collins (GMA and City Limits)
Motor Vehicle LOS Standards (Intersections)

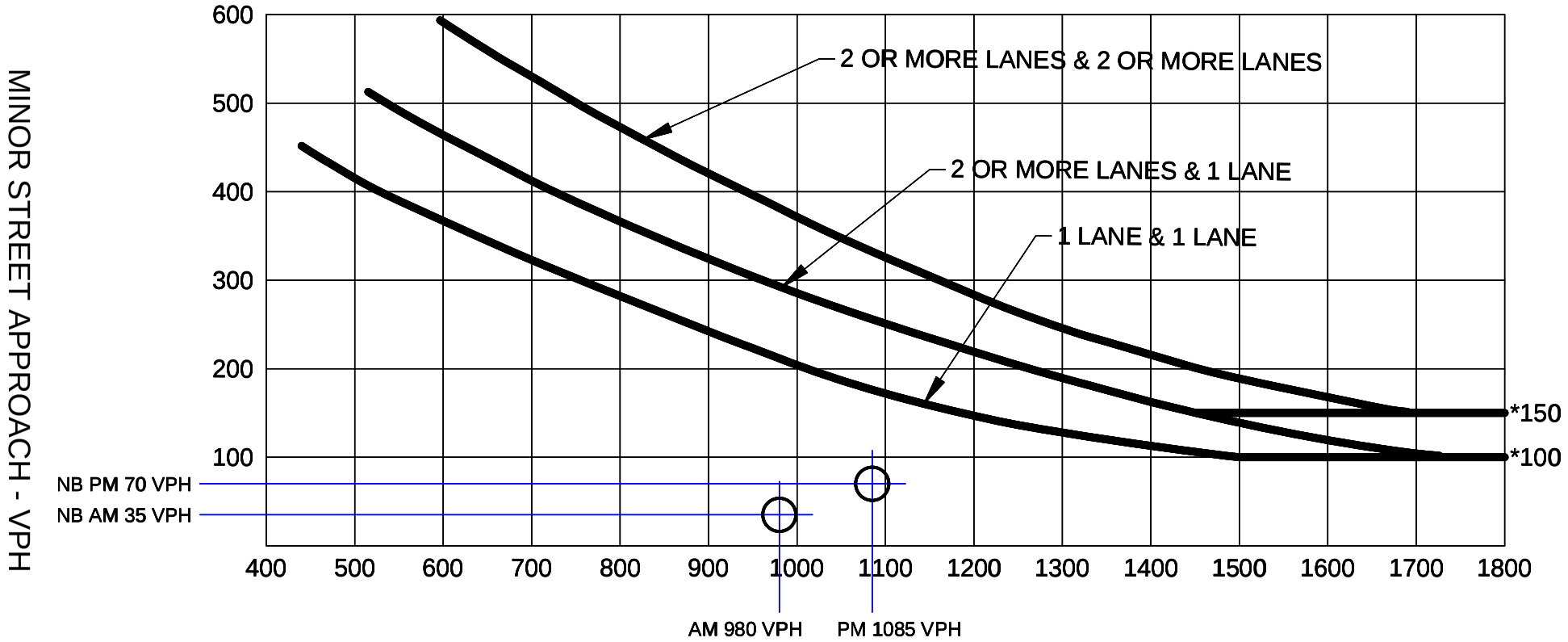
Intersection type	Land Use (from structure plan)			
	Commercial corridors	Other corridors within:		
		Mixed use districts	Low density mixed use residential	All other areas
Signalized intersections (overall)	D	E*	D	D
Any Leg	E	E	D	E
Any Movement	E	E	D	E
Stop sign control (arterial/arterial, arterial/collector or local-any approach leg)	N/A	F**	F**	E
Stop sign control (collector/local--any approach leg)	N/A	C	C	C

* mitigating measures required
** considered normal in an urban environment

APPENDIX D

FIGURE 4C-3. WARRANT 3, PEAK HOUR

MUTCD, 2003 EDITION, PAGE 4C-7



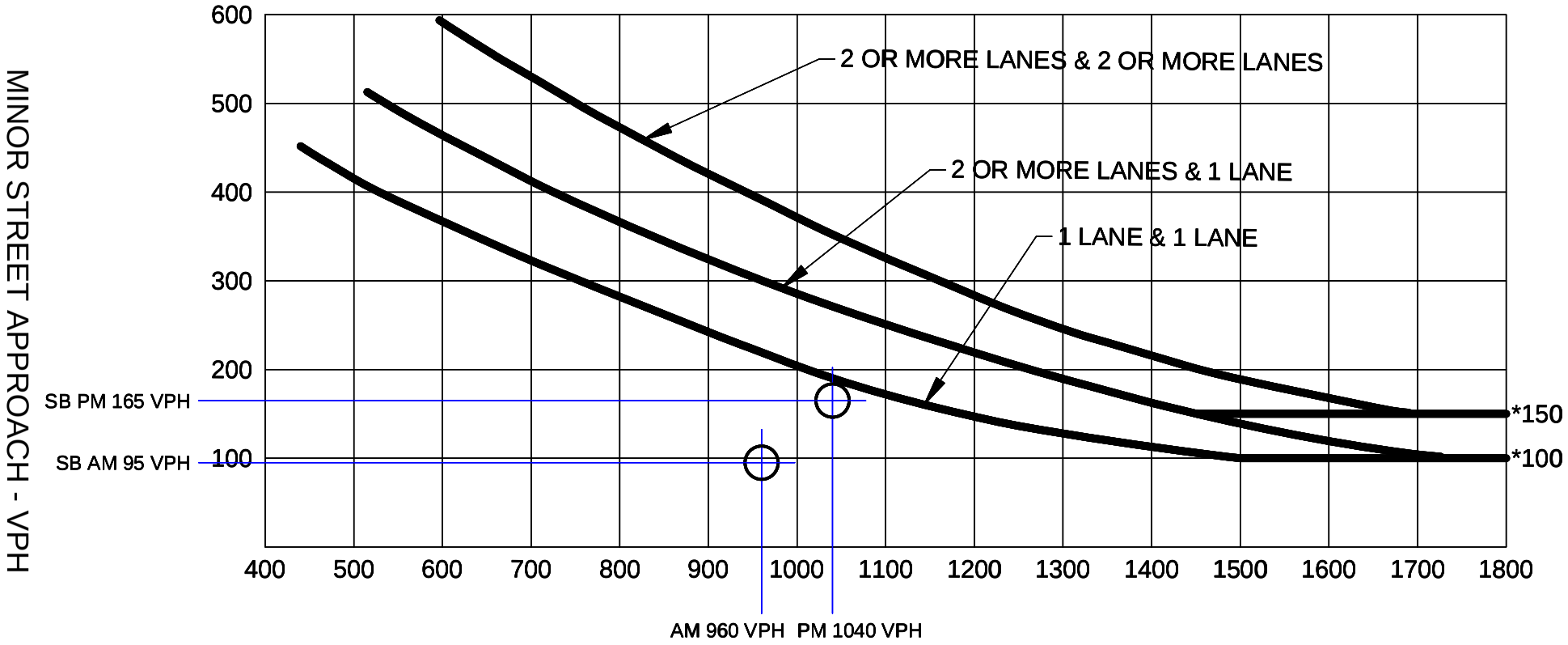
MAJOR STREET - TOTAL OF BOTH APPROACH - VEHICLES PER HOUR (VPH)

*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.

LONG RANGE TOTAL PEAK HOUR WARRANT AT LAPORTE/GRANDVIEW

FIGURE 4C-3. WARRANT 3, PEAK HOUR

MUTCD, 2003 EDITION, PAGE 4C-7



MAJOR STREET - TOTAL OF BOTH APPROACH - VEHICLES PER HOUR (VPH)

*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.

LONG RANGE TOTAL PEAK HOUR WARRANT AT LAPORTE/SALUD

APPENDIX E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	68	191	184	84	160	26	129	280	183	41	356	121
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	80	225	10	99	188	0	152	329	111	48	419	42
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	298	253	260	318	270	530	1139	968	549	924	785
Arrive On Green	0.06	0.16	0.16	0.07	0.17	0.00	0.07	0.61	0.61	0.50	0.50	0.50
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	945	1863	1583
Grp Volume(v), veh/h	80	225	10	99	188	0	152	329	111	48	419	42
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	945	1863	1583
Q Serve(g_s), s	3.3	10.4	0.5	4.1	8.4	0.0	3.5	7.5	2.6	2.4	13.2	1.2
Cycle Q Clear(g_c), s	3.3	10.4	0.5	4.1	8.4	0.0	3.5	7.5	2.6	2.4	13.2	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	298	253	260	318	270	530	1139	968	549	924	785
V/C Ratio(X)	0.28	0.76	0.04	0.38	0.59	0.00	0.29	0.29	0.11	0.09	0.45	0.05
Avail Cap(c_a), veh/h	330	486	413	288	486	413	562	1139	968	549	924	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	36.1	32.0	28.7	34.4	0.0	9.8	8.3	7.3	12.0	14.8	11.7
Incr Delay (d2), s/veh	0.5	3.9	0.1	0.9	1.8	0.0	0.3	0.6	0.2	0.3	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	5.6	0.2	2.0	4.4	0.0	1.7	4.0	1.2	0.7	7.2	0.6
LnGrp Delay(d),s/veh	29.4	40.0	32.0	29.6	36.2	0.0	10.1	8.9	7.5	12.4	16.4	11.9
LnGrp LOS	C	D	C	C	D		B	A	A	B	B	B
Approach Vol, veh/h		315			287			592			509	
Approach Delay, s/veh		37.1			33.9			9.0			15.6	
Approach LOS		D			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	10.4	50.1	9.6	19.9		60.5	8.6	20.9
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	7.0	31.5	7.0	22.5		43.5	7.0	22.5
Max Q Clear Time (g_c+I1), s	5.5	15.2	6.1	12.4		9.5	5.3	10.4
Green Ext Time (p_c), s	0.1	3.1	0.0	1.0		3.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.4
HCM 2010 LOS	C

Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	12	38	11	29	50	11	29
Maximum Split (%)	13.3%	42.2%	12.2%	32.2%	55.6%	12.2%	32.2%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	60	72	20	31	60	20	31
End Time (s)	72	20	31	60	20	31	60
Yield/Force Off (s)	67	13.5	27	53.5	13.5	27	53.5
Yield/Force Off 170(s)	67	1.5	27	43.5	89.5	27	39.5
Local Start Time (s)	40	52	0	11	40	0	11
Local Yield (s)	47	83.5	7	33.5	83.5	7	33.5
Local Yield 170(s)	47	71.5	7	23.5	69.5	7	19.5

Intersection Summary

Cycle Length		90
Control Type		Actuated-Coordinated
Natural Cycle		80

Offset: 20 (22%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	93	171	173	218	185	61	112	317	131	28	338	33
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	99	182	19	232	197	0	119	337	77	30	360	0
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	253	215	312	312	265	581	1140	969	570	950	808
Arrive On Green	0.07	0.14	0.14	0.11	0.17	0.00	0.06	0.61	0.61	0.51	0.51	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	968	1863	1583
Grp Volume(v), veh/h	99	182	19	232	197	0	119	337	77	30	360	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	968	1863	1583
Q Serve(g_s), s	4.4	8.9	1.0	10.0	9.4	0.0	2.8	8.1	1.9	1.5	11.1	0.0
Cycle Q Clear(g_c), s	4.4	8.9	1.0	10.0	9.4	0.0	2.8	8.1	1.9	1.5	11.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	253	215	312	312	265	581	1140	969	570	950	808
V/C Ratio(X)	0.34	0.72	0.09	0.74	0.63	0.00	0.20	0.30	0.08	0.05	0.38	0.00
Avail Cap(c_a), veh/h	307	461	392	312	500	425	625	1140	969	570	950	808
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.7	39.3	35.9	31.1	36.8	0.0	9.6	8.7	7.5	11.8	14.1	0.0
Incr Delay (d2), s/veh	0.7	3.9	0.2	9.3	2.1	0.0	0.2	0.7	0.2	0.2	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.8	0.4	1.9	5.0	0.0	1.4	4.3	0.9	0.4	6.0	0.0
LnGrp Delay(d),s/veh	32.4	43.2	36.1	40.3	38.9	0.0	9.7	9.4	7.7	11.9	15.3	0.0
LnGrp LOS	C	D	D	D	D		A	A	A	B	B	
Approach Vol, veh/h		300			429			533			390	
Approach Delay, s/veh		39.2			39.7			9.2			15.0	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	9.6	54.0	13.0	18.4		63.6	10.0	21.4
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	7.0	34.5	9.0	22.5		46.5	7.0	24.5
Max Q Clear Time (g_c+I1), s	4.8	13.1	12.0	10.9		10.1	6.4	11.4
Green Ext Time (p_c), s	0.1	2.7	0.0	1.0		2.8	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.9
HCM 2010 LOS	C

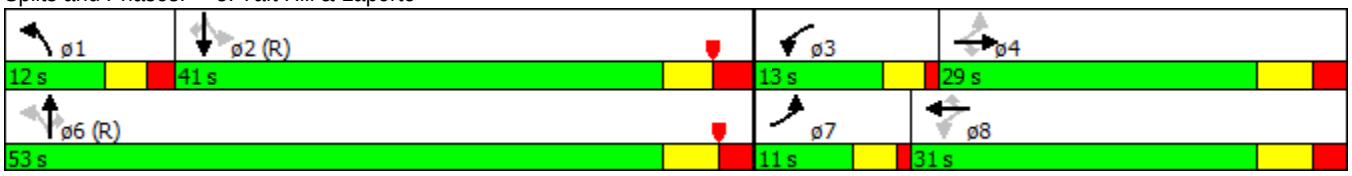
Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	12	41	13	29	53	11	31
Maximum Split (%)	12.6%	43.2%	13.7%	30.5%	55.8%	11.6%	32.6%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	93	10	51	64	93	51	62
End Time (s)	10	51	64	93	51	62	93
Yield/Force Off (s)	5	44.5	60	86.5	44.5	58	86.5
Yield/Force Off 170(s)	5	32.5	60	76.5	30.5	58	72.5
Local Start Time (s)	42	54	0	13	42	0	11
Local Yield (s)	49	88.5	9	35.5	88.5	7	35.5
Local Yield 170(s)	49	76.5	9	25.5	74.5	7	21.5

Intersection Summary

Cycle Length	95	
Control Type	Actuated-Coordinated	
Natural Cycle	80	

Offset: 51 (54%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte



Intersection

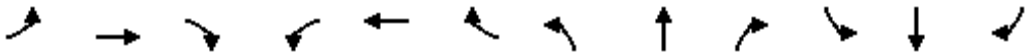
Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	401	60	7	282	0	26	0	7	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	456	68	8	320	0	30	0	8	3	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	320	0	0	524	0	0	830	828	490	832	862	320
Stage 1	-	-	-	-	-	-	492	492	-	336	336	-
Stage 2	-	-	-	-	-	-	338	336	-	496	526	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1240	-	-	1043	-	-	289	306	578	288	293	721
Stage 1	-	-	-	-	-	-	558	548	-	678	642	-
Stage 2	-	-	-	-	-	-	676	642	-	556	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1240	-	-	1043	-	-	286	303	578	282	290	721
Mov Cap-2 Maneuver	-	-	-	-	-	-	286	303	-	282	290	-
Stage 1	-	-	-	-	-	-	557	547	-	677	636	-
Stage 2	-	-	-	-	-	-	668	636	-	548	528	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	17.7	14.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	320	1240	-	-	1043	-	-	373
HCM Lane V/C Ratio	0.117	0.001	-	-	0.008	-	-	0.015
HCM Control Delay (s)	17.7	7.9	0	-	8.5	0	-	14.8
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.983						0.972			0.946	
Flt Protected					0.999			0.962			0.971	
Satd. Flow (prot)	0	1831	0	0	1861	0	0	1742	0	0	1711	0
Flt Permitted					0.999			0.962			0.971	
Satd. Flow (perm)	0	1831	0	0	1861	0	0	1742	0	0	1711	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			616			254			235	
Travel Time (s)		29.9			14.0			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	323	42	1	445	2	64	1	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	330	43	1	454	2	65	1	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	456	0	0	372	0	0	813	813	351	814	834	455
Stage 1	-	-	-	-	-	-	355	355	-	457	457	-
Stage 2	-	-	-	-	-	-	458	458	-	357	377	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1105	-	-	1186	-	-	297	313	692	297	304	605
Stage 1	-	-	-	-	-	-	662	630	-	583	568	-
Stage 2	-	-	-	-	-	-	583	567	-	661	616	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1105	-	-	1186	-	-	296	312	692	295	303	605
Mov Cap-2 Maneuver	-	-	-	-	-	-	296	312	-	295	303	-
Stage 1	-	-	-	-	-	-	661	629	-	582	567	-
Stage 2	-	-	-	-	-	-	581	566	-	657	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	20.4	14.1
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	301	1105	-	-	1186	-	-	397
HCM Lane V/C Ratio	0.227	0.002	-	-	0.001	-	-	0.005
HCM Control Delay (s)	20.4	8.3	0	-	8	0	-	14.1
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.985			0.999			0.996			0.932	
Flt Protected								0.954			0.976	
Satd. Flow (prot)	0	1835	0	0	1861	0	0	1770	0	0	1694	0
Flt Permitted								0.954			0.976	
Satd. Flow (perm)	0	1835	0	0	1861	0	0	1770	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			616			254			235	
Travel Time (s)		29.9			14.0			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	401	60	7	282	0	26	0	7	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	456	68	8	320	0	30	0	8	3	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	320	0	0	456	0	0	796	794	456	798	794	320
Stage 1	-	-	-	-	-	-	458	458	-	336	336	-
Stage 2	-	-	-	-	-	-	338	336	-	462	458	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1240	-	-	1105	-	-	305	321	604	304	321	721
Stage 1	-	-	-	-	-	-	583	567	-	678	642	-
Stage 2	-	-	-	-	-	-	676	642	-	580	567	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1240	-	-	1105	-	-	302	318	604	298	318	721
Mov Cap-2 Maneuver	-	-	-	-	-	-	302	318	-	298	318	-
Stage 1	-	-	-	-	-	-	583	567	-	677	637	-
Stage 2	-	-	-	-	-	-	669	637	-	572	567	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	17	14.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	338	1240	-	-	1105	-	-	389
HCM Lane V/C Ratio	0.111	0.001	-	-	0.007	-	-	0.015
HCM Control Delay (s)	17	7.9	-	-	8.3	-	-	14.4
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		100	75		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850					0.972			0.946	
Flt Protected	0.950			0.950				0.962			0.971	
Satd. Flow (prot)	1770	1863	1583	1770	1863	0	0	1742	0	0	1711	0
Flt Permitted	0.950			0.950				0.962			0.971	
Satd. Flow (perm)	1770	1863	1583	1770	1863	0	0	1742	0	0	1711	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			616			254			235	
Travel Time (s)		29.9			14.0			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	323	42	1	445	2	64	1	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	330	43	1	454	2	65	1	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	456	0	0	330	0	0	792	792	330	792	791	455
Stage 1	-	-	-	-	-	-	334	334	-	457	457	-
Stage 2	-	-	-	-	-	-	458	458	-	335	334	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1105	-	-	1229	-	-	307	322	712	307	322	605
Stage 1	-	-	-	-	-	-	680	643	-	583	568	-
Stage 2	-	-	-	-	-	-	583	567	-	679	643	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1105	-	-	1229	-	-	306	321	712	305	321	605
Mov Cap-2 Maneuver	-	-	-	-	-	-	306	321	-	305	321	-
Stage 1	-	-	-	-	-	-	679	642	-	582	568	-
Stage 2	-	-	-	-	-	-	582	567	-	675	642	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	19.7	13.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	312	1105	-	-	1229	-	-	406
HCM Lane V/C Ratio	0.219	0.002	-	-	0.001	-	-	0.005
HCM Control Delay (s)	19.7	8.3	-	-	7.9	-	-	13.9
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		100	75		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.999			0.996			0.932	
Flt Protected	0.950			0.950				0.954			0.976	
Satd. Flow (prot)	1770	1863	1583	1770	1861	0	0	1770	0	0	1694	0
Flt Permitted	0.950			0.950				0.954			0.976	
Satd. Flow (perm)	1770	1863	1583	1770	1861	0	0	1770	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			616			254			235	
Travel Time (s)		29.9			14.0			5.8			5.3	

Intersection Summary

Area Type: Other

APPENDIX F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	245	250	105	210	30	175	375	220	50	480	165
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	95	258	42	111	221	0	184	395	130	53	505	70
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	333	283	269	349	296	443	1094	930	482	856	728
Arrive On Green	0.07	0.18	0.18	0.08	0.19	0.00	0.08	0.59	0.59	0.46	0.46	0.46
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	874	1863	1583
Grp Volume(v), veh/h	95	258	42	111	221	0	184	395	130	53	505	70
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	874	1863	1583
Q Serve(g_s), s	3.8	11.9	2.0	4.5	9.8	0.0	4.5	10.0	3.3	3.1	18.1	2.2
Cycle Q Clear(g_c), s	3.8	11.9	2.0	4.5	9.8	0.0	4.5	10.0	3.3	3.1	18.1	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	333	283	269	349	296	443	1094	930	482	856	728
V/C Ratio(X)	0.32	0.78	0.15	0.41	0.63	0.00	0.41	0.36	0.14	0.11	0.59	0.10
Avail Cap(c_a), veh/h	327	486	413	288	486	413	454	1094	930	482	856	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	35.2	31.2	27.4	33.7	0.0	12.4	9.7	8.4	14.0	18.0	13.7
Incr Delay (d2), s/veh	0.6	4.7	0.2	1.0	1.9	0.0	0.6	0.9	0.3	0.5	3.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.5	0.9	2.2	5.2	0.0	2.3	5.3	1.5	0.8	10.0	1.0
LnGrp Delay(d),s/veh	28.0	40.0	31.4	28.4	35.7	0.0	13.0	10.7	8.7	14.4	21.0	14.0
LnGrp LOS	C	D	C	C	D		B	B	A	B	C	B
Approach Vol, veh/h		395			332			709			628	
Approach Delay, s/veh		36.2			33.2			10.9			19.7	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	11.5	46.9	10.1	21.6		58.4	9.3	22.3
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	7.0	31.5	7.0	22.5		43.5	7.0	22.5
Max Q Clear Time (g_c+I1), s	6.5	20.1	6.5	13.9		12.0	5.8	11.8
Green Ext Time (p_c), s	0.0	3.5	0.0	1.2		4.5	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	12	38	11	29	50	11	29
Maximum Split (%)	13.3%	42.2%	12.2%	32.2%	55.6%	12.2%	32.2%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	60	72	20	31	60	20	31
End Time (s)	72	20	31	60	20	31	60
Yield/Force Off (s)	67	13.5	27	53.5	13.5	27	53.5
Yield/Force Off 170(s)	67	1.5	27	43.5	89.5	27	39.5
Local Start Time (s)	40	52	0	11	40	0	11
Local Yield (s)	47	83.5	7	33.5	83.5	7	33.5
Local Yield 170(s)	47	71.5	7	23.5	69.5	7	19.5

Intersection Summary

Cycle Length		90
Control Type	Actuated-Coordinated	
Natural Cycle		80

Offset: 20 (22%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	125	225	235	265	240	75	150	425	160	30	455	45
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	132	237	36	279	253	0	158	447	87	32	479	0
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	308	262	348	386	328	437	1045	888	442	829	705
Arrive On Green	0.08	0.17	0.17	0.13	0.21	0.00	0.07	0.56	0.56	0.45	0.45	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	867	1863	1583
Grp Volume(v), veh/h	132	237	36	279	253	0	158	447	87	32	479	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	867	1863	1583
Q Serve(g_s), s	5.7	11.6	1.8	12.0	11.8	0.0	4.3	13.2	2.4	2.1	18.2	0.0
Cycle Q Clear(g_c), s	5.7	11.6	1.8	12.0	11.8	0.0	4.3	13.2	2.4	4.3	18.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	308	262	348	386	328	437	1045	888	442	829	705
V/C Ratio(X)	0.41	0.77	0.14	0.80	0.65	0.00	0.36	0.43	0.10	0.07	0.58	0.00
Avail Cap(c_a), veh/h	318	441	375	348	520	442	437	1045	888	442	829	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.3	37.9	33.9	28.1	34.5	0.0	13.6	12.0	9.7	16.5	19.7	0.0
Incr Delay (d2), s/veh	0.9	5.1	0.2	12.6	1.9	0.0	0.5	1.3	0.2	0.3	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	6.4	0.8	7.1	6.2	0.0	2.1	7.1	1.1	0.5	10.0	0.0
LnGrp Delay(d),s/veh	30.1	43.0	34.1	40.7	36.4	0.0	14.1	13.3	9.9	16.8	22.6	0.0
LnGrp LOS	C	D	C	D	D		B	B	A	B	C	
Approach Vol, veh/h		405			532			692			511	
Approach Delay, s/veh		38.0			38.7			13.1			22.2	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	11.0	47.8	15.0	21.2		58.8	11.0	25.2
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	6.0	34.5	11.0	21.5		45.5	7.0	25.5
Max Q Clear Time (g_c+I1), s	6.3	20.2	14.0	13.6		15.2	7.7	13.8
Green Ext Time (p_c), s	0.0	3.4	0.0	1.1		3.9	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

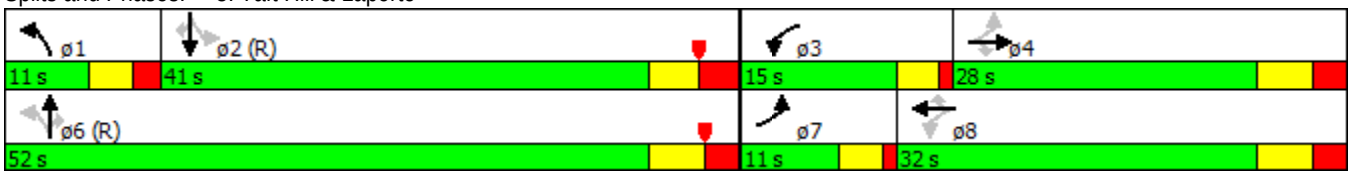
Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	11	41	15	28	52	11	32
Maximum Split (%)	11.6%	43.2%	15.8%	29.5%	54.7%	11.6%	33.7%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	63	74	20	35	63	20	31
End Time (s)	74	20	35	63	20	31	63
Yield/Force Off (s)	69	13.5	31	56.5	13.5	27	56.5
Yield/Force Off 170(s)	69	1.5	31	46.5	94.5	27	42.5
Local Start Time (s)	43	54	0	15	43	0	11
Local Yield (s)	49	88.5	11	36.5	88.5	7	36.5
Local Yield 170(s)	49	76.5	11	26.5	74.5	7	22.5

Intersection Summary

Cycle Length		95
Control Type	Actuated-Coordinated	
Natural Cycle		80

Offset: 20 (21%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte



Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	490	60	10	350	5	25	0	10	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	100	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	516	63	11	368	5	26	0	11	5	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	374	0	0	516	0	0	921	921	516	924	918	371
Stage 1	-	-	-	-	-	-	526	526	-	392	392	-
Stage 2	-	-	-	-	-	-	395	395	-	532	526	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1184	-	-	1050	-	-	251	270	559	250	272	675
Stage 1	-	-	-	-	-	-	535	529	-	633	606	-
Stage 2	-	-	-	-	-	-	630	605	-	531	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1184	-	-	1050	-	-	246	266	559	243	268	675
Mov Cap-2 Maneuver	-	-	-	-	-	-	246	266	-	243	268	-
Stage 1	-	-	-	-	-	-	533	527	-	630	600	-
Stage 2	-	-	-	-	-	-	619	599	-	519	527	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	19	15.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	293	1184	-	-	1050	-	-	357
HCM Lane V/C Ratio	0.126	0.004	-	-	0.01	-	-	0.029
HCM Control Delay (s)	19	8.1	-	-	8.5	-	-	15.4
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		100	75		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.960			0.932	
Flt Protected	0.950			0.950				0.966			0.976	
Satd. Flow (prot)	1770	1863	1583	1770	1859	0	0	1727	0	0	1694	0
Flt Permitted	0.950			0.950				0.966			0.976	
Satd. Flow (perm)	1770	1863	1583	1770	1859	0	0	1727	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			204			254			235	
Travel Time (s)		29.9			4.6			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	405	40	5	555	5	65	0	5	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	100	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	413	41	5	566	5	66	0	5	5	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	571	0	0	413	0	0	1005	1005	413	1005	1002	569
Stage 1	-	-	-	-	-	-	423	423	-	579	579	-
Stage 2	-	-	-	-	-	-	582	582	-	426	423	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1002	-	-	1146	-	-	220	241	639	220	242	522
Stage 1	-	-	-	-	-	-	609	588	-	501	501	-
Stage 2	-	-	-	-	-	-	499	499	-	606	588	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1002	-	-	1146	-	-	216	239	639	217	240	522
Mov Cap-2 Maneuver	-	-	-	-	-	-	216	239	-	217	240	-
Stage 1	-	-	-	-	-	-	606	585	-	499	499	-
Stage 2	-	-	-	-	-	-	492	497	-	598	585	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	28	17.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	227	1002	-	-	1146	-	-	307
HCM Lane V/C Ratio	0.315	0.005	-	-	0.004	-	-	0.033
HCM Control Delay (s)	28	8.6	-	-	8.2	-	-	17.1
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.3	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		100	75		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.999			0.990			0.932	
Flt Protected	0.950			0.950				0.956			0.976	
Satd. Flow (prot)	1770	1863	1583	1770	1861	0	0	1763	0	0	1694	0
Flt Permitted	0.950			0.950				0.956			0.976	
Satd. Flow (perm)	1770	1863	1583	1770	1861	0	0	1763	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			204			254			235	
Travel Time (s)		29.9			4.6			5.8			5.3	

Intersection Summary

Area Type: Other

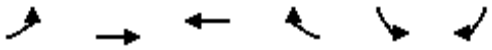
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	30	475	330	0	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	500	347	0	0	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	347	0	-	0	910	347
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	563	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1212	-	-	-	305	696
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	570	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1212	-	-	-	297	696
Mov Cap-2 Maneuver	-	-	-	-	297	-
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	555	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1212	-	-	-	696
HCM Lane V/C Ratio	0.026	-	-	-	0.053
HCM Control Delay (s)	8.1	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	75			100	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.865	
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1863	0	1611	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		204	412		205	
Travel Time (s)		4.6	9.4		4.7	

Intersection Summary

Area Type: Other

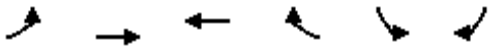
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	20	395	550	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	2	2	2	2	2
Mvmt Flow	20	403	561	0	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	561	0	-	0	1005	561
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	444	-
Critical Hdwy	4.1	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1020	-	-	-	268	527
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	646	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1020	-	-	-	263	527
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	633	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1020	-	-	-	527
HCM Lane V/C Ratio	0.02	-	-	-	0.029
HCM Control Delay (s)	8.6	-	-	-	12
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	75			100	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.865	
Flt Protected	0.950					
Satd. Flow (prot)	1805	1863	1863	0	1611	0
Flt Permitted	0.950					
Satd. Flow (perm)	1805	1863	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		204	412		205	
Travel Time (s)		4.6	9.4		4.7	

Intersection Summary

Area Type: Other

APPENDIX G

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	68	195	184	88	161	27	129	280	198	44	356	121
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	80	229	10	104	189	0	152	329	120	52	419	42
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	302	256	265	327	278	525	1130	961	540	914	777
Arrive On Green	0.06	0.16	0.16	0.08	0.18	0.00	0.07	0.61	0.61	0.49	0.49	0.49
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	937	1863	1583
Grp Volume(v), veh/h	80	229	10	104	189	0	152	329	120	52	419	42
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	937	1863	1583
Q Serve(g_s), s	3.3	10.6	0.5	4.3	8.4	0.0	3.5	7.6	2.9	2.7	13.3	1.2
Cycle Q Clear(g_c), s	3.3	10.6	0.5	4.3	8.4	0.0	3.5	7.6	2.9	2.7	13.3	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	302	256	265	327	278	525	1130	961	540	914	777
V/C Ratio(X)	0.28	0.76	0.04	0.39	0.58	0.00	0.29	0.29	0.12	0.10	0.46	0.05
Avail Cap(c_a), veh/h	336	486	413	288	486	413	556	1130	961	540	914	777
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	36.0	31.8	28.3	34.1	0.0	10.0	8.4	7.5	12.4	15.1	12.0
Incr Delay (d2), s/veh	0.5	3.9	0.1	0.9	1.6	0.0	0.3	0.7	0.3	0.4	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	5.7	0.2	2.1	4.5	0.0	1.7	4.0	1.3	0.7	7.2	0.6
LnGrp Delay(d),s/veh	29.2	40.0	31.9	29.3	35.7	0.0	10.3	9.1	7.8	12.7	16.7	12.1
LnGrp LOS	C	D	C	C	D		B	A	A	B	B	B
Approach Vol, veh/h		319			293			601			513	
Approach Delay, s/veh		37.0			33.4			9.2			15.9	
Approach LOS		D			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	10.4	49.7	9.8	20.1		60.1	8.6	21.3
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	7.0	31.5	7.0	22.5		43.5	7.0	22.5
Max Q Clear Time (g_c+I1), s	5.5	15.3	6.3	12.6		9.6	5.3	10.4
Green Ext Time (p_c), s	0.1	3.2	0.0	1.0		3.6	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.4
HCM 2010 LOS	C

Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	12	38	11	29	50	11	29
Maximum Split (%)	13.3%	42.2%	12.2%	32.2%	55.6%	12.2%	32.2%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	60	72	20	31	60	20	31
End Time (s)	72	20	31	60	20	31	60
Yield/Force Off (s)	67	13.5	27	53.5	13.5	27	53.5
Yield/Force Off 170(s)	67	1.5	27	43.5	89.5	27	39.5
Local Start Time (s)	40	52	0	11	40	0	11
Local Yield (s)	47	83.5	7	33.5	83.5	7	33.5
Local Yield 170(s)	47	71.5	7	23.5	69.5	7	19.5

Intersection Summary

Cycle Length	90	
Control Type	Actuated-Coordinated	
Natural Cycle	80	

Offset: 20 (22%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	93	173	173	236	190	65	112	317	138	29	338	33
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	99	184	19	251	202	0	119	337	81	31	360	0
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	255	217	312	314	267	579	1137	967	567	948	806
Arrive On Green	0.07	0.14	0.14	0.11	0.17	0.00	0.06	0.61	0.61	0.51	0.51	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	965	1863	1583
Grp Volume(v), veh/h	99	184	19	251	202	0	119	337	81	31	360	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	965	1863	1583
Q Serve(g_s), s	4.4	9.0	1.0	10.0	9.6	0.0	2.8	8.2	2.0	1.5	11.2	0.0
Cycle Q Clear(g_c), s	4.4	9.0	1.0	10.0	9.6	0.0	2.8	8.2	2.0	1.5	11.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	255	217	312	314	267	579	1137	967	567	948	806
V/C Ratio(X)	0.35	0.72	0.09	0.80	0.64	0.00	0.21	0.30	0.08	0.05	0.38	0.00
Avail Cap(c_a), veh/h	305	461	392	312	500	425	623	1137	967	567	948	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.6	39.3	35.8	32.2	36.8	0.0	9.6	8.8	7.6	11.8	14.2	0.0
Incr Delay (d2), s/veh	0.7	3.8	0.2	14.2	2.2	0.0	0.2	0.7	0.2	0.2	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.9	0.4	2.9	5.1	0.0	1.4	4.3	0.9	0.4	6.0	0.0
LnGrp Delay(d),s/veh	32.4	43.1	36.0	46.4	39.0	0.0	9.8	9.5	7.8	12.0	15.4	0.0
LnGrp LOS	C	D	D	D	D		A	A	A	B	B	
Approach Vol, veh/h		302			453			537			391	
Approach Delay, s/veh		39.1			43.1			9.3			15.1	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	9.7	53.9	13.0	18.5		63.5	10.0	21.5
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	7.0	34.5	9.0	22.5		46.5	7.0	24.5
Max Q Clear Time (g_c+I1), s	4.8	13.2	12.0	11.0		10.2	6.4	11.6
Green Ext Time (p_c), s	0.1	2.7	0.0	1.0		2.9	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C

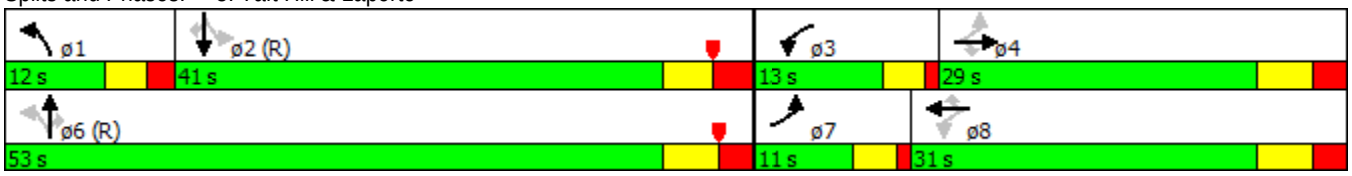
Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	12	41	13	29	53	11	31
Maximum Split (%)	12.6%	43.2%	13.7%	30.5%	55.8%	11.6%	32.6%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	93	10	51	64	93	51	62
End Time (s)	10	51	64	93	51	62	93
Yield/Force Off (s)	5	44.5	60	86.5	44.5	58	86.5
Yield/Force Off 170(s)	5	32.5	60	76.5	30.5	58	72.5
Local Start Time (s)	42	54	0	13	42	0	11
Local Yield (s)	49	88.5	9	35.5	88.5	7	35.5
Local Yield 170(s)	49	76.5	9	25.5	74.5	7	21.5

Intersection Summary

Cycle Length		95
Control Type		Actuated-Coordinated
Natural Cycle		80

Offset: 51 (54%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte



Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	423	60	7	288	0	26	0	7	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	481	68	8	327	0	30	0	8	3	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	327	0	0	549	0	0	861	860	515	864	894	327
Stage 1	-	-	-	-	-	-	517	517	-	343	343	-
Stage 2	-	-	-	-	-	-	344	343	-	521	551	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1233	-	-	1021	-	-	276	294	560	274	280	714
Stage 1	-	-	-	-	-	-	541	534	-	672	637	-
Stage 2	-	-	-	-	-	-	671	637	-	539	515	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1233	-	-	1021	-	-	273	291	560	268	277	714
Mov Cap-2 Maneuver	-	-	-	-	-	-	273	291	-	268	277	-
Stage 1	-	-	-	-	-	-	540	533	-	671	631	-
Stage 2	-	-	-	-	-	-	662	631	-	531	514	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	18.4	15.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	306	1233	-	-	1021	-	-	357
HCM Lane V/C Ratio	0.123	0.001	-	-	0.008	-	-	0.016
HCM Control Delay (s)	18.4	7.9	0	-	8.6	0	-	15.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.983						0.972			0.946	
Flt Protected					0.999			0.962			0.971	
Satd. Flow (prot)	0	1831	0	0	1861	0	0	1742	0	0	1711	0
Flt Permitted					0.999			0.962			0.971	
Satd. Flow (perm)	0	1831	0	0	1861	0	0	1742	0	0	1711	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			204			254			235	
Travel Time (s)		29.9			4.6			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	333	42	1	472	2	64	1	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	340	43	1	482	2	65	1	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	484	0	0	383	0	0	850	851	361	852	872	483
Stage 1	-	-	-	-	-	-	365	365	-	485	485	-
Stage 2	-	-	-	-	-	-	485	486	-	367	387	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1079	-	-	1175	-	-	280	297	684	280	289	584
Stage 1	-	-	-	-	-	-	654	623	-	563	552	-
Stage 2	-	-	-	-	-	-	563	551	-	653	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1079	-	-	1175	-	-	279	296	684	278	288	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	279	296	-	278	288	-
Stage 1	-	-	-	-	-	-	653	622	-	562	551	-
Stage 2	-	-	-	-	-	-	561	550	-	649	609	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	21.6	14.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	284	1079	-	-	1175	-	-	377
HCM Lane V/C Ratio	0.241	0.002	-	-	0.001	-	-	0.005
HCM Control Delay (s)	21.6	8.3	0	-	8.1	0	-	14.6
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.985			0.999			0.996			0.932	
Flt Protected								0.954			0.976	
Satd. Flow (prot)	0	1835	0	0	1861	0	0	1770	0	0	1694	0
Flt Permitted								0.954			0.976	
Satd. Flow (perm)	0	1835	0	0	1861	0	0	1770	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			204			254			235	
Travel Time (s)		29.9			4.6			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	423	60	7	288	0	26	0	7	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	481	68	8	327	0	30	0	8	3	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	327	0	0	481	0	0	827	826	481	830	826	327
Stage 1	-	-	-	-	-	-	483	483	-	343	343	-
Stage 2	-	-	-	-	-	-	344	343	-	487	483	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1233	-	-	1082	-	-	291	307	585	289	307	714
Stage 1	-	-	-	-	-	-	565	553	-	672	637	-
Stage 2	-	-	-	-	-	-	671	637	-	562	553	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1233	-	-	1082	-	-	288	304	585	283	304	714
Mov Cap-2 Maneuver	-	-	-	-	-	-	288	304	-	283	304	-
Stage 1	-	-	-	-	-	-	565	553	-	671	632	-
Stage 2	-	-	-	-	-	-	664	632	-	554	553	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	17.6	14.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	323	1233	-	-	1082	-	-	373
HCM Lane V/C Ratio	0.116	0.001	-	-	0.007	-	-	0.015
HCM Control Delay (s)	17.6	7.9	-	-	8.4	-	-	14.8
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		100	75		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850					0.972			0.946	
Flt Protected	0.950			0.950				0.962			0.971	
Satd. Flow (prot)	1770	1863	1583	1770	1863	0	0	1742	0	0	1711	0
Flt Permitted	0.950			0.950				0.962			0.971	
Satd. Flow (perm)	1770	1863	1583	1770	1863	0	0	1742	0	0	1711	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			204			254			235	
Travel Time (s)		29.9			4.6			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	333	42	1	472	2	64	1	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	340	43	1	482	2	65	1	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	484	0	0	340	0	0	829	830	340	830	829	483
Stage 1	-	-	-	-	-	-	344	344	-	485	485	-
Stage 2	-	-	-	-	-	-	485	486	-	345	344	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1079	-	-	1219	-	-	290	306	702	289	306	584
Stage 1	-	-	-	-	-	-	671	637	-	563	552	-
Stage 2	-	-	-	-	-	-	563	551	-	671	637	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1079	-	-	1219	-	-	289	305	702	287	305	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	289	305	-	287	305	-
Stage 1	-	-	-	-	-	-	670	636	-	562	552	-
Stage 2	-	-	-	-	-	-	562	551	-	667	636	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	20.9	14.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	294	1079	-	-	1219	-	-	385
HCM Lane V/C Ratio	0.233	0.002	-	-	0.001	-	-	0.005
HCM Control Delay (s)	20.9	8.3	-	-	8	-	-	14.4
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		100	75		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.999			0.996			0.932	
Flt Protected	0.950			0.950				0.954			0.976	
Satd. Flow (prot)	1770	1863	1583	1770	1861	0	0	1770	0	0	1694	0
Flt Permitted	0.950			0.950				0.954			0.976	
Satd. Flow (perm)	1770	1863	1583	1770	1861	0	0	1770	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			204			254			235	
Travel Time (s)		29.9			4.6			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	22	411	289	51	13	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	467	328	58	15	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	386	0	-	0	874	357
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	517	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1172	-	-	-	320	687
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1172	-	-	-	311	687
Mov Cap-2 Maneuver	-	-	-	-	311	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	581	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1172	-	-	-	376
HCM Lane V/C Ratio	0.021	-	-	-	0.057
HCM Control Delay (s)	8.1	0	-	-	15.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.980		0.957	
Flt Protected		0.997			0.967	
Satd. Flow (prot)	0	1857	1825	0	1724	0
Flt Permitted		0.997			0.967	
Satd. Flow (perm)	0	1857	1825	0	1724	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		204	412		205	
Travel Time (s)		4.6	9.4		4.7	

Intersection Summary

Area Type: Other

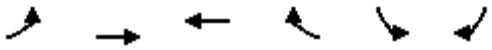
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	10	326	448	24	62	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	333	457	24	63	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	482	0	-	0	822	469
Stage 1	-	-	-	-	469	-
Stage 2	-	-	-	-	353	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1081	-	-	-	344	594
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1081	-	-	-	340	594
Mov Cap-2 Maneuver	-	-	-	-	340	-
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	703	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	17
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1081	-	-	-	391
HCM Lane V/C Ratio	0.009	-	-	-	0.232
HCM Control Delay (s)	8.4	0	-	-	17
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.9



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.993		0.958	
Flt Protected		0.999			0.967	
Satd. Flow (prot)	0	1861	1850	0	1726	0
Flt Permitted		0.999			0.967	
Satd. Flow (perm)	0	1861	1850	0	1726	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		204	412		235	
Travel Time (s)		4.6	9.4		5.3	

Intersection Summary

Area Type: Other

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	22	411	289	51	13	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	467	328	58	15	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	386	0	-	0	874	357
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	517	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1172	-	-	-	320	687
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1172	-	-	-	313	687
Mov Cap-2 Maneuver	-	-	-	-	313	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1172	-	-	-	378
HCM Lane V/C Ratio	0.021	-	-	-	0.057
HCM Control Delay (s)	8.1	-	-	-	15.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	75			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.980		0.957	
Flt Protected	0.950				0.967	
Satd. Flow (prot)	1770	1863	1825	0	1724	0
Flt Permitted	0.950				0.967	
Satd. Flow (perm)	1770	1863	1825	0	1724	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		204	412		205	
Travel Time (s)		4.6	9.4		4.7	

Intersection Summary

Area Type: Other

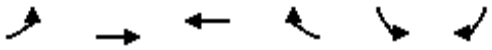
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	10	326	448	24	62	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	333	457	24	63	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	482	0	-	0	822	469
Stage 1	-	-	-	-	469	-
Stage 2	-	-	-	-	353	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1081	-	-	-	344	594
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1081	-	-	-	341	594
Mov Cap-2 Maneuver	-	-	-	-	341	-
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	704	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	16.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1081	-	-	-	392
HCM Lane V/C Ratio	0.009	-	-	-	0.232
HCM Control Delay (s)	8.4	-	-	-	16.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.9



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	75			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.993		0.958	
Flt Protected	0.950				0.967	
Satd. Flow (prot)	1770	1863	1850	0	1726	0
Flt Permitted	0.950				0.967	
Satd. Flow (perm)	1770	1863	1850	0	1726	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		204	412		235	
Travel Time (s)		4.6	9.4		5.3	

Intersection Summary

Area Type: Other

APPENDIX H

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	255	250	115	215	35	175	375	245	55	480	165
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	95	268	44	121	226	0	184	395	136	58	505	65
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	342	291	277	367	312	434	1076	914	470	836	710
Arrive On Green	0.07	0.18	0.18	0.08	0.20	0.00	0.08	0.58	0.58	0.45	0.45	0.45
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	869	1863	1583
Grp Volume(v), veh/h	95	268	44	121	226	0	184	395	136	58	505	65
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	869	1863	1583
Q Serve(g_s), s	3.8	12.3	2.1	4.8	10.0	0.0	4.6	10.2	3.6	3.5	18.5	2.1
Cycle Q Clear(g_c), s	3.8	12.3	2.1	4.8	10.0	0.0	4.6	10.2	3.6	3.5	18.5	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	303	342	291	277	367	312	434	1076	914	470	836	710
V/C Ratio(X)	0.31	0.78	0.15	0.44	0.62	0.00	0.42	0.37	0.15	0.12	0.60	0.09
Avail Cap(c_a), veh/h	337	486	413	287	486	413	442	1076	914	470	836	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	35.0	30.8	26.8	33.0	0.0	12.9	10.2	8.8	14.7	18.8	14.3
Incr Delay (d2), s/veh	0.6	5.3	0.2	1.1	1.7	0.0	0.7	1.0	0.3	0.5	3.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.8	0.9	2.4	5.3	0.0	2.3	5.6	1.6	0.9	10.1	1.0
LnGrp Delay(d),s/veh	27.5	40.3	31.1	27.9	34.7	0.0	13.6	11.2	9.1	15.2	22.0	14.5
LnGrp LOS	C	D	C	C	C		B	B	A	B	C	B
Approach Vol, veh/h		407			347			715			628	
Approach Delay, s/veh		36.3			32.3			11.4			20.6	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	11.6	45.9	10.5	22.0		57.5	9.3	23.2
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	7.0	31.5	7.0	22.5		43.5	7.0	22.5
Max Q Clear Time (g_c+I1), s	6.6	20.5	6.8	14.3		12.2	5.8	12.0
Green Ext Time (p_c), s	0.0	3.4	0.0	1.2		4.5	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C

Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	12	38	11	29	50	11	29
Maximum Split (%)	13.3%	42.2%	12.2%	32.2%	55.6%	12.2%	32.2%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	60	72	20	31	60	20	31
End Time (s)	72	20	31	60	20	31	60
Yield/Force Off (s)	67	13.5	27	53.5	13.5	27	53.5
Yield/Force Off 170(s)	67	1.5	27	43.5	89.5	27	39.5
Local Start Time (s)	40	52	0	11	40	0	11
Local Yield (s)	47	83.5	7	33.5	83.5	7	33.5
Local Yield 170(s)	47	71.5	7	23.5	69.5	7	19.5

Intersection Summary

Cycle Length		90
Control Type		Actuated-Coordinated
Natural Cycle		80

Offset: 20 (22%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	125	230	235	295	250	80	150	425	175	35	455	45
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	132	242	36	311	263	0	158	447	95	37	479	0
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	313	266	348	392	333	434	1040	884	436	824	701
Arrive On Green	0.08	0.17	0.17	0.13	0.21	0.00	0.07	0.56	0.56	0.44	0.44	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	860	1863	1583
Grp Volume(v), veh/h	132	242	36	311	263	0	158	447	95	37	479	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	860	1863	1583
Q Serve(g_s), s	5.7	11.8	1.8	12.0	12.3	0.0	4.3	13.3	2.7	2.5	18.3	0.0
Cycle Q Clear(g_c), s	5.7	11.8	1.8	12.0	12.3	0.0	4.3	13.3	2.7	4.7	18.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	313	266	348	392	333	434	1040	884	436	824	701
V/C Ratio(X)	0.42	0.77	0.14	0.89	0.67	0.00	0.36	0.43	0.11	0.08	0.58	0.00
Avail Cap(c_a), veh/h	315	441	375	348	520	442	434	1040	884	436	824	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.1	37.8	33.6	29.9	34.5	0.0	13.8	12.2	9.9	16.8	19.9	0.0
Incr Delay (d2), s/veh	0.9	5.4	0.2	24.1	2.1	0.0	0.5	1.3	0.2	0.4	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	6.5	0.8	4.6	6.6	0.0	2.1	7.1	1.2	0.6	10.1	0.0
LnGrp Delay(d),s/veh	30.0	43.2	33.9	54.0	36.6	0.0	14.3	13.5	10.1	17.2	22.9	0.0
LnGrp LOS	C	D	C	D	D		B	B	B	B	C	
Approach Vol, veh/h		410			574			700			516	
Approach Delay, s/veh		38.1			46.0			13.2			22.5	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	11.0	47.5	15.0	21.5		58.5	11.0	25.5
Change Period (Y+Rc), s	5.0	6.5	4.0	6.5		6.5	4.0	6.5
Max Green Setting (Gmax), s	6.0	34.5	11.0	21.5		45.5	7.0	25.5
Max Q Clear Time (g_c+I1), s	6.3	20.3	14.0	13.8		15.3	7.7	14.3
Green Ext Time (p_c), s	0.0	3.4	0.0	1.2		4.0	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

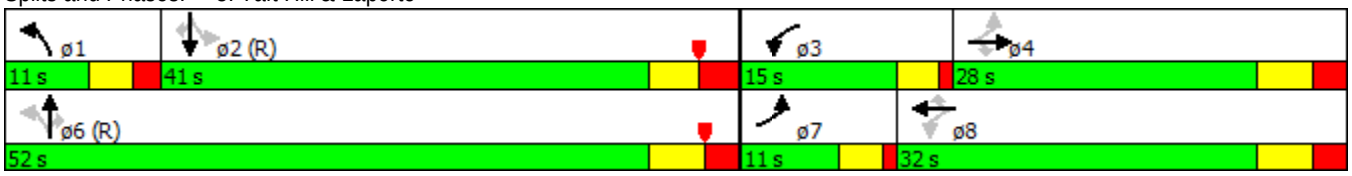
Phase Number	1	2	3	4	6	7	8
Movement	NBL	SBTL	WBL	EBTL	NBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize							
Recall Mode	None	C-Max	None	None	C-Max	None	None
Maximum Split (s)	11	41	15	28	52	11	32
Maximum Split (%)	11.6%	43.2%	15.8%	29.5%	54.7%	11.6%	33.7%
Minimum Split (s)	11	28	11	28	28	11	28
Yellow Time (s)	3	3.5	3	4	4	3	4
All-Red Time (s)	2	3	1	2.5	2.5	1	2.5
Minimum Initial (s)	4	7	4	7	7	4	7
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7		7	7		7
Flash Dont Walk (s)		12		10	14		14
Dual Entry	No	Yes	No	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	63	74	20	35	63	20	31
End Time (s)	74	20	35	63	20	31	63
Yield/Force Off (s)	69	13.5	31	56.5	13.5	27	56.5
Yield/Force Off 170(s)	69	1.5	31	46.5	94.5	27	42.5
Local Start Time (s)	43	54	0	15	43	0	11
Local Yield (s)	49	88.5	11	36.5	88.5	7	36.5
Local Yield 170(s)	49	76.5	11	26.5	74.5	7	22.5

Intersection Summary

Cycle Length		95
Control Type	Actuated-Coordinated	
Natural Cycle		80

Offset: 20 (21%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red

Splits and Phases: 3: Taft Hill & Laporte



Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	530	60	10	370	5	25	0	10	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	100	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	558	63	11	389	5	26	0	11	5	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	558	0	0	984	984	558	987	981	392
Stage 1	-	-	-	-	-	-	568	568	-	413	413	-
Stage 2	-	-	-	-	-	-	416	416	-	574	568	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1164	-	-	1013	-	-	228	248	529	226	249	657
Stage 1	-	-	-	-	-	-	508	506	-	616	594	-
Stage 2	-	-	-	-	-	-	614	592	-	504	506	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1164	-	-	1013	-	-	224	244	529	219	245	657
Mov Cap-2 Maneuver	-	-	-	-	-	-	224	244	-	219	245	-
Stage 1	-	-	-	-	-	-	506	504	-	613	588	-
Stage 2	-	-	-	-	-	-	602	586	-	492	504	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	20.6	16.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	268	1164	-	-	1013	-	-	329
HCM Lane V/C Ratio	0.137	0.005	-	-	0.01	-	-	0.032
HCM Control Delay (s)	20.6	8.1	-	-	8.6	-	-	16.3
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		100	75		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.960			0.932	
Flt Protected	0.950			0.950				0.966			0.976	
Satd. Flow (prot)	1770	1863	1583	1770	1859	0	0	1727	0	0	1694	0
Flt Permitted	0.950			0.950				0.966			0.976	
Satd. Flow (perm)	1770	1863	1583	1770	1859	0	0	1727	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			204			254			235	
Travel Time (s)		29.9			4.6			5.8			5.3	

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	430	40	5	600	5	65	0	5	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	100	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	439	41	5	612	5	66	0	5	5	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	617	0	0	439	0	0	1077	1077	439	1077	1074	615
Stage 1	-	-	-	-	-	-	449	449	-	625	625	-
Stage 2	-	-	-	-	-	-	628	628	-	452	449	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	963	-	-	1121	-	-	197	219	618	197	220	491
Stage 1	-	-	-	-	-	-	589	572	-	473	477	-
Stage 2	-	-	-	-	-	-	471	476	-	587	572	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	963	-	-	1121	-	-	194	217	618	194	218	491
Mov Cap-2 Maneuver	-	-	-	-	-	-	194	217	-	194	218	-
Stage 1	-	-	-	-	-	-	586	569	-	471	475	-
Stage 2	-	-	-	-	-	-	464	474	-	579	569	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	31.9	18.4
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	204	963	-	-	1121	-	-	278
HCM Lane V/C Ratio	0.35	0.005	-	-	0.005	-	-	0.037
HCM Control Delay (s)	31.9	8.8	-	-	8.2	-	-	18.4
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.5	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		100	75		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.999			0.990			0.932	
Flt Protected	0.950			0.950				0.956			0.976	
Satd. Flow (prot)	1770	1863	1583	1770	1861	0	0	1763	0	0	1694	0
Flt Permitted	0.950			0.950				0.956			0.976	
Satd. Flow (perm)	1770	1863	1583	1770	1861	0	0	1763	0	0	1694	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1316			204			254			235	
Travel Time (s)		29.9			4.6			5.8			5.3	

Intersection Summary

Area Type: Other

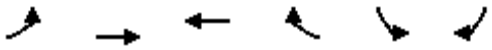
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	70	475	330	85	40	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	100	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	500	347	89	42	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	347	0	-	0	994	347
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	647	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1212	-	-	-	272	696
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	521	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1212	-	-	-	255	696
Mov Cap-2 Maneuver	-	-	-	-	255	-
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	489	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	16.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1212	-	-	-	403
HCM Lane V/C Ratio	0.061	-	-	-	0.248
HCM Control Delay (s)	8.2	-	-	-	16.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	75			100	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt				0.850	0.922	
Flt Protected	0.950				0.979	
Satd. Flow (prot)	1770	1863	1863	1583	1681	0
Flt Permitted	0.950				0.979	
Satd. Flow (perm)	1770	1863	1863	1583	1681	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		204	412		205	
Travel Time (s)		4.6	9.4		4.7	

Intersection Summary

Area Type: Other

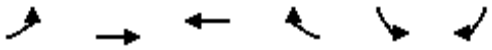
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	45	395	545	55	100	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	100	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	2	2	2	2	2
Mvmt Flow	46	403	556	56	102	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	556	0	-	0	1051	556
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	495	-
Critical Hdwy	4.1	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1025	-	-	-	251	531
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	613	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1025	-	-	-	240	531
Mov Cap-2 Maneuver	-	-	-	-	240	-
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	30.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1025	-	-	-	306
HCM Lane V/C Ratio	0.045	-	-	-	0.55
HCM Control Delay (s)	8.7	-	-	-	30.3
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	3.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	75			100	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt				0.850	0.947	
Flt Protected	0.950				0.971	
Satd. Flow (prot)	1805	1863	1863	1583	1713	0
Flt Permitted	0.950				0.971	
Satd. Flow (perm)	1805	1863	1863	1583	1713	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		204	412		205	
Travel Time (s)		4.6	9.4		4.7	

Intersection Summary

Area Type: Other

APPENDIX I

SCALE: 1"=600'

PEDESTRIAN INFLUENCE AREA

DELICH ASSOCIATES

Pedestrian LOS Worksheet

Project Location Classification: Transit Corridor

	Description of Applicable Destination Area Within 1320'	Destination Area Classification		Level of Service (minimum based on project location classification)				
				Directness	Continuity	Street Crossings	Visual Interest & Amenities	Security
1	Commercial uses to the west of the site	Commercial	Minimum	B	C	C	C	B
			Actual	B	D	A	C	B
			Proposed	B	D	A	C	B
2	Neighborhood to the east of the site	Residential	Minimum	B	C	C	C	B
			Actual	B	D	A	C	B
			Proposed	B	D	A	C	B
3	Neighborhood to the south of the site	Residential	Minimum	B	C	C	C	B
			Actual	B	C	B	C	B
			Proposed	B	C	B	C	B
4			Minimum					
			Actual					
			Proposed					
5			Minimum					
			Actual					
			Proposed					
6			Minimum					
			Actual					
			Proposed					
7			Minimum					
			Actual					
			Proposed					
8			Minimum					
			Actual					
			Proposed					
9			Minimum					
			Actual					
			Proposed					
10			Minimum					
			Actual					
			Proposed					

Salud Overall Development Plan
Neighborhood Meeting Notes
September 16, 2015
LaPorte Outreach Church

In attendance from the City: Jason Holland, City Planner; Martina Wilkinson, Traffic Systems Engineer. Representatives from Salud were also in attendance as well as the project architect and landscape architect.

The meeting began with Jason Holland providing an overview of the Northwest Subarea plan, an explanation of the development review process, next steps in the review, and an overview of the neighborhood meeting agenda and ground rules. Hand-outs were also provided showing all permitted uses in the L-M-N and C-L zone districts as well as information about the Northwest Subarea Plan.

Stephanie Van Dyken, land planning consultant for Salud, provided a presentation of the development's components. A site plan was presented which outlined the general layout of the proposal, including the location of a temporary clinic in a portion of the existing office building along the southern portion of the property as well as the location of six proposed lots surrounding a proposed extension of Maple Street through the property which connects to Laporte Avenue at the southeast corner of the property.

Q: You're showing a new street connection from Laporte to Maple?
A: (Applicant) Yes, we would connect with the existing part of Maple.

Q: Have easement locations been determined?
A: (Applicant) Not at this time.

Q: How much additional traffic is expected?
A: (Applicant) Not known at this time. We are only occupying the temporary facility right now while we work on plans and a traffic study for the whole site.

Q: How big is the temporary clinic and how many employees and people do you expect?
A: (Applicant) 9,000 square feet total space; 12-15 employees total; 6 exam rooms; 25 customers anticipated at any one time max.

Comment: I'm concerned with more people coming and going.

Q: How big is the new building for your permanent facility?
A: (Applicant) We'll be renovating the existing building in the middle of the site and will occupy 20,000 to 30,000 square feet of that building.

Q: Does the existing location up off of North College stay open?
A: (Applicant) Yes, it will stay open.

Q: Where will employees park?
A: (Applicant) In the existing parking lot.

Comment: I find that hard to believe.

Q: Can you tell us what infrastructure improvements will be needed?
A: (Applicant) This still needs to be determined. This is just the Overall Plan.

Q: What are the hours of operation?
A: (Applicant) 8 a.m. to 5 p.m.

Q: Will the lots be for sale?
A: (Applicant) Yes.

Q: What is the cost for the bridge shown?
A: (Applicant) Unknown at this time.

Q: What are the impacts to the Northstar Trailer Park? Increase in traffic?
A: (Applicant) This is to be determined, we will need to complete the traffic study.

Q: How are uses for the new lots determined for the traffic study?
A: (City) This is based on conservative (high) estimates for trips generated by potential uses.

Q: What is the use classification for Salud?
A: (City) Medical Clinic.

Q: What will the future Lot 1 be?
A: (Applicant) It could be any use from the C-L zone (Limited Commercial), provided that they meet the performance standards in the Land Use Code.

Comment: I think it will be a disaster to have all of the traffic entering and exiting through Laporte Ave.

Q: Are there landscaping requirements?
A: (Applicant) Yes, and street improvements.

Q: What's the height of the new building?
A: (Applicant) Only renovation of existing footprint. No height changes.

Q: What will happen to the existing residence (along Laporte)?
A: (Applicant) Will be removed.

Q: How will you renovate the building, what are the materials?
A: (Applicant) Stone/stucco, metal roof.

Q: What are the plans for the L-M-N zoned portion?
A: (Applicant) We will list a range of uses based on what's permitted in that zone district. The final use will be market driven.

Q: Will Maple Street be a school bus route?
A: (City) Not sure but we will coordinate that question with the school district with our review process.

Q: What is the next step with a detailed site plan for the Salud part?
A: (Applicant) In the next few months we'll working on those plans and turning them into the city.

Q: Will the bus services be impacted?
A: (City) We'll look at those services and bus stop locations with Transfort with the increase in traffic.

Q: What services is Salud providing?
A: (Applicant) Dental, pharmacy, outpatient medical care, behavioral health.

Q: Very concerned with safety and increase in crime this proposal will generate. Security measures? Fencing?
A: (Applicant) Typically we see that these issues come from outside our facility grounds out in the surrounding neighborhoods. People get services and leave. We serve all incomes.

Comment: I'd like to see security lighting and fencing.

Q: Ambulance visits?
A: (Applicant) Could be, but this is an outpatient only facility.

Q: What's the typical salary of staff?
A: (Applicant) It ranges based on the job. The minimum salary is $15.00 per hour.

Q: Is the 9,000 square feet temporary facility connected to sewer?
A: (Applicant) Yes.

With no more questions, the meeting adjourned.