

June 13, 2025

City of Aurora
Planning Division

**RE: Debreselam Medhanealem (Savior Of The World) Church - Site Plan
Application Number: DA-2386-00, Case Number: 2024-6033-00
3rd Review Applicant Response Letter**

Dear Ani,

Thank you for the staff comments dated April 22, 2025, regarding the subject development application under review with the City of Aurora. We appreciate staff working with us to resolve the comments since their issuance; below is a summary in ***bold and italics*** of our responses that coincide with our related plan revisions.

PLANNING DEPARTMENT COMMENTS (Comments in Dark Cyan)

1. Community Questions, Comments, and Concerns

1A. No Comments

2. Lighting Comments

Sheet 7 (See Redlines on Site Plan)

2A. (Based on a Last Review's Comment) See the highlighted Area on the Plan. Please add a lighting fixture to make sure this portion of the property complies with the following section of code: Private sidewalks and internal pedestrian paths are required to be lit with full cutoff shielded lighting fixtures no more than 16 feet tall and provide consistent illumination of at least one foot candle on the walking surface. Please revise plans to have the private sidewalks and paths that are highlighted on the plan to conform to the 1 foot candle requirement.

Galloway Response: Accessible routes have been revised and match on the plans. All sidewalks and pathways on site should now conform to the 1 footcandle requirement. Operationally, this church property will operate on Sundays between 8:00AM and 3:00PM. The northernmost parking spaces are intended to be overflow spaces when the church is holding services and would not be occupied during dark hours.

3. Landscaping Issues (Tammy Cook / 954-266-6488 / tdcook@auroragov.org / Comments in bright teal)

Sheet 5

3A. Per the comment/ response this area will be the future phase. Label this area: Open Space Picnic Area (Future Phase).

Galloway Response: Comment has been added on landscape sheet.

3B. Repeat Comment: The building perimeter should include the south perimeter of both buildings (136'+ 170'=306') and east perimeter of both buildings (93'+99'=192'). These perimeters should be called out separately and the provided trees/shrubs provided. The South (306') and East (192') perimeters are not called out separately and the shrubs are not noted.

***Galloway Response: Building perimeters updated:
- South perimeters (total 306') - required 8 trees.
- East perimeters (total 192') - required 5 trees.***

4. Addressing (Phil Turner / 303-739-7357 / pcturner@auroragov.org)

4A. Repeat Comment: Please submit a preliminary digital addressing .SHP or a .DWG file as soon as possible. This digital file is used for street naming, addressing and preliminary GIS analysis.



Include the following layers as a minimum:

- PARCELS
- STREET LINES
- BUILDING FOOTPRINTS (IF AVAILABLE)

PLEASE ENSURE THAT THE DIGITAL FILE IS PROVIDED IN A NAD 83 FEET, STATE PLANE, CENTRAL COLORADO PROJECTION SO IT WILL DISPLAY CORRECTLY WITHIN OUR GIS SYSTEM. PLEASE PROVIDE A CAD .DWG FILE THAT IS A 2013 CAD VERSION. PLEASE ELIMINATE ANY LINE WORK OUTSIDE OF THE TARGET AREA. MORE INFORMATION CAN BE FOUND AT: [HTTPS://AURORAGOV.ORG/CADTOGISSTANDARDS](https://AURORAGOV.ORG/CADTOGISSTANDARDS) OR BY CONTACTING CADGIS@AURORAGOV.ORG

Galloway Response: This will be emailed to the GIS department on Monday, 6/16.

REFERRAL COMMENTS FROM OTHER DEPARTMENTS AND AGENCIES

5. Civil Engineering (Sara Siggue / 303-960-1349 / ssigue@auroragov.org / Comments in green)

Sheet 1

- 5A. 2nd Referral Comments in green were made by Development Services reviewer Sara Siggue. Please reach out to her at ssigue@auroragov.org for any comments or questions.

Sheet 2

- 5B. Understood final site plan approval will be granted once the 6th Ave roadway improvements are reviewed and approved.

Galloway Response: Acknowledged.

Sheet 3

- 5C. Repeat Comment: Please ensure that 6th Ave is classified as a Major Arterial.

Galloway Response: Roadway callout has been updated to show "Major Arterial."

- 5D. Repeat Comment: Please ensure that the maximum transverse slope of the fire lane easement doesn't exceed 4%.

Galloway Response: Grading design has been updated to show transverse slopes do not exceed 4%.

Sheet 9

- 5E. Remove copyright notes restricting reproduction of the approved plans and reports. (3.D.7 of the 2025 COA Roadway Manual) (TYP).

Galloway Response: Copyright notes have been removed.

6. Traffic Engineering (Jason Igo / jigo@auroragov.org / Comments in orange)

Traffic Impact Study:

- 6A. The Add note about assumption of 25' for vehicle queued at non signalized intersection.

Galloway Response: Note added.

- 6B. A SB left lane at 6th and Ventura is warranted based on volumes.

Galloway Response: SBL has been discussed in the updated traffic study. Final striping design will be addressed with the Civil Construction Documents. A note has been added to the Site Plan sheet (page 2) to address this.

Site Plan

- 6C. Two turn lane striping is being evaluated for Ventura. This could be a change during civil plans.

Galloway Response: Acknowledged.

Move sight triangle north to here. (See redline)

Galloway Response: Site triangle has been moved north.

7. Fire / Life Safety (Stephen Kirchner / 303-739-7489 / stkirchn@auroragov.org / Comments in blue)

Sheet 2

- 7A. Please identify all public and main entrances in Building A and Building C. Make sure at least 60% of all public entrances are accessible. TYP
Galloway Response: All entrances have been identified and labeled in the site legend.
- 7B. Knox boxes should be located at main entrance to building and fire riser room.
Galloway Response: Knox box locations have been updated to comply with this standard.
- 7C. Repeat Comment: Accessible route must connect to trash enclosure. TYP
Galloway Response: Accessible route has been shown to connect to the trash enclosure.
- 7D. Use notes provided to show location of Knox Boxes.
Galloway Response: Acknowledged.
- 7E. Accessible routes shown on sheet 2, sheet 3, and sheet 7 are all different.
Galloway Response: Accessible routes have been updated to be consistent on all sheets.
- 7F. Repeat Comment: Third request to relocate FDC and hydrant to the position indicated. This location provides better visibility of the strobe above the FDC for fire crews responding. The current location also has a ramp which obstructs access to the FDC. See image provided.
Galloway Response: FDC location has been revised as requested. Fire hydrant is located within 100' of the FDC location.

Sheet 3

- 7G. Accessible route ends at public ROW. Area marked in blue is not required.
Galloway Response: Area marked in blue has been removed from the accessible route.
- 7H. Accessible route shown on sheet 2, sheet 3, and sheet 7 are all different.
Galloway Response: Accessible routes have been updated to be consistent on the following sheets.

Sheet 5

- 7I. Provide 3 foot paved path to FDC.
Galloway Response: FDC location has been shifted east along the face of the building and is accessible by way of paved sidewalk.
- 7J. Repeat Comment: Third request to show fire riser room and Knox box locations on landscape sheet.
Galloway Response: Fire riser room and knox box are labeled on landscape plan.
- 7K. See notes on sheet 2 regarding FDC and hydrant placement.
Galloway Response: Acknowledged.

Sheet 7

- 7L. 1009.7 Exterior areas for assisted rescue. Exterior areas for assisted rescue shall be accessed by an accessible route from the area served. Where the exit discharge does not include an accessible route from an exit located on the level of exit discharge to a public way, an exterior area of assisted rescue shall be provided on the exterior landing in accordance with Sections 1009.7.1 through 1009.7.4.
Galloway Response: Acknowledged. Accessible paths have been revised and noted.
- 7M. Every path of exit discharge must connect to an accessible route.
Galloway Response: Accessible path are updated to accommodate this requirement.
- 7N. Accessible routes shown on sheet 2, sheet 3, and sheet 7 are all different. Repeat Comment: Show all accessible routes throughout the site on photometric sheet.
Galloway Response: Accessible routes have been updated to be consistent on the following sheets.

Sheet 9

- 7O. Knox boxes should be located at main entrance to building and fire riser room. Use notes provided to show mounting locations. TYP
Galloway Response: Knox box locations have been updated and shown on plan.
- 7P. Identify Sanctuary as Building A from site plan. TYP

- Galloway Response: Title has been updated to say building A.***
- 7Q. Add these signs to elevations. TYP
Galloway Response: Signs have been added and labeled on the plans.
- 7R. Use notes provided to show mounting location of FDC. TYP
Galloway Response: Acknowledged.
- 7S. Requested location of FDC.
Galloway Response: Acknowledged.
- 7T. Repeat Comment: Third request. For each building, where applicable, show the following features: FDC, fire riser room door, Knox box. TYP Please label structures consistent with site plan sheet. TYP
Galloway Response: These features have been labeled on the building plans and elevations.

Sheet 11

- 7U. Identify Main Hall as Building C from site plan. TYP.
Galloway Response: Title has been updated to say building C.
- 7V. FDC and Knox location is different from site plan.
Galloway Response: FDC and Knox box locations have been updated to match the site plans.

8. Aurora Water (Ashley Duncan / 720 859-4319 / aduncan@auroragov.org / Comments in red)

- 8A. ADVISORY: The site plan will not be approved by Aurora Water until the preliminary drainage report or letter has been approved.
Galloway Response: Acknowledged.
- Sheet 4 (See redlines on Site Plan)
- 8B. Where did the grease interceptor go?
Galloway Response: Upon coordination with the architects, a grease interceptor is to be relocated inside the building. The kitchen equipment will be limited and only a small interior grease trap will be utilized.
- 8C. What is this clean out for?
Galloway Response: This was an old callout. This errant cleanout has been removed.

Sheet 5 (See redline on Site Plan)

- 8D. Access to the top of the outlet structure is not to be within the 100-year water surface elevation. This will be further reviewed during the civil plan review.
Galloway Response: Acknowledged.
- 8E. Advisory: I would advise against having trees on top of your sanitary sewer service.
Galloway Response: Revised to avoid this conflict.

Please feel free to reach out with any additional comments or questions you may have.

Sincerely,

GALLOWAY

3rd Referral
 Comments in green were made by Development Services reviewer Sara Siggue. Please reach out to her at ssiggue@auroragov.org for any comments or questions.

DEBRESLAM MEDHANELEM CHURCH

DENVER DEBRESLAM MEDHANELEM ETHIOPIAN ORTHODOX TEWAHEDO CHURCH

THE SOUTH 1/3 OF LOT 1, BLOCK 1 THUNDERBIRD INDUSTRIAL AND TECHNOLOGICAL SUBDIVISION
 SITUATED IN THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 E 6TH AVENUE & N VENTURA STREET, CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO

SITE PLAN
 APRIL 2025

3rd Submittal Casey Ballard/Aurora Waterballard@auroragov.org
 ADVISORY: The site plan will not be approved by Aurora Water until the preliminary drainage report or letter has been approved

Galloway
 5500 Greenwood Plaza Blvd., Suite 200
 Greenwood Village, CO 80111
 303.770.8884
 GallowayUS.com

NOT FOR CONSTRUCTION

CITY OF AURORA SITE PLAN NOTES

- THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS, INCLUDING THE HOMEOWNERS OR MERCHANTS ASSOCIATION, SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL FIRE LANE SIGNS AS REQUIRED BY THE CITY OF AURORA.
- ALL SIGNS MUST CONFORM TO THE CITY OF AURORA SIGN CODE.
- RIGHT OF WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON AND THROUGH ANY AND ALL PRIVATE ROADS AND WAYS NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY, AND THE SAME ARE HEREBY DESIGNATED AS "SERVICE/EMERGENCY AND UTILITY EASEMENTS" AND SHALL BE POSTED "NO PARKING - FIRE LANE."
- "ACCESSIBLE EXTERIOR ROUTES SHALL BE PROVIDED FROM PUBLIC TRANSPORTATION STOPS, ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES AND PUBLIC SIDEWALKS TO 60 OF THE ACCESSIBLE BUILDING ENTRANCES THEY SERVE. THE ACCESSIBLE ROUTE BETWEEN ACCESSIBLE PARKING AND ACCESSIBLE BUILDING ENTRANCES SHALL BE THE MOST PRACTICAL DIRECT ROUTE. THE ACCESSIBLE ROUTE MUST BE LOCATED WITHIN A SIDEWALK. NO SLOPE ALONG THIS ROUTE MAY EXCEED 1:20 WITHOUT PROVIDING A RAMP WITH A MAXIMUM SLOPE OF 1:12 AND HANDRAILS. CROSSWALKS ALONG THIS ROUTE SHALL BE WIDE ENOUGH TO WHOLLY CONTAIN THE CURB RAMP WITH A MINIMUM WIDTH OF 36" AND SHALL BE PAINTED WITH WHITE STRIPES. THE CITY OF AURORA ENFORCES HANDICAPPED ACCESSIBILITY REQUIREMENTS BASED ON THE 2021 INTERNATIONAL BUILDING CODE, CHAPTER 11, AND THE INTERNATIONAL CODE COUNCIL (ICC) A117.1-2017.
- THE APPLICANT HAS THE OBLIGATION TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.
- THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS, SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED SITE PLAN OR LANDSCAPE PLAN ON FILE IN THE PLANNING DEPARTMENT. ALL LANDSCAPING WILL BE INSTALLED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- ALL CROSSINGS OR ENCROACHMENTS INTO EASEMENTS AND RIGHTS-OF-WAY OWNED BY THE CITY OF AURORA ("CITY") IDENTIFIED AS BEING PRIVATELY-OWNED AND MAINTAINED HEREIN ARE ACKNOWLEDGED BY THE UNDERSIGNED AS BEING SUBJECT TO CITY'S USE AND OCCUPANCY OF SAID EASEMENTS OR RIGHTS-OF-WAY. THE UNDERSIGNED, ITS SUCCESSORS AND ASSIGNS, FURTHER AGREES TO REMOVE, REPAIR, REPLACE, RELOCATE, MODIFY, OR OTHERWISE ADJUST SAID CROSSINGS OR ENCROACHMENTS UPON REQUEST FROM THE CITY AND AT NO EXPENSE TO THE CITY. THE CITY RESERVES THE RIGHT TO MAKE FULL USE OF THE EASEMENTS AND RIGHTS-OF-WAY AS MAY BE NECESSARY OR CONVENIENT AND THE CITY RETAINS ALL RIGHTS TO OPERATE, MAINTAIN, INSTALL, REPAIR, REMOVE OR RELOCATE ANY CITY FACILITIES LOCATED WITHIN SAID EASEMENTS AND RIGHTS-OF-WAY AT ANY TIME AND IN SUCH A MANNER AS IT DEEMS NECESSARY OR CONVENIENT.
- THE APPROVAL OF THIS DOCUMENT DOES NOT CONSTITUTE FINAL APPROVAL OF GRADING, DRAINAGE, UTILITY, PUBLIC IMPROVEMENTS AND BUILDING PLANS. CONSTRUCTION PLANS MUST BE REVIEWED AND APPROVED BY THE APPROPRIATE AGENCY PRIOR TO THE ISSUANCE OF BUILDING PERMITS.
- ALL BUILDINGS ADDRESS NUMBERS SHALL COMPLY WITH THE AURORA CITY CODE, SECTION 126, ARTICLE VII - NUMBERING OF BUILDINGS.
- ALL ROOFTOP MECHANICAL EQUIPMENT AND VENTS GREATER THAN EIGHT (8) INCHES IN DIAMETER MUST BE SCREENED. SCREENING MAY BE DONE EITHER WITH AN EXTENDED PARAPET WALL OR A FREESTANDING SCREEN WALL. SCREENS SHALL BE AT LEAST AS HIGH AS THE EQUIPMENT THEY HIDE. IF EQUIPMENT IS VISIBLE BECAUSE SCREENS DON'T MEET THIS MINIMUM HEIGHT REQUIREMENT, THE DIRECTOR OF PLANNING MAY REQUIRE CONSTRUCTION MODIFICATIONS PRIOR TO THE ISSUANCE OF A PERMANENT CERTIFICATE OF OCCUPANCY.
- NOTWITHSTANDING ANY SURFACE IMPROVEMENTS, LANDSCAPING, PLANTING OR CHANGES SHOWN IN THESE SITE OR CONSTRUCTION PLANS, OR ACTUALLY CONSTRUCTED OR PUT IN PLACE, ALL UTILITY EASEMENTS MUST REMAIN UNOBSERVED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH TO ALLOW FOR ADEQUATE MAINTENANCE EQUIPMENT. ADDITIONALLY, NO INSTALLATION, PLANTING, CHANGE IN THE SURFACE, ETC., SHALL INTERFERE WITH THE OPERATION OF THE UTILITY LINES PLACED WITHIN THE EASEMENT. BY SUBMITTING THESE SITE OR CONSTRUCTION PLANS FOR APPROVAL, THE LANDOWNER RECOGNIZES AND ACCEPTS THE TERMS, CONDITIONS AND REQUIREMENTS OF THIS NOTE.
- FINAL GRADE SHALL BE AT LEAST SIX (6) INCHES BELOW ANY EXTERIOR WOOD SIDING ON THE PREMISES.
- ALL INTERESTED PARTIES ARE HEREBY ALERTED THAT THIS SITE PLAN IS SUBJECT TO ADMINISTRATIVE CHANGES AND AS SHOWN ON THE ORIGINAL SITE PLAN ON FILE IN THE AURORA CITY PLANNING OFFICE AT THE MUNICIPAL BUILDING. A COPY OF THE OFFICIAL CURRENT PLAN MAY BE PURCHASED THERE. LIKEWISE, SITE PLANS ARE REQUIRED TO AGREE WITH THE APPROVED SUBDIVISION PLAT OF RECORD AT THE TIME OF A BUILDING PERMIT; AND IF NOT, MUST BE AMENDED TO AGREE WITH THE PLAT AS NEEDED, OR VICE VERSA.
- ERRORS IN APPROVED SITE PLANS RESULTING FROM COMPUTATIONS OR INCONSISTENCIES IN THE DRAWINGS MADE BY THE APPLICANT ARE THE RESPONSIBILITY OF THE PROPERTY OWNER OF RECORD. WHERE FOUND, THE CURRENT MINIMUM CODE REQUIREMENTS WILL APPLY AT THE TIME OF BUILDING PERMIT. PLEASE BE SURE THAT ALL PLAN COMPUTATIONS ARE CORRECT.
- ALL REPRESENTATIONS AND COMMITMENTS MADE BY APPLICANTS AND PROPERTY OWNERS AT PUBLIC HEARINGS REGARDING THIS PLAN ARE BINDING UPON THE APPLICANT, PROPERTY OWNER, AND ITS HEIRS, SUCCESSORS, AND ASSIGNS.
- ARCHITECTURAL FEATURES, SUCH AS BAY WINDOWS, FIREPLACES, ROOF OVERHANGS, GUTTERS, EAVES, FOUNDATIONS, FOOTINGS, CANTILEVERED WALLS, ETC. ARE NOT ALLOWED TO ENCRUSH INTO ANY EASEMENT OR FIRE LANE.
- IN LOCATIONS WHERE UTILITY EASEMENTS OVERLAP DRAINAGE EASEMENTS, ONLY SUBSURFACE UTILITIES SHALL BE PERMITTED WITHIN THE PORTION OF THE UTILITY EASEMENT THAT OVERLAPS THE DRAINAGE EASEMENT. INSTALLATION OF ABOVE GROUND UTILITIES WITHIN A DRAINAGE EASEMENT REQUIRES PRIOR WRITTEN APPROVAL BY CITY ENGINEER.
- THE DEVELOPER IS RESPONSIBLE FOR SIGNING AND STRIPING ALL PUBLIC STREETS. THE DEVELOPER IS REQUIRED TO PLACE TRAFFIC CONTROL, STREET NAME, AND GUIDE SIGNS ON ALL PUBLIC STREETS AND PRIVATE STREETS APPROACHING AN INTERSECTION WITH A PUBLIC STREET. SIGNS SHALL BE FURNISHED AND INSTALLED PER THE MOST CURRENT EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND CITY STANDARDS, AND SHOWN ON THE SIGNING AND STRIPING PLAN FOR THE DEVELOPMENT.
- THE 2015/2021 INTERNATIONAL FIRE CODE (IFC), REQUIRES ALL BUILDINGS TO BE ASSESSED FOR ADEQUATE EMERGENCY RESPONDER RADIO COVERAGE (ERRC). AT THE TIME THE STRUCTURE IS AT FINAL FRAME AND FINAL ELECTRICAL INSPECTIONS, THE GENERAL CONTRACTOR (GC) WILL BE REQUIRED TO HIRE AN APPROVED AND QUALIFIED INDEPENDENT 3RD PARTY TO ASSESS THE RADIO FREQUENCY LEVELS WITHIN THE STRUCTURE. ONCE COMPLETED, THE 3RD PARTY WILL PROVIDE THE RESULTS OF THE TEST TO BOTH THE GC AND THE AURORA BUILDING DIVISION AS TO WHETHER THE STRUCTURE PASSED OR FAILED THE PRELIMINARY RADIO SURVEILLANCE. A STRUCTURE THAT HAS PASSED THIS SURVEILLANCE REQUIRES NO FURTHER ACTION BY THE GC. A FAILED RADIO SURVEILLANCE WILL REQUIRE A LICENSED CONTRACTOR TO SUBMIT PLANS TO THE AURORA BUILDING DIVISION TO OBTAIN A BUILDING PERMIT FOR THE INSTALLATION OF AN ERRC SYSTEM PRIOR TO INSTALLATION. THIS ASSESSMENT AND INSTALLATION IS AT THE OWNER OR DEVELOPER'S EXPENSE. FUTURE INTERIOR OR EXTERIOR MODIFICATIONS TO THE STRUCTURE AFTER THE ORIGINAL CERTIFICATE OF OCCUPANCY IS ISSUED WILL REQUIRE A REASSESSMENT FOR ADEQUATE RADIO FREQUENCY COVERAGE. THE STREETLIGHT OR PEDESTRIAN LIGHT INSTALLATION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DESIGNED, FUNDED, AND CONSTRUCTED BY THE DEVELOPER/OWNER. OWNERSHIP AND MAINTENANCE OF THE STREET/PEDESTRIAN LIGHTS SHALL BE THE RESPONSIBILITY OF THE CITY OF AURORA ONCE THEY HAVE BEEN ACCEPTED. STREET LIGHT AND/OR PEDESTRIAN PHOTOMETRICS PLANS SHALL BE PREPARED AND SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL AND SHALL BECOME A PART OF THE APPROVED CIVIL CONSTRUCTION PLANS FOR THE PROJECT. AN ELECTRICAL PLAN SHOWING SITE LOCATION OF LIGHTS, ELECTRICAL ONE LINE AND GROUNDING DETAILS SHALL BE SUBMITTING TO THE PERMIT CENTER FOR REVIEW BY THE BUILDING DEPARTMENT. THE OWNER IS RESPONSIBLE FOR OBTAINING AN ADDRESS FOR THE METER(S) FROM THE PLANNING DEPARTMENT. A BUILDING PERMIT FOR THE METER AND A PUBLIC INSPECTIONS PERMIT FOR THE STREET LIGHTS ARE REQUIRED. CERTIFICATE OF OCCUPANCIES WILL NOT BE ISSUED UNTIL THE STREET AND/OR PEDESTRIAN LIGHTING PLANS ARE APPROVED, CONSTRUCTED, AND INITIALLY ACCEPTED.
- ATTENTION BUILDING DIVISION: PER ARTICLE XII, C.O.A. BUILDING AND ZONING CODE, SECTION 22-425 THROUGH 22-424, AN ACOUSTIC ANALYSIS, PREPARED BY ACOUSTIC EXPERT THAT WILL IDENTIFY BUILDING DESIGN FEATURES NECESSARY TO ACCOMPLISH EXTERIOR NOISE REDUCTION TO ACHIEVE INTERIOR NOISE LEVELS NOT EXCEEDING 65-80 LDN UNDER WORSE CASE NOISE CONDITIONS.

PROJECT CONTACTS

PROPERTY OWNER/DEVELOPER
 DENVER DEBRESLAM MEDHANELEM ETHIOPIAN ORTHODOX TEWAHEDO CHURCH
 5152 E. 17TH AVE PARKWAY
 DENVER, CO 80220
 ATTN: MELAKU AMENESHOA
 EMAIL: MELAKUANGEL26@GMAIL.COM

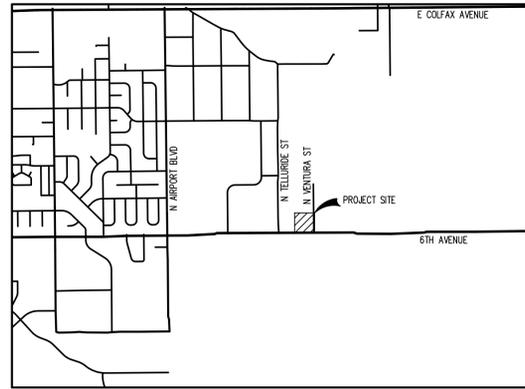
ARCHITECT
 AXUMARCH LLC
 DALLAS, TEXAS
 PHONE: (682) 564-3922
 ATTN: ABYI DEJENE

CIVIL ENGINEER
 GALLOWAY & COMPANY INC.
 5500 GREENWOOD PLAZA BLVD., STE 200
 GREENWOOD VILLAGE, CO 80111
 PHONE: (303) 770-8884
 ATTN: TROY KELTS, P.E.

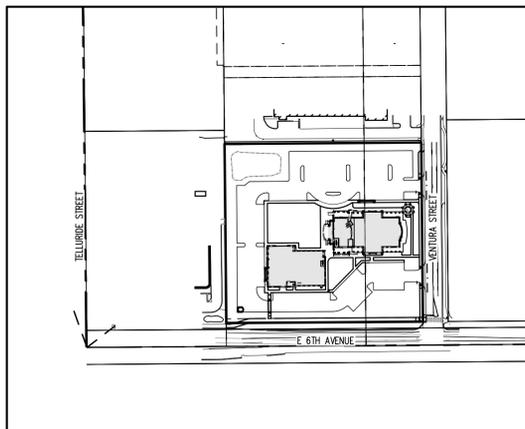
SURVEYOR
 GALLOWAY & COMPANY INC.
 5500 GREENWOOD PLAZA BLVD., STE 200
 GREENWOOD VILLAGE, CO 80111
 PHONE: (303) 770-8884
 ATTN: KEVIN REYNOLDS, P.L.S.

TRAFFIC ENGINEER
 GALLOWAY & COMPANY INC.
 5500 GREENWOOD PLAZA BLVD., STE 200
 GREENWOOD VILLAGE, CO 80111
 PHONE: (303) 770-8884
 ATTN: BRIAN HORAN, P.E., P.T.O.E.

LANDSCAPE
 GALLOWAY & COMPANY INC.
 5500 GREENWOOD PLAZA BLVD., STE 200
 GREENWOOD VILLAGE, CO 80111
 PHONE: (303) 770-8884
 ATTN: JON ROMERO, ASLA, PLA



VICINITY MAP
 SCALE: 1"=200'



PROJECT MAP
 SCALE: 1"=200'

3rd SUBMITTAL
 JASON IGO
 jigo@auroragov.org

SITE DATA - BUILDING A	
BUILDING COVERAGE	14,109 SF (0.32 ACRES)
GROSS BUILDING AREA	17,153 SF
SRINKLERED	YES
MAXIMUM BUILDING HEIGHT	77'-0"
NUMBER OF STORIES	2
2021 INTERNATIONAL BUILDING CODE CONSTRUCTION TYPE	II-B
PARKING SPACES REQUIRED	162
PARKING SPACES PROVIDED	175
ACCESSIBLE SPACES REQUIRED	3
STANDARD ACCESSIBLE SPACES PROVIDED	1
VAN ACCESSIBLE SPACES PROVIDED	2

SITE DATA - BUILDING C	
BUILDING COVERAGE	12,078 SF (0.28 ACRES)
GROSS BUILDING AREA	12,078 SF
SRINKLERED	YES
MAXIMUM BUILDING HEIGHT	30'-6"
NUMBER OF STORIES	1
2021 INTERNATIONAL BUILDING CODE CONSTRUCTION TYPE	II-B
PARKING SPACES REQUIRED	8
PARKING SPACES PROVIDED	175
ACCESSIBLE SPACES REQUIRED	3
STANDARD ACCESSIBLE SPACES PROVIDED	2
VAN ACCESSIBLE SPACES PROVIDED	1

SIGNATURE BLOCK

THIS SITE PLAN AND ANY AMENDMENTS HERETO, UPON APPROVAL BY THE CITY OF AURORA AND RECORDING, SHALL BE BINDING UPON THE APPLICANTS THEREFORE, THEIR SUCCESSORS AND ASSIGNS. THIS PLAN SHALL LIMIT AND CONTROL THE ISSUANCE AND VALIDITY OF ALL BUILDING PERMITS, AND SHALL RESTRICT AND LIMIT THE CONSTRUCTION, LOCATION, USE, OCCUPANCY AND OPERATION OF ALL LAND AND STRUCTURES WITHIN THIS PLAN TO ALL CONDITIONS, REQUIREMENTS, LOCATIONS AND LIMITATIONS SET FORTH HEREIN. ABANDONMENT, WITHDRAWAL OR AMENDMENT OF THIS PLAN MAY BE PERMITTED ONLY UPON APPROVAL OF THE CITY OF AURORA.

IN WITNESS WHEREOF, _____ HAS CAUSED THESE PRESENTS TO BE EXECUTED THIS _____ DAY OF _____ AD, 2025.

CITY OF AURORA APPROVAL

CITY ATTORNEY: _____ DATE: _____
 PLANNING DIRECTOR: _____ DATE: _____
 PLANNING COMMISSION: _____ DATE: _____
 (CHAIRPERSON)
 CITY COUNCIL: _____ DATE: _____
 (MAYOR)
 ATTEST: _____ DATE: _____
 (CITY CLERK)
 DATABASE APPROVAL DATE: _____
 RECORDER'S CERTIFICATE:
 ACCEPTED FOR FILING IN THE OFFICE OF THE CLERK AND RECORDER OF _____
 COLORADO AT _____ O'CLOCK _____ M, THIS _____ DAY OF _____ AD, 2025
 CLERK AND RECORDER: _____ DEPUTY: _____

DENVER DEBRESLAM MEDHANELEM ETHIOPIAN ORTHODOX TEWAHEDO CHURCH
 BY: _____
 NAME: _____
 ITS: _____
 STATE OF _____)
) SS
 COUNTY OF _____)
 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ AD, 2025.
 BY _____
 (PRINCIPALS OR OWNERS)
 WITNESS MY HAND AND OFFICIAL SEAL
 _____ NOTARY SEAL
 (NOTARY PUBLIC)
 MY COMMISSION EXPIRES _____
 NOTARY BUSINESS ADDRESS: _____

BENCHMARK

CITY OF AURORA BENCHMARK "456604SE006" IS DESCRIBED AS A 3" BRASS CAP IN CONCRETE, STAMPED "COA BM, 456604SE006, 2012", AND IS LOCATED ON THE EAST SIDE OF A 5 FOOT WIDE STORM INLET, ALONG THE EAST SIDE OF TELLURIDE ROAD, 420' NORTH OF EAST 8TH AVENUE. PUBLISHED ELEVATION: 5,483.39 (NAVD 88)

PROPERTY DESCRIPTION

THE SOUTH 1/3 OF LOT 1, BLOCK 1, THUNDERBIRD INDUSTRIAL AND TECHNOLOGICAL SUBDIVISION, CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO, RECORDED AT RECEPTION NO. E0010714.

FLOODPLAIN NOTE

FLOOD ZONE CLASSIFICATION (WITH PROPER ANNOTATION BASED ON FEDERAL FLOOD INSURANCE RATE MAPS OR THE STATE OR LOCAL EQUIVALENT) DEPICTED BY SCALE MAP LOCATION AND GRAPHIC PLOTTING ONLY. ZONE "X", PER FEMA FIRM PLAN #080500182X, DATED DECEMBER 17, 2010.

BASIS OF BEARING

BASIS OF BEARINGS: ALL BEARINGS ARE GRID BEARINGS OF THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NORTH AMERICAN DATUM 1983. THE SOUTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 4 SOUTH, RANGE 66 WEST, 6TH P.M., BEARS N89°36'00"E, MONUMENTED ON THE WEST END OF THE LINE BY THE SOUTH QUARTER CORNER OF SAID SECTION 4, BEING A 3-1/4" BRASS CAP, "T45 1/4 4 9 CITY OF AURORA 1991 LS 16419", IN A RANGE BOX, AND MONUMENTED ON THE EAST END OF THE LINE BY THE SOUTHEAST CORNER OF SAID SECTION 4, BEING A 3-1/4" BRASS CAP, STAMPED, "T45 R66W CITY OF AURORA PLS 16419 1983", IN A RANGE BOX, AS SHOWN HEREON.

Sheet List Table	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	SITE PLAN
3	GRADING PLAN
4	UTILITY PLAN
5	LANDSCAPE PLAN
6	LANDSCAPE NOTES & DETAILS
7	PHOTOMETRIC PLAN
8	PHOTOMETRIC DETAILS
9	EXTERIOR ELEVATION - BUILDING A
10	EXTERIOR ELEVATION - BUILDING A
11	EXTERIOR ELEVATION - BUILDING C
12	EXTERIOR ELEVATION - BUILDING C
13	EXTERIOR ELEVATION - BETHLEHEM BUILDING C
14	OVERALL ROOF PLAN
15	TRASH ENCLOSURE DETAILS



DENVER DEBRESLAM MEDHANELEM ETHIOPIAN ORTHODOX TEWAHEDO CHURCH
 SITE PLAN
 E 6TH AVENUE & N VENTURA ST
 AURORA, COLORADO 80011

#	Date	Issue / Description	Init.
1	05/13/24	SITE PLAN SUBMITTAL	NAA
2	12/04/24	SITE PLAN SUBMITTAL	DMP
3	04/04/2025	SITE PLAN SUBMITTAL	TDK

Project No: DDM000001
 Drawn By: TKG
 Checked By: TDK
 Date: APRIL 2025

COVER SHEET

CITY OF AURORA NOTES

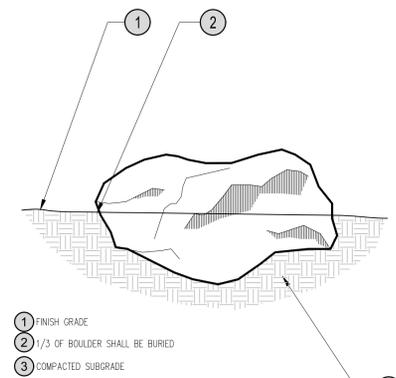
1. ALL LANDSCAPE AREA ARE TO RECEIVE ORGANIC SOIL PREPARATION AT 4 CU. YDS / 1,000 SF
2. ALL FREE STANDING LIGHTS WITHIN THIS PLAN ARE TO BE INSTALLED PER THE PHOTO METRIC PLANS AND DETAILS.
3. THE SURFACE MATERIAL OF WALKS AND PLAZAS ARE TO BE MEDIUM BROOM FINISHED STANDARD GRAY CONCRETE AND COLORED CONCRETE WITH SAND FINISH. VEHICULAR DRIVES AND PARKING LOTS ARE TO BE CONCRETE AND ASPHALT (REFER TO CIVIL PLANS)
4. ALL UTILITY EASEMENTS SHALL REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR THE MAINTENANCE EQUIPMENT ENTRY.
5. THE OWNER / DEVELOPER, HIS SUCCESSORS, AND ASSIGNS, SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED SITE PLAN OR LANDSCAPE PLAN ON FILE IN THE PLANNING DEPARTMENT. ALL LANDSCAPING WILL BE NON-IRRIGATED AS DELINEATED ON THE PLAN, PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
6. ALL LANDSCAPED AREAS AND PLANT MATERIAL, EXCEPT FOR NON-IRRIGATED NATIVE, RESTORATIVE AND DRYLAND GRASS AREAS MUST BE WATERED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. IRRIGATION SYSTEM DESIGN, INSTALLATION, OPERATION AND MAINTENANCE SHALL CONFORM TO REQUIREMENTS FOUND IN THE CITY OF AURORA IRRIGATION ORDINANCE.
7. LANDSCAPE MATERIAL PLACEMENT SHALL NOT BE PLACED OR KEPT NEAR FIRE HYDRANTS, FIRE DEPARTMENT INLET CONNECTIONS OR FIRE PROTECTION CONTROL VALVES IN A MANNER THAT WOULD PREVENT SUCH EQUIPMENT OR FIRE HYDRANTS FROM BEING IMMEDIATELY DISCERNABLE. THE FIRE DEPARTMENT SHALL NOT BE DETERRED OR HINDERED FROM GAINING IMMEDIATE ACCESS TO FIRE PROTECTION EQUIPMENT OR HYDRANTS.
8. A 5-FT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS.
9. LANDSCAPING MATERIAL SHOWN WITHIN THE SITE PLAN CANNOT ENCRUCH INTO ROADWAYS THAT ARE DEDICATED (OR DESIGNATED) AS FIRE LANE EASEMENTS (OR CORRIDORS).
10. TREES MAY NOT BE PLACED WITHIN 8 FT OF ANY PUBLIC UTILITY.
11. ALL PROPOSED LANDSCAPING WITHIN THE SIGHT TRIANGLE SHALL BE IN COMPLIANCE WITH COA ROADWAY SPECIFICATIONS, SECTION 4.04.2.10
12. ALL CROSSINGS OR ENCROACHMENTS BY PRIVATE LANDSCAPE IRRIGATION LINES OR SYSTEMS INTO EASEMENTS AND STREET RIGHTS-OF-WAY OWNED BY THE CITY OF AURORA ARE ACKNOWLEDGED BY THE OWNER AS BEING SUBJECT TO CITY OF AURORA'S USE AND OCCUPANCY OF THE SAID RIGHTS-OF-WAY. THE OWNER, THEIR SUCCESSORS AND ASSIGNS, HEREBY AGREE TO INDEMNIFY THE CITY OF AURORA FOR ANY LOSS, DAMAGE OR REPAIR TO CITY FACILITIES THAT MAY RESULT FROM THE INSTALLATION, OPERATION, OR MAINTENANCE OF SAID PRIVATE IRRIGATION LINES OR SYSTEMS.
13. LANDSCAPE MATERIAL SHALL NOT BE PLACED OR KEPT NEAR FIRE HYDRANTS IN A MANNER THAT WOULD PREVENT SUCH EQUIPMENT FROM BEING IMMEDIATELY DISCERNIBLE. A 5-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS. LANDSCAPING MATERIAL SHOWN WITHIN THE SITE PLAN CANNOT ENCRUCH INTO ROADWAYS THAT ARE DEDICATED (OR DESIGNATED) AS FIRE LANE EASEMENTS (OR CORRIDORS).

IRRIGATION CONCEPT

1. AN AUTOMATIC IRRIGATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL BY THE TIME OF FINAL INSPECTION. THE ENTIRE IRRIGATION SYSTEM SHALL BE INSTALLED BY A QUALIFIED IRRIGATION CONTRACTOR.
2. THE IRRIGATION SYSTEM WILL HAVE APPROPRIATE BACKFLOW PREVENTION DEVICES INSTALLED TO PREVENT CONTAMINATION OF THE WATER SOURCE IF APPLICABLE.
3. ALL NON-TURFSEEDED PLANTED AREAS WILL BE DRIP IRRIGATED. TURF SO/SEED SHALL RECEIVE POP-UP SPRAY IRRIGATION FOR HEAD TO HEAD COVERAGE.
4. ALL PLANTS SHARING SIMILAR HYDROZONE CHARACTERISTICS SHALL BE PLACED ON A VALVE DEDICATED TO PROVIDE THE NECESSARY WATER REQUIREMENTS SPECIFIC TO THAT HYDROZONE.
5. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED, TO THE MAXIMUM EXTENT POSSIBLE, TO CONSERVE WATER BY USING THE FOLLOWING DEVICES AND SYSTEMS: MATCHED PRECIPITATION RATE TECHNOLOGY ON ROTOR AND SPRAY HEADS (WHEREVER POSSIBLE), RAIN SENSORS, AND SMART MULTI-PROGRAM COMPUTERIZED IRRIGATION CONTROLLERS FEATURING SENSORY INPUT CAPABILITIES.

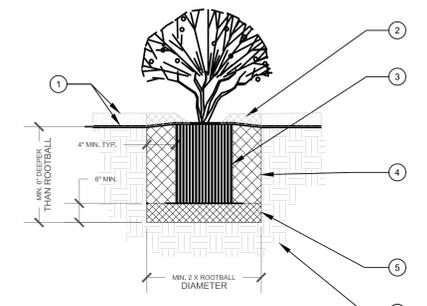
TREE PROTECTION NOTES:

1. USE CITY OF AURORA TREE PROTECTION NOTES (IF AVAILABLE). TREE PROTECTION NOTES BELOW SHALL BE USED FOR FURTHER INTEGRATION.
2. "PROTECTED ZONE" FOR EXISTING TREES: BEFORE BEGINNING ANY DEMOTION OR CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL INSTALL TEMPORARY FENCING AROUND ALL EXISTING TREES WITHIN THE CONSTRUCTION ZONE THAT ARE TO BE SAVED. THE FENCE SHALL BE INSTALLED NO CLOSER TO THE TREE THAN THE EDGE OF THE TREE'S PROTECTED ZONE, GENERALLY DEFINED AS THE AREA BEGINNING FIVE FEET OUTSIDE OF THE TREE'S DRIFLINE AND EXTENDING TOWARDS THE TREE (OR AS FAR AWAY FROM THE TRUNK AS PRACTICABLE). THE FENCING SHALL BE OF A MATERIAL AND HEIGHT ACCEPTABLE TO THE LANDSCAPE ARCHITECT. ALL CONTRACTORS AND THEIR CREWS SHALL NOT BE ALLOWED INSIDE THIS "PROTECTED ZONE" NOR SHALL THEY BE ALLOWED TO STORE OR DUMP FOREIGN MATERIALS WITHIN THIS AREA. NO WORK OF ANY KIND, INCLUDING TRENCHING, SHALL BE ALLOWED WITHIN THE PROTECTED ZONE EXCEPT AS DESCRIBED BELOW. THE FENCING SHALL REMAIN AROUND EACH TREE TO BE SAVED UNTIL THE COMPLETION OF CONSTRUCTION OPERATIONS.
3. TEMPORARY MULCH: TO ALLEVIATE SOIL COMPACTION IN ANTICIPATED AREAS OF HIGH CONSTRUCTION TRAFFIC, AND ONLY WHERE FENCING CANNOT BE SET FIVE FEET OUTSIDE OF THE DRIFLINE, THE CONTRACTOR SHALL INSTALL A LAYER OF MULCH 3" TO 4" THICK, OVER ALL EXPOSED EARTH FROM THE TREE TRUNK TO 5' OUTSIDE OF THE DRIFLINE. THIS LAYER SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. WHEN PLANTING OPERATIONS ARE COMPLETED, THE MULCH SHALL BE REDISTRIBUTED THROUGHOUT ALL PLANTING AREAS IN A 3" THICK "PERMANENT" MULCH LAYER.
4. NECESSARY WORK: WHEN IT BECOMES NECESSARY TO ENTER THE "PROTECTED ZONE", SUCH AS FOR FINE GRADING, IRRIGATION INSTALLATION, AND PLANTING OPERATIONS, THE CONTRACTOR SHALL STRICTLY ADHERE TO THE FOLLOWING RULES:
 - A. EVERY EFFORT SHALL BE MADE TO PRESERVE THE EXISTING GRADE AROUND PROTECTED TREES IN AS WIDE AN AREA AS POSSIBLE.
 - B. TRENCHING WITHIN THE PROTECTED ZONE OF EXISTING TREES SHALL BE PERFORMED BY HAND, AND WITH EXTREME CARE NOT TO SEVER ROOTS 1-1/2" IN DIAMETER AND LARGER. WHERE ROOTS 1-1/2" IN DIAMETER AND LARGER ARE ENCOUNTERED, THE CONTRACTOR SHALL TUNNEL UNDER SAID ROOTS. EXPOSED ROOTS THAT HAVE BEEN TUNNELED UNDER SHALL BE WRAPPED IN WET BURLAP AND KEPT MOIST WHILE THE TRENCH IS OPEN.
 - C. WHERE ROOTS 1-1/2" IN DIAMETER OR LARGER MUST BE CUT DUE TO EXTENSIVE GRADE CHANGES, THOSE ROOTS MUST BE EXPOSED BY HAND DIGGING AND CUT CLEANLY. RAGGED CUTS GENERALLY DO NOT HEAL PROPERLY, AND MAY LEAVE THE TREE OPEN TO PESTS AND PATHOGENS.
 - D. WHERE TRENCHING NEAR TREES HAS ALREADY OCCURRED FROM PREVIOUS CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL MAKE EVERY EFFORT TO CONFINE HIS TRENCHING OPERATIONS TO THE PREVIOUSLY-CREATED TRENCHES, WHILE ADHERING TO THE CONDITIONS SET FORTH IN 3B.
5. POTENTIAL CONFLICTS: THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARBORIST SHOULD ANY POTENTIAL CONFLICTS ARISE BETWEEN THESE SPECIFICATIONS AND/OR LARGE ROOTS ENCOUNTERED IN THE FIELD, AND CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL NOT TAKE ANY ACTION IN SUCH CONFLICTS WITHOUT THE ARBORIST'S WRITTEN APPROVAL. THE ARBORIST SHALL HAVE FINAL AUTHORITY OVER ALL METHODS NECESSARY TO HELP ENSURE THE PROTECTION AND SURVIVAL OF EXISTING TREES.
6. PRUNING: PRUNE ONLY THE TREES THAT ARE INDICATED ON THE PLANS AS REQUIRING PRUNING. PRUNE TREES ACCORDING TO INTERNATIONAL SOCIETY OF ARBORICULTURE / ANSI A300 STANDARDS.
 - A. REMOVE ALL DEAD WOOD.
 - B. PRUNE LIVE WOOD FOR HEALTH OR STRUCTURAL REASONS ONLY, INCLUDING THE NEED TO ELIMINATE DISEASED OR DAMAGED GROWTH. ELIMINATE STRUCTURALLY UNSOUND GROWTH. REDUCE THE POTENTIAL FOR WIND TOPPLING OR WIND DAMAGE, OR TO MAINTAIN GROWTH WITHIN LIMITED SPACE. DO NOT REMOVE MORE THAN 25% OF ANY TREE'S LIVE FOLIAGE IN ANY ONE GROWING SEASON. PRUNE ONLY TO INTERNATIONAL SOCIETY OF ARBORICULTURE/ANSI A300 STANDARDS, AND ONLY UNDER THE DIRECT SUPERVISION OF A CERTIFIED ARBORIST.
 - C. FINAL CUTS SHALL BE MADE JUST OUTSIDE THE SHOULDER RING AREA. EXTREMELY FLUSHED CUTS WHICH PRODUCE LARGE WOUNDS SHALL NOT BE MADE.
 - D. ALL TRIMMING CUTS SHALL BE PERFORMED IN SUCH A MANNER AS TO PROMOTE THE NATURAL GROWTH AND SHAPE OF EACH TREE SPECIES.
 - E. IMPROPER PRUNING METHODS INCLUDING, BUT NOT LIMITED TO, "TOPPING", "TIPPING", "HEADING BACK", "DEHORNING", AND "LIONTAILING" WILL NOT BE ALLOWED. THE CONTRACTOR SHALL PAY FOR ALL WORK NECESSARY TO CORRECT SUCH PRUNING WHEN PERFORMED BY HIS CREWS OR SUBCONTRACTORS.
 - F. SHOULD THE CONTRACTOR REQUIRE MORE INFORMATION, THE CONTRACTOR SHALL CONTACT THE ISA AT (217) 355-9411 FOR A COPY OF THE ANSI A300 PRUNING STANDARDS. CONTRACTOR SHALL ADHERE TO THE METHODS AND PRACTICES SET FORTH IN THIS DOCUMENT.
7. LANDSCAPE AND IRRIGATION (NATIVE TREES ONLY): ANY FUTURE LANDSCAPE AND IRRIGATION SHOULD ADHERE TO THE FOLLOWING GUIDELINES:
 - A. NO IRRIGATION OR PLANTING SHOULD OCCUR CLOSER THAN 8'-10" FROM THE TRUNK.
 - B. WHERE IRRIGATION DOES OCCUR WITHIN THE PROTECTED ZONE, DRIP IRRIGATION SHOULD BE USED WHEREVER POSSIBLE. ADDITIONALLY, ONLY PLANTS WITH LOW WATER NEEDS SHOULD BE PLANTED WITHIN THE PROTECTED ZONE, SPACED FAR APART WHERE CLOSE TO THE TREE. PLANTS MAY BE SPACED CLOSER TOGETHER NEAR THE EDGE OF THE PROTECTED ZONE.



- NOTES:
1. HARVEST LANDSCAPE BOULDERS FROM A LOCAL SOURCE, REFERENCE
 2. LANDSCAPE ARCHITECT TO VERIFY BOULDER LOCATIONS AND ORIENTATION PRIOR TO FINAL INSTALLATION.

1 LANDSCAPE BOULDER
N.T.S.

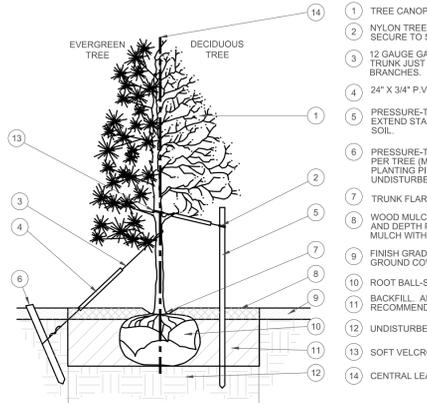


2 SHRUB AND PERENNIAL DETAIL
SCALE: NOT TO SCALE

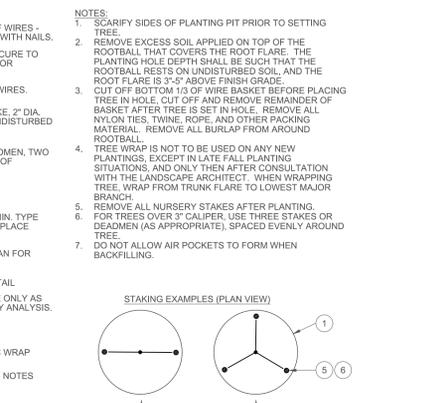
LANDSCAPE REQUIREMENTS

CODE SECTION	CATEGORY	FORMULA	BUFFER REQUIRED/PROVIDED	CALCULATION	REQUIRED	PROVIDED
146-4.7.5.C	CURBSIDE LANDSCAPE (EAST 6TH AVE.)	1 TREE / 40 LF	N/A	456 LF / 40	12 TREES	12 TREES*
146-4.7.5.C	CURBSIDE LANDSCAPE (VENTURA ST.)	1 TREE / 40 LF	N/A	279 LF / 40	7 TREES	7 TREES*
146-4.7.5.D TABLE 4.7-2	STREET FRONTAGE LANDSCAPE BUFFER (EAST 6TH AVE.)	1 TREE / 40 LF	25' / 10' ALLOWED REDUCTION	456 LF / 40	12 TREES	12 TREES
146-4.7.5.D TABLE 4.7-2	STREET FRONTAGE LANDSCAPE BUFFER (EAST 6TH AVE.)	10 SHRUBS / 40 LF	25' / 10' ALLOWED REDUCTION	456 LF / 40	60 SHRUBS	60 SHRUBS
146-4.7.5.D TABLE 4.7-2	STREET FRONTAGE LANDSCAPE BUFFER (VENTURA ST.)	1 TREE / 40 LF	20' / 10' ALLOWED REDUCTION	279 LF / 40	7 TREES	7 TREES
146-4.7.5.D TABLE 4.7-2	STREET FRONTAGE LANDSCAPE BUFFER (VENTURA ST.)	10 SHRUBS / 40 LF	20' / 10' ALLOWED REDUCTION	279 LF / 40	70 SHRUBS	70 SHRUBS
146-4.7.5.E.2.b.ii	NON-STREET BUFFER (NORTH)	1 TREE / 40 LF 30% EVERGREEN MIN.	15' WITH FENCE / 18.7'	464 LF / 40	12 TREES	12 TREES (CONSISTS OF 6 SHADE TREES & 6 EVERGREEN TREES)
146-4.7.5.E.2.b.ii	NON-STREET BUFFER (NORTH)	5 SHRUBS / 40 LF	15' WITH FENCE / 18.7'	464 LF / 40 X 5	30 SHRUBS OR 3 TREES (10 SHRUBS PER 1 TREE EQUIVALENT)	3 EVERGREEN TREES
146-4.7.5.E.2.b.ii	NON-STREET BUFFER (WEST)	1 TREE / 40 LF 30% EVERGREEN MIN.	25' / 27.2'	421 LF / 40	11 TREES	11 EVERGREEN TREES
146-4.7.5.E.2.b.ii	NON-STREET BUFFER (WEST)	5 SHRUBS / 40 LF	25' / 27.2'	421 LF / 40 X 5	55 SHRUBS	55 SHRUBS
146-4.7.5.K	PARKING LOT LANDSCAPE	6 SHRUBS / PARKING ISLAND	N/A	10 ISLANDS X 6	60 SHRUBS	60 SHRUBS
146-4.7.5.K	PARKING LOT LANDSCAPE	1 PARKING LOT ISLAND (9FT X 19FT) & 1 TREE / 15 PARKING SPACES	N/A	102 SPACES / 15	7 ISLANDS 7 TREES	10 ISLANDS 10 TREES
146-4.7.5.K	PARKING LOT LANDSCAPE	12 SHRUBS / DOUBLE PARKING ISLAND	N/A	3 ISLANDS X 12	36 SHRUBS	36 SHRUBS
146-4.7.5.K	PARKING LOT LANDSCAPE	1 DOUBLE PARKING LOT ISLAND (9FT X 38FT) X 2	N/A	3 DOUBLE ISLANDS X 2	6 TREES	6 TREES
4.7.5.M.4	DETENTION POND	1 TREE PER 4000 SF ABOVE 100-YR	N/A	898 SF / 4000 X 1	0 TREES	0 TREES
4.7.5.M.4	DETENTION POND	10 TREE PER 4000 SF ABOVE 100-YR	N/A	898 SF / 4000 X 10	0 SHRUBS	0 SHRUBS
4.7.5.J.2.A	BUILDING PERIMETER	1 TREE PER 40 LF OF BUILDING ADJ. TO STREET	N/A	498 LF / 40	13 TREES	13 TREES

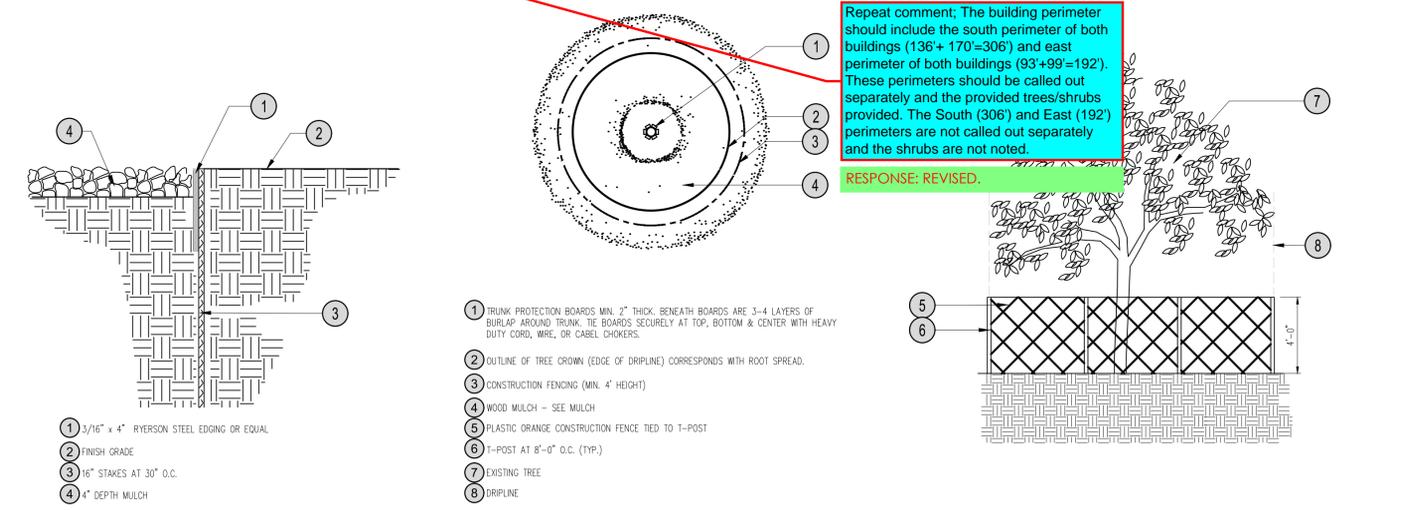
*STREET TREES ARE BEING MET WITH STREET BUFFER TREES DUE TO UTILITY CONFLICTS.



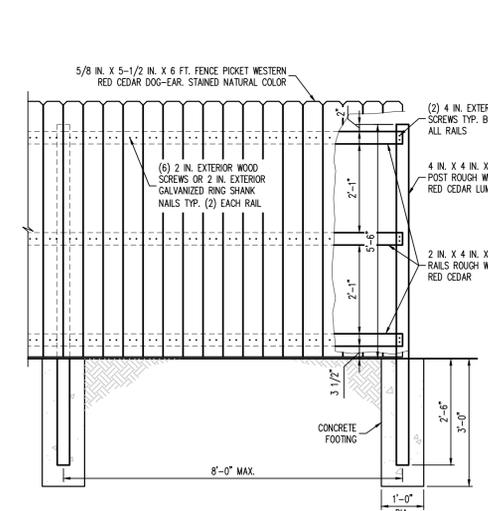
3 TREE PLANTING DETAIL
SCALE: NOT TO SCALE



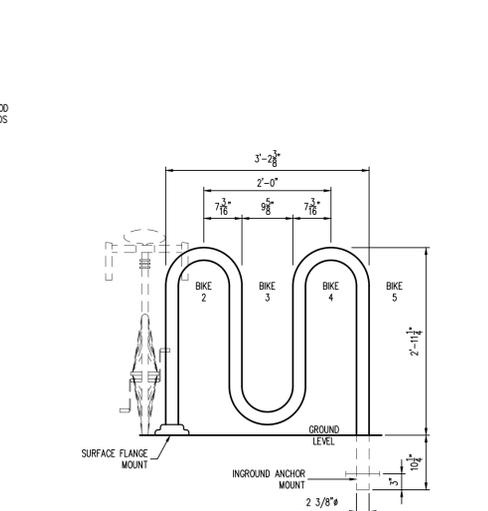
4 STAKING EXAMPLES (PLAN VIEW)



5 TREE PROTECTION DETAIL
N.T.S.



6 6' CEDAR SCREEN FENCE
SCALE: NOT TO SCALE



7 BICYCLE RACK DETAIL
SCALE: NOT TO SCALE

NOT FOR CONSTRUCTION



DENVER DEBERESLAM MEDHANEALEM
ETHIOPIAN ORTHODOX TEWAHEDO CHURCH
SITE PLAN
E 6TH AVENUE & N VENTURA ST
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Project No: DDM000001
Drawn By: LJP
Checked By: JAR
Date: APRIL 2025

LANDSCAPE NOTES & DETAILS



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 Phone: 404-578-0460

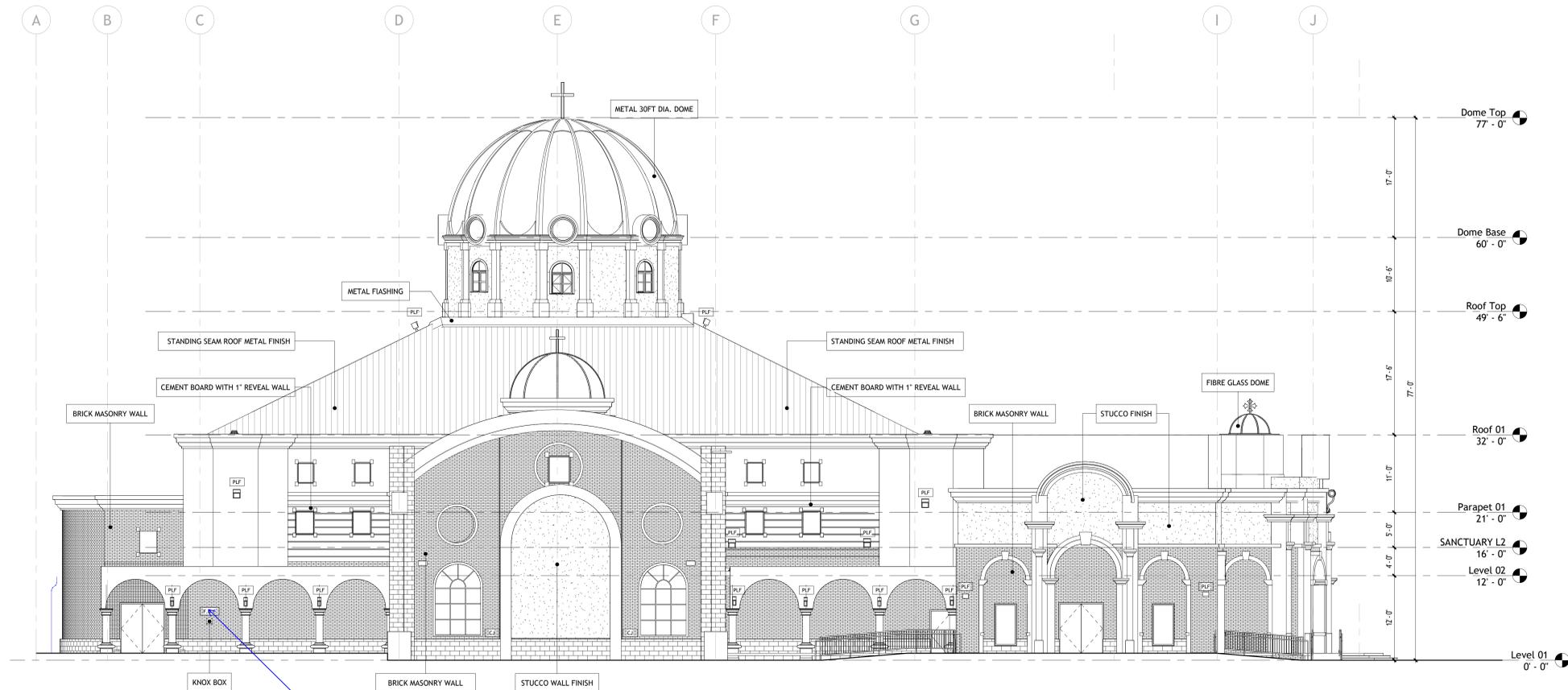
GallowayUS
 5500 Greenwood Plaza
 Blvd, Suite 200,
 Greenwood Village, CO
 Phone: 303.770.8884

- LEGEND**
- BRICK MASONRY WALL
 - STUCCO FINISH
 - METALLIC FINISH
 - STANDING SEAM METAL ROOF

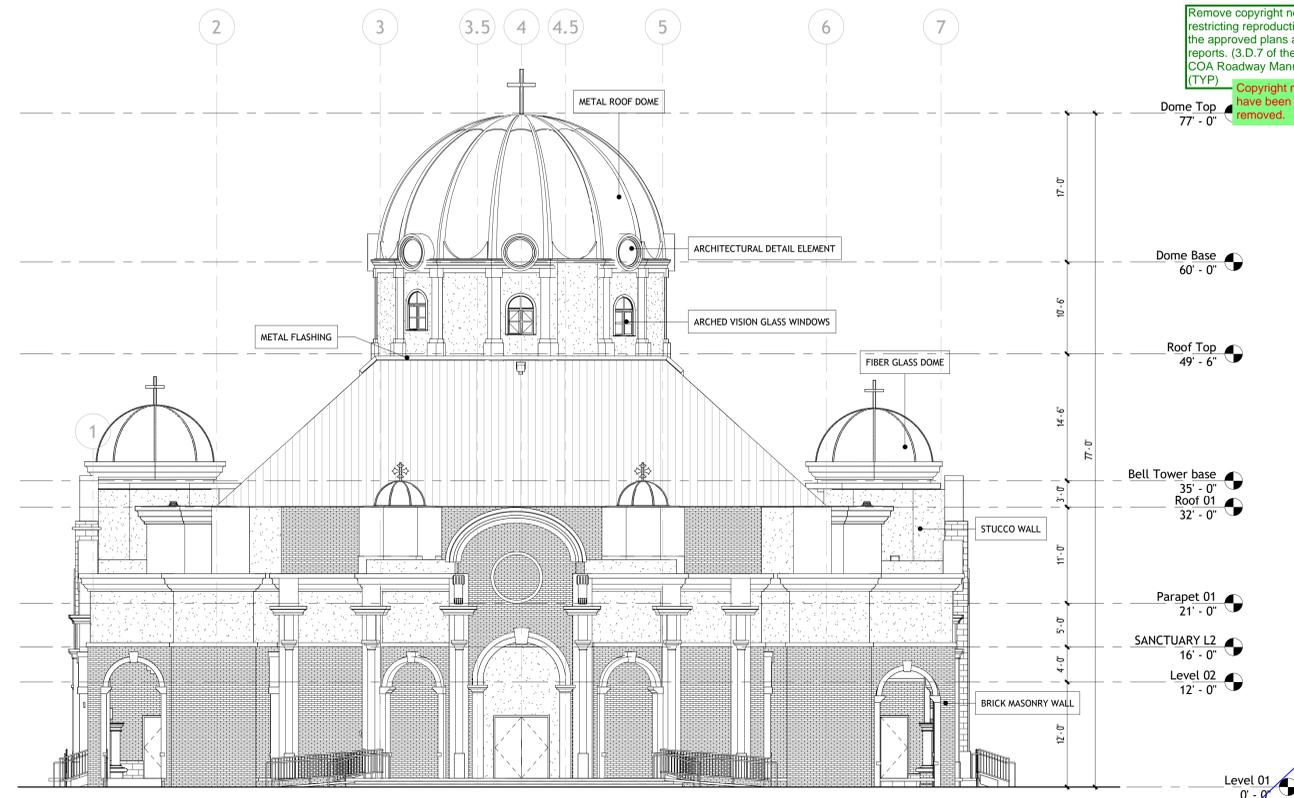
- KEY NOTE**
- PLF PENDENT LIGHT FIXTURE
 - CJ CONTROL JOINT
 - DIA DIAMETER
 - FDC FIRE DEPARTMENT CONNECTION

Table 4-B-6
 Façade Character Elements for Four-Sided Building Design

BUILDING A FACIES	Medhanealem Church Building A		
	PRIMARY FACIAD	SECONDARY FACIAD	MINOR FACIAD
Missing	1	2	1
General			
Wall off-set (min. 3 ft.)	Y	Y	Y
Wall/parapet height change (min. 3 ft.)	Y	Y	N
Floor form change	Y	Y	Y
Upper floor setback	Y	Y	Y
Wall notch (min. 12 in.)	Y	Y	Y
Materials			
General			
Change in material	Y	Y	Y
Change in color	Y	Y	Y
Change in texture	Y	Y	Y
Use of masonry (min. 40% of façade)	Y	Y	Y
Use of panelized materials (min. 40% of façade)	N	N	N
Variety of window sizes	Y	Y	Y
Transparency and glazing (min 70% transparent glass)	N	N	N
Human Scale			
General			
Architectural detailing	Y	Y	Y
Display cases on ground floor (for mixed-use)	N	N	N
Building-mounted lighting fixture	Y	Y	Y
Awnings or shutters	N	N	N
Entry details (pronounced overhang/roof form, steps, porch, etc.)	Y	Y	Y
Building corner enhancements	Y	Y	Y
Wall set	Y	Y	N
Balconies	N	N	N
Landscape wall/decorative screen for vines	N	N	N



02 North Architectural Building Elevation
 1/8" = 1'-0"



01 West Architectural Building Elevation
 1/8" = 1'-0"

Add these signs to elevations. TYP
 Signs have been added and labeled.



Third request. For each building, where applicable, show the following features: FDC, fire riser room door, Knox box. TYP
 Elevation sheets must show and label the locations of Fire Department Connection (FDC), Fire Riser Room Door and Knox Box locations.
 The following have been labeled on the buildings.

Knox boxes should be located at main entrance to building and fire riser room. Use notes provided to show mounting locations. TYP
 Knox Box locations have been updated to comply with the standards listed.



NOTE: Fire Department Connections shall be located not less than 18" and not more than 48" above the level of the adjoining ground, sidewalk, or grade surface.
 A working space of not less than 36 inches in width, 36 inches in depth and 78 inches in height shall be provided and maintained in front of and to the sides of wall-mounted fire department connections and around the circumference of free-standing fire department connections, except as otherwise required or approved by the fire code official.

Requested location of FDC. Acknowledged.

Use notes provided to show mounting location of FDC. TYP Acknowledged.

Remove copyright notes restricting reproduction of the approved plans and reports. (3.D.7 of the 2025 COA Roadway Manual) (TYP)
 Copyright notes have been removed.

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ISSUE FOR

No.	Description	Date

revision

EXTERIOR ELEVATION - SANCTUARY

Project Number 11031
 Date 03-05-2025

Sheet

Scale As indicated



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 Blvd, Suite 200,
 Greenwood Village, CO
 Phone: 303.770.8884

LEGEND

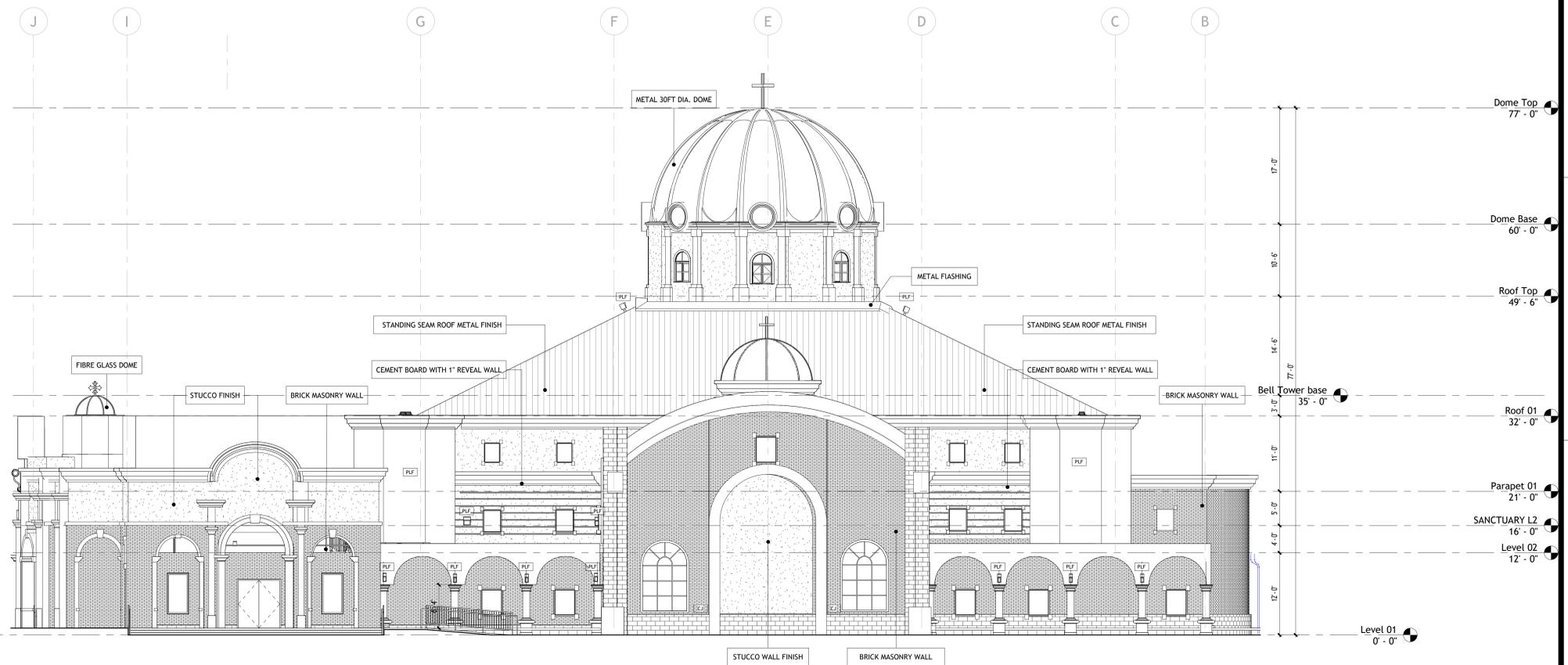
	BRICK MASONRY WALL
	STUCCO FINISH
	METALLIC FINISH
	STANDING SEAM METAL ROOF

KEY NOTE

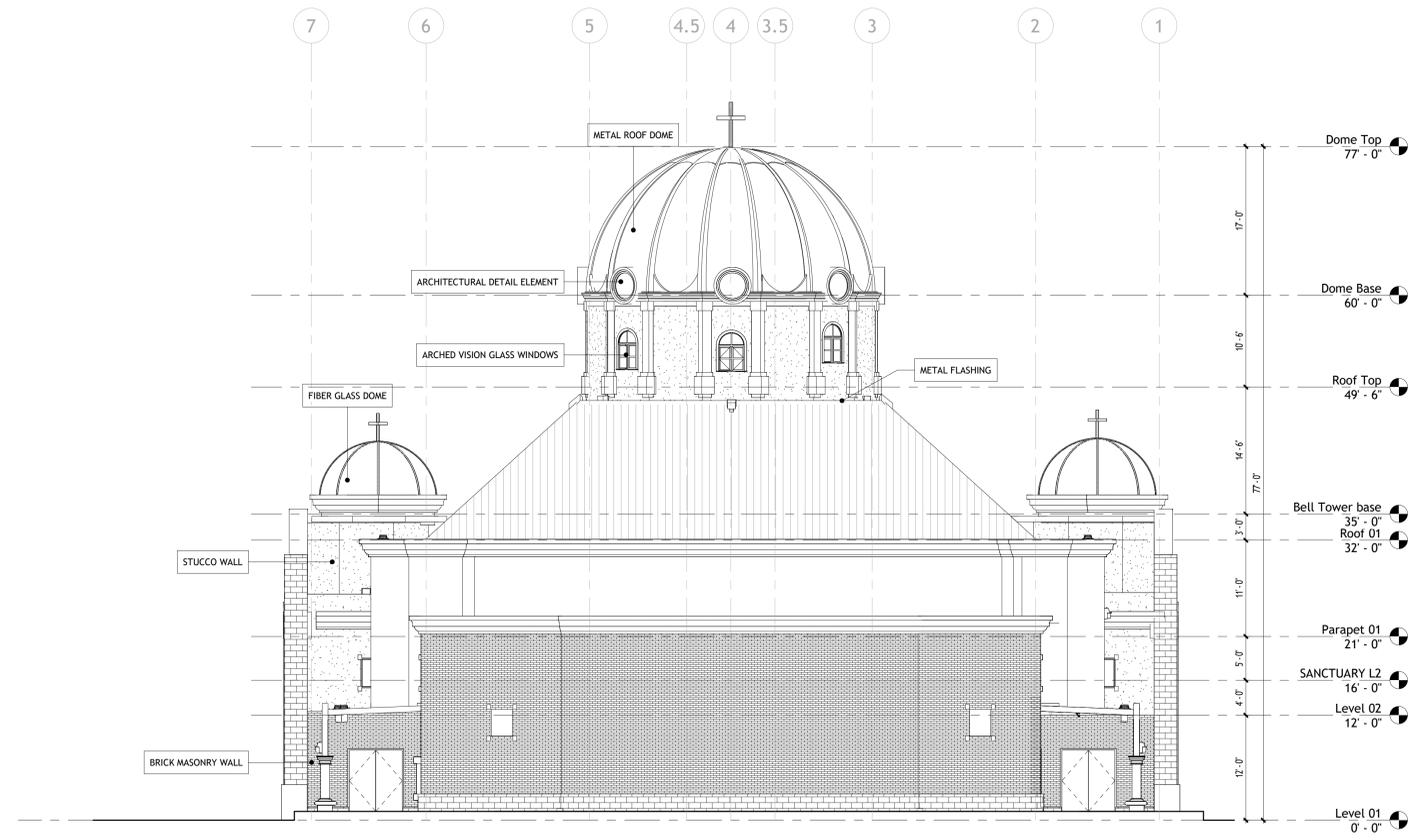
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 Façade Character Elements for Four-Sided Building Design

BUILDING A FACIES	Medhanealem Church Building A		
	PRIMARY FACIAD	SECONDARY FACIAD	MINOR FACIAD
	West	South & North	East
Missing			
General	1	2	1
Wall off-set (min. 3 ft.)	Y	Y	Y
Wall/parapet height change (min. 3 ft.)	Y	Y	N
Floor form change	Y	Y	N
Upper floor setback	Y	Y	Y
Wall notch (min. 12 in.)	Y	Y	Y
Materials			
General	-	-	-
Change in material	Y	Y	Y
Change in color	Y	Y	Y
Change in texture	Y	Y	Y
Use of masonry (min. 40% of façade)	Y	Y	Y
Use of panelized materials (min. 40% of façade)	N	N	N
Variety of window sizes	Y	Y	Y
Transparency and glazing (min 70% transparent glass)	N	N	N
Human Scale			
General	-	-	-
Architectural detailing	Y	Y	Y
Display cases on ground floor (for mixed-use)	N	N	N
Building-mounted lighting fixtures	Y	Y	Y
Awnings or shutters	N	N	N
Entry details (pronounced overhanging roof, stoop, porch, etc.)	Y	Y	N
Building corner enhancements	Y	Y	Y
Wall set	Y	Y	N
Balconies	N	N	N
Landscape wall/decorative screen for vines	N	N	N



02 South Architectural Building Elevation
 1/8" = 1'-0"



01 East Architectural Building Elevation
 1/8" = 1'-0"

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LEGEND

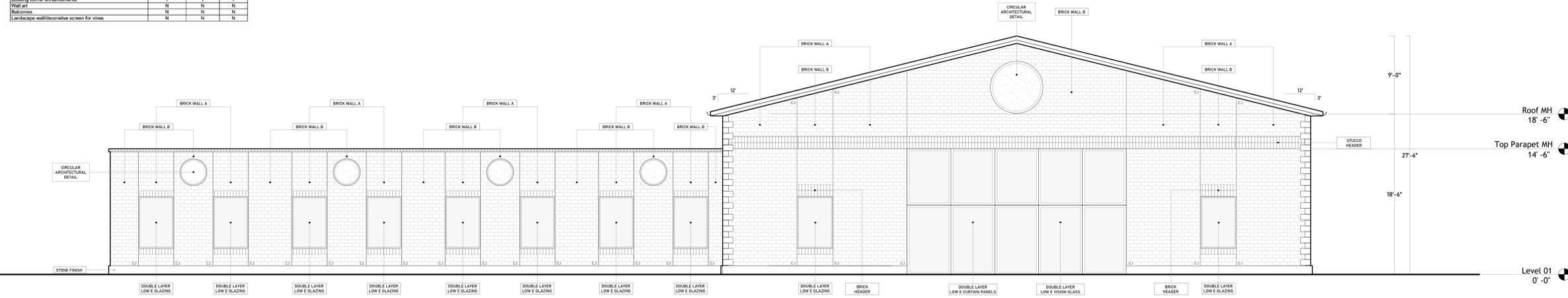
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-  BRICK TYPE B
-  STUCCO FINISH
-  STONE FINISH
-  STANDING SEAM METAL ROOF
-  STONE CORNER FINISH

KEYNOTE

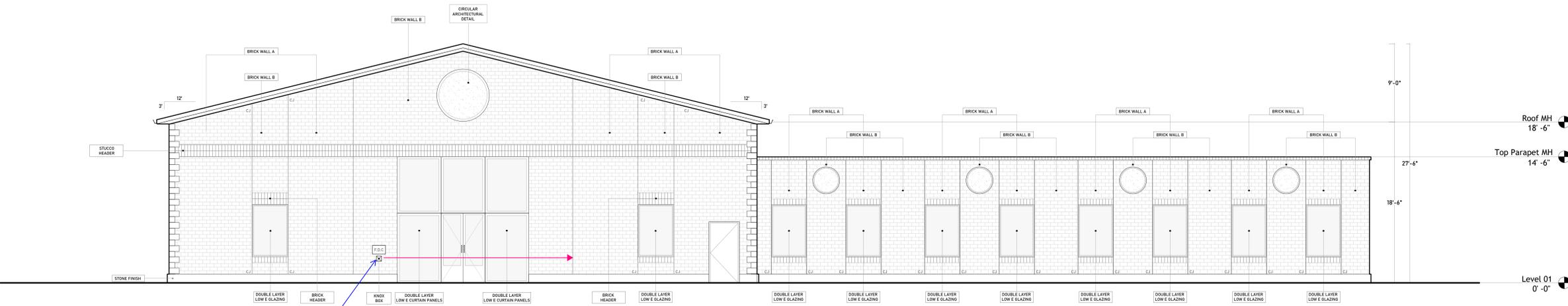
- CJ CONTROL JOINT
- FDC FIRE DEPARTMENT CONNECTION

Table 4.8-6

Façade Character Elements for Four-Sided Building Design			
BUILDING C FACE	Medhanealem Church Building C		
	PRIMARY FACADE East and South	SECONDARY FACADE North	MINOR FACADE West
Massing			
General	Y	Y	Y
Wall off-set (min. 3 ft.)	Y	Y	N
Wall parapet height change (min. 3 ft.)	N	N	N
Roof form change	Y	Y	N
Upper floor setback	N	N	N
Wall width (min. 12 in.)	N	N	N
Materials			
General	Y	Y	Y
Change in material	Y	Y	Y
Change in color	Y	Y	Y
Change in texture	Y	Y	Y
Use of masonry (min. 40% of façade)	Y	Y	Y
Use of paneled materials (min. 40% of façade)	N	N	N
Variety of window sizes	N	N	N
Transparency and glazing (min. 70% transparent glass)	N	N	N
Roof Style			
General	Y	Y	Y
Architectural detailing	Y	Y	Y
Display cases on ground floor (for mixed-use)	N	N	N
Building-mounted lighting fixtures	Y	Y	Y
Average or slanted	N	N	N
Entry deflector (pronounced mansard/roof form, stoop, porch, etc.)	Y	Y	Y
Building corner enhancements	Y	Y	Y
Wall art	N	N	N
Balconies	N	N	N
Landscape wall/decorative screen for vines	N	N	N



02 NORTH ELEVATION
3/16" = 1' - 0"



01 SOUTH ELEVATION
3/16" = 1' - 0"

FDC and Knox location is different from site plan. FDC and Knox box locations have been updated to match the site plans

Identify Main Hall as Building C from site plan. TYP

Title has been updated to say building C



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EXTERIOR ELEVATION MAIN HALL

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LEGEND

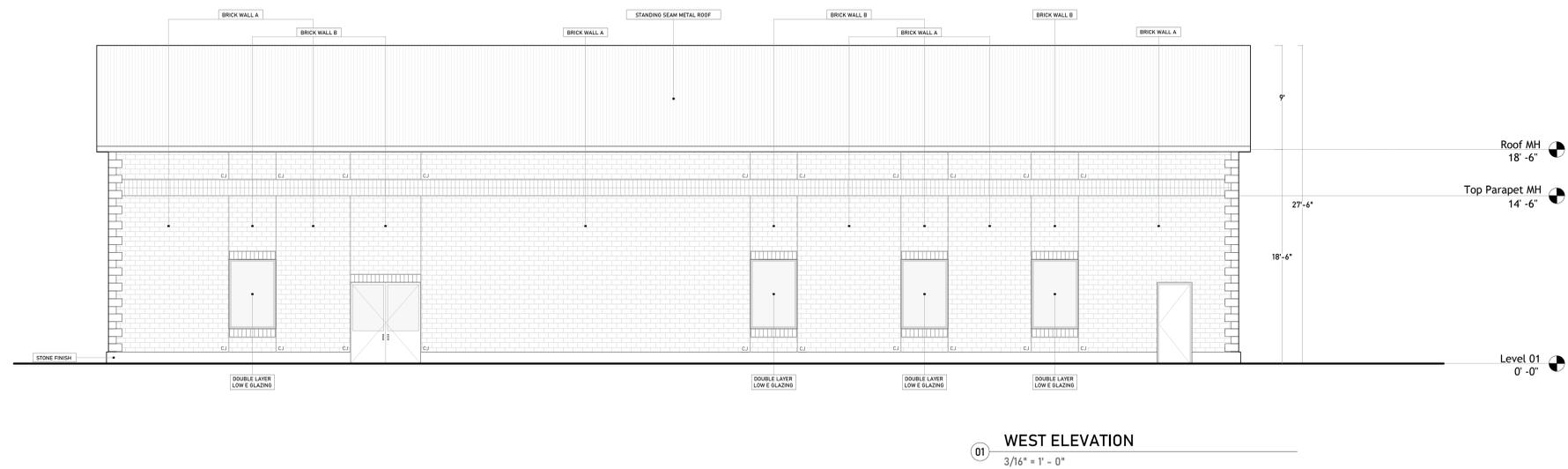
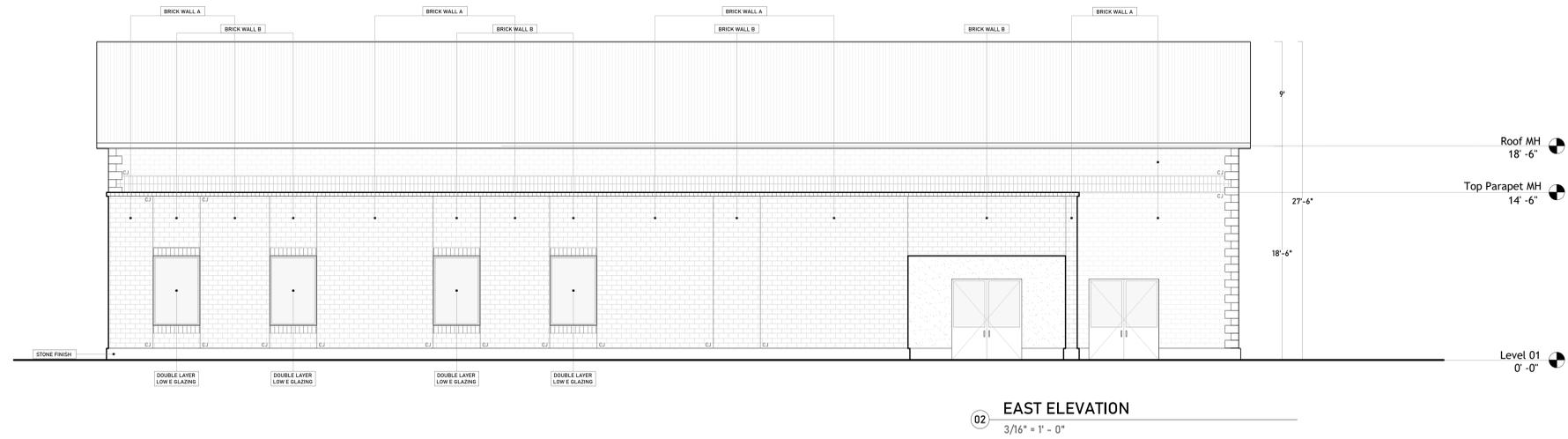
-  BRICK TYPE A
-  BRICK TYPE B
-  STUCCO FINISH
-  STONE FINISH
-  STANDING SEAM METAL ROOF
-  STONE CORNER FINISH

KEYNOTE

- CJ CONTROL JOINT
- FDC FIRE DEPARTMENT CONNECTION

Table 4-B-4
Facade Character Elements for Four-Sided Building Design

BUILDING C FACADE	Medhanalem Church Building C			
	PRIMARY FACADE		SECONDARY FACADE	
	East and South	North	West	East
Missing				
General	1	2	1	
Wall offset (min. 3 ft.)	Y	Y	N	
Wall/parapet height change (min. 3 ft.)	N	N	N	
Roof form change	Y	Y	N	
Upper floor setback	N	N	N	
Wall notch (min. 12 in.)	N	N	N	
Materials				
General	-	-	-	
Change in material	Y	Y	Y	
Change in color	Y	Y	Y	
Change in texture	Y	Y	Y	
Use of masonry (min. 40% of facade)	Y	Y	Y	
Use of panelized materials (min. 40% of facade)	N	N	N	
Variety of window sizes	N	N	N	
Transparency and glazing (min 70% transparent glass)	N	N	N	
Human Scale				
General	-	-	-	
Architectural detailing	Y	Y	Y	
Display cases on ground floor (for merchandise)	N	N	N	
Building-mounted lighting fixtures	Y	Y	Y	
Awnings or shutters	N	N	N	
Entry definition (pronounced massing/roof form, stoop, porch, etc.)	Y	Y	Y	
Building corner enhancements	Y	Y	Y	
Wall art	N	N	N	
Balconies	N	N	N	
Landscape wall/decorative screen for vines	N	N	N	



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EXTERIOR ELEVATION MAIN HALL

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12

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- LEGEND**
- BRICK MASONRY WALL
 - STUCCO FINISH
 - METALLIC FINISH
 - STANDING SEAM METAL ROOF

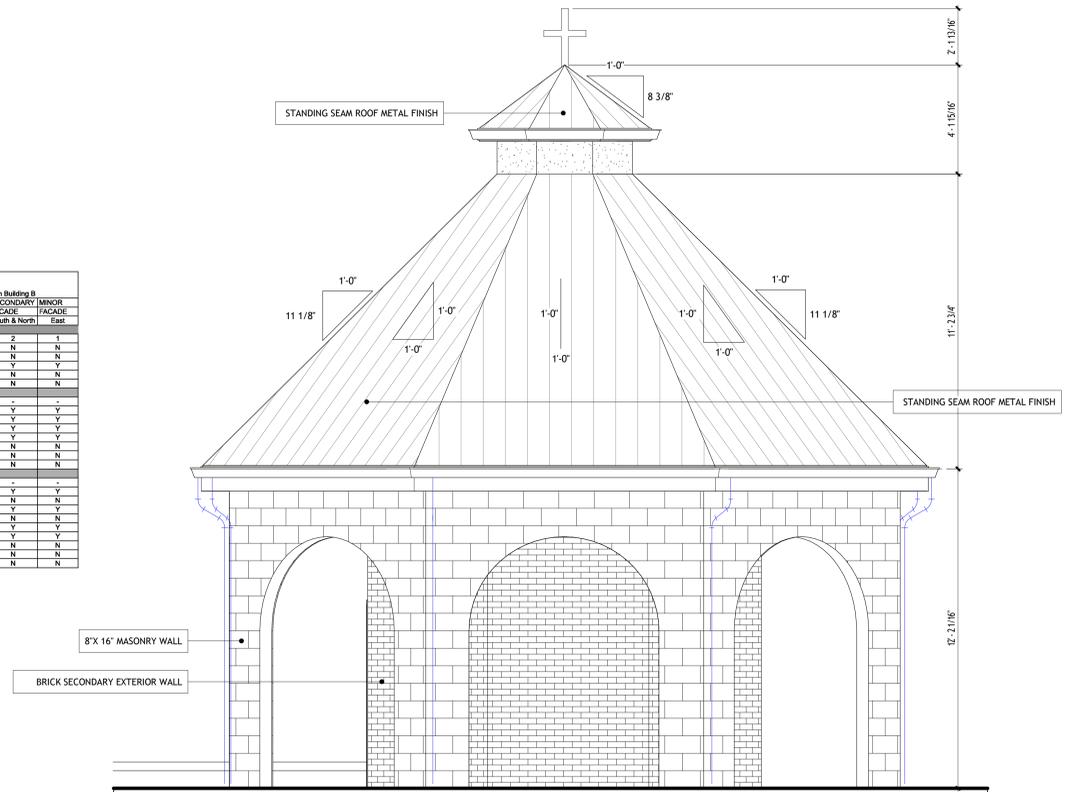
KEY NOTE

- PLF PENDENT LIGHT FIXTURE
- CJ CONTROL JOINT
- DIA DIAMETER
- FDC FIRE DEPARTMENT CONNECTION

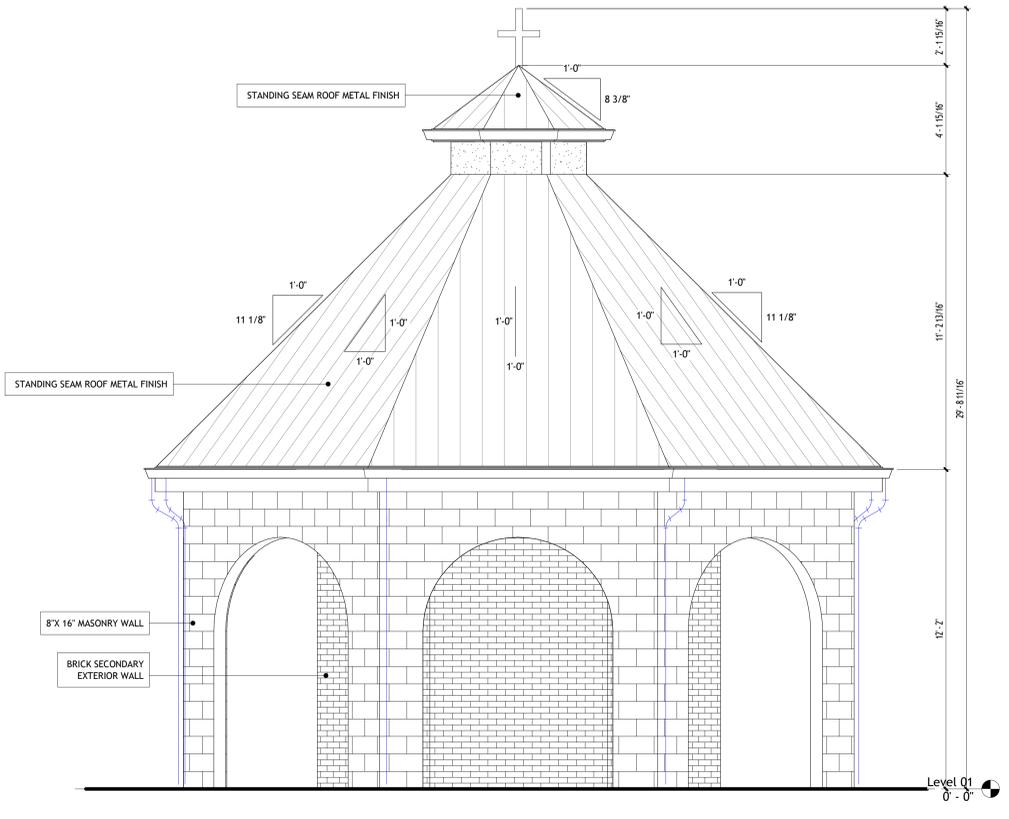
Table 4.8-8

Facade Character Elements for Four-Sided Building Design

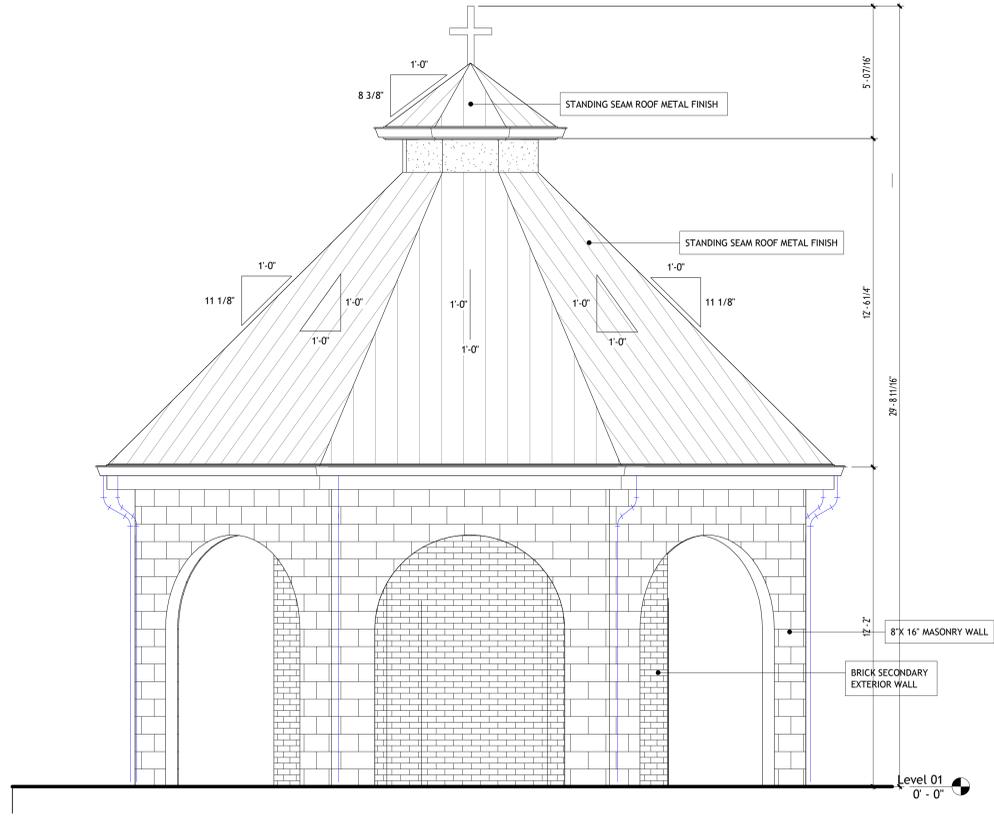
BUILDING B FACE	Medhanealem Church Building B		MINOR FACADE
	PRIMARY FACADE	SECONDARY FACADE	
	West	South & North	East
Material			
General	1	2	1
Wall off-set (min. 3 ft.)	N	N	N
Wall panel height change (min. 3 ft.)	N	N	N
Roof form change	Y	Y	Y
Upper floor setback	N	N	N
Wall finish (min. 12 in.)	N	N	N
Materials			
General	-	-	-
Change in material	Y	Y	Y
Change in color	Y	Y	Y
Change in texture	Y	Y	Y
Use of masonry (min. 40% of facade)	Y	Y	Y
Use of panelled materials (min. 40% of facade)	N	N	N
Variety of window sizes	N	N	N
Transparency and glazing (min 70% transparent glass)	N	N	N
Human Scale			
General	-	-	-
Architectural detailing	Y	Y	Y
Display areas on ground floor (for mixed-use)	N	N	N
Building-mounted lighting fixtures	Y	Y	Y
Awnings or shutters	N	N	N
Entry definition (pronounced massing/roof form, stoop, porch, etc.)	Y	Y	Y
Building corner enhancements	Y	Y	Y
Wall art	N	N	N
Balconies	N	N	N
Landscape wall/decorative screen for vines	N	N	N



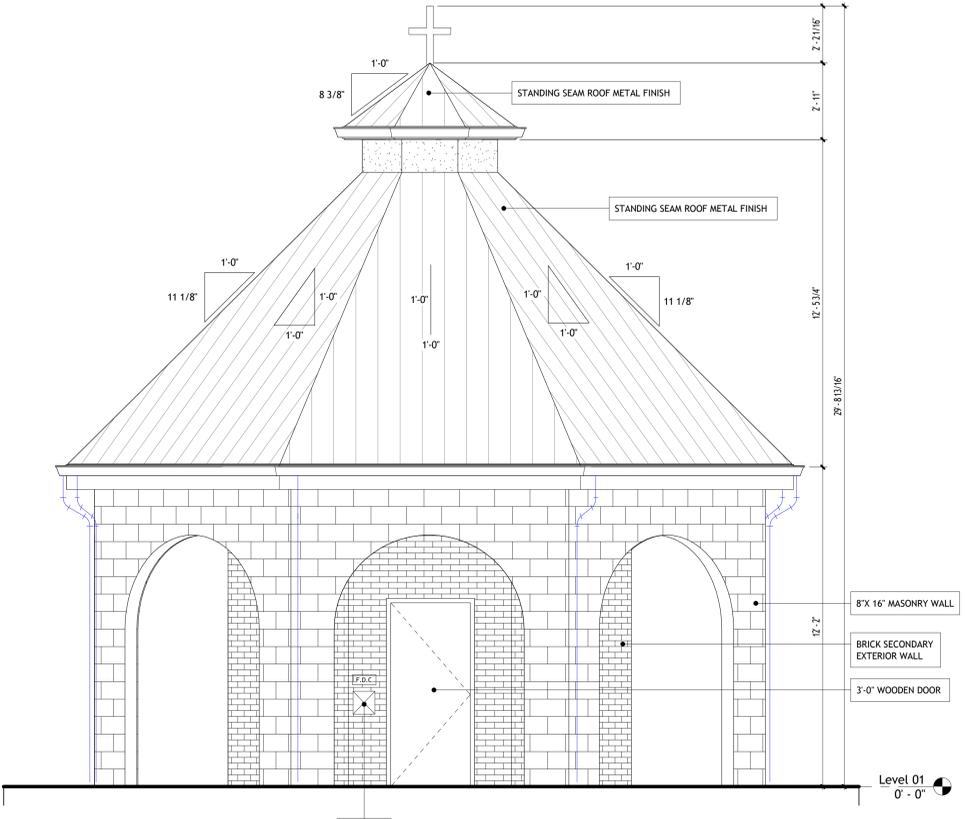
04 North Architectural Building Elevation
 3/8" = 1'-0"



02 South Architectural Building Elevation
 3/8" = 1'-0"



03 East Architectural Building Elevation
 3/8" = 1'-0"



01 West Architectural Building Elevation
 3/8" = 1'-0"

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EXTERIOR ELEVATION - BETELHEM BUILDING B

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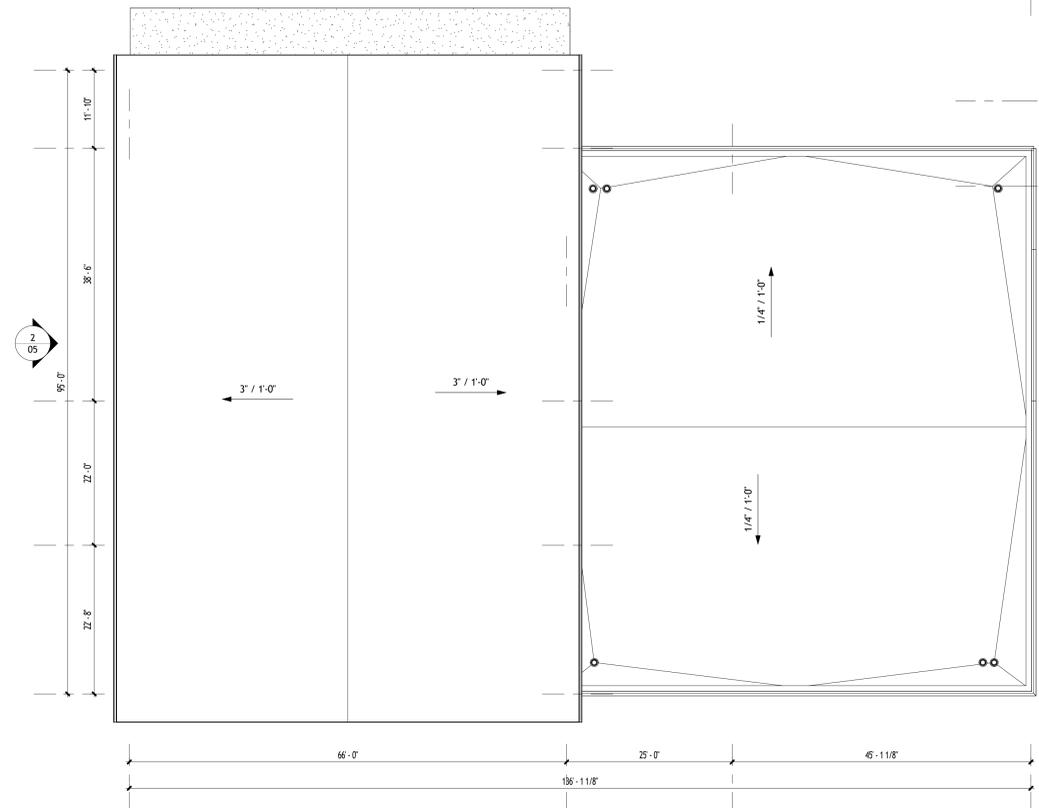
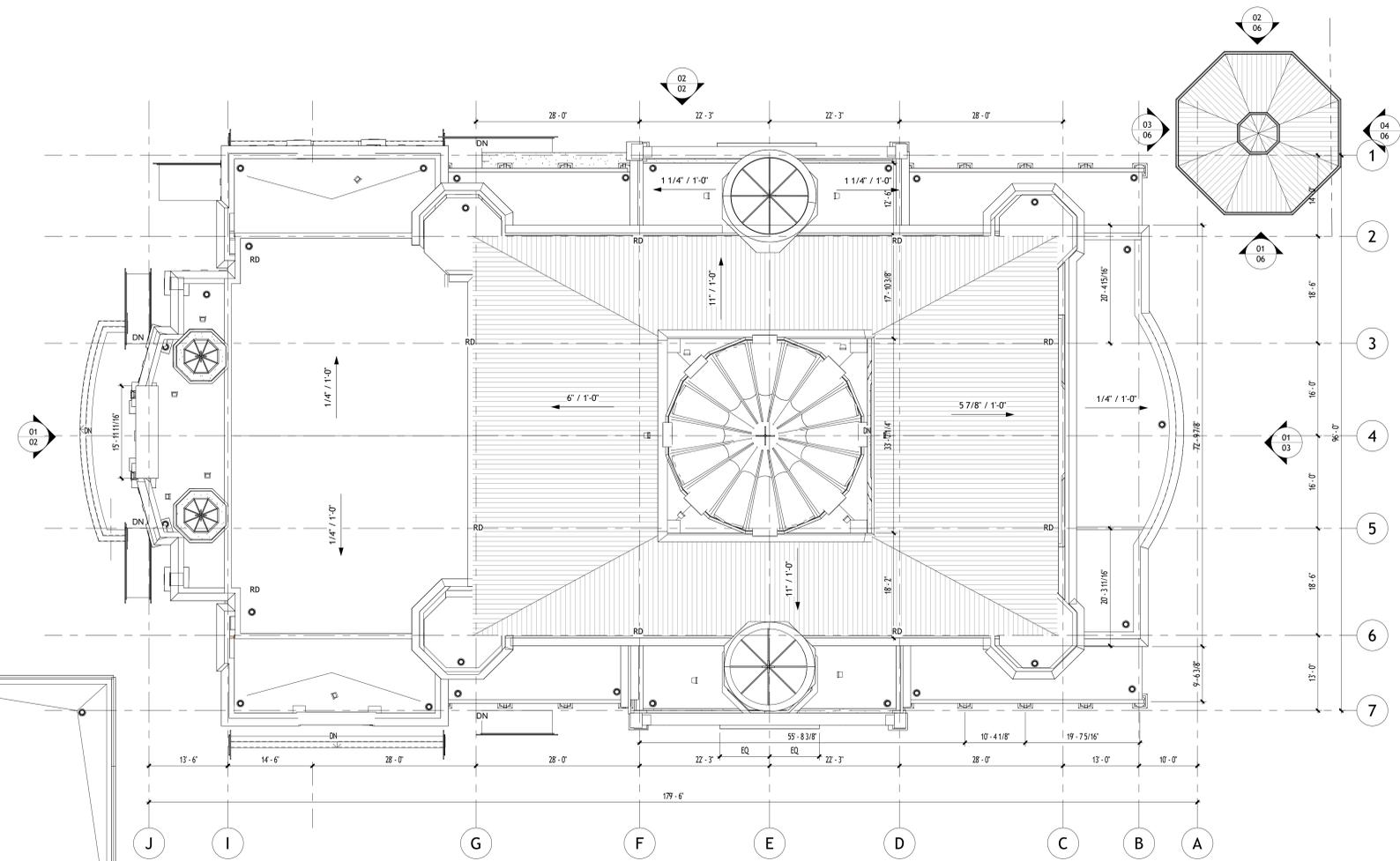
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OVERALL ROOF PLAN

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1 Site Plan
 3/32" = 1'-0"



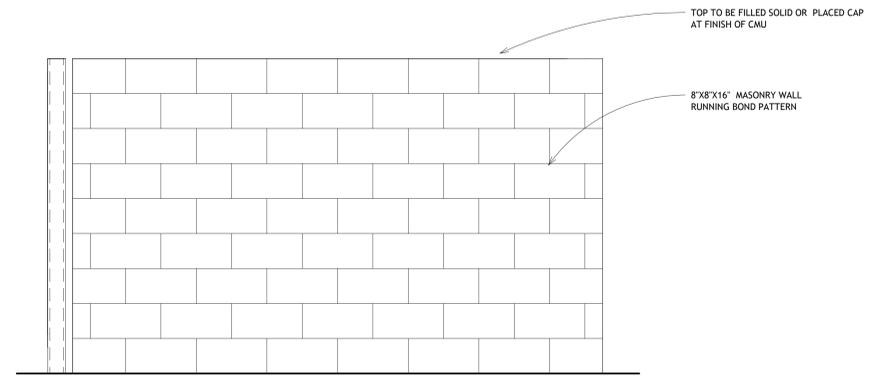
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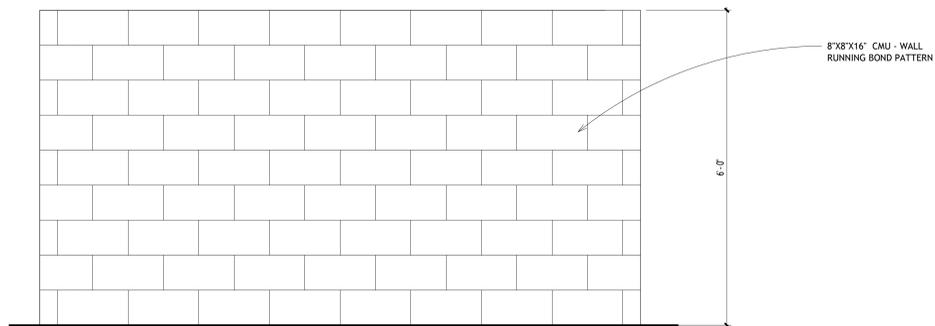
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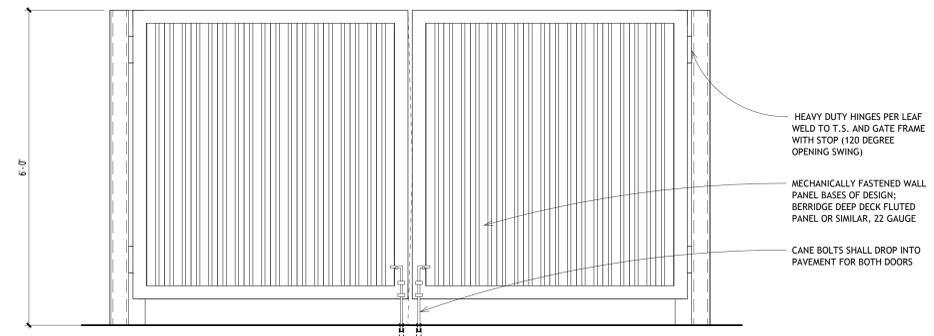
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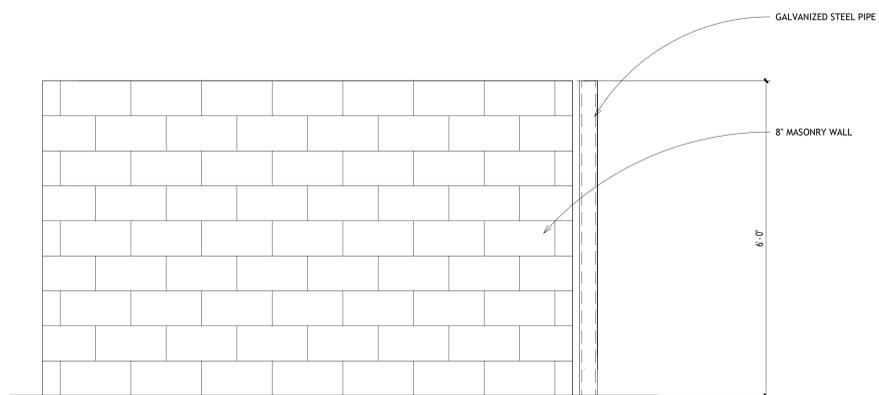
③ NORTH -TRASH ENCLOSURE
 3/4" = 1'-0"



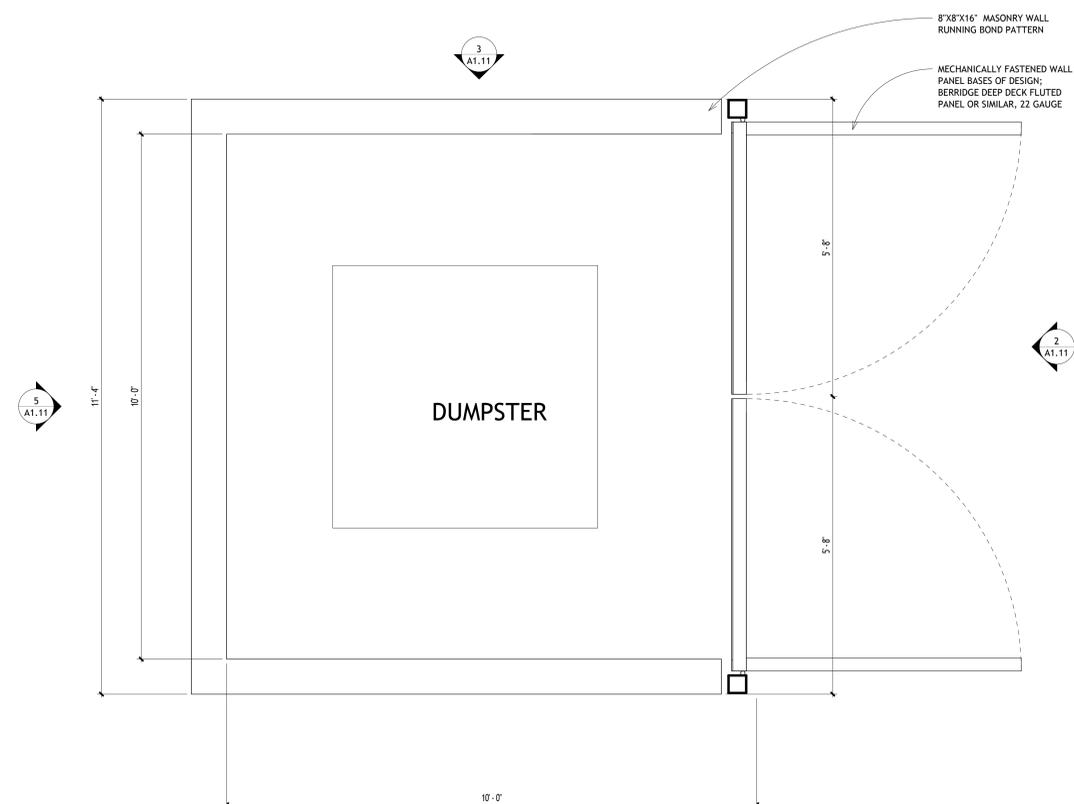
⑤ WEST -TRASH ENCLOSURE
 3/4" = 1'-0"



② EAST -TRASH ENCLOSURE
 3/4" = 1'-0"



④ SOUTH -TRASH ENCLOSURE
 3/4" = 1'-0"



① TRASH ENCLOSURE PLAN
 3/4" = 1'-0"

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No.	Description	Date

TRASH ENCLOSURE DETAILS

Project Number 11031
 Date Issue Date

Sheet

Scale 3/4" = 1'-0"



TRAFFIC IMPACT STUDY

DENVER DEBRESELAM MEDHANEALEM CHURCH

Aurora, Colorado

PREPARED FOR:
The City of Aurora

PREPARED BY:
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Triston Sorah

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DATE:
December 11, 2024
REVISED:
March 05, 2025



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Debreselam Medhanealem Church
Aurora, CO

Appendices:

- A. Full Sized Conceptual Site Plan
- B. LOS Descriptions
- C. Traffic Counts
- D. Existing Synchro Outputs
- E. Background (without site development) Synchro Outputs
- F. Future (with site development) Synchro Outputs

Executive Summary

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 4.5 acres in size and is identified as the north section of Arapahoe County Parcel Number 1975-04-4-01-010. It is located on the northwestern quadrant of the 6th Avenue and Ventura Street intersection in Aurora, Colorado. It is zoned Business/Tech District (I-1) and is currently vacant.

The study area is generally bounded by property lines to the north and west, Ventura Street to the east, and 6th Avenue to the south. The study area for the project includes those intersections that could be affected by the proposed development:

- 6th Avenue/Telluride St
- 6th Avenue/Ventura Street
- Proposed Site Accesses

Description of Proposed Development

The Operator, Debreselam Medhanealem Church, seeks to develop the property with a church use. Site access is being proposed via two full movement accesses on Ventura Street.

Conclusions and Recommendations

Conclusions

Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the intersections within the study area currently operate at overall acceptable levels of service (LOS) “C” or better during the Sunday peak hour.
- Under background future 2026 and 2050 traffic conditions, without the development of the subject site, the intersections within the study area would operate at acceptable LOS “C” or better, consistent with existing conditions.
- The proposed site development would generate, upon completion and full occupancy, 306 new Sunday peak hour vehicle trips as well as 928 new Sunday daily trips.
- Under 2026 and 2050 future site development conditions would remain consistent with future background conditions (i.e., without site development) with the exception of the southbound movement at 6th Avenue and Ventura Street which operates at LOS “C” in 2026 and LOS “E” in 2050. The delay can be attributed to the growth of 6th Avenue.
- All forecasted queues would be contained within their effective storage.

Recommendations

- The Applicant should provide access consistent with the site plan contained herein.
- Auxiliary lanes should be coordinated with CDOT as detailed within the report.

I. Introduction

Overview

This report presents the results of a Traffic Impact Study (TIS) conducted in support of a site plan to develop a church use in the Aurora, Colorado. Currently, the site is vacant.

The basis of this traffic impact assessment includes confirmation of the study area by City Staff and information from the Operator including preliminary site concepts.

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 4.5 acres in size and is identified Arapahoe County Parcel Number 1975-04-4-01-010. It is located on the northwestern quadrant of the 6th Avenue and Ventura Street intersection in Aurora, Colorado, as shown on Figure 1-1. It is zoned Business/Tech District (I-1) and is currently vacant.

The study area is generally bounded by property lines to the north and west, Ventura Street to the east, and 6th Avenue to the south. Site access is being proposed via two full movement accesses on Ventura Street.

The Operator, Denver Debreselam Medhanealem Church, seeks to develop the property with a church use. A reduction of the Applicant's proposed conceptual site plan is provided on Figure 1-2. A full-size copy of the plan is provided in Appendix A.

The study area is generally bounded by property lines to the north and west, Ventura Street to the east, and 6th Avenue to the south.

Tasks undertaken in the course of this study included the following:

1. Reviewed the Applicant's proposed development plans and other background data.
2. Conducted a virtual field reconnaissance of existing roadway and intersection geometries, traffic controls, and speed limits.
3. Conducted peak hour turning movement counts at the key intersections.
4. Analyzed existing levels of service at each of the key study intersections based on the methodologies set forth in the Highway Capacity Guidelines (HCM) 7th as reported by Synchro version 12.
5. Forecasted background future traffic volumes based on baseline traffic counts and regional traffic growth for 2026 build-out and 2050 long-range conditions.
6. Calculated background levels of service at each of the key study intersections for the projected build-out and long-range years based on background future traffic forecasts, regional growth, and the existing lane use and traffic controls.
7. Estimated the number of Sunday peak hour trips that would be generated by the proposed use based on the Institute of Transportation Engineers (ITE) Trip Generation Manual 11th Edition rates/equations and methodologies.

8. Prepared Sunday peak hour total future traffic forecasts based on background traffic forecasts plus site traffic assignments for the 2026 buildout-year as well as 2050 long-range conditions.
9. Calculated total future levels of service for each of the key study intersections based on projected total future traffic forecasts, existing/future traffic controls and intersection geometries.
10. Identified roadway improvements required to accommodate future traffic volumes as necessary.

Sources of data for this analysis included the ITE, HCM 7th, Synchro, Denver Debreselam Medhanealem Church, Aurora, Colorado, and the files/library of Galloway.

Site Description and Access

Site Conditions

The terrain proximate to and surrounding the site is generally classified as “level”.

Hazardous Conditions

Based on the field reconnaissance in the vicinity of the subject site, no hazardous features or constraints were identified.

Proposed Site Access

Access to the site is being proposed via two full movement accesses on Ventura Street.

Existing Zoning

The subject site is currently zoned Business/Tech District (I-1) and is currently vacant. Figure 1-3 depicts the existing zoning associated with the subject property, as well as neighboring properties as shown on the City of Aurora zoning map.

Nearby Uses

The properties surrounding the subject site are generally developed with industrial and retail uses.

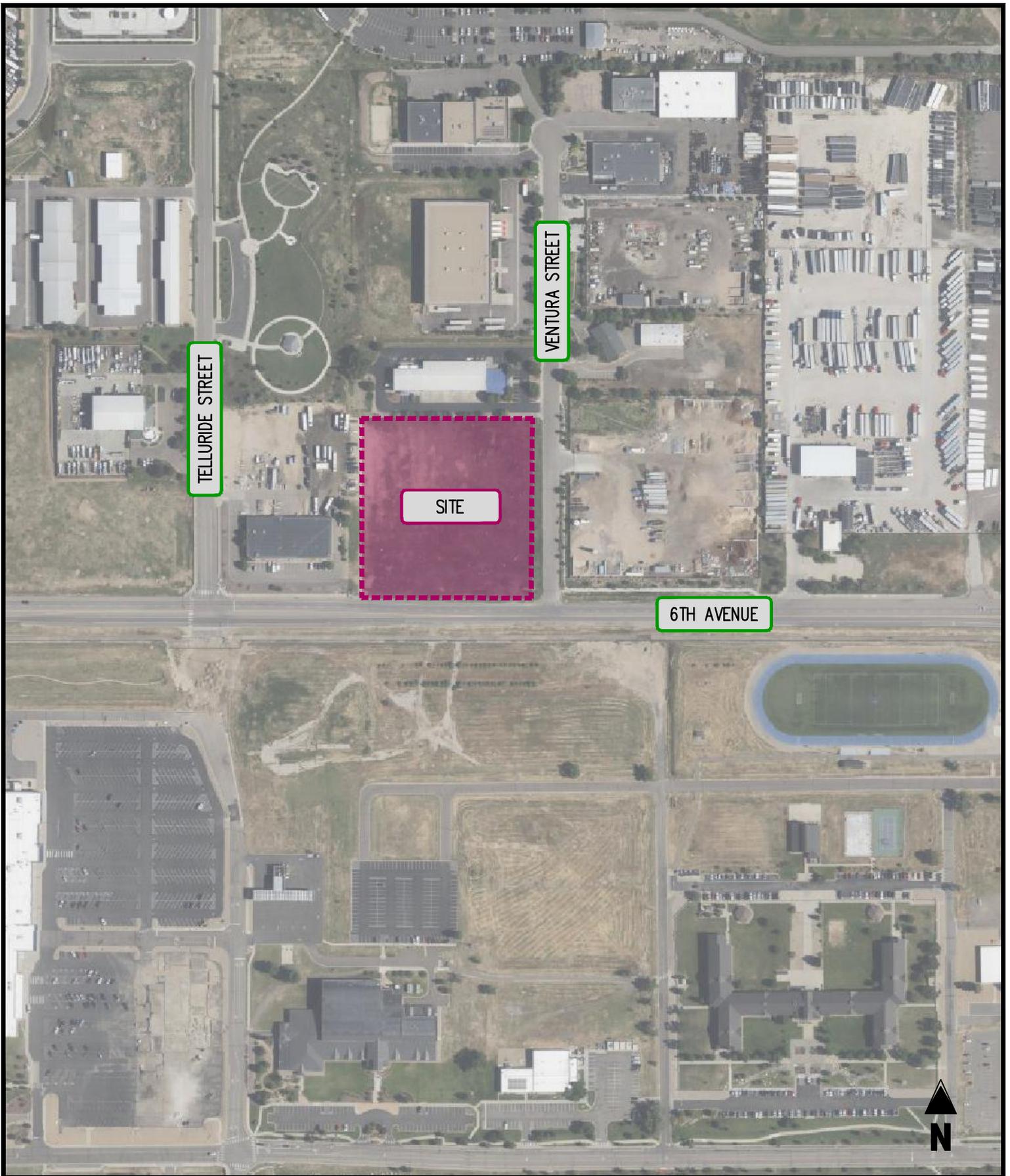


FIGURE 1-1
SITE LOCATION



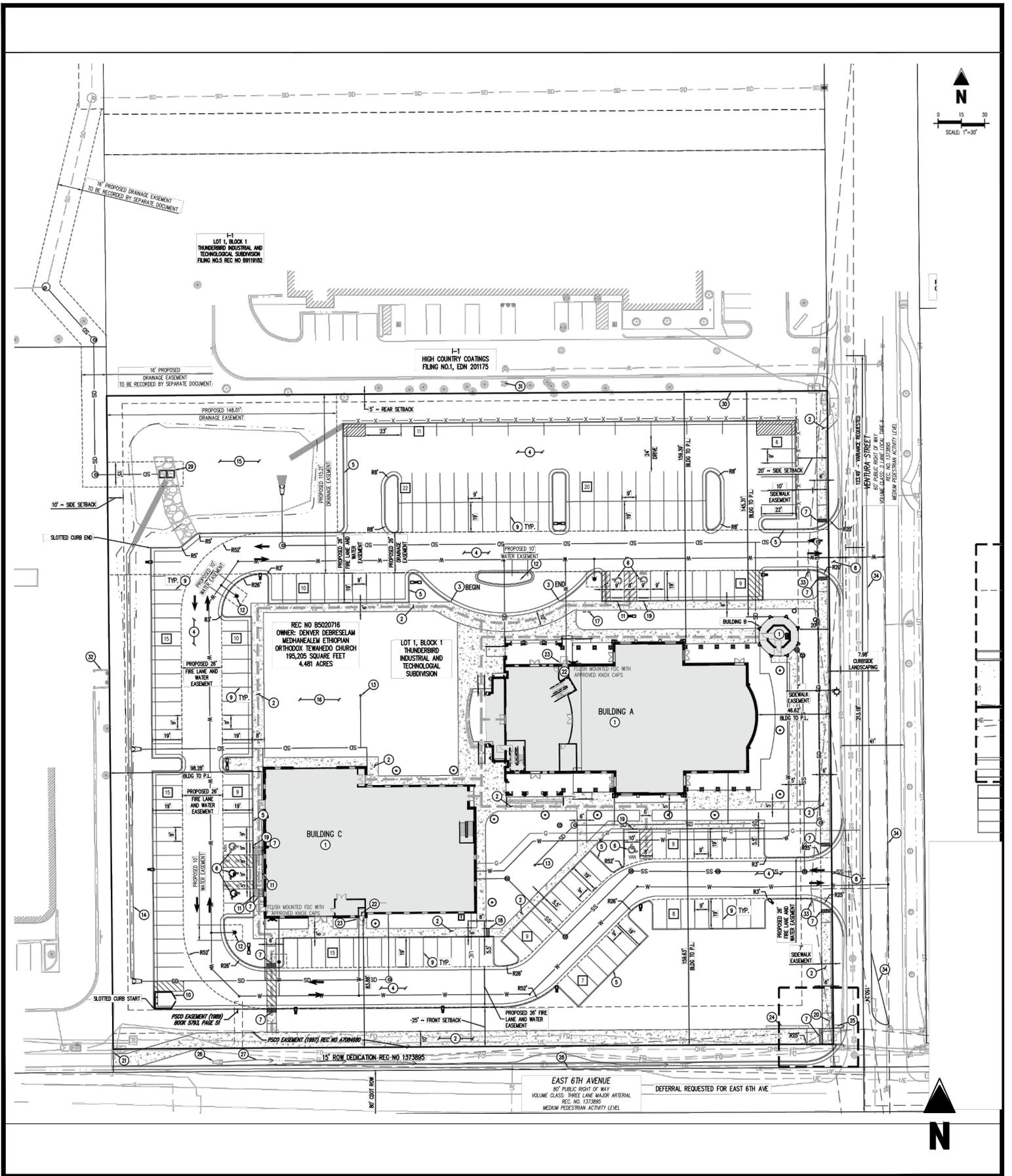
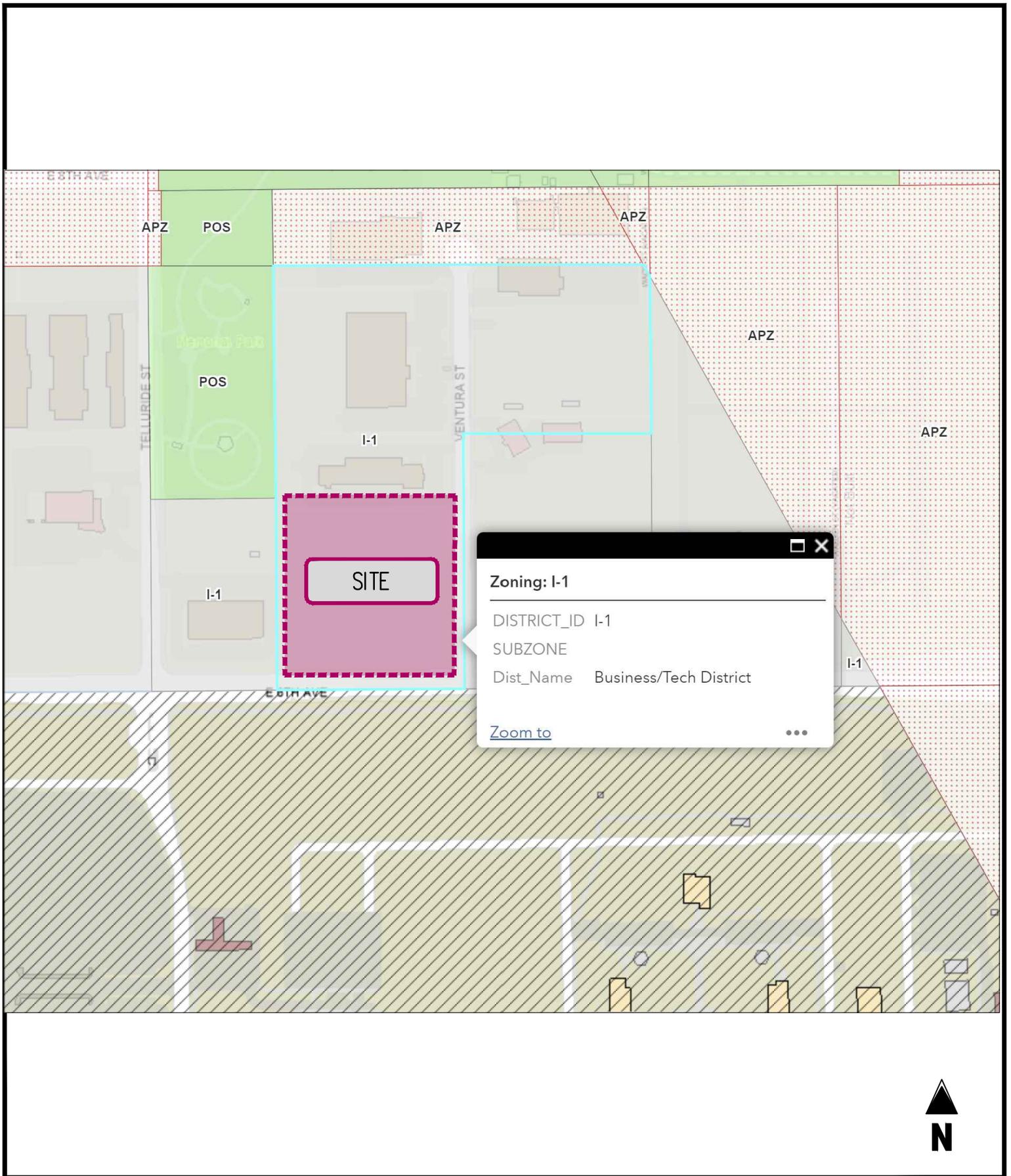


FIGURE 1-2
SITE PLAN

DENVER DEBRESELEM MEDHANEALEM CHURCH
AURORA, COLORADO





**FIGURE 1-3
EXISTING ZONING**



II. Background Information

Study Area

The study area was defined via the initial request for proposal from the City and subsequent correspondence with City Staff. As provided, the traffic study focuses primarily on the following intersections:

Study Intersections

- 6th Avenue/Telluride St
- 6th Avenue/Ventura Street
- Proposed Site Access

Study Assumptions

For purposes of this analysis only, the proposed uses are assumed to be built and occupied in one distinct phase. It was assumed that the use would be built and operational in study year 2026. As requested by the City of Aurora, a long-term analysis of 2050 was also provided. A peak Sunday analysis is provided for all scenarios per scoping from the City.

Study Methodology

Synchro software version 12 was used to evaluate levels of service at each of the study intersections during the Sunday peak hour. Synchro is a macroscopic model used for optimizing traffic signal timing and performing capacity analyses. The software can model existing traffic signal timings or optimize splits, offsets, and cycle lengths for individual intersections, an arterial, or a complete network. Synchro allows the user to evaluate the effects of changing intersection geometrics, traffic demands, traffic control, and/or traffic signal settings as well as optimize traffic signal timings.

The levels of service reported for the signalized and unsignalized intersections analyzed herein were taken from the Highway Capacity Manual (HCM) 7th reports generated by Synchro 12 for unsignalized intersections and Synchro reports for signalized intersections. Level of service descriptions are included in Appendix B. A default percent heavy vehicle (%HV) factor of 2% was used for all movements in the study area.

Existing Roadway Network

Regional access to the subject site is provided by 6th Avenue and local access is provided via Ventura Street. Figure 2-1 depicts existing lane use and traffic controls in the vicinity of the subject site. The following provides a description of each of the roadways within the study network.

6th Avenue

6th Avenue is constructed as a three-lane section with turn lanes at major intersections and a posted speed limit of 40 mph in the vicinity of the subject site. CDOT classifies the roadway as a Non-Rural Principal Highway. The intersection with Telluride Street operates under SIGNALIZED control, while the intersection with Ventura Street operates under STOP control.

Assumed Improvements

No funded/programmed roadway improvements were identified at the study intersections.

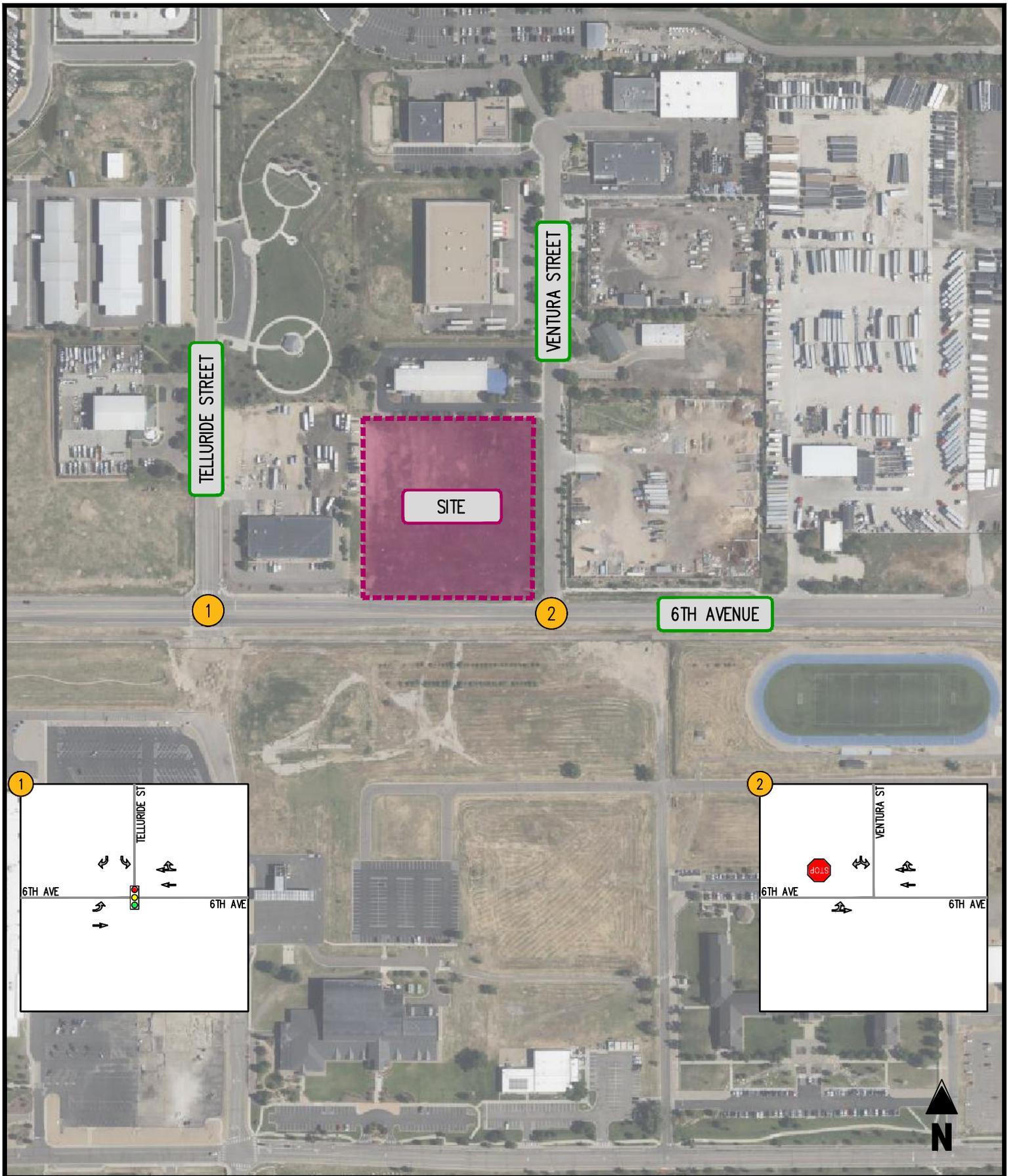


FIGURE 2-1
EXISTING LANE USE AND TRAFFIC CONTROL

DENVER DEBRESLAM MEDHANEALEM CHURCH
 AURORA, COLORADO

- ← MOVEMENT
- 🚦 SIGNALIZED INTERSECTION
- 🛑 STOP SIGN
- 🚧 YIELD SIGN



III. Analysis of Existing Conditions

Traffic Volumes

Sunday peak hour traffic volumes counts were conducted on Sunday September 29, 2024, from 7:00 AM to 1:00 PM at the study intersections by IDAX Data Solutions.

The existing volumes are summarized in Figure 3-1. Copies of traffic counts are included in Appendix C. Existing peak hour factors (PHF) were also computed by approach from the traffic counts and applied to the analysis with a minimum of 0.85 and a maximum of 0.92.

Operational Analysis

Capacity/level of service analyses were conducted at the study intersections based on the existing lane use and traffic controls shown on Figure 2-1 and existing baseline vehicular traffic volumes shown on Figure 3-1. The capacity analysis results are presented in Appendix D and summarized in Table 3-1 and on Figure 3-2.

As shown in Table 3-1, the intersections within the study area currently operate at overall acceptable LOS "C" or better during the weekday peak hours.

Existing Intersection Queues

An analysis of intersection 95th-percentile queues was performed at key locations. The results of the queuing analysis, as reported by Synchro, are summarized in Table 3-2.

As shown in the table, the existing queues are contained within the effective storage within the study area.

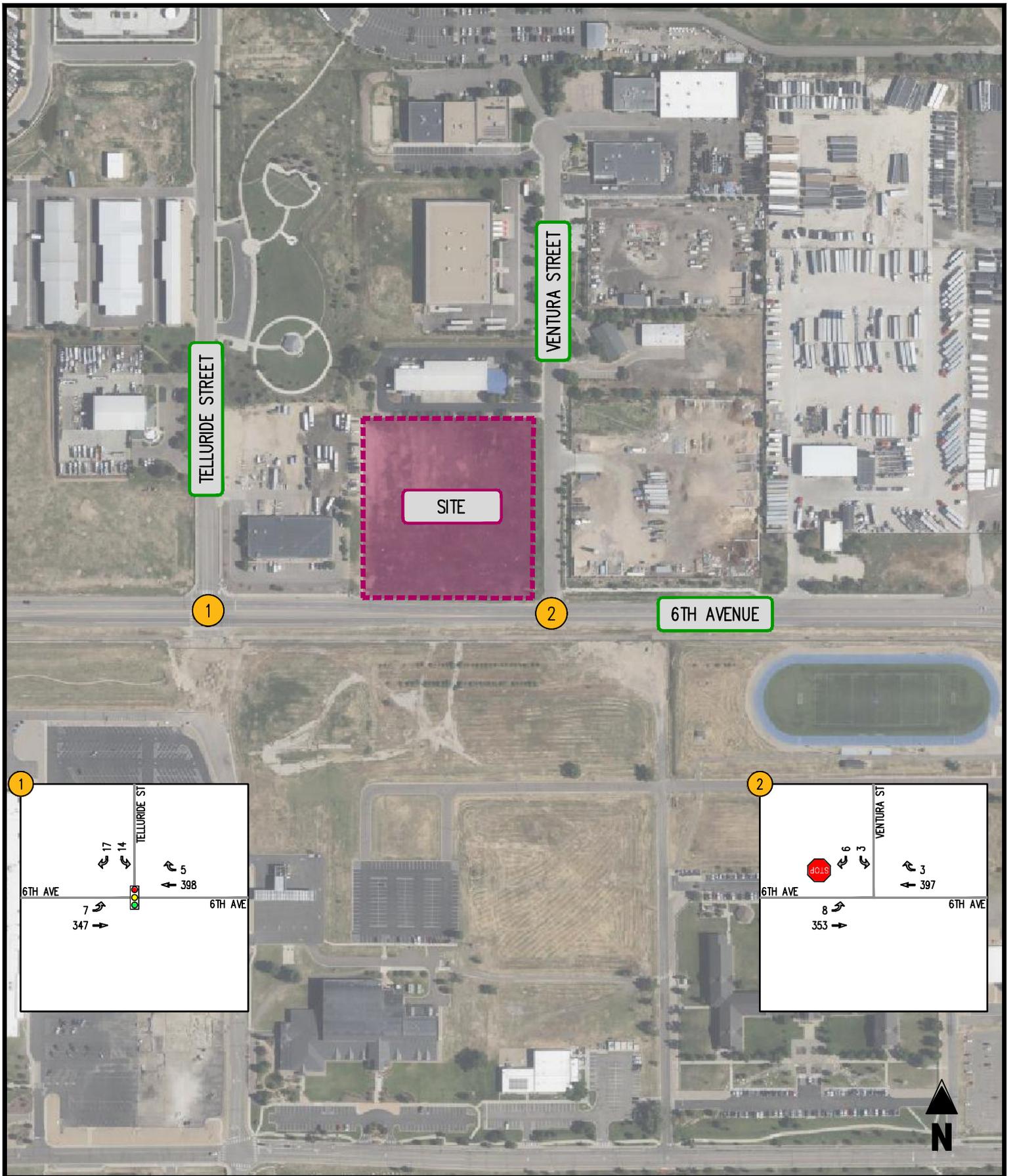


FIGURE 3-1
EXISTING VOLUMES

DENVER DEBRESELEM MEDHANEALEM CHURCH
AURORA, COLORADO

(A) INTERSECTION LOS
0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



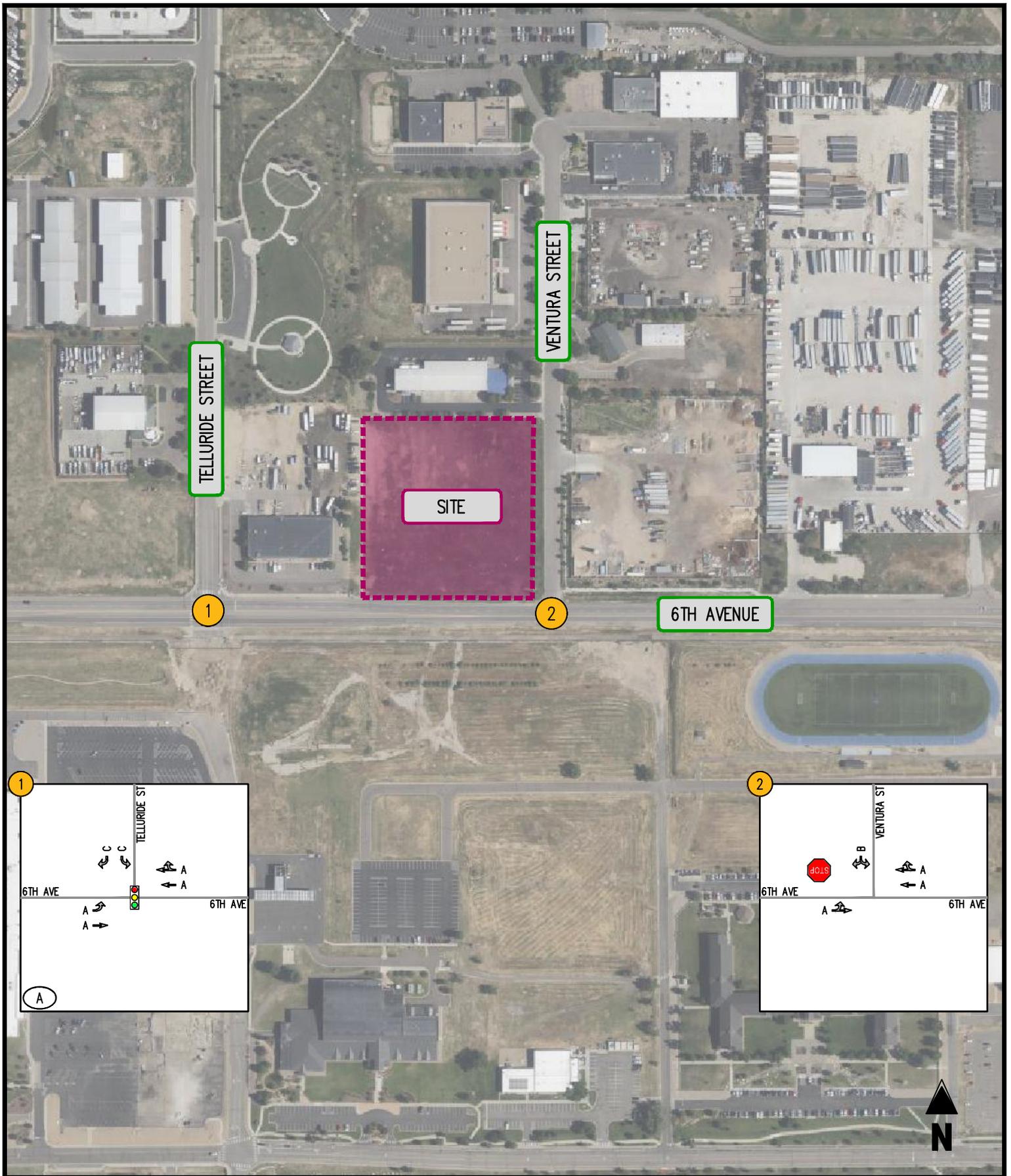


FIGURE 3-2
EXISTING LOS

DENVER DEBRESSELEM MEDHANELEM CHURCH
AURORA, COLORADO

(A) INTERSECTION LOS
0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 3-1
 Denver Debresalem Medhanealem Church
 Existing Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2024 Sunday Peak Hour
1 6th Avenue/Telluride Street	SIGNAL	6th Ave	EBL	A (2.1)
			EBT	A (2.4)
		6th Ave	WBT	A (2.1)
			WBR	A (2.1)
		Telluride St	SBL	C (29.6)
		Overall	A (3.4)	
2 6th Avenue/Ventura Street	STOP	6th Ave	EBL	A [8.3]
			EBT	A [0.0]
		6th Ave	WBT	A [0.0]
			WBR	A [0.0]
		Ventura St	SBL	B [12.3]
		SBR	A [0.0]	
3 S Site Access/Ventura Street	STOP	S Site Access	EBL	N/A
			EBR	N/A
		Ventura St	NBL	N/A
			NBT	N/A
		Ventura St	SBT	N/A
		SBR	N/A	
4 N Site Access/Ventura Street	STOP	N Site Access	EBL	N/A
			EBR	N/A
		Ventura St	NBL	N/A
			NBT	N/A
		Ventura St	SBT	N/A
		SBR	N/A	

Notes (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
 (2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 3-2
 Denver Debresalem Medhanealem Church
 Existing Intersection Queueing Summary (1)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2024 Sunday Peak Hour
1 6th Avenue/Telluride Street	SIGNAL	6th Ave	EBL	330	4
			EBT	-	70
		6th Ave	WBT	-	34
			WBR	-	0
		Telluride St	SBL	250	19
			SBR	-	15
2 6th Avenue/Ventura Street	STOP	6th Ave	EBL	-	0
			EBT	-	0
		6th Ave	WBT	-	0
			WBR	-	0
		Ventura St	SBL	-	2.5
			SBR	-	0
3 S Site Access/Ventura Street	STOP	S Site Access	EBL	-	N/A
			EBR	-	N/A
		Ventura St	NBL	-	N/A
			NBT	-	N/A
		Ventura St	SBT	-	N/A
			SBR	-	N/A
4 N Site Access/Ventura Street	STOP	N Site Access	EBL	-	N/A
			EBR	-	N/A
		Ventura St	NBL	-	N/A
			NBT	-	N/A
		Ventura St	SBT	-	N/A
			SBR	-	N/A

Note added

Note (1) Queue length is based on the 95th percentile queue as reported by Synchro, Version 11.

Repeat comment. Add note for a vehicle length of 25' for all non signalized intersections. Add the note to all queuing tables.

IV. Analysis of Future Conditions without Site Development

Methodology

The future traffic forecasts, without the proposed new use, were developed for 2026 and 2050 conditions based on a composite of existing baseline traffic volumes and regional traffic. A 1.5% growth per year rate was determined to be appropriate using data from a CDOT OTIS station in the area, and applied to existing through traffic along 6th Avenue.

Regional Growth

Increases in traffic associated with regional growth were estimated at 1.5 percent per year compounded for through movements along 6th Avenue up to 2026 as well as to 2050. This growth accounts for increases in traffic resulting from influences outside of the immediate study area. The resulting increases in traffic within the study area are reflected on Figure 4-1 for 2026 build-out year conditions and Figure 4-2 for 2050 long-range conditions.

Background Traffic Forecasts

The existing traffic forecasts depicted on Figure 3-1 and the regional growth shown on Figure 4-1 (2026) and Figure 4-2 (2050) were added together to yield the background future traffic forecasts shown on Figure 4-3 for 2026 conditions, and Figure 4-4 for 2050 conditions.

Background Future Levels of Service

Capacity analyses of 2026 and 2050 future traffic conditions without the proposed development are provided in Appendix E and summarized in Table 4-1. The forecasted levels of service are also depicted graphically on Figure 4-5 for 2026 conditions and Figure 4-6 for 2050 conditions.

As shown on Table 4-1, the intersections within the study area would operate at overall acceptable levels of service during the Sunday peak hour, consistent with existing conditions.

Background Future Queueing

An analysis of intersection queues was performed at key locations under background future traffic conditions. The results of the queueing analysis are summarized in Table 4-2.

As shown in the table, forecasted queues within the study network would be contained within their effective storage, consistent with existing conditions.

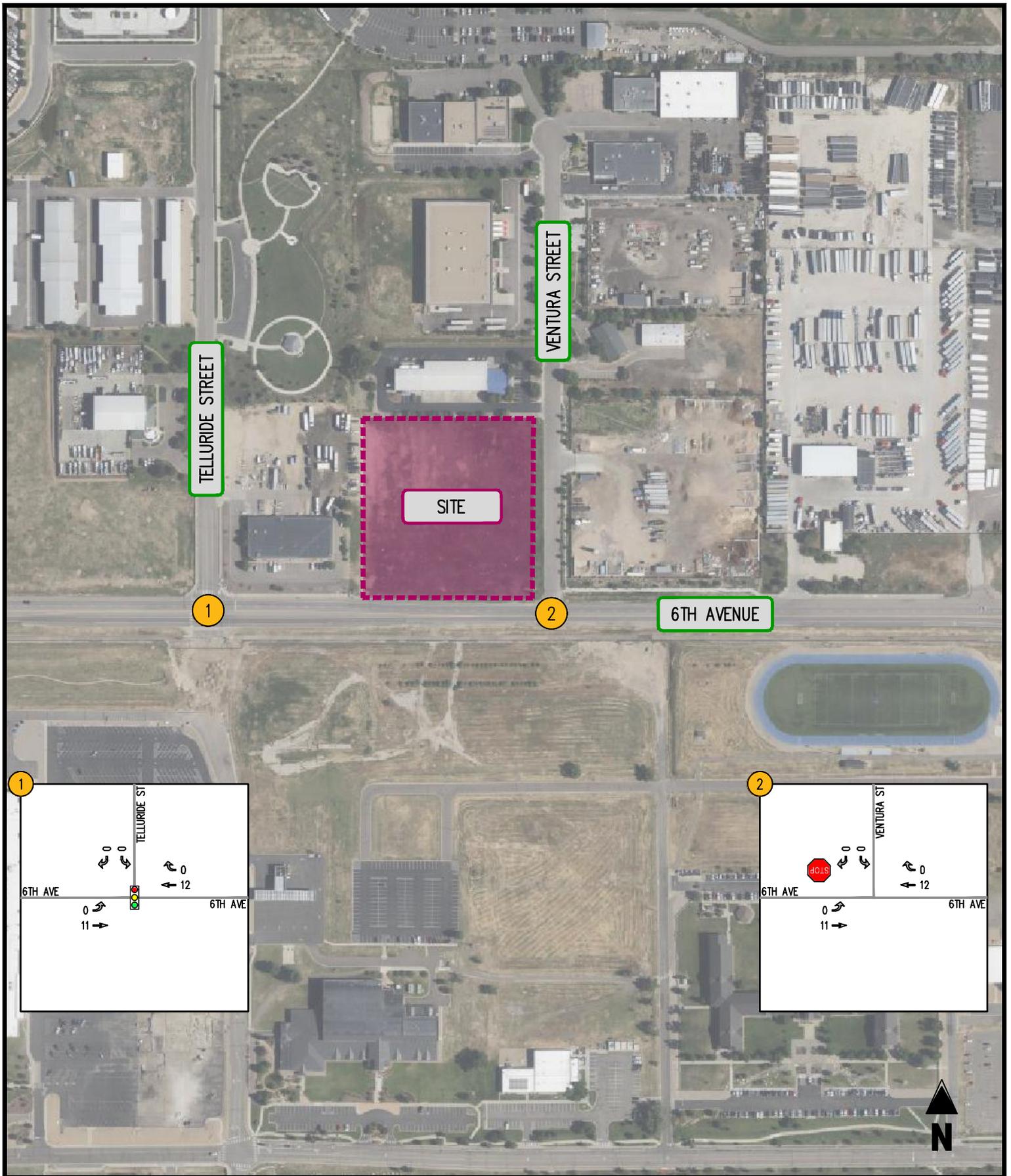


FIGURE 4-1
BACKGROUND GROWTH 2026

DENVER DEBRESLAM MEDHANELEM CHURCH
AURORA, COLORADO

(A) INTERSECTION LOS
0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



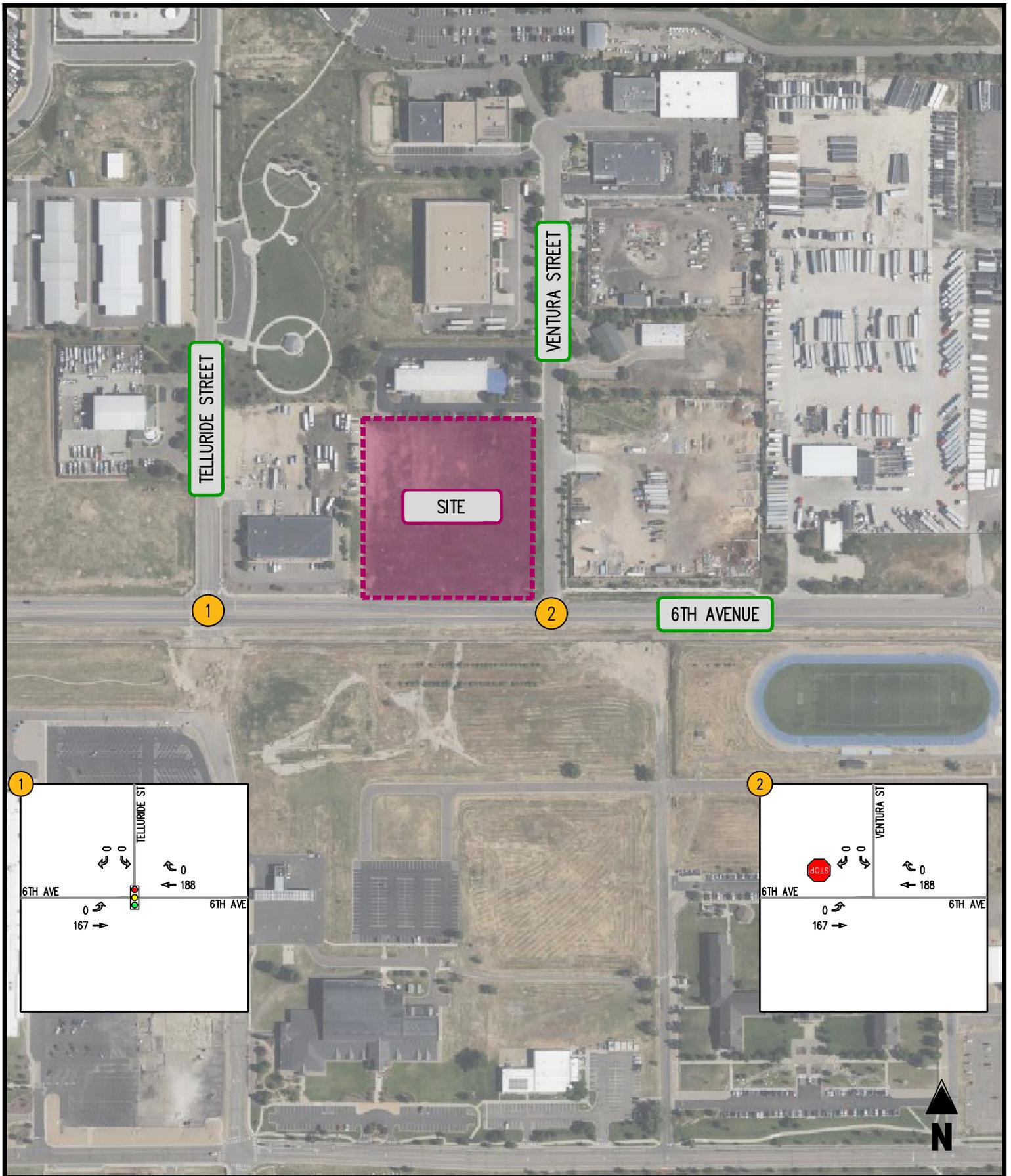


FIGURE 4-2
BACKGROUND GROWTH 2050

DENVER DEBRESELEM MEDHANEALEM CHURCH
AURORA, COLORADO

(A) INTERSECTION LOS
0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



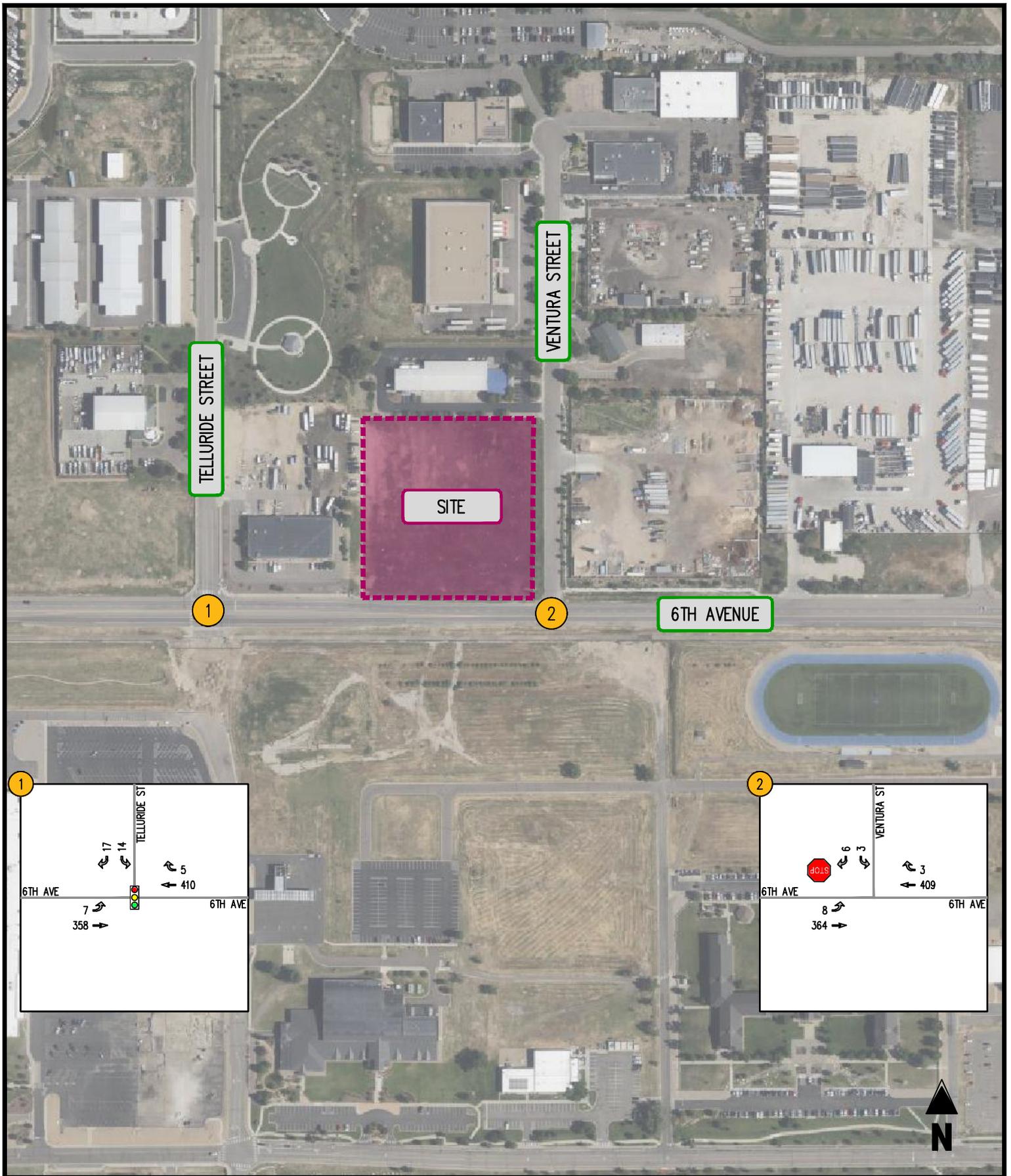


FIGURE 4-3
BACKGROUND FUTURE FORECASTS 2026

DENVER DEBRESLAM MEDHANELEM CHURCH
 AURORA, COLORADO

(A) INTERSECTION LOS
 0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



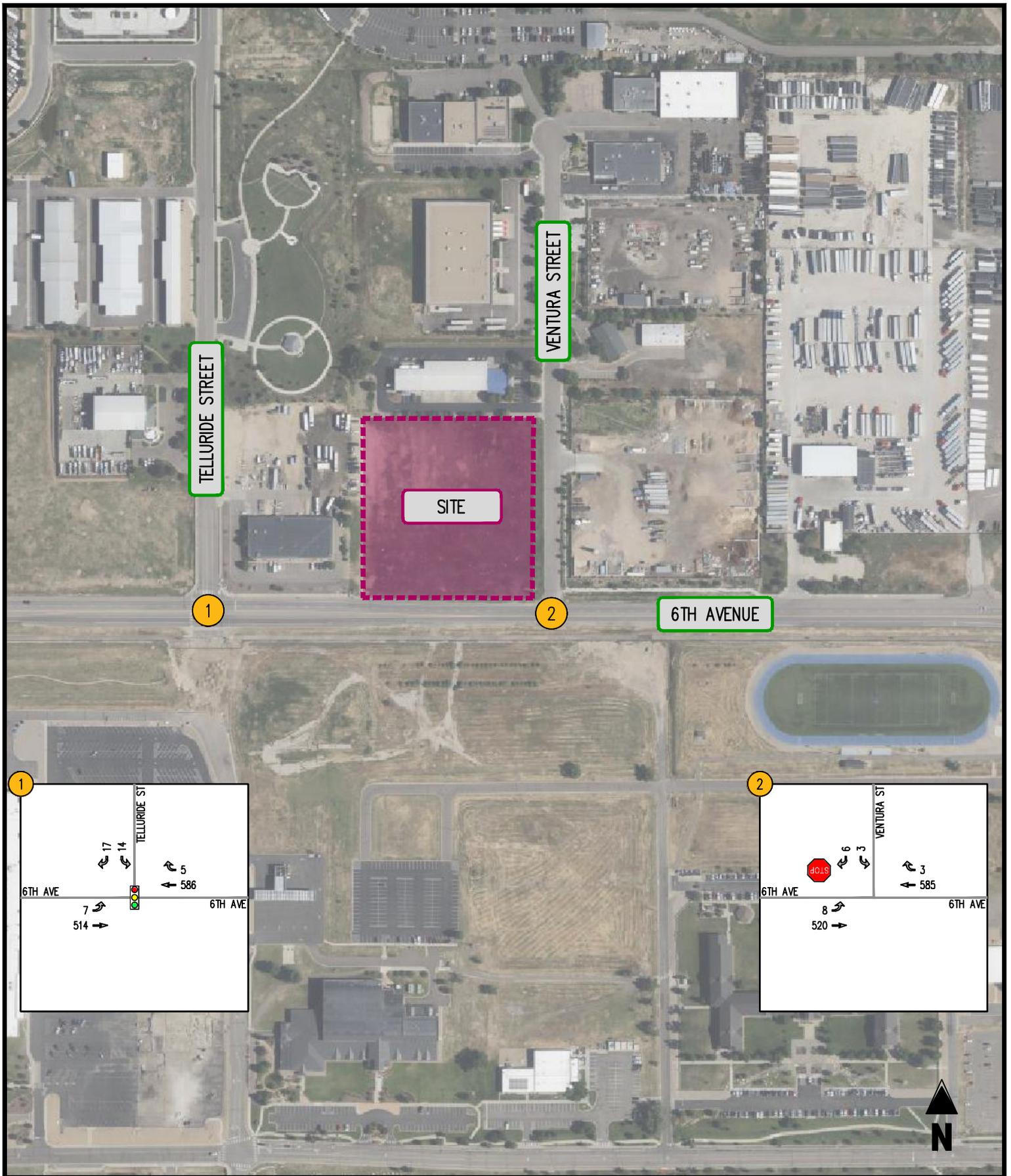


FIGURE 4-4
BACKGROUND FUTURE FORECASTS 2050

DENVER DEBRESLAM MEDHANELEM CHURCH
 AURORA, COLORADO

A INTERSECTION LOS
 0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



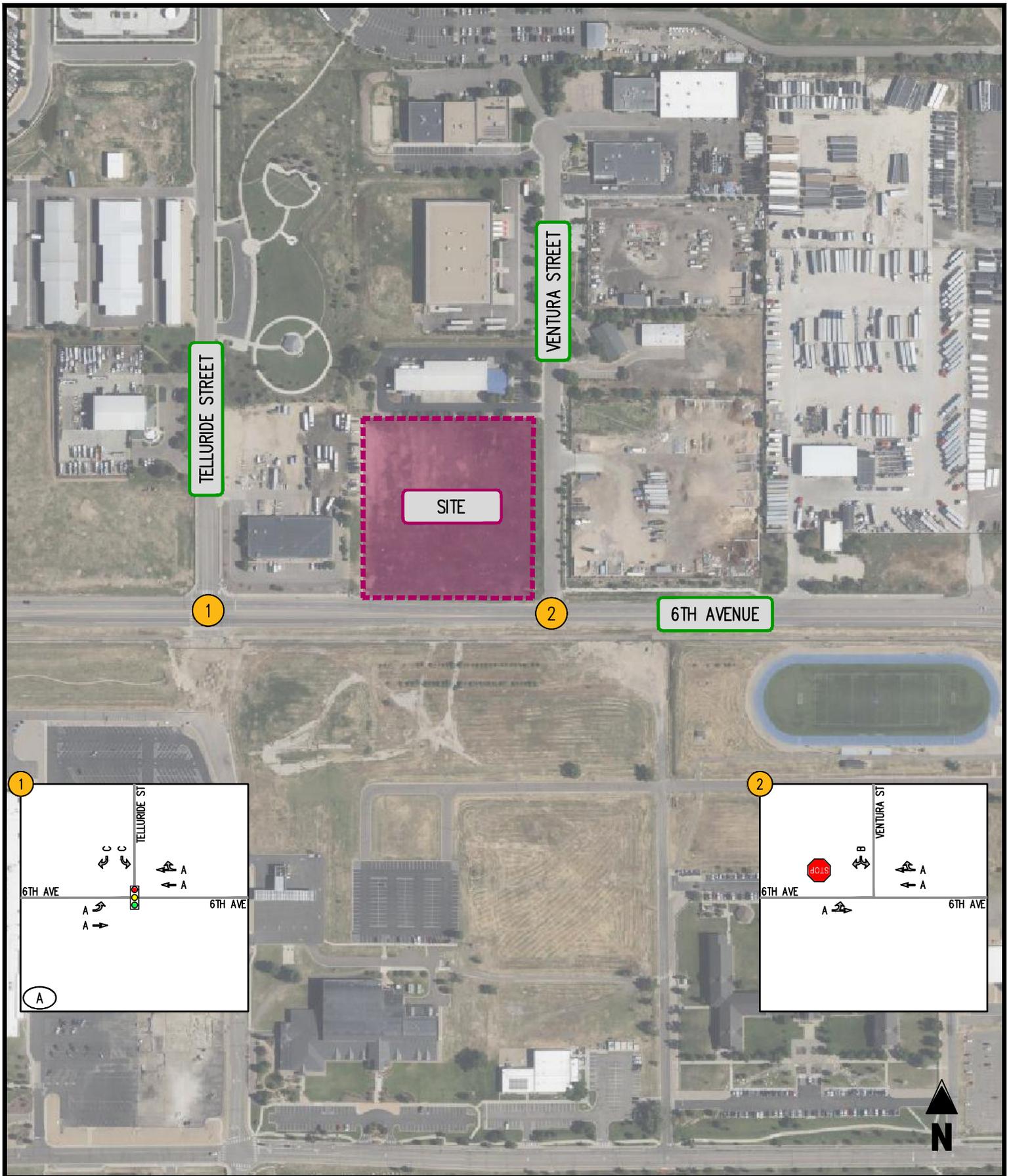


FIGURE 4-5
BACKGROUND FUTURE LOS 2026

DENVER DEBRESELAM MEDHANELEM CHURCH
 AURORA, COLORADO

(A) INTERSECTION LOS
 0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



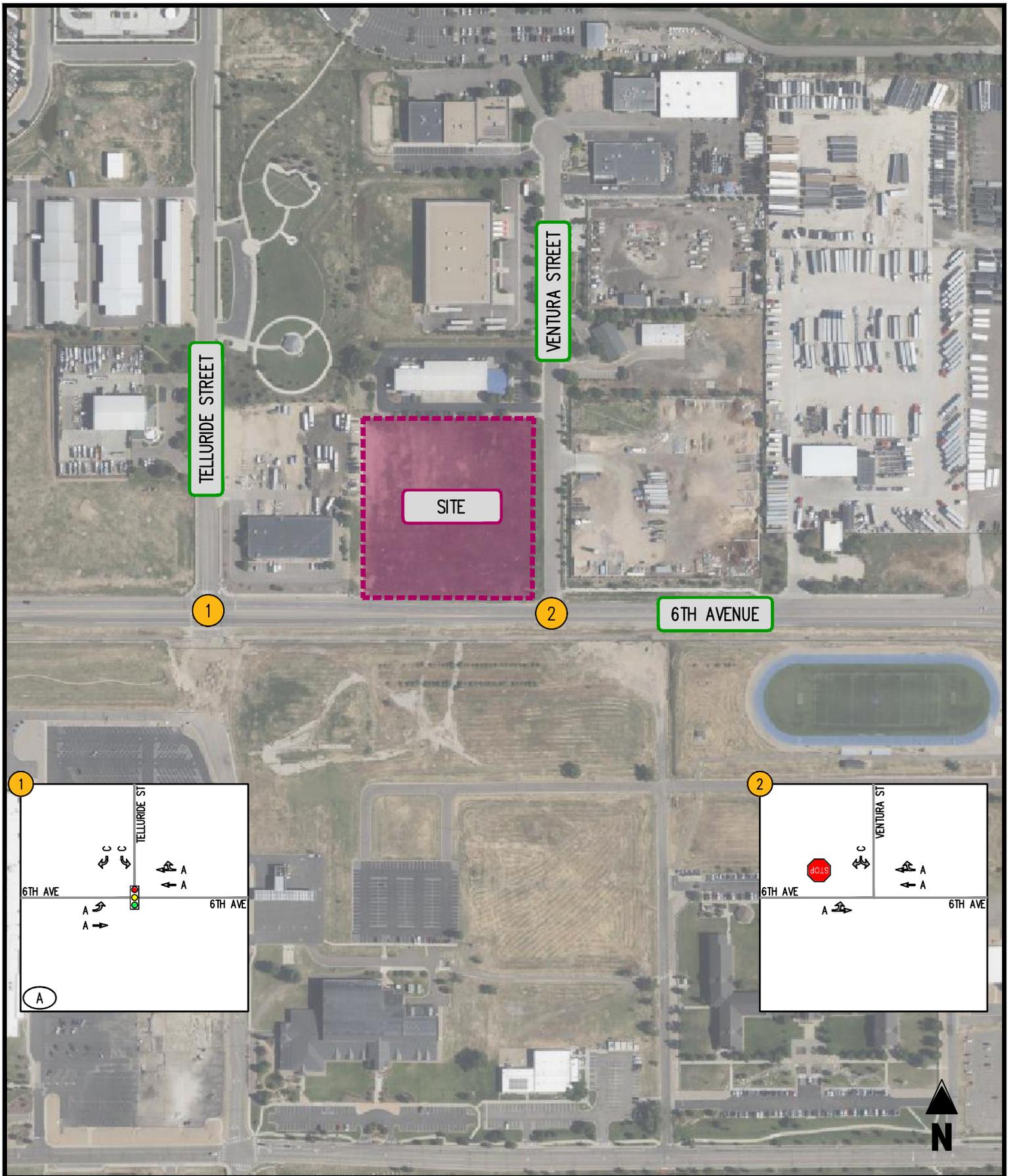


FIGURE 4-6
BACKGROUND FUTURE LOS 2050

DENVER DEBRESELEM MEDHANELEM CHURCH
 AURORA, COLORADO

(A) INTERSECTION LOS
 0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 4-1
 Denver Debraesalem Medhanealem Church
 Background Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2024 Sunday Peak Hour	Background 2026 Sunday Peak Hour	Background 2050 Sunday Peak Hour
1 6th Avenue/Telluride Street	SIGNAL	6th Ave	EBL	A (2.1)	A (2.1)	A (2.4)
			EBT	A (2.4)	A (2.4)	A (3.0)
		6th Ave	WBT	A (2.1)	A (2.0)	A (2.3)
			WBR	A (2.1)	A (2.0)	A (2.3)
		Telluride St	SBL	C (29.6)	C (29.8)	C (29.8)
			SBR	<u>C (30.8)</u>	<u>C (30.8)</u>	<u>C (30.8)</u>
Overall			A (3.4)	A (3.3)	A (3.4)	
2 6th Avenue/Ventura Street	STOP	6th Ave	EBL	A [8.3]	A [8.3]	A [8.9]
			EBT	A [0.0]	A [0.0]	A [0.0]
		6th Ave	WBT	A [0.0]	A [0.0]	A [0.0]
			WBR	A [0.0]	A [0.0]	A [0.0]
		Ventura St	SBL	B [12.3]	B [12.1]	C [15.4]
			SBR	A [0.0]	A [0.0]	A [0.0]
3 S Site Access/Ventura Street	STOP	S Site Access	EBL	N/A	N/A	N/A
			EBR	N/A	N/A	N/A
		Ventura St	NBL	N/A	N/A	N/A
			NBT	N/A	N/A	N/A
		Ventura St	SBT	N/A	N/A	N/A
			SBR	N/A	N/A	N/A
4 N Site Access/Ventura Street	STOP	N Site Access	EBL	N/A	N/A	N/A
			EBR	N/A	N/A	N/A
		Ventura St	NBL	N/A	N/A	N/A
			NBT	N/A	N/A	N/A
		Ventura St	SBT	N/A	N/A	N/A
			SBR	N/A	N/A	N/A

Notes (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
 (2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 4-2
 Denver Debresalem Medhanealem Church
 Background Intersection Queueing Summary (1)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2024 Sunday Peak Hour	Background 2026 Sunday Peak Hour	Background 2050 Sunday Peak Hour
1 6th Avenue/Telluride Street	SIGNAL	6th Ave	EBL	330	4	4	4
			EBT	-	70	71	113
		6th Ave	WBT	-	34	35	51
			WBR	-	0	0	0
		Telluride St	SBL	250	19	20	20
SBR	-	15	16	16			
2 6th Avenue/Ventura Street	STOP	6th Ave	EBL	-	0	0	0
			EBT	-	0	0	0
		6th Ave	WBT	-	0	0	0
			WBR	-	0	0	0
		Ventura St	SBL	-	2.5	2.5	2.5
SBR	-	0	0	0			
3 S Site Access/Ventura Street	STOP	S Site Access	EBL	-	N/A	N/A	N/A
			EBR	-	N/A	N/A	N/A
		Ventura St	NBL	-	N/A	N/A	N/A
			NBT	-	N/A	N/A	N/A
		Ventura St	SBT	-	N/A	N/A	N/A
SBR	-	N/A	N/A	N/A			
4 N Site Access/Ventura Street	STOP	N Site Access	EBL	-	N/A	N/A	N/A
			EBR	-	N/A	N/A	N/A
		Ventura St	NBL	-	N/A	N/A	N/A
			NBT	-	N/A	N/A	N/A
		Ventura St	SBT	-	N/A	N/A	N/A
SBR	-	N/A	N/A	N/A			

Note added

Note (1) Queue length is based on the 95th percentile queue as reported by Synchro, Version 11.

Repeat comment. Add note for a vehicle length of 25' for all non signalized intersections. Add the note to all queuing tables.

V. Site Analysis

Overview

The Applicant is proposing to develop the approximately 4.5-acre site with a church use. For purposes of this study, the site will be developed in one phase. For analysis purposes it was assumed that the development would be complete and operational by 2026. The following use and development program was analyzed:

Build Out – 2026
29,000 SF Church

Proposed Site Access and Circulation

As shown on the Applicant's conceptual plan (Figure 1-2), access to the development is being proposed via two full movement accesses on Ventura Street as shown on Figure 5-1. For analysis purposes Figure 5-1 reflects the addition of northbound left turn lanes on Ventura Street, and the addition of eastbound left and westbound right deceleration lanes on 6th Avenue.

Trip Generation

Overview

Trip generation estimates for the Sunday peak hour, as well as the Sunday average daily traffic (ADT), were derived from the standard Institute of Transportation Engineers (ITE) Trip Generation Manual rates/equations, as published in the 11th edition. The trip generation analysis is presented in Table 5-1. Weekday trips are not being evaluated due to the expectation from the developer that there will be no significant trip generation outside of the Sunday peak hour.

Site Trips

The vehicle trips that would be generated by the proposed development plan are summarized in Table 5-2. As shown in Table 5-2, the site would generate upon completion and full occupancy, 306 new Sunday peak hour vehicle trips as well as 928 new Sunday daily trips.

Site Trip Distributions

The distribution of the anticipated trips generated by the completion of the proposed development was based on an examination of existing traffic counts and local knowledge. Existing travel patterns indicate the following distribution is appropriate in the forecasting of future site traffic:

- To/from the west on 6th Avenue: 75%
- To/from the east on 6th Avenue: 25%

Site Trip Assignments

The assignment of the new vehicle trips generated upon the future build-out of the development project was based on the above distribution. The trips assignments and distributions are depicted on Figure 5-3.

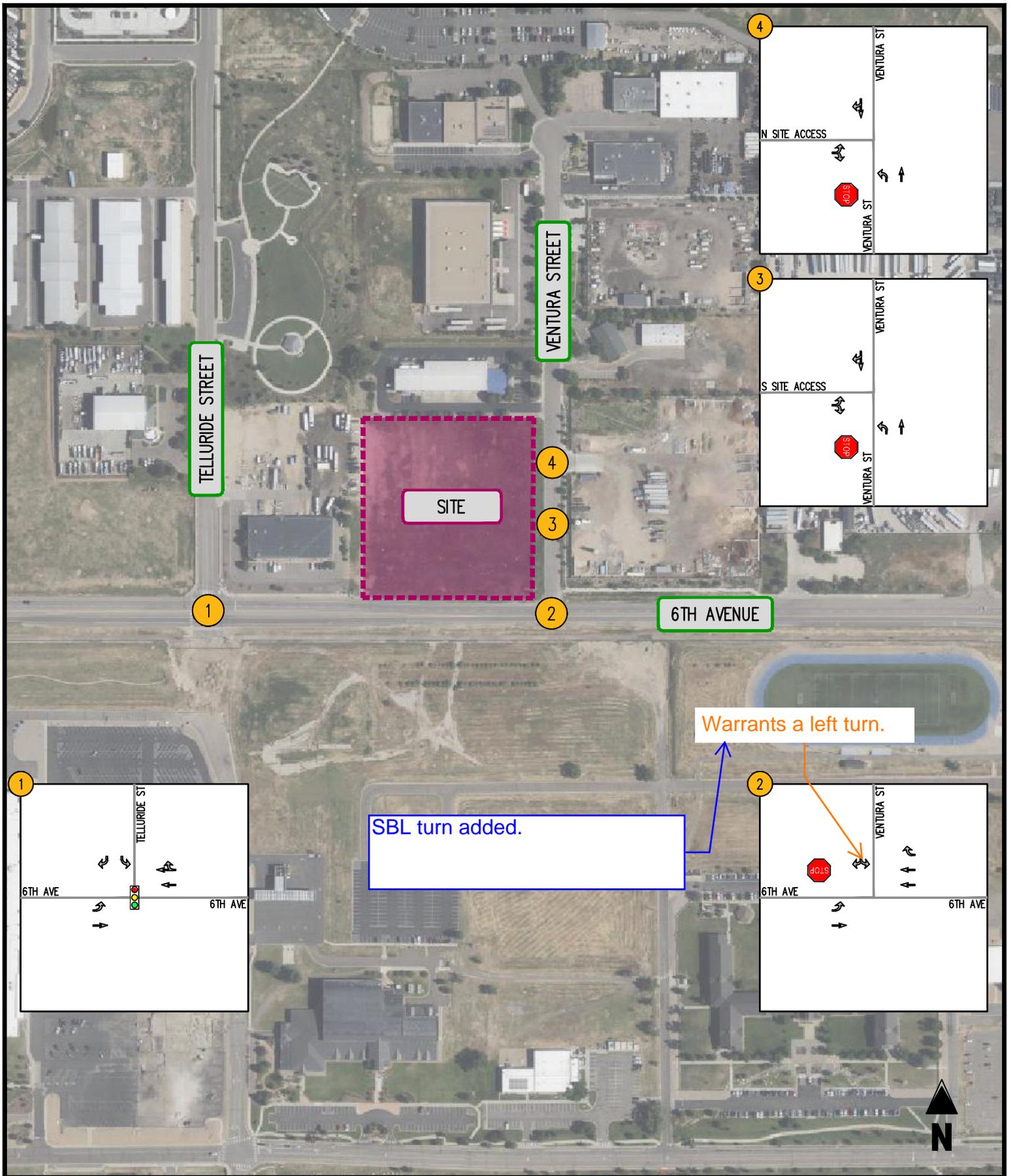


FIGURE 5-1
TOTAL FUTURE USE AND TRAFFIC CONTROL

DENVER DEBRESELEM MEDHANEALEM CHURCH
 AURORA, COLORADO

- MOVEMENT
- SIGNALIZED INTERSECTION
- STOP SIGN
- YIELD SIGN



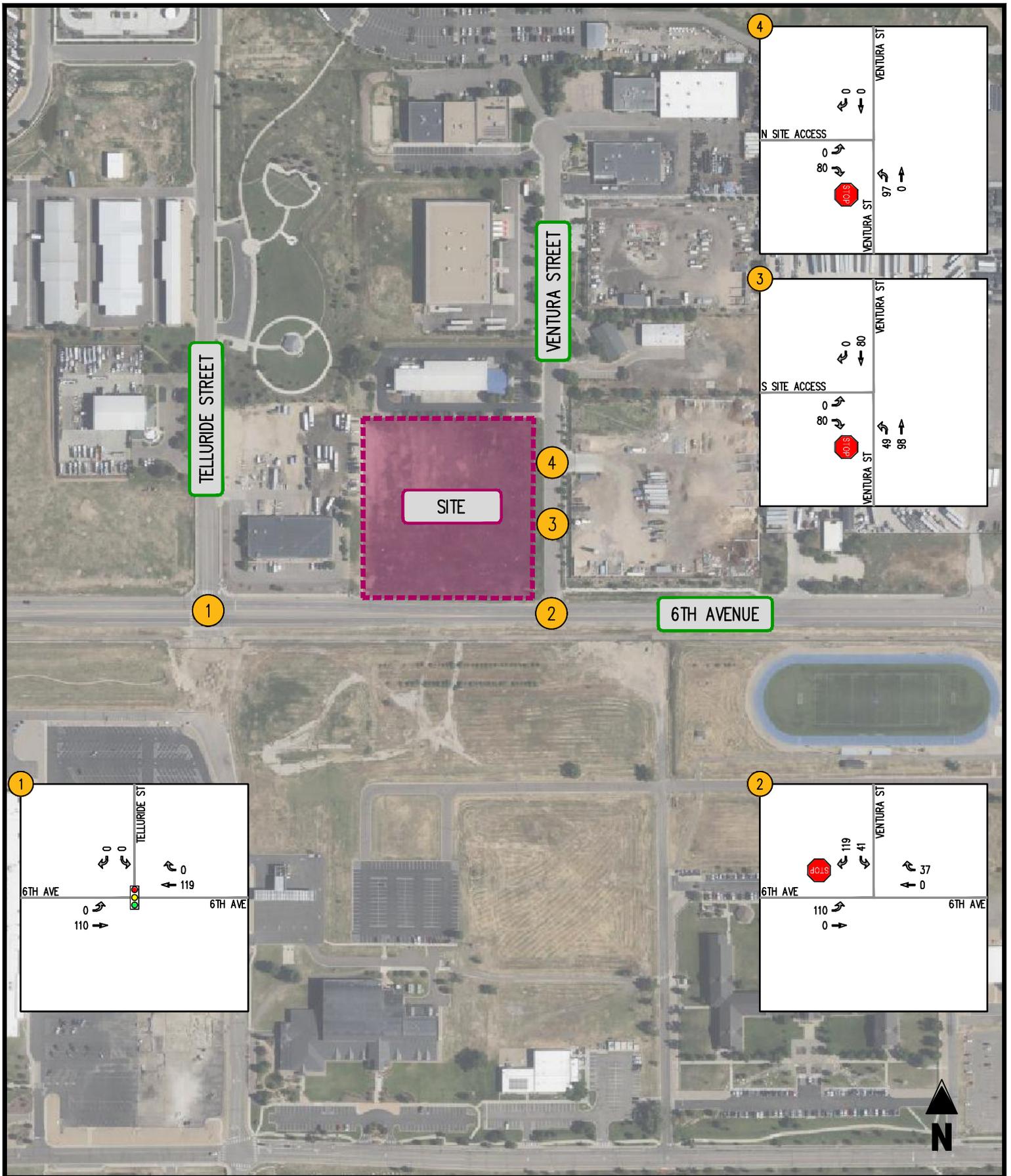


FIGURE 5-2
SITE TRIPS

DENVER DEBRESELAM MEDHANELEM CHURCH
AURORA, COLORADO

(A) INTERSECTION LOS
0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 5-1

Debreselam Medhanealem Church
 Site Trip Generation

Land Use	Land Use Code	Amount	Units	Sunday Peak Hour			Sunday Daily Trips	AM Peak Hour			PM Peak Hour			Average Daily Trips
				In	Out	Total		In	Out	Total	In	Out	Total	
<i>Proposed</i> ⁽¹⁾ Church	560	29,500	SF	147	159	306	928	6	3	9	6	8	14	224

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition

VI. Analysis of Future Conditions with Site Development

Total Future Traffic Forecasts

The 2026 and 2050 total future traffic forecasts associated with the proposed development were developed by combining background future forecasts shown on Figure 4-3 (2026) and Figure 4-4 (2050), and the site trip assignments shown on Figure 5-1. The resulting total future traffic forecasts are provided on Figure 6-1 for 2026 conditions and Figure 6-2 for 2050 conditions.

Total Future Levels of Service with Proposed Development

Total future levels of service with the proposed development plan were estimated at key study intersections based on the future traffic volumes shown on Figures 6-1 and Figure 6-2, the lane use on Figure 5-1, and the HCM 7th methodologies for unsignalized intersections and Synchro methodologies for signalized intersections. The results of these analyses are provided in Appendix F and presented in Table 6-1. Total future levels of service are also presented graphically on Figure 6-3 (2026) and Figure 6-4 (2050).

As shown in Table 6-1, levels of service under 2026 and 2050 future site development conditions would remain consistent with future background conditions (i.e., without site development).

Total Future Queuing

Total future queues were forecasted using Synchro software. The results of the queuing analysis are summarized in Table 6-2. Forecasted queues would be contained within their effective storage.

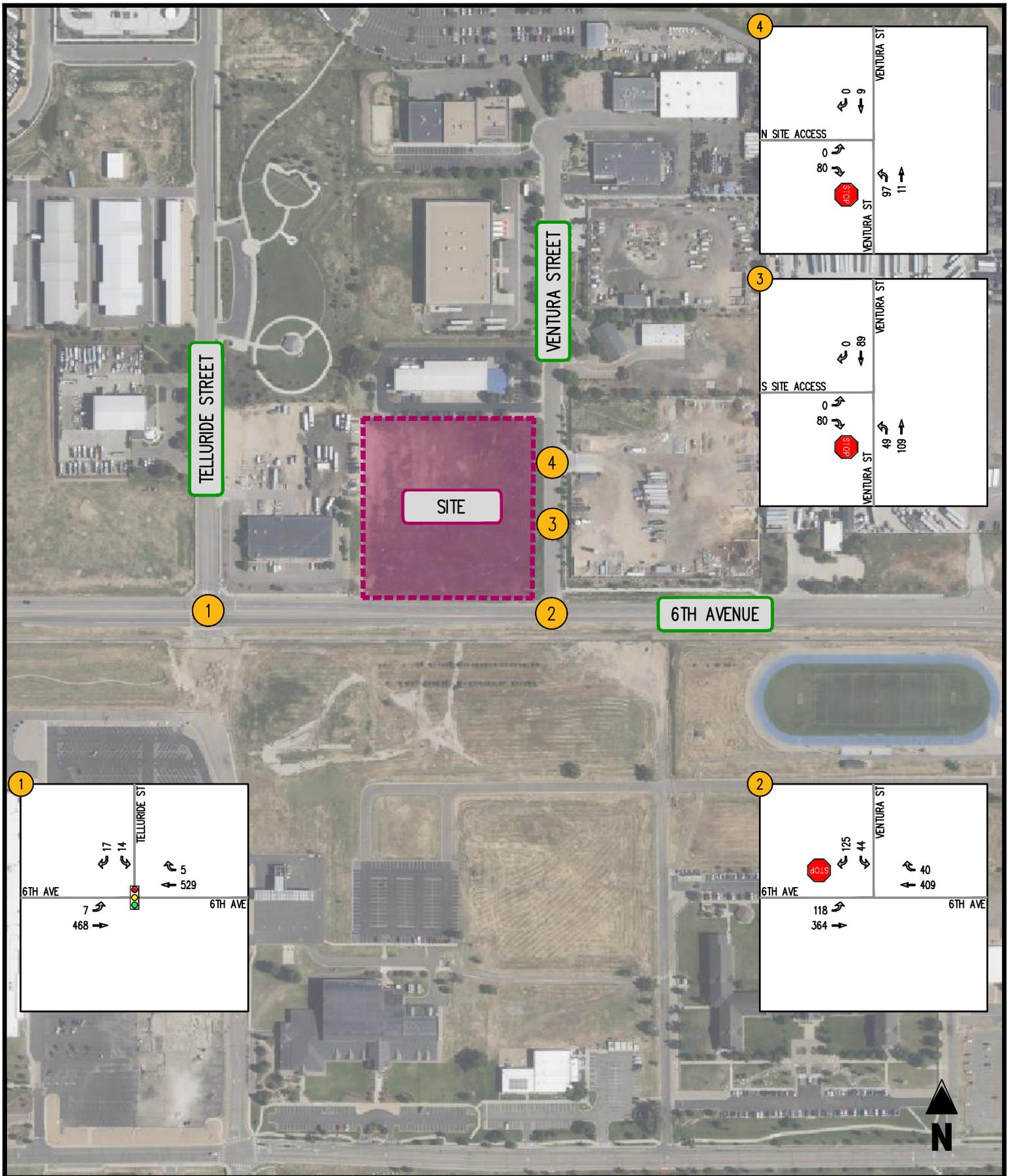


FIGURE 6-1
TOTAL FUTURE FORECASTS 2026

DENVER DEBRESELAM MEDHANELEM CHURCH
AURORA, COLORADO

(A) INTERSECTION LOS
0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



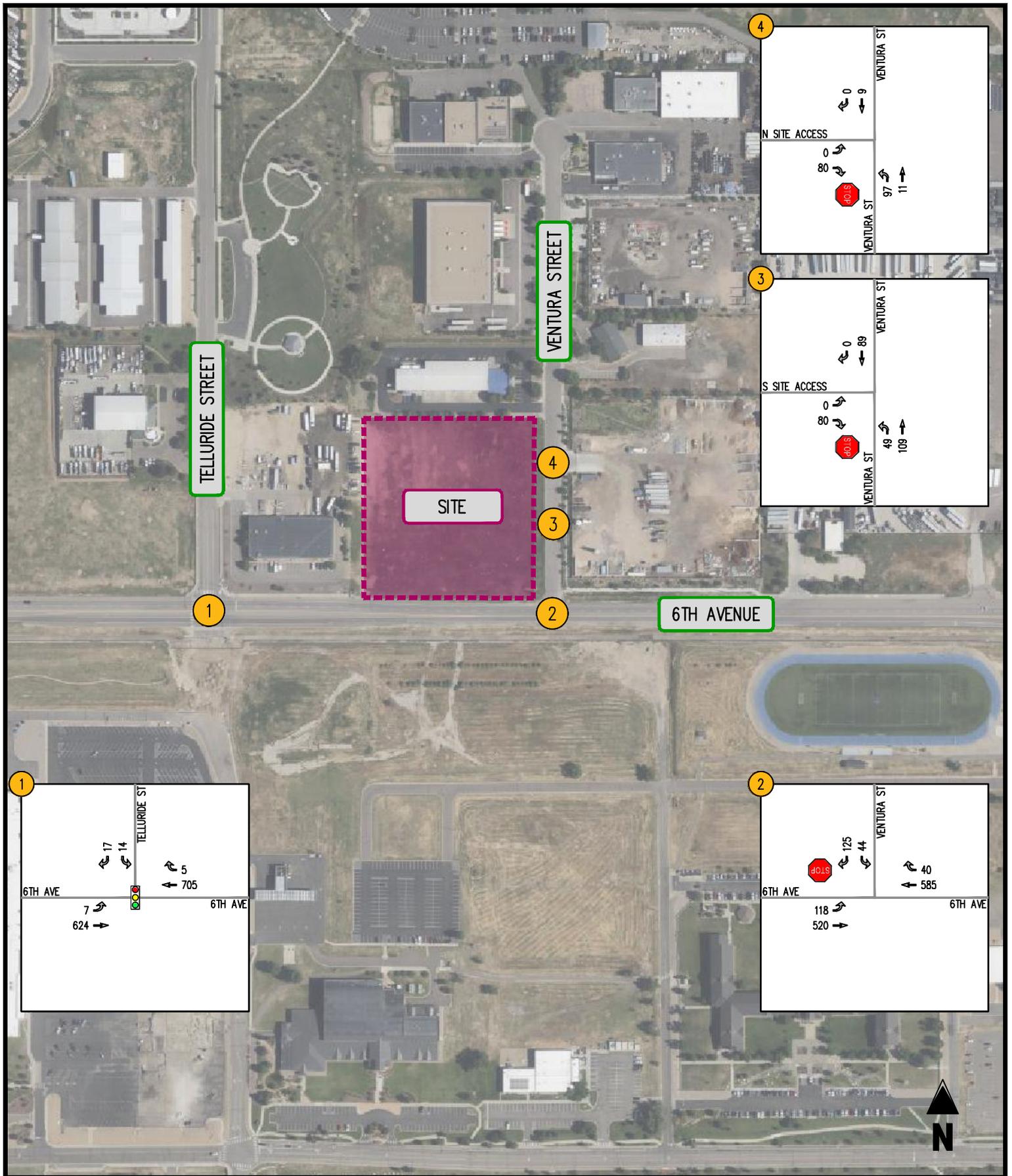


FIGURE 6-2
TOTAL FUTURE FORECASTS 2050

DENVER DEBRESELAM MEDHANELEM CHURCH
 AURORA, COLORADO

(A) INTERSECTION LOS
 0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



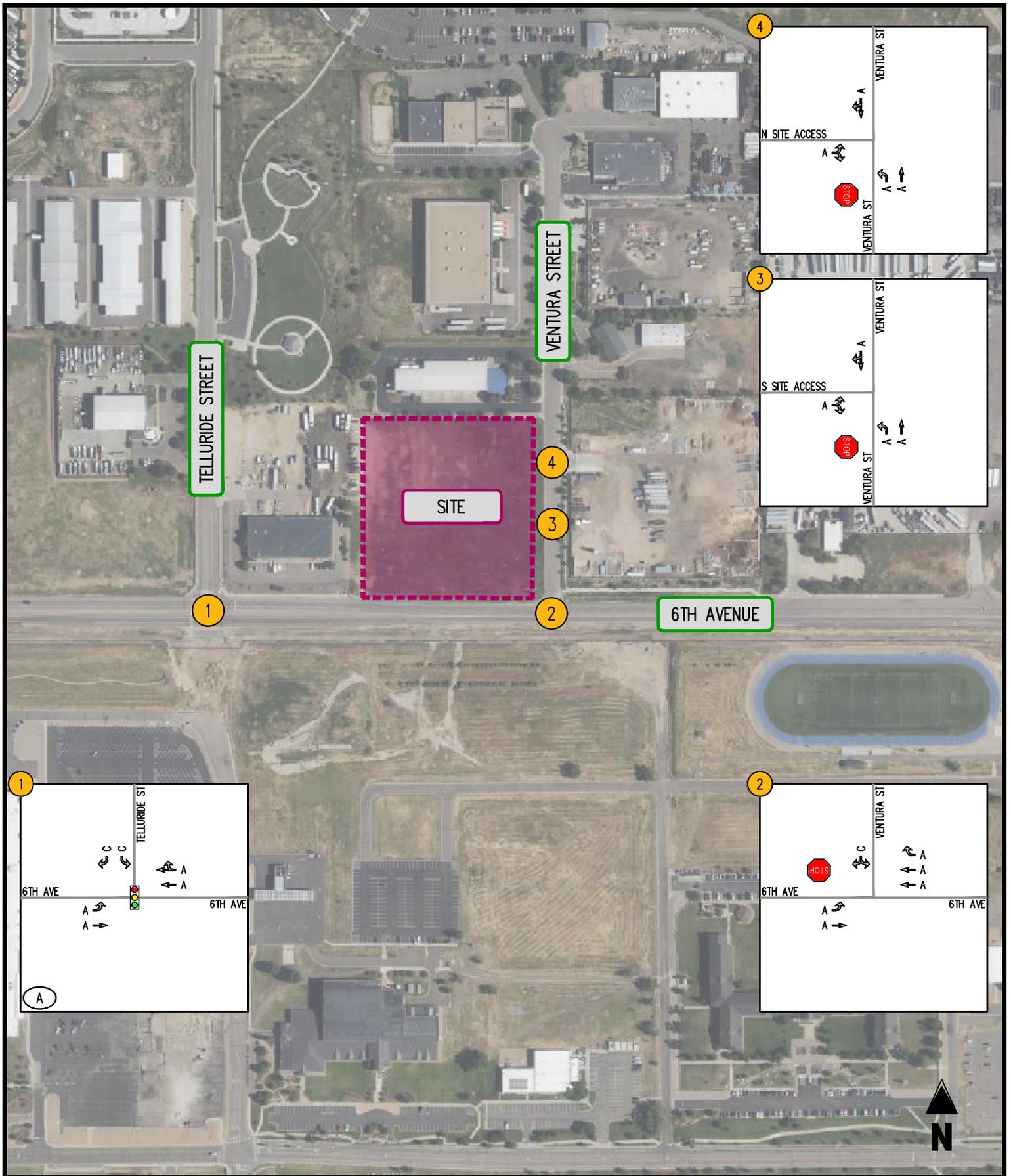


FIGURE 6-3
TOTAL FUTURE LOS 2026

DENVER DEBRESELAM MEDHANELEM CHURCH
AURORA, COLORADO

(A) INTERSECTION LOS
0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



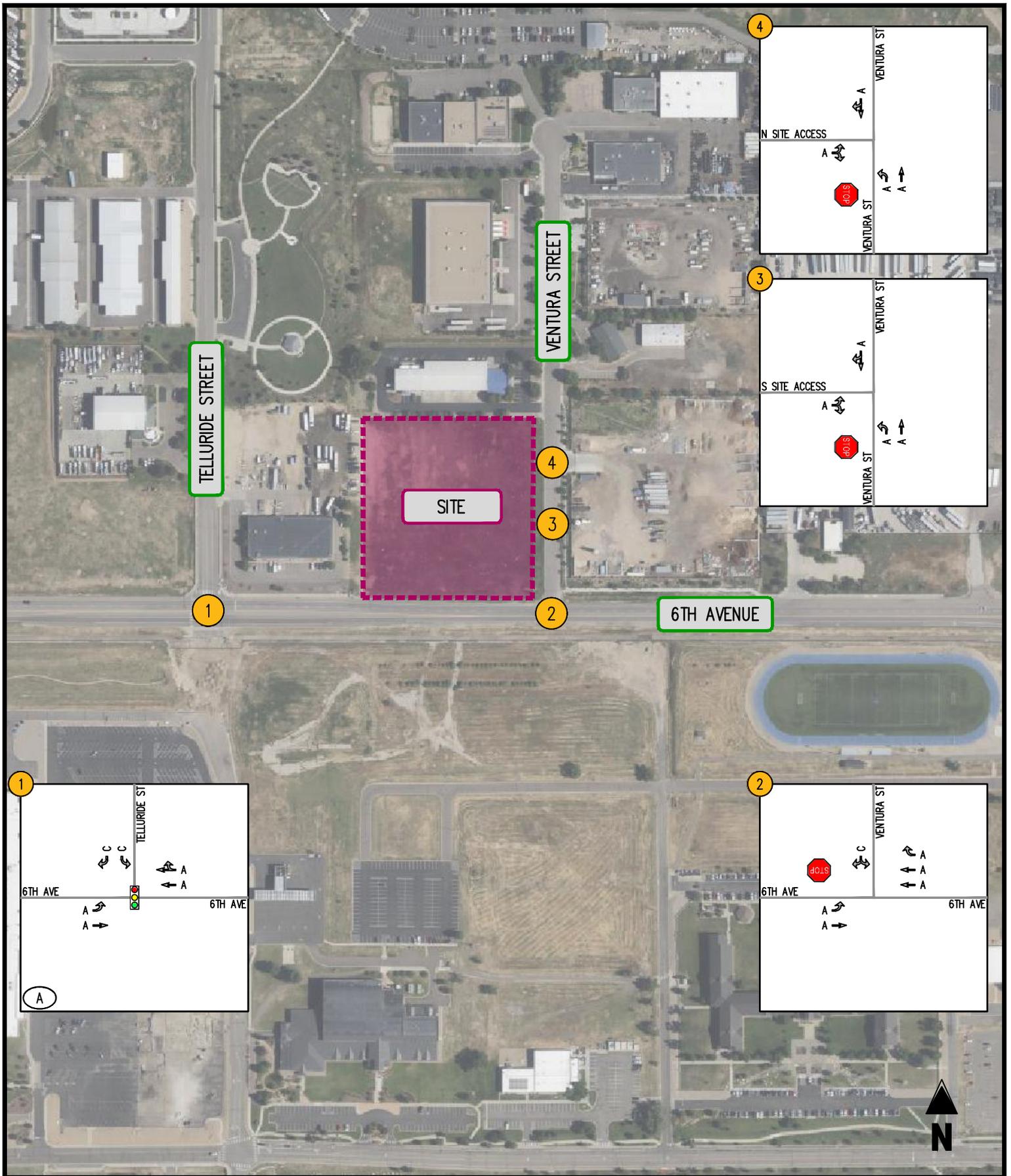


FIGURE 6-4
TOTAL FUTURE LOS 2050

DENVER DEBRESELEM MEDHANEALEM CHURCH
 AURORA, COLORADO

(A) INTERSECTION LOS
 0000 SUNDAY PEAK HOUR

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 6-1
 Denver Debresalem Medhanealem Church
 Total Future Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Background 2026 Sunday Peak Hour	Background 2050 Sunday Peak Hour	Total Future 2026 Sunday Peak Hour	Total Future 2050 Sunday Peak Hour
1 6th Avenue/Telluride Street	SIGNAL	6th Ave	EBL	A (2.1)	A (2.4)	A (2.3)	A (2.6)
			EBT	A (2.4)	A (3.0)	A (2.8)	A (3.5)
		6th Ave	WBT	A (2.0)	A (2.3)	A (2.2)	A (2.5)
			WBR	A (2.0)	A (2.3)	A (2.2)	A (2.5)
		Telluride St	SBL	C (29.8)	C (29.8)	C (29.8)	C (29.8)
			SBR	<u>C (30.8)</u>	<u>C (30.8)</u>	<u>C (30.8)</u>	<u>C (30.8)</u>
Overall			A (3.3)	A (3.4)	A (3.3)	A (3.6)	
2 6th Avenue/Ventura Street	STOP	6th Ave	EBL	A [8.3]	A [8.9]	A [8.8]	A [9.6]
			EBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		6th Ave	WBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			WBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Ventura St	SBL	B [12.1]	C [15.4]	C [15.3]	C [21.5]
			SBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
3 S Site Access/Ventura Street	STOP	S Site Access	EBL	N/A	N/A	A [9.1]	A [9.1]
			EBR	N/A	N/A	A [0.0]	A [0.0]
		Ventura St	NBL	N/A	N/A	A [7.5]	A [7.5]
			NBT	N/A	N/A	A [0.0]	A [0.0]
		Ventura St	SBT	N/A	N/A	A [0.0]	A [0.0]
			SBR	N/A	N/A	A [0.0]	A [0.0]
4 N Site Access/Ventura Street	STOP	N Site Access	EBL	N/A	N/A	A [8.7]	A [8.7]
			EBR	N/A	N/A	A [0.0]	A [0.0]
		Ventura St	NBL	N/A	N/A	A [7.4]	A [7.4]
			NBT	N/A	N/A	A [0.0]	A [0.0]
		Ventura St	SBT	N/A	N/A	A [0.0]	A [0.0]
			SBR	N/A	N/A	A [0.0]	A [0.0]

Notes (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
 (2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 6-2
 Denver Debresalem Medhanealem Church
 Total Future Intersection Queueing Summary (1)(2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Background 2026 Sunday Peak Hour	Background 2050 Sunday Peak Hour	Total Future 2026 Sunday Peak Hour	Total Future 2050 Sunday Peak Hour
1 6th Avenue/Telluride Street	SIGNAL	6th Ave	EBL	330	4	4	4	4
			EBT	-	71	113	99	151
		6th Ave	WBT	-	35	51	45	63
			WBR	-	0	0	0	0
		Telluride St	SBL	250	20	20	20	20
			SBR	-	16	16	16	16
2 6th Avenue/Ventura Street	STOP	6th Ave	EBL	-	0	0	10	12.5
			EBT	-	0	0	0	0
		6th Ave	WBT	-	0	0	0	0
			WBR	-	0	0	0	0
		Ventura St	SBL	-	2.5	2.5	37.5	57.5
			SBR	-	0	0	0	0
3 S Site Access/Ventura Street	STOP	S Site Access	EBL	-	N/A	N/A	7.5	7.5
			EBR	-	N/A	N/A	0	0
		Ventura St	NBL	-	N/A	N/A	2.5	2.5
			NBT	-	N/A	N/A	0	0
		Ventura St	SBT	-	N/A	N/A	0	0
			SBR	-	N/A	N/A	0	0
4 N Site Access/Ventura Street	STOP	N Site Access	EBL	-	N/A	N/A	7.5	7.5
			EBR	-	N/A	N/A	0	0
		Ventura St	NBL	-	N/A	N/A	5	5
			NBT	-	N/A	N/A	0	0
		Ventura St	SBT	-	N/A	N/A	0	0
			SBR	-	N/A	N/A	0	0

Note (1) Queue length is based on the 95th percentile queue as reported by Synchro, Version 11.

(2) Each vehicle is assumed to occupy 25 feet of storage.

VII. CDOT State Highway Access Code (SHAC)

Non-Rural Principal Highway (NR-A)

The CDOT State Highway Access Code provides guidance on the need and geometry of auxiliary lanes for State roadways. The intersection of 6th Avenue and Ventura Street was evaluated against this criterion for 2026 total future forecasts shown on Figure 6-1 to determine ultimate geometries studied herein.

The 6th Avenue/Ventura Street intersection was evaluated against the NR-A criteria for auxiliary lanes found within the SHAC guidelines. The auxiliary lane requirements for an NR-A section are as follows:

(7) Auxiliary turn lanes shall be installed according to the criteria below.

(a) A left turn deceleration lane and taper with storage length is required for any access with a projected peak hour ingress turning volume greater than 10 vph. The taper length will be included within the required deceleration length.

(b) A right turn deceleration lane and taper is required for any access with a projected peak hour ingress turning volume greater than 25 vph. The taper length will be included within the required deceleration length.

(c) Right turn acceleration lane and taper is required for any access with a projected peak hour right turning volume greater than 50 vph when the posted speed on the highway is greater than 40 mph. The taper length will be included within the required acceleration length. A right turn acceleration lane may also be required at a signalized intersection if a free-right turn is needed to maintain an appropriate level of service.

(d) Right turn deceleration and acceleration lanes are generally not required on roadways with three or more travel lanes in the direction of the right turn except as provided in subsection 3.5.

(e) A left turn acceleration lane may be required if it would be a benefit to the safety and operation of the roadway or as determined by subsection 3.5. A left turn acceleration lane is generally not required where: the posted speed is less than 45 mph, or the intersection is signalized, or the acceleration lane would interfere with the left turn ingress movements to any other access.

Per the guidelines above, the following auxiliary lanes would be required at the 6th Avenue/Ventura Street intersection once the site reaches operation:

- Eastbound left turn deceleration lane
- Westbound right turn deceleration lane
- Southbound right turn acceleration lane

With a posted speed limit of 40 mph, all deceleration lengths shall be 370 feet in length, acceleration lengths shall be 380 feet in length and tapers should be constructed at a 12:1 to ratio. The storage required for the eastbound left turn deceleration lane will be around 120 ft. Taper length is included within the stated acceleration or deceleration length for NR-A sections.

These improvements should be coordinated with CDOT.

Non-Rural Arterial (NR-C)

The intersections of Ventura Street and the site accesses were evaluated against this criterion for 2026 total future forecasts shown on Figure 6-1 to determine ultimate geometries studied herein.

The Ventura Street/site accesses intersections were evaluated against the NR-C criteria for auxiliary lanes found within the SHAC guidelines per the requirements of the City of Aurora. The auxiliary lane requirements for an NR-C section are as follows:

(7) Auxiliary turn lanes shall be installed according to the criteria below.

(a) A left turn deceleration lane and taper with storage length is required for any access with a projected peak hour ingress turning volume greater than 25 vph. The taper length will be included within the required deceleration length.

(b) A right turn deceleration lane and taper is required for any access with a projected peak hour ingress turning volume greater than 50 vph. The taper length will be included within the required deceleration length.

Per the guidelines above, the following auxiliary lanes would be required for both site accesses on Ventura Street intersection once the site reaches operation:

Southbound left turn deceleration lane at Verntura Street and 6th Avenue warrants a turn lane.

With an unposted speed limit of 25 mph, all deceleration lengths shall be 132 feet in length, and deceleration tapers should be constructed at a 7.5:1 to ratio. The storage required for the northbound left turn deceleration lane at the northmost site access requires 100 ft, which is satisfied by the addition of a two way left turn lane striped along the frontage of the site at Ventura St.

These improvements should be coordinated with the City of Aurora.

Remove language about two way left turn lane. We might stripe it out differently.

SBL turn lane added.

Language removed.

VIII. Conclusions and Recommendations

Conclusions

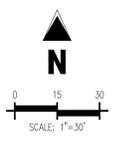
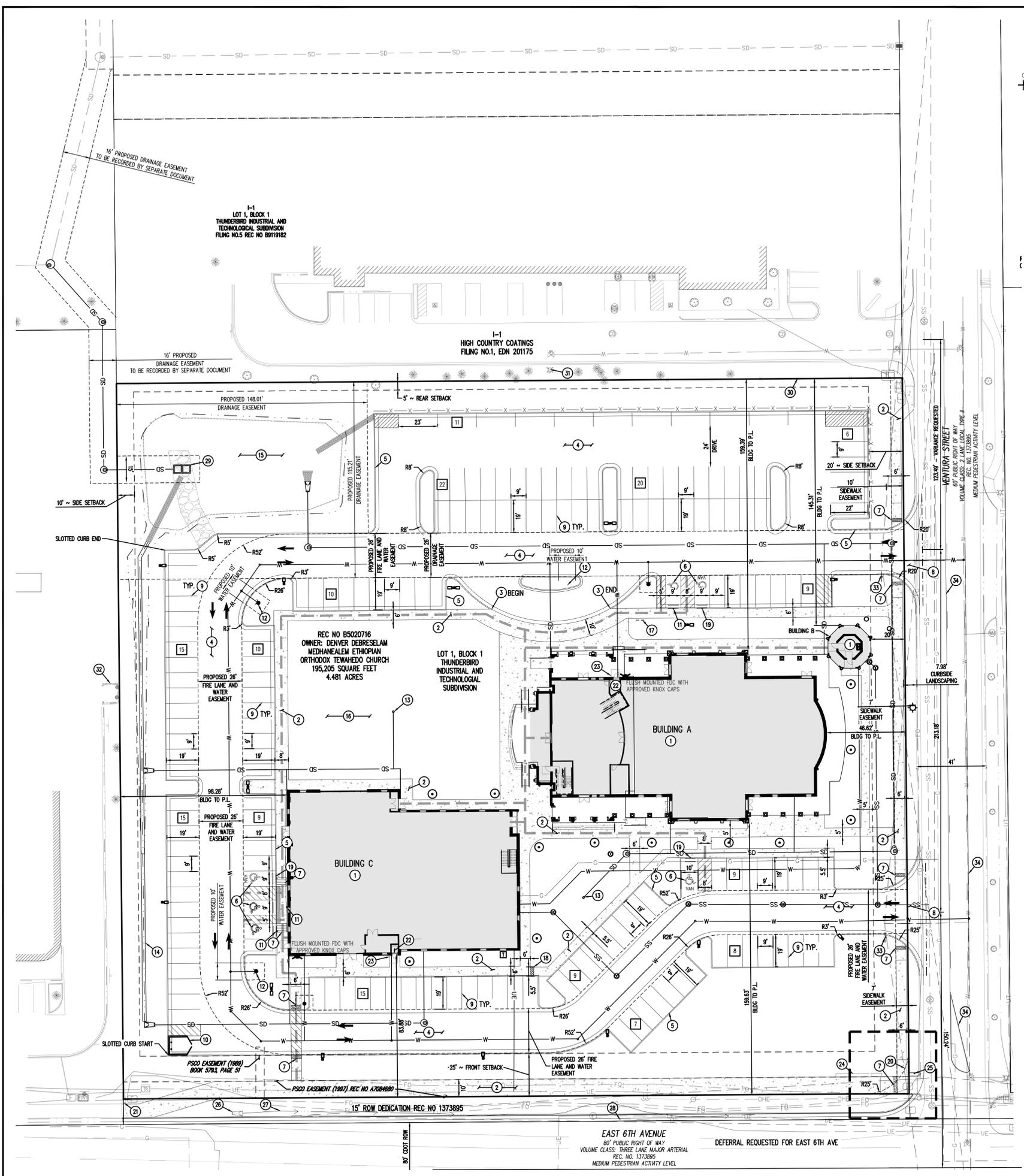
Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the intersections within the study area currently operate at overall acceptable levels of service (LOS) “C” or better during the Sunday peak hour.
- Under background future 2026 and 2050 traffic conditions, without the development of the subject site, the intersections within the study area would operate at acceptable LOS “C” or better, consistent with existing conditions.
- The proposed site development would generate, upon completion and full occupancy, 306 new Sunday peak hour vehicle trips as well as 928 new Sunday daily trips.
- Under 2026 and 2050 future site development conditions would remain consistent with future background conditions (i.e., without site development).
- All forecasted queues would be contained within their effective storage.

Recommendations

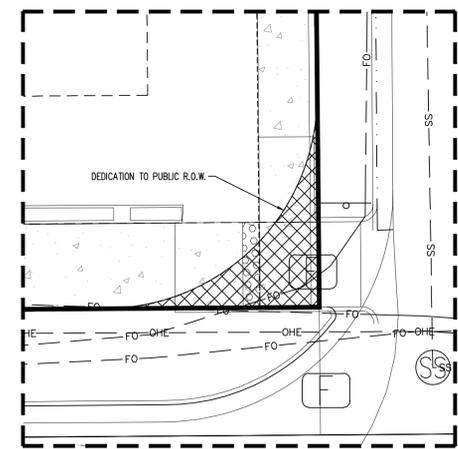
- The Applicant should provide access consistent with the site plan contained herein.
- Auxiliary lanes should be coordinated with CDOT as detailed within the report.

APPENDIX A – Full Sized Conceptual Plan



- SITE SCHEDULE**
- ① PROPOSED BUILDING
 - ② PROPOSED SIDEWALK
 - ③ PROPOSED FLUSH CURB DROP OFF AREA
 - ④ PROPOSED ASPHALT
 - ⑤ PROPOSED CURB AND GUTTER
 - ⑥ PROPOSED ACCESSIBLE PARKING SPACES
 - ⑦ PROPOSED ADA RAMPS
 - ⑧ PROPOSED CONCRETE DRIVEWAY
 - ⑨ PROPOSED 4" WHITE PARKING STRIPING
 - ⑩ PROPOSED TRASH ENCLOSURE
 - ⑪ PROPOSED ADA PARKING SIGN
 - ⑫ PROPOSED FIRE HYDRANT
 - ⑬ PROPOSED STORM INLET
 - ⑭ PROPOSED DRAINAGE SWALE
 - ⑮ PROPOSED STORMWATER DETENTION AREA
 - ⑯ PROPOSED COURTYARD
 - ⑰ PROPOSED BIKE PARKING
 - ⑱ PROPOSED 2" WIDE SIDEWALK CHASE
 - ⑲ PROPOSED VAN ACCESSIBLE ADA PARKING SIGN
 - ⑳ PROPOSED RIGHT OF WAY DEDICATION BY SEPARATE INSTRUMENT
 - ㉑ EXISTING POOL AND SPRINGHILL GOLF COURSE SIGN
 - ㉒ PROPOSED FIRE RISER ROOM
 - ㉓ PROPOSED KNOX BOX
 - ㉔ EXISTING BRICK SIGN
 - ㉕ RELOCATED STOP SIGN
 - ㉖ EXISTING FLARED END SECTION
 - ㉗ EXISTING DRAINAGE SWALE
 - ㉘ EXISTING COLORADO FREEDOM MEMORIAL SIGN
 - ㉙ PROPOSED STORM OUTLET CONTROL STRUCTURE
 - ㉚ EXISTING SILT FENCE
 - ㉛ EXISTING FIRE HYDRANT
 - ㉜ EXISTING TRASH ENCLOSURE
 - ㉝ PROPOSED STOP SIGN
 - ㉞ PROPOSED YELLOW STRIPING

- SITE LEGEND**
- PROPERTY BOUNDARY LINE
 - ADJACENT PROPERTY BOUNDARY LINE
 - RIGHT OF WAY BOUNDARY LINE
 - - - SECTION LINE
 - - - EXISTING ADJACENT LOT LINE
 - - - PROPOSED LOT LINE
 - - - EXISTING EASEMENT LINE
 - - - PROPOSED EASEMENT LINE
 - - - SETBACK LINE
 - - - ROAD CENTERLINE
 - - - PROPOSED SAWCUT LINE
 - - - PROPOSED SWALE FLOWLINE
 - - - EXISTING TO REMAIN
 - - - PROPOSED NEW
 - - - PROPOSED CURB AND GUTTER
 - - - EXISTING CURB AND GUTTER
 - - - PROPOSED SIDEWALK
 - - - PROPOSED SIGHT TRIANGLE
 - - - ADA PATH OF TRAVEL
 - 1 PARKING COUNT
 - EXISTING SIGN
 - PROPOSED SIGN
 - PROPOSED PIPE BOLLARD
 - PROPOSED ADA PARKING SYMBOL
 - PROPOSED WHEEL STOP
 - PROPOSED DETECTABLE WARNING TRUNCATED DOMES
 - EXISTING ELECTRICAL PULL BOX
 - EXISTING PAD MOUNTED TRANSFORMER
 - EXISTING LIGHT POLE
 - PROPOSED LIGHT POLE
 - PROPOSED SITE LIGHTING
 - PROPOSED SANITARY SEWER CLEANOUT
 - PROPOSED SANITARY SEWER MANHOLE
 - EXISTING SANITARY SEWER MANHOLE
 - EXISTING STORM SEWER MANHOLE
 - PROPOSED STORM SEWER MANHOLE
 - EXISTING WATER METER
 - EXISTING WATER VALVE
 - EXISTING FIRE HYDRANT
 - PROPOSED FIRE HYDRANT
 - EXISTING TREE



ROW DEDICATION

DESCRIPTION	AREA
LOT AREA	195,192.36 SQFT (4.481 ACRES)
DEDICATED AREA	134,915.3 (0.003 ACRES)

- NOTES**
- ALL DIMENSIONS ARE MEASURED FROM THE FLOWLINE UNLESS NOTED OTHERWISE.
 - ONSITE SEWER SYSTEM IS PRIVATE AND WILL BE MAINTAINED BY OWNER.
 - PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED WITH PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL.
 - CURB RAMPS THAT FALL WITHIN SIDEWALK EASEMENTS WILL BE EVALUATED WITH THE CIVIL PLANS AND UPDATED AS NEEDED.

FLOODPLAIN NOTE
 FLOOD ZONE CLASSIFICATION (WITH PROPER ANNOTATION BASED ON FEDERAL FLOOD INSURANCE RATE MAPS OR THE STATE OR LOCAL EQUIVALENT) DEPICTED BY SCALE MAP LOCATION AND GRAPHIC PLOTTING ONLY. ZONE 'X', PER FEMA FIRM PANEL #08050C0182K, DATED DECEMBER 17, 2010.

BASIS OF BEARING
 BASIS OF BEARINGS: ALL BEARINGS ARE GRID BEARINGS OF THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NORTH AMERICAN DATUM 1983. THE SOUTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 4 SOUTH, RANGE 66 WEST, 6TH P.M., BEARS N89°36'00"E, MONUMENTED ON THE WEST END OF THE LINE BY THE SOUTH QUARTER CORNER OF SAID SECTION 4, BEING A 3-1/4" BRASS CAP, "T45 1/4 4 9 CITY OF AURORA 1991 LS 16419", IN A RANGE BOX, AND MONUMENTED ON THE EAST END OF THE LINE BY THE SOUTHEAST CORNER OF SAID SECTION 4, BEING A 3-1/4" BRASS CAP, STAMPED, "T45 R66W CITY OF AURORA PLS 16419 1983", IN A RANGE BOX, AS SHOWN HEREON.

BENCHMARK
 CITY OF AURORA BENCHMARK "456604SE006" IS DESCRIBED AS A 3" BRASS CAP IN CONCRETE, STAMPED "COA BM, 456604SE006, 2012", AND IS LOCATED ON THE EAST SIDE OF A 5 FOOT WIDE STORM INLET, ALONG THE EAST SIDE OF TELLURIDE ROAD, 420' NORTH OF EAST 8TH AVENUE. PUBLISHED ELEVATION: 5,483.39 (NAVD 88)

NOT FOR CONSTRUCTION



DENVER DEBERESELAM MEDHANEALEM
 ETHIOPIAN ORTHODOX TEWAHEDO CHURCH
 SITE PLAN
 E 6TH AVENUE & N VENTURA ST
 AURORA, COLORADO 80011

#	Date	Issue / Description	Init.
1	05/13/24	SITE PLAN SUBMITTAL	NAA
2	12/04/24	SITE PLAN SUBMITTAL	DMF
3	01/29/25	SITE PLAN SUBMITTAL	TDK

Project No: DDM000001
 Drawn By: TKG
 Checked By: TDK
 Date: JANUARY 2025

SITE PLAN

APPENDIX B – LOS Descriptions

Level of Service for Signalized Intersections

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average stopped delay per vehicle for a 15-min analysis period. The criteria are given in Exhibit 16-2. Delay may be measured in the field or estimated using procedures presented later in this chapter. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

LOS A describes operations with very low delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

Exhibit 16-2. Level-of-Service Criteria for Signalized Intersections

LEVEL OF SERVICE	STOPPED DELAY PER VEHICLE (SEC)
A	≤ 10.0
B	> 10.0 and ≤ 20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and ≤ 80.0
F	> 80.0

LOS C describes operations with delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with delay greater than 35 and up to 55 sec per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: [Highway Capacity Manual, 2000](#). Transportation Research Board, National Research Council

Level of Service Criteria for Stop Sign Controlled Intersections

The level of service criteria are given in Table 17-2. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. . . .

Table 17-2. Level of Service Criteria for TWSC Intersections

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (sec/veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Average total delay less than 10 sec/veh is defined as Level of Service (LOS) A. Follow-up times of less than 5 sec have been measured when there is no conflicting traffic for a minor street movement, so control delays of less than 10 sec/veh are appropriate for low flow conditions. To remain consistent with the AWSC intersection analysis procedure described later in this chapter, a total delay of 50 sec/veh is assumed as the break point between LOS E and F.

The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, where drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the total delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. . . .

LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queueing on the minor approaches. The method, however, is based on a constant critical gap size - that is, the critical gap remains constant, no matter how long the side street motorist waits. LOS F may also appear in the form of side street vehicles' selecting smaller-than-usual gaps. In such cases, safety may be a problem and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior. The latter is more difficult to observe on the field than queueing, which is more obvious.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

APPENDIX C –Traffic Counts

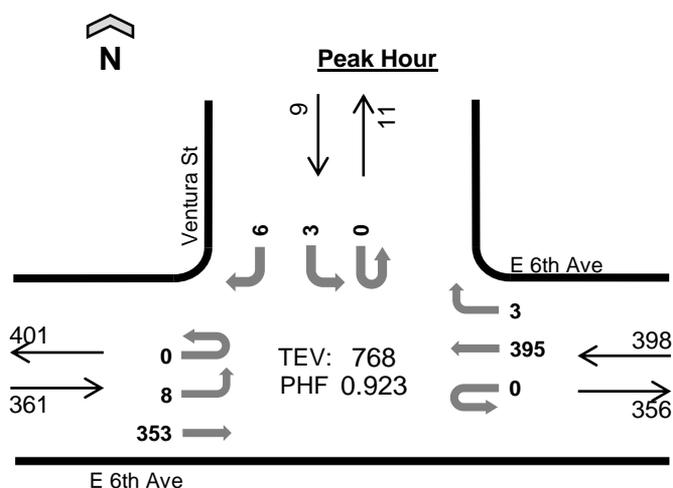
Count Summaries - All Vehicles																			
Interval Start	E 6th Ave				E 6th Ave				N Telluride St				Telluride St				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	3	22	0	0	0	38	2	0	0	0	0	0	0	0	1	66	0	
7:15 AM	0	6	33	0	0	0	38	0	0	0	0	0	0	0	0	2	79	0	
7:30 AM	0	3	37	0	0	0	41	4	0	0	0	0	0	0	1	1	87	0	
7:45 AM	0	2	30	0	0	0	60	1	0	0	0	0	0	0	1	0	94	326	
8:00 AM	0	3	45	0	0	0	62	1	0	0	0	0	0	1	1	0	113	373	
8:15 AM	0	4	33	0	0	0	60	1	0	0	0	0	0	0	0	0	98	392	
8:30 AM	0	3	38	0	0	0	85	2	0	0	0	0	0	0	0	4	132	437	
8:45 AM	0	3	46	0	0	0	89	2	0	0	0	0	0	0	0	2	142	485	
9:00 AM	0	2	43	0	0	0	78	3	0	0	0	0	0	1	0	2	129	501	
9:15 AM	0	5	46	0	0	0	94	2	0	0	0	0	0	1	0	0	148	551	
9:30 AM	0	2	47	0	0	0	102	2	0	0	0	0	0	4	0	1	158	577	
9:45 AM	0	1	47	0	0	0	98	1	0	0	0	0	0	1	0	2	150	585	
10:00 AM	0	1	49	1	0	0	108	1	0	0	0	1	0	3	0	3	167	623	
10:15 AM	0	1	62	0	0	0	122	1	0	0	0	0	0	0	0	6	192	667	
10:30 AM	0	5	56	0	0	0	114	1	0	0	0	0	0	2	0	6	184	693	
10:45 AM	0	2	82	0	0	0	125	2	0	0	0	0	0	4	0	8	223	766	
11:00 AM	0	1	76	0	0	0	97	3	0	0	0	0	0	0	0	4	181	780	
11:15 AM	0	2	92	0	0	0	89	0	0	0	0	0	0	8	0	3	194	782	
11:30 AM	0	2	94	0	0	0	87	0	0	0	0	0	0	2	0	2	187	785	
11:45 AM	0	1	84	0	0	0	74	3	0	0	0	0	0	1	0	2	165	727	
12:00 PM	1	3	87	0	0	0	105	1	0	0	0	0	0	0	0	2	199	745	
12:15 PM	0	4	87	0	0	0	85	2	0	0	0	0	0	2	0	6	186	737	
12:30 PM	0	2	100	0	0	0	91	3	0	0	0	0	0	1	0	3	200	750	
12:45 PM	0	2	89	0	0	0	81	0	0	0	0	0	0	4	0	3	179	764	
Count Total	1	63	1,425	1	0	0	2,023	38	0	0	0	1	0	35	3	63	3,653		
Pk Hr	All	0	7	344	0	0	0	398	5	0	0	0	0	0	14	0	17	785	
	HV	0	0	7	0	0	0	6	0	0	0	0	0	0	1	0	0	14	
	HV%	-	0%	2%	-	-	-	2%	0%	-	-	-	-	-	7%	-	0%	2%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
8:30 AM	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
9:15 AM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0
9:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
10:00 AM	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0
10:15 AM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
10:45 AM	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0
11:00 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11:15 AM	2	0	0	1	3	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
11:45 AM	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0
12:00 PM	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0
12:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
12:30 PM	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0
12:45 PM	2	0	0	1	3	0	0	0	0	0	0	0	0	0	0
Count Total	26	23	0	3	52	0	0	0	0	0	0	1	0	2	3
Peak Hour	7	6	0	1	14	0	0	0	0	0	0	0	0	0	0

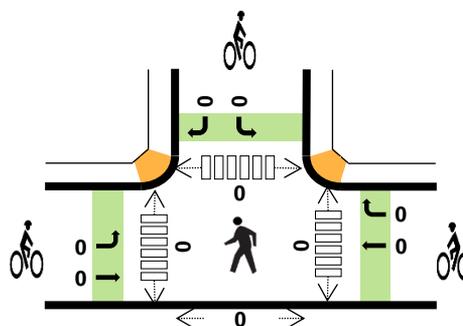
Count Summaries - Heavy Vehicles																		
Interval Start	E 6th Ave				E 6th Ave				N Telluride St				Telluride St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	2
8:30 AM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	6
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
9:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7
9:15 AM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	8
9:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2	6
9:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7
10:00 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	10
10:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	9
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
10:45 AM	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6	12
11:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11
11:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	12
11:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	14
11:45 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	13
12:00 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	13
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
12:30 PM	0	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	4	13
12:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	3	11
Count Total	0	0	26	0	0	0	22	1	0	0	0	0	0	3	0	0	52	
Pk Hr Heavy	0	0	7	0	0	0	6	0	0	0	0	0	0	1	0	0	14	

Count Summaries - Bikes																		
Interval Start	E 6th Ave				E 6th Ave				N Telluride St				Telluride St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Ventura St E 6th Ave



Date: 9/29/2024
 Count Period: 7:00 AM to 1:00 PM
 Peak Hour: 10:45 AM to 11:45 AM



	HV%	PHF
EB	2%	0.89
WB	1%	0.82
NB	--	--
SB	11%	0.56
TOTAL	2%	0.92

Peak Hour Count Summaries

Peak Hour Interval Start	E 6th Ave				E 6th Ave				n/a				Ventura St				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
10:45 AM	0	1	83	0	0	0	122	0	0	0	0	0	0	0	0	2	208	0	
11:00 AM	0	2	75	0	0	0	102	1	0	0	0	0	0	0	0	0	180	0	
11:15 AM	0	3	98	0	0	0	89	0	0	0	0	0	0	1	0	2	193	0	
11:30 AM	0	2	97	0	0	0	82	2	0	0	0	0	0	2	0	2	187	768	
Pk Hr	All	0	8	353	0	0	0	395	3	0	0	0	0	0	3	0	6	768	
	HV	0	0	8	0	0	0	4	0	0	0	0	0	0	0	1	13		
	HV%	-	0%	2%	-	-	-	1%	0%	-	-	-	-	-	0%	-	17%	2%	

Note: For complete count summary (all intervals), see following pages.
 ** Heavy Vehicle Classifications include FHWA Classes 4-13.
 ** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
10:45 AM	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0
11:00 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11:15 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0
Peak Hour	8	4	0	1	13	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles																			
Interval Start	E 6th Ave				E 6th Ave				n/a				Ventura St				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	1	22	0	0	0	40	1	0	0	0	0	0	0	0	0	64	0	
7:15 AM	0	2	30	0	0	0	44	2	0	0	0	0	0	0	0	0	78	0	
7:30 AM	0	0	38	0	0	0	43	0	0	0	0	0	0	0	1	0	82	0	
7:45 AM	0	1	30	0	0	0	61	1	0	0	0	0	0	0	0	0	93	317	
8:00 AM	0	0	47	0	0	0	64	1	0	0	0	0	0	0	2	0	114	367	
8:15 AM	0	0	33	0	0	0	61	0	0	0	0	0	0	0	1	0	95	384	
8:30 AM	0	1	37	0	0	0	78	2	0	0	0	0	0	0	1	0	119	421	
8:45 AM	0	3	42	0	0	0	93	0	0	0	0	0	0	0	0	0	138	466	
9:00 AM	0	1	44	0	0	0	81	0	0	0	0	0	0	0	0	0	126	478	
9:15 AM	0	1	46	0	0	0	91	1	0	0	0	0	0	0	1	0	140	523	
9:30 AM	0	2	50	0	0	0	95	0	0	0	0	0	0	2	0	0	149	553	
9:45 AM	0	1	45	0	0	0	104	0	0	0	0	0	0	1	0	0	151	566	
10:00 AM	0	3	51	0	0	0	100	0	0	0	0	0	0	1	0	5	160	600	
10:15 AM	0	0	59	0	0	0	126	2	0	0	0	0	0	1	0	1	189	649	
10:30 AM	0	1	61	0	0	0	120	0	0	0	0	0	0	0	0	0	182	682	
10:45 AM	0	1	83	0	0	0	122	0	0	0	0	0	0	0	0	2	208	739	
11:00 AM	0	2	75	0	0	0	102	1	0	0	0	0	0	0	0	0	180	759	
11:15 AM	0	3	98	0	0	0	89	0	0	0	0	0	0	1	0	2	193	763	
11:30 AM	0	2	97	0	0	0	82	2	0	0	0	0	0	2	0	2	187	768	
11:45 AM	0	1	83	0	0	0	79	0	0	0	0	0	0	1	0	1	165	725	
12:00 PM	0	0	89	0	0	0	101	1	0	0	0	0	0	0	0	2	193	738	
12:15 PM	0	0	81	0	0	0	95	3	0	0	0	0	0	1	0	0	180	725	
12:30 PM	0	0	102	0	0	0	85	1	0	0	0	0	0	0	0	3	191	729	
12:45 PM	0	2	92	0	0	0	81	0	0	0	0	0	0	1	0	1	177	741	
Count Total	0	28	1,435	0	0	0	2,037	18	0	0	0	0	0	11	0	25	3,554		
Pk Hr	All	0	8	353	0	0	0	395	3	0	0	0	0	0	3	0	6	768	
	HV	0	0	8	0	0	0	4	0	0	0	0	0	0	0	1	13		
	HV%	-	0%	2%	-	-	-	1%	0%	-	-	-	-	-	0%	-	17%	2%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
8:30 AM	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
9:15 AM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0
9:30 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
9:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
10:00 AM	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0
10:15 AM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0
11:00 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11:15 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0
11:45 AM	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0
12:00 PM	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0
12:15 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
12:30 PM	1	2	0	1	4	0	0	0	0	0	0	0	0	0	0
12:45 PM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Count Total	29	22	0	2	53	0	0	0	0	0	0	0	0	0	0
Peak Hour	8	4	0	1	13	0	0	0	0	0	0	0	0	0	0

Count Summaries - Heavy Vehicles																		
Interval Start	E 6th Ave				E 6th Ave				n/a				Ventura St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	
7:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	
8:30 AM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4	6	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
9:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	7	
9:15 AM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3	8	
9:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	6	
9:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	7	
10:00 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3	9	
10:15 AM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3	9	
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
10:45 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	5	11	
11:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	11	
11:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	11	
11:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	13	
11:45 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	5	13	
12:00 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3	13	
12:15 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	12	
12:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	4	14	
12:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	12	
Count Total	0	0	29	0	0	0	21	1	0	0	0	0	0	0	2	53		
Pk Hr Heavy	0	0	8	0	0	0	4	0	0	0	0	0	0	0	1	13		

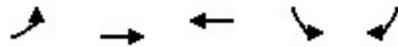
Count Summaries - Bikes																		
Interval Start	E 6th Ave				E 6th Ave				n/a				Ventura St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

APPENDIX D – Existing Synchro Outputs

Queues

1: 6th Avenue & Telluride Street

10/30/2024



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	8	381	474	16	20
v/c Ratio	0.01	0.23	0.15	0.11	0.13
Control Delay (s/veh)	2.4	2.4	1.8	26.4	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.4	2.4	1.8	26.4	14.1
Queue Length 50th (ft)	0	0	0	6	0
Queue Length 95th (ft)	4	70	34	19	15
Internal Link Dist (ft)		1126	739	502	
Turn Bay Length (ft)	300				250
Base Capacity (vph)	789	1640	3111	560	514
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.01	0.23	0.15	0.03	0.04

Intersection Summary

HCM 7th Signalized Intersection Summary

1: 6th Avenue & Telluride Street

10/30/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	347	398	5	14	17
Future Volume (veh/h)	7	347	398	5	14	17
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	381	468	6	16	20
Peak Hour Factor	0.91	0.91	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	797	1440	2766	35	54	48
Arrive On Green	0.77	0.77	0.77	0.77	0.03	0.03
Sat Flow, veh/h	920	1870	3686	46	1781	1585
Grp Volume(v), veh/h	8	381	231	243	16	20
Grp Sat Flow(s),veh/h/ln	920	1870	1777	1862	1781	1585
Q Serve(g_s), s	0.1	3.5	2.1	2.1	0.5	0.7
Cycle Q Clear(g_c), s	2.2	3.5	2.1	2.1	0.5	0.7
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	797	1440	1368	1434	54	48
V/C Ratio(X)	0.01	0.26	0.17	0.17	0.30	0.42
Avail Cap(c_a), veh/h	797	1440	1368	1434	564	502
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.1	2.0	1.8	1.8	28.5	28.6
Incr Delay (d2), s/veh	0.0	0.4	0.3	0.3	1.1	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.2	0.2	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	2.1	2.4	2.1	2.1	29.6	30.8
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		389	474		36	
Approach Delay, s/veh		2.4	2.1		30.3	
Approach LOS		A	A		C	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.2		7.8		52.2
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		29.0		19.0		29.0
Max Q Clear Time (g_c+I1), s		5.5		2.7		4.1
Green Ext Time (p_c), s		2.2		0.0		2.6

Intersection Summary

HCM 7th Control Delay, s/veh	3.4
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th TWSC
2: 6th Avenue & Ventura Street

10/30/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↕		↕	
Traffic Vol, veh/h	8	353	397	3	3	6
Future Vol, veh/h	8	353	397	3	3	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	89	89	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	397	467	4	4	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	471	0	-	0	883
Stage 1	-	-	-	-	469
Stage 2	-	-	-	-	415
Critical Hdwy	4.13	-	-	-	6.63
Critical Hdwy Stg 1	-	-	-	-	5.83
Critical Hdwy Stg 2	-	-	-	-	5.43
Follow-up Hdwy	2.219	-	-	-	3.519
Pot Cap-1 Maneuver	1089	-	-	-	300
Stage 1	-	-	-	-	597
Stage 2	-	-	-	-	666
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1089	-	-	-	297
Mov Cap-2 Maneuver	-	-	-	-	297
Stage 1	-	-	-	-	591
Stage 2	-	-	-	-	666

Approach	EB	WB	SB
HCM Control Delay, s/v	0.18	0	12.32
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	40	-	-	-	502
HCM Lane V/C Ratio	0.008	-	-	-	0.021
HCM Control Delay (s/veh)	8.3	0	-	-	12.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 7th TWSC
3: Ventura Street & Site Access

10/30/2024

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	0	0	0	11	9	0
Future Vol, veh/h	0	0	0	11	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	10	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	22	10	10	0	0
Stage 1	10	-	-	-	-
Stage 2	12	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	995	1072	1610	-	-
Stage 1	1013	-	-	-	-
Stage 2	1011	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	995	1072	1610	-	-
Mov Cap-2 Maneuver	995	-	-	-	-
Stage 1	1013	-	-	-	-
Stage 2	1011	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

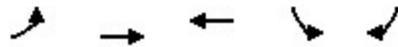
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1610	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

**APPENDIX E – Background (without site development) Synchro
Outputs**

Queues

1: 6th Avenue & Telluride Street

10/30/2024



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	8	389	451	15	18
v/c Ratio	0.01	0.24	0.14	0.10	0.12
Control Delay (s/veh)	2.4	2.4	1.8	26.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.4	2.4	1.8	26.4	14.5
Queue Length 50th (ft)	0	0	0	5	0
Queue Length 95th (ft)	4	71	35	20	16
Internal Link Dist (ft)		1126	739	502	
Turn Bay Length (ft)	300				250
Base Capacity (vph)	806	1641	3112	560	513
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.01	0.24	0.14	0.03	0.04

Intersection Summary

HCM 7th Signalized Intersection Summary

1: 6th Avenue & Telluride Street

10/30/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↶↷		↶	↷
Traffic Volume (veh/h)	7	358	410	5	14	17
Future Volume (veh/h)	7	358	410	5	14	17
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	389	446	5	15	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	815	1444	2778	31	50	45
Arrive On Green	0.77	0.77	0.77	0.77	0.03	0.03
Sat Flow, veh/h	940	1870	3693	40	1781	1585
Grp Volume(v), veh/h	8	389	220	231	15	18
Grp Sat Flow(s),veh/h/ln	940	1870	1777	1863	1781	1585
Q Serve(g_s), s	0.1	3.6	1.9	1.9	0.5	0.7
Cycle Q Clear(g_c), s	2.1	3.6	1.9	1.9	0.5	0.7
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	815	1444	1371	1438	50	45
V/C Ratio(X)	0.01	0.27	0.16	0.16	0.30	0.40
Avail Cap(c_a), veh/h	815	1444	1371	1438	564	502
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.1	2.0	1.8	1.8	28.6	28.7
Incr Delay (d2), s/veh	0.0	0.5	0.3	0.2	1.2	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.2	0.2	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	2.1	2.4	2.0	2.0	29.8	30.8
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		397	451		33	
Approach Delay, s/veh		2.4	2.0		30.4	
Approach LOS		A	A		C	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.3		7.7		52.3
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		29.0		19.0		29.0
Max Q Clear Time (g_c+I1), s		5.6		2.7		3.9
Green Ext Time (p_c), s		2.2		0.0		2.5
Intersection Summary						
HCM 7th Control Delay, s/veh			3.3			
HCM 7th LOS			A			

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th TWSC
2: 6th Avenue & Ventura Street

10/30/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↕		↕	
Traffic Vol, veh/h	8	364	409	3	3	6
Future Vol, veh/h	8	364	409	3	3	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	396	445	3	3	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	448	0	-	0	859 224
Stage 1	-	-	-	-	446 -
Stage 2	-	-	-	-	413 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1111	-	-	-	311 780
Stage 1	-	-	-	-	613 -
Stage 2	-	-	-	-	667 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1111	-	-	-	308 780
Mov Cap-2 Maneuver	-	-	-	-	308 -
Stage 1	-	-	-	-	607 -
Stage 2	-	-	-	-	667 -

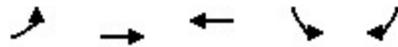
Approach	EB	WB	SB
HCM Control Delay, s/v	0.18	0	12.11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	39	-	-	-	516
HCM Lane V/C Ratio	0.008	-	-	-	0.019
HCM Control Delay (s/veh)	8.3	0	-	-	12.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Queues

1: 6th Avenue & Telluride Street

10/30/2024



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	8	559	642	15	18
v/c Ratio	0.01	0.34	0.21	0.10	0.12
Control Delay (s/veh)	2.4	2.9	1.9	26.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.4	2.9	1.9	26.4	14.5
Queue Length 50th (ft)	0	0	0	5	0
Queue Length 95th (ft)	4	113	51	20	16
Internal Link Dist (ft)		1126	739	502	
Turn Bay Length (ft)	300				250
Base Capacity (vph)	669	1641	3115	560	513
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.01	0.34	0.21	0.03	0.04

Intersection Summary

HCM 7th Signalized Intersection Summary

1: 6th Avenue & Telluride Street

10/30/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	514	586	5	14	17
Future Volume (veh/h)	7	514	586	5	14	17
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	559	637	5	15	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	689	1444	2789	22	50	45
Arrive On Green	0.77	0.77	0.77	0.77	0.03	0.03
Sat Flow, veh/h	787	1870	3707	28	1781	1585
Grp Volume(v), veh/h	8	559	313	329	15	18
Grp Sat Flow(s),veh/h/ln	787	1870	1777	1865	1781	1585
Q Serve(g_s), s	0.2	5.8	2.9	2.9	0.5	0.7
Cycle Q Clear(g_c), s	3.1	5.8	2.9	2.9	0.5	0.7
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	689	1444	1371	1440	50	45
V/C Ratio(X)	0.01	0.39	0.23	0.23	0.30	0.40
Avail Cap(c_a), veh/h	689	1444	1371	1440	564	502
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.3	2.2	1.9	1.9	28.6	28.7
Incr Delay (d2), s/veh	0.0	0.8	0.4	0.4	1.2	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.3	0.3	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	2.4	3.0	2.3	2.3	29.8	30.8
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		567	642		33	
Approach Delay, s/veh		3.0	2.3		30.4	
Approach LOS		A	A		C	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.3		7.7		52.3
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		29.0		19.0		29.0
Max Q Clear Time (g_c+I1), s		7.8		2.7		4.9
Green Ext Time (p_c), s		3.4		0.0		3.7

Intersection Summary

HCM 7th Control Delay, s/veh			3.4			
HCM 7th LOS			A			

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th TWSC
2: 6th Avenue & Ventura Street

10/30/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↕		↕	
Traffic Vol, veh/h	8	520	585	3	3	6
Future Vol, veh/h	8	520	585	3	3	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	565	636	3	3	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	639	0	-	0	1220 320
Stage 1	-	-	-	-	638 -
Stage 2	-	-	-	-	583 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	943	-	-	-	185 677
Stage 1	-	-	-	-	490 -
Stage 2	-	-	-	-	557 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	943	-	-	-	183 677
Mov Cap-2 Maneuver	-	-	-	-	183 -
Stage 1	-	-	-	-	483 -
Stage 2	-	-	-	-	557 -

Approach	EB	WB	SB
HCM Control Delay, s/v	0.13	0	15.4
HCM LOS			C

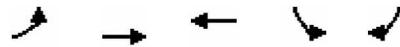
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	27	-	-	-	356
HCM Lane V/C Ratio	0.009	-	-	-	0.027
HCM Control Delay (s/veh)	8.9	0	-	-	15.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

APPENDIX F – Future (with site development) Synchro Outputs

Queues

1: 6th Avenue & Telluride Street

02/04/2025



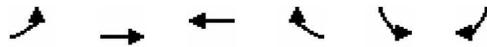
Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	8	509	580	15	18
v/c Ratio	0.01	0.31	0.19	0.10	0.12
Control Delay (s/veh)	2.4	2.7	1.9	26.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.4	2.7	1.9	26.4	14.5
Queue Length 50th (ft)	0	0	0	5	0
Queue Length 95th (ft)	4	99	45	20	16
Internal Link Dist (ft)		1126	739	502	
Turn Bay Length (ft)	300				250
Base Capacity (vph)	712	1641	3115	560	513
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.01	0.31	0.19	0.03	0.04

Intersection Summary

HCM 7th Signalized Intersection Summary

1: 6th Avenue & Telluride Street

02/04/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	468	529	5	14	17
Future Volume (veh/h)	7	468	529	5	14	17
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	509	575	5	15	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	728	1444	2786	24	50	45
Arrive On Green	0.77	0.77	0.77	0.77	0.03	0.03
Sat Flow, veh/h	834	1870	3704	31	1781	1585
Grp Volume(v), veh/h	8	509	283	297	15	18
Grp Sat Flow(s),veh/h/ln	834	1870	1777	1865	1781	1585
Q Serve(g_s), s	0.2	5.1	2.6	2.6	0.5	0.7
Cycle Q Clear(g_c), s	2.8	5.1	2.6	2.6	0.5	0.7
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	728	1444	1371	1439	50	45
V/C Ratio(X)	0.01	0.35	0.21	0.21	0.30	0.40
Avail Cap(c_a), veh/h	728	1444	1371	1439	564	502
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.2	2.1	1.9	1.9	28.6	28.7
Incr Delay (d2), s/veh	0.0	0.7	0.3	0.3	1.2	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.3	0.3	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	2.3	2.8	2.2	2.2	29.8	30.8
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		517	580		33	
Approach Delay, s/veh		2.8	2.2		30.4	
Approach LOS		A	A		C	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.3		7.7		52.3
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		29.0		19.0		29.0
Max Q Clear Time (g_c+I1), s		7.1		2.7		4.6
Green Ext Time (p_c), s		3.1		0.0		3.3
Intersection Summary						
HCM 7th Control Delay, s/veh			3.3			
HCM 7th LOS			A			

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th TWSC
2: 6th Avenue & Ventura Street

02/04/2025

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑	↑↑	↗	↘	
Traffic Vol, veh/h	118	364	409	40	44	125
Future Vol, veh/h	118	364	409	40	44	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	370	-	-	370	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	396	445	43	48	136

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	488	0	-	0	1097 222
Stage 1	-	-	-	-	445 -
Stage 2	-	-	-	-	652 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1073	-	-	-	318 782
Stage 1	-	-	-	-	614 -
Stage 2	-	-	-	-	708 -
Platoon blocked, %		-	-	-	0
Mov Cap-1 Maneuver	1073	-	-	-	280 782
Mov Cap-2 Maneuver	-	-	-	-	280 -
Stage 1	-	-	-	-	541 -
Stage 2	-	-	-	-	708 -

Approach	EB	WB	SB
HCM Control Delay, s/v	2.16	0	15.26
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1073	-	-	-	533
HCM Lane V/C Ratio	0.12	-	-	-	0.345
HCM Control Delay (s/veh)	8.8	-	-	-	15.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	1.5

HCM 7th TWSC
 3: Ventura Street & S Site Access

02/04/2025

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	80	49	109	89	0
Future Vol, veh/h	0	80	49	109	89	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	110	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	87	53	118	97	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	322	97	97	0	0
Stage 1	97	-	-	-	-
Stage 2	225	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	672	960	1497	-	-
Stage 1	927	-	-	-	-
Stage 2	812	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	648	960	1497	-	-
Mov Cap-2 Maneuver	648	-	-	-	-
Stage 1	894	-	-	-	-
Stage 2	812	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.13	2.32	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1497	-	960	-	-
HCM Lane V/C Ratio	0.036	-	0.091	-	-
HCM Control Delay (s/veh)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection						
Int Delay, s/veh	7.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	80	97	11	9	0
Future Vol, veh/h	0	80	97	11	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	87	105	12	10	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	233	10	10	0	0
Stage 1	10	-	-	-	-
Stage 2	223	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	756	1072	1610	-	-
Stage 1	1013	-	-	-	-
Stage 2	814	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	706	1072	1610	-	-
Mov Cap-2 Maneuver	706	-	-	-	-
Stage 1	947	-	-	-	-
Stage 2	814	-	-	-	-

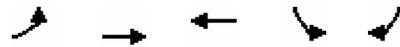
Approach	EB	NB	SB
HCM Control Delay, s/v	8.66	6.64	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1610	-	1072	-	-
HCM Lane V/C Ratio	0.065	-	0.081	-	-
HCM Control Delay (s/veh)	7.4	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Queues

1: 6th Avenue & Telluride Street

02/04/2025



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	8	678	771	15	18
v/c Ratio	0.01	0.41	0.25	0.10	0.12
Control Delay (s/veh)	2.4	3.3	2.0	26.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.4	3.3	2.0	26.4	14.5
Queue Length 50th (ft)	0	0	0	5	0
Queue Length 95th (ft)	4	151	63	20	16
Internal Link Dist (ft)		1126	739	502	
Turn Bay Length (ft)	300				250
Base Capacity (vph)	589	1641	3115	560	513
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.01	0.41	0.25	0.03	0.04

Intersection Summary

HCM 7th Signalized Intersection Summary

1: 6th Avenue & Telluride Street

02/04/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↶↷		↶	↷
Traffic Volume (veh/h)	7	624	705	5	14	17
Future Volume (veh/h)	7	624	705	5	14	17
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	678	766	5	15	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	616	1444	2793	18	50	45
Arrive On Green	0.77	0.77	0.77	0.77	0.03	0.03
Sat Flow, veh/h	698	1870	3713	24	1781	1585
Grp Volume(v), veh/h	8	678	376	395	15	18
Grp Sat Flow(s),veh/h/ln	698	1870	1777	1866	1781	1585
Q Serve(g_s), s	0.2	7.8	3.7	3.7	0.5	0.7
Cycle Q Clear(g_c), s	3.9	7.8	3.7	3.7	0.5	0.7
Prop In Lane	1.00			0.01	1.00	1.00
Lane Grp Cap(c), veh/h	616	1444	1371	1440	50	45
V/C Ratio(X)	0.01	0.47	0.27	0.27	0.30	0.40
Avail Cap(c_a), veh/h	616	1444	1371	1440	564	502
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.5	2.5	2.0	2.0	28.6	28.7
Incr Delay (d2), s/veh	0.0	1.1	0.5	0.5	1.2	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.4	0.4	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	2.6	3.5	2.5	2.5	29.8	30.8
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		686	771		33	
Approach Delay, s/veh		3.5	2.5		30.4	
Approach LOS		A	A		C	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.3		7.7		52.3
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		29.0		19.0		29.0
Max Q Clear Time (g_c+I1), s		9.8		2.7		5.7
Green Ext Time (p_c), s		4.3		0.0		4.6

Intersection Summary

HCM 7th Control Delay, s/veh			3.6			
HCM 7th LOS			A			

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th TWSC
2: 6th Avenue & Ventura Street

02/04/2025

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑	↑↑	↗	↘	
Traffic Vol, veh/h	118	520	585	40	44	125
Future Vol, veh/h	118	520	585	40	44	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	370	-	-	370	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	565	636	43	48	136

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	679	0	-	0	1458 318
Stage 1	-	-	-	-	636 -
Stage 2	-	-	-	-	822 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	911	-	-	-	214 679
Stage 1	-	-	-	-	491 -
Stage 2	-	-	-	-	722 -
Platoon blocked, %		-	-	-	0
Mov Cap-1 Maneuver	911	-	-	-	184 679
Mov Cap-2 Maneuver	-	-	-	-	184 -
Stage 1	-	-	-	-	421 -
Stage 2	-	-	-	-	722 -

Approach	EB	WB	SB
HCM Control Delay, s/v	1.78	0	21.46
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	911	-	-	-	399
HCM Lane V/C Ratio	0.141	-	-	-	0.46
HCM Control Delay (s/veh)	9.6	-	-	-	21.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	2.3

HCM 7th TWSC
3: Ventura Street & S Site Access

02/04/2025

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	0	80	49	109	89	0
Future Vol, veh/h	0	80	49	109	89	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	110	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	87	53	118	97	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	322	97	97	0	-	0
Stage 1	97	-	-	-	-	-
Stage 2	225	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	672	960	1497	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	648	960	1497	-	-	-
Mov Cap-2 Maneuver	648	-	-	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	812	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.13	2.32	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1497	-	960	-	-
HCM Lane V/C Ratio	0.036	-	0.091	-	-
HCM Control Delay (s/veh)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection						
Int Delay, s/veh	7.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	80	97	11	9	0
Future Vol, veh/h	0	80	97	11	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	87	105	12	10	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	233	10	10	0	0
Stage 1	10	-	-	-	-
Stage 2	223	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	756	1072	1610	-	-
Stage 1	1013	-	-	-	-
Stage 2	814	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	706	1072	1610	-	-
Mov Cap-2 Maneuver	706	-	-	-	-
Stage 1	947	-	-	-	-
Stage 2	814	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.66	6.64	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1610	-	1072	-	-
HCM Lane V/C Ratio	0.065	-	0.081	-	-
HCM Control Delay (s/veh)	7.4	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-