City of Albuquerque

DEVELOPMENT FACILITATION TEAM (DFT) APPLICATIONS

Effective 12/15/2022

Please check the appropriate box(es) and refer to supplemental forms for submittal requirements. All fees must be paid at the time of application.

MISCELLANEOUS APPLICATIONS	
☐ Site Plan Administrative DFT *(Forms P & P2)*	☐ Extension of Infrastructure List or IIA *(Form S3)*
■ Final EPC Sign-off for Master Development/Site Plans - EPC *(Form P2)*	**PRE-APPLICATIONS**
☐ Amendment to Infrastructure List (*Form S3*)	☐ Sketch Plat Review and Comment *(Form S3)*
☐ Temporary Deferral of S/W *(Form S3)*	☐ Sketch Plan Review and Comment *(Form S3)*
☐ Extension of IIA: Temp. Def. of S/W *(Form S3)*	**APPEAL**
	☐ Administrative Decision *(Form A)*

BRIEF DESCRIPTION OF REQUEST

Final Sign off for an ECP approved Site Development Plan to add in a new restaurant and drive through use (Starbucks).

APPLICATION INFORMATION

Applicant/Owner: Smith' s Food & Drug Center Inc.		Phone:
Address: 1014 VINE ST FLOOR 7TH		Email:
City: CINCINNATI	State: OH	Zip: 45202
Professional/Agent (if any): Modulus Architects & Land Use Planning, Inc.		Phone:
Address: 8220 SAN PEDRO DR. NE, SUITE 520		Email: rokoye@modulusarchitects.com
City: Albuquerque	State: NM	Zip: 87109
Proprietary Interest in Site: Agent	List all owners:	

SITE INFORMATION (Accuracy of the existing legal description is crucial! Attach a separate sheet if necessary.)

Lot or Tract No.: J-1		Block:	Unit:
Subdivision/Addition: FOUR HILLS VILLAGE SHOPPING CTR & APT COMPLEX		MRGCD Map No.:	UPC Code: 102305602134521316
Zone Atlas Page(s): L- 23- Z and L- 22- Z	Existing Zoning: MX-M		Proposed Zoning N/A
# of Existing Lots: 1	# of Proposed Lots: 1		Total Area of Site (Acres): +/- 8.5

LOCATION OF PROPERTY BY STREETS

Site Address/Street: 200 TRAMWAY BLVD SE	Between: Tramway Blvd	and: Central Ave

CASE HISTORY (List any current or prior project and case number(s) that may be relevant to your request.)

PR-2023-008767-SI-2023-001056

I certify that the information I have included here and sent in the required notice was complete, true, and accurate to the extent of my knowledge.

Signature: Regina Okoye	**Date:** 9/13/2023
Printed Name: Regina Okoye	☐ Applicant or ■ Agent

FORM P2: SITE PLAN ADMINISTRATIVE – Development Facilitation Team (DFT) as of 12/25/2022

☐ **SITE PLAN ADMINISTRATIVE – DFT**

A Single PDF file of the complete application including all documents being submitted must be emailed to PLNDRS@cabq.gov. Zipped files or those over 9 MB cannot be delivered via email, in which case the PDF must be provided to City Staff using other online resources such as Dropbox or FTP. *The PDF shall be organized in the number order below.* Divide the PDF with a title sheet for each of the three documentation sections in **bold** below.

SITE PLAN DOCUMENTATION

____ 1) DFT Application form completed, signed, and dated

____ 2) Form P2 with all the submittal items checked/marked

____ 3) Form P with signatures from Hydrology, Transportation, and ABCWUA

____ 4) Zone Atlas map with the entire site clearly outlined and labeled

____ 5) Site Plan and related drawings (include a Site Plan key of the sheets submitted)

____ 6) Copy of the original approved Site Plan or Master Development Plan (for amendments to or Extensions of the Site Plan)

____ 7) Infrastructure List, if required for building of public infrastructure

____ 8) Sensitive Lands Site Analysis for new site design in accordance with IDO Section 5-2(C) (The Sensitive Lands Site Analysis form can be obtained online at): https://documents.cabq.gov/planning/development-review-board/Sensitive_lands_analysis_form.pdf

____ 9) Responses to climatic and geographic responsive design considerations (Recommended to promote sustainability, but not required. The Climatic and Geographic Responsiveness form can be obtained online at): https://documents.cabq.gov/planning/IDO/SubmittalFormIDO5-2(D)ClimaticGeographic_Responsiveness.pdf

SUPPORTIVE DOCUMENTATION

____ 10) Completed Site Plan Checklist

____ 11) Letter of authorization from the property owner if application is submitted by an agent

____ 12) Justification letter describing and justifying the request per the criteria in IDO Section 16-6-5(G)(3)

____ 13) Explanation and justification of requested deviations, if any, in accordance with IDO Section 14-16-6-4(P). *Note: If requesting more than allowed by deviation, a Variance – ZHE or Waiver –DHO will be required, as applicable*

____ 14) Sites 5 acres or greater: Archaeological Certificate in accordance with IDO Section 14-16-6-5(A) *(not required for Extension)*

____ 15) Landfill disclosure statement per IDO Section 14-16-6-4(S)(5)(d)(2)(d) if site is within a designated landfill buffer zone

____ 16) Architectural Review Committee approval letter if the site is located within a Master Development Plan area or a Framework Plan area

PUBLIC NOTICE DOCUMENTATION

____ 17) Sign Posting Agreement

____ 18) Proof of a Pre-Submittal Neighborhood Meeting per IDO 6-4(C)(1)(b) for new building or multiple new buildings that include a total of more than 100 multi-family residential dwelling units or more than 50,000 square feet of non-residential development

__ Office of Neighborhood Coordination neighborhood meeting inquiry response

__ Proof of email with read receipt OR Certified Letter offering meeting to applicable associations

__ Completed neighborhood meeting request form(s)

__ If a meeting was requested or held, copy of sign-in sheet and meeting notes

____ 19) Required Content of Notice at Submittal per IDO Section 14-16-6-4(K)(1) (not required for an extension)

__ Office of Neighborhood Coordination notice inquiry response

__ Completed notification form(s), proof of additional information provided in accordance with IDO Section 6-4(K)(1)(b)

__ Proof of emailed notice to affected Neighborhood Association representatives

[X] **FINAL SIGN-OFF FOR MASTER DEVELOPMENT PLANS AND SITE PLANS – EPC**

A Single PDF file of the complete application including all documents being submitted must be emailed to PLNDRS@cabq.gov prior to making a submittal. Zipped files or those over 9 MB cannot be delivered via email, in which case the PDF must be provided to City Staff using other online resources such as Dropbox or FTP. *The PDF shall be organized in the number order below.*

X 1) DFT Application form completed, signed, and dated

X 2) Form P2 with all the submittal items checked/marked

X 3) Zone Atlas map with the entire site clearly outlined and labeled

X 4) Site Plan and related drawings

X 5) Infrastructure List, if require

X 6) Copy of EPC Notice of Decision and letter explaining how each EPC condition has been met

X 7) Letter of authorization from the property owner if application is submitted by an agent

X 8) Solid Waste Department signature on Site Plan

X 9) Signed Form DRWS Drainage Report, Grading and Drainage Plan, and Water & Sewer Availability Statement filing information

X 10) Approved Grading and Drainage Plan

X 11) Copy of Site Plan with Fire Marshal's stamp, i.e. "Fire 1" plan *(not required for Master Development Plans)*

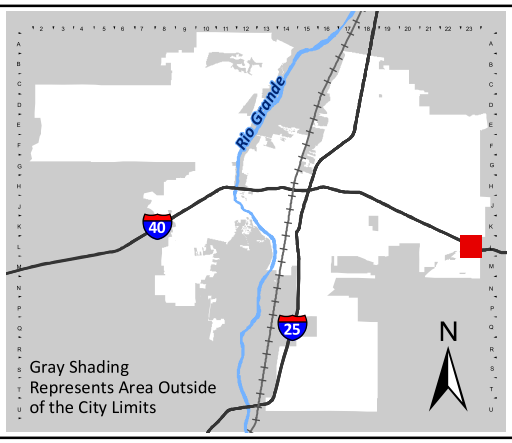
For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance

IDO Zone Atlas
May 2018

Albuquerque Geographic Information System

IDO Zoning information as of May 17, 2018

The Zone Districts and Overlay Zones are established by the Integrated Development Ordinance (IDO).

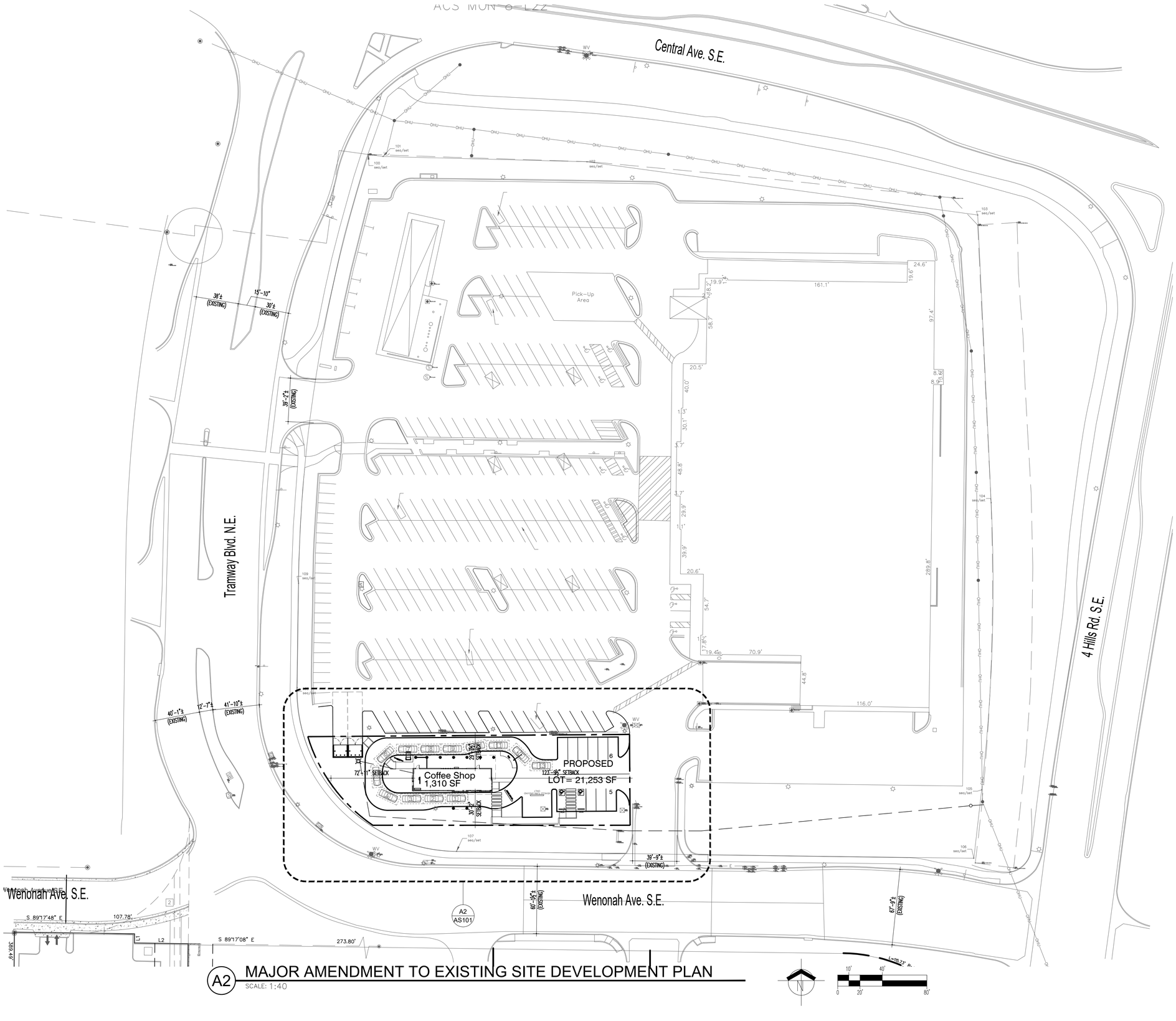


Zone Atlas Page:

L-23-Z

- Easement
- Escarpment
- Petroglyph National Monument
- Areas Outside of City Limits
- Airport Protection Overlay (APO) Zone
- Character Protection Overlay (CPO) Zone
- Historic Protection Overlay (HPO) Zone
- View Protection Overlay (VPO) Zone

Feet: 0 250 500 1,000



A2 MAJOR AMENDMENT TO EXISTING SITE DEVELOPMENT PLAN

SCALE: 1:40

GENERAL NOTES

A. "C" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.
B. INDICATED DIMENSIONS ARE TO FACE OF FINISH; UNLESS OTHERWISE NOTED.

SITE DATA

IDO ZONING DESIGNATION – MX-M
COMPREHENSIVE PLAN CORRIDOR – MAJOR TRANSIT CORRIDOR & PREMIUM TRANSIT CORRIDOR (CENTRAL AVE)
COMPREHENSIVE PLAN CENTER – FOUR HILLS VILLAGE – ACTIVITY CENTER
CITY DEVELOPMENT AREA – AREA OF CHANGE

PROJECT NUMBER:_____
APPLICATION NUMBER:_____

THIS PLAN IS CONSISTENT WITH THE SPECIFIC SITE DEVELOPMENT PLAN APPROVED BY THE ENVIRONMENTAL PLANNING COMMISSION (EPC), DATED_____ AND THE FINDINGS AND CONDITIONS IN THE OFFICIAL NOTIFICATION OF DECISION ARE SATISFIED.

IS AN INFRASTRUCTURE LIST EQUIRED? ( ) YES ( ) NO. IF YES, THEN A SET OF APPROVED DRC PLANS WITH A WORK ORDER IS REQUIRED FOR ANY CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY OR FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS.

Traffic Engineering, Transportation Division	Date
ABCWUA	Date
Parks and Recreation Department	Date
Hydrology	Date
Code Enforcement	Date
Environmental Health Department (conditional)	Date
Solid Waste Management	Date
Planning Department	Date

EXISTING SMITH'S PARKING

USE/PARKING REQUIREMENT	TOTALS
BUILDING SIZE	85,875 SF
TOTAL PARKING REQUIRED	1 SPACE PER 300 SQ. FT. GFA = 286
EXISTING PARKING PROVIDED	383 SPACES
HC PARKING REQUIRED	7 SPACES
HC PARKING REQUIRED	10 SPACES
BIKE SPACE PROVIDED	12 SPACES
NO. OF PARKING REMOVED FOR COFFEE SHOP W/ DRIVE-THRU	48 SPACES REMOVED
REMAIN PARKING SPACES PROVIDED	335 SPACES

PROPOSED COFFEE SHOP WITH DRIVE-THRU PARKING

USE/PARKING REQUIREMENT	TOTALS
BUILDING SIZE	1,310 SF
TOTAL PARKING REQUIRED	8 SPACES PER 1,000 SF GFA = 10 SPACES
OUTDOOR PATIO SIZE	725 SF
TOTAL PARKING REQ FOR PATIO	3 SPACES PER 1,000 SF GFA = 2 SPACES
20% PARKING REDUCTION (AC, MT)	9 SPACES
HC PARKING REQUIRED	1 SPACE
HC PARKING PROVIDED	2 SPACES
TOTAL PARKING PROVIDED	11 SPACES
BIKE SPACES REQUIRED	3 SPACES
MOTORCYCLE PARKING REQUIRED	1 SPACE
MOTORCYCLE PARKING PROVIDED	2 SPACES

REV	DATE	BY	REVISION
6			
5			
4			
3	05 JUL 2023	RO	MAJOR AMENDMENT TO EXISTING SITE DEVELOPMENT PLAN
2			
1			

MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498

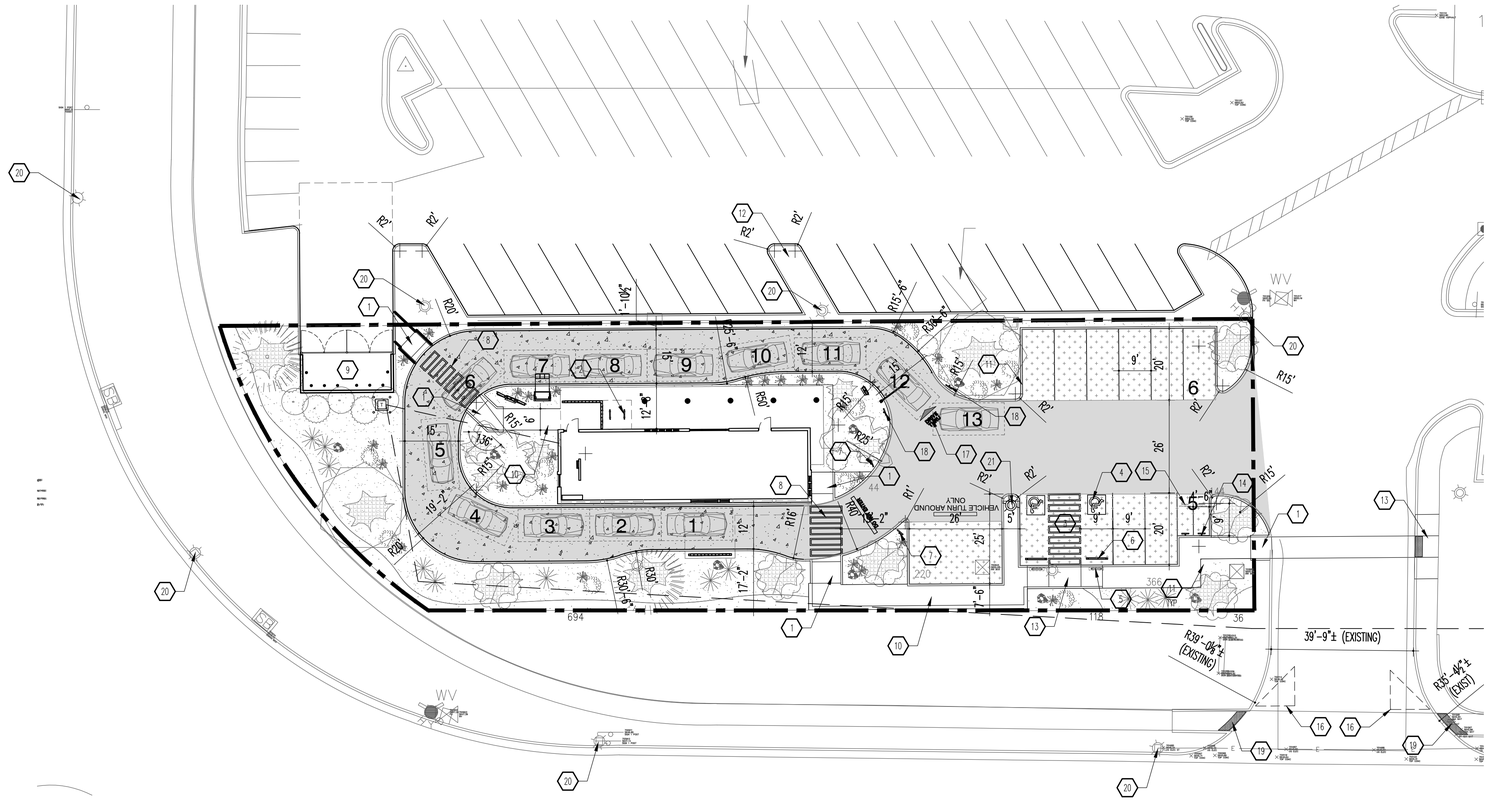
STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
05 JULY 2023

PROJECT TITLE
COFFEE SHOP with DRIVE-THRU
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

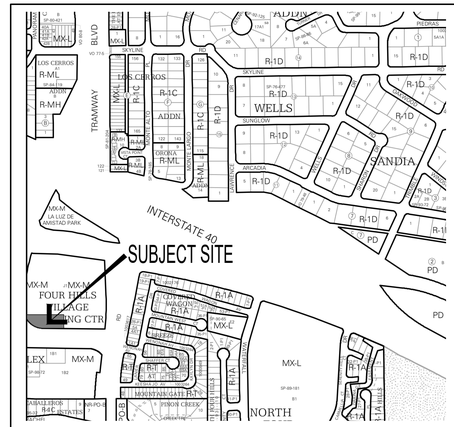
PROJECT MANAGER: DEVIN NGUYEN
JOB NO.: CS-TRAMWAY
DRAWN BY: DTN

SHEET TITLE
SITE PLAN – EPC, MAJOR AMENDMENT JULY 20, 2023

DATE: 05 Jul 2023
SCALE: AS NOTED
sheet- AS100
of-



A2 ARCHITECTURAL SITE PLAN
SCALE: 1:20



VICINITY MAP
Zone Atlas Map L-23-Z
NTS

LEGAL DESCRIPTION: TRACT J-1-A AND J-1-B, FOUR HILLS VILLAGE SHOPPING CENTER AND APARTMENT COMPLEX, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO.

GENERAL NOTES

A. "C" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.
B. INDICATED DIMENSIONS ARE TO FACE OF FINISH; UNLESS OTHERWISE NOTED.
C. PARKING AND ACCESSIBLE PAVEMENT MARKING AND STRIPING SHALL CONFORM TO THE NEW MEXICO COMMERCIAL BUILDING CODE SECTION 1110.3 F7.2.
D. LANDSCAPING AND SIGNAGE SHALL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBS BETWEEN 3' AND 8' TALL (AS MEASURED FROM THE GUTTER PLAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE.
E. ALL BROKEN OR CRACKED SIDEWALK MUST BE REPLACED WITH SIDEWALK AND CURB & GUTTER.

KEYED NOTES

1. CURBED RAMP: SEE A1/A1.1.
2. BIKE RACK: SEE B1/A1.2; TYPICAL OF (2).
3. HANDICAP PARKING: SEE A1/A1.2 AND A3/A1.2.
4. HANDICAP PAVEMENT MARKING: SEE A5/A1.2.
5. HANDICAP SIGNAGE: SEE B4/A1.2; TYPICAL OF (2).
6. WHEEL STOP: SEE B5/A1.2; TYPICAL OF (2).
7. 'DO NOT ENTER' SIGNAGE: SEE B3/A1.2; TYPICAL OF (2).
8. WALKWAY PAVEMENT MARKING: SEE C5/A1.2.
9. REFUSE ENCLOSURE: SEE B2/A1.3.
10. SIDEWALK: SEE B3/A1.1.
11. CURB & GUTTER: SEE B1/A1.1.
12. PARKING ISLAND: SEE C3/A1.1.
13. TAPERED RAMP: SEE C1/A1.1.
14. MOTORCYCLE PARKING SIGNAGE: SEE B2/A1.2; TYPICAL OF (2).
15. "MOTORCYCLE PARKING": 12" HIGH x 4" WIDE PAVEMENT MARKING, WHITE IN COLOR.
16. DASHED LINE INDICATES 11' x 11' CLEAR SITE TRIANGLE.
17. "DRIVE-THRU" PAVEMENT MARKING: SEE B1/A1.3.
18. "ONE WAY" SIGNAGE: SEE C1/A1.2.
19. PROVIDE 2' WIDE ADA APPROVED TRUNCATED DOME STRIP.
20. EXISTING LIGHT POLE TO REMAIN.
21. NEW LIGHT POLE.

GRAPHIC LEGEND

6" THICK NORMAL WEIGHT REINFORCED CONCRETE PAVING.

HEAVY DUTY: SEE A5/A1.3.

LIGHT DUTY ASPHALT: SEE A3/A1.3.

EASEMENTS

NO EASEMENTS AT IMMEDIATE SITE.

PARKING CALCULATION

PARKING SPACES REQUIRED	PARKING SPACES PROVIDED
8 PER 1,000 GSF @1,310 GSF	(8) SPACES
PARKING SPACES REQUIRED FOR PATIO	PARKING SPACES PROVIDED
3 PER 1,000 GSF @725 GSF	(2) SPACES
MOTORCYCLE PARKING REQUIRED	
(1) REQUIRED	(2) SPACES
BICYCLE PARKING REQUIRED	
(3) REQUIRED	(4) SPACES

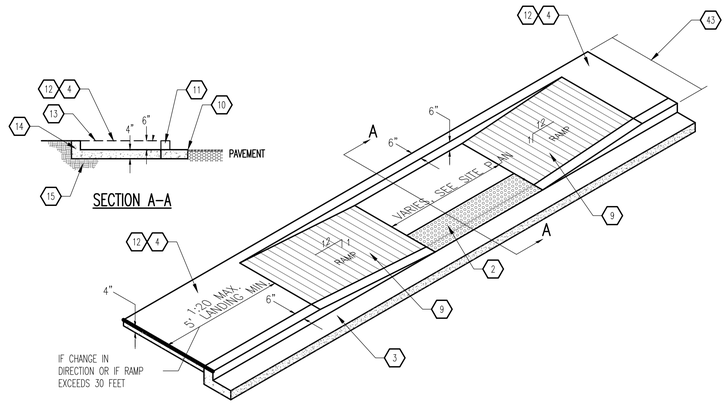
REV	DATE	BY	REVISION
6			
5			
4			
3			
2	24 MAY 2022	DTN	CABQ COMMENTS
1			

MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498

STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
28 Jul 2023

PROJECT TITLE: STARBUCKS – TRAMWAY
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123
PROJECT MANAGER: DEVIN NGUYEN
DRAWN BY: DTN
JOB NO.: 59-TRAMWAY
SHEET TITLE: SITE PLAN

DATE: 25 Jan 2023
SCALE: AS NOTED
sheet- AS101 of-

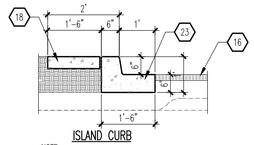


NOTE:

H.C RAMP SHALL NOT EXCEED 6', OR 8% SLOPE IN ANY DIRECTION, AND SHALL CONFORM W/ ALL APPLICABLE ANSI REQ'S. G.C SHALL VERIFY CONFORMANCE W/ ALL APPLICABLE ANSI REQ'S

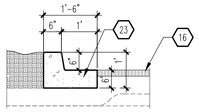
C1 TAPERED RAMP

SCALE: NTS



ISLAND CURB

NOTE:
RE: SITEPLAN FOR LOCATIONS OF PAVEMENT SECTION
DESIGN PER THE GEOTECHNICAL INVESTIGATION
FOLLOW COA STANDARD DRAWING #2415B

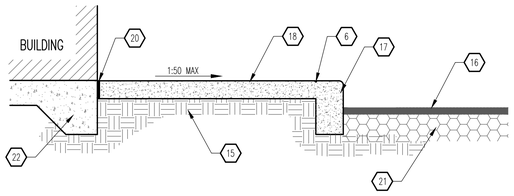


CURB & GUTTER

NOTE:
RE: SITE PLAN FOR LOCATIONS OF PAVEMENT SECTION
DESIGN PER THE GEOTECHNICAL INVESTIGATION
FOLLOW COA STANDARD DRAWING #2415B

B1 CURB & GUTTER

SCALE: 1/2" = 1'-0"

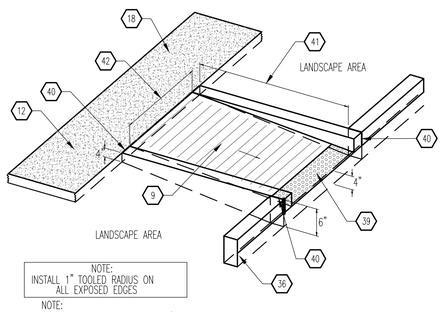


NOTE:

1. CONTRACTION JOINTS AT 5'-0" OC TOOLED ¼" (5/16") WIDE, 1" OR MAXIMUM D/4 (DEEP) WHICHEVER IS GREATER EXPANSION JOINTS AT 20' MAXIMUM AND ALL P.C.s, UNLESS APPROVED OR INDICATED OTHERWISE ON PLAN VIEW JOINT PATTERN.
2. ALIGN CURB AND SIDEWALK JOINTS AT ALL TIMES.

B2 TURNDOWN SIDEWALK SECTION

SCALE: 3/4" = 1'-0"

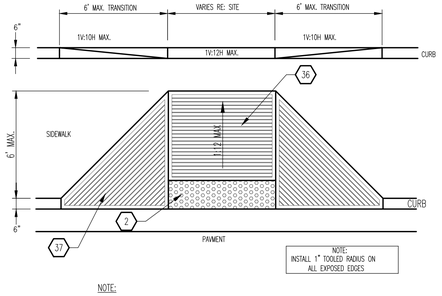


NOTE:
INSTALL 1" TOOLED RADIUS ON ALL EXPOSED EDGES

NOTE:
H.C RAMP SHALL NOT EXCEED 6', OR 8% SLOPE IN ANY DIRECTION, AND SHALL CONFORM W/ ALL APPLICABLE ANSI REQ'S. G.C SHALL VERIFY CONFORMANCE W/ ALL APPLICABLE ANSI REQ'S

A1 CURBED RAMP

SCALE: 3/4" = 1'-0"

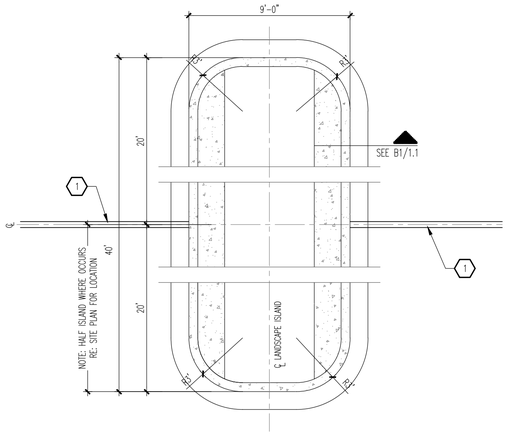


NOTE:

HANDICAP RAMPS SHALL NOT EXCEED 6', OR 8% SLOPE IN ANY DIRECTION, AND SHALL CONFORM WITH ALL APPLICABLE ANSI REQUIREMENTS. GC SHALL VERIFY CONFORMANCE WITH ALL APPLICABLE ANSI REQUIREMENT.

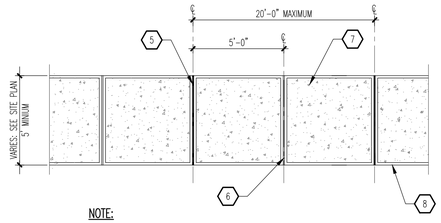
A3 END ISLAND ADA RAMP

SCALE: 1/4" = 1'-0"



C3 TYPICAL ISLAND

SCALE: 1/4" = 1'-0"

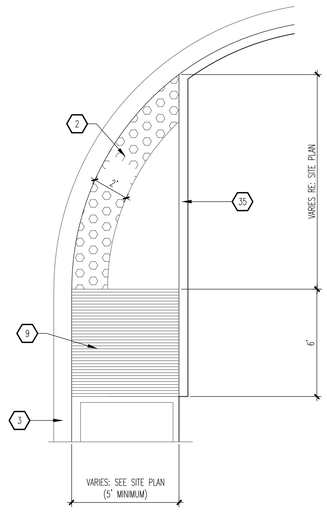


NOTE:

FOLLOW COA STANDARD DRAWING #2430.

B3 TYPICAL SIDEWALK

SCALE: 3/4" = 1'-0"

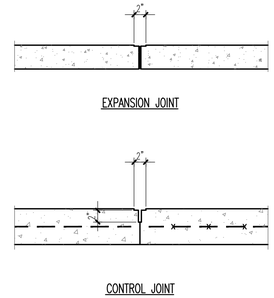


NOTE:

FOLLOW COA STANDARD DRAWING #2443.

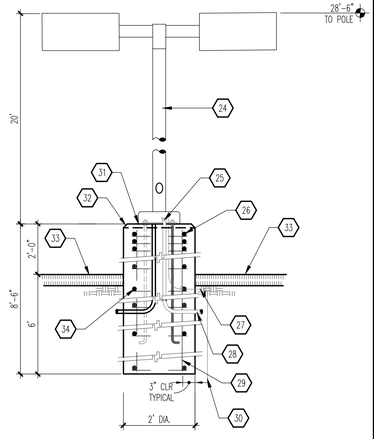
A4 END ISLAND ADA RAMP

SCALE: 1/4" = 1'-0"



B5 EXPANSION/CONTROL JOINT

SCALE: 1" = 1'-0"



NOTE:

1. MANUFACTURER SHALL WARRANT THAT THE COMPLETE ASSEMBLY FIXTURES, POLE, BASE, SHALL WITHSTAND MINIMUM 90 MPH SUSTAINED WIND LOAD OR AS REQUIRED BY LOCAL AGENCY HAVING JURISDICTION; WHICHEVER IS MORE RESTRICTIVE.
2. CONTRACTOR SHALL VERIFY THAT ALL CONTRACTOR INSTALLED LIGHTS COMPLY WITH LOCAL CODES REQUIREMENTS.
3. SHOULD EXISTING POLE HEIGHT TO BE MATCHED EXCEED 22'. GENERAL CONTRACTOR SHALL VERIFY WITH ARCHITECT ADEQUACY OF DESIGN SHOWN PRIOR TO INSTALL.

A5 LIGHT POLE

SCALE: 1/2" = 1'-0"

GENERAL NOTES

A. "G" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.

KEYED NOTES

1. 4" THICK PAVEMENT MARKING; WHITE IN COLOR.
2. 2' WIDE ADA APPROVED TRUNCATED DOME STRIP.
3. CURB AND GUTTER: SEE B1/A1.1.
4. CONCRETE SIDEWALK: SEE B3/A1.1.
5. CONCRETE EXPANSION JOINT: SEE B5/A1.1.
6. CONCRETE CONTROL JOINT: SEE B5/A1.1.
7. BROOM FINISH CONCRETE SURFACE AREA INSIDE OF TOOLED EDGE TO CREATE PICTURE FRAME EFFECT.
8. SMOOTH TOOLED FINISH AROUND EDGES, TYPICAL.
9. MONOLITHIC CONCRETE HANDICAP RAMP INTEGRALLY COLORED DAVIS COLORS #160 "BRICK RED"; SMOOTH TEXTURE FINISH WITH ¼" DEEP x ¼" WIDE GROOVES AT 2" OC.
10. CONCRETE FLUSH WITH PAVEMENT.
11. CURB, BEYOND.
12. 2% CROSS SLOPE, MAXIMUM.
13. RAMP, BEYOND.
14. RETAINING CURB.
15. SUBGRADE: COMPACTED AS SPECIFIED.
16. PAVEMENT AS SPECIFIED.
17. CONCRETE TURNDOWN CURB.
18. 4" THICK CONCRETE SIDEWALK.
19. SIDEWALK ELEVATIONS VARY – HOLD FLUSH WITH FINISHED FLOOR AT ENTRANCE WAYS. PLANTING AREAS MAY EXIST BETWEEN THE BUILDING AND THE BACK-OF-SIDEWALK (SEE SITE PLAN). EXPANSION JOINTS DO NOT APPLY TO SIDEWALK SECTION ADJACENT TO PLANTING AREAS.
20. ½" EXPANSION JOINT MATERIAL.
21. STABILIZED AGGREGATE BASE COARSE, AS SPECIFIED.
22. STRUCTURAL FOUNDATION SYSTEM: SEE STRUCTURAL FOUNDATION PLAN.
23. CONCRETE CURB AND GUTTER.
24. SQUARE, STRAIGHT, STEEL ANCHOR BASE POLE. POLE & BRACKETS SHALL BE FACTORY FINISHED, PAINTED SEMI GLOSS BLACK WRAP POLES FOR SHIPPING. PROVIDE 1 QT. MATCHING PAINT TO TOUCH ANY SCRATCHES ON POLES ON JOB. SEE LIGHT FIXTURE SCHEDULE FOR SPECIFICATIONS.
25. CONNECT GROUND WIRE TO REINFORCING BARS.
26. (3) #3 TIES AT ½" OC IN TOP 5".
27. #6 BARE COPPER GROUND WIRE.
28. CONDUIT AS INDICATED ON ELECTRICAL PLAN.
29. (6) #6 BARS VERTICAL.
30. 8'-0" COPPER WELD GROUND ROD BY ELECTRICAL CONTRACTOR.
31. NON-SHRINK GROUT.
32. 2" CHAMFER.
33. FINISHED GRADE.
34. #3 TIES @ 12" OC.
35. 6" RETAINING CURB.
36. MONOLITHIC INTEGRALLY COLORED CONCRETE HANDICAP RAMP (4,000 PSI): PROVIDE ARCHITECT WITH SAMPLE COLOR FOR APPROVAL.
37. PROVIDE ¼" DEEP BY ¼" WIDE GROOVES @ 2" OC. EXTEND THE PULL WIDTH AND DEPTH OF THE RAMP.
38. 6" STANDUP CURB OR CURB AND GUTTER AS APPLICABLE (SEE SITE PLAN).
39. PROVIDE ADA APPROVED TRUNCATED STRIP AT 2' WIDTH.
40. EXPANSION JOINT.
41. WIDTH VARIES (6' MINIMUM): SEE SITE PLAN.
42. PROVIDE A 5 SF LAND AT TOP OF RAMP FOR CHANGE IN DIRECTION.
43. WIDTH VARIES: SEE SITE PLAN (MINIMUM 5' WIDTH).

REV	DATE	BY	REVISION
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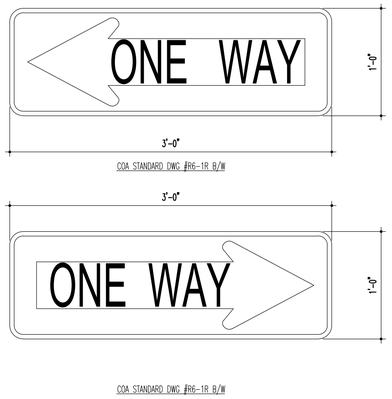
MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498

STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
05 JULY 2023

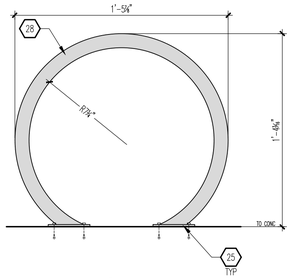
PROJECT TITLE
COFFEE SHOP with DRIVE-THRU
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

DRAWN BY: DTN
JOB NO. CS-TRAMWAY
PROJECT MANAGER DEVIN NGUYEN
SHEET TITLE SITE DETAILS

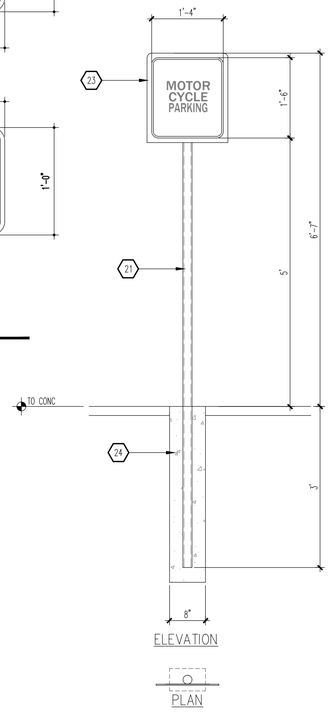
DATE: 05 Jul 2023
SCALE: AS NOTED
sheet- A1.1 of-



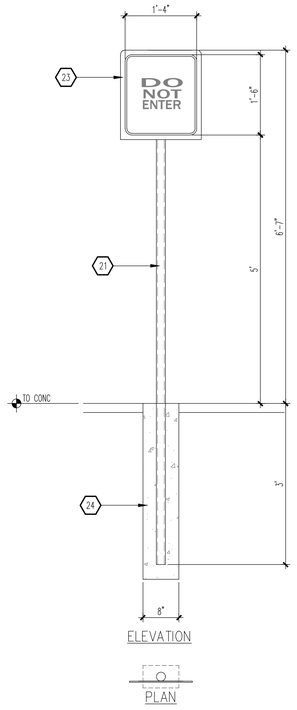
C1 SIGNAGE - 'ONE WAY'
SCALE: 1-1/2" = 1'-0"



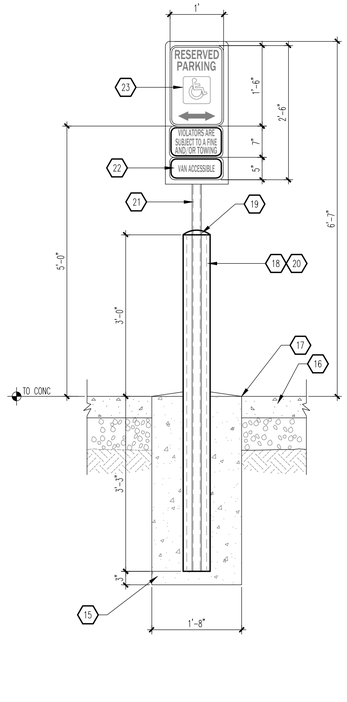
B1 BIKE RACK
SCALE: 1/2" = 1'-0"



B2 MICS. SIGNAGE
SCALE: 3/4" = 1'-0"



B3 MISC. SIGNAGE
SCALE: 3/4" = 1'-0"



B4 MISC. SIGNAGE
SCALE: 3/4" = 1'-0"

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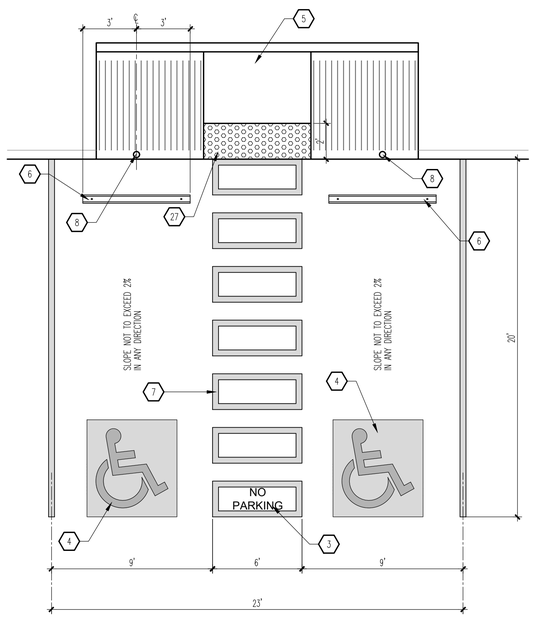
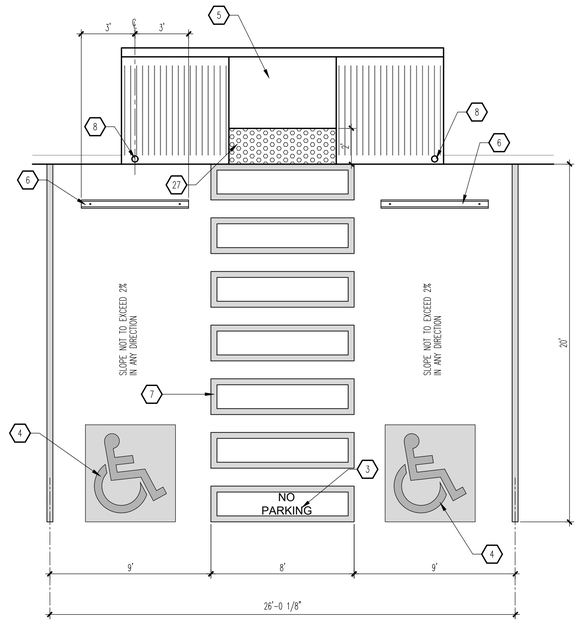


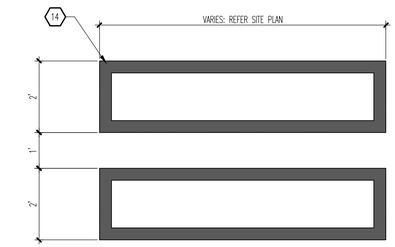
A1 HC PARKING PLAN
SCALE: 1/4" = 1'-0"

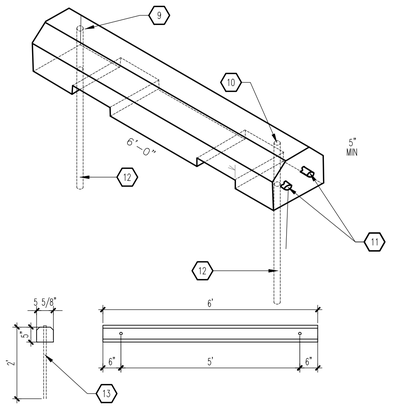
NOTE:



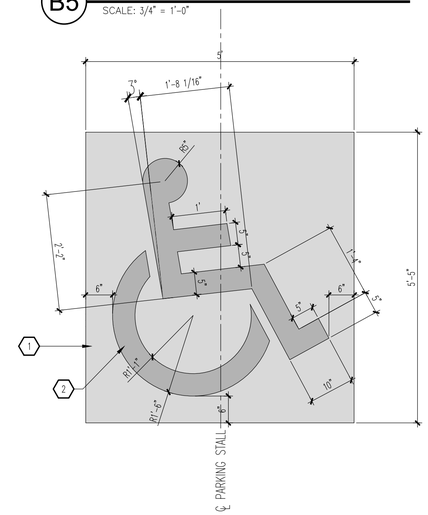
A3 HC PARKING PLAN (VAN ACCESIBLE)
SCALE: 1/4" = 1'-0"

C5 WALKWAY PAVEMENT MARKING
SCALE: 1/2" = 1'-0"





B5 WHEEL STOP
SCALE: 3/4" = 1'-0"



A5 HANDICAP SIGNAGE
SCALE: 3/4" = 1'-0"

GENERAL NOTES

A. "C" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.

KEYED NOTES

1. PAINT BLUE.
2. PAINT WHITE.
3. 12" HIGH BY 4" WIDE "NO PARKING" MARKING - WHITE PAINT.
4. HANDICAP PAVEMENT MARKING: SEE A5/A1.2.
5. TAPERED RAMP: SEE C2/A1.1.
6. WHEEL STOP: SEE B5/1.2.
7. WALKWAY PAVEMENT MARKING: SEE C5/A1.2.
8. HANDICAP POST SIGNAGE: SEE B4/A1.2.
9. TOP OF REINFORCING BAR FLUSH WITH TOP OF CONCRETE.
10. ⅞" DIAMETER HOLE.
11. (2) #4 BARS CONTINUOUS.
12. ¾" REINFORCING BAR EMBEDDED 24" INTO SUBGRADE.
13. #5 REINFORCING BAR.
14. 4" WIDE WHITE PAINTED STRIPING.
15. 3,500 PSI CONCRETE FOUNDATION.
16. FINISHED SURFACE.
17. BITUMINOUS JOINT FILLER (CONCRETE PAVEMENT ONLY).
18. 6" DIAMETER STEEL PIPE FILLED WITH CONCRETE.
19. ROUND CONCRETE TOP.
20. PAINT SAFETY YELLOW.
21. 2" OD GALVANIZED STEEL SIGN POST.
22. "VAN ACCESSIBLE" SIGN WHERE INDICATED ON SITE PLAN.
23. ⅜" STEEL PLATE WITH CONTINUOUS WELD ALONG INTERSECTION OF PIPE POST AND PLATE.
24. CONCRETE FOUNDATION.
25. 7" DIAMETER x ⅜" THICK STEEL PLATE: BLACK POWDER COAT.
26. 2 ⅜" STANDARD DUTY PIPE CENTER SUPPORT.
27. ADA APPROVED TRUNCATED DOME STRIP.
28. 2 ⅜" OUTSIDE DIAMETER (OD) STEEL TUBING: BLACK POWDER COAT.

REV	DATE	BY	REVISION
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MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
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STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
05 JULY 2023

PROJECT TITLE: COFFEE SHOP with DRIVE-THRU
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123
PROJECT MANAGER: DEVIN NGUYEN
JOB NO. 05-TRAMWAY
DRAWN BY: DTN
SHEET TITLE: SITE DETAILS

DATE: 05 Jul 2023
SCALE: AS NOTED
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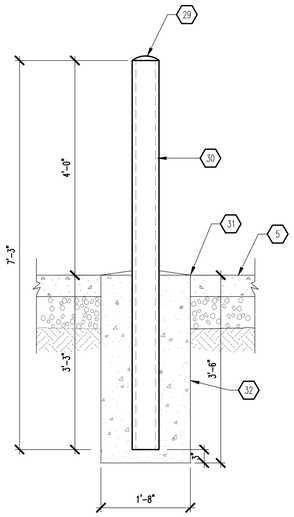
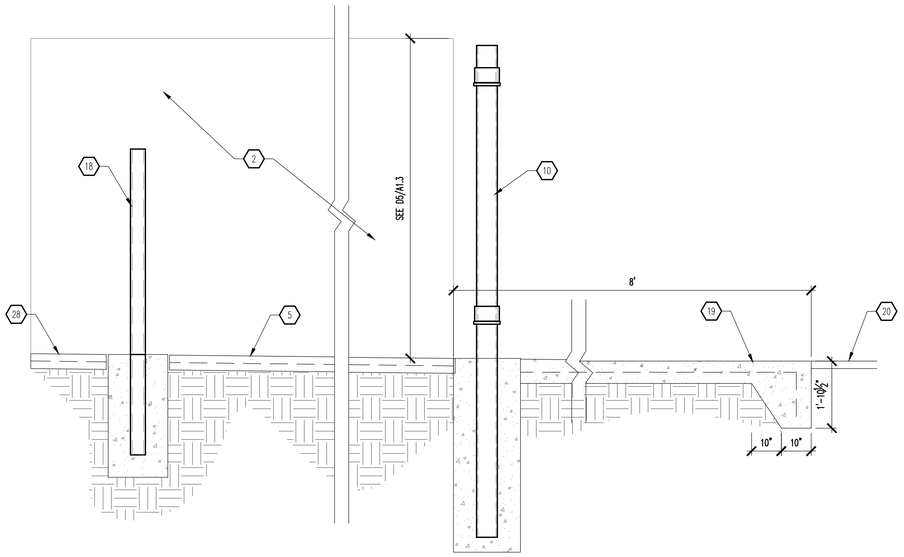


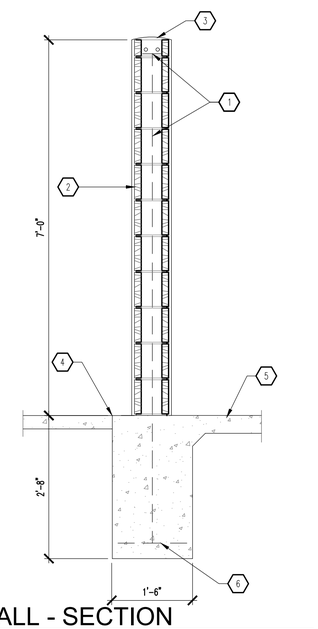
D1 BOLLARD - SECTION

SCALE: 3/4" = 1'-0"



D2 REFUSE ENCLOSURE - SECTION

SCALE: 1/2" = 1'-0"



D5 WALL - SECTION

SCALE: 3/4" = 1'-0"

GENERAL NOTES

A. "G" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.
B. INDICATED DIMENSIONS ARE TO FACE OF FINISH; UNLESS OTHERWISE NOTED.

KEYED NOTES

1. (2) #5 BARS @ TOP KNOCK-OUT BLOCK BOND BEAM, CONTINUOUS: #5 BRAS @ 32" OC VERTICAL GROUT REINFORCED CELLS, DURAWALL @ 16" OC HORIZONTAL.
2. 8" CMU WALL WITH 2-COAT SYNTHETIC STUCCO SYSTEM. COLOR TO MATCH BUILDING "STUCCO 1" COLOR; REFER TO EXTERIOR ELEVATIONS ON SHEET A201.
3. SLOPE STUCCO CAP.
4. ½" EXPANSION JOINT MATERIAL.
5. 6" SEALED CONCRETE SLAB AT 4,000 PSI, ¾" AGGREGATE WITH 6x6 – 10x10 WWM.
6. (4) #4 BARS CONTINUOUS @ BOTTOM OF FOOTING #4 @ 16" OC ACROSS BOTTOM OF FOOTING.
7. 3 ½"x3 ½"x⅜" STEEL ANGLE-WELD CORNERS (TYPICAL OF 4 SIDES).
8. METAL DECKING, 18ga WITH SHEET METAL SCREWS @ 9" OC TOP, BOTTOM AND SIDES. PAINT FINISH, SHERWIN WILLIAMS #SW6143 BASKET BEIGE.
9. 3 ½" x 3 ½" x ⅜" STEEL ANGLE-WELD FLUSH WITH METAL DECKING AT EACH END.
10. 5" OD HEAVY DUTY PIPE POST.
11. ¾" DIAMETER CANE BOLT: PROVIDE CATCH TO HOLD IN POSITION WHEN REQUIRED TO ELIMINATE DRAG.
12. STEEL TUBING WELD TO ANGLE AT TOP TO FIT STEEL ROD.
13. ¾" DIAMETER STEEL ROD TAPER END AND WELD 6" HANDLE.
14. ¾" SQUARE STOCK WRAP AROUND POST AT EACH LOCATION.
15. 6" HEAVY DUTY PIPE SLEEVE 4" IN WIDTH.
16. ½" x 3 ½" FLAT BAR STOCK OVER 6" SLEEVE.
17. 3 ½" x 3 ½" x ⅜" ANGLE OVER ½" FLAT BAR.
18. BOLLARD: SEE D1/A1.3.
19. 6" CONCRETE APRON AT 4,000 PSI ¾" AGGREGATE WITH 6x6 – 10x10 WWM WITH TURNDOWN EDGE.
20. ASPHALT PAVING.
21. STRUCTURAL FOOTING: SEE 7/S201.
22. ⅝" THICK PLATE: SEE 7/S201.
23. TUBE STEEL (TS): SEE 7/S201.
24. METAL CHANNEL.
25. 2 ½" METAL STUD FRAMING, 18ga.
26. 6" T&G SIDING: LONGBOARD PRODUCTS, 6" V-GROOVE T&G SIDING; DARK KNOTTY PINE; OR APPROVED EQUAL. CONTRACTOR TO MATCH APPROVED SOFFIT PANEL. SEE RCP ON SHEET A111.
27. BOTTOM TRIM WITH WEEP HOLE BY SIDING MANUFACTURER.
28. FINISHED GRADE.
29. ROUND CONCRETE TOP.
30. 6" STEEL PIPE FILLED WITH CONCRETE. PAINT FINISH – SAFETY YELLOW.
31. BITUMINOUS JOINT FILLER (AT CONCRETE PAVEMENT ONLY).
32. CONCRETE FOOTING.
33. DASHED LINE INDICATES SHRUB: SEE LANDSCAPING PLAN ON SHEET LS101.
34. ARTIFICIAL TURF: SMART TURF, CYPRESS POINT 70oz WITH MICROBAN TECHNOLOGY; OR APPROVED EQUAL.
35. 3 LBS INFILL.
36. 2" CUSHION PAD BY ARTIFICIAL TURF MANUFACTURER.
37. 4" COMPACTED SUBGRADE.
38. WEED BARRIER.
39. COMPACTED SOIL UNDERNEATH.
40. PAINT SOLID WHITE.
41. PROVIDE ¼" PER FOOT SLOPE TO FLOOR DRAIN.
42. FLOOR DRAIN: SEE UTILITY PLAN ON SHEET C2.1.
43. LOCKABLE HOSE BIB: REFER TO SITE UTILITY PLAN ON SHEET C2.1 FOR ADDITIONAL INFORMATION.
44. 2" ASPHALT CONCRETE OVER 6" BASE COURSE PER GEOTECH REPORT RECOMMENDATION.
45. 3" ASPHALT CONCRETE OVER 6" BASE COURSE PER GEOTECH REPORT RECOMMENDATION.

REV	DATE	BY	REVISION
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MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
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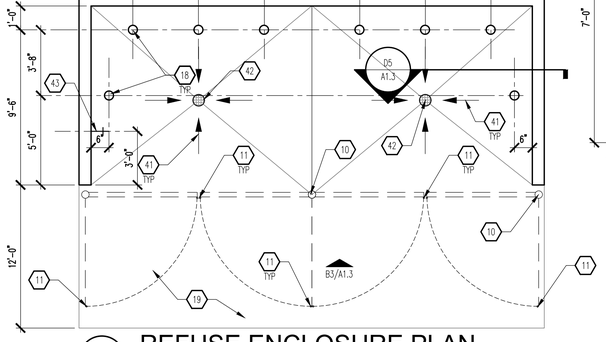
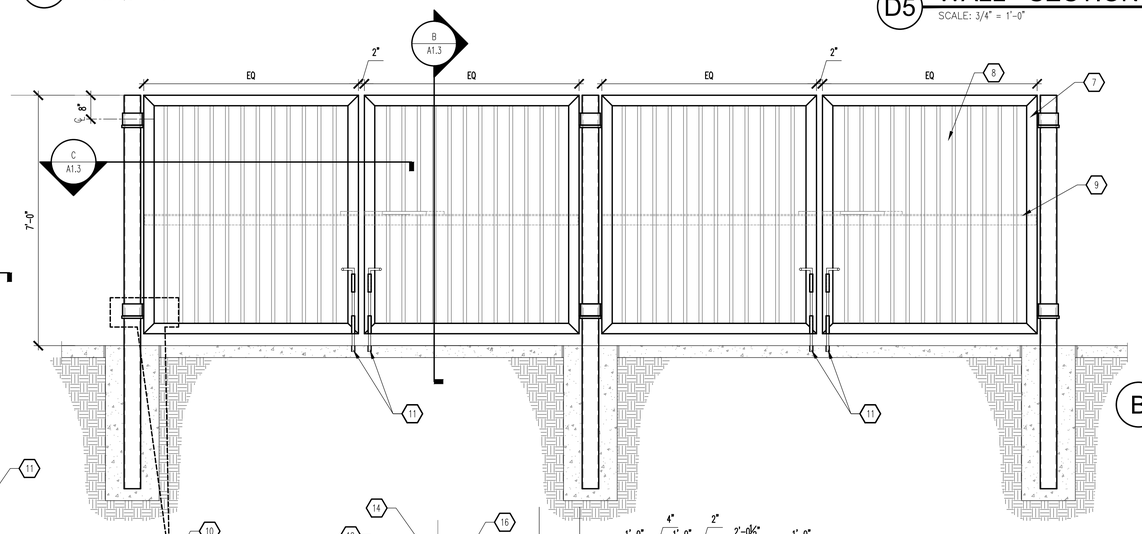


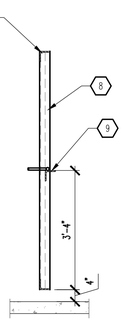
B2 REFUSE ENCLOSURE PLAN

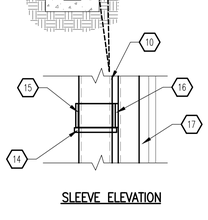
SCALE: 1/4" = 1'-0"



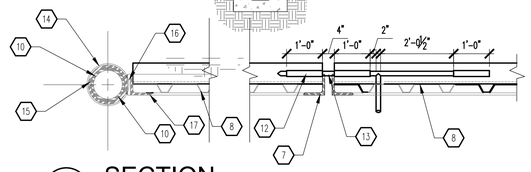
B SECTION

SCALE: 1/2" = 1'-0"





SLEEVE ELEVATION

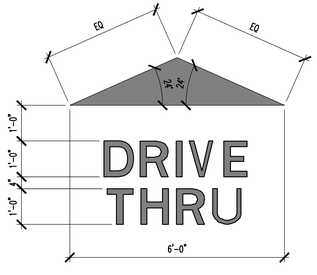


C SECTION

SCALE: 1/2" = 1'-0"

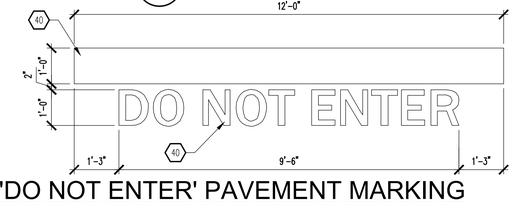
B3 REFUSE ENCLOSURE ELEVATION

SCALE: 1/2" = 1'-0"



B1 PAVEMENT MARKING

SCALE: 1/2" = 1'-0"



A1 'DO NOT ENTER' PAVEMENT MARKING

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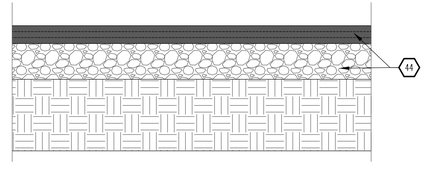
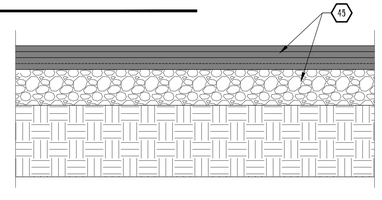


A3 LIGHT DUTY ASPHALT

SCALE: 1" = 1'-0"



A5 HEAVY DUTY ASPHALT

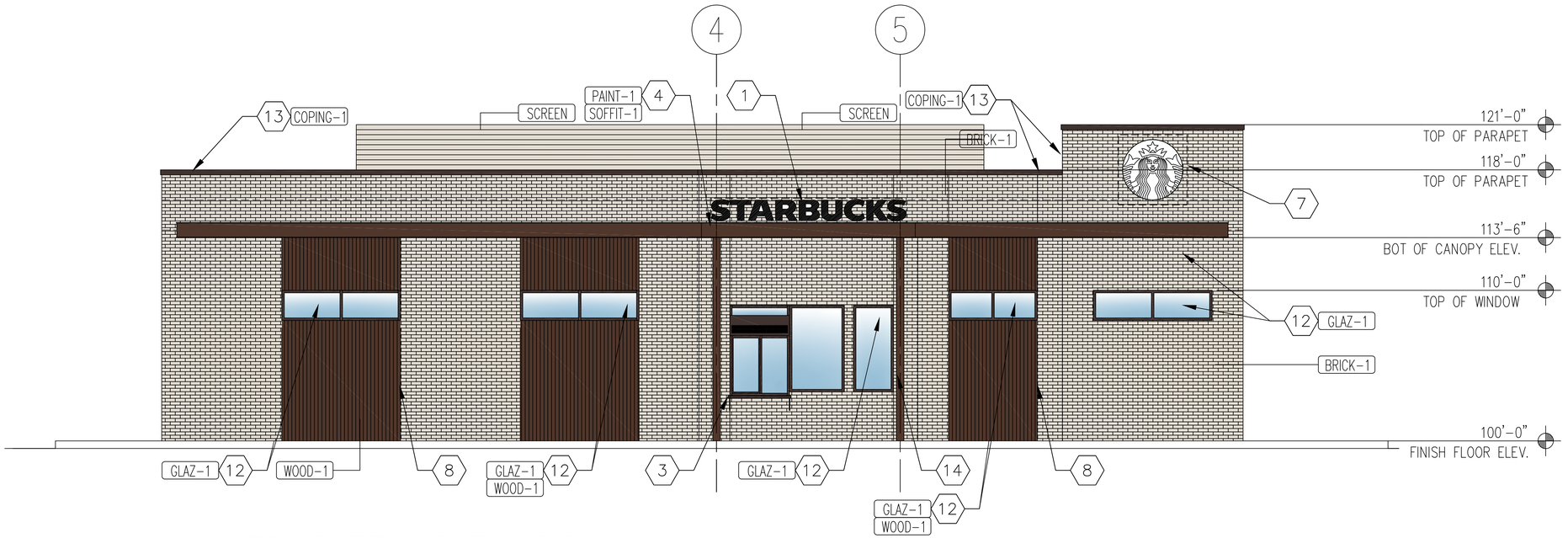
SCALE: 1" = 1'-0"

STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
05 JULY 2023

PROJECT TITLE: COFFEE SHOP with DRIVE-THRU
200 TRAMWAY BLVD, NE
ALBUQUERQUE, NEW MEXICO 87123

PROJECT MANAGER: DEVIN NGUYEN
DRAWN BY: DTN
JOB NO. CS-TRAMWAY
SHEET TITLE: SITE DETAILS

DATE: 05 Jul 2023
SCALE: AS NOTED
sheet- A1.3 of-



1 SOUTHERN ELEVATION

1'=1/4"'

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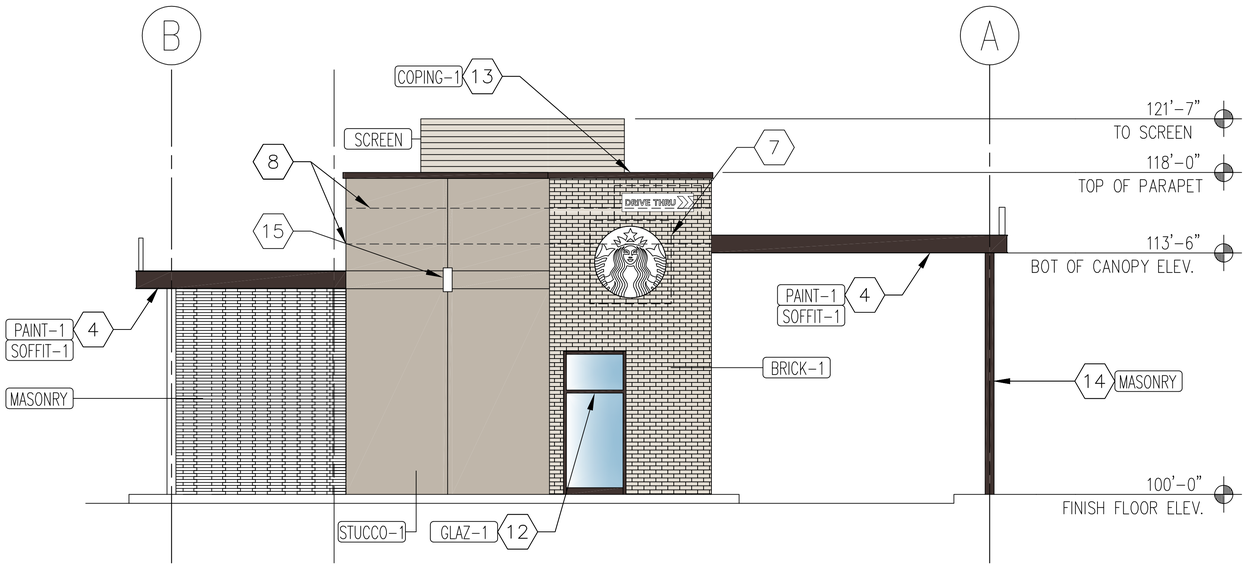

2 WESTERN ELEVATION

1'=1/4"'

5 0 2.5 5 10 20

GENERAL NOTES

A. "G" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.
B. INDICATED DIMENSIONS ARE TO FACE OF FINISH; UNLESS OTHERWISE NOTED.
C. INDICATED ELEVATIONS ARE BASED ON A FINISHED FLOOR OF 100'-0".

KEYED NOTES

1. SIGNAGE SHALL BE PROVIDED AND INSTALLED BY TENANT UNDER A SEPARATE PERMIT; CONTRACTOR TO PROVIDE ELECTRICAL POWER UNDER THIS CONTRACT.
2. SURFACE MOUNTED LIGHT FIXTURE: SEE ELECTRICAL PLAN ON SHEET E101
3. DRIVE-THRU SHELF.
4. COVERED CANOPY.
5. SCHEDULED DOOR AND FRAME: SEE FLOOR PLAN ON SHEET A101.
6. LEADER HEAD AND DOWNSPOUT.
7. DASHED LINE INDICATES ¾" FIRE RETARDANT PLYWOOD BACKING AT SIGNAGE LOCATION.
8. ALUMINUM STUCCO REVEAL: SEE XXX/AXXX.
9. BRICK VENEER CONTROL JOINT: SEE XXX/AXX.
10. HEATED AIR CURTAIN: AA300.
11. EXPANSION JOINT: SEE XX/AXXX.
12. SCHEDULED STOREFRONT: SEE FLOOR PLAN ON SHEET A101 FOR ADDITIONAL INFORMATION.
13. GALVANIZED METAL COPING.
14. DASHED LINE INDICATES MASONRY SCREEN IN FRONT.
15. SURFACE MOUNT DOWNWARD FOCUSED LIGHT FIXTURE.

SIGNAGE DATA TABLE

SIGNAGE LOCATION	REQUIREMENT	PROPOSED
WALL SIGN WEST ELEVATION 'DRIVE-THRU'	15% OF FACADE AREA (528 SF) INCLUSIVE OF DOORS AND WINDOWS: 79 SF ALLOWED	4 SF
WALL SIGN WEST ELEVATION: ROUND SIGNAGE	15% OF FACADE AREA (528 SF) INCLUSIVE OF DOORS AND WINDOWS: 79 SF ALLOWED	12.5 SF
WALL SIGN SOUTH ELEVATION: 'STARBUCKS'	15% OF FACADE AREA (1,454 SF) INCLUSIVE OF DOORS AND WINDOWS: 218 SF ALLOWED	21 SF
WALL SIGN SOUTH ELEVATION: ROUND SIGNAGE	15% OF FACADE AREA (1,454 SF) INCLUSIVE OF DOORS AND WINDOWS: 218 SF ALLOWED	4 SF

*Signs will be permitted separately and the colors and material will be determined at the time of sign permit.

EXTERIOR MATERIALS

STUCCO-1	2 COAT EXTERIOR STUCCO SYSTEM COLOR – SHERWIN WILLIAMS SW#7030 ANEW GRAY, SANDED TEXTURE
BRICK-1	BRICK VENEER MUTUAL MATERIALS – PEWTER MISSION, RUNNING BOND WITH SM100 GRAY COLOR MORTAR
MASONRY	MASONRY SCREEN MUTUAL MATERIALS – PEWTER MISSION, RUNNING BOND WITH SM100 GRAY COLOR MORTAR
PAINT-1	STEEL CANOPY STRUCTURE COLOR: SHERWIN WILLIAMS SW#7033 BRAIN STORM BRONZE
GLAZ-1	ALUMINUM STOREFRONT SYSTEM WITH CLEAR LOW-E COLOR: DARK BRONZE
WOOD-1	WOOD CLADDING NICHIHA FIBER CEMENT – VINTAGEWOOD– CEDER
COPING-1	GALVANIZED METAL COPING COLOR: SHERWIN WILLIAMS SW#7030 ANEW GRAY
SCREEN	1–1/2" METAL B–DECK COLOR – SHERWIN WILLIAMS SW#7030 ANEW GRAY, SANDED TEXTURE
SOFFIT-1	WOOD CLADDING NICHIHA FIBER CEMENT – VINTAGEWOOD– CEDAR

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STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
28 Jul 2023

PROJECT TITLE
STARBUCKS – TRAMWAY
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

PROJECT MANAGER
DEVIN NGUYEN

DRAWN BY:
DTN

JOB NO.
SB–TRAMWAY

SHEET TITLE
EXTERIOR ELEVATIONS

DATE:
1/14/2023

SCALE:
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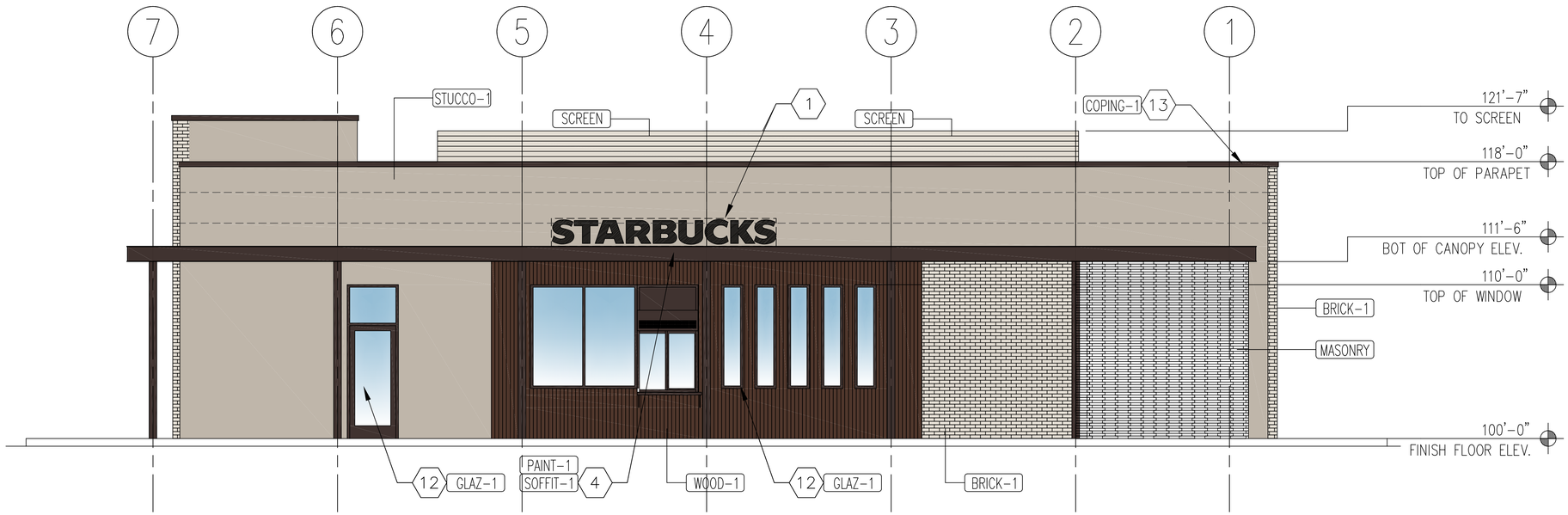

3 NORTHERN ELEVATION

1'=1/4"'

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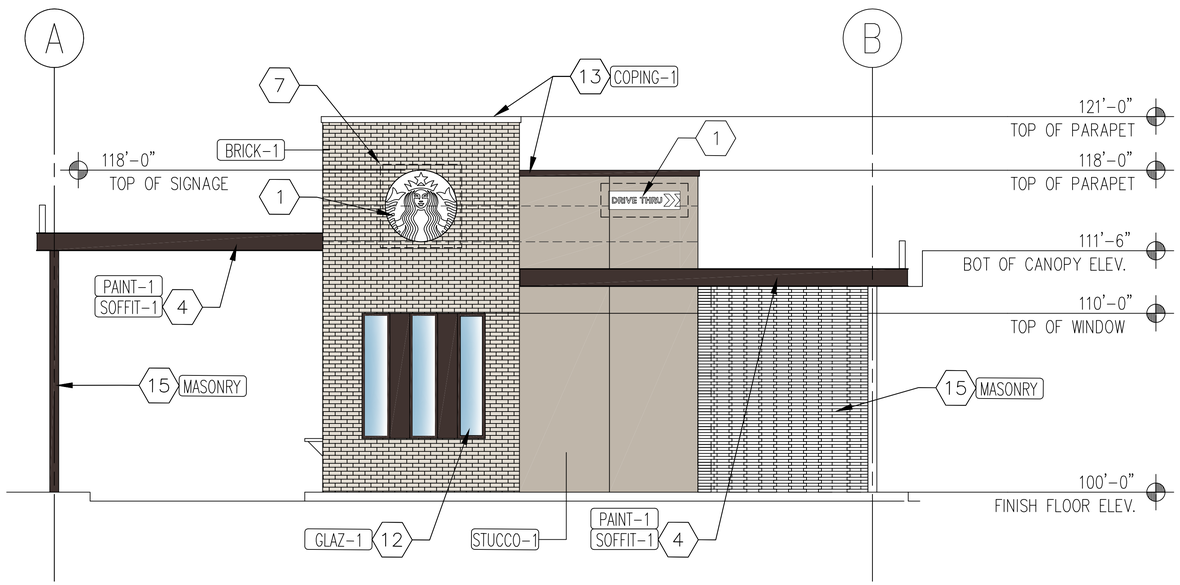

4 EASTERN ELEVATION

1'=1/4"'

5 0 2.5 5 10 20

GENERAL NOTES

A. "C" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.
B. INDICATED DIMENSIONS ARE TO FACE OF FINISH; UNLESS OTHERWISE NOTED.
C. INDICATED ELEVATIONS ARE BASED ON A FINISHED FLOOR OF 100'-0".

KEYED NOTES

1. SIGNAGE SHALL BE PROVIDED AND INSTALLED BY TENANT UNDER A SEPARATE PERMIT; CONTRACTOR TO PROVIDE ELECTRICAL POWER UNDER THIS CONTRACT.
2. SURFACE MOUNTED LIGHT FIXTURE: SEE ELECTRICAL PLAN ON SHEET E101
3. DRIVE-THRU SHELF.
4. COVERED CANOPY.
5. SCHEDULED DOOR AND FRAME: SEE FLOOR PLAN ON SHEET A101.
6. LEADER HEAD AND DOWNSPOUT.
7. DASHED LINE INDICATES ⅝" FIRE RETARDANT PLYWOOD BACKING AT SIGNAGE LOCATION.
8. ALUMINUM STUCCO REVEAL: SEE XXX/AXXX.
9. BRICK VENEER CONTROL JOINT: SEE XXX/AXX.
10. HEATED AIR CURTAIN: AA300.
11. EXPANSION JOINT: SEE XX/AXXX.
12. SCHEDULED STOREFRONT: SEE FLOOR PLAN ON SHEET A101 FOR ADDITIONAL INFORMATION.
13. GALVANIZED METAL COPING.
14. DASHED LINE INDICATES MASONRY SCREEN IN FRONT.
15. MASONRY SCREEN WALL AREA.

SIGNAGE DATA TABLE

SIGNAGE LOCATION	REQUIREMENT	PROPOSED
WALL SIGN EAST ELEVATION 'DRIVE-THRU'	15% OF FACADE AREA (537 SF) INCLUSIVE OF DOORS AND WINDOWS: 81 SF ALLOWED	4 SF
WALL SIGN EAST ELEVATION: ROUND SIGNAGE	15% OF FACADE AREA (537 SF) INCLUSIVE OF DOORS AND WINDOWS: 81 SF ALLOWED	12.5 SF
WALL SIGN NORTH ELEVATION: 'STARBUCKS'	15% OF FACADE AREA (1,415 SF) INCLUSIVE OF DOORS AND WINDOWS: 212 SF ALLOWED	21 SF

*Signs will be permitted separately and the colors and material will be determined at the time of sign permit.

EXTERIOR MATERIALS

STUCCO-1	2 COAT EXTERIOR STUCCO SYSTEM COLOR - SHERWIN WILLIAMS SW7030 ANEW GRAY, SANDED TEXTURE
BRICK-1	BRICK VENEER MUTUAL MATERIALS - PEWTER MISSION, RUNNING BOND WITH SM100 GRAY COLOR MORTAR
MASONRY	MASONRY SCREEN MUTUAL MATERIALS - PEWTER MISSION, RUNNING BOND WITH SM100 GRAY COLOR MORTAR
PAINT-1	STEEL CANOPY STRUCTURE COLOR: SHERWIN WILLIAMS SW7033 BRAIN STORM BRONZE
GLAZ-1	ALUMINUM STOREFRONT SYSTEM WITH CLEAR LOW-E COLOR: DARK BRONZE
WOOD-1	WOOD CLADDING NICHIHA FIBER CEMENT - VINTAGEWOOD- CEDER
COPING-1	GALVANIZED METAL COPING COLOR: SHERWIN WILLIAMS SW7030 ANEW GRAY
SCREEN	1-1/2" METAL B-DECK COLOR - SHERWIN WILLIAMS SW7030 ANEW GRAY, SANDED TEXTURE
SOFFIT-1	WOOD CLADDING NICHIHA FIBER CEMENT - VINTAGEWOOD- CEDAR

REV	DATE	BY	REVISION
A6			
A5			
A4			
A3			
A2			
A1			

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STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
28 Jul 2023

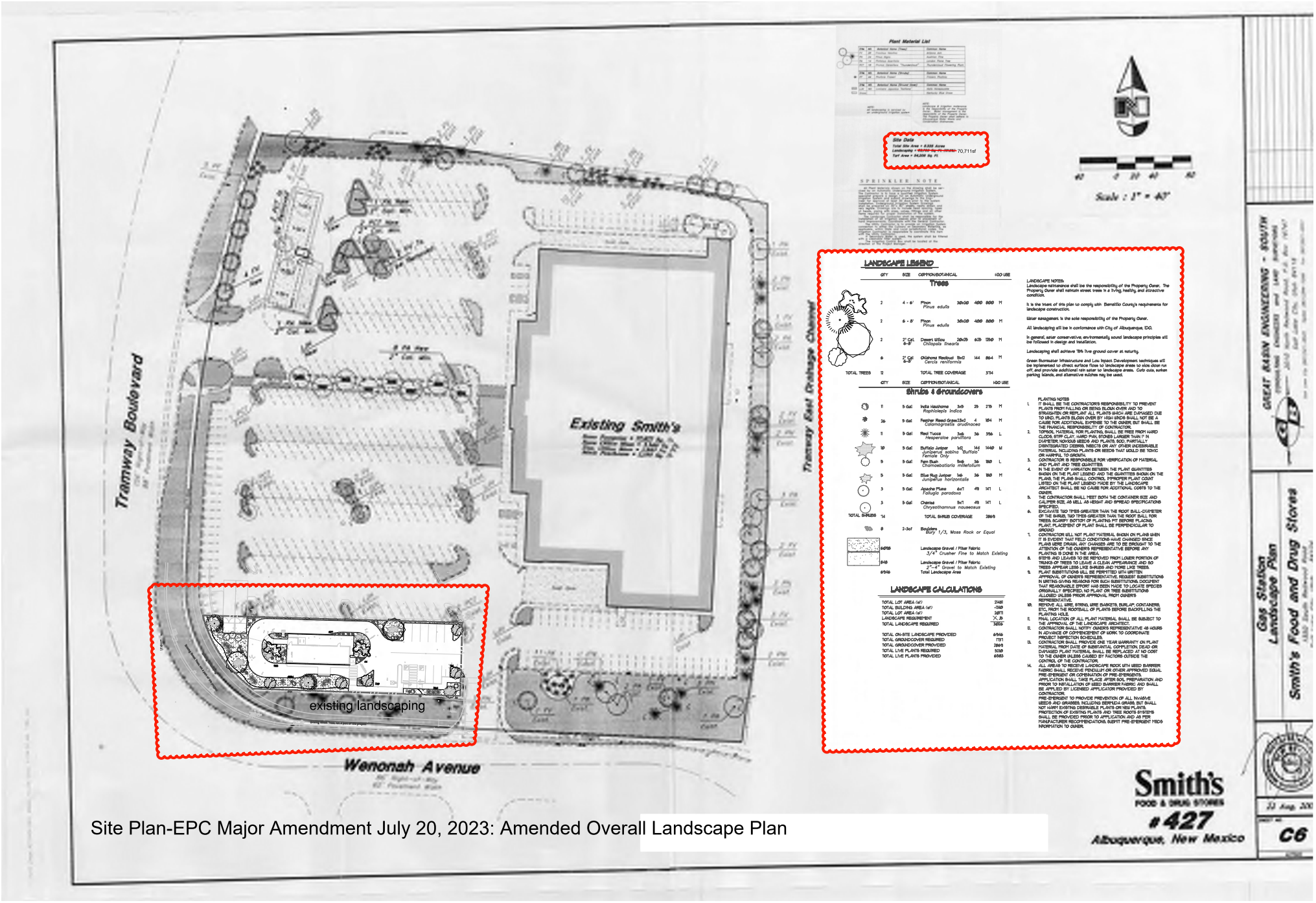
PROJECT TITLE: STARBUCKS - TRAMWAY
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

PROJECT MANAGER: DEVIN NGUYEN
DRAWN BY: DTN
JOB NO. SB-TRAMWAY

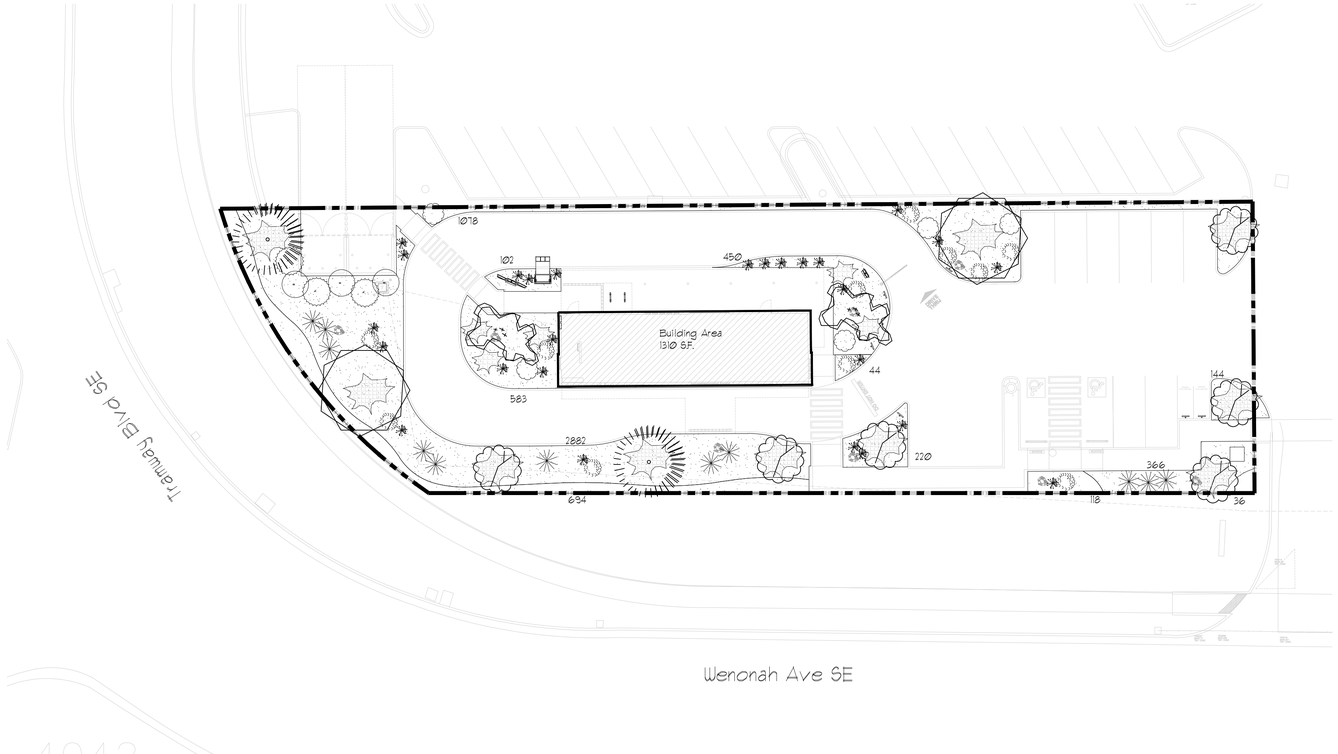
SHEET TITLE: EXTERIOR ELEVATIONS

DATE: 1/14/2023
SCALE: AS NOTED

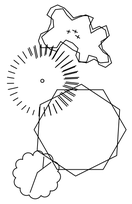
sheet- A201-B of-



Site Plan-EPC Major Amendment July 20, 2023: Amended Overall Landscape Plan



LANDSCAPE LEGEND



	QTY	SIZE	COMMON/BOTANICAL				H2O USE
Trees							
	2	4 - 6'	Pinon *Pinus edulis*	30x20	400	800	M
	2	6 - 8'	Pinon *Pinus edulis*	30x20	400	800	M
	2	2" Cal. 6-8'	Desert Willow *Chilopsis linearis*	20x25	625	1250	M
	6	2" Cal 6-8'	Oklahoma Redbud *Cercis reniformis*	15x12	144	864	M
TOTAL TREES	12		TOTAL TREE COVERAGE			3714	

	QTY	SIZE	COMMON/BOTANICAL				H2O USE
Shrubs & Groundcovers							
	11	5 Gal	India Hawthorne *Raphiolepis indica*	3x5	25	275	M
	26	5 Gal	Feather Reed Grass *Calamagrostis arudinacea*	2.5x2	4	104	M
	11	5 Gal	Red Yucca *Hesperaloe parviflora*	3x6	36	396	L
	10	5 Gal	Buffalo Juniper *Juniperus sabina "Buffalo"*	1x12	144	1440	M
	5	5 Gal	Fern Bush *Chamaebatiaria millefolium*	5x6	36	180	L
	5	5 Gal	Blue Rug Juniper *Juniperus horizontalis*	1x6	36	180	M
	3	5 Gal	Apache Plume *Fallugia paradoxa*	6x7	49	147	L
	3	5 Gal	Chamisa *Chrysothamnus nauseosus*	5x7	49	147	L
TOTAL SHRUBS	74		TOTAL SHRUB COVERAGE			2869	
	8	2-3cf	Boulders *Bury 1/3, Mass Rock or Equal*				
	5869		Landscape Gravel / Filter Fabric *3/4" Crusher Fine to Match Existing*				
	812		Landscape Gravel / Filter Fabric *2"-4" Gravel to Match Existing*				
	6681		Total Landscape Area				

LANDSCAPE CALCULATIONS

TOTAL LOT AREA (sf)	21253
TOTAL BUILDING AREA (sf)	-1310
TOTAL LOT AREA (sf)	19943
LANDSCAPE REQUIREMENT	X .15
TOTAL LANDSCAPE REQUIRED	2991
TOTAL ON-SITE LANDSCAPE PROVIDED	6681
TOTAL GROUNDCOVER REQUIRED	1670
TOTAL GROUNDCOVER PROVIDED	2869
TOTAL LIVE PLANTS REQUIRED	5011
TOTAL LIVE PLANTS PROVIDED	6583

LANDSCAPE NOTES:
Landscape maintenance shall be the responsibility of the Property Owner. The Property Owner shall maintain street trees in a living, healthy, and attractive condition.

It is the intent of this plan to comply with Bernalillo County's requirements for landscape construction.

Water management is the sole responsibility of the Property Owner.

All landscaping will be in conformance with Bernalillo County Zoning Code.

In general, water conservative, environmentally sound landscape principles will be followed in design and installation.

Landscaping shall achieve 75% live ground cover at maturity.

A minimum of 50% of the landscape area are low water use or precipitation supported plant material.

Green Stormwater Infrastructure and Low Impact Development techniques will be implemented to direct surface flows to landscape areas to slow down run off, and provide additional rain water to landscape areas. Curb cuts, sunken parking islands, and alternative mulches may be used.

PLANTING NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS FROM FALLING OR BEING BLOWN OVER AND TO STRAIGHTEN OR REPLANT ALL PLANTS WHICH ARE DAMAGED DUE TO WIND. PLANTS BLOWN OVER BY HIGH WINDS SHALL NOT BE A CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE FINANCIAL RESPONSIBILITY OF CONTRACTOR.
2. TOPSOIL MATERIAL FOR PLANTING, SHALL BE FREE FROM HARD CLODS, STIFF CLAY, HARD PAN, STONES LARGER THAN 1" IN DIAMETER, NOXIOUS WEEDS AND PLANTS, SOD, PARTIALLY DISINTEGRATED DEBRIS, INSECTS OR ANY OTHER UNDESIRABLE MATERIAL INCLUDING PLANTS OR SEEDS THAT WOULD BE TOXIC OR HARMFUL TO GROWTH.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF MATERIAL AND PLANT AND TREE QUANTITIES.
4. IN THE EVENT OF VARIATION BETWEEN THE PLANT QUANTITIES SHOWN ON THE PLANT LEGEND AND THE QUANTITIES SHOWN ON THE PLANS, THE PLANS SHALL CONTROL. IMPROPER PLANT COUNT LISTED ON THE PLANT LEGEND MADE BY THE LANDSCAPE ARCHITECT SHALL BE NO CAUSE FOR ADDITIONAL COSTS TO THE OWNER.
5. THE CONTRACTOR SHALL MEET BOTH THE CONTAINER SIZE AND CALIPER SIZE, AS WELL AS HEIGHT AND SPREAD SPECIFICATIONS SPECIFIED.
6. EXCAVATE TWO TIMES GREATER THAN THE ROOT BALL-DIAMETER OF THE SHRUB, TWO TIMES GREATER THAN THE ROOT BALL FOR TREES. SCARIFY BOTTOM OF PLANTING PIT BEFORE PLACING PLANT. PLACEMENT OF PLANT SHALL BE PERPENDICULAR TO GROUND
7. CONTRACTOR WILL NOT PLANT MATERIAL SHOWN ON PLANS WHEN IT IS EVIDENT THAT FIELD CONDITIONS HAVE CHANGED SINCE PLANS WERE DRAWN, ANY CHANGES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE BEFORE ANY PLANTING IS DONE IN THE AREA.
8. STEMS AND LEAVES TO BE REMOVED FROM LOWER PORTION OF TRUNKS OF TREES TO LEAVE A CLEAN APPEARANCE AND SO TREES APPEAR LESS LIKE SHRUBS AND MORE LIKE TREES.
9. PLANT SUBSTITUTIONS WILL BE PERMITTED WITH WRITTEN APPROVAL OF OWNER'S REPRESENTATIVE. REQUEST SUBSTITUTIONS IN WRITING GIVING REASONS FOR SUCH SUBSTITUTIONS. DOCUMENT THAT REASONABLE EFFORT HAS BEEN MADE TO LOCATE SPECIES ORIGINALLY SPECIFIED. NO PLANT OR TREE SUBSTITUTIONS ALLOWED UNLESS PRIOR APPROVAL FROM OWNER'S REPRESENTATIVE.
10. REMOVE ALL WIRE, STRING, WIRE BASKETS, BURLAP, CONTAINERS, ETC, FROM THE ROOTBALL OF PLANTS BEFORE BACKFILLING THE PLANTING HOLE.
11. FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
12. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE 48 HOURS IN ADVANCE OF COMMENCEMENT OF WORK TO COORDINATE PROJECT INSPECTION SCHEDULES.
13. CONTRACTOR SHALL PROVIDE ONE YEAR WARRANTY ON PLANT MATERIAL FROM DATE OF SUBSTANTIAL COMPLETION. DEAD OR DAMAGED PLANT MATERIAL SHALL BE REPLACED AT NO COST TO THE OWNER UNLESS CAUSED BY FACTORS OUTSIDE THE CONTROL OF THE CONTRACTOR.
14. ALL AREAS TO RECEIVE LANDSCAPE ROCK WITH WEED BARRIER FABRIC SHALL RECEIVE PENDULUM OR OTHER APPROVED EQUAL PRE-EMERGENT OR COMBINATION OF PRE-EMERGENTS. APPLICATION SHALL TAKE PLACE AFTER SOIL PREPARATION AND PRIOR TO INSTALLATION OF WEED BARRIER FABRIC AND SHALL BE APPLIED BY LICENSED APPLICATOR PROVIDED BY CONTRACTOR.
PRE-EMERGENT TO PROVIDE PREVENTION OF ALL INVASIVE WEEDS AND GRASSES, INCLUDING BERMUDA GRASS, BUT SHALL NOT HARM EXISTING DESIRABLE PLANTS OR NEW PLANTS. PROTECTION OF EXISTING PLANTS AND TREE ROOTS SYSTEMS SHALL BE PROVIDED PRIOR TO APPLICATION AND AS PER MANUFACTURER RECOMMENDATIONS. SUBMIT PRE-EMERGENT MSDS INFORMATION TO OWNER.

GRAPHIC SCALE
20 10 0 10 20
SCALE: 1" = 20'-0"

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Danny Mitchell
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REV	DATE	BY	REVISION
6			
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2			
1			

MODULUS ARCHITECTS
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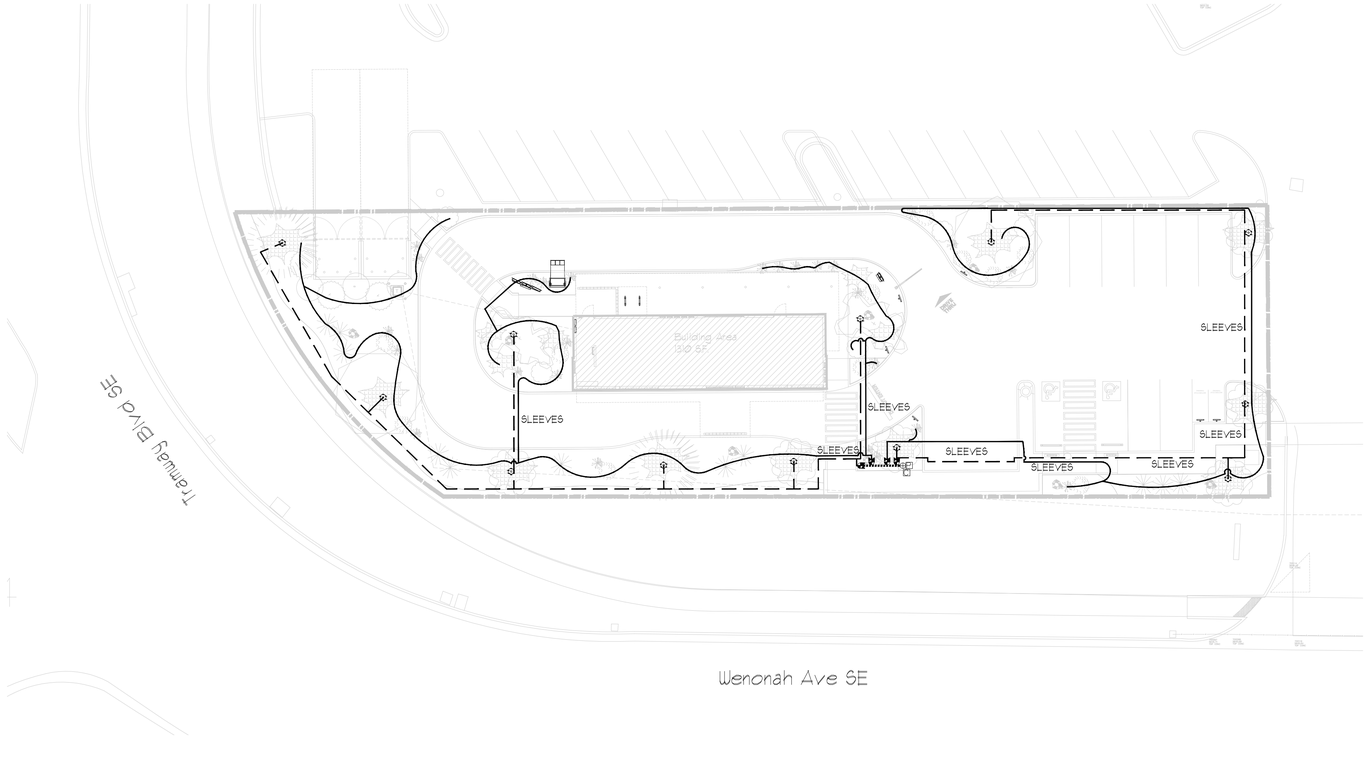
Landscape Architect
August 03, 2023
STATE OF NEW MEXICO
DANNY D. MITCHELL
639
REGISTERED LANDSCAPE ARCHITECT

PROJECT TITLE: STARBUCKS – TRAMWAY
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123
PROJECT MANAGER: DEVIN NGUYEN
JOB NO.: 58-TRAMWAY
DRAWN BY: DTN
SHEET TITLE: LANDSCAPE PLAN

DATE: 24 May 2023
SCALE: AS NOTED
SHEET: LS-101



IRRIGATION LEGEND

	COMPONENT	MANUFACTURER	SIZE / NOTES
⊟	POINT OF CONNECTION	NA	1", Install Shut off valve.
☐	IRRIGATION CONTROLLER	HUNTER	Smart Controller
I	BACKFLOW PREVENTION DEVICE, RPA	FEBCO (OR EQUAL)	1" / Freeze Protection Required
⊕	MASTERVALVE ASSEMBLY	HUNTER ICV	1"
	MAINLINE	Sch 40 PVC	1"
	ELECTRIC ZONE VALVE	HUNTER ICV	1" Typ.
	SLEEVES	Class 200 PVC	2 SIZES LARGER THAN PIPE TO BE SLEEVED.
	Irrigation Lateral for tree rings	Class 200 PVC.	1"
	Drip Line, Shrub Drip Emitter Line	Polyline	3/4"
	Drip Emitter, TREE IRRIGATION	RAINBIRD	SEE DETAIL

Size Equipment as Required for Flow Rate

IRRIGATION NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK.
2. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS PRIOR TO BEGINNING OR CONTINUING WORK.
3. THE IRRIGATION CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
4. ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
5. THIS PLAN IS SCHEMATIC AND DUE TO THE NATURE OF CONSTRUCTION SLIGHT FIELD MODIFICATIONS MAY BE NECESSARY TO IMPLEMENT PLAN.
6. IRRIGATION SYSTEMS CONNECTED TO POTABLE WATER SUPPLY, SHALL HAVE A BACKFLOW PREVENTER INSTALLED.
7. IRRIGATION LATERAL LINES, MAIN LINES AND EQUIPMENT MAY BE SHOWN OUTSIDE PROPERTY LINES ON THIS PLAN. ALL IRRIGATION LINES AND EQUIPMENT ARE TO BE WITHIN AND INSTALLED WITHIN THE LIMITS OF THE PROPERTY LINE.
8. ALL IRRIGATION SLEEVING TO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. SEE SLEEVING DETAIL.
9. SUPPLY LINE AND WATER METER TO BE PROVIDED BY OWNERBACKFLOW PREVENTOR TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN DOWNSTREAM OF THE IRRIGATION WATER METER.

IRRIGATION NOTES:
Irrigation system maintenance and operation shall be the sole responsibility of the owner. It shall be the owners responsibility to ensure that fugitive water does not leave the site due to overwatering.

Irrigation shall be a complete underground system with Trees to receive 1 Netafim spiral (50' length) with 3 loops at a final radius of 4.5' from tree trunk, pinned in place. Netafim shall have emitters 12" o.c. with a flow of .6 gph. Shrubs to receive (2) 1.0 GPH Drip Emitters. Drip and Bubbler systems to be tied to 1/2" polypipe with flush caps at each end.

Point of connection for irrigation system is unknown at current time and will be coordinated in the field. Irrigation will be operated by automatic controller.

Location of controller to be field determined and power source for controller to be provided by others.

Irrigation maintenance shall be the responsibility of the Property Owner.

Water and Power source shall be the responsibility of the Developer/Builder.

GRAPHIC SCALE
20 10 0 10 20
SCALE: 1" = 20'-0"

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REV	DATE	BY	REVISION
6			
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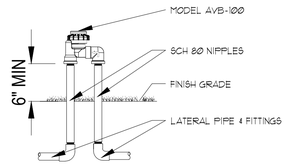
Landscape Architect
August 03, 2023
STATE OF NEW MEXICO
DANNY D. MITCHELL
2539
REGISTERED LANDSCAPE ARCHITECT

PROJECT TITLE: STARBUCKS – TRAMWAY
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123
PROJECT MANAGER: DEVIN NGUYEN
JOB NO.: SB-TRAMWAY
DRAWN BY: DTN
SHEET TITLE: IRRIGATION PLAN

DATE: 24 May 2023
SCALE: AS NOTED
SHEET: LS-102

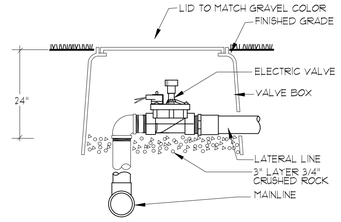


NOTE:
ATMOSPHERIC VACUUM BREAKERS SHOULD BE INSTALLED 6 - 12" ABOVE THE HIGHEST SPRINKLER HEAD WITHIN THE ZONE, OR ACCORDING TO LOCAL CODE.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 901-085n.

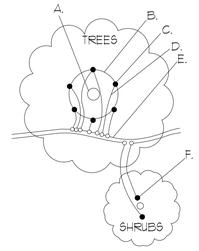
VALVES: AVB VALVES

AVB W/ SCH 80 NIPPLE RISERS N.T.S.



ELECTRIC VALVE ASSEMBLY

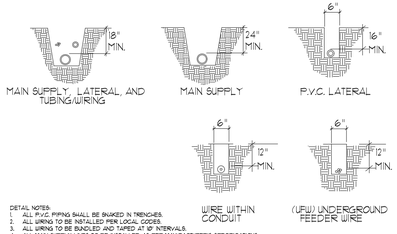
Install Y filter and Pressure Regulator for all drip valves. N.T.S.



A. TREE TRUNK/ROOT CROWN
B. 24" CIRCLE FROM TRUNK
C. EMITTERS
D. 1/8" DISTRIBUTION LINE
E. PE DRIPLINE
F. EMITTER PLACED WITHIN 6" OF PLANT STEM
NOTE: PLACE EMITTER ABOVE PLANT ON SLOPE

EMITTER PLACEMENT DETAIL

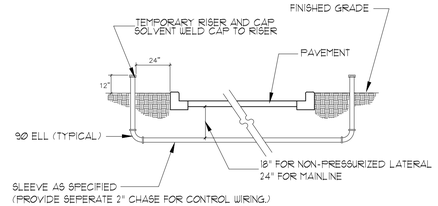
N.T.S.



DETAIL NOTES:
1. ALL P.V.C. PIPING SHALL BE SNAKED IN TRENCHES.
2. ALL WIRING TO BE INSTALLED PER LOCAL CODES.
3. ALL WIRING TO BE BUNDLED AND TAPED AT 10' INTERVALS.
4. ALL MAIN SUPPLY LINES TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS.
5. PROVIDE PIPE AND WIRE SLEEVING UNDER ALL PAVED SURFACES.
6. WIRE SHALL BE WITHIN SEPARATE 1" ELECTRICAL CHASE.

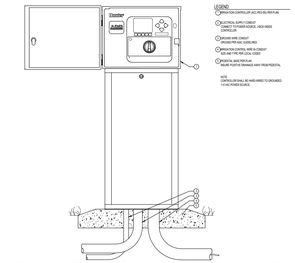
TRENCHING DETAIL

N.T.S.

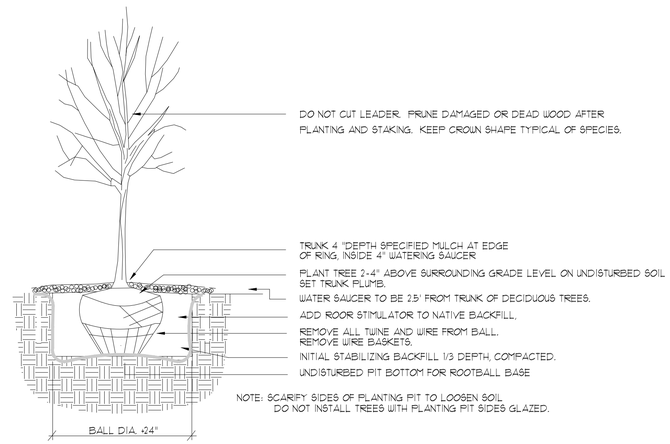


SLEEVE INSTALLATION DETAIL

N.T.S.

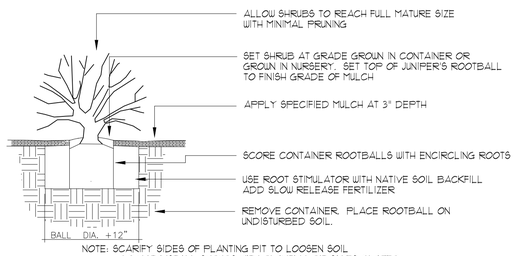


ACC - PEDESTAL MOUNT STAINLESS STEEL
Hunter C.ACC.05 NOT TO SCALE



TREE PLANTING DETAIL

N.T.S.



SHRUB PLANTING DETAIL

N.T.S.

REV	DATE	BY	REVISION
6			
5			
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1			

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100 SUN AVENUE N.E., Ste 600
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Landscape Architect
August 03, 2023
STATE OF NEW MEXICO
DANNY D. MITCHELL
2139
REGISTERED LANDSCAPE ARCHITECT

PROJECT TITLE: STARBUCKS – TRAMWAY
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

PROJECT MANAGER: DEVIN NGUYEN
DRAWN BY: SB-TRAMWAY
CHK'D BY: DTN
SHEET TITLE: DETAIL SHEET

DATE: 24 May 2023
SCALE: AS NOTED
SHEET: LS-103

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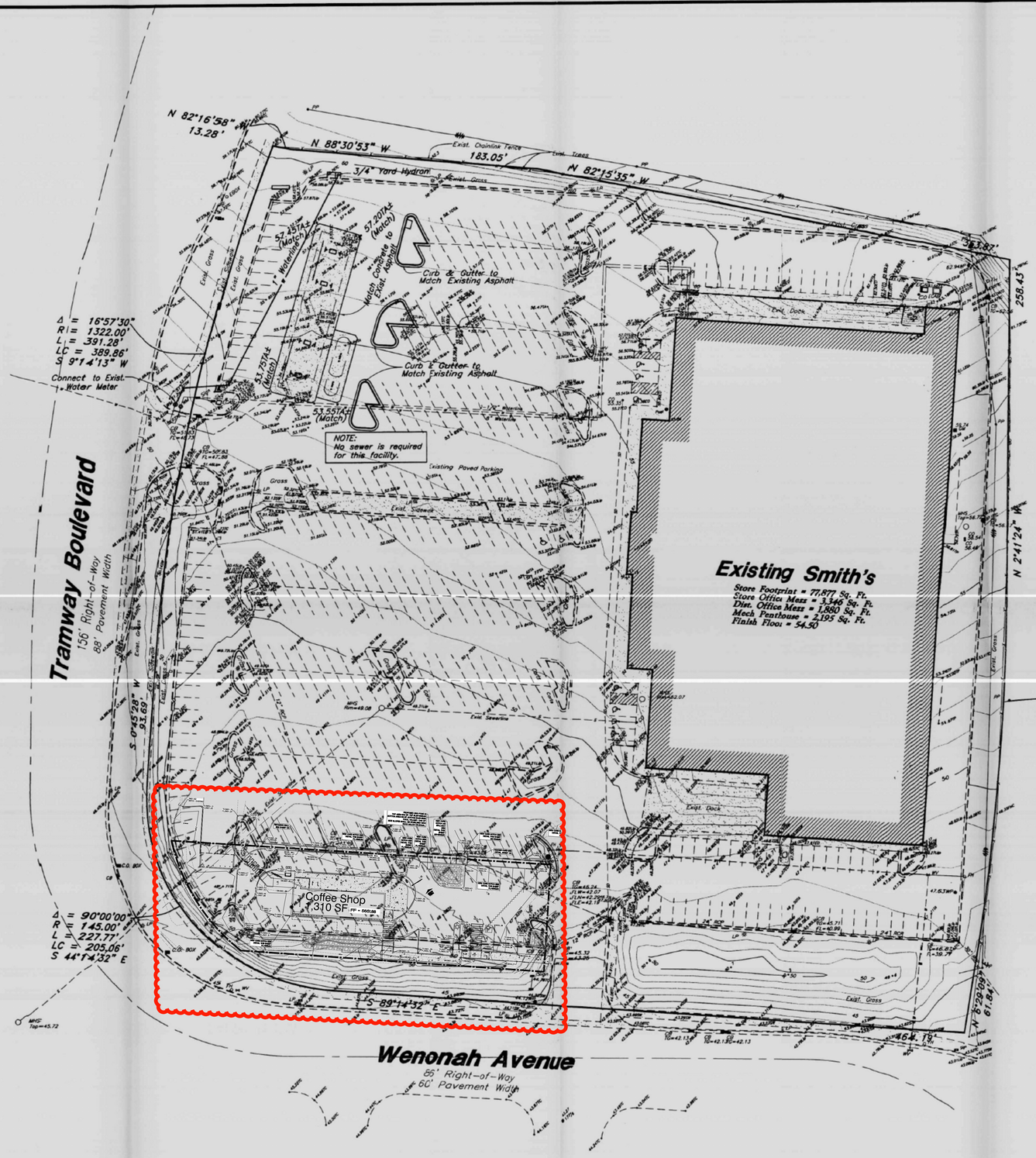

Scale : 1" = 40'

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (SO-19)

1. BUILD SIDEWALK CULVERTS PER COA STD DWG 2236.
2. CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A MEETING PRIOR TO FORMING.
3. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
4. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" [OR (505) 260-1990] FOR THE LOCATION OF EXISTING UTILITIES.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
7. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
8. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
9. WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
10. CONTRACTOR MUST CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A CONSTRUCTION INSPECTION. FOR EXCAVATING AND BARRICADING INSPECTIONS, CONTACT CONSTRUCTION COORDINATION AT (505) 924-3416.

LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- RIGHT-OF-WAY
- BUILDING
- CONCRETE/SIDEWALK
- 5010 CONTOUR MAJOR
- 5011 CONTOUR MINOR
- x 5048.25 SPOT ELEVATION
- FLOW ARROW
- EXISTING CURB & GUTTER
- 5010 EXISTING CONTOUR MAJOR
- 5011 EXISTING CONTOUR MINOR
- x 5048.25 EXISTING SPOT ELEVATION
- GRADE BREAK
- RETAINING WALL

SPOT ELEVATION LEGEND

SW= TOP OF SIDEWALK
TC= TOP OF CURB
FL= FLOW LINE
FF= FINISHED FLOOR

SPOT ELEVATION NOTE:

ALL PROPOSED SPOT ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.

CAUTION

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1001565

Smith's
FOOD & DRUG STORES
#427
Albuquerque, New Mexico

REV.	DATE	DESCRIPTION

GREAT BASIN ENGINEERING - SOUTH
CONSULTING ENGINEERS and LAND SURVEYORS
2010 North Redwood Road, P.O. Box 16747
Salt Lake City, Utah 84116
Salt Lake City (801)521-8529 Ogden (801)394-7288 Fax (801)521-9551

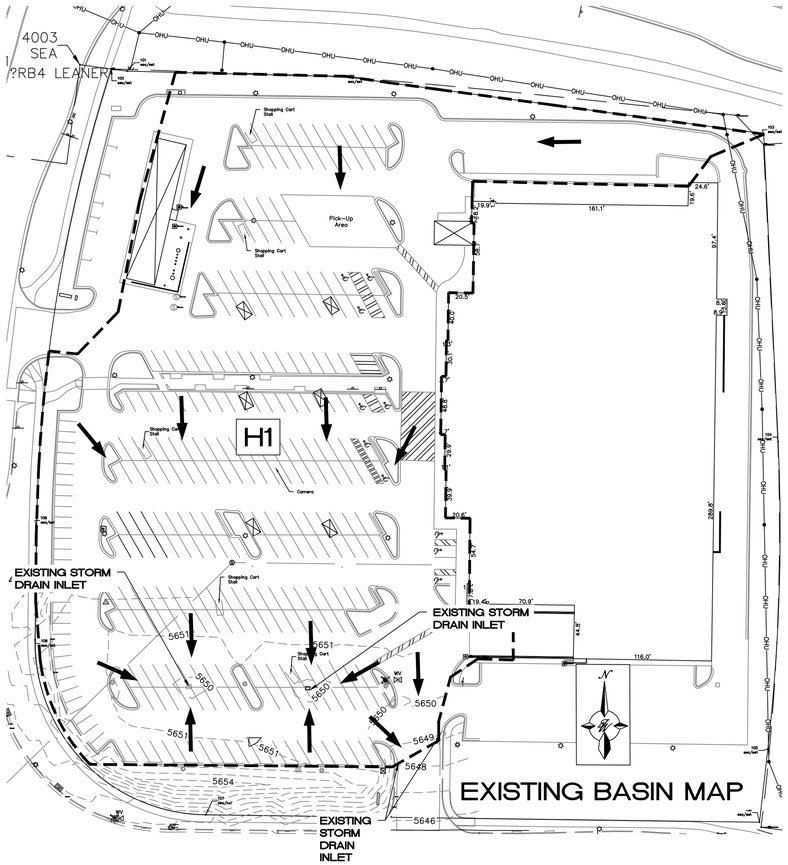
Gas Station
Preliminary Grading / Utility Plan
Smith's Food and Drug Stores
1550 South Redwood Road
Salt Lake City, Utah 84104
Telephone (801) 974-1400

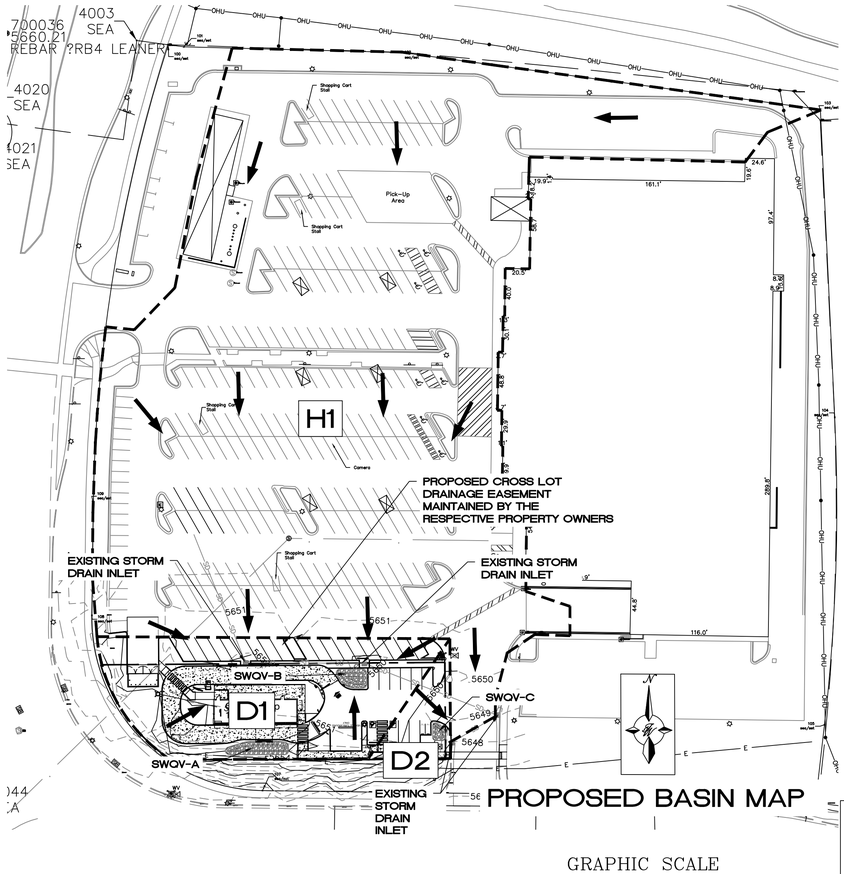
ERNEST GENE MARTIN
NEW MEXICO
12973
REGISTERED PROFESSIONAL ENGINEER

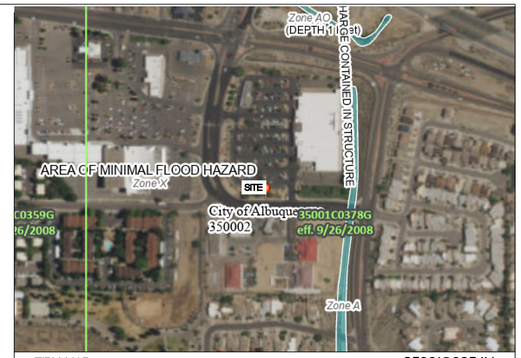
22 Oct. 2001

SHEET NO. 2 of 2

427GAS







EXISTING CONDITIONS

THE SUBJECT SITE IS LOCATED WITHIN A LARGER BASIN INDICATED AS AREA "B" IN THE DRAINAGE REPORT FOR SMITHS STORE #427 IN HYDRONUM FILE: L23D015. CURRENTLY THE SITE IS PAVED WITH PARKING SPACES AND THE STORM WATER DISCHARGE FREE FLOWS INTO VARIOUS STORM DRAIN INLETS ON THE SOUTHERN PART OF THE SMITHS LARGER TRACT AS SHOWN IN THE EXISTING CONDITIONS.

PROPOSED CONDITIONS

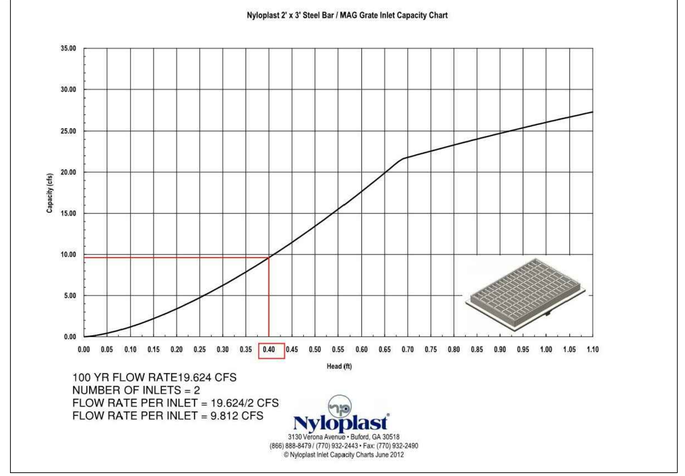
A NEW COFFEE DRIVE THRU SHOP IS PROPOSED TO BE DEVELOPED AND WILL REPLACE EXISTING PARKING SPACES. THE DEVELOPED STORM WATER DISCHARGE SHALL BE ROUTED THROUGH STORM WATER QUALITY PONDS INSTALLED WITHIN PLANTERS PRIOR TO BEING DISCHARGED INTO THE EXISTING STORM DRAIN INLETS AS SHOWN IN THE PROPOSED CONDITIONS BASIN MAP.

GRAPHIC SCALE

60 30 0 30 60

SCALE: 1"=60'

EXISTING STORM INLET CAPACITY CHART



DPM Weighted E Method CH 6

Precipitation Zone 3

STARBUCKS ON TRAMWAY

TWLLC **Date** 5/24/2023

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed

Volume = Weighted E * Total Area

Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

HYDROLOGY CALCULATION TABLES

Existing Conditions

Basin Descriptions												100-Year, 6-Hr		
Basin ID	Tract	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs
H1		195,800	4.49	0.00702	0%	0.000	0%	0.000	10%	0.449	90%	4.045	2.431	0.911	19.59
Total		**195,800**	**4.49**	**0.00702**		**0.000**		**0.000**		**0.000**		**4.045**		**0.911**	**19.589**

Proposed Conditions

Basin Descriptions												100-Year, 6-Hr		
Basin ID	Tract	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs
H1		171,000	3.93	0.00613	0%	0.000	0%	0.000	10%	0.393	90%	3.533	2.431	0.795	17.11
D1		23,640	0.54	0.00085	0%	0.000	0%	0.000	30%	0.163	70%	0.3799	2.133	0.096	2.22
D2		3,135	0.07	0.00011	0%	0.000	0%	0.000	30%	0.022	70%	0.0504	2.133	0.013	0.29
Total		**197,775**	**4.54**	**0.00709**		**0.000**		**0.000**		**0.577**		**3.963**		**0.905**	**19.624**

REQUIRED STORM WATER QUALITY VOLUME CALCULATIONS

Basin D1 Storm Water Quality Volume		
Total Impervious Area =	ΣArea in "Treatment D"	
Retainage depth = 0.42" Per DPM Pg. 272	0.035	FT
Retention Volume =	**=0.035 x Area D**	CF
Area D (0.3799 acres)	16548	SF
Required Retention Volume	579	CF
Pond Volume Provided	708	CF

Basin D2 Storm Water Quality Volume		
Total Impervious Area =	ΣArea in "Treatment D"	
Retainage depth = 0.42" Per DPM Pg. 272	0.035	FT
Retention Volume =	**=0.035 x Area D**	CF
Area D (0.0504 acres)	2195	SF
Required Retention Volume	77	CF
Pond Volume Provided	115	CF

PROPOSED STORM WATER POND VOLUME TABLES

SWQV-A POND VOLUME CALCULATIONS

ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5650	199	0	0
5651	525	362	362

SWQV-B POND VOLUME CALCULATIONS

ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5648	36	0	0
5649	156	96	96
5650	344	250	346

SWQV-C POND VOLUME CALCULATIONS

ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5647.5	29	0	0
5648	56	21.25	21
5649	131	93.5	115

ENGINEER'S SEAL

RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER

08/22/2023

RONALD R. BOHANNAN P.E. #7868

STARBUCKS ON TRAMWAY
ALBUQUERQUE, NM

GRADING AND DRAINAGE BASIN MAP

TIERRA WEST, LLC
5571 MIDWAY PARK PLACE NE
ALBUQUERQUE, NM 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY: BF

DATE: 07/11/2023

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SHEET # C1

JOB # 2023047

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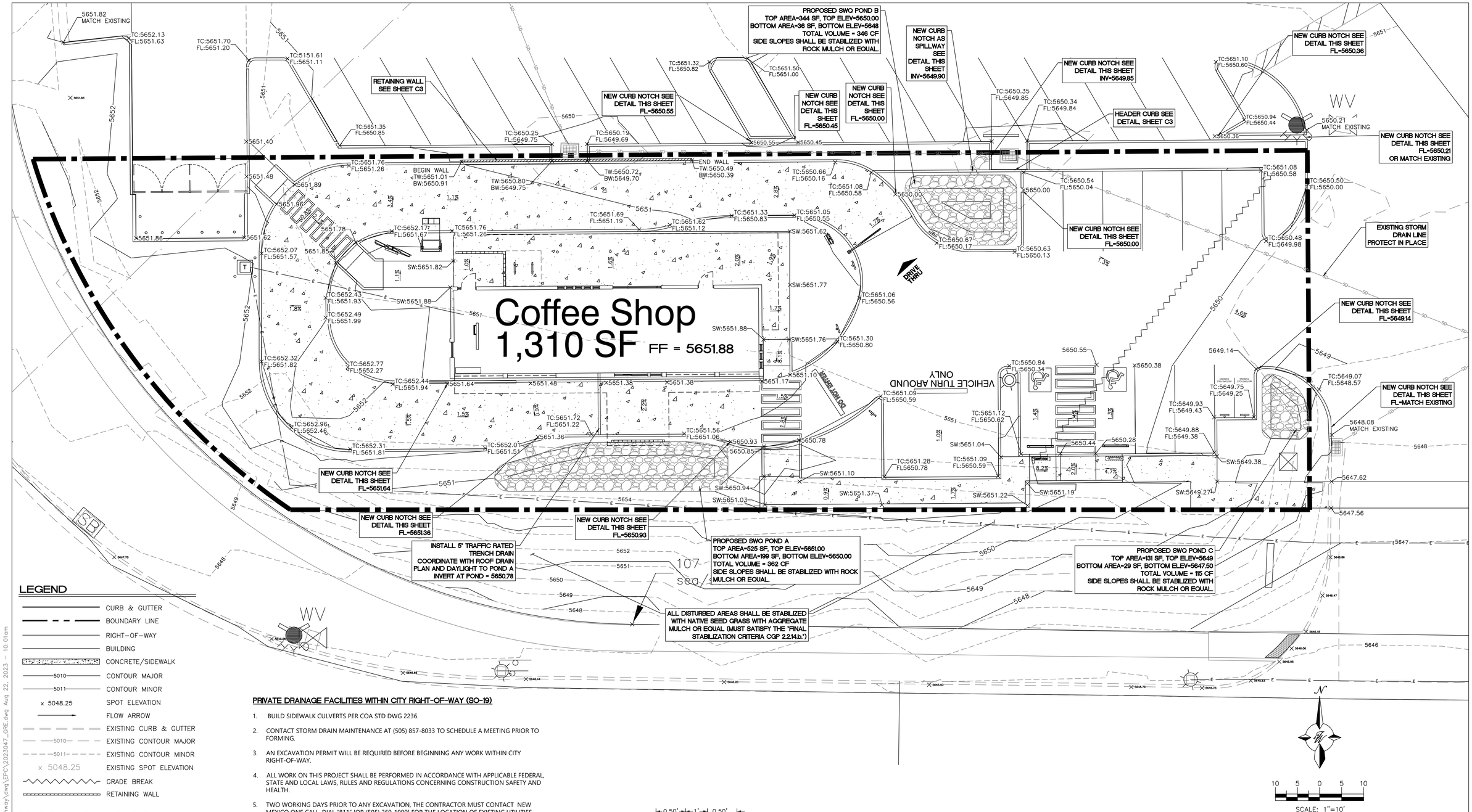

LEGEND

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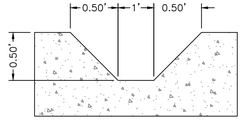
PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (SO-19)

1. BUILD SIDEWALK CULVERTS PER COA STD DWG 2236.
2. CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A MEETING PRIOR TO FORMING.
3. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
4. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" (OR (505) 260-1990) FOR THE LOCATION OF EXISTING UTILITIES.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
7. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
8. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
9. WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
10. CONTRACTOR MUST CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A CONSTRUCTION INSPECTION. FOR EXCAVATING AND BARRICADING INSPECTIONS, CONTACT CONSTRUCTION COORDINATION AT (505) 924-3416.



CURB NOTCH
NTS

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08/22/2023
RONALD R. BOHANNAN P.E. #7868

STARBUCKS ON TRAMWAY
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DRAWN BY: BF
DATE: 07/11/2023
2023047_GRE
SHEET #: C2
JOB #: 2023047

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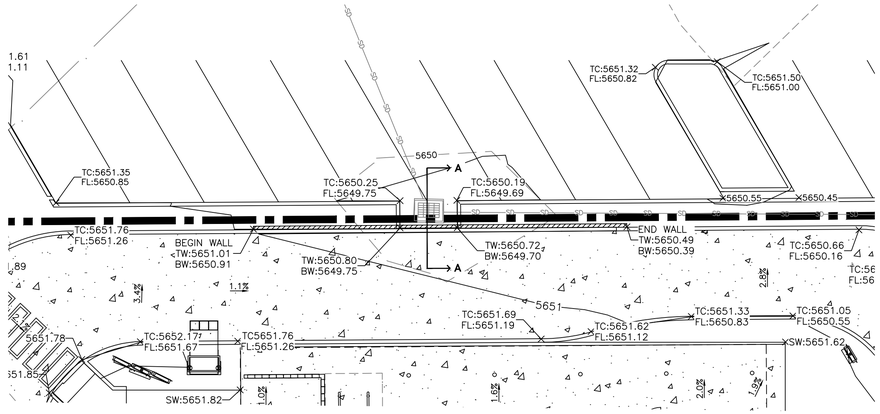

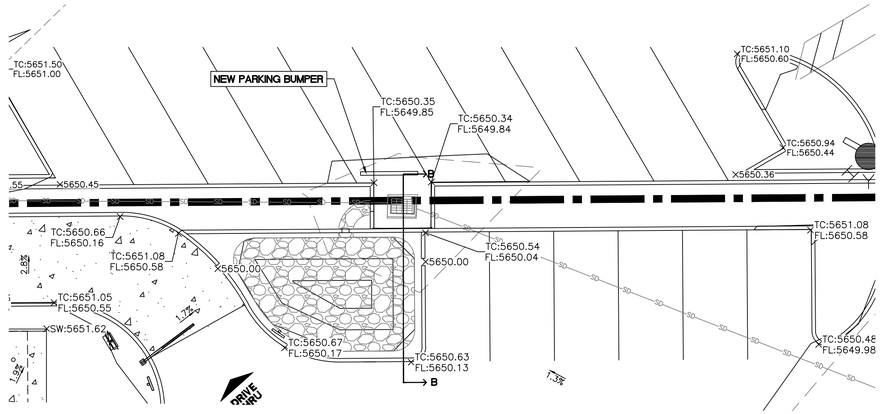

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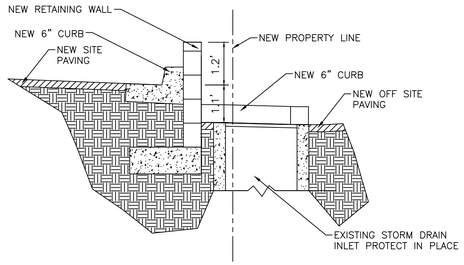
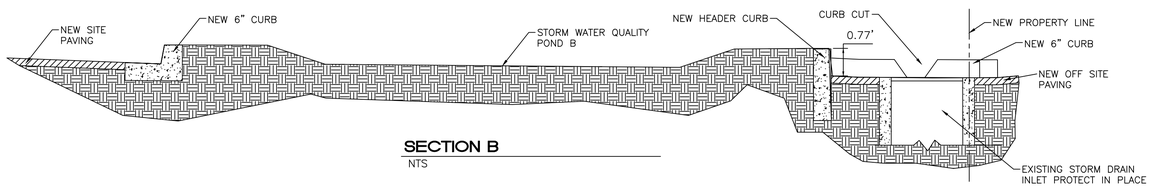
SCALE: 1"=10'



SECTION A
NTS



SECTION B
NTS

LEGEND

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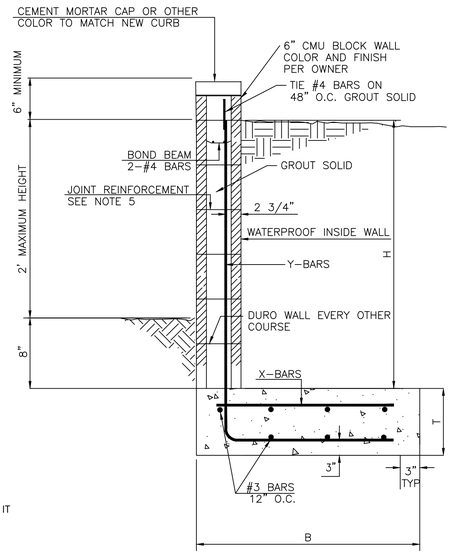


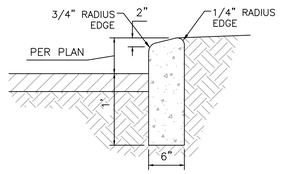
"L" FOOTING RETAINING WALL DETAIL
NTS

GENERAL NOTES:

1. ALL CONCRETE IS TO BE 3000 PSI @ 28 DAYS.
2. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM. D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE ± 2.0%.
3. BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
4. ALL BARS ARE TO BE GRADE 60, ASTM 615.
5. TRUSS TYPE DUR-O-WALL EVERY OTHER COURSE.
6. USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS EVERY 12'.
7. 30 BAR DIAMETER LAPS TYPICAL.
8. DUR-O-WAL HORIZONTAL JOINT REINFORCEMENT 16" O.C.
9. OPEN JOINTS 16" O.C. TYPICAL AT FIRST COURSE.
10. OWNER TO SELECT MASONRY COLOR AND/OR FINISH
11. SOLID MASONRY CAP COURSE TYPICAL.
12. WATER PROOF WALL.

6 INCH REINFORCED CONCRETE MASONRY WALL (FOR RETAINING PORTION ONLY)

H	B	T	Y-BARS	X-BARS
ft.-in.	ft.-in.	in.		
2'-0"	2'-0"	9"	#4 @ 24" O.C.	



CURB GENERAL NOTES:
1. ALL CURBS TO BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE.
2. PROVIDE CONTRACTION JTS. 12' MAX., SPACING, 1/2" EXP. JTS. AT CURB RETURNS AND AT A MAX. SPACING OF 120' BETWEEN CURB RETURNS AND EACH SIDE OF SEPARATELY CONSTRUCTED DRIVEWAYS. CONTRACTION JTS., SHALL BE EITHER SAWED OR TOOLED A MINIMUM OF 1" DEEP AT FINISHED FACES.
3. ALL EDGES SHALL BE EDGED WITH A 3/8" RADUIS EDGING TOOL.
4. 1/4" ISOLATION JOINT SHALL BE PLACED BETWEEN SIDEWALK AND CURB WHEN CAST ADJACENT TO EACH OTHER.

6" HEADER CURB DETAIL
NTS

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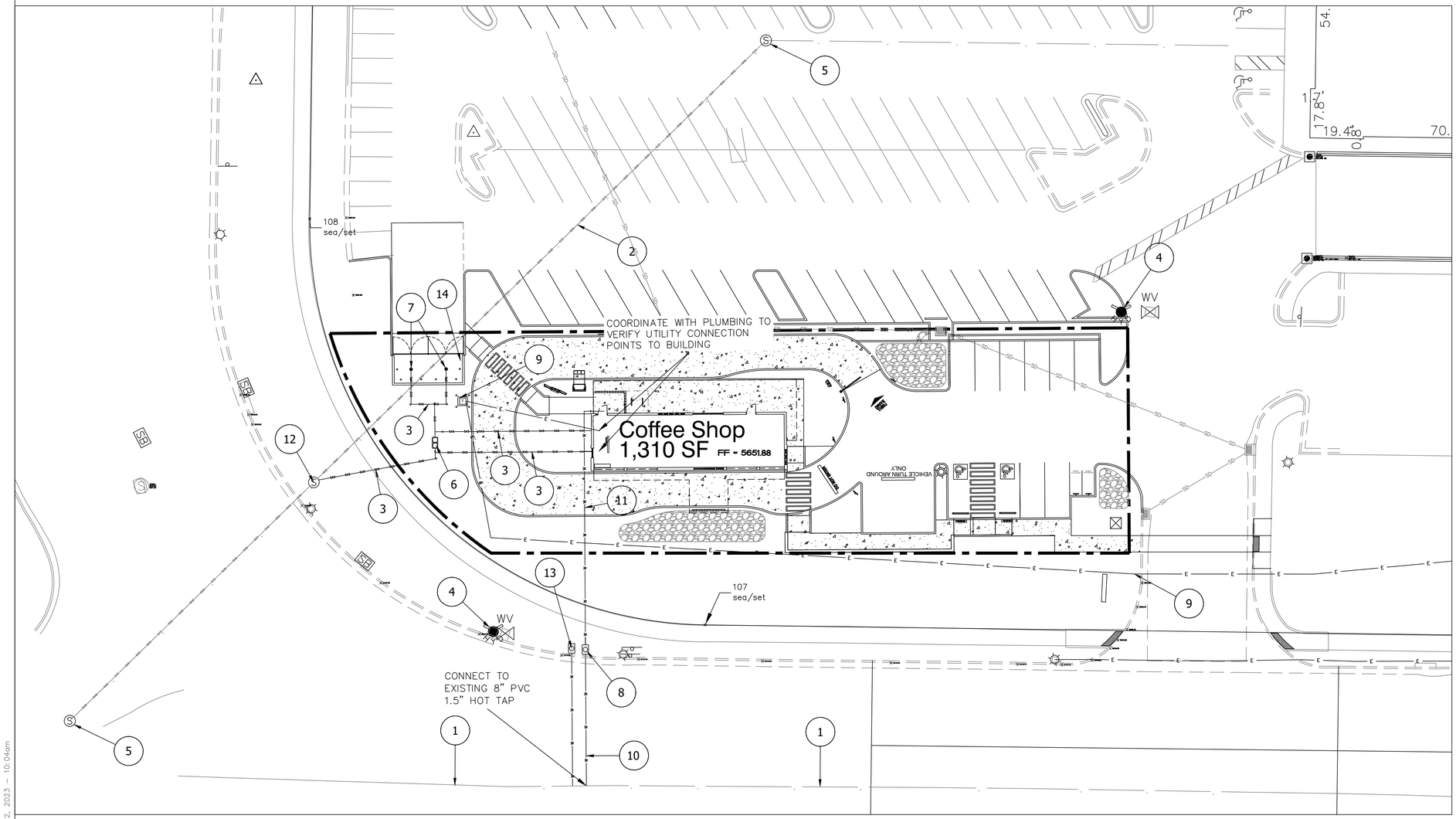

LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- BUILDING
- SIDEWALK
- RETAINING WALL
- CURB AND GUTTER
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- SINGLE CLEAN OUT
- DOUBLE CLEAN OUT
- EXISTING SD MANHOLE
- EXISTING SS MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING POWER POLE
- EXISTING GAS VALVE
- EXISTING OVERHEAD UTILITIES
- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- EXISTING STORM SEWER LINE
- PROPOSED TELEPHONE LINE
- PROPOSED ELECTRIC LINE
- PROPOSED GAS LINE
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED SAS MANHOLE
- PROPOSED WATER METER

GENERAL UTILITY NOTES:

1. ALL WATER AND SEWER UTILITY WORK TO BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE SPECIFICATIONS FOR PUBLIC UTILITY CONSTRUCTION, 1986 EDITION (UPDATE NO 8) INCLUDING AMENDMENT NO 1.
2. 4' MINIMUM BURY REQUIRED FOR ALL UTILITIES UNLESS OTHERWISE NOTED.
3. REFERENCE ARCHITECTURAL PLANS FOR WATER LINE RISER LOCATIONS.
4. CLEAN OUTS ARE TO BE BUILT PER UNIFORM PLUMBING CODE STANDARDS.
5. ALL PLUMBING PIPE MATERIAL TO BE USED PER UPC.
6. IRRIGATION AND DOMESTIC WATERLINE MUST HAVE BACKFLOW PREVENTORS PER UPC. IF BACKFLOW PREVENTOR IS INSTALLED EXTERIOR OF BUILDING A HOT BOX SHALL BE INSTALLED AND USED.
7. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED–OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.
8. ALL UTILITY DISTANCES SHOWN ARE FOR REFERENCE ONLY. CALL 811 FOR PUBLIC UTILITIES LOCATES.
9. PNM WILL REVIEW ALL TECHNICAL NEEDS, ISSUES AND SAFETY CLEARANCES FOR ITS ELECTRIC POWER SYSTEMS. ANY EXISTING AND PROPOSED PUBLIC UTILITY EASEMENTS SHALL BE INDICATED ON THE SITE PLAN UTILITY SHEET PRIOR TO DRB REVIEW. PNM'S STANDARD FOR PUBLIC UTILITY EASEMENTS IS 10 FEET IN WIDTH TO ENSURE ADEQUATE, SAFE CLEARANCES.
10. PNM HAS NUMEROUS ELECTRIC FACILITIES AT THIS SITE CURRENTLY SERVING EXISTING CUSTOMERS. THE APPLICANT SHALL COORDINATE WITH PNM REGARDING THESE EXISTING FACILITIES. ANY RELOCATION, CHANGES OR REALIGNMENT OF EXISTING ELECTRIC UTILITIES WILL BE THE DEVELOPER EXPENSE. IN SOME CASES, RELOCATION OR CHANGES TO EXISTING FACILITIES MAY NOT BE FEASIBLE DUE TO PHYSICAL, USE OR SAFETY CLEARANCE CONSTRAINTS.
11. SCREENING SHALL BE DESIGNED TO ALLOW FOR ACCESS TO UTILITY FACILITIES. IT IS NECESSARY TO PROVIDE ADEQUATE CLEARANCE OF TEN FEET SURROUNDING ALL GROUND–MOUNTED UTILITIES FOR SAFE OPERATION, MAINTENANCE AND REPAIR PURPOSES.

KEYED NOTES

1. EXISTING 8" PVC WATERLINE
2. EXISTING 8" PRIVATE SAS
3. NEW 4" SAS SERVICE COORDINATE WITH BUILDING PLUMBING PLANS PROVIDE CLEAN OUTS PER UPC
4. EXISTING FIRE HYDRANT PROTECT IN PLACE
5. EXISTING PUBLIC 4' DIAM. SAS MANHOLE
6. NEW SAS GREASE TRAP COORDINATE WITH BUILDING PLUMBING PLANS
7. NEW DUMPSTER DRAINS
8. NEW 1.5" WATER METER BOX AND COVER PER ABCWUA DWG **2363**
9. ELECTRICAL IMPROVEMENTS REFER BUILDING ELECTRICAL PLANS COORDINATE OFFSITE IMPROVEMENTS WITH PNM
10. **NEW 1.5" COPPER SERVICE LINE PER ABCWUA DWG 2363**
11. 1.5" WATER SERVICE COORDINATE WITH BUILDING PLUMBING PLANS
12. NEW PUBLIC MANHOLE PER ABCWUA DWG 2101 PUBLIC IMPROVEMENTS REQUIRE AN APPROVED WORK ORDER
13. NEW 3/4" IRRIGATION METER BOX AND COVER PER ABCWUA DWG 2362 WITH BACK FLOW PREVENTOR AND HOT BOX.
14. INSTALL LOCKABLE HOSE BIB, ROUTE WATERLINE FROM BUILDING REFER BUILDING PLUMBING PLANS FOR LOCATION AND SIZE

GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=20

NOTE

ELECTRIC, GAS AND COMMUNICATION SERVICES TO STARBUCKS WILL BE EXTENDED FROM EXISTING FACILITIES LOCATED ON OR ADJACENT TO TRAMWAY BLVD AND/OR WENONAH AVE ROW. EXACT LOCATION TO BE DETERMINED

INSPECTION NOTE

CONTRACTOR SHALL CONSULT THE LOCAL BUILDING DEPARTMENT OFFICIALS FOR ANY PLAN REVIEW, PERMITTING REQUIREMENTS OR BUILDING CODE INSPECTIONS THAT MAY BE REQUIRED TO ENFORCE LOCAL, STATE OR NATIONAL BUILDING CODES PRIOR TO CONSTRUCTING IMPROVEMENTS

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(505) 858–3100
www.tierrawestllc.com

DRAWN BY BF

DATE 07/11/2023

2023047 MU

SHEET # C4

JOB # 2023047

\\TWNAS\Z_Drive\2023\2023047 Starbucks at Tramway\dwg\Construction\2023047-MU.dwg Aug 22, 2023 - 10:04am

Current DRC
Project Number:_____

FIGURE 12

Date Submitted:_____
Date Site Plan Approved:_____
Date Preliminary Plat Approved:_____
Date Preliminary Plat Expires:_____
DHO Project No.:_____
DHO Application No.:_____

INFRASTRUCTURE LIST

(Rev. 2-16-18)

EXHIBIT "A"

TO SUBDIVISION IMPROVEMENTS AGREEMENT

DEVELOPMENT HEARING OFFICER (DHO) REQUIRED INFRASTRUCTURE LIST

PLAT FOR TRACTS J-1-A AND J-1-B, FOUR HILLS VILLAGE SHOPPING CENTER AND APARTMENT COMPLEX
PROPOSED NAME OF PLAT

TRACT J-1 REPL OF TRS F, H-1, J & UNPLATTED LAND FOUR HILLS VILLAGE SHOPPING CENTER & APT COMPLEX CONT 7.9444 AC +/- OR 346,058 SF +/-
EXISTING LEGAL DESCRIPTION PRIOR TO PLATTING ACTION

Following is a summary of PUBLIC/PRIVATE Infrastructure required to be constructed or financially guaranteed for the above development. This Listing is not necessarily a complete listing. During the SIA process and/or in the review of the construction drawings, if the DRC Chair determines that appurtenant items and/or unforeseen items have not been included in the infrastructure listing, the DRC Chair may include those items in the listing and related financial guarantee. Likewise, if the DRC Chair determines that appurtenant or non-essential items can be deleted from the listing, those items may be deleted as well as the related portions of the financial guarantees. All such revisions require approval by the DRC Chair, the User Department and agent/owner. If such approvals are obtained, these revisions to the listing will be incorporated administratively. In addition, any unforeseen items which arise during construction which are necessary to complete the project and which normally are the Subdivider's responsibility will be required as a condition of project acceptance and close out by the City.

Financially Guaranteed DRC #	Constructed Under DRC #	Size	Type of Improvement	Location	From	To	Construction Certification Private Inspector	Private P.E.	City Cnst Engineer
		4' Diameter	Public SAS Manhole	NE Corner of Tramway Blvd and Wenonah Ave.			/	/	/
		Varies 0'-12' wide	Lengthen Median Turn Lane by 75' including Major collector paving median curb and gutter.	Tramway Blvd median	Central Ave	100 ft south of Central Ave	/	/	/
							/	/	/
							/	/	/
							/	/	/
							/	/	/
							/	/	/
							/	/	/
		_____	_____ _____	_____	_____	_____	/	/	/
		_____	_____ _____	_____	_____	_____	/	/	/

The items listed below are on the CCIP and approved for Impact Fee credits. Signatures from the Impact Fee Administrator and the City User Department is required prior to DRB approval of this listing. The Items listed below are subject to the standard SIA requirements.

Financially Guaranteed DRC #	Constructed Under DRC #	Size	Type of Improvement	Location	From	To	Construction Certification: Private Inspector	Private P.E.	City Cnst Engineer
			Engineer's Certification for Grading & Drainage is required for release of Financial Guarantee				/	/	/
							/	/	/

Approval of Creditable Items:

Impact Fee Admistrator Signature Date

Approval of Creditable Items:

City User Dept. Signature Date

NOTES

If the site is located in a floodplain, then the financial guarantee will not be released until the LOMR is approved by FEMA.

Street lights per City rquirements.

1

2

3

AGENT / OWNER

VINCENT CARRICA, PE
NAME (print)

TIERRA WEST LLC
FIRM

9-7-23
SIGNATURE - date

DEVELOPMENT REVIEW BOARD MEMBER APPROVALS

PLANNING- date

PARKS & RECREATION - date

TRANSPORTATION DEVELOPMENT - date

AMAFCA - date

UTILITY DEVELOPMENT - date

CODE ENFORCEMENT - date

CITY ENGINEER - date

HYDROLOGY-date

DESIGN REVIEW COMMITTEE REVISIONS

REVISION	DATE	DRC CHAIR	USER DEPARTMENT	AGENT /OWNER

(Rev. 2-16-18)

PLANNING DEPARTMENT
URBAN DESIGN & DEVELOPMENT DIVISION
600 2nd Street NW, 3rd Floor, Albuquerque, NM 87102
P.O. Box 1293, Albuquerque, NM 87103
Office (505) 924-3860 Fax (505) 924-3339

OFFICIAL NOTIFICATION OF DECISION

July 20, 2023

SWI Real Estate LTD PTNS
c/o Nickel & Co LLC
1014 Vine St. Floor 7th
Cincinnati, OH 45202

Project # PR-2023-008767
SI-2023-001056- Site Plan - EPC, Major Amendment

LEGAL DESCRIPTION:
Modulus Architects & Land Use Planning Inc. agent for SWI Real Estate PTNS c/o Nickle & Co LLC, requests a Site Plan-EPC Major Amendment, for all or a portion of Tract J-1, Replat of Tracts F, H-1, J and unplatted land, Four Hills Village Shopping Center and Apartment Complex, located south of Central Ave. SE, north of Wenonah Ave. SE, and between Tramway Blvd. SE and Four Hills Rd. SE (200 Tramway Blvd. SE), zoned MX-M, approximately 8.5 acres (L-22-Z)(L-23-Z)
Staff Planner: Megan Jones

On July 20, 2023 the Environmental Planning Commission (EPC) voted to Approve Project # PR-2023-008767, SI-2023-001056 - Site Plan- EPC, Major Amendment based on the following Findings and subject to the following Conditions of Approval:

FINDINGS - SI-2023-001056:

1. The request is for a Major Amendment for an approximately 8.5-acre site legally described all or a portion of Tract J-1, Replat of Tracts F, H-1, J and unplatted land, Four Hills Village Shopping Center and Apartment Complex, located at 200 Tramway Blvd. SE., south of Central Ave. SE, north of Wenonah Ave. SE, and between Tramway Blvd. SE and Four Hills Rd. SE (the "subject site").

2. The applicant wishes to amend the controlling Site Development Plan to allow a 1,310 SF restaurant with accessory drive-through use on the southwestern portion of the subject site. The amendment would facilitate development of the proposed Site Plan for a coffee shop associated with this request, which includes parking, landscaping, utilities, grading and drainage, which would be delegated to the DFT for final-sign off.

3. The proposed future Site Plan associated with this request is contingent upon the EPC's approval of the Major Amendment.

4. The subject site is zoned MX-M (Mixed-use – Moderate Intensity), a zoning designation received upon adoption of IDO in May 2018. The subject site was formerly zoned SU-2/EG-CAC.

5. The amendment exceeds the thresholds found in IDO table 6-4-4: Allowable Minor Amendments, therefore it is classified as a Major Amendment pursuant to IDO section 14-16-6-4(Z)(1)(b). Pursuant to IDO Section 14-16-6-4(Q), the decision-making body may impose conditions necessary to ensure compliance with the development standards of this IDO via the Site Plan-EPC Review and Decision Criteria in IDO Section 14-16-6-6(J).

6. The subject site is located in an Area of Change, within the Four Hills Village Activity Center, within 660-feet of the Central Ave. Major Transit Corridor and Premium Transit Corridor as designated by the Comprehensive Plan.

7. The Albuquerque/Bernalillo County Comprehensive Plan and the Integrated Development Ordinance (IDO) are incorporated herein by reference and made part of the record for all purposes.

8. The request is generally consistent with the following Comprehensive Plan Goal from Chapter 4: Community Identity

   Goal 4.1.2– Character, Identity and Design: Protect the identity and cohesiveness of neighborhoods by ensuring the appropriate scale and location of development, mix of uses, and character of building design.

   This request would facilitate future development that is the appropriate scale and location in the existing Grocery Store Shopping Center, the Four Hills Village Activity Center, and a mixed-use zone district. Although, Activity Centers are intended to incorporate pedestrian friendly design and convenient day-to-day services at a neighborhoods scale within a walking or bike riding distance, the applicant has incorporated the required pedestrian design elements. The restaurant will be accessible by residents of the single-family neighborhood to the east and south, employees and shoppers in the Activity Center, and commuters along Tramway Blvd.

   Future development will be subject to IDO requirements which will help to ensure appropriate character of building design and scale so that the surrounding neighborhood and Activity Center is not adversely affected. The new site plan will follow the Design Standards of the (IDO) MX-M Zone District dimensional standards (Table 5-1-2), buffer landscaping (14-16-5-6-(E)), and building design standards (14-16-5-11). Additionally, Use-specific standards for a drive-through will be required to be met.

9. The request is consistent with the following Comprehensive Plan Policies regarding Centers and Corridors and Efficient Development Patters from Chapter 5: Land Use

   A. Policy 5.1.6 Activity Centers: Foster mixed-use centers of activity with a range of services and amenities that support healthy lifestyles and meet the needs of nearby residents and businesses.

      The request would capture growth in Centers and Corridors. The subject site is located in the Four Hills Village Activity Center. Activity Centers are intended to incorporate a mix of neighborhood scale services within mixed use centers. They are intended to serve neighborhoods within a 20-minute walk or short bike ride. The development of a restaurant (coffee shop) with drive-through will provide a convenient service to the surrounding neighborhoods and retail in the area. It is within walking distance of the single-family residential development east of the subject site, and is accessible by transit.

Additionally, the subject site is located in an Area of Change which intends for development to benefit the surrounding community. Development of the subject site on a Major Transit Corridor and Activity Center will direct growth to the Activity Center as well as help to shape the built environment into a sustainable development pattern.

B. Policy 5.3.1 Infill Development: Support additional growth in areas with existing infrastructure and public facilities.

The subject site is within an existing Shopping Center (the controlling Site Development Plan), the Four Hills Village Activity Center, and within 600' of the Central Ave. Major Transit Corridor. The subject site is served by existing infrastructure and public facilities on the subject site, which future development will utilize. The development made possible by the request would support additional growth in an area with existing infrastructure and public facilities.

10. The request is generally consistent with the following Comprehensive Plan Goal and Policies regarding City Development Areas from Chapter 5: Land Use

A. Goal 5.6 – City Development Areas: Encourage and direct growth to Areas of Change where it is expected and desired to ensure that development in and near Areas of Consistency reinforces the character and intensity of the surrounding area.

The subject site is located in an Area of Change where growth is expected and desired. The request would encourage, enable, and direct neighborhood scale growth to it.

B. Policy 5.6.2 – Areas of Change: Direct growth and more intense development to Centers, Corridors, industrial and business parks, and Metropolitan Redevelopment Areas where change is encouraged.

The amendment would facilitate development to an Area of Change within the Four Hills Village Activity Center and within 600' of a Major Transit Corridor. The amendment to the controlling SDP is consistent with this policy because its location is appropriate for small scale commercial uses and is accessible by all transportation modes. The request would facilitate small scale growth to a Center and Corridor where change is encouraged.

C. Sub-Policy 5.6.2.h: Encourage development in areas with a highly connected street grid and frequent transit service.

The request furthers this policy because the subject site is located in an area with a connected street grid in the SE quadrant of the City. It is within 600' of the Central Ave. Major Transit Corridor and Premium Transit Corridor, which both connect to transit service located on Tramway Blvd. The subject site is well served by transit; Juan Tabo Bus Route 1 and Bus Route 66 as well as the Green Line Rapid Ride Route 777. All three routes offer service Monday through Sunday with a peak frequency of 15-25 minutes. There are two Bus Stops at the NW corner of Wenonah Ave. SE and Tramway Blvd. SE.

11. The request is generally consistent with the following Comprehensive Plan Policies from Chapter 8: Economic Development

    Policy 8.1.2 Resilient Economy: Encourage economic development efforts that improve quality of life for new and existing residents and foster a robust, resilient, and diverse economy.

    Sub-Policy 8.1.2.c: Prioritize local job creation, employer recruitment, and support for development projects that hire local residents.

    The request could facilitate development that would bring economic growth opportunities to the Four Hills Village Activity Center. The restaurant would provide a variety jobs in a Major Transit Corridor which could help to improve the quality of life of those needing accessible job opportunities. The restaurant would be a new choice in the Activity Center and bring new neighborhood-scale commercial development to an established shopping center. The applicant intends on recruiting and retaining local employees.

12. The request meets the Site Plan-EPC Review & Decision Criteria in IDO Section 14-16-6-6(J)(3) as follows:

    A. 14-16-6-6(J)(3)(a) As demonstrated by the policy analysis of the site plan, the request is consistent with applicable Comprehensive Goals and Policies.

    B. 14-16-6-6(J)(3)(b) The subject site is zoned MX-M; therefore, this criterion does not apply.

    C. 14-16-6-6(J)(3)(c) With the application of conditions of approval, the site plan major amendment would comply with all applicable provisions of the IDO.

    D. 14-16-6-6(J)(3)(d) The proposed future Site Plan request will be reviewed administratively via the Development Facilitation Team (DFT) process, which will address infrastructure and ensuring that infrastructure such as streets, trails, sidewalks, and drainage systems has sufficient capacity to serve a proposed development.

    E. 14-16-6-6(J)(3)(e) The future, proposed development will be required to comply with the decisions made through- the EPC and the DFT Process. The EPC's conditions of approval will improve compliance with the IDO, which contains regulations to mitigate site plan impacts to surrounding areas. The DFT review will ensure infrastructure is adequately addressed so that a proposed development will not burden the surrounding area.

    F. 14-16-6-6(J)(3)(f) The subject site is not located within an approved Master Development Plan.

    G. 14-16-6-6(J)(3)(g) The subject property is not within the Railroad and Spur Area and no cumulative impact analysis is required. Therefore, the above criterion does not apply.

13. The applicant notified the Singing Arrow NA, the East Gateway coalition, and property owners within 100 feet of the subject site as required.

14. A pre-submittal neighborhood meeting was offered and held on May 25, 2023. Concerns about increased traffic were raised and addressed.

15. A letter was received from the Singing Arrow Neighborhood Association dated June 30, 2023 stating that the Board of Directors has no objection to the proposed Major Amendment, other than potential traffic flow issues.

16. Conditions of approval are needed to ensure that applicable IDO regulations are met and to provide clarification.

CONDITIONS OF APPROVAL:

1. The EPC delegates final sign-off authority of this site development plan to the (Development Facilitation Team (DFT) administrative view process as per IDO Section 6-5(G)(1). The reviewer will be responsible for ensuring that the EPC Conditions have been satisfied and that other applicable City requirements have been met.

2. The applicant shall meet with the staff planner prior to submitting to the DFT to ensure that all conditions of approval have been satisfied.

3. Major Amendment: An amended Grading and Drainage Plan shall be provided prior to submitting the associated Site Plan to DFT.

4. Site Plan:

   A. Provided bicycle parking total shall be added.

   B. Light pole locations shall be added to the proposed site plan.

5. On-site walkways and crosswalks shall be identified to motorists and pedestrians pursuant to 5-3(D)(3)(c) Materials to Alert Motorists

6. Landscape plan: The amendments to the landscape plan shall be to scale and included in the Major Amendment Package and the “for reference only: label shall be removed.

7. Signage:

   A. All signs shall be included on the elevations of the proposed building.

   B. Dimensions, colors and materials shall be provided prior to submitting to the DFT.

8. Detail Sheets: Colors and materials shall be provided for all details.

9. Condition from Transportation Development Services:

   The Traffic Impact Study is required per the Traffic Scoping Form and shall need to be reviewed and approved prior to site plan approval through DFT action.

10. Condition from the Solid Waste Management Department:

Any landscape that would overhang in the trash enclosure shall be relocated.

11. Conditions from the Public Service Company of New Mexico (PNM):

    A. Any existing and/or new PNM easements and facilities shall be reflected on the Site Plan and any resulting Plat.

    B. Typical electric utility easement widths vary depending on the type of facility. On-site transformers shall have a five-foot clear area on the sides and rear and ten-foot in front to allow for access and maintenance

    C. Perimeter and interior landscape design shall abide by any easement restrictions and not impact PNM facilities.

12. Condition from Kirtland Airforce Base:

    Dark skies are necessary to the mission operations of the Starfire Optical Range (SOR). Therefore, any lighting of the proposed use shall be shielded and focused downward in order to have the least effect on the base.

13. Elevations: The east and west elevation labels shall be updated to reflect the correct elevation façade.

APPEAL: If you wish to appeal this decision, you must do so within 15 days of the EPC's decision or by **August 4, 2023**. The date of the EPC's decision is not included in the 15-day period for filing an appeal, and if the 15th day falls on a Saturday, Sunday or Holiday, the next working day is considered as the deadline for filing the appeal.

For more information regarding the appeal process, please refer to Section 14-16-6-4(V) of the Integrated Development Ordinance (IDO), Administration and Enforcement. A Non-Refundable filing fee will be calculated at the Land Development Coordination Counter and is required at the time the appeal is filed. It is not possible to appeal an EPC Recommendation to the City Council since this is not a final decision.

You will receive notification if any person files an appeal. If there is no appeal, you can receive Building Permits at any time after the appeal deadline quoted above, provided all conditions imposed at the time of approval have been met. Successful applicants are reminded that other regulations of the IDO must be complied with, even after approval of the referenced application(s).

Sincerely,

Catalina Lehner

for Alan M. Varela,
Planning Director

AV/CL/MJ

cc: Regina Okoye, Modulus Architects & Land Use Planning LLC, Rokoye@madulusarchitects.com
Brooke Nowak-Neely, Brooke@bnnlawfirm.com
Singing Arrow NA, Meg Beck, 123mbeck@gmail.com
Singing Arrow NA, Laurie Williams, lwilliams751@gmail.com
East Gateway Coalition, Julie Dreike, dreikeja@comcast.net
East Gateway Coalition, Michael Brasher, eastgatewaycoalition@gmail.com
Legal, dking@cabq.gov
EPC File

Development Facilitation Team
City of Albuquerque
Plaza Del Sol, 600 Second NW
Albuquerque, New Mexico 87102

August 4, 2023

RE: PR-2023-008767 – STARBUCKS – FINAL SIGN-OFF FOR MAJOR AMENDMENT TO A SITE DEVELOPMENT PLAN –EPC - 200 TRAMWAY BLVD SE

Members of the Development Facilitation Team Board,

Modulus Architects, Inc., hereafter referred to as "Agent" for the purpose of this request, represents Smith's Food & Drug Center Inc., hereafter referred to as "Applicant." We, "Agent" are requesting approval for a Final Sign-off for a Major Amendment to the Site Development plan through the EPC.

The EPC Site Plan Amendment to the Site Development Plan was approved on July 20, 2023. The request to added a new restaurant with a drive through use on the south west corner of the overall site. The approval was delegated to the DFT for final sign-off. Below is how each Condition of Approval was addressed.

EPC Conditions of Approval –

1. The EPC delegates final sign-off authority of this site development plan to the (Development Facilitation Team (DFT) administrative view process as per IDO Section 6-5(G)(1). The reviewer will be responsible for ensuring that the EPC Conditions have been satisfied and that other applicable City requirements have been met.
    a. **Applicant Response: The application has been submitted to the DFT for final sign-off to ensure that the EPC conditions have been satisfied.**
2. The applicant shall meet with the staff planner prior to submitting to the DFT to ensure that all conditions of approval have been satisfied.
    a. **Applicant Response: The applicant has met with staff planner prior to submitted to the DFT. An approval letter has been obtained and is included in this application.**
3. Major Amendment: An amended Grading and Drainage Plan shall be provided prior to submitting the associated Site Plan to DFT.
    a. **Applicant Response: Attached is the amended overall G&D Plan.**
4. Site Plan:
    a. Provided bicycle parking total shall be added.
        i. **Applicant Response: A total of (4) bicycle parking space was provided, please see sheet AS101; bottom right corner.**
    b. Light pole locations shall be added to the proposed site plan.
        i. **Applicant Response: Per sheet AS101, existing light poles are identified (keyed note #20). In addition, we're proposing (1) new light pole to the site (keyed note #21).**

5. On-site walkways and crosswalks shall be identified to motorists and pedestrians pursuant to 5-3(D)(3)(c) Materials to Alert Motorists
    a. **Applicant Response: On-site walkways and crosswalks are identified on sheet AS101 with reference detail C5/A1.1, A3/A1.2, A5/A1.2; and C5/A1.2 with paving color change per 5-3(D)(3)(c) requirements.**
6. Landscape plan: The amendments to the landscape plan shall be to scale and included in the Major Amendment Package and the "for reference only: label shall be removed.

    a. **Applicant Response: Landscaping plan has been scaled and included in the Major Amendment Package and the "for reference only" label has been removed.**
7. Signage:
    a. All signs shall be included on the elevations of the proposed building.
        i. **Applicant Response: Refer to sheet A201-A and A201-B for signage locations.**
    b. Dimensions, colors and materials shall be provided prior to submitting to the DFT.
        i. Applicant Response: Refer to sheet A201-A and A201-B for Signage Data Table for requested information. The following note have been added to the elevation plans "*Signs will be permitted separately and the colors and material will be determined at the time of sign permit".
8. Detail Sheets: Colors and materials shall be provided for all details.
    a. **Applicant Response: Refer to Exterior Materials Table on sheet A201-A and A201-B, bottom right corner for building materials.**
9. Condition from Transportation Development Services:
   The Traffic Impact Study is required per the Traffic Scoping Form and shall need to be reviewed and approved prior to site plan approval through DFT action.
    a. **Applicant Response: The traffic study has been submitted and approved. Approval Letter include in submittal.**
10. Condition from the Solid Waste Management Department: Any landscape that would overhang in the trash enclosure shall be relocated.
    a. **Applicant Response: There are no landscaping plants/trees that overhang onto the refuse enclosure.**
11. Conditions from the Public Service Company of New Mexico (PNM):
    a. Any existing and/or new PNM easements and facilities shall be reflected on the Site Plan and any resulting Plat.
        i. **Applicant Response: Noted. No easements are being provided at this time.**
    b. Typical electric utility easement widths vary depending on the type of facility. On-site transformers shall have a five-foot clear area on the sides and rear and ten-foot in front to allow for access and maintenance
        i. **Applicant Response: Noted. No easements are being provided at this time.**
    c. Perimeter and interior landscape design shall abide by any easement restrictions and not impact PNM facilities.
        i. **Applicant Response: Perimeter and interior landscape design abide by easement restrictions and do not impact PNM facilities.**
12. Condition from Kirtland Air force Base:
   Dark skies are necessary to the mission operations of the Starfire Optical Range (SOR). Therefore, any lighting of the proposed use shall be shielded and focused downward in order to have the least effect on the base.
    a. **Applicant Response: Building surface-mount light fixtures will be shielded and downward focused.**
13. Elevations: The east and west elevation labels shall be updated to reflect the correct elevation façade.
    a. **Applicant Response: Elevation 4/A201-B have been updated to reflect the correct elevation side (Eastern Elevation).**

The responses and updated plan submittals should adequately address the comments provided.

Sincerely,

REGINA OKOYE, ENTITLEMENTS PROJECT MANAGER
MODULUS ARCHITECTS & LAND USE PLANNING, INC.
100 Sun Avenue NE, Suite 600
Albuquerque, NM 87109
Office 505.338.1499 (Ext. 1003)
Mobile + Text 505.267.7686
Email: rokoye@modulusarchitects.com
Website: www.modulusarchitects.com
Join us on Facebook: Modulus Architects on Facebook
New Mexico | Texas | Arizona | Colorado | Oklahoma

INTER-OFFICE MEMO

DATE: September 11, 2023

TO: Jolene Wolfley, DFT Chair
Jay Rodenbeck, Planning Manager

FROM: Megan Jones, MCRP - Senior Planner

RE: Project #2023-008767/SI-2023-001056
Site Plan-EPC Major Amendment, 200 Tramway Blvd. SE

On July 20, 2023, the EPC voted to approve a Site Plan-EPC Major Amendment for an approximately 8.5-acre site known as Tract J-1, Replat of Tracts F, H-1, J and unplatted land, Four Hills Village Shopping Center and Apartment Complex, located south of Central Ave. SE, north of Wenonah Ave. SE, and between Tramway Blvd. SE and Four Hills Rd. SE. The Site Plan-EPC, Major Amendment is subject to meet Conditions of Approval prior to reeving final sign off by the DFT.

The applicant's agent reached out to Staff in August 2023 coordinate.

Note: Staff reviewed the DFT version of the Site Plan-EPC, Major Amendment against the EPC version of the Site Plan-EPC, Major Amendment which is the standard, required review.

Staff originally reviewed the Site Plan-EPC, Major Amendment Request, which was Conditioned by the EPC, and not the associated future Site Plan for the Coffee Shop. The request was for a major amendment and not for a Site Plan, which is why the Site Plan was not reviewed as part of this request.

Staff checked for incorporation of the Conditions of Approval and for unauthorized changes. The following is a list of conditions detailing how they were met, not met or partially met:

EPC Conditions of Approval

1. Condition 1 & 2: The applicant has coordinated with the Staff Planner and provided a letter responding to the conditions off approval in the NOD dated July 20, 2023 for the Major Amendment request (see attached). The DFT Site Plan satisfies all, but three Conditions. It is the responsibility of the DFT reviewer to ensure that all other applicable City requirements are met for the associated Site Plan approval.

2. Condition 3: The applicant provided the amended Grading and Drainage plan.

a. A note shall be added to sheet C1 stating that the EPC approved the requested amendments on 7-20-2023.
b. The G&D Plans show exiting and proposed G& D as sheet C3.

3. Condition 4, a: The applicant shall update the Major Amendment sheet to reflect the provided bicycle spaces. This was only included on the Site Plan sheet associated with the request. All amendments shall be reflected on the Major Amendment Sheet.

4. Condition 4, b, 5-11: Satisfied.

5. Condition 12. The applicant shall provide a note on the Site Plan and light pole detail stating that all building surface mount light fixtured will be shielded and downward focused.

6. Condition 13: Satisfied.

Unauthorized Changes

1. AS-101 Site Plan Sheet:
    a. Keyed notes 17-21 have been added to reflect Conditions 5b & 5c.
    b. General note E
2. New Grading and drainage sheet C3.
3. The master Utility Plan Sheet was renamed from sheet MU-1 to sheet C4.
    a. General note 12 and keyed note 14 are new.

The conditions of approval have been mostly fulfilled. All conditions that have not been met shall be coordinated with DFT staff prior to receiving final sign-off. All unauthorized changes appear to have been provided to satisfy conditions off approval.

Staff did not review the associated Site Plan, therefore DFT staff shall review all applicable standards for the proposed restaurant with drive-through.

If you have any questions regarding this case, please call me at (505) 924-3352 or e-mail me at mdjones@cabq.gov. Thank you.

• KROGER CORPORATE REAL ESTATE • 1014 VINE STREET • CINCINNATI, OH 45202-1100

June 15, 2023

City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87102

RE: AGENT AUTHORIZATION NOTICE – 200 TRAMWAY BLVD SE ALBUQUERQUE NM 87123

To Whom It May Concern,

Smith's Food & Drug Centers, Inc., hereby authorizes Modulus Architects & Land Use Planning, Inc., to perform as the Agent of Record with the City of Albuquerque. This Agent Authorization is for the property located at 200 TRAMWAY BLVD SE ALBUQUERQUE NM 87123 and legally described as:

Lot: J1
TR J-1 REPL OF TRS F, H-1, J & UNPLATTED LAND FOUR HILLS VILLAGE SHOPPING CENTER & APT COMPLEX CONT 7.9444 AC +/- OR 346,058 SF +/-

This authorization is valid until further written notice from Smith's Food & Drug Centers, Inc. or Modulus Architects & Land Use Planning, Inc. (Agent). Please direct all correspondence and communication to our Agent for the purpose of this request for the Environmental Planning Commission and all supplements submittals.

Sincerely,

Rick J. Landrum
Vice President
Smith's Food & Drug Centers, Inc.

APPROVED SKG/DB 6.12.23 LAW DEPT.

Owner: Smith's Food & Drug Centers, Inc.
Owner Address: 1014 VINE ST FLOOR 7TH CINCINNATI OH 45202

FORM P: PRE-APPROVALS/SIGNATURES

Legal Description & Location: 200 TRAMWAY BLVD. SE, ALBUQUERQUE, NM 87123

TR J-1 REPL OF TRS F, H-1, J & UNPLATTED LAND FOUR HILLS VILLAGE SHOPPING CENTER & APT COMPLEX CONT 7.9444 AC +/- OR 346,058 SF +/-

Job Description: Starbucks

❑ ***Hydrology:***

• Grading and Drainage Plan	X Approved	____ NA
• AMAFCA	____ Approved	X NA
• Bernalillo County	____ Approved	X NA
• NMDOT	____ Approved	x NA
• MRGCD	____ Approved	X NA

Renée C. Brissette — Hydrology Department

07/28/23 — Date

❑ ***Transportation:***

• Traffic Circulations Layout (TCL)	X Approved	____ NA
• Traffic Impact Study (TIS)	X Approved	____ NA
• Neighborhood Impact Analysis (NIA)	____ Approved	X NA
• Bernalillo County	____ Approved	X NA
• MRCOG	____ Approved	X NA
• NMDOT	____ Approved	X NA
• MRGCD	____ Approved	X NA

Ernest Armijo — Transportation Department

8/17/2023 — Date

❑ ***Albuquerque Bernalillo County Water Utility Authority (ABCWUA):***

• Water/Sewer Availability Statement/Serviceability Letter	x Approved	____ NA
• ABCWUA Development Agreement	____ Approved	x NA
• ABCWUA Service Connection Agreement	____ Approved	x NA

Sarah Luckie — ABCWUA

7/26/2023 — Date

☒ Infrastructure Improvements Agreement (IIA*)	____ Approved	____ NA
☒ Solid Waste Department Signature on the plan	X Approved	____ NA
☒ Fire Marshall Signature on the plan	X Approved	____ NA

* Prior to Final Site Plan approval submittals (include a copy of the recorded IIA)

EXHIBIT 1 - HYDROLOGY APPROVAL

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

July 27, 2023

Ronald Bohannan, P.E.
Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM 87109

RE: Starbucks - Tramway
Grading and Drainage Plans
Engineer's Stamp Date: 07/19/23
Hydrology File: L23D015A

Dear Mr. Bohannan:

Based upon the information provided in your submittal received 07/19/2023, the Grading & Drainage Plans are approved for Building Permit, Grading Permit, and for action by the Development Hearing Officer (DHO) on Preliminary/Final Plat. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **$25.00** made out to "**Bernalillo County**" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

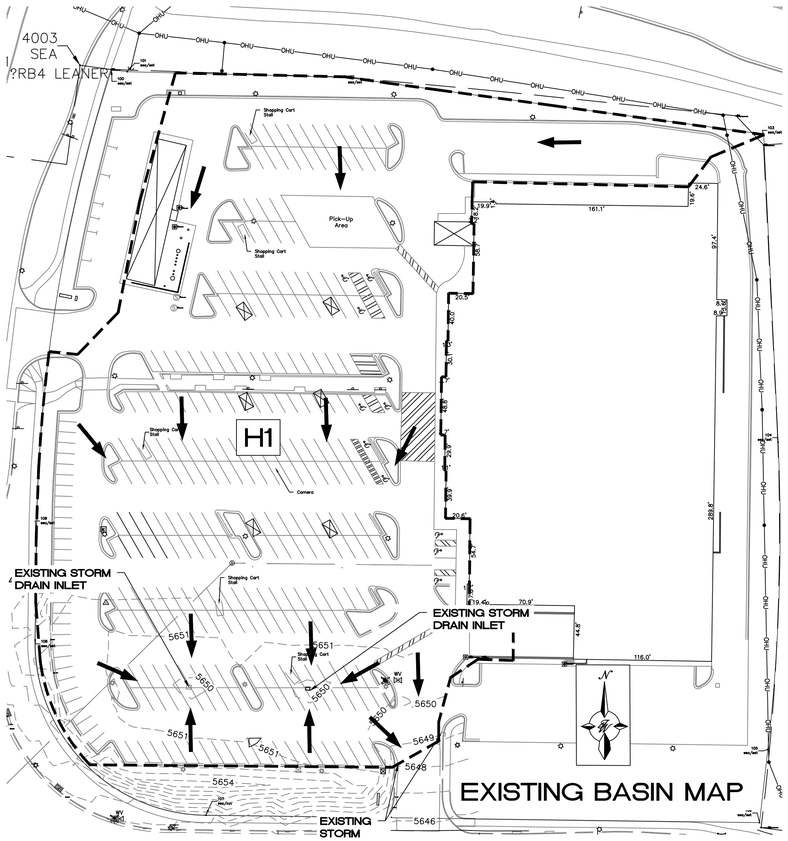
Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

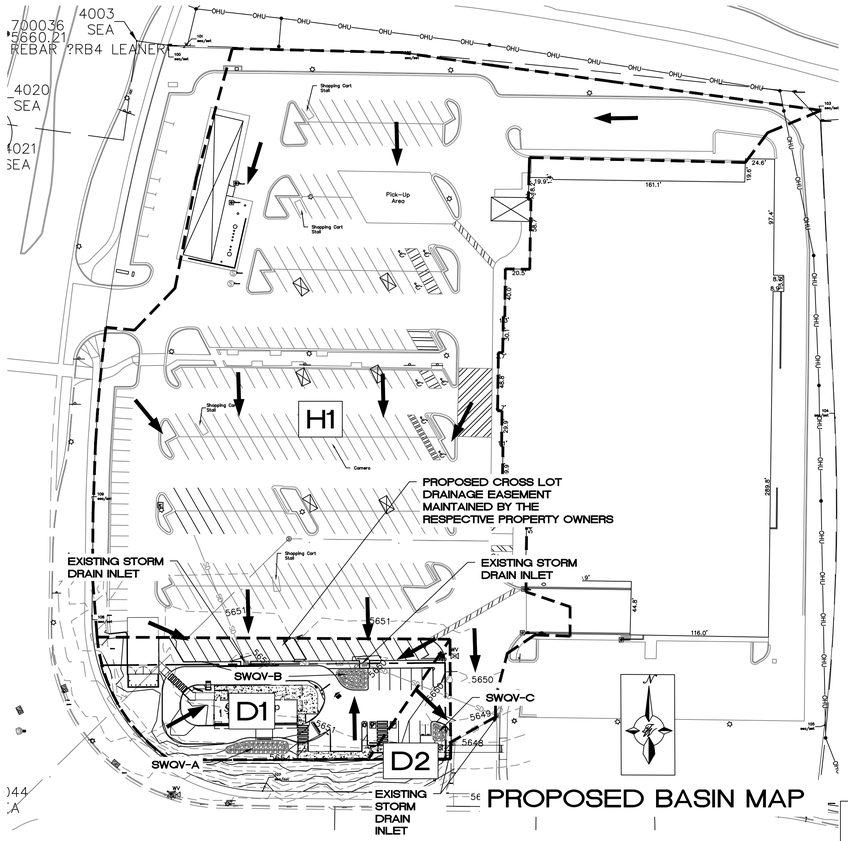
Albuquerque

NM 87103

www.cabq.gov



EXISTING BASIN MAP

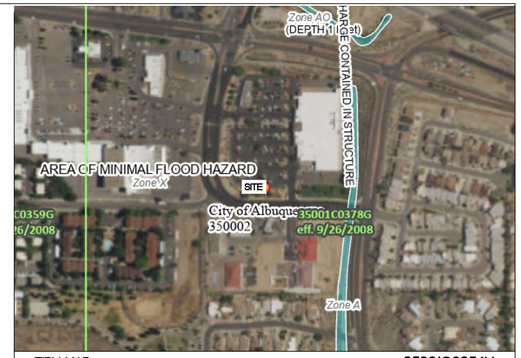


PROPOSED BASIN MAP

GRAPHIC SCALE

60 30 0 30 60

SCALE: 1"=60'



FIRM MAP: 35001C0354H

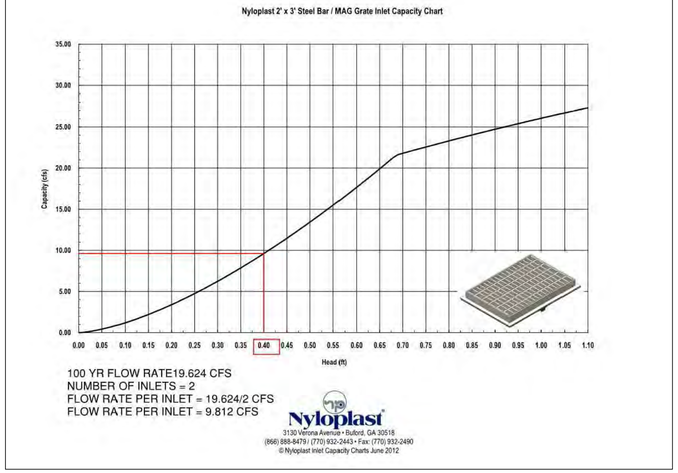
EXISTING CONDITIONS

THE SUBJECT SITE IS LOCATED WITHIN A LARGER BASIN INDICATED AS AREA "B" IN THE DRAINAGE REPORT FOR SMITHS STORE #427 IN HYDRONUM FILE: L23D015. CURRENTLY THE SITE IS PAVED WITH PARKING SPACES AND THE STORM WATER DISCHARGE FREE FLOWS INTO VARIOUS STORM DRAIN INLETS ON THE SOUTHERN PART OF THE SMITHS LARGER TRACT AS SHOWN IN THE EXISTING CONDITIONS.

PROPOSED CONDITIONS

A NEW COFFEE DRIVE THRU SHOP IS PROPOSED TO BE DEVELOPED AND WILL REPLACE EXISTING PARKING SPACES. THE DEVELOPED STORM WATER DISCHARGE SHALL BE ROUTED THROUGH STORM WATER QUALITY PONDS INSTALLED WITHIN PLANTERS PRIOR TO BEING DISCHARGED INTO THE EXISTING STORM DRAIN INLETS AS SHOWN IN THE PROPOSED CONDITIONS BASIN MAP.

EXISTING STORM INLET CAPACITY CHART



DPM Weighted E Method CH 6

Precipitation Zone 3

STARBUCKS ON TRAMWAY

TWLLC **Date** 5/24/2023

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed

Volume = Weighted E * Total Area

Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

HYDROLOGY CALCULATION TABLES

Existing Conditions

Basin Descriptions													100-Year, 6-Hr		
Basin ID	Tract	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs
H1		195,800	4.49	0.00702	0%	0.000	0%	0.000	10%	0.449	90%	4.045	2.431	0.911	19.59
Total		**195,800**	**4.49**	**0.00702**		**0.000**		**0.000**		**0.000**		**4.045**		**0.911**	**19.589**

Proposed Conditions

Basin Descriptions													100-Year, 6-Hr		
Basin ID	Tract	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs
H1		171,000	3.93	0.00613	0%	0.000	0%	0.000	10%	0.393	90%	3.533	2.431	0.795	17.11
D1		23,640	0.54	0.00085	0%	0.000	0%	0.000	30%	0.163	70%	0.3799	2.133	0.096	2.22
D2		3,135	0.07	0.00011	0%	0.000	0%	0.000	30%	0.022	70%	0.0504	2.133	0.013	0.29
Total		**197,775**	**4.54**	**0.00709**		**0.000**		**0.000**		**0.577**		**3.963**		**0.905**	**19.624**

REQUIRED STORM WATER QUALITY VOLUME CALCULATIONS

Basin D1 Storm Water Quality Volume		
Total Impervious Area =	ΣArea in "Treatment D"	
Retainage depth = 0.42" Per DPM Pg. 272	0.035	FT
Retention Volume =	**=0.035 x Area D**	CF
Area D (0.3799 acres)	16548	SF
Required Retention Volume	579	CF
Pond Volume Provided	708	CF

Basin D2 Storm Water Quality Volume		
Total Impervious Area =	ΣArea in "Treatment D"	
Retainage depth = 0.42" Per DPM Pg. 272	0.035	FT
Retention Volume =	**=0.035 x Area D**	CF
Area D (0.0504 acres)	2195	SF
Required Retention Volume	77	CF
Pond Volume Provided	115	CF

PROPOSED STORM WATER POND VOLUME TABLES

SWQV-A POND VOLUME CALCULATIONS

ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5650	199	0	0
5651	525	362	362

SWQV-B POND VOLUME CALCULATIONS

ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5648	36	0	0
5649	156	96	96
5650	344	250	346

SWQV-C POND VOLUME CALCULATIONS

ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5647.5	29	0	0
5648	56	21.25	21
5649	131	93.5	115

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 07/27/23
BY: Ronald C Bohannan
HydroTrans # L23D015A

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY FROM REQUIRING THE CORRECTION OF ERRORS, CORRECTION, OR ERROR OR OMISSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED, OR ALTERED WITHOUT AUTHORIZATION.

ENGINEER'S SEAL

RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER

07/19/2023

RONALD R. BOHANNAN
P.E. #7868

STARBUCKS ON TRAMWAY
ALBUQUERQUE, NM

GRADING AND DRAINAGE BASIN MAP

TIERRA WEST, LLC
5571 MIDWAY PARK PLACE NE
ALBUQUERQUE, NM 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY: BF

DATE: 07/11/2023

2023047_BASINS

SHEET # C1

JOB # 2023047

\\TWMAS\Z_Drive\2023\2023047 Starbucks at Tramway\dwg\EPC\2023047_BASINS.dwg Jul 19, 2023 - 8:38am

LEGEND

	CURB & GUTTER
	BOUNDARY LINE
	RIGHT-OF-WAY
	BUILDING
	CONCRETE/SIDEWALK
5010	CONTOUR MAJOR
5011	CONTOUR MINOR
x 5048.25	SPOT ELEVATION
	FLOW ARROW
	EXISTING CURB & GUTTER
5010	EXISTING CONTOUR MAJOR
5011	EXISTING CONTOUR MINOR
x 5048.25	EXISTING SPOT ELEVATION
	GRADE BREAK
	RETAINING WALL

SPOT ELEVATION LEGEND

SW= TOP OF SIDEWALK
TC= TOP OF CURB
FL= FLOW LINE
FF= FINISHED FLOOR

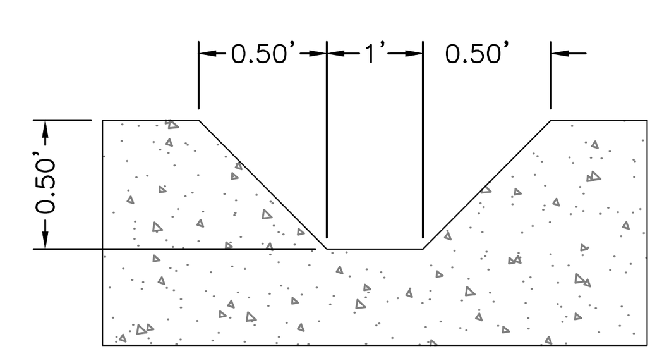
SPOT ELEVATION NOTE:

ALL PROPOSED SPOT ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.

CAUTION
ALL EXISTING UTILITIES/TOPOGRAPHY SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (SO-19)

1. BUILD SIDEWALK CULVERTS PER COA STD DWG 2236.
2. CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A MEETING PRIOR TO FORMING.
3. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
4. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" [OR (505) 260-1990] FOR THE LOCATION OF EXISTING UTILITIES.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
7. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
8. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
9. WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
10. CONTRACTOR MUST CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A CONSTRUCTION INSPECTION. FOR EXCAVATING AND BARRICADING INSPECTIONS, CONTACT CONSTRUCTION COORDINATION AT (505) 924-3416.



CURB NOTCH
NTS

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 07/27/23
BY:
HydroTrans # L23D015A

SCALE: 1"=10'

ENGINEER'S SEAL
RONALD R. BOHANNAN, NEW MEXICO, 7868, PROFESSIONAL ENGINEER
07/19/2023
RONALD R. BOHANNAN
P.E. #7868

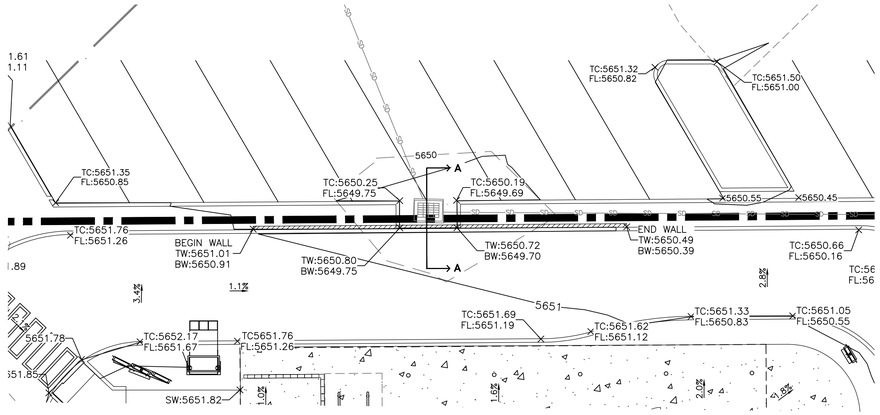
STARBUCKS ON TRAMWAY
ALBUQUERQUE, NM

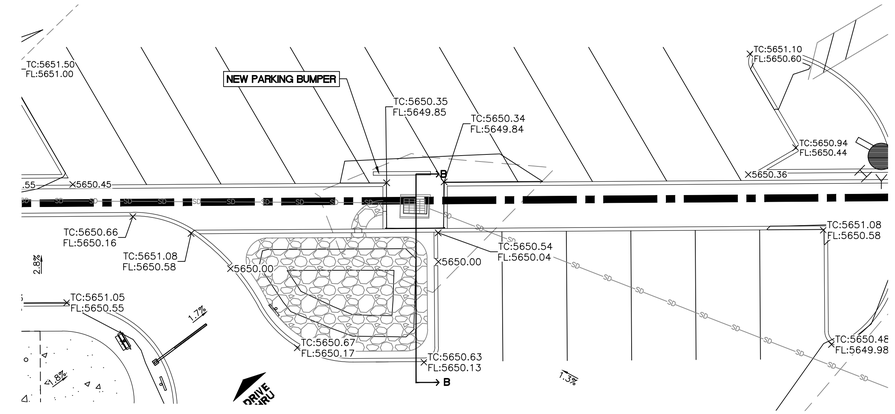
GRADING & DRAINAGE PLAN

TIERRA WEST, LLC
5571 MIDWAY PARK PLACE NE
ALBUQUERQUE, NM 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY: BF
DATE: 07/11/2023
2023047_GRE
SHEET # C2
JOB # 2023047

\\TWNAS\Z_Drive\2023\2023047 Starbucks at Tramway\dwg\EPC\2023047_GRE.dwg Jul 19, 2023 – 8:40am





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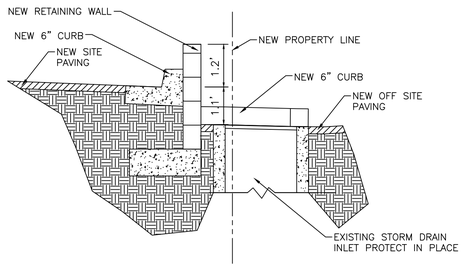
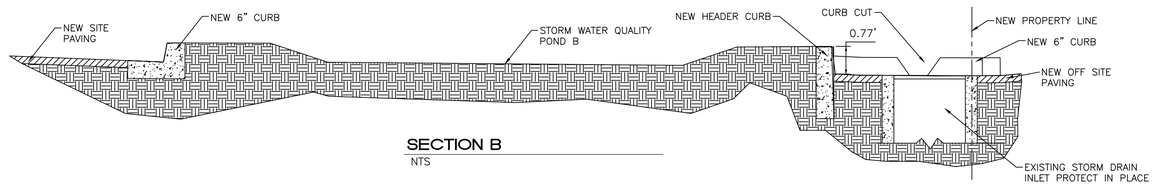
SCALE: 1"=10'



SECTION A

NTS



SECTION B

NTS

LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- RIGHT-OF-WAY
- BUILDING
- CONCRETE/SIDEWALK
- 5010 — CONTOUR MAJOR
- 5011 — CONTOUR MINOR
- x 5048.25 — SPOT ELEVATION
- FLOW ARROW
- EXISTING CURB & GUTTER
- 5010 — EXISTING CONTOUR MAJOR
- 5011 — EXISTING CONTOUR MINOR
- x 5048.25 — EXISTING SPOT ELEVATION
- GRADE BREAK

SPOT ELEVATION LEGEND

SW= TOP OF SIDEWALK
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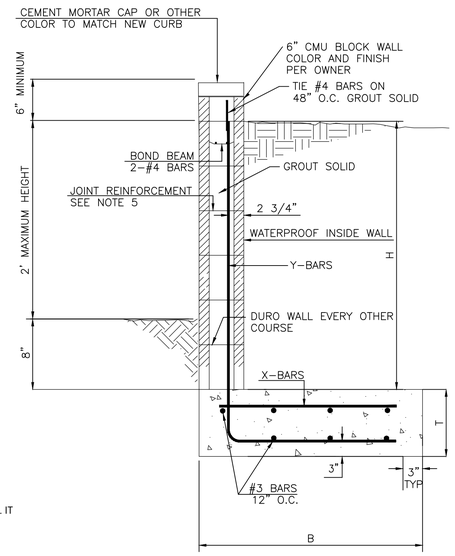


"L" FOOTING RETAINING WALL DETAIL

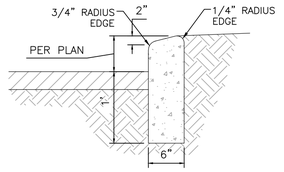
NTS

GENERAL NOTES:

1. ALL CONCRETE IS TO BE 3000 PSI @ 28 DAYS.
2. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM. D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE ± 2.0%.
3. BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
4. ALL BARS ARE TO BE GRADE 60, ASTM 615.
5. TRUSS TYPE DUR-O-WALL EVERY OTHER COURSE.
6. USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS EVERY 12'.
7. 30 BAR DIAMETER LAPS TYPICAL.
8. DUR-O-WAL HORIZONTAL JOINT REINFORCEMENT 16" O.C.
9. OPEN JOINTS 16" O.C. TYPICAL AT FIRST COURSE.
10. OWNER TO SELECT MASONRY COLOR AND/OR FINISH
11. SOLID MASONRY CAP COURSE TYPICAL.
12. WATER PROOF WALL.

6 INCH REINFORCED CONCRETE MASONRY WALL (FOR RETAINING PORTION ONLY)

H	B	T	Y-BARS	X-BARS
ft.-in.	ft.-in.	in.		
2'-0"	2'-0"	9"	#4 @ 24" O.C.	



CURB GENERAL NOTES:

1. ALL CURBS TO BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE.
2. PROVIDE CONTRACTION JTS. 12' MAX., SPACING, 1/2" EXP. JTS. AT CURB RETURNS AND AT A MAX. SPACING OF 120' BETWEEN CURB RETURNS AND EACH SIDE OF SEPARATELY CONSTRUCTED DRIVEWAYS. CONTRACTION JTS., SHALL BE EITHER SAWED OR TOOLED A MINIMUM OF 1" DEEP AT FINISHED FACES.
3. ALL EDGES SHALL BE EDGED WITH A 3/8" RADUIS EDGING TOOL.
4. 1/4" ISOLATION JOINT SHALL BE PLACED BETWEEN SIDEWALK AND CURB WHEN CAST ADJACENT TO EACH OTHER.

6" HEADER CURB DETAIL

NTS

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 07/27/23
BY: Ronald C. Bohannan
HydroTrans # L23D015A
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO BE A VIOLATION OF ANY PROVISION OR ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS/REPORT, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

ENGINEER'S SEAL	STARBUCKS ON TRAMWAY ALBUQUERQUE, NM	DRAWN BY BF
RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER 07/19/2023	**GRADING & DRAINAGE PLAN**	DATE 07/11/2023
RONALD R. BOHANNAN P.E. #7868	TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawestllc.com	2023047_GRE SHEET # **C3** JOB # 2023047

\\TNMAS\Z_Drive\2023\2023047 Starbucks at Tramway\dwg\EPC\2023047_GRE.dwg Jul 19, 2023 - 8:40am

EXHIBIT 2 - TCL APPROVAL

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

August 17, 2023

Devin Nguyen, AAIA
Modulus Architects
100 Sun Ave. NE
Albuquerque, NM 87109

Re: **Starbucks**
200 Tramway Blvd. SE
Traffic Circulation Layout
Architect's Stamp 07-05-23 (L23-D015A)

Dear Mr. Nguyen,

The TCL submittal received 07-31-2023 is approved for Building Permit by Transportation. A copy of the stamped and signed plan will be needed for each of the building permit plans. Please keep the original to be used for certification of the site for final C.O. for Transportation.

When the site construction is completed and an inspection for Certificate of Occupancy (C.O.) is requested, use the original City stamped approved TCL for certification. Redline any minor changes and adjustments that were made in the field. A NM registered architect or engineer must stamp, sign, and date the certification TCL along with indicating that the development was built in "substantial compliance" with the TCL. Submit this certification, the TCL, and a completed Drainage and Transportation Information Sheet to the PLNDRS@cabq.gov for log in and evaluation by Transportation**. AN APPROVED PLAT IS A CONDITION OF RELEASING FINAL CO.**

Once verification of certification is completed and approved, notification will be made to Building Safety to issue Final C.O. To confirm that a final C.O. has been issued, call Building Safety at 924-3690.

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

C: CO Clerk, File

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Starbucks Coffee Shop Building Permit #: TBD Hydrology File #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: TRACT J-1-A AND J-1-B, FOUR HILLS VILLAGE SHOPPING CENTER AND APARTMENT COMPLEX, FILED IN THE OFFICE OF THE COUNTY CLEARK OF BERNAILLO COUNTY, NEW MEXICO.

City Address: 200 TRAMWAY BLVD. SE, ALBUQUERQUE, NM 87123

Applicant: Modulus Architects Contact: Devin Nguyen

Address: 100 Sun Ave Suite 600, Albuquerque NM 87109

Phone#: 505-338-1499 Fax#: _____ E-mail: devinn@modulusarchitects.com

Other Contact: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE X ADMIN SITE

IS THIS A RESUBMITTAL? X Yes _____ No

DEPARTMENT X TRANSPORTATION _____ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
____ GRADING PLAN
____ DRAINAGE REPORT
____ DRAINAGE MASTER PLAN
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
X TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ STREET LIGHT LAYOUT
____ OTHER (SPECIFY) _____
____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY

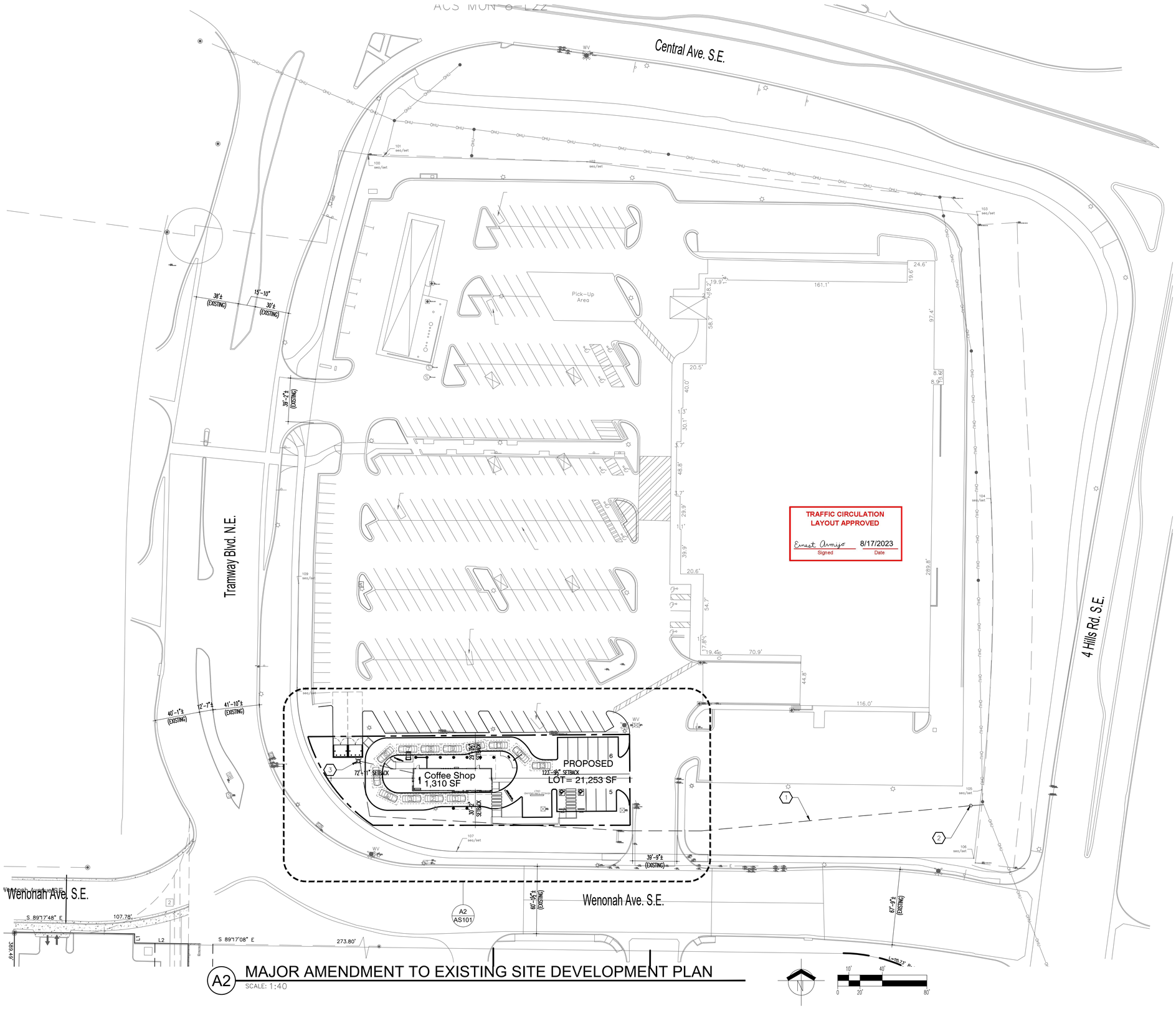
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL

____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ By: 07 Aug 2023

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:_____

FEE PAID:_____



A2 MAJOR AMENDMENT TO EXISTING SITE DEVELOPMENT PLAN

SCALE: 1:40

GENERAL NOTES

A. "C" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.
B. INDICATED DIMENSIONS ARE TO FACE OF FINISH; UNLESS OTHERWISE NOTED.

SITE DATA

IDO ZONING DESIGNATION – MX-M
COMPREHENSIVE PLAN CORRIDOR – MAJOR TRANSIT CORRIDOR & PREMIUM TRANSIT CORRIDOR (CENTRAL AVE)
COMPREHENSIVE PLAN CENTER – FOUR HILLS VILLAGE – ACTIVITY CENTER
CITY DEVELOPMENT AREA – AREA OF CHANGE

EXISTING SMITH'S PARKING

USE/PARKING REQUIREMENT	TOTALS
BUILDING SIZE	85,875 SF
TOTAL PARKING REQUIRED	1 SPACE PER 300 SQ. FT. GFA = 286
EXISTING PARKING PROVIDED	383 SPACES
HC PARKING REQUIRED	7 SPACES
HC PARKING REQUIRED	10 SPACES
BIKE SPACE PROVIDED	12 SPACES
NO. OF PARKING REMOVED FOR COFFEE SHOP W/ DRIVE-THRU	48 SPACES REMOVED
REMAIN PARKING SPACES PROVIDED	335 SPACES

PROPOSED COFFEE SHOP WITH DRIVE-THRU PARKING

USE/PARKING REQUIREMENT	TOTALS
BUILDING SIZE	1,310 SF
TOTAL PARKING REQUIRED	8 SPACES PER 1,000 SF GFA = 10 SPACES
OUTDOOR PATIO SIZE	725 SF
TOTAL PARKING REQ FOR PATIO	3 SPACES PER 1,000 SF GFA = 2 SPACES
20% PARKING REDUCTION (AC, MT)	9 SPACES
HC PARKING REQUIRED	1 SPACE
HC PARKING PROVIDED	2 SPACES
TOTAL PARKING PROVIDED	11 SPACES
BIKE SPACES REQUIRED	3 SPACES
MOTORCYCLE PARKING REQUIRED	1 SPACE
MOTORCYCLE PARKING PROVIDED	2 SPACES

REV	DATE	BY	REVISION
6			
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4			
3	05 JUL 2023	RO	MAJOR AMENDMENT TO EXISTING SITE DEVELOPMENT PLAN
2			
1			

MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498

STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
05 JULY 2023

PROJECT TITLE
COFFEE SHOP with DRIVE-THRU
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

PROJECT MANAGER: DEVIN NGUYEN
JOB NO.: CS-TRAMWAY
DRAWN BY: DTN

SHEET TITLE
SITE PLAN – EPC, MAJOR AMENDMENT JULY 20, 2023

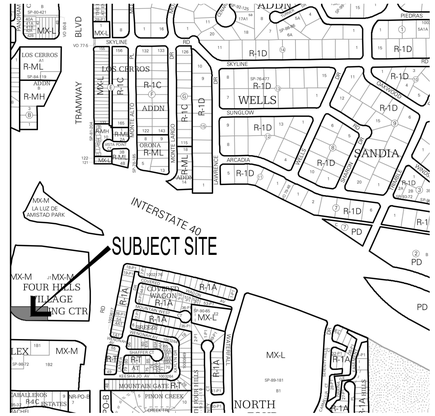
DATE: 05 Jul 2023
SCALE: AS NOTED
sheet- AS100
of-

GRAPHIC LEGEND

6" THICK NORMAL WEIGHT REINFORCED CONCRETE PAVING.

HEAVY DUTY: SEE A5/A1.3.

LIGHT DUTY ASPHALT: SEE A3/A1.3.



VICINITY MAP

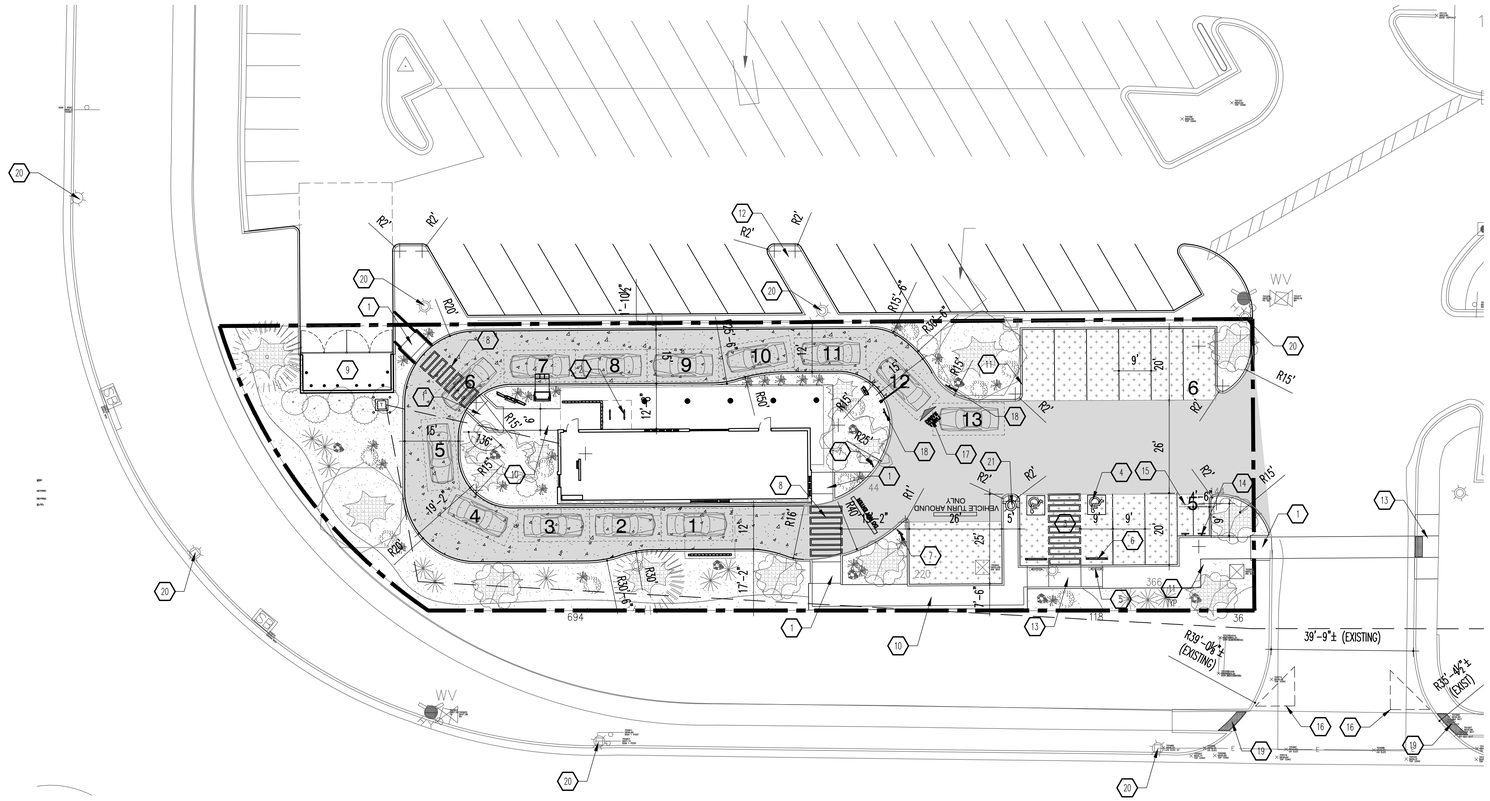
Zone Atlas Map L-23-Z NTS

LEGAL DESCRIPTION: TRACT J-1-A AND J-1-B, FOUR HILLS VILLAGE SHOPPING CENTER AND APARTMENT COMPLEX, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO.

TRAFFIC CIRCULATION LAYOUT APPROVED

Ernest Armijo 8/17/2023
Signed Date

AN APPROVED PLAT IS A CONDITION OF RELEASING FINAL CO.



A2 ARCHITECTURAL SITE PLAN
SCALE: 1:20

GENERAL NOTES

A. "C" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.
B. INDICATED DIMENSIONS ARE TO FACE OF FINISH; UNLESS OTHERWISE NOTED.
C. PARKING AND ACCESSIBLE PAVEMENT MARKING AND STRIPING SHALL CONFORM TO THE NEW MEXICO COMMERCIAL BUILDING CODE SECTION 1110.3 F7.2.
D. LANDSCAPING AND SIGNAGE SHALL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBS BETWEEN 3' AND 8' TALL (AS MEASURED FROM THE GUTTER PLAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE.
E. ALL BROKEN OR CRACKED SIDEWALK MUST BE REPLACED WITH SIDEWALK AND CURB & GUTTER.

KEYED NOTES

1. CURBED RAMP: SEE A1/A1.1.
2. BIKE RACK: SEE B1/A1.2; TYPICAL OF (2).
3. HANDICAP PARKING: SEE A1/A1.2 AND A3/A1.2.
4. HANDICAP PAVEMENT MARKING: SEE A5/A1.2.
5. HANDICAP SIGNAGE: SEE B4/A1.2; TYPICAL OF (2).
6. WHEEL STOP: SEE B5/A1.2; TYPICAL OF (2).
7. 'DO NOT ENTER' SIGNAGE: SEE B3/A1.2; TYPICAL OF (2).
8. WALKWAY PAVEMENT MARKING: SEE C5/A1.2.
9. REFUSE ENCLOSURE: SEE B2/A1.3.
10. SIDEWALK: SEE B3/A1.1.
11. CURB & GUTTER: SEE B1/A1.1.
12. PARKING ISLAND: SEE C3/A1.1.
13. TAPERED RAMP: SEE C1/A1.1.
14. MOTORCYCLE PARKING SIGNAGE: SEE B2/A1.2; TYPICAL OF (2).
15. "MOTORCYCLE PARKING": 12" HIGH x 4" WIDE PAVEMENT MARKING, WHITE IN COLOR.
16. DASHED LINE INDICATES 11' x 11' CLEAR SITE TRIANGLE.
17. "DRIVE-THRU" PAVEMENT MARKING: SEE B1/A1.3.
18. "ONE WAY" SIGNAGE: SEE C1/A1.2.
19. PROVIDE 2' WIDE ADA APPROVED TRUNCATED DOME STRIP.
20. EXISTING LIGHT POLE TO REMAIN.
21. NEW LIGHT POLE.

EASEMENTS

NO EASEMENTS AT IMMEDIATE SITE.

EXISTING SMITH'S PARKING

USE/PARKING REQUIREMENT	TOTALS
BUILDING SIZE	85,875 SF
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REV	DATE	BY	REVISION
6			
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2			
1			

MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
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PHONE (505) 338-1499 FAX (505) 338-1498

STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
05 JULY 2023

PROJECT TITLE: COFFEE SHOP with DRIVE-THRU
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

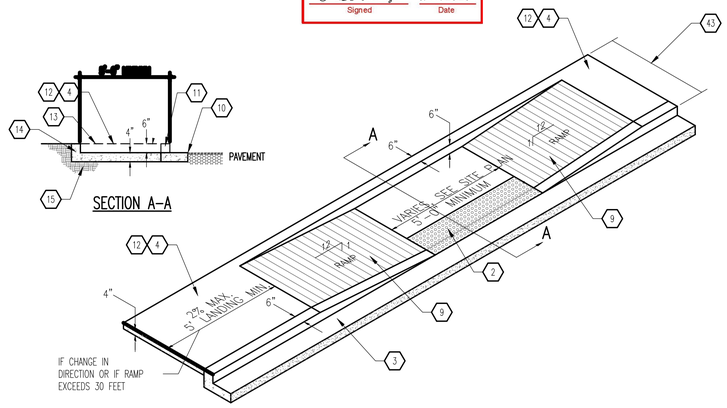
PROJECT MANAGER: DEVIN NGUYEN
JOB NO.: 05-TRAMWAY
DRAWN BY: DTN

SHEET TITLE: SITE PLAN

DATE: 05 Jul 2023
SCALE: AS NOTED
sheet- AS101 of-

TRAFFIC CIRCULATION LAYOUT APPROVED

Ernest Armijo — Signed — 8/17/2023 — Date

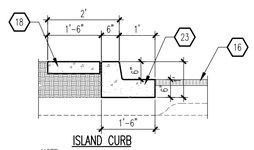


NOTE:

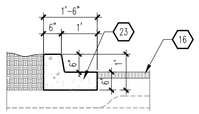
H.C RAMP SHALL NOT EXCEED 6', OR 8% SLOPE IN ANY DIRECTION, AND SHALL CONFORM W/ ALL APPLICABLE ANSI REQ'S. G.C SHALL VERIFY CONFORMANCE W/ ALL APPLICABLE ANSI REQ'S

C1 TAPERED RAMP

SCALE: NTS



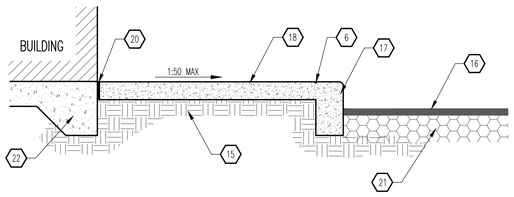
NOTE:
RE: SITEPLAN FOR LOCATIONS OF PAVEMENT SECTION DESIGN PER THE GEOTECHNICAL INVESTIGATION FOLLOW COA STANDARD DRAWING #2415B



NOTE:
RE: SITE PLAN FOR LOCATIONS OF PAVEMENT SECTION DESIGN PER THE GEOTECHNICAL INVESTIGATION FOLLOW COA STANDARD DRAWING #2415B

B1 CURB & GUTTER

SCALE: 1/2" = 1'-0"

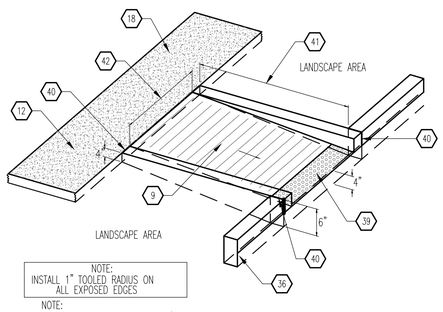


NOTE:

1. CONTRACTION JOINTS AT 5'-0" OC TOOLED ¼" (5/16") WIDE, 1" OR MAXIMUM D/4 (DEEP) WHICHEVER IS GREATER EXPANSION JOINTS AT 20' MAXIMUM AND ALL P.C.s, UNLESS APPROVED OR INDICATED OTHERWISE ON PLAN VIEW JOINT PATTERN.
2. ALIGN CURB AND SIDEWALK JOINTS AT ALL TIMES.

B2 TURNDOWN SIDEWALK SECTION

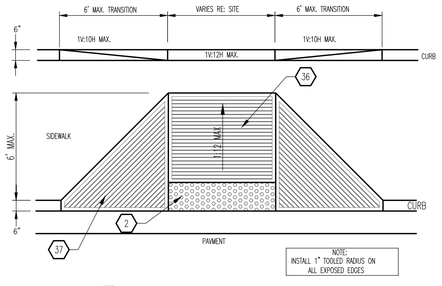
SCALE: 3/4" = 1'-0"



NOTE:
H.C RAMP SHALL NOT EXCEED 6', OR 8% SLOPE IN ANY DIRECTION, AND SHALL CONFORM W/ ALL APPLICABLE ANSI REQ'S. G.C SHALL VERIFY CONFORMANCE W/ ALL APPLICABLE ANSI REQ'S

A1 CURBED RAMP

SCALE: 3/4" = 1'-0"

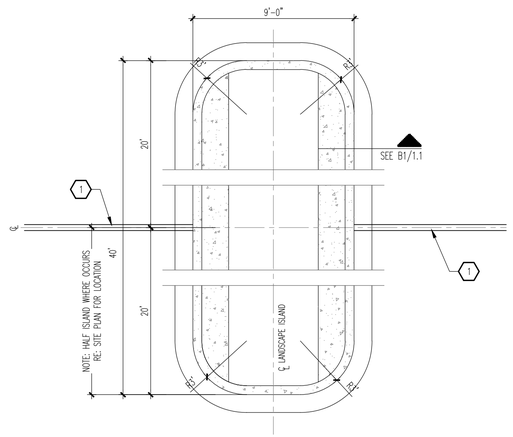


NOTE:

HANDICAP RAMPS SHALL NOT EXCEED 6', OR 8% SLOPE IN ANY DIRECTION, AND SHALL CONFORM WITH ALL APPLICABLE ANSI REQUIREMENTS. GC SHALL VERIFY CONFORMANCE WITH ALL APPLICABLE ANSI REQUIREMENT.

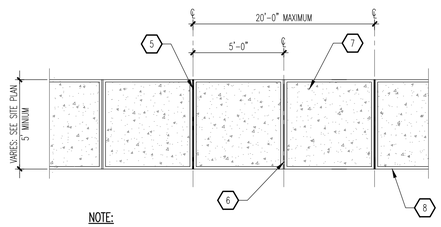
A3 END ISLAND ADA RAMP

SCALE: 1/4" = 1'-0"



C3 TYPICAL ISLAND

SCALE: 1/4" = 1'-0"

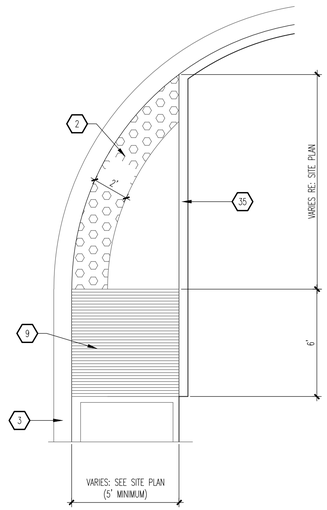


NOTE:

FOLLOW COA STANDARD DRAWING #2430.

B3 TYPICAL SIDEWALK

SCALE: 3/4" = 1'-0"

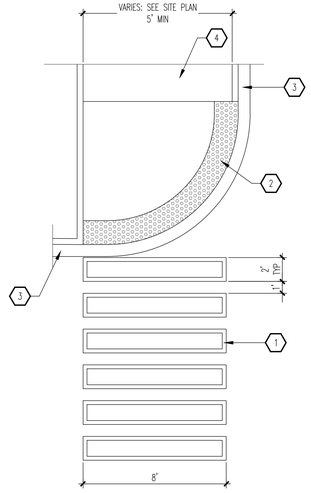


NOTE:

FOLLOW COA STANDARD DRAWING #2443.

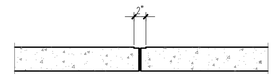
A4 END ISLAND ADA RAMP

SCALE: 1/4" = 1'-0"

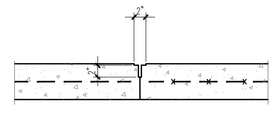


C5 CONCRETE CROSSWALK

SCALE: 1/4" = 1'-0"



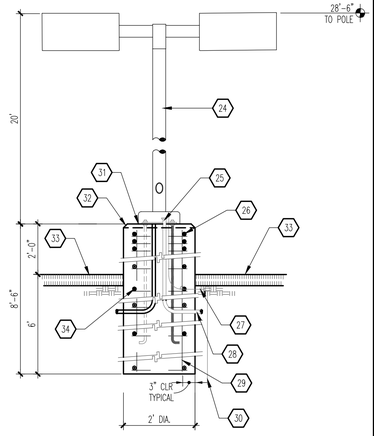
EXPANSION JOINT



CONTROL JOINT

B5 EXPANSION/CONTROL JOINT

SCALE: 1" = 1'-0"



NOTE:

1. MANUFACTURER SHALL WARRANT THAT THE COMPLETE ASSEMBLY FIXTURES, POLE, BASE, SHALL WITHSTAND MINIMUM 90 MPH SUSTAINED WIND LOAD OR AS REQUIRED BY LOCAL AGENCY HAVING JURISDICTION; WHICHEVER IS MORE RESTRICTIVE.
2. CONTRACTOR SHALL VERIFY THAT ALL CONTRACTOR INSTALLED LIGHTS COMPLY WITH LOCAL CODES REQUIREMENTS.
3. SHOULD EXISTING POLE HEIGHT TO BE MATCHED EXCEED 22'. GENERAL CONTRACTOR SHALL VERIFY WITH ARCHITECT ADEQUACY OF DESIGN SHOWN PRIOR TO INSTALL.

A5 LIGHT POLE

SCALE: 1/2" = 1'-0"

GENERAL NOTES

A. "G" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.

KEYED NOTES

1. 4" THICK PAVEMENT MARKING; WHITE IN COLOR.
2. 2' WIDE ADA APPROVED TRUNCATED DOME STRIP.
3. CURB AND GUTTER: SEE B1/A1.1.
4. CONCRETE SIDEWALK: SEE B3/A1.1.
5. CONCRETE EXPANSION JOINT: SEE B5/A1.1.
6. CONCRETE CONTROL JOINT: SEE B5/A1.1.
7. BROOM FINISH CONCRETE SURFACE AREA INSIDE OF TOOLED EDGE TO CREATE PICTURE FRAME EFFECT.
8. SMOOTH TOOLED FINISH AROUND EDGES, TYPICAL.
9. MONOLITHIC CONCRETE HANDICAP RAMP INTEGRALLY COLORED DAVIS COLORS #160 "BRICK RED"; SMOOTH TEXTURE FINISH WITH ¼" DEEP x ¼" WIDE GROOVES AT 2" OC.
10. CONCRETE FLUSH WITH PAVEMENT.
11. CURB, BEYOND.
12. 2% CROSS SLOPE, MAXIMUM.
13. RAMP, BEYOND.
14. RETAINING CURB.
15. SUBGRADE: COMPACTED AS SPECIFIED.
16. PAVEMENT AS SPECIFIED.
17. CONCRETE TURNDOWN CURB.
18. 4" THICK CONCRETE SIDEWALK.
19. SIDEWALK ELEVATIONS VARY – HOLD FLUSH WITH FINISHED FLOOR AT ENTRANCE WAYS. PLANTING AREAS MAY EXIST BETWEEN THE BUILDING AND THE BACK-OF-SIDEWALK (SEE SITE PLAN). EXPANSION JOINTS DO NOT APPLY TO SIDEWALK SECTION ADJACENT TO PLANTING AREAS.
20. ½" EXPANSION JOINT MATERIAL.
21. STABILIZED AGGREGATE BASE COARSE, AS SPECIFIED.
22. STRUCTURAL FOUNDATION SYSTEM: SEE STRUCTURAL FOUNDATION PLAN.
23. CONCRETE CURB AND GUTTER.
24. SQUARE, STRAIGHT, STEEL ANCHOR BASE POLE. POLE & BRACKETS SHALL BE FACTORY FINISHED, PAINTED SEMI GLOSS BLACK WRAP POLES FOR SHIPPING. PROVIDE 1 QT. MATCHING PAINT TO TOUCH ANY SCRATCHES ON POLES ON JOB. SEE LIGHT FIXTURE SCHEDULE FOR SPECIFICATIONS.
25. CONNECT GROUND WIRE TO REINFORCING BARS.
26. (3) #3 TIES AT ½" OC IN TOP 5".
27. #6 BARE COPPER GROUND WIRE.
28. CONDUIT AS INDICATED ON ELECTRICAL PLAN.
29. (6) #6 BARS VERTICAL.
30. 8'-0" COPPER WELD GROUND ROD BY ELECTRICAL CONTRACTOR.
31. NON-SHRINK GROUT.
32. 2" CHAMFER.
33. FINISHED GRADE.
34. #3 TIES @ 12" OC.
35. 6" RETAINING CURB.
36. MONOLITHIC INTEGRALLY COLORED CONCRETE HANDICAP RAMP (4,000 PSI): PROVIDE ARCHITECT WITH SAMPLE COLOR FOR APPROVAL.
37. PROVIDE ¼" DEEP BY ¼" WIDE GROOVES @ 2" OC. EXTEND THE PULL WIDTH AND DEPTH OF THE RAMP.
38. 6" STANDUP CURB OR CURB AND GUTTER AS APPLICABLE (SEE SITE PLAN).
39. PROVIDE ADA APPROVED TRUNCATED STRIP AT 2' WIDTH.
40. EXPANSION JOINT.
41. WIDTH VARIES (6' MINIMUM): SEE SITE PLAN.
42. PROVIDE A 5 SF LAND AT TOP OF RAMP FOR CHANGE IN DIRECTION.
43. WIDTH VARIES: SEE SITE PLAN (MINIMUM 5' WIDTH).

REV	DATE	BY	REVISION
6			
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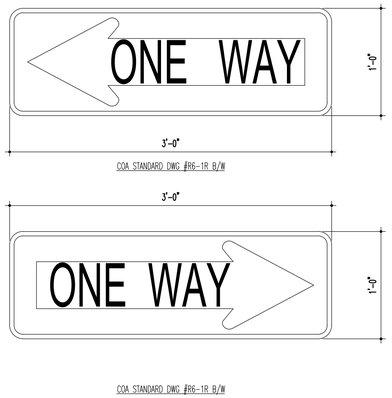
MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498

STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
05 JULY 2023

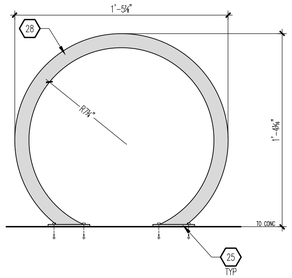
PROJECT TITLE: COFFEE SHOP with DRIVE-THRU
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

DRAWN BY: DTN
JOB NO.: CS-TRAMWAY
PROJECT MANAGER: DEVIN NGUYEN
SHEET TITLE: SITE DETAILS

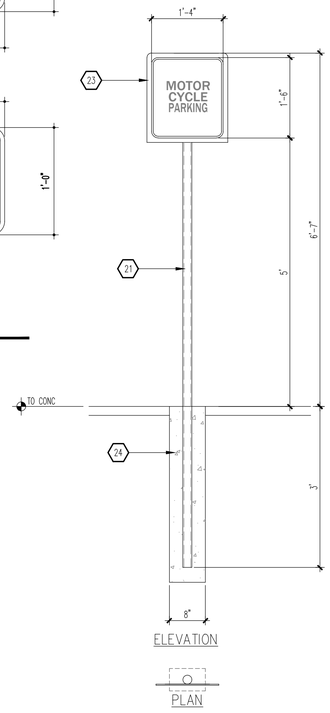
DATE: 05 Jul 2023
SCALE: AS NOTED
sheet: A1.1
of-



C1 SIGNAGE - 'ONE WAY'
SCALE: 1-1/2" = 1'-0"

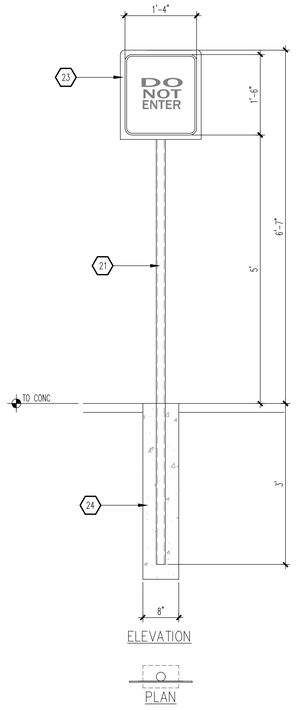


B1 BIKE RACK
SCALE: 1/2" = 1'-0"

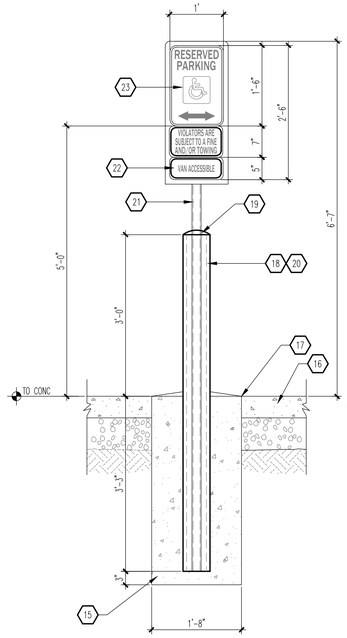


B2 MICS. SIGNAGE
SCALE: 3/4" = 1'-0"

NOTE:

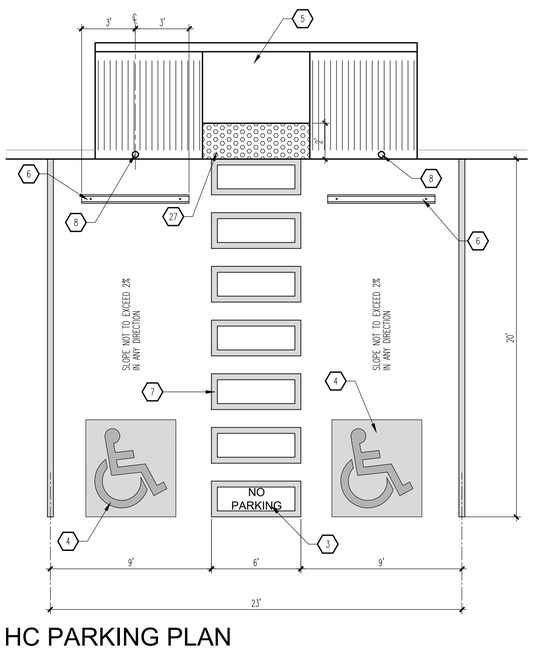


B3 MISC. SIGNAGE
SCALE: 3/4" = 1'-0"

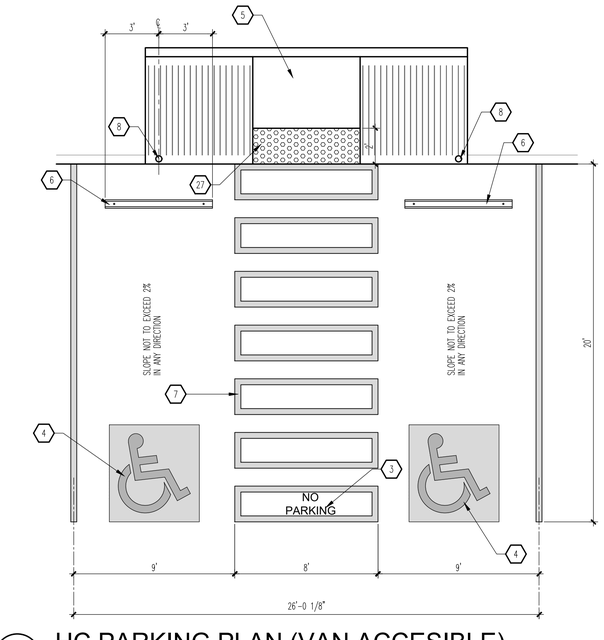


B4 MISC. SIGNAGE
SCALE: 3/4" = 1'-0"

NOTE:



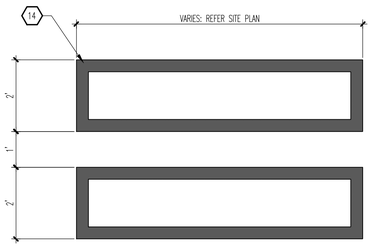
A1 HC PARKING PLAN
SCALE: 1/4" = 1'-0"



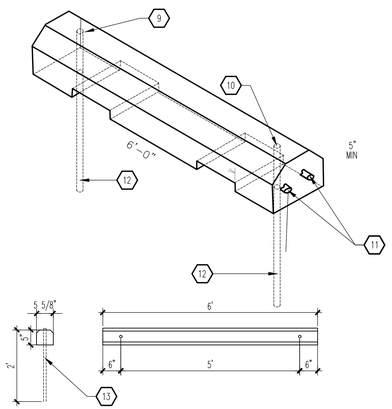
A3 HC PARKING PLAN (VAN ACCESIBLE)
SCALE: 1/4" = 1'-0"

TRAFFIC CIRCULATION LAYOUT APPROVED

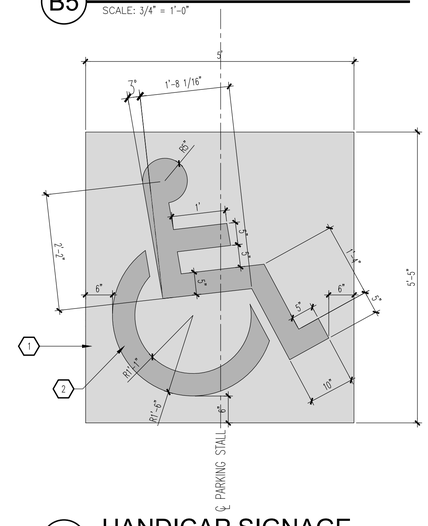
Ernest Armijo — Signed
8/17/2023 — Date



C5 WALKWAY PAVEMENT MARKING
SCALE: 1/2" = 1'-0"



B5 WHEEL STOP
SCALE: 3/4" = 1'-0"



A5 HANDICAP SIGNAGE
SCALE: 3/4" = 1'-0"

GENERAL NOTES

A. "C" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.

KEYED NOTES

1. PAINT BLUE.
2. PAINT WHITE.
3. 12" HIGH BY 4" WIDE "NO PARKING" MARKING – WHITE PAINT.
4. HANDICAP PAVEMENT MARKING: SEE A5/A1.2.
5. TAPERED RAMP: SEE C2/A1.1.
6. WHEEL STOP: SEE B5/1.2.
7. WALKWAY PAVEMENT MARKING: SEE C5/A1.2.
8. HANDICAP POST SIGNAGE: SEE B4/A1.2.
9. TOP OF REINFORCING BAR FLUSH WITH TOP OF CONCRETE.
10. ⅞" DIAMETER HOLE.
11. (2) #4 BARS CONTINUOUS.
12. ¾" REINFORCING BAR EMBEDDED 24" INTO SUBGRADE.
13. #3 REINFORCING BAR.
14. 4" WIDE WHITE PAINTED STRIPING.
15. 3,500 PSI CONCRETE FOUNDATION.
16. FINISHED SURFACE.
17. BITUMINOUS JOINT FILLER (CONCRETE PAVEMENT ONLY).
18. 6" DIAMETER STEEL PIPE FILLED WITH CONCRETE.
19. ROUND CONCRETE TOP.
20. PAINT SAFETY YELLOW.
21. 2" OD GALVANIZED STEEL SIGN POST.
22. "VAN ACCESSIBLE" SIGN WHERE INDICATED ON SITE PLAN.
23. ⅜" STEEL PLATE WITH CONTINUOUS WELD ALONG INTERSECTION OF PIPE POST AND PLATE.
24. CONCRETE FOUNDATION.
25. 7" DIAMETER x ⅜" THICK STEEL PLATE: BLACK POWDER COAT.
26. 2 ⅜" STANDARD DUTY PIPE CENTER SUPPORT.
27. ADA APPROVED TRUNCATED DOME STRIP.
28. 2 ½" OUTSIDE DIAMETER (OD) STEEL TUBING: BLACK POWDER COAT.

REV	DATE	BY	REVISION
6			
5			
4			
3			
2			
1			

MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498

STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
05 JULY 2023

PROJECT TITLE: COFFEE SHOP with DRIVE-THRU
200 TRAMWAY BLVD, NE
ALBUQUERQUE, NEW MEXICO 87123

PROJECT MANAGER: DEVIN NGUYEN
JOB NO.: CS-TRAMWAY
DRAWN BY: DTN

SHEET TITLE: SITE DETAILS

DATE: 05 Jul 2023
SCALE: AS NOTED

sheet- A1.2 of-

EXHIBIT 3 - TIS APPROVAL

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

August 16, 2023

Jonathon Kruse, P.E., PTOE
Lee Engineering
8220 San Pedro Drive NE
Suite 150
Albuquerque, NM 87113
Via email jkruse@lee-eng.com

Re: Tramway Starbucks, 200 Tramway Blvd. SE
Traffic Impact Study final, dated August 2023
HT#L23D015A
Engineering Seal date 8/15/2023

Dear Mr. Kruse,

Review of the Traffic Impact Study for Tramway Starbucks received August 15, 2023 has been completed by the City's Planning Transportation Development section. The City accepts and approves the TIS with the following recommendation for a minor infrastructure modification.

- The existing southbound left turn lane serving the site at the west driveway be lengthened to meet DPM design specifications as closely as possible.

The Traffic Impact Study shall be valid for a period of three years. Should significant modifications to the approved development proposal occur, the approved study shall be revised to incorporate the changes.

If you have any questions, feel free to contact me at (505) 924-3362.

Sincerely,

Matt Grush, P.E.
Senior Engineer
City of Albuquerque
Planning Department
Development Review Services

via: email
C: Applicant, File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

Project Title: Tramway Starbucks **Building Permit #**_____ **Hydrology File #**_____
DRB#_____ **EPC#**_____
Legal Description: UPC: 102305602134521316 City Address OR Parcel 200 TRAMWAY BLVD. SE, ALBUQUERQUE, NM 87123

Applicant/Agent: Lee Engineering on Behalf of Modulus Architects **Contact:** Jonathon Kruse
Address: 8220 San Pedro Dr NE STE 150, Albuquerque NM 87113 **Phone:** 505-545-8459
Email: jkruse@lee-eng.com

Applicant/Owner: Modulus Architects **Contact:** Regina Okoye
Address: _____ **Phone:** 505-338-1499
Email: rokoye@modulusarchitects.com

TYPE OF DEVELOPMENT: ___PLAT (#of lots) __RESIDENCE __DRB SITE ___ ADMIN SITE: ____
RE-SUBMITTAL: X YES _____ NO

DEPARTMENT: X TRANSPORTATION _____ HYDROLOGY/DRAINAGE
Check all that apply:

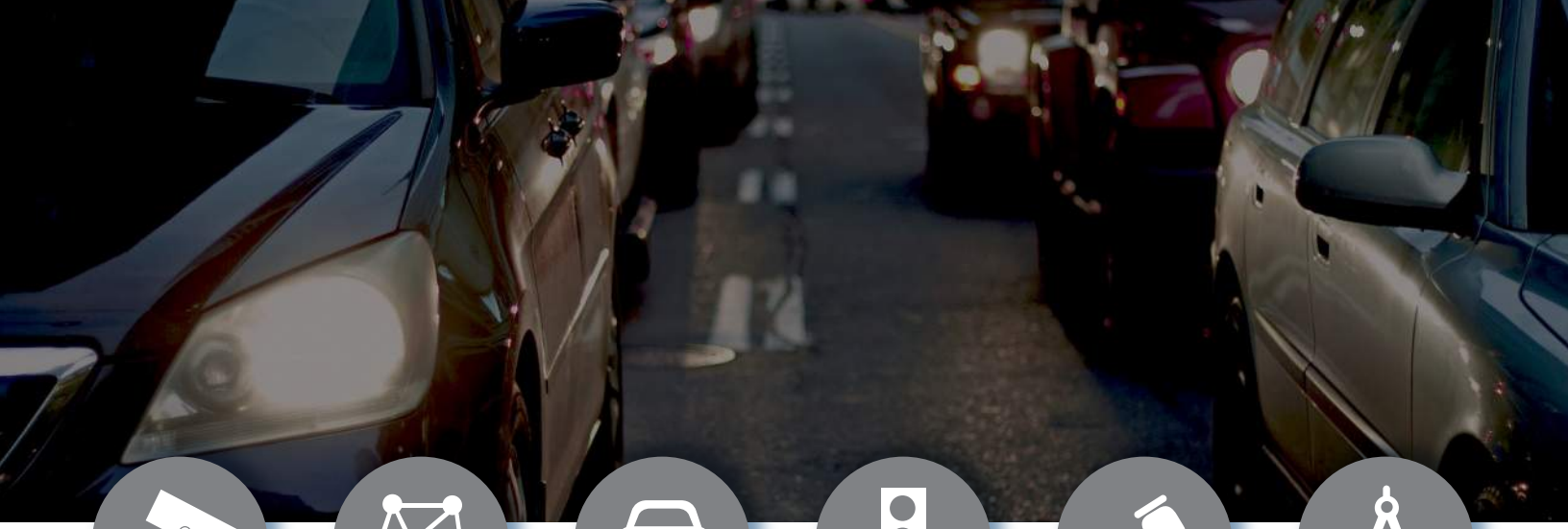
TYPE OF SUBMITTAL:

___ENGINEER/ARCHITECT CERTIFICATION
___PAD CERTIFICATION
___CONCEPTUAL G&D PLAN
___GRADING PLAN
___DRAINAGE REPORT
___DRAINAGE MASTER PLAN
___FLOOD PLAN DEVELOPMENT PERMIT APP.
___ELEVATION CERTIFICATE
___CLOMR/LOMR
___TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE
___TRAFFIC CIRCULATION LAYOUT FOR DRB APPROVAL
X TRAFFIC IMPACT STUDY (TIS)
___STREET LIGHT LAYOUT
___OTHER (SPECIFY)
___PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

___BUILDING PERMIT APPROVAL
___CERTIFICATE OF OCCUPANCY
___CONCEPTUAL TCL DRB APPROVAL
___PRELIMINARY PLAT APPROVAL
___SITE PLAN FOR SUB'D APPROVAL
___SITE PLAN FOR BLDG PERMIT APPROVAL
___FINAL PLAT APPROVAL
___SIA/RELEASE OF FINANCIAL GUARANTEE
___FOUNDATION PERMIT APPROVAL
___GRADING PERMIT APPROVAL
___SO-19 APPROVAL
___PAVING PERMIT APPROVAL
___GRADING PAD CERTIFICATION
___WORK ORDER APPROVAL
___CLOMR/LOMR
___FLOOD PLAN DEVELOPMENT PERMIT
X OTHER (SPECIFY) Final TIS

DATE SUBMITTED: 8/15/2023



TRAFFIC IMPACT STUDY

Tramway Starbucks

Final Report

August 2023

Prepared for

Modulus Architects

8220 San Pedro Drive NE, Suite 150
Albuquerque, NM 87113

(505) 338-0988

leeengineering.com

LEE ENGINEERING

Traffic Impact Analysis (TIA)
for Tramway Starbucks

Final Report

August 2023

Prepared for:

Modulus Architects & Land Use Planning, Inc.

Prepared By:

LEE ENGINEERING

EXECUTIVE SUMMARY

The following contains a Traffic Impact Study (TIS) for a Starbucks coffee shop in Albuquerque, NM. Lee Engineering has completed this report for Modulus Architects & Land Use Planning, Inc (MODULUS). All analyses and items contained herein conform to scoping requirements set forth in a scoping meeting held with the City of Albuquerque on May 1st, 2023.

BACKGROUND

The proposed development is to construct a Starbucks coffee shop on the parking lot of Smith's Superstore located along Tramway Blvd and Wenonah Ave. Nearby intersections include Wenonah Ave & 4 Hills Rd, Tramway Blvd & Wenonah Ave, West Entrance Driveway on Tramway Blvd, and East Entrance Driveway on Wenonah Ave.

The site is anticipated to generate 67 ingress and 66 egress trips during the AM peak hour, and 29 ingress and 28 egress during the PM peak hour. The number of vehicle trips generated by the proposed development was based on the trip generation rates and equations provided in the Trip Generation Manual, 10th Edition, by the Institute of Transportation Engineers (ITE) 937 – Coffee/Donut Shop with Drive-Through Window.

Site access is available from West Entrance Driveway along Tramway Blvd, and East Entrance Driveway along Wenonah Ave.

Study intersections include:

1. Wenonah Ave/ 4 Hills Rd
2. Tramway Blvd/ Wenonah Ave
3. West Entrance Driveway/ Tramway Blvd
4. East Entrance Driveway/ Wenonah Ave

Construction is anticipated to begin in 2023, with full completion of the Development in 2025. The Development is to be constructed in a single phase.

Analysis scenarios for this study include:

- Existing (2023) – Field counted Existing traffic volumes
- Build-Out Year (2025) Background –Existing traffic volumes with an applied annual growth rate.
- Build-Out Year (2025) Total – Build-Out Year Background volumes plus Starbucks site-generated Direct and Pass-By trips.

Existing turning movement counts were collected on June 20, 2023, for all study intersections. These volumes were analyzed unaltered in the Existing portion of the Capacity Analysis section.

Site trips for the development site were generated based on ITE 937 –Coffee/Donut Shop with Drive-Through Window, Peak Hour Generator. Proposed development-generated trips were used to analyze Build-Out Total volumes.

SUMMARY OF RECOMMENDATIONS

The following presents a summary of recommendations included in this report.

CONCLUSIONS

- All study intersections operate at an acceptable LOS throughout all study scenarios
- 95th % Queue Lengths do not exceed queue storage at study intersections for studied analsysis scenarios
- HCS results do not suggest the need for capacity mitigation measures or street improvements related to the proposed development
- Proposed Drive-Through Queue Storage accommodates average and 88th percentile queues but fails to accommodate 95th percentile of vehicle queues as designed. However, the provided storage does meet requirements set forth in the City of Albuquerque's Integrated Development Ordinance.

RECOMMENDATIONS

It is recommended that the existing southbound left turn lane serving the site at the west driveway be lengthened to meet DPM design specifications as closely as possible.

Maintain sight distance at all driveways by keeping sight lines visibility free from any obstructions such as but not limited to parking, canopies, site displays, and landscaping.

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INTRODUCTION

This report details the procedures and findings of a Traffic Impact Study (TIS) performed by Lee Engineering for Modulus Architects. This report and the analyses herein were performed for a Starbucks development to be constructed on the parking lot of Smith's Superstore located along Tramway Blvd and Wenonah Ave in Albuquerque, NM. This study examines the impacts of the proposed Development on surrounding traffic conditions and discusses the potential impacts of trips generated by the Development on the study intersections.

The scope of this report and the analyses performed were completed in agreement with the scoping requirements set forth by the CABQ. Scoping meeting notes from the scoping meeting held on May 1st 2023, are included in Appendix A. Analysis procedures, conclusions, and recommendations for this study were developed according to the *Highway Capacity Manual 6th Edition.*

Single-phase construction is anticipated to begin in 2023, with full completion of the Development in 2025. The proposed development site plan displayed in Figure 1 shows that the proposed development is a coffee/donut shop with a drive-through window. AM and PM peak hour volumes were analyzed for each scenario. Traffic generated by the site is anticipated to be 67 ingress and 66 egress trips during the AM peak hour, and 29 ingress and 28 egress trips during PM peak hour. Lee Engineering conducted an HCS Capacity Analysis for the following AM and PM peak hour scenarios:

Traffic Analysis

- Existing (2023) – Field counted Existing traffic volumes
- Build-Out Year (2025) Background –Existing traffic volumes with an applied annual growth rate and the addition of traffic volumes generated by the nearby development of a Coffee/Donut Shop with Drive-Through Window ITE code 937.
- Build-Out Year (2025) Total – Build-Out Year Background volumes plus Starbucks site-generated Direct Trips.

PROJECT LOCATION & SITE PLAN

The development will be located on Tramway Blvd and Wenonah Ave, in the northeast quadrant, in the parking lot of the Smith's superstore in Albuquerque, NM. Figure 1 shows the proposed site plan, and Figure 2 shows the site location, study intersections, and the surrounding area. Nearby intersections include Wenonah Ave and 4 Hills Rd, and Tramway Blvd & Central Ave. Existing commercial businesses border the project area on to the west and south, and residential land use borders the development to the east and southwest.

The proposed development would convert approximately 0.56 acres of land into into a 1,310 square feet Starbucks with a driveway. The development would include 14 existing parking spaces, 24 new parking spaces with a lot of 21,253 square feet. Proposed access points include two existing shared access driveways located north and west to the development site.

The development Site Plan is presented in Figure 1, and Figure 2 shows the Vicinity Map, which includes the study area and intersections.

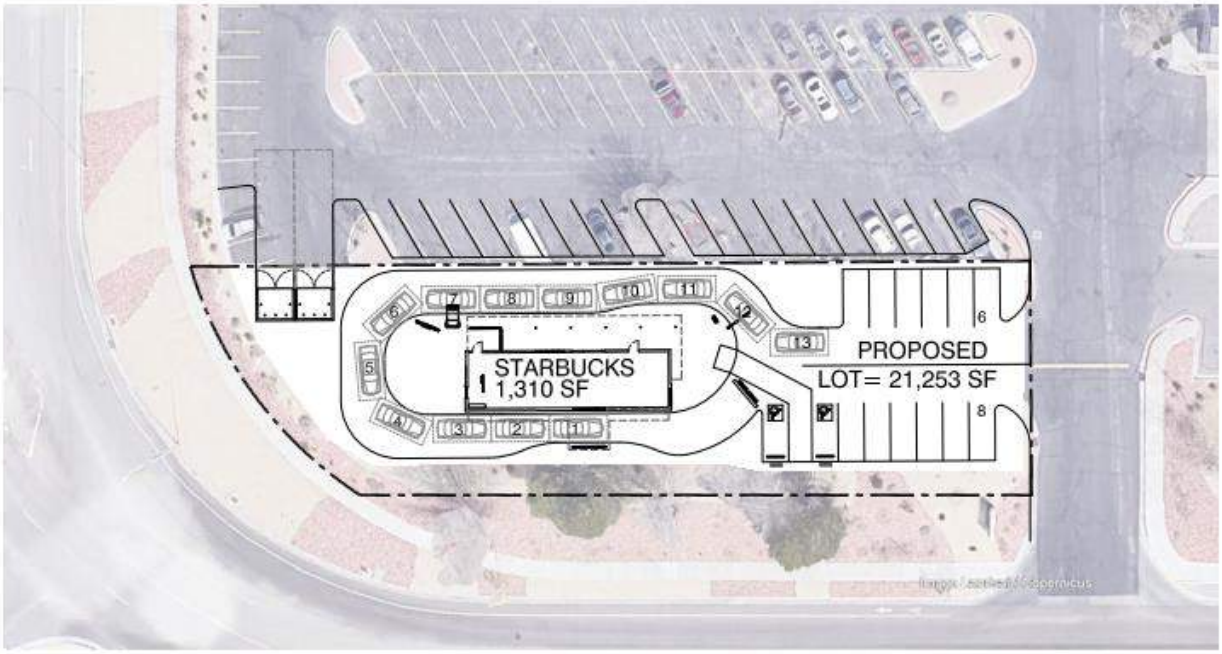


Figure 1: Site Plan

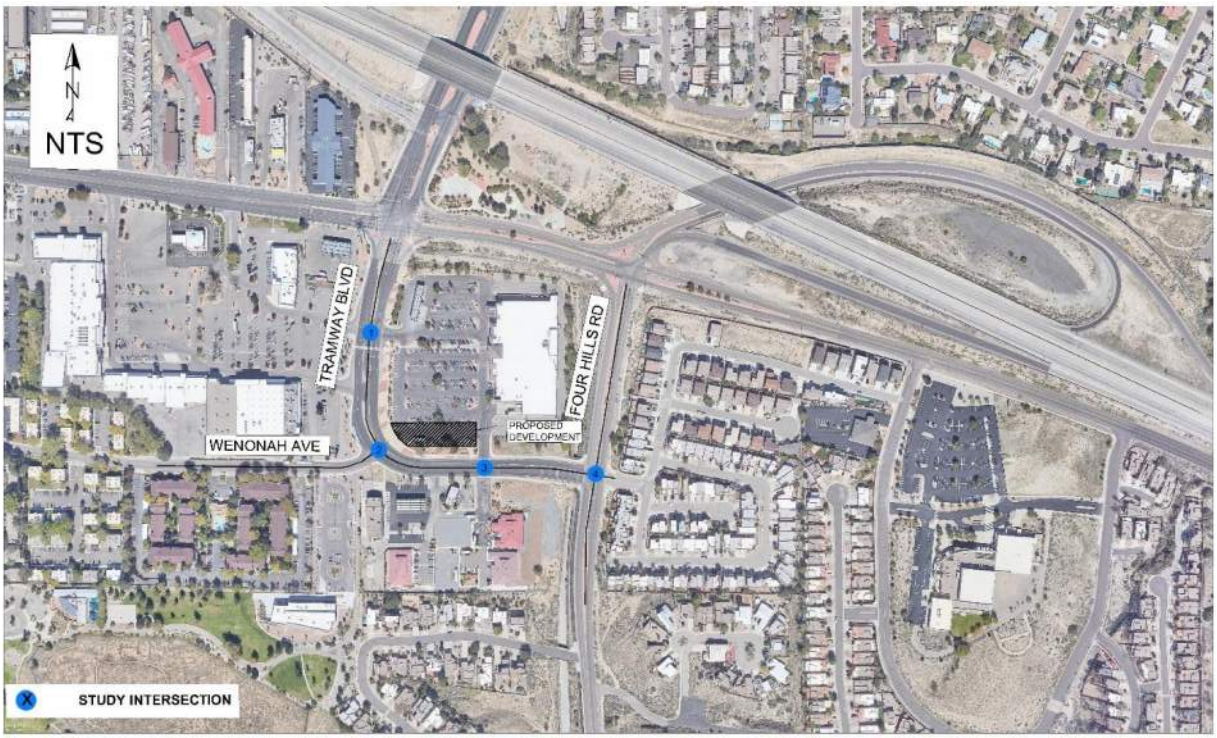


Figure 2: Vicinity Map

STUDY AREA, AREA LAND USE, AND STREETS NARRATIVE SUMMARY

STUDY AREA

The study area is defined as Wenonah Ave & 4 Hills Rd to West Driveway on Tramway Blvd. The following intersections were identified for analysis during the scoping meeting:

1. Wenonah Ave & 4 Hills Dr
2. Tramway Blvd & Wenonah Ave
3. West Entrance Driveway on Tramway Blvd
4. East Entrance Driveway on Wenonah Ave

AREA LAND USE

The Development will be located on the west side of the East Entrance Driveway on Wenonah Ave. Land uses adjacent to and surrounding consist of the following:

- Commercial: Existing commercial developments immediately surrounding the development site include markets, restaurants, gas stations, a travel center, and a hotel.
- Residential: Residential zones are located southwest and east of the development site.

STREETS

The following details the characteristics and features of streets included in the study area:

4 Hills Rd is a CABQ maintained roadway classified as a Major Collector, running north in Albuquerque, NM. The posted speed limit is 40 MPH. The roadway has 4 lanes that are 11 feet wide, and the road is divided by a 20-foot-wide raised median. The median narrows to accommodate northbound and southbound left turn lanes at 4 Hills Rd & Wenonah Ave, a northbound left turn lane at 4 Hills Rd, and a southbound left turn lane at 4 Hills Rd. In the southbound direction, there is a 6-foot bike lane that extends from Central Ave to Wenonah Ave. In the northbound firection there is a continuous sidewalk, and no bicycle facilities are present.

Wenonah Ave is CABQ maintained Major Collector running in an east-west direction, it is two-lane to the west of Tramway Blvd, and 3-lane to the west of Tramway Blvd. The posted speed limit is 25 MPH to the west of Tramway Blvd and 35 MPH to the east of Tramway Blvd. The roadway has 12-foot travel lanes with striping. To the west of Tramway Blvd, Wenonah Ave is undivided, and to the east of Tramway Blvd, it is divided bye a 12-ft two-way-two-lane median that extends from Tramway Blvd to 4 Hills Rd. There are 5-foot bike lanes in each direction to the east of Tramway Blvd, but no bicycle facilities to the west. Continuous sidewalk is present in both directions.

Tramway Blvd is a CABQ maintained Major Collector to the south of Central Ave & Tramway Blvd intersection, and a Principal Arterial to the north of Central Ave & Tramway Blvd intersection. The posted speed limit is 45 mph to the north of Central Ave & Tramway Blvd, and 35 MPH to the south of Central Ave & Tramway Blvd. The roadway has four lanes that are 12-ft wide, and the road is divided by a 18-ft-side raised median. The median narrows to accommodate northbound and southbound left turn lanes at Tramway Blvd. There are 5-foot bike lanes in each direction, and continouous sidewalk is present in both directions.

INTERSECTIONS

The following details the traffic control and characteristics of existing intersections in the study area:

Wenonah Ave & 4 Hills Rd is a 4-legged, stop-controlled intersection of major collectors. There are stop signs on the eastbound and westbound directions. The eastbound leg consists of one left-turn lane with approximately 128 ft of storage lane, one through-lane and one right-turn lane. The westbound leg consists of one left-turn lane and one through/right turn lane. The northbound and southbound legs consist of two

through-lanes and one left-turn lane with approximately 140 ft of storage. Curb cuts with ramps are present, but there are no painted crosswalks present for any leg of the intersection.

Tramway Blvd and Wenonah Ave is a 3-legged, stop-controlled intersection, both roadways are major collectors. There is a stop sign on Wenonah Ave, approaching eastbound traffic. The eastbound leg consists of one shared-lane. The northbound leg consists of one shared-lane, and the southbound leg consist of one through-lane and one through/right turn lane. Curb cuts with ramps are present, but there is no stripped crosswalk.

West Entrance Driveway & Tramway Blvd is a 4-leg intersection of a major collector and an unnamed business access road. For the purposes of this study the unnamed access road will be referred to as West Entrance Driveway. A stop sign is present on the eastbound approach. The eastbound and westbound legs consist of two lanes, and no stripping for any of the approaches. The northbound leg consist of one through-lane, one through/right turn lane, and one displaced left-turn lane separated by a painted 12-ft-wide lane. The southbound leg consists of one through-lane, one through/right turn lane, and one left-turn lane with approximately 140 ft of storage. A painted crosswalk is present across Tramway Blvd.

East Entrance Driveway & Wenonah Ave is a 4-legged, stop-controlled intersection of a major collector and an unnamed business access road. For the purpose of this study the unnamed access road will be referred to as East Entrance Driveway. The northbound leg consists of one through/left turn lane and one right turn lane, and the southbound leg consists of one shared lane. The eastbound leg consists of one shared lane, and the westbound leg consists of one through-lane and one through/right turn lane. No stop signs are present for any approach. No crosswalks are present.

BICYCLE FACILITIES

An existing 5-foot-wide bike lane runs adjacent to the Proposed Starbucks development on Wenonah Ave and Tramway Blvd. This bike lane begins on the 4 Hills Rd & Wenonah Ave intersection and continues north to Central Ave. This bike lane in present for both eastbound and westbound approaches along Wenonah Ave.

DATA COLLECTION

The following section details the data collection method used in subsequent analyses of this report. The data discussed below was collected via a combination of field observations and machine/video recordings.

Field Data Collection

PEDESTRIANS AND BICYCLES

Pedestrian and bicycle volumes were collected at all study intersections with turning movement counts (see Turning Movement Counts section below).

TRANSIT

Based on the ABQRIDE System Map (February 2022) several transit routes serve Tramway Blvd through the study area. As such, there is one bus stop inside the study area.

Turning Movement Counts

Turning movement counts for the study intersections were collected for three separate three-hour periods: 6:00 AM to 9:00 AM, 11:00 AM to 2:00 PM, and 3:00 PM to 6:00 PM on June 20, 2023. Turning movement volumes collected at the study intersections show a typical commuter directionally biased distribution with observable AM and PM peak hour periods. AM and PM peak hour counts are shown in Figure 3 and complete turning movement counts can be found in Appendix B.

Figure 3: Existing Peak Hour Turning Movement Counts

CAPACITY ANALYSIS: LEVEL OF SERVICE AND QUEUING

ANALYSIS VOLUMES

EXISTING YEAR

For the Existing Year traffic volumes, video collected turning movement counts (TMCs) were used. AM and PM peak hours were analyzed for level of service, capacity, and queueing.

BUILD-OUT YEAR (2025) BACKGROUND

Existing TMCs were used with an applied annual growth rate developed from the MRCOG Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model for the Build-Out Year Background volumes.

BUILD-OUT YEAR (2025) TOTAL

Site trips generated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, were added to the Build-Out Year Background volumes for analysis.

CAPACITY ANALYSIS

Per the Highway Capacity Manual, LOS is presented as a letter grade (A through F) based on the calculated average delay for an intersection or movement. Delay is calculated as a function of several variables, including signal phasing operations, cycle length, traffic volumes, and opposing traffic volumes, but is a measurement of the average wait time a driver can expect when moving through an intersection. Factors such as total cycle time (for all movements), queueing restrictions, and vehicle volumes can affect measurements of delay, especially for lower volume movements and side streets. Generally, these factors are only realized when delays reach or exceed LOS E thresholds. In such cases, a narrative is offered in subsequent sections specific to the individual movement in question.

Table 1 below, reproduced from the Highway Capacity Manual, shows delay thresholds and the associated Level of Service assigned to delay ranges. Generally, a LOS of D or better is considered an acceptable level of service.

Table 1: LOS Criteria and Descriptions

Level of Service	Average Control Delay (sec/vehicle)	General Description (Signalized Intersections)
A	≤10	Free flow
B	>10 – 20	Stable flow (slight delays)
C	>10 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F	>80	Forced flow (jammed)

Queueing is reported in vehicles, with a base assumption of 20 feet queue length per vehicle, for Two-Way Stop Controlled intersections, including the proposed site access points. Queues are reported for queue measurements falling within the 95th percentile. It should be noted that 95th percentile queues are statistically expected to occur during only 5% of the peak hour's sign cycles. It is also noted that un-reported average queueing at an intersection would statistically be much shorter than 95th percentile queueing.

For the purposes of this analysis, acceptable levels of service (LOS) are defined to be a LOS D or better. Based on procedures outlined in the Highway Capacity Manual, intersection delay and level of service for stop-

controlled intersections are reported as the delay and level of service for the worst-case movement at each intersection. Detailed output sheets can be found in Appendix C.

HCS ANALYSIS

Highway Capacity Software was used to analyze the study intersections for Level of Service (LOS) and queueing conditions. All intersection approaches operate at a LOS of C or better during AM and PM peak hours under the Existing scenario. The results of the HCS analysis for the Existing conditions are shown in Table 2.

Table 2: HCS Result Summary for Existing (2023) Conditions

		Wenonah Ave & Four Hills Rd					Tramway Blvd & Wenonah Ave					West Entrance Driveway & Tramway Blvd					East Entrance Driveway & Wenonah Ave				
		Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)
Existing	AM Peak Hour	EBL	13.2	B	6.0	0.1	EBL	-	-	-	-	EBL	-	-	-	-	EBL	7.6	A	-	0.0
		EBR	9.1	A	-	0.5	EBR	-	-	-	-	EBR	-	-	-	-	EBR				
		EBT	15.2	C	-	0.1	EBT	11.7	B	-	0.8	EBT	13.9	B	-	0.1	EBT				
		NBL	7.6	A	6.8	0.3	NBL	7.8	A	-	0.1	NBL	7.8	A	5.0	0.0	NBL	11.6	B	3.8	0.0
		NBR					NBR					NBR					NBR	8.8	A	3.8	0.0
		NBT					NBT					NBT	-	-	-	-	NBT	-	-	-	-
		SBL	7.9	A	5.2	0.0	SBL					SBL	8.1	A	6.4	0.3	SBL	-	-	-	-
		SBR					SBR					SBR					SBR	-	-	-	-
		SBT					SBT					SBT					SBT	9.7	A	-	0.2
		WBL	14.8	B	4.2	0.0	WBL					WBL	-	-	-	-	WBL	7.6	A	-	0.0
		WBR	12.1	B	4.2	0.2	WBR					WBR	-	-	-	-	WBR				
		WBT	-	-	-	-	WBT					WBT	10.5	B	-	0.4	WBT				
		Wenonah Ave & Four Hills Rd					Tramway Blvd & Wenonah Ave					West Entrance Driveway & Tramway Blvd					East Entrance Driveway & Wenonah Ave				
		Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)
Existing	PM Peak Hour	EBL	14.7	B	6.0	0.7	EBL	-	-	-	-	EBL	-	-	-	-	EBL	7.6	A		0.1
		EBR	11.6	B	-	2.0	EBR	-	-	-	-	EBR	-	-	-	-	EBR				
		EBT	16.3	C	-	0.3	EBT	15.5	C	-	1.7	EBT	23.9	C	-	0.7	EBT				
		NBL	7.9	A	6.8	0.2	NBL	8.8	A	-	0.2	NBL	8.6	A	5.0	0.0	NBL	17.0	C		0.0
		NBR					NBR					NBR					NBR	9.6	A		0.0
		NBT					NBT					NBT	-	-	-	-	NBT	-	-	-	-
		SBL	7.8	A	5.2	0.0	SBL					SBL	8.8	A	6.4	0.8	SBL	-	-	-	-
		SBR					SBR					SBR					SBR	-	-	-	-
		SBT					SBT					SBT					SBT	12.4	B		1.1
		WBL	18.1	C	4.2	0.0	WBL					WBL	-	-	-	-	WBL	8.2	A	-	0.0
		WBR	12.3	B	4.2	0.1	WBR					WBR	-	-	-	-	WBR				
		WBT	-	-	-	-	WBT					WBT	12.6	B	-	1.4	WBT				

From the above table, the following conclusions are made from the Existing Year analysis:

- Under existing conditions, all approaches for all four stop-controlled intersections operate at an acceptable level of service (LOS) C or better during both the AM and PM peak hours. Queuing is accommodated by existing storage lengths during both AM and PM peak hours.

BUILD YEAR (2025) ANALYSES

The following sections detail the methods and calculations used to obtain traffic volumes for Build-Out Year analysis scenarios. This process used the following tools as described below: Traffic Projections and Site Trip Distribution & Assignment. Figures at the end of this section show the resulting traffic volumes determined for the Build-Out Year (2025) analysis scenarios.

TRAFFIC PROJECTIONS

Development construction is anticipated to begin in the current year (2023), with full completion expected in 2025. Build-Out Year (2025) volumes were forecast from existing traffic volumes using counted values from 2016 and the 2040 (updated) travel demand models provided by MRCOG. These models were then compared using AM and PM peak hour direction volumes (AMPH LOAD and PMPH LOAD) to calculate anticipated growth rates for individual roadways near the study area. Roadways calculated to have a yearly growth rate of 2%. Growth rates were then converted to growth factors for specific analysis scenarios. Values provided by MRCOG are reproduced verbatim in Table 3, in addition to the calculated growth rates used in the analysis. Growth rates were then applied to the 2023 existing volumes to forecast future volumes.

Table 3: Growth Rates

Roadway			MRCOG 2016 Model "Peak Hour Load"	MRCOG 2040 Model "Peak Hour Load"	Yearly Growth Rate	Average Yearly Growth	Growth Rate for Analysis
Wenonah Ave & 4 Hills Rd	AM	PH	848	794	-0.27%	1.55%	2.00%
	PM	PH	575	601	0.18%		
Wenonah Ave & Tramway	AM	PH	199	528	4.15%		
	PM	PH	305	509	2.16%		

Projected turning movement volumes were used for the Build-Out Year Background scenario. Projected turning movement volumes plus the site-generated trips were used for the Build-Out Year Total scenario.

TRAMWAY STARBUCKS SITE TRIP GENERATION

Trip generation for the Development was performed using the procedures and methodologies provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The land use category Coffee/Donut Shop with Drive-Through Window (ITE 937) was used to generate trips for the Development. Trips were calculated using rates for daily, AM peak hour, and PM peak hour generators. Trips generated by the proposed development are shown below in the tables. Site-generated trips were added to the Background traffic volumes to create the Total Build-Out traffic volumes. Table 4 below shows the trip generation and associated calculations.

Table 4: Trip Generation

Use	Units		Trip Generation							
			AM Peak				PM Peak			
			Rate	Enter/Exit %	In	Out	Rate	Enter/Exit %	In	Out
ITE 937 - Coffee/Donut Shop with Drive-Through Window	1.31	SQ FT GFA	101.27	50/50	67	66	43.65	50/50	29	28

Trip Distribution and Assignment

Trip distribution was determined based on the analysis of existing intersection demand characteristics withing the study area. To facilitate a conservative capacity and queueing analysis, Pass-by trips were not considered in the trip generations above. It is noted that the ITE Trip Generation Manual, 11th Edition does provide a pass-by percentage of up to 50%.

The trips were routed withing the roadway network to and from the development based on the proportions of existing turning movement counts/demands. The routing was based on logical trip attractions and destinations. Figure 4 shows the trip distribution and routing percentages generated by the Development. When the applied distribution percentages did not result in whole vehicles or did not summate equal the total generated trips, rounding preference was assigned to the movement with the highest existing turning movement count volumes.

Figure 4: Site Generated Direct Trips & Routing Percentages

Traffic Volume Calculations

Traffic volumes used in the Build-Out Years analyses were calculated as follows:

- Build-Out Year (2025) Background –Existing traffic volumes with an applied annual growth rate
- Build-Out Year (2025) Total – Build-Out Year Background volumes plus Tramway Starbucks site-generated trips.

Figure 5 shows the Build-Out Year Background (2025) and Figure 6 shows Build-Out Year (2025) Total volumes.

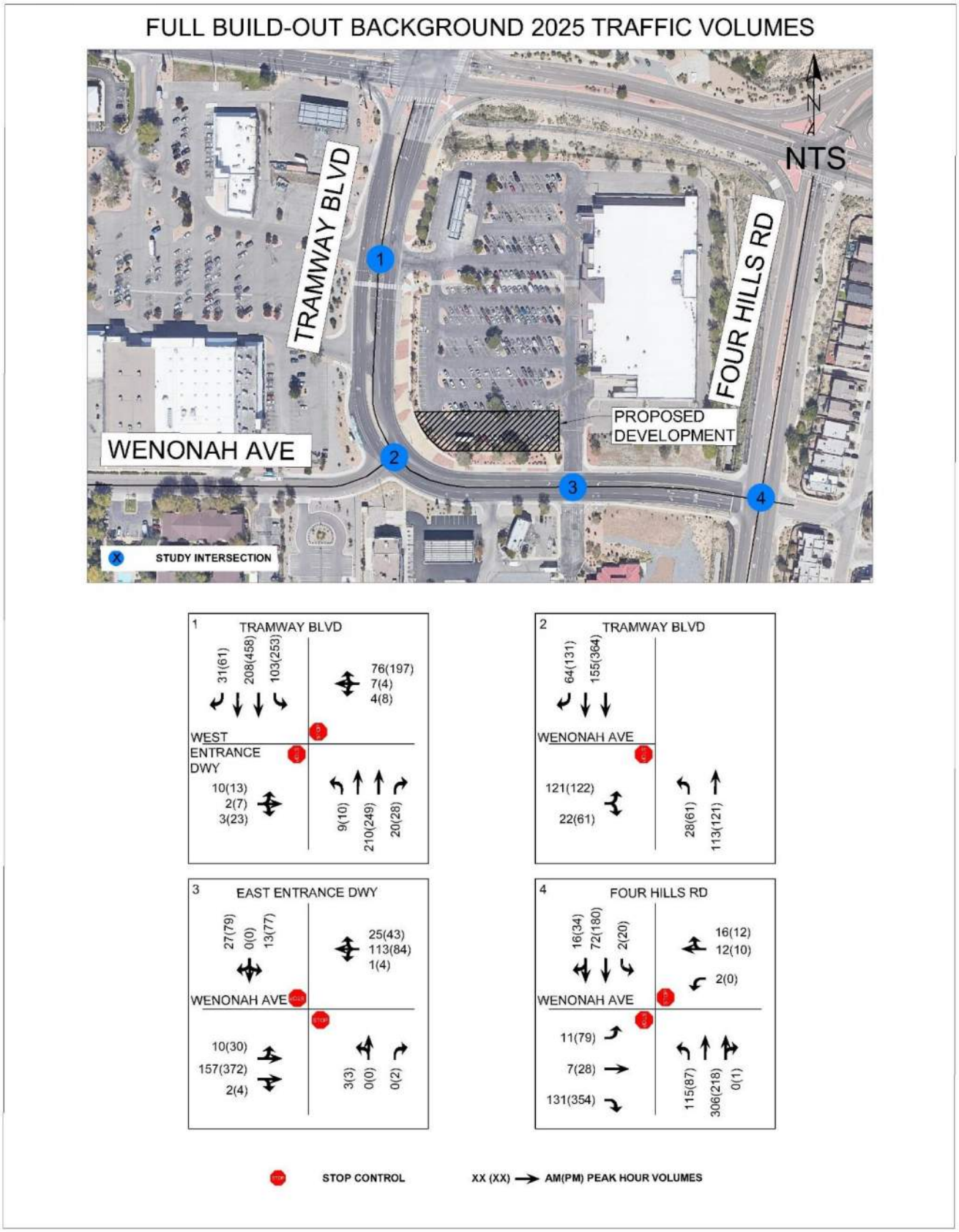


Figure 5: Build-Out Year (2025) Background

Figure 6: Build-Out Year (2025) Total

TRAFFIC ANALYSIS OF BUILD-OUT BACKGROUND AND TOTAL

As performed for Existing Background conditions, a Level of Service (LOS) and queueing analysis was performed for all Build-Out analysis scenarios using the same procedures, field data, and assumptions.

2025 Build-out Total Conditions

Table 5 below summarizes the delay, level of service, and queueing under 2025 build-out background conditions, Table 6 summarizes delay, level of service, and queueing under 2025 build-out total conditions. Detailed capacity output sheets showing all individual movements can be found in Appendix C.

Table 5: HCS Result Summary for Build-Out Year (2025) Backgroud Conditions

Build-Out Background	AM Peak Hour	Wenonah Ave & Four Hills Rd					Tramway Blvd & Wenonah Ave					West Entrance Driveway & Tramway Blvd					East Entrance Driveway & Wenonah Ave				
		Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)
		EBL	13.3	B	6.0	0.1	EBL	-	-	-	-	EBL	-	-	-	-	EBL	7.6	A	-	0.0
		EBR	9.1	A	-	0.5	EBR	-	-	-	-	EBR	-	-	-	-	EBR				
		EBT	15.5	C	-	0.1	EBT	11.9	B	-	0.9	EBT	14.1	B	-	0.1	EBT				
		NBL	7.6	A	6.8	0.3	NBL	7.8	A	-	0.1	NBL	7.8	A	5.0	0.0	NBL	11.7	B	3.8	0.0
		NBR					NBR					NBR					NBR	8.8	A	3.8	0.0
		NBT					NBT					NBT			-		NBT	-	-	-	-
		SBL	7.9	A	5.2	0.0	SBL					SBL	8.2	A	6.4	0.3	SBL	-	-	-	-
		SBR					SBR					SBR					SBR	-	-	-	-
		SBT					SBT					SBT					SBT	9.7	A	-	0.2
		WBL	15	B	4.2	0.0	WBL					WBL	-	-	-	-	WBL	7.6	A	-	0.0
		WBR	12.3	B	4.2	0.2	WBR					WBR	-	-	-	-	WBR				
		WBT	-	-	-	-	WBT					WBT	10.6	B	-	0.5	WBT				
Build-Out Background	PM Peak Hour	Wenonah Ave & Four Hills Rd					Tramway Blvd & Wenonah Ave					West Entrance Driveway & Tramway Blvd					East Entrance Driveway & Wenonah Ave				
		Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)
		EBL	15	B	6.0	0.7	EBL	-	-	-	-	EBL	-	-	-	-	EBL	7.6	A	-	0.1
		EBR	11.8	B	-	2.1	EBR	-	-	-	-	EBR	-	-	-	-	EBR				
		EBT	16.8	C	-	0.3	EBT	16.0	C	-	1.9	EBT	24.9	C	-	0.7	EBT				
		NBL	7.9	A	6.8	0.2	NBL	8.9	A	-	0.2	NBL	8.7	A	5.0	0.0	NBL	17.5	C	3.8	0.0
		NBR					NBR					NBR					NBR	9.6	A	3.8	0.0
		NBT					NBT					NBT			-		NBT	-	-	-	-
		SBL	7.8	A	5.2	0.1	SBL					SBL	8.9	A	6.4	0.9	SBL	-	-	-	-
		SBR					SBR					SBR					SBR	-	-	-	-
		SBT					SBT					SBT					SBT	12.7	B	-	1.1
		WBL	18.9	C	4.2	0.0	WBL					WBL	-	-	-	-	WBL	8.3	A	-	0.0
		WBR	12.5	B	4.2	0.1	WBR					WBR	-	-	-	-	WBR				
		WBT	-	-	-	-	WBT					WBT	12.8	B	-	1.4	WBT				

Table 6: HCS Result Summary for Build-Out Year (2025) Total Conditions

		Wenonah Ave & Four Hills Rd					Tramway Blvd & Wenonah Ave					West Entrance Driveway & Tramway Blvd					East Entrance Driveway & Wenonah Ave				
Build-out Total	AM Peak Hour	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)
		EBL	14.4	B	6.0	0.1	EBL	-	-	-	-	EBL	-	-	-	-	EBL	7.7	A	-	0.0
		EBR	9.3	A	-	0.6	EBR	-	-	-	-	EBR	-	-	-	-	EBR				
		EBT	16.6	C	-	0.1	EBT	12.0	B	-	1	EBT	15.1	B	-	0.1	EBT				
		NBL	7.7	A	6.8	0.3	NBL	7.8	A	-	0.1	NBL	7.8	A	5.0	0.0	NBL	12.1	B	3.8	0.0
		NBR					NBR					NBR					NBR	8.8	A	3.8	0.0
		NBT					NBT					NBT			-		NBT	-	-	-	-
		SBL	7.9	A	5.2	0.0	SBL					SBL	8.3	A	6.4	0.4	SBL	-	-	-	-
		SBR					SBR					SBR					SBR	-	-	-	-
		SBT					SBT					SBT					SBT	10.8	B	-	0.4
		WBL	16.3	C	4.2	0.0	WBL					WBL	-	-	-	-	WBL	7.6	A	-	0.0
		WBR	12.8	B	4.2	0.2	WBR					WBR	-	-	-	-	WBR				
		WBT	-	-	-	-	WBT					WBT	11.2	B	-	0.7	WBT				
		Wenonah Ave & Four Hills Rd					Tramway Blvd & Wenonah Ave					West Entrance Driveway & Tramway Blvd					East Entrance Driveway & Wenonah Ave				
Build-out Total	PM Peak Hour	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)	Movement	Delay (s/veh)	LOS	Storage Length (veh)	95th% Length (veh)
		EBL	15.4	C	6.0	0.8	EBL	-	-	-	-	EBL	-	-	-	-	EBL	7.6	A	-	0.1
		EBR	11.9	B	-	2.2	EBR	-	-	-	-	EBR	-	-	-	-	EBR				
		EBT	17.0	C	-	0.3	EBT	16.2	C	-	1.9	EBT	26.6	D	-	0.8	EBT				
		NBL	7.9	A	6.8	0.2	NBL	8.9	A	-	0.2	NBL	8.7	A	5.0	0.00	NBL	17.7	C	3.8	0.0
		NBR					NBR					NBR					NBR	9.6	A	3.8	0.0
		NBT					NBT					NBT			-		NBT	-	-	-	-
		SBL	7.8	A	5.2	0.1	SBL					SBL	8.9	A	6.4	0.9	SBL	-	-	-	-
		SBR					SBR					SBR					SBR	-	-	-	-
		SBT					SBT					SBT					SBT	13.2	B	-	1.3
		WBL	19.4	C	4.2	0.0	WBL					WBL	-	-	-	-	WBL	8.3	A	-	0.0
		WBR	12.6	B	4.2	0.2	WBR					WBR	-	-	-	-	WBR				
		WBT	-	-	-	-	WBT					WBT	13.7	B	-	1.7	WBT				

From the above tables, the following conclusions are made from the Build-Out year analysis:

- Wenonah Ave & Four Hills Rd
  - Capacity Analysis
    - The intersection approaches are predicted to operate at LOS C or better, the westbound left turn changed from existing LOS B to C during the AM peak hour. And the eastbound left turn changed from LOS B to C during the PM peak hour.
  - Queueing Analysis
    - Where HCS results are present, all queue lengths are <1 vehicle (20 feet). Except for the eastbound right movement during the PM peak hour, with a queue of 2.2 vehicles.
- Wenonah Ave & Tramway Blvd
  - Capacity Analysis
    - The intersection approaches are predicted to operate at LOS C or better, and is unchanged from the existing operating LOS to build-out conditions.
  - Queueing Analysis
    - Where HCS results are present, all queue lengths for the northbound left during the AM peak hour and PM peak hour are <1 vehicle (20 feet). The eastbound through is 1 and 1.9 during the AM and PM peak hour, respectively.
- Tramway Blvd & West Entrance Dwy
  - Capacity Analysis
    - The intersection approaches are predicted to operate at LOS D or better. The eastbound through changed from existing LOS C to D during the PM peak hour.
  - Queueing Analysis
    - Where HCS results are present, all queue lengths are <1 vehicle (20 feet). Except for the westbound through movement during the PM peak hour, with a queue of 1.7 vehicles.
- Wenonah Ave & East Entrance Dwy
  - Capacity Analysis
    - The intersection approaches are predicted to operate at LOS C or better. The southbound through changed from existing LOS A to B during the AM peak hour.
  - Queueing Analysis
    - Where HCS results are present, all queue lengths are <1 vehicle (20 feet). Except for the southbound through movement during the PM peak hour, with a queue of 1.3 vehicles.

Site Related Capacity Mitigations and Street Improvements

The above section shows that capacity and queueing issues are not observed during the study peak hours. No capacity mitigations or street improvements are recommended based on the HCS Analysis results pertaining to the proposed site development.

Site Access Sight Distance

The following presents recommended intersection sight distance requirements for the access driveway serving the Development. Intersection sight distance requirements were calculated based on the CABP DPM Chapter 7-4 for the east driveway, and 2018 AASHTO "Green Book" chapter 9.5 for the west driveway as the DPM does not contain any cases for a 4 lane divided roadway. The design vehicle used was a passenger vehicle.

- Case B1 – A stopped vehicle turning left turn from a minor street approach onto a major road.
- Case B2 – A stopped vehicle turning right from a minor street approach onto a major road.

Intersection sight distances were calculated based on the following assumptions:

- Required intersection sight distance for Case B2 was calculated based on the design vehicle crossing into the first lane of the roadway.

Values shown below in Table 7 were rounded up to the nearest 5-foot increment. Formulas, values, and calculations used in the sight distance analysis can be found in the Appendix D.

Table 7: Site Distance Requirements

Case	Roadway	Speed	Sight Distance Available	Sight Distance Required
Turning Left from East Dwy	Wenonah Ave	35 MPH	270 Ft	420 Ft
Turning Right from East Dwy	Wenonah Ave	35 MPH	480 Ft	340 Ft
Case B1 – Turning Left from West Dwy	Tramway Blvd	35 MPH	450 ft	465 Ft
Case B2 – Turning Right from West Dwy	Tramway Blvd	35 MPH	450 Ft	335 Ft

It is recommended that all development driveways adhere to the sight distance provisions detailed in the AASHTO "Green Book". An area bounded by the above sight distances with the decision point placed 14.5 feet back from the edge of the shoulder midway between the outbound driving lane should be maintained clear of any obstructions.

Auxiliary Lane Analysis

CABQ DPM auxiliary lane warrants were reviewed for the site access driveways. DPM Table 7.4.67 was used to determine potential auxiliary lane needs for site access points and to guide recommendations. DPM Tables 7.4.68 and 7.4.70 were used to determine applicable deceleration lengths. 2025 Full Build-Out traffic volumes and direct trips were used in the analysis. The results of this analysis are shown in Table 8 and the narratives below.

Table 8: Auxiliary Turn Lane Warrant

Location	Access/Turn Type	Posted Speed Limit	Max Turning Volume per Hour	DPM Warrant Result	Recommendation
Tramway & West Dwy	Full Access (Right Turn)	35 MPH	31	Not Required	Existing auxiliary lane; no change recommended
	Full Access (Left Turn)	35 MPH	256	Required	Lengthen existing auxiliary lane to meet DPM criteria or geometric constraints
Wenonah & East Dwy	Full Access (Right Turn)	35 MPH	58	Required	No change recommended; see narrative below
	Full Access (Left Turn)	35 MPH	30	Not Required	Existing Two-Way Left-Turn Lane; no change recommended

For the intersection of Tramway and the West Access Driveway:

- A right turn lane was not warranted per DPM criteria, however a right turn lane exists of approximately 150ft with a 50ft transition taper. No changes are recommended for the existing auxiliary lane.
- A left turn lane is warranted per DPM criteria. A turn lane exist approximately 200 ft in length with a 50 ft transition taper. This lane as it exists does not meet DPM design specifications. It is recommended that this auxiliary lane be lengthened to meep DPM criteria or geometric constraints. DPM criteria for this auxiliary turn lane recommends a queueing length of 50 FT, and a deceleration length of 240-350 FT with a 150 FT reverse curve taper. However, geometric constraints may limit the total length available for the auxiliary lane.

For the intersection of Wenonah and the East Access Driveway:

- A right turn lane is warranted per DPM criteria, however the construction of a new turn lane is not recommended. Existing traffic volumes, without the development, do not meet DPM criteria to warrant an auxiliary lane. While the addition of site trips does meet DPM criteria to warrant an auxiliary lane, only direct trips were analyzied in this report. The ITE Trip Generation Manual, 11th Edition provides a pass-by trip reduction of up to 50% which would potentially reduce the total number of new vehicles served by this intersection. Additionally, the right-in movement at this driveway is located approximately 300 feet from the stop controlled intersection of Four Hills Rd and Wenonah Ave where approaching traffic speeds are likely to be reduced. Furthermore, the site's location within an existing grocery store parking lot is likely to see a portion of its trips/sales through its "convenience" thereby reducing entering traffic. Therefore, construction of a right turn auxiliary lane at this driveway is not recommended.

- A left turn lane is not warranted per DPM criteria. However, a two-way left-turn lane exists as an auxiliary lane serving this access point. No changes are recommended for this movement.

Based on the information presented above, a turn lane is not recommended for right turns entering the site at Wenonah and the East Access Driveway. It is recommended that the existing left turn lane serving the site's west driveway be lengthened to meet DPM design specifications as closely as possible.

DRIVE-THRU QUEUING ANALYSIS

DRIVE-THRU DESCRIPTION

Based on the development site plan, the Tramway Starbucks will be located on a 21,253 square foot lot. 1,310 square feet will be developed for the building. The portion of the lot, designed for parking and vehicle access, contains an approximately 25-foot-wide parking lot travel lane and 14 parking spaces east of the building and drive-thru queue.

Per the site plan presented in Figure 1, queue storage is provided for 13 passenger vehicles. The queue processes counterclockwise around the building and exits into the existing parking lot travel lane adjacent to Wenonah Ave. Furthermore, there appears to be room within the parking lot travel lane to accommodate an additional three passenger cars without blocking the site's eastern entrance or spilling onto Wenonah Ave.

QUEUING VARIABLES

Queue extension analysis is presented using the following variables:

- **The Arrival Rate (λ)** is measured in vehicles per hour (vph). This rate determines how many vehicles enter the system in an hour. The value used in this analysis for λ was the ITE Trip Generation AM peak hour ingress volume for land use Coffee/Donut Shop with Drive-Through Window- ITE 937 presented previously in Table 4.
    - The site includes interior dining facilities, and presumably, some portion of the total inbound traffic would be dining on-site rather than using the drive-thru. No data related to the dine-in percentage was available. Thus, the conservative approach of routing 100% of ITE AM peak hour ingress traffic through the drive-thru was used.
- **Average Time in System (E_v) is** measured in seconds and converted to hours for calculation purposes. The variable represents the average amount of time individual vehicles spend in the queue from entry to exit. It is used to calculate the service rate in conjunction with the arrival rate.
    - Lee Engineering used a national study conducted in 2021 to know the Average Time in System for the Tramway Starbucks. The Starbucks Average Time in System of 409 seconds was used for the pruposes of this analysis.
- **The Service Rate (μ)** is also measured in vph; this is the rate at which vehicles are processed through the drive-thru. The value for the Service Rate used in this analysis was calculated from the Average Time in System in conjunction with the Arrival Rate based on the Queuing Performance Equations for Random Arrival-Random Service Single Channel Systems presented in Traffic Flow Fundamentals by Adolf D. May.

$$\mu = \lambda + \frac{1}{E_v}$$

Queuing Analysis

The queuing analysis assumed a single-channel queuing model where arrivals occur according to a Poisson process and service times have an exponential distribution (M/M/1 model). The following equation for M/M/1 queuing was used to determine a certain queue length's probability. The results for the probabilities of 0 through 25 vehicles are presented in Table 9.

$$Probability\ of\ More\ Than\ \text{“k” Vehicles in Queue} = \left(\frac{\lambda}{\mu}\right)^{k+1}$$

Table 9: Probability of "k" Vehicles in Queue

Number of Vehicles in Queue (k)	Probability of the Number of Vehicles	Cummulative Probability of the Number of Vehicles	Number of Vehicles in Queue (k)	Probability of the Number of Vehicles	Cummulative Probability of the Number of Vehicles
0	12%	12%	13	2%	83%
1	10%	22%	14	2%	85%
2	9%	31%	15	2%	87%
3	8%	40%	16	2%	88%
4	7%	47%	17	1%	90%
5	6%	53%	18	1%	91%
6	6%	59%	19	1%	92%
7	5%	64%	20	1%	93%
8	4%	68%	21	1%	94%
9	4%	72%	22	1%	94%
10	3%	75%	**23**	**1%**	**95%**
11	3%	78%	24	1%	96%
12	3%	81%	25	1%	96%

Table 9 shows that the 95th percentile probability event during the AM peak hour is equal to 23 vehicles in the queue, which fails to meet the threshold design of 13 vehicles. Although, there is potential for three additional vehicles, the design length does not appear to be enough to prevent conflict with the operations of the East driveway. The likelihood of the queue interfering with operations at the North Access Rd is low. This outcome is a 99th+ percentile event during PM peak hours. The results of the Queuing Analysis for the PM peak hour are further summarized in Table 10.

Table 10: Queuing Analysis Summary

Probability of Exceeding Queue Storage	Probability of Queue Spillback to East Dwy	AM PH Average Number of Vehicles in Queue
19%	9%	7

Therefore, proposed Drive-Through Queue Storage accommodates average and 88th percentile queues but fails to accommodate 95th percentile of vehicle queues as designed. It is noted that the provided storage does meet requirements set forth in the City of Albuquerque's Integrated Development Ordinance.

CRASH DATA SUMMARY

At the request of the NMDOT, a crash summary for the intersections within the study area has been completed. The purpose of this analysis is to highlight trends and observations from summarized crash data. Crash data was provided by NMDOT for the years 2015 to 2019 in aggregate form and is summarized in the table below.

Table 11: Crash Summary

Crash Summary		Wenonah Ave & Four Hills Rd	Tramway Blvd & Wenonah Ave
	Total Crashes	19	21
By Year	2015	5	6
	2016	5	3
	2017	3	3
	2018	3	6
	2019	3	3
By Type	Fixed Object	0	4
	Left Blank	3	3
	Other Vehicle - Both Going Straight/Entering at Angle	7	1
	Other Vehicle - From Opposite Direction	0	1
	Other Vehicle - From Same Direction/Both Going Straight	1	2
	Other Vehicle - From Same Direction/Rear End Collision	1	1
	Other Vehicle - From Same Direction/Sideswipe Collision	0	1
	Other Vehicle - One Left Turn/Entering At Angle	4	4
	Rollover	1	1
	Pedestrian Collision	1	0
	Other Vehicle - All Others/Entering At Angle	1	0
	Non-Collision - All Other/Not Stated	0	3
By Lighting Conditions	Daylight	15	13
	Dawn/Dusk	2	0
	Dark	2	7
	Invalid Code/Not Specified	0	1
By Severity	Fatal (K)	0	0
	Serious Injury (A)	0	0
	Visible Injury (B)	9	9
	Complaint of Injury (C)	0	0
	Property Damage Only (O)	10	12
By Contributing Factors	Driver Inattention	4	6
	Passed Stop Sign	0	1
	Improper Overtaking	0	1
	Improper Lane Change	1	0
	Pedestrian Error	1	0
	Alcohol/Drug Involved	1	3
	Avoid No Contact - Vehicle	1	0
	Collision with Motor Vehicle	0	0
	Disregarded Traffic Signal	1	0
	Excessive Speed	0	3
	Failed to Yield Right of Way	8	3
	Following Too Closely	1	2
	Improper Backing	0	0
	Made Improper Turn	0	0
	Missing Data	1	0
	None	0	0
	Other	0	2

From the above table, the following observations are made:

- For the intersection of Wenonah Ave & Four Hills Rd:
  - Within the years 2015 to 2019, 19 crashes were reported.
  - The most common crash classification was Other Vehicle – Both going straight/Entering at angle.
  - The majority of crashes at this intersection occurred during daylight hours.
  - No fatal crashes were reported from 2015 to 2019. However, injuries were reported.
  - The most common reported cause was Failed to Yield Right of Way.

- For the intersection of Tramway Blvd & Wenonah Ave:
  - Within the years 2015 to 2019, 21 crashes were reported.
  - The most common crash classification was Fixed Object and Other Vehicle – One Left Turn/Entering at Angle.
  - The majority of crashes at this intersection occurred during daylight hours.
  - No fatal crashes were reported from 2015 to 2019. However, injuries were reported.
  - The most common reported cause was Driver Inattention.

SUMMARY OF RECOMMENDATIONS

The following presents a summary of recommendations included in this report.

CONCLUSIONS

- All study intersections operate at an acceptable LOS throughout all study scenarios
- 95th % Queue Lengths do not exceed queue storage at study intersections for studied analsysis scenarios
- HCS results do not suggest the need for capacity mitigation measures or street improvements related to the proposed development
- Proposed Drive-Through Queue Storage accommodates average and 88th percentile queues but fails to accommodate 95th percentile of vehicle queues as designed. However, the provided storage does meet requirements set forth in the City of Albuquerque's Integrated Development Ordinance.

RECOMMENDATIONS

It is recommended that the existing southbound left turn lane serving the site at the west driveway be lengthened to meet DPM design specifications as closely as possible.

Maintain sight distance at all driveways by keeping sight lines visibility free from any obstructions such as but not limited to parking, canopies, site displays, and landscaping.

APPENDIX A:

SCOPING MEETING NOTES

SCOPE OF TRAFFIC IMPACT STUDY (TIS)

TO: Terry Brown, P.E.
Tierra West, LLC
5571 Midway Park Pl. NE
Albuquerque, NM 87109

MEETING DATE: Monday, May 1, 2023 (1:00 pm)

ATTENDEES: Matthew Grush, P.E. email comments (City of Albuquerque), Margaret Haynes*, P.E. (NM DOT D3), Ronald R. Bohannan, P.E., Terry Brown, P.E., Amanda Herrera, P.E., and Derek Bohannan (Tierra West, LLC)
*** - Margaret Haynes sent an e-mail dated 05/01/2023 stating that the NM DOT will not be involved with this Traffic Impact Study.**

PROJECT: Starbuck's Coffee (Wenonah Ave. / Tramway Blvd.)

REQUESTED CITY ACTION: ___ Zone Change __X__ Site Development Plan

___ Subdivision ___ Building Permit ___ Sector Plan ___ Sector Plan Amendment

___ Curb Cut Permit ___ Conditional Use ___ Annexation ___ Site Plan Amendment

ASSOCIATED APPLICATION: Coffee Shop w/ Drive- Thru Window (1,310 SF)

SCOPE OF REPORT:
The Traffic Impact Study should follow the standard report format, which is outlined in the DPM. The following supplemental information is provided for the preparation of this specific study.

1. Trip Generation - Use Trip Generation Manual, 11th Edition.
   Local data may be used for certain land use types as determined by staff. Consultant to provide local traffic generation volumes (AM and PM Peak Hour) for the following existing Starbuck's and Dutch Brothers Coffee shops:
   1) Starbuck's (Montgomery Blvd. & San Mateo)
   2) Starbuck's (Paseo del Norte & Golf Course Rd.)
   3) Starbuck's (Indian School Rd. / Juan Tabo Blvd.)
   4) Dutch Brothers (Fortuna Rd. / Coors Blvd.)

(Compare data to ITE Trip Generation data (11th Edition) – Local data preferred if significant variations.

2. Appropriate study area:
   Signalized Intersections; N/A

   Unsignalized Intersections;
   a. Wenonah Ave / Four Hills Rd
   b. Tramway / Wenonah Ave.

   Driveway Intersections: Smith's Access driveways (2)
   a. West entrance Driveway on Tramway @ Smith's
   b. South entrance Driveway on Wenonah @ Smith's

3. Intersection turning movement counts
   Study Time – 7-9 a.m. peak hour, 4-6 p.m. peak hour
   Consultant to provide for all intersections listed above.
   (Intersection turning movements counts to be correlated with TAQA data, if available)

4. Type of intersection progression and factors to be used. N/A

5. Boundaries of area to be used for trip distribution.
   City Wide - residential, office or industrial;
   2 mile radius – commercial;
   Interstate or to be determined by consultant - motel/hotel
   APS district boundary mapping for each school and bus routes

6. Basis for trip distribution.

Commercial - Use relationship based upon population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Residential - Ts = (Tt) (Se / D) / (Se / D)
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Se = Subarea Employment
D = Distance from Development to Subarea

Office/Industrial - Ts = (Tt) (Sp / D) / (Sp / D)
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population
D = Distance from Development to Subarea

Commercial -
Ts = (Tt) (Sp) / (Sp)
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population

7. Traffic Assignment. Logical routing on the major street system.

8. Proposed developments which have been approved but not constructed that are to be Included in the analyses. Projects in the area include:
   a. N/A

9. Method of intersection capacity analysis - planning or operational (see “2016 Highway Capacity Manual” or equivalent [i.e. HCS, Synchro, Teapac, etc.] as approved by staff). Must use latest version of design software and/or current edition of design manual.
   Implementation Year: 2025
   Horizon Year: N/A

10. Traffic conditions for analysis:
    a. Existing analysis __ yes _X_ no - year (N/A);

b. Phase implementation year(s) without proposed development – N/A
c. Phase implementation year(s) with proposed development – N/A
d. Project completion year without proposed development – 2025
e. Project completion year with proposed development – 2025
f. Other –

11. Background traffic growth.
    Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps. Minimum growth rate to be used is 1/2%.

12. Planned (programmed) traffic improvements.
    List planned CIP improvements in study area and projected project implementation year:
    a. Project – Location (Implementation Year) – N/A

13. Items to be included in the study:
    a. Intersection analysis. Yes
    b. Signal progression - An analysis is required if the driveway analysis indicates a traffic signal is possibly warranted. Analysis Method: N/A
    c. Arterial LOS analysis; No
    d. Recommended street, intersection and signal improvements. Yes
    e. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway signalization and visibility. Yes
    f. Transportation system impacts. Yes
    g. Other mitigating measures. Yes
    h. Accident analyses _X_ yes __ no; Location(s):
       Wenonah Ave / Four Hills Rd (5 years)
       Tramway / Wenonah Ave (5 years)

    i. Weaving analyses __ yes _X_ no; Location(s):
    j. Other:

SUBMITTAL REQUIREMENTS:

1. Number of copies of report required
   a. 1 paper copy
   b. 1 digital copy
2. Submittal Fee – $1300 for up to 3 reviews (plus technology fee)

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me at 924-3362.

MP P.E. 5/2/2023

Matt Grush, P.E. Date
Senior Engineer
City of Albuquerque, Planning
Transportation Development Section

via: email
C: TIS Task Force Attendees, file

APPENDIX B:

TURNING MOVEMENT COUNTS

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

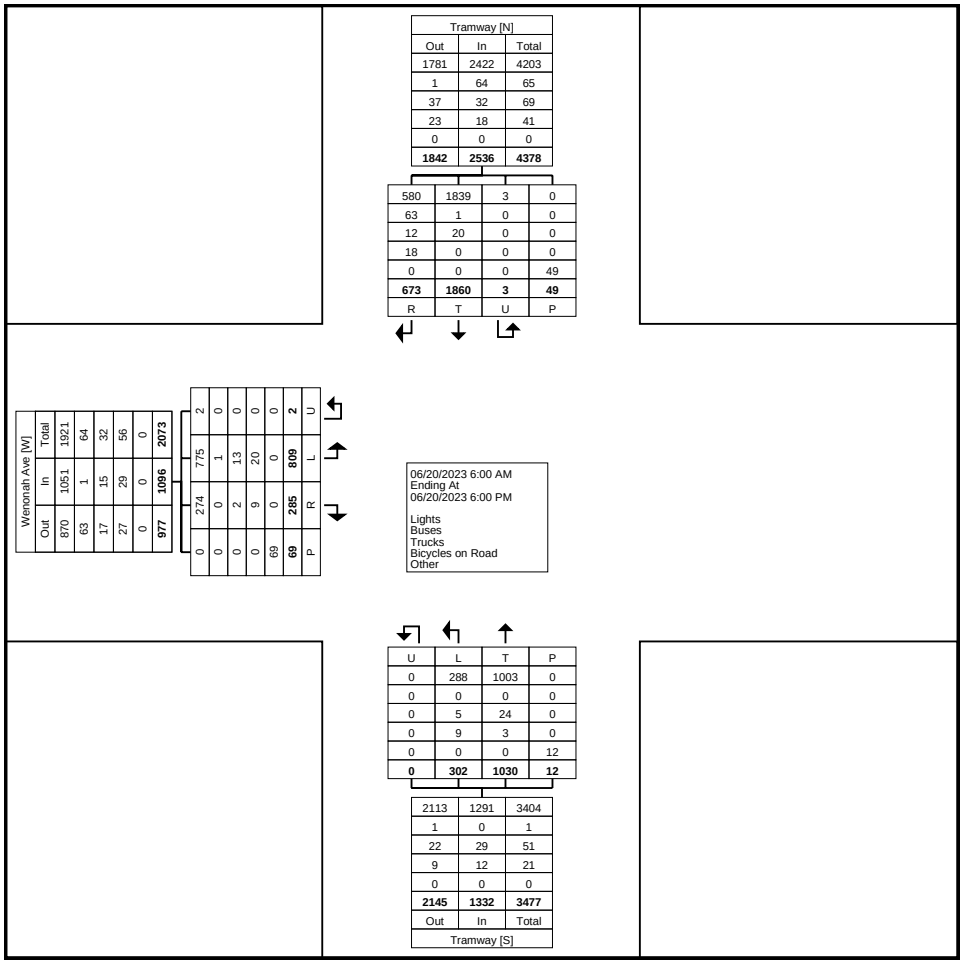
Turning Movement Data

Start Time	Tramway Southbound					Tramway Northbound					Wenonah Ave Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
6:00 AM	5	5	0	4	10	4	3	0	0	7	2	14	0	0	16	33
6:15 AM	9	8	0	0	17	11	4	0	0	15	3	16	0	0	19	51
6:30 AM	8	15	0	4	23	13	3	0	0	16	4	23	0	0	27	66
6:45 AM	5	14	0	0	19	13	6	0	0	19	1	19	0	1	20	58
Hourly Total	27	42	0	8	69	41	16	0	0	57	10	72	0	1	82	208
7:00 AM	13	16	0	0	29	19	3	0	0	22	3	14	0	1	17	68
7:15 AM	13	17	0	0	30	19	5	0	0	24	7	22	1	0	30	84
7:30 AM	20	27	0	0	47	21	8	0	0	29	4	35	0	2	39	115
7:45 AM	8	25	0	0	33	22	6	0	0	28	5	27	0	1	32	93
Hourly Total	54	85	0	0	139	81	22	0	0	103	19	98	1	4	118	360
8:00 AM	13	36	0	1	49	27	11	0	0	38	4	22	0	1	26	113
8:15 AM	15	41	0	1	56	32	5	0	0	37	3	33	0	1	36	129
8:30 AM	15	31	0	2	46	23	5	0	0	28	3	33	0	2	36	110
8:45 AM	19	42	0	0	61	28	6	0	0	34	11	29	0	2	40	135
Hourly Total	62	150	0	4	212	110	27	0	0	137	21	117	0	6	138	487
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	14	48	0	3	62	29	5	0	0	34	6	14	0	4	20	116
11:15 AM	11	49	0	3	60	35	4	0	0	39	5	17	0	8	22	121
11:30 AM	20	46	0	2	66	33	5	0	0	38	14	19	0	1	33	137
11:45 AM	18	49	0	0	67	24	5	0	0	29	9	18	0	3	27	123
Hourly Total	63	192	0	8	255	121	19	0	0	140	34	68	0	16	102	497
12:00 PM	11	51	0	1	62	53	13	0	2	66	12	27	0	2	39	167
12:15 PM	19	63	0	0	82	38	10	0	3	48	8	22	0	1	30	160
12:30 PM	20	59	0	1	79	42	6	0	0	48	7	21	0	1	28	155
12:45 PM	19	64	0	2	83	37	16	0	1	53	7	17	0	0	24	160
Hourly Total	69	237	0	4	306	170	45	0	6	215	34	87	0	4	121	642
1:00 PM	16	61	0	1	77	30	9	0	0	39	10	15	0	1	25	141
1:15 PM	18	43	0	0	61	42	6	0	0	48	10	12	0	1	22	131
1:30 PM	14	65	1	1	80	37	10	0	0	47	8	19	0	3	27	154
1:45 PM	25	53	0	1	78	26	6	0	0	32	7	26	0	0	33	143
Hourly Total	73	222	1	3	296	135	31	0	0	166	35	72	0	5	107	569
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	20	65	0	0	85	34	9	0	0	43	9	24	0	1	33	161
3:15 PM	29	66	1	1	96	30	7	0	0	37	9	19	0	3	28	161
3:30 PM	18	54	0	1	72	29	9	0	0	38	6	32	0	7	38	148
3:45 PM	24	78	0	3	102	29	10	0	0	39	8	19	0	2	27	168

Hourly Total	91	263	1	5	355	122	35	0	0	157	32	94	0	13	126	638
4:00 PM	18	72	0	4	90	30	14	0	0	44	8	29	0	2	37	171
4:15 PM	26	87	0	0	113	46	11	0	0	57	9	22	0	0	31	201
4:30 PM	35	88	0	3	123	29	6	0	0	35	12	22	1	2	35	193
4:45 PM	31	89	0	3	120	30	10	0	0	40	19	23	0	4	42	202
Hourly Total	110	336	0	10	446	135	41	0	0	176	48	96	1	8	145	767
5:00 PM	27	69	0	0	96	24	20	0	1	44	19	34	0	1	53	193
5:15 PM	36	118	1	3	155	30	17	0	2	47	7	30	0	6	37	239
5:30 PM	33	77	0	4	110	33	12	0	3	45	14	31	0	2	45	200
5:45 PM	28	69	0	0	97	28	17	0	0	45	12	10	0	3	22	164
Hourly Total	124	333	1	7	458	115	66	0	6	181	52	105	0	12	157	796
Grand Total	673	1860	3	49	2536	1030	302	0	12	1332	285	809	2	69	1096	4964
Approach %	26.5	73.3	0.1	-	-	77.3	22.7	0.0	-	-	26.0	73.8	0.2	-	-	-
Total %	13.6	37.5	0.1	-	51.1	20.7	6.1	0.0	-	26.8	5.7	16.3	0.0	-	22.1	-
Lights	580	1839	3	-	2422	1003	288	0	-	1291	274	775	2	-	1051	4764
% Lights	86.2	98.9	100.0	-	95.5	97.4	95.4	-	-	96.9	96.1	95.8	100.0	-	95.9	96.0
Buses	63	1	0	-	64	0	0	0	-	0	0	1	0	-	1	65
% Buses	9.4	0.1	0.0	-	2.5	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	0.1	1.3
Trucks	12	20	0	-	32	24	5	0	-	29	2	13	0	-	15	76
% Trucks	1.8	1.1	0.0	-	1.3	2.3	1.7	-	-	2.2	0.7	1.6	0.0	-	1.4	1.5
Bicycles on Road	18	0	0	-	18	3	9	0	-	12	9	20	0	-	29	59
% Bicycles on Road	2.7	0.0	0.0	-	0.7	0.3	3.0	-	-	0.9	3.2	2.5	0.0	-	2.6	1.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	2	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	16.7	-	-	-	-	7.2	-	-
Pedestrians	-	-	-	49	-	-	-	-	10	-	-	-	-	64	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	83.3	-	-	-	-	92.8	-	-

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023



Turning Movement Data Plot

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Tramway Southbound					Tramway Northbound					Wenonah Ave Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
8:00 AM	13	36	0	1	49	27	11	0	0	38	4	22	0	1	26	113
8:15 AM	15	41	0	1	56	32	5	0	0	37	3	33	0	1	36	129
8:30 AM	15	31	0	2	46	23	5	0	0	28	3	33	0	2	36	110
8:45 AM	19	42	0	0	61	28	6	0	0	34	11	29	0	2	40	135
Total	62	150	0	4	212	110	27	0	0	137	21	117	0	6	138	487
Approach %	29.2	70.8	0.0	-	-	80.3	19.7	0.0	-	-	15.2	84.8	0.0	-	-	-
Total %	12.7	30.8	0.0	-	43.5	22.6	5.5	0.0	-	28.1	4.3	24.0	0.0	-	28.3	-
PHF	0.816	0.893	0.000	-	0.869	0.859	0.614	0.000	-	0.901	0.477	0.886	0.000	-	0.863	0.902
Lights	52	141	0	-	193	107	25	0	-	132	20	115	0	-	135	460
% Lights	83.9	94.0	-	-	91.0	97.3	92.6	-	-	96.4	95.2	98.3	-	-	97.8	94.5
Buses	8	1	0	-	9	0	0	0	-	0	0	0	0	-	0	9
% Buses	12.9	0.7	-	-	4.2	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	1.8
Trucks	1	8	0	-	9	3	2	0	-	5	1	2	0	-	3	17
% Trucks	1.6	5.3	-	-	4.2	2.7	7.4	-	-	3.6	4.8	1.7	-	-	2.2	3.5
Bicycles on Road	1	0	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Bicycles on Road	1.6	0.0	-	-	0.5	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	4	-	-	-	-	0	-	-	-	-	6	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

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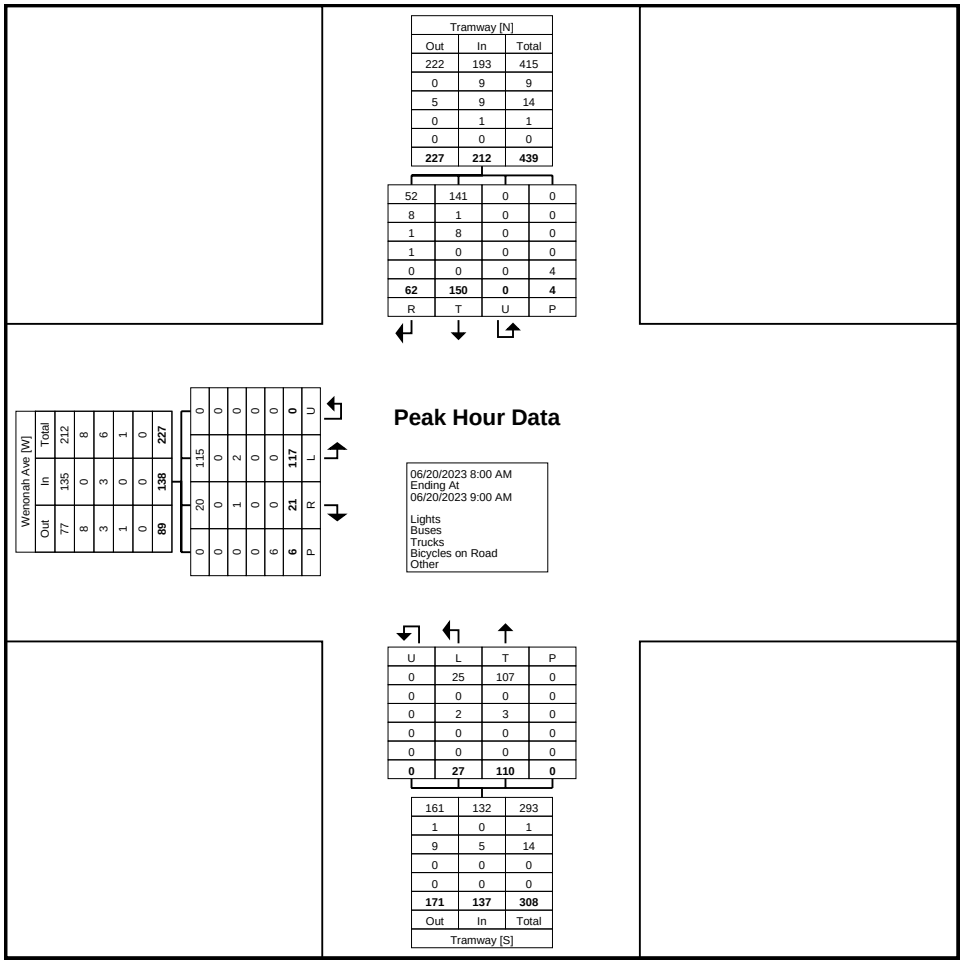
Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023



Turning Movement Peak Hour Data Plot (8:00 AM)

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Tramway Southbound					Tramway Northbound					Wenonah Ave Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
4:45 PM	31	89	0	3	120	30	10	0	0	40	19	23	0	4	42	202
5:00 PM	27	69	0	0	96	24	20	0	1	44	19	34	0	1	53	193
5:15 PM	36	118	1	3	155	30	17	0	2	47	7	30	0	6	37	239
5:30 PM	33	77	0	4	110	33	12	0	3	45	14	31	0	2	45	200
Total	127	353	1	10	481	117	59	0	6	176	59	118	0	13	177	834
Approach %	26.4	73.4	0.2	-	-	66.5	33.5	0.0	-	-	33.3	66.7	0.0	-	-	-
Total %	15.2	42.3	0.1	-	57.7	14.0	7.1	0.0	-	21.1	7.1	14.1	0.0	-	21.2	-
PHF	0.882	0.748	0.250	-	0.776	0.886	0.738	0.000	-	0.936	0.776	0.868	0.000	-	0.835	0.872
Lights	119	352	1	-	472	111	57	0	-	168	56	110	0	-	166	806
% Lights	93.7	99.7	100.0	-	98.1	94.9	96.6	-	-	95.5	94.9	93.2	-	-	93.8	96.6
Buses	7	0	0	-	7	0	0	0	-	0	0	0	0	-	0	7
% Buses	5.5	0.0	0.0	-	1.5	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.8
Trucks	1	1	0	-	2	3	1	0	-	4	0	0	0	-	0	6
% Trucks	0.8	0.3	0.0	-	0.4	2.6	1.7	-	-	2.3	0.0	0.0	-	-	0.0	0.7
Bicycles on Road	0	0	0	-	0	3	1	0	-	4	3	8	0	-	11	15
% Bicycles on Road	0.0	0.0	0.0	-	0.0	2.6	1.7	-	-	2.3	5.1	6.8	-	-	6.2	1.8
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	2	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	33.3	-	-	-	-	23.1	-	-
Pedestrians	-	-	-	10	-	-	-	-	4	-	-	-	-	10	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	66.7	-	-	-	-	76.9	-	-

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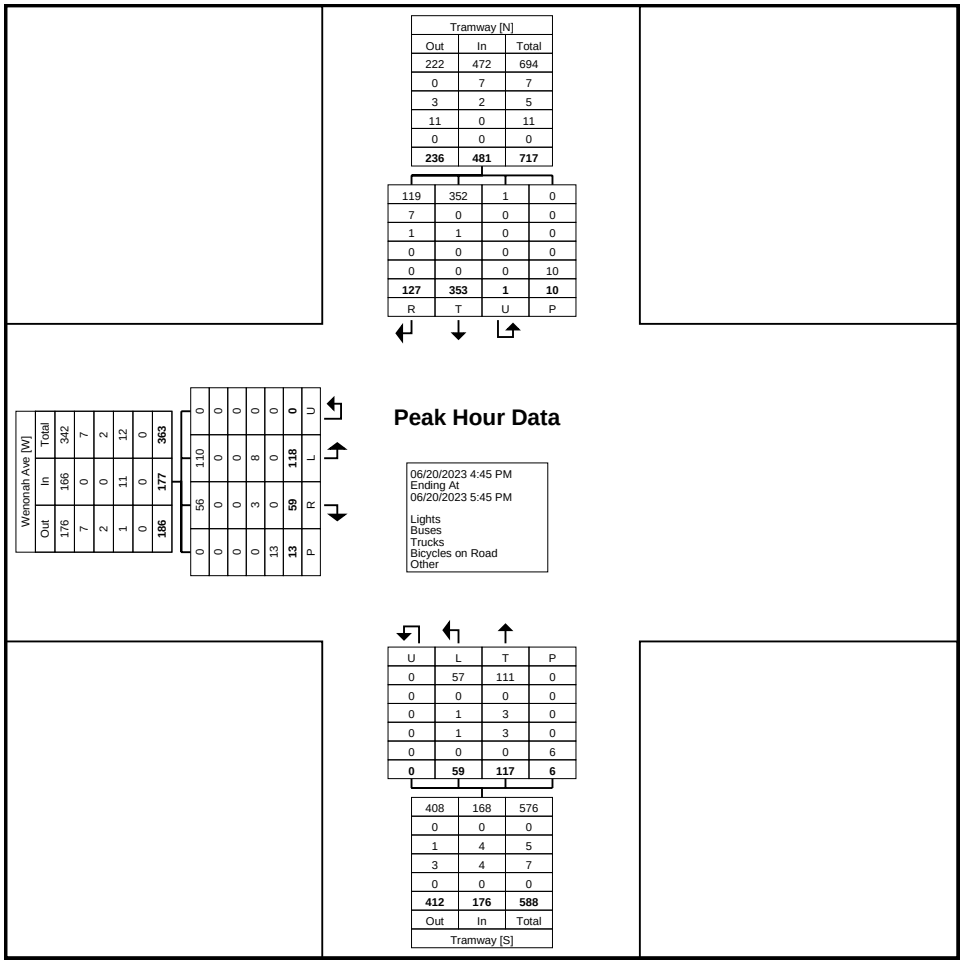


Turning Movement Peak Hour Data Plot (4:45 PM)

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

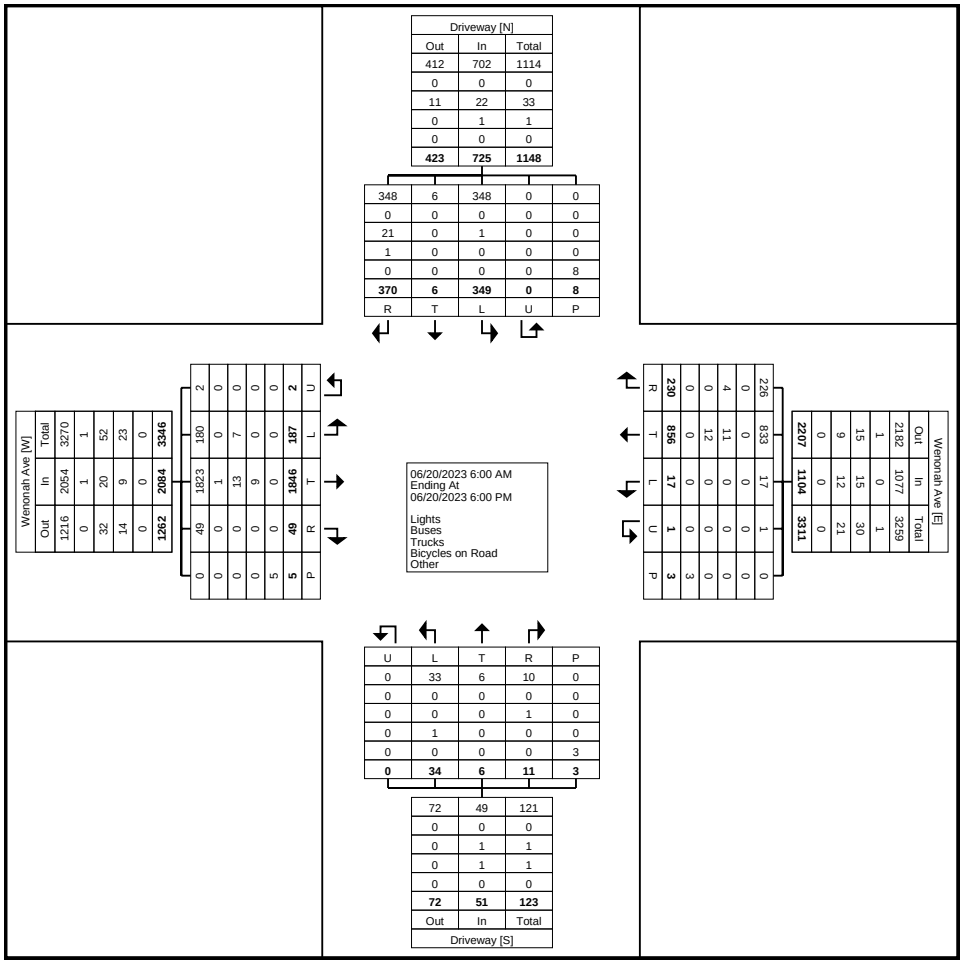
Turning Movement Data

Start Time	Driveway Southbound						Wenonah Ave Westbound						Driveway Northbound						Wenonah Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
6:00 AM	1	0	0	0	0	1	1	5	0	0	0	6	0	0	0	0	0	0	0	5	3	0	0	8	15
6:15 AM	3	0	0	0	2	3	2	12	0	1	0	15	0	0	0	0	0	0	0	10	2	0	0	12	30
6:30 AM	1	0	1	0	1	2	5	16	0	0	1	21	0	0	0	0	0	0	0	14	2	0	0	16	39
6:45 AM	2	0	2	0	0	4	4	19	0	0	0	23	0	0	0	0	1	0	1	16	0	0	0	17	44
Hourly Total	7	0	3	0	3	10	12	52	0	1	1	65	0	0	0	0	1	0	1	45	7	0	0	53	128
7:00 AM	5	0	0	0	0	5	6	15	0	0	0	21	0	0	0	0	0	0	3	16	0	0	0	19	45
7:15 AM	1	0	1	0	0	2	2	23	0	0	1	25	1	0	0	0	0	1	1	21	0	0	0	22	50
7:30 AM	3	0	2	0	0	5	7	27	0	0	1	34	0	0	0	0	0	0	1	24	3	0	0	28	67
7:45 AM	2	0	7	0	0	9	4	27	1	0	0	32	0	0	0	0	0	0	1	34	5	0	0	40	81
Hourly Total	11	0	10	0	0	21	19	92	1	0	2	112	1	0	0	0	0	1	6	95	8	0	0	109	243
8:00 AM	11	0	3	0	1	14	6	27	1	0	0	34	0	0	1	0	0	1	1	27	2	0	0	30	79
8:15 AM	4	0	5	0	0	9	8	33	0	0	0	41	0	0	2	0	0	2	0	43	2	0	0	45	97
8:30 AM	3	0	2	0	0	5	7	24	0	0	0	31	0	0	0	0	0	0	0	38	1	0	0	39	75
8:45 AM	8	0	3	0	0	11	3	26	0	0	0	29	0	0	0	0	0	0	1	44	5	0	0	50	90
Hourly Total	26	0	13	0	1	39	24	110	1	0	0	135	0	0	3	0	0	3	2	152	10	0	0	164	341
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	7	1	10	0	0	18	5	30	0	0	0	35	0	0	0	0	0	0	2	46	7	0	0	55	108
11:15 AM	11	0	11	0	1	22	8	25	3	0	0	36	1	0	0	0	0	1	1	48	5	0	1	54	113
11:30 AM	10	0	10	0	0	20	6	19	1	0	0	26	0	1	2	0	1	3	2	51	5	0	0	58	107
11:45 AM	9	1	10	0	0	20	3	20	0	0	0	23	0	0	2	0	0	2	2	43	7	0	0	52	97
Hourly Total	37	2	41	0	1	80	22	94	4	0	0	120	1	1	4	0	1	6	7	188	24	0	1	219	425
12:00 PM	18	1	6	0	0	25	4	46	1	0	0	51	2	0	2	0	0	4	2	53	8	0	0	63	143
12:15 PM	9	1	9	0	0	19	5	28	2	0	0	35	0	1	4	0	0	5	5	60	6	0	0	71	130
12:30 PM	12	1	7	0	0	20	4	38	0	0	0	42	0	1	1	0	1	2	2	58	4	0	0	64	128
12:45 PM	14	0	5	0	0	19	7	34	1	0	0	42	1	0	2	0	0	3	2	64	6	0	0	72	136
Hourly Total	53	3	27	0	0	83	20	146	4	0	0	170	3	2	9	0	1	14	11	235	24	0	0	270	537
1:00 PM	13	0	10	0	0	23	10	24	0	0	0	34	2	0	1	0	0	3	3	54	10	0	0	67	127
1:15 PM	12	0	11	0	0	23	9	28	0	0	0	37	0	0	0	0	0	0	3	38	6	0	1	47	107
1:30 PM	13	0	16	0	0	29	5	28	0	0	0	33	0	0	2	0	0	2	2	63	6	0	0	71	135
1:45 PM	9	0	14	0	0	23	5	23	0	0	0	28	0	1	0	0	0	1	3	52	6	0	1	61	113
Hourly Total	47	0	51	0	0	98	29	103	0	0	0	132	2	1	3	0	0	6	11	207	28	0	2	246	482
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	12	1	13	0	0	26	7	26	1	0	0	34	1	1	1	0	0	3	0	59	10	0	0	69	132
3:15 PM	14	0	18	0	0	32	11	20	0	0	0	31	0	0	2	0	0	2	1	67	5	0	0	73	138
3:30 PM	11	0	20	0	1	31	2	21	0	0	0	23	0	0	1	0	0	1	1	52	5	0	1	58	113

3:45 PM	15	0	11	0	0	26	12	18	0	0	0	30	1	0	0	0	0	1	2	75	4	0	0	81	138
Hourly Total	52	1	62	0	1	115	32	85	1	0	0	118	2	1	4	0	0	7	4	253	24	0	1	281	521
4:00 PM	13	0	24	0	0	37	7	26	0	0	0	33	0	1	3	0	0	4	0	71	8	0	0	79	153
4:15 PM	17	0	15	0	0	32	11	26	0	0	0	37	0	0	4	0	0	4	1	82	7	1	0	91	164
4:30 PM	10	0	15	0	1	25	6	22	0	0	0	28	0	0	0	0	0	0	0	92	11	0	0	103	156
4:45 PM	18	0	12	0	0	30	11	22	2	0	0	35	0	0	0	0	0	0	2	87	7	0	0	96	161
Hourly Total	58	0	66	0	1	124	35	96	2	0	0	133	0	1	7	0	0	8	3	332	33	1	0	369	634
5:00 PM	20	0	18	0	1	38	13	14	2	0	0	29	0	0	1	0	0	1	2	78	8	0	1	88	156
5:15 PM	24	0	24	0	0	48	8	22	0	0	0	30	1	0	1	0	0	2	0	113	5	0	0	118	198
5:30 PM	15	0	21	0	0	36	10	24	0	0	0	34	1	0	1	0	0	2	0	83	8	1	0	92	164
5:45 PM	20	0	13	0	0	33	6	18	2	0	0	26	0	0	1	0	0	1	2	65	8	0	0	75	135
Hourly Total	79	0	76	0	1	155	37	78	4	0	0	119	2	0	4	0	0	6	4	339	29	1	1	373	653
Grand Total	370	6	349	0	8	725	230	856	17	1	3	1104	11	6	34	0	3	51	49	1846	187	2	5	2084	3964
Approach %	51.0	0.8	48.1	0.0	-	-	20.8	77.5	1.5	0.1	-	-	21.6	11.8	66.7	0.0	-	-	2.4	88.6	9.0	0.1	-	-	-
Total %	9.3	0.2	8.8	0.0	-	18.3	5.8	21.6	0.4	0.0	-	27.9	0.3	0.2	0.9	0.0	-	1.3	1.2	46.6	4.7	0.1	-	52.6	-
Lights	348	6	348	0	-	702	226	833	17	1	-	1077	10	6	33	0	-	49	49	1823	180	2	-	2054	3882
% Lights	94.1	100.0	99.7	-	-	96.8	98.3	97.3	100.0	100.0	-	97.6	90.9	100.0	97.1	-	-	96.1	100.0	98.8	96.3	100.0	-	98.6	97.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	0.0	-	0.0	0.0
Trucks	21	0	1	0	-	22	4	11	0	0	-	15	1	0	0	0	-	1	0	13	7	0	-	20	58
% Trucks	5.7	0.0	0.3	-	-	3.0	1.7	1.3	0.0	0.0	-	1.4	9.1	0.0	0.0	-	-	2.0	0.0	0.7	3.7	0.0	-	1.0	1.5
Bicycles on Road	1	0	0	0	-	1	0	12	0	0	-	12	0	0	1	0	-	1	0	9	0	0	-	9	23
% Bicycles on Road	0.3	0.0	0.0	-	-	0.1	0.0	1.4	0.0	0.0	-	1.1	0.0	0.0	2.9	-	-	2.0	0.0	0.5	0.0	0.0	-	0.4	0.6
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	8	-	-	-	-	-	3	-	-	-	-	-	3	-	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023



Turning Movement Data Plot

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Driveway Southbound						Wenonah Ave Westbound						Driveway Northbound						Wenonah Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
8:00 AM	11	0	3	0	1	14	6	27	1	0	0	34	0	0	1	0	0	1	1	27	2	0	0	30	79
8:15 AM	4	0	5	0	0	9	8	33	0	0	0	41	0	0	2	0	0	2	0	43	2	0	0	45	97
8:30 AM	3	0	2	0	0	5	7	24	0	0	0	31	0	0	0	0	0	0	0	38	1	0	0	39	75
8:45 AM	8	0	3	0	0	11	3	26	0	0	0	29	0	0	0	0	0	0	1	44	5	0	0	50	90
Total	26	0	13	0	1	39	24	110	1	0	0	135	0	0	3	0	0	3	2	152	10	0	0	164	341
Approach %	66.7	0.0	33.3	0.0	-	-	17.8	81.5	0.7	0.0	-	-	0.0	0.0	100.0	0.0	-	-	1.2	92.7	6.1	0.0	-	-	-
Total %	7.6	0.0	3.8	0.0	-	11.4	7.0	32.3	0.3	0.0	-	39.6	0.0	0.0	0.9	0.0	-	0.9	0.6	44.6	2.9	0.0	-	48.1	-
PHF	0.591	0.000	0.650	0.000	-	0.696	0.750	0.833	0.250	0.000	-	0.823	0.000	0.000	0.375	0.000	-	0.375	0.500	0.864	0.500	0.000	-	0.820	0.879
Lights	18	0	13	0	-	31	23	107	1	0	-	131	0	0	3	0	-	3	2	145	8	0	-	155	320
% Lights	69.2	-	100.0	-	-	79.5	95.8	97.3	100.0	-	-	97.0	-	-	100.0	-	-	100.0	100.0	95.4	80.0	-	-	94.5	93.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	8	0	0	0	-	8	1	1	0	0	-	2	0	0	0	0	-	0	0	5	2	0	-	7	17
% Trucks	30.8	-	0.0	-	-	20.5	4.2	0.9	0.0	-	-	1.5	-	-	0.0	-	-	0.0	0.0	3.3	20.0	-	-	4.3	5.0
Bicycles on Road	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	0	2	0	0	-	2	4
% Bicycles on Road	0.0	-	0.0	-	-	0.0	0.0	1.8	0.0	-	-	1.5	-	-	0.0	-	-	0.0	0.0	1.3	0.0	-	-	1.2	1.2
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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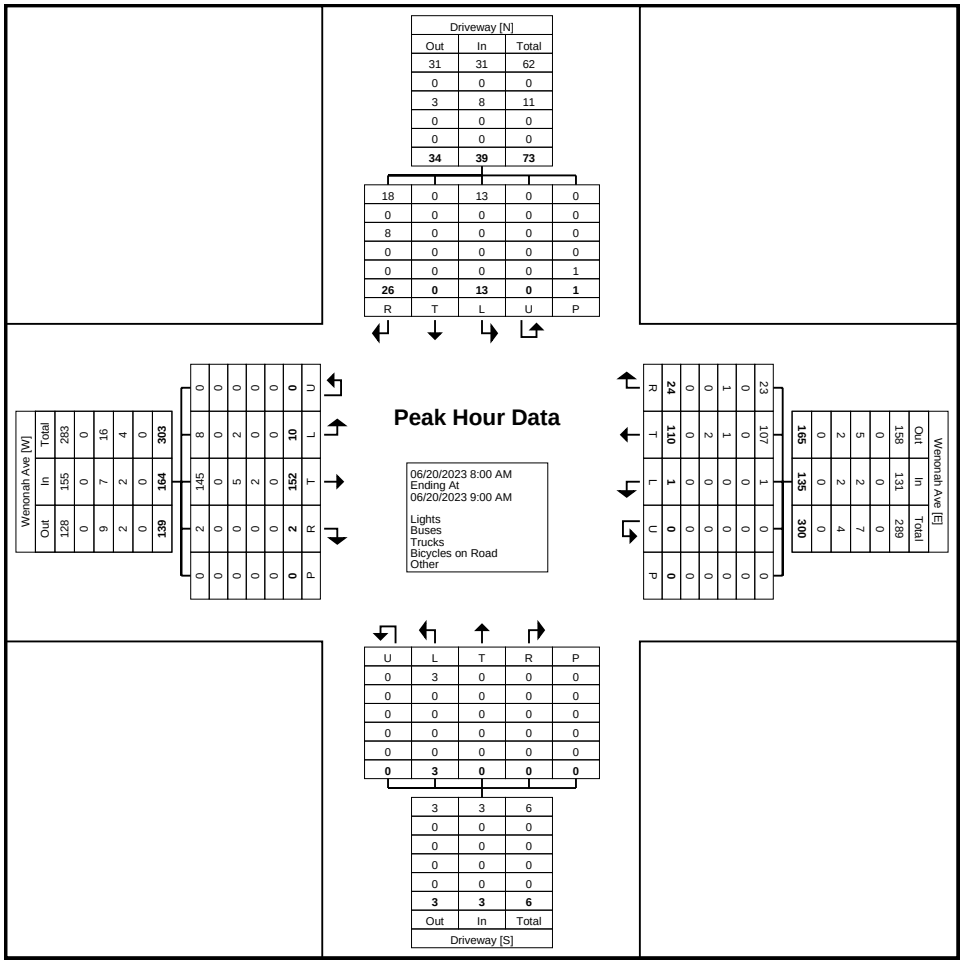

Turning Movement Peak Hour Data Plot (8:00 AM)

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Driveway Southbound						Wenonah Ave Westbound						Driveway Northbound						Wenonah Ave Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:45 PM	18	0	12	0	0	30	11	22	2	0	0	35	0	0	0	0	0	0	2	87	7	0	0	96	161
5:00 PM	20	0	18	0	1	38	13	14	2	0	0	29	0	0	1	0	0	1	2	78	8	0	1	88	156
5:15 PM	24	0	24	0	0	48	8	22	0	0	0	30	1	0	1	0	0	2	0	113	5	0	0	118	198
5:30 PM	15	0	21	0	0	36	10	24	0	0	0	34	1	0	1	0	0	2	0	83	8	1	0	92	164
Total	77	0	75	0	1	152	42	82	4	0	0	128	2	0	3	0	0	5	4	361	28	1	1	394	679
Approach %	50.7	0.0	49.3	0.0	-	-	32.8	64.1	3.1	0.0	-	-	40.0	0.0	60.0	0.0	-	-	1.0	91.6	7.1	0.3	-	-	-
Total %	11.3	0.0	11.0	0.0	-	22.4	6.2	12.1	0.6	0.0	-	18.9	0.3	0.0	0.4	0.0	-	0.7	0.6	53.2	4.1	0.1	-	58.0	-
PHF	0.802	0.000	0.781	0.000	-	0.792	0.808	0.854	0.500	0.000	-	0.914	0.500	0.000	0.750	0.000	-	0.625	0.500	0.799	0.875	0.250	-	0.835	0.857
Lights	77	0	74	0	-	151	40	77	4	0	-	121	2	0	3	0	-	5	4	359	27	1	-	391	668
% Lights	100.0	-	98.7	-	-	99.3	95.2	93.9	100.0	-	-	94.5	100.0	-	100.0	-	-	100.0	100.0	99.4	96.4	100.0	-	99.2	98.4
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Trucks	0	0	1	0	-	1	2	4	0	0	-	6	0	0	0	0	-	0	0	1	1	0	-	2	9
% Trucks	0.0	-	1.3	-	-	0.7	4.8	4.9	0.0	-	-	4.7	0.0	-	0.0	-	-	0.0	0.0	0.3	3.6	0.0	-	0.5	1.3
Bicycles on Road	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	0	1	0	0	-	1	2
% Bicycles on Road	0.0	-	0.0	-	-	0.0	0.0	1.2	0.0	-	-	0.8	0.0	-	0.0	-	-	0.0	0.0	0.3	0.0	0.0	-	0.3	0.3
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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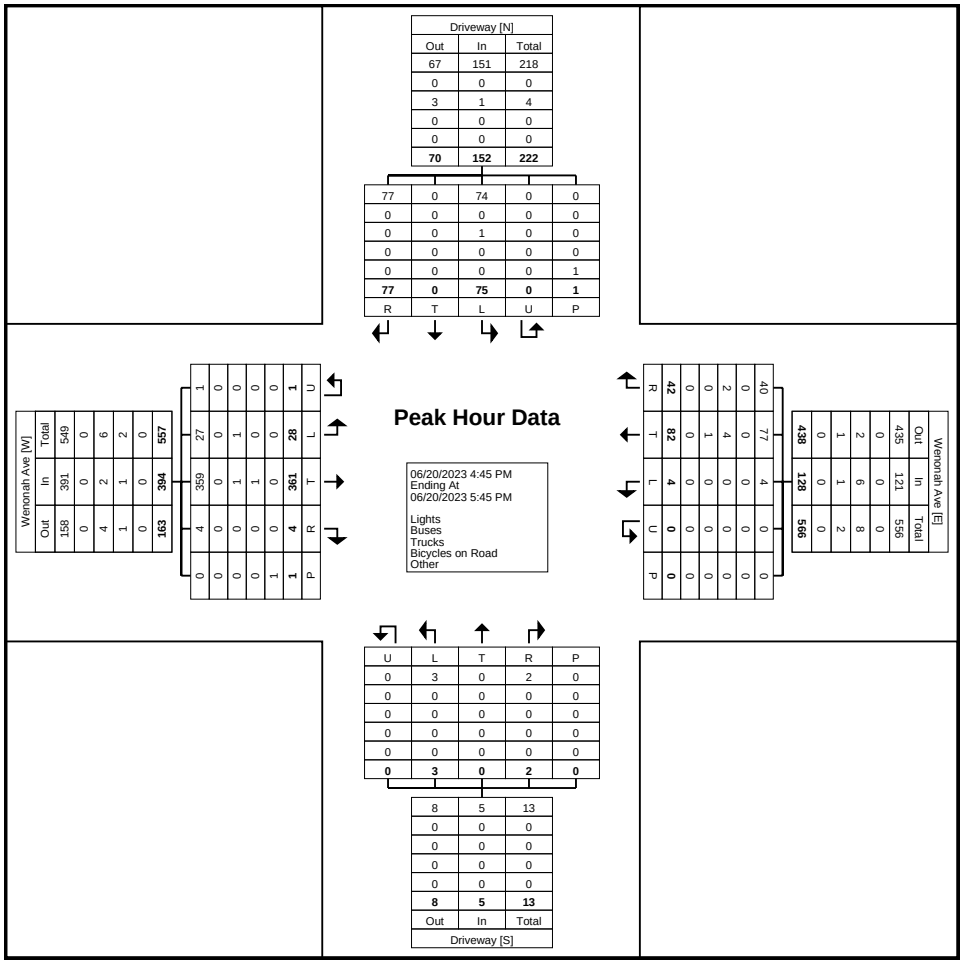

Turning Movement Peak Hour Data Plot (4:45 PM)

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Data

Start Time	4 Hills Rd Southbound						Wenonah Ave Westbound						4 Hills Rd Northbound						Wenonah Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
6:00 AM	1	2	0	0	0	3	1	0	0	0	0	1	0	23	6	0	0	29	2	1	0	0	0	3	36
6:15 AM	3	2	0	0	0	5	3	2	0	0	0	5	0	35	8	0	1	43	9	0	0	1	0	10	63
6:30 AM	2	5	0	0	0	7	1	3	0	0	0	4	0	39	15	0	0	54	15	1	1	0	1	17	82
6:45 AM	2	4	1	0	0	7	3	2	0	0	0	5	0	63	18	0	0	81	13	1	2	0	0	16	109
Hourly Total	8	13	1	0	0	22	8	7	0	0	0	15	0	160	47	0	1	207	39	3	3	1	1	46	290
7:00 AM	3	9	0	0	4	12	8	1	0	0	0	9	0	53	18	0	1	71	11	1	3	0	0	15	107
7:15 AM	5	16	0	0	0	21	5	3	0	0	0	8	0	75	18	0	0	93	21	0	3	0	0	24	146
7:30 AM	4	18	1	0	0	23	5	3	0	0	0	8	0	96	25	0	0	121	20	1	4	0	0	25	177
7:45 AM	2	16	0	0	0	18	8	1	2	0	0	11	0	75	26	0	0	101	29	3	3	0	0	35	165
Hourly Total	14	59	1	0	4	74	26	8	2	0	0	36	0	299	87	0	1	386	81	5	13	0	0	99	595
8:00 AM	4	17	0	0	0	21	1	3	0	0	0	4	0	68	27	0	0	95	32	3	2	0	0	37	157
8:15 AM	6	19	1	0	0	26	2	5	0	0	0	7	0	58	34	0	0	92	46	0	2	0	0	48	173
8:30 AM	4	16	0	0	0	20	4	3	0	0	0	7	0	76	24	0	0	100	30	1	0	0	0	31	158
8:45 AM	5	13	0	0	0	18	2	4	0	0	0	6	1	81	19	0	0	101	49	1	0	0	0	50	175
Hourly Total	19	65	1	0	0	85	9	15	0	0	0	24	1	283	104	0	0	388	157	5	4	0	0	166	663
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	2	25	0	0	0	27	1	0	0	0	1	1	0	56	30	0	0	86	48	1	4	0	0	53	167
11:15 AM	8	35	0	0	1	43	3	1	0	0	0	4	0	59	27	0	0	86	49	3	8	0	0	60	193
11:30 AM	9	29	2	0	0	40	0	1	0	0	0	1	0	50	18	0	0	68	50	3	10	0	0	63	172
11:45 AM	3	19	2	0	0	24	3	1	0	0	0	4	3	47	17	0	0	67	47	3	8	0	0	58	153
Hourly Total	22	108	4	0	1	134	7	3	0	0	1	10	3	212	92	0	0	307	194	10	30	0	0	234	685
12:00 PM	7	24	0	0	0	31	1	2	0	0	0	3	1	77	40	0	0	118	50	1	8	1	0	60	212
12:15 PM	6	31	1	1	0	39	2	1	0	0	0	3	2	48	29	0	0	79	60	1	9	0	0	70	191
12:30 PM	8	32	1	0	1	41	3	0	0	0	0	3	0	56	29	0	0	85	44	4	12	0	0	60	189
12:45 PM	9	34	3	0	0	46	4	1	0	0	0	5	0	56	35	0	0	91	62	2	5	0	0	69	211
Hourly Total	30	121	5	1	1	157	10	4	0	0	0	14	3	237	133	0	0	373	216	8	34	1	0	259	803
1:00 PM	9	36	1	0	0	46	2	2	0	0	0	4	0	53	20	0	0	73	54	4	7	0	0	65	188
1:15 PM	8	20	2	0	0	30	3	1	0	0	0	4	0	43	24	0	0	67	40	3	10	0	0	53	154
1:30 PM	5	19	2	0	0	26	2	1	0	0	0	3	0	41	22	0	1	63	52	8	14	0	0	74	166
1:45 PM	3	26	3	0	0	32	1	2	0	0	0	3	0	46	19	0	0	65	53	1	8	0	0	62	162
Hourly Total	25	101	8	0	0	134	8	6	0	0	0	14	0	183	85	0	1	268	199	16	39	0	0	254	670
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	5	29	3	0	1	37	0	1	0	0	0	1	0	62	30	0	0	92	67	2	8	0	0	77	207
3:15 PM	4	32	3	1	1	40	2	0	0	0	0	2	0	44	24	0	0	68	63	1	15	0	0	79	189
3:30 PM	0	31	3	0	0	34	1	1	0	0	1	2	1	39	23	0	0	63	52	2	16	0	0	70	169

3:45 PM	8	39	3	0	0	50	3	3	0	0	0	6	0	56	20	0	0	76	77	0	10	0	0	87	219
Hourly Total	17	131	12	1	2	161	6	5	0	0	1	11	1	201	97	0	0	299	259	5	49	0	0	313	784
4:00 PM	6	33	1	0	0	40	3	1	0	0	0	4	1	45	24	0	0	70	76	3	8	0	0	87	201
4:15 PM	7	38	3	1	0	49	2	2	0	0	0	4	1	44	30	0	0	75	80	7	12	0	0	99	227
4:30 PM	6	35	3	0	0	44	5	0	1	0	2	6	0	57	22	0	2	79	77	8	13	0	0	98	227
4:45 PM	9	46	2	0	0	57	4	3	0	0	0	7	0	45	23	0	0	68	89	6	15	0	0	110	242
Hourly Total	28	152	9	1	0	190	14	6	1	0	2	21	2	191	99	0	2	292	322	24	48	0	0	394	897
5:00 PM	7	43	3	0	0	53	0	3	0	0	0	3	0	58	20	0	0	78	66	5	12	0	0	83	217
5:15 PM	9	42	8	0	0	59	3	2	0	0	0	5	1	44	16	0	0	61	112	9	23	0	0	144	269
5:30 PM	8	44	6	0	0	58	5	2	0	0	0	7	0	65	24	1	0	90	77	7	27	0	0	111	266
5:45 PM	4	40	4	0	0	48	5	2	0	0	0	7	0	49	24	0	0	73	67	9	7	0	0	83	211
Hourly Total	28	169	21	0	0	218	13	9	0	0	0	22	1	216	84	1	0	302	322	30	69	0	0	421	963
Grand Total	191	919	62	3	8	1175	101	63	3	0	4	167	11	1982	828	1	5	2822	1789	106	289	2	1	2186	6350
Approach %	16.3	78.2	5.3	0.3	-	-	60.5	37.7	1.8	0.0	-	-	0.4	70.2	29.3	0.0	-	-	81.8	4.8	13.2	0.1	-	-	-
Total %	3.0	14.5	1.0	0.0	-	18.5	1.6	1.0	0.0	0.0	-	2.6	0.2	31.2	13.0	0.0	-	44.4	28.2	1.7	4.6	0.0	-	34.4	-
Lights	184	903	61	3	-	1151	101	61	3	0	-	165	7	1969	815	1	-	2792	1775	101	287	2	-	2165	6273
% Lights	96.3	98.3	98.4	100.0	-	98.0	100.0	96.8	100.0	-	-	98.8	63.6	99.3	98.4	100.0	-	98.9	99.2	95.3	99.3	100.0	-	99.0	98.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	2	1	0	-	3	1	0	0	0	-	1	4
% Buses	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.1	0.0	-	0.1	0.1	0.0	0.0	0.0	-	0.0	0.1
Trucks	3	16	1	0	-	20	0	1	0	0	-	1	2	10	10	0	-	22	13	0	2	0	-	15	58
% Trucks	1.6	1.7	1.6	0.0	-	1.7	0.0	1.6	0.0	-	-	0.6	18.2	0.5	1.2	0.0	-	0.8	0.7	0.0	0.7	0.0	-	0.7	0.9
Bicycles on Road	4	0	0	0	-	4	0	1	0	0	-	1	2	1	2	0	-	5	0	5	0	0	-	5	15
% Bicycles on Road	2.1	0.0	0.0	0.0	-	0.3	0.0	1.6	0.0	-	-	0.6	18.2	0.1	0.2	0.0	-	0.2	0.0	4.7	0.0	0.0	-	0.2	0.2
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	12.5	-	-	-	-	-	25.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	3	-	-	-	-	-	5	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	87.5	-	-	-	-	-	75.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Lee Engineering, LLC
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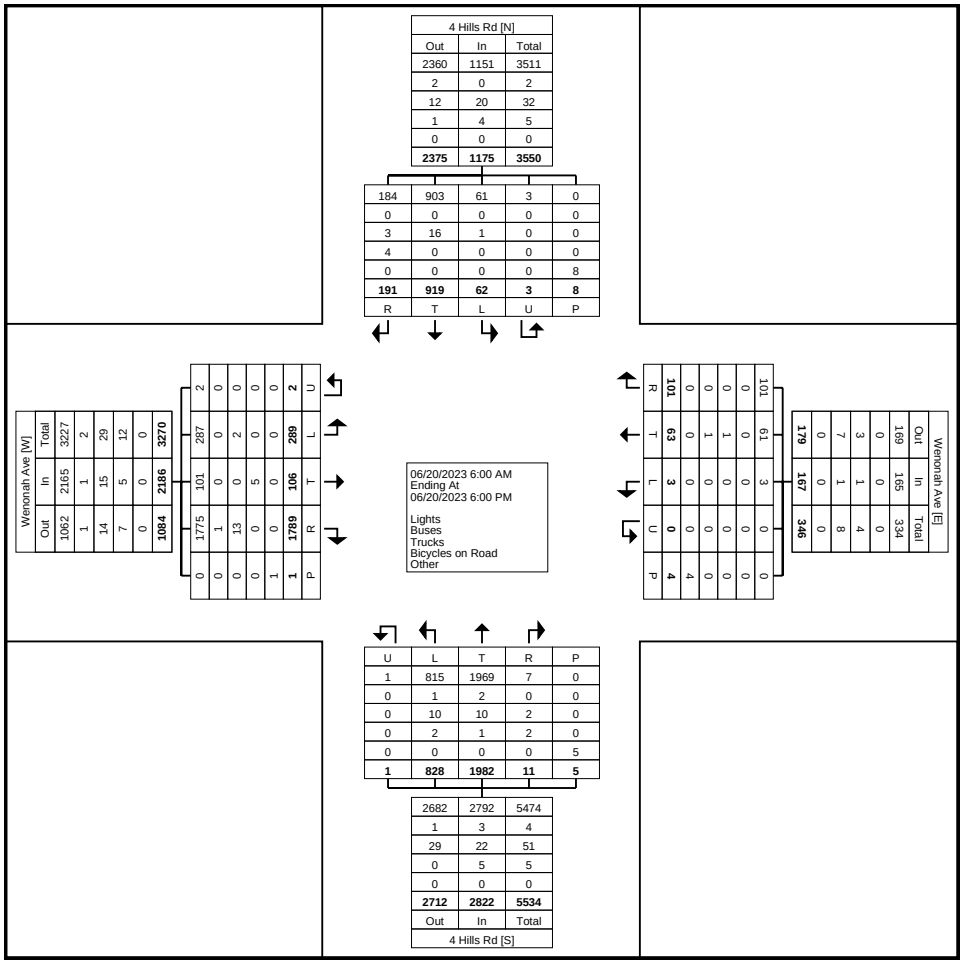
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023



Turning Movement Data Plot

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Peak Hour Data (7:30 AM)

Start Time	4 Hills Rd Southbound						Wenonah Ave Westbound						4 Hills Rd Northbound						Wenonah Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:30 AM	4	18	1	0	0	23	5	3	0	0	0	8	0	96	25	0	0	121	20	1	4	0	0	25	177
7:45 AM	2	16	0	0	0	18	8	1	2	0	0	11	0	75	26	0	0	101	29	3	3	0	0	35	165
8:00 AM	4	17	0	0	0	21	1	3	0	0	0	4	0	68	27	0	0	95	32	3	2	0	0	37	157
8:15 AM	6	19	1	0	0	26	2	5	0	0	0	7	0	58	34	0	0	92	46	0	2	0	0	48	173
Total	16	70	2	0	0	88	16	12	2	0	0	30	0	297	112	0	0	409	127	7	11	0	0	145	672
Approach %	18.2	79.5	2.3	0.0	-	-	53.3	40.0	6.7	0.0	-	-	0.0	72.6	27.4	0.0	-	-	87.6	4.8	7.6	0.0	-	-	-
Total %	2.4	10.4	0.3	0.0	-	13.1	2.4	1.8	0.3	0.0	-	4.5	0.0	44.2	16.7	0.0	-	60.9	18.9	1.0	1.6	0.0	-	21.6	-
PHF	0.667	0.921	0.500	0.000	-	0.846	0.500	0.600	0.250	0.000	-	0.682	0.000	0.773	0.824	0.000	-	0.845	0.690	0.583	0.688	0.000	-	0.755	0.949
Lights	16	66	2	0	-	84	16	12	2	0	-	30	0	296	112	0	-	408	123	7	11	0	-	141	663
% Lights	100.0	94.3	100.0	-	-	95.5	100.0	100.0	100.0	-	-	100.0	-	99.7	100.0	-	-	99.8	96.9	100.0	100.0	-	-	97.2	98.7
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1	0	0	0	-	1	2
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.3	0.0	-	-	0.2	0.8	0.0	0.0	-	-	0.7	0.3
Trucks	0	4	0	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	3	0	0	0	-	3	7
% Trucks	0.0	5.7	0.0	-	-	4.5	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	2.4	0.0	0.0	-	-	2.1	1.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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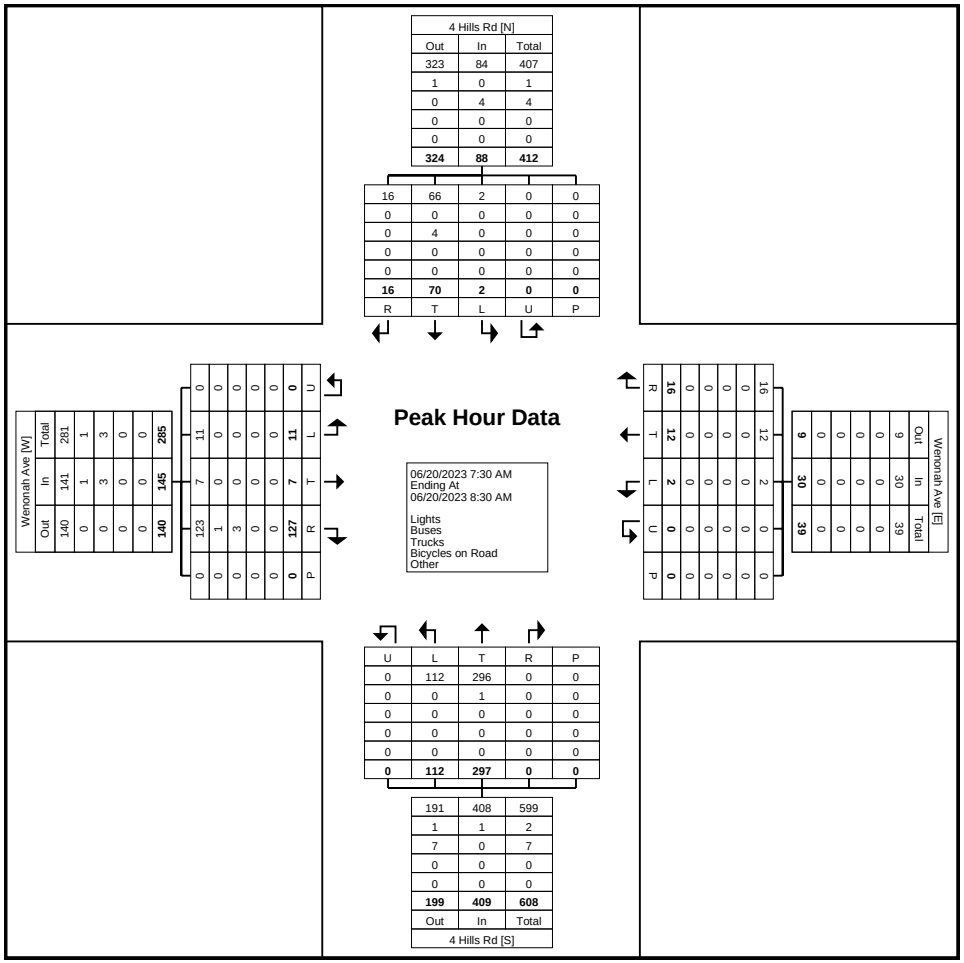

Turning Movement Peak Hour Data Plot (7:30 AM)

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	4 Hills Rd Southbound						Wenonah Ave Westbound						4 Hills Rd Northbound						Wenonah Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:45 PM	9	46	2	0	0	57	4	3	0	0	0	7	0	45	23	0	0	68	89	6	15	0	0	110	242
5:00 PM	7	43	3	0	0	53	0	3	0	0	0	3	0	58	20	0	0	78	66	5	12	0	0	83	217
5:15 PM	9	42	8	0	0	59	3	2	0	0	0	5	1	44	16	0	0	61	112	9	23	0	0	144	269
5:30 PM	8	44	6	0	0	58	5	2	0	0	0	7	0	65	24	1	0	90	77	7	27	0	0	111	266
Total	33	175	19	0	0	227	12	10	0	0	0	22	1	212	83	1	0	297	344	27	77	0	0	448	994
Approach %	14.5	77.1	8.4	0.0	-	-	54.5	45.5	0.0	0.0	-	-	0.3	71.4	27.9	0.3	-	-	76.8	6.0	17.2	0.0	-	-	-
Total %	3.3	17.6	1.9	0.0	-	22.8	1.2	1.0	0.0	0.0	-	2.2	0.1	21.3	8.4	0.1	-	29.9	34.6	2.7	7.7	0.0	-	45.1	-
PHF	0.917	0.951	0.594	0.000	-	0.962	0.600	0.833	0.000	0.000	-	0.786	0.250	0.815	0.865	0.250	-	0.825	0.768	0.750	0.713	0.000	-	0.778	0.924
Lights	31	174	19	0	-	224	12	9	0	0	-	21	1	212	79	1	-	293	344	27	76	0	-	447	985
% Lights	93.9	99.4	100.0	-	-	98.7	100.0	90.0	-	-	-	95.5	100.0	100.0	95.2	100.0	-	98.7	100.0	100.0	98.7	-	-	99.8	99.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	2	1	0	0	-	3	0	1	0	0	-	1	0	0	3	0	-	3	0	0	1	0	-	1	8
% Trucks	6.1	0.6	0.0	-	-	1.3	0.0	10.0	-	-	-	4.5	0.0	0.0	3.6	0.0	-	1.0	0.0	0.0	1.3	-	-	0.2	0.8
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	1.2	0.0	-	0.3	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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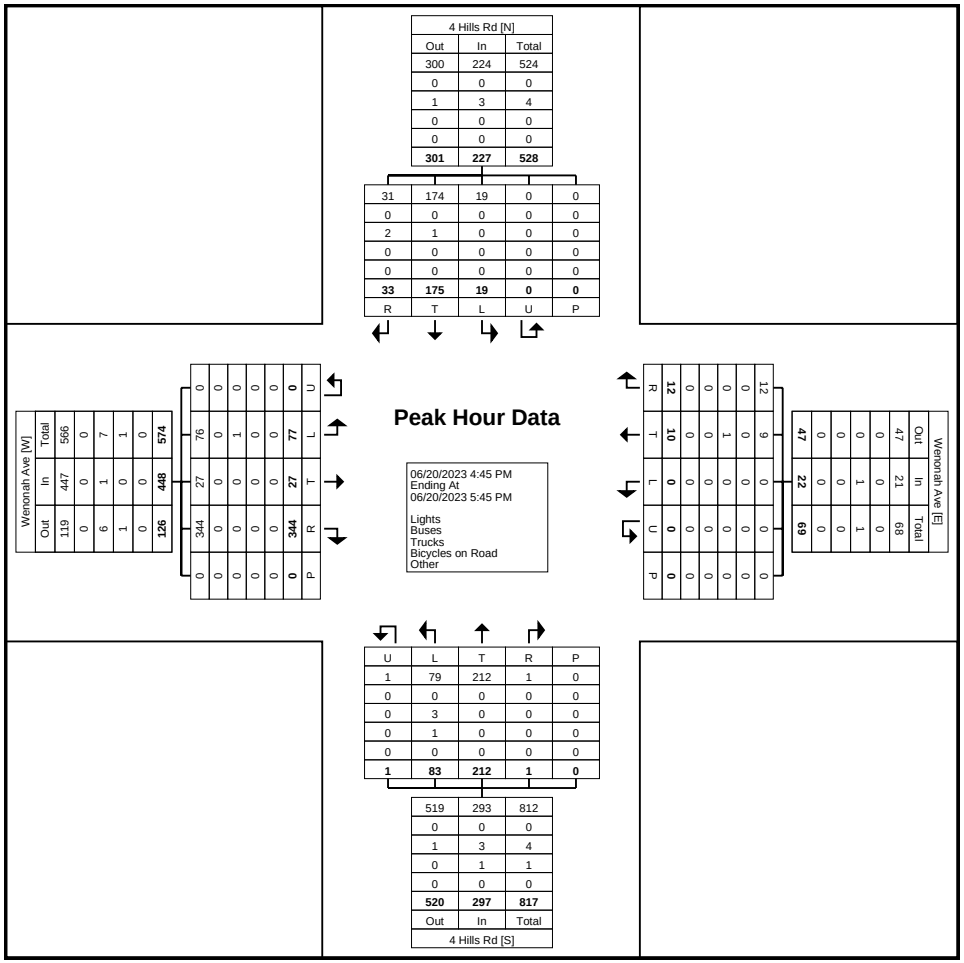


Turning Movement Peak Hour Data Plot (4:45 PM)

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

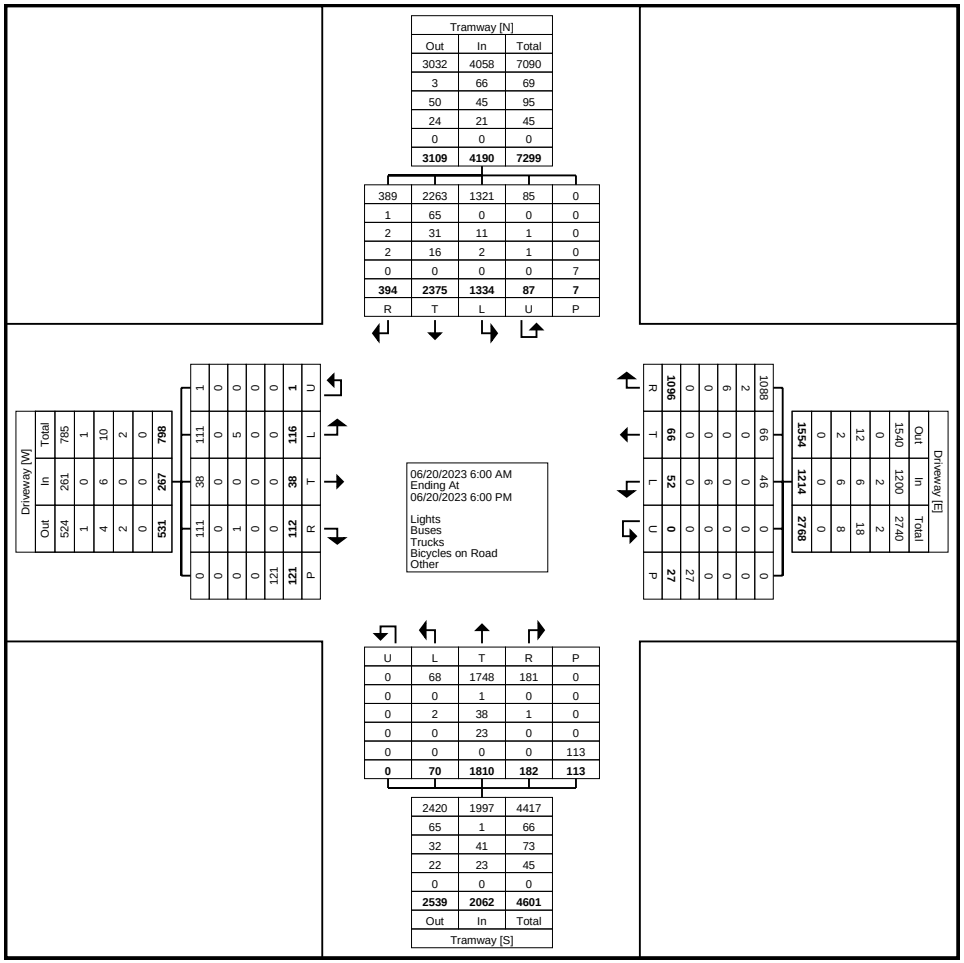
Turning Movement Data

Start Time	Tramway Southbound						Driveway Westbound						Tramway Northbound						Driveway Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
6:00 AM	7	12	8	2	0	29	6	2	0	0	0	8	2	17	0	0	0	19	0	0	0	0	2	0	56
6:15 AM	4	15	9	2	0	30	12	0	0	0	3	12	3	22	0	0	3	25	0	0	0	0	1	0	67
6:30 AM	2	21	12	1	1	36	7	2	1	0	1	10	1	35	2	0	0	38	0	0	1	0	1	1	85
6:45 AM	3	21	11	3	0	38	9	1	1	0	0	11	1	29	3	0	0	33	1	0	1	0	5	2	84
Hourly Total	16	69	40	8	1	133	34	5	2	0	4	41	7	103	5	0	3	115	1	0	2	0	9	3	292
7:00 AM	6	31	15	3	0	55	10	1	0	0	0	11	0	32	3	0	1	35	1	1	1	0	3	3	104
7:15 AM	5	31	17	4	0	57	18	1	3	0	1	22	6	35	3	0	1	44	0	0	2	0	1	2	125
7:30 AM	3	42	17	4	0	66	11	0	2	0	0	13	2	55	4	0	2	61	3	0	4	0	2	7	147
7:45 AM	2	41	19	1	0	63	17	1	3	0	1	21	3	44	2	0	7	49	1	0	0	0	8	1	134
Hourly Total	16	145	68	12	0	241	56	3	8	0	2	67	11	166	12	0	11	189	5	1	7	0	14	13	510
8:00 AM	3	43	17	3	0	66	10	3	0	0	1	13	2	38	5	0	1	45	2	0	1	0	1	3	127
8:15 AM	9	55	28	1	1	93	19	0	1	0	2	20	7	63	1	0	5	71	0	0	3	0	2	3	187
8:30 AM	7	47	26	0	0	80	24	1	1	0	0	26	6	52	2	0	6	60	0	0	4	0	3	4	170
8:45 AM	11	57	21	4	0	93	21	3	2	0	0	26	4	51	1	0	4	56	1	2	2	0	3	5	180
Hourly Total	30	202	92	8	1	332	74	7	4	0	3	85	19	204	9	0	16	232	3	2	10	0	9	15	664
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	13	67	43	0	0	123	20	4	1	0	1	25	4	58	1	0	2	63	3	1	4	0	10	8	219
11:15 AM	19	62	35	1	0	117	27	1	1	0	0	29	10	49	1	0	6	60	4	1	5	0	14	10	216
11:30 AM	8	58	38	3	0	107	34	3	4	0	0	41	7	62	2	0	3	71	2	0	5	0	0	7	226
11:45 AM	8	56	38	2	0	104	43	1	1	0	3	45	13	32	2	0	4	47	2	2	4	1	1	9	205
Hourly Total	48	243	154	6	0	451	124	9	7	0	4	140	34	201	6	0	15	241	11	4	18	1	25	34	866
12:00 PM	13	68	40	1	1	122	36	2	0	0	1	38	5	72	3	0	5	80	1	0	1	0	1	2	242
12:15 PM	12	69	38	0	0	119	28	5	4	0	1	37	4	56	1	0	4	61	4	4	5	0	3	13	230
12:30 PM	15	76	40	2	1	133	38	4	1	0	1	43	4	69	0	0	1	73	5	1	3	0	0	9	258
12:45 PM	15	77	36	1	0	129	32	0	2	0	1	34	5	61	0	0	1	66	2	1	9	0	2	12	241
Hourly Total	55	290	154	4	2	503	134	11	7	0	4	152	18	258	4	0	11	280	12	6	18	0	6	36	971
1:00 PM	16	70	51	3	0	140	31	6	3	0	0	40	2	44	4	0	0	50	5	4	6	0	2	15	245
1:15 PM	11	54	40	2	0	107	31	4	2	0	0	37	7	52	0	0	1	59	4	1	3	0	3	8	211
1:30 PM	15	74	48	3	0	140	42	0	0	0	1	42	2	57	3	0	3	62	4	2	4	0	1	10	254
1:45 PM	15	73	31	1	0	120	30	3	4	0	2	37	9	52	1	0	6	62	3	0	5	0	2	8	227
Hourly Total	57	271	170	9	0	507	134	13	9	0	3	156	20	205	8	0	10	233	16	7	18	0	8	41	937
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	16	78	59	4	1	157	33	1	0	0	0	34	4	59	4	0	0	67	4	1	4	0	2	9	267
3:15 PM	15	94	52	5	0	166	52	3	1	0	0	56	7	40	3	0	1	50	4	0	5	0	7	9	281
3:30 PM	15	60	47	6	0	128	41	1	1	0	0	43	2	63	2	0	1	67	7	2	2	0	5	11	249

3:45 PM	15	88	47	2	1	152	44	4	2	0	2	50	8	48	1	0	5	57	4	2	4	0	1	10	269
Hourly Total	61	320	205	17	2	603	170	9	4	0	2	183	21	210	10	0	7	241	19	5	15	0	15	39	1066
4:00 PM	14	83	53	3	0	153	49	0	1	0	0	50	8	57	1	0	14	66	6	3	4	0	4	13	282
4:15 PM	19	105	52	2	0	178	39	2	0	0	1	41	8	68	2	0	8	78	4	0	4	0	3	8	305
4:30 PM	10	118	56	4	0	188	39	1	2	0	1	42	3	51	2	0	3	56	6	1	3	0	2	10	296
4:45 PM	17	112	63	3	0	195	39	0	0	0	1	39	8	56	2	0	2	66	3	2	1	0	7	6	306
Hourly Total	60	418	224	12	0	714	166	3	3	0	3	172	27	232	7	0	27	266	19	6	12	0	16	37	1189
5:00 PM	15	96	54	1	0	166	58	2	3	0	1	63	9	63	3	0	2	75	4	2	6	0	2	12	316
5:15 PM	13	132	59	3	0	207	47	1	1	0	0	49	9	60	3	0	3	72	10	2	6	0	5	18	346
5:30 PM	14	105	58	5	0	182	47	1	4	0	0	52	1	63	2	0	4	66	5	1	0	0	6	6	306
5:45 PM	9	84	56	2	1	151	52	2	0	0	1	54	6	45	1	0	4	52	7	2	4	0	6	13	270
Hourly Total	51	417	227	11	1	706	204	6	8	0	2	218	25	231	9	0	13	265	26	7	16	0	19	49	1238
Grand Total	394	2375	1334	87	7	4190	1096	66	52	0	27	1214	182	1810	70	0	113	2062	112	38	116	1	121	267	7733
Approach %	9.4	56.7	31.8	2.1	-	-	90.3	5.4	4.3	0.0	-	-	8.8	87.8	3.4	0.0	-	-	41.9	14.2	43.4	0.4	-	-	-
Total %	5.1	30.7	17.3	1.1	-	54.2	14.2	0.9	0.7	0.0	-	15.7	2.4	23.4	0.9	0.0	-	26.7	1.4	0.5	1.5	0.0	-	3.5	-
Lights	389	2263	1321	85	-	4058	1088	66	46	0	-	1200	181	1748	68	0	-	1997	111	38	111	1	-	261	7516
% Lights	98.7	95.3	99.0	97.7	-	96.8	99.3	100.0	88.5	-	-	98.8	99.5	96.6	97.1	-	-	96.8	99.1	100.0	95.7	100.0	-	97.8	97.2
Buses	1	65	0	0	-	66	2	0	0	0	-	2	0	1	0	0	-	1	0	0	0	0	-	0	69
% Buses	0.3	2.7	0.0	0.0	-	1.6	0.2	0.0	0.0	-	-	0.2	0.0	0.1	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.9
Trucks	2	31	11	1	-	45	6	0	0	0	-	6	1	38	2	0	-	41	1	0	5	0	-	6	98
% Trucks	0.5	1.3	0.8	1.1	-	1.1	0.5	0.0	0.0	-	-	0.5	0.5	2.1	2.9	-	-	2.0	0.9	0.0	4.3	0.0	-	2.2	1.3
Bicycles on Road	2	16	2	1	-	21	0	0	6	0	-	6	0	23	0	0	-	23	0	0	0	0	-	0	50
% Bicycles on Road	0.5	0.7	0.1	1.1	-	0.5	0.0	0.0	11.5	-	-	0.5	0.0	1.3	0.0	-	-	1.1	0.0	0.0	0.0	0.0	-	0.0	0.6
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	9	-	-	-	-	-	4	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	33.3	-	-	-	-	-	3.5	-	-	-	-	-	0.8	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	18	-	-	-	-	-	109	-	-	-	-	-	120	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	66.7	-	-	-	-	-	96.5	-	-	-	-	-	99.2	-	-

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023



Turning Movement Data Plot

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Tramway Southbound						Driveway Westbound						Tramway Northbound						Driveway Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
8:00 AM	3	43	17	3	0	66	10	3	0	0	1	13	2	38	5	0	1	45	2	0	1	0	1	3	127
8:15 AM	9	55	28	1	1	93	19	0	1	0	2	20	7	63	1	0	5	71	0	0	3	0	2	3	187
8:30 AM	7	47	26	0	0	80	24	1	1	0	0	26	6	52	2	0	6	60	0	0	4	0	3	4	170
8:45 AM	11	57	21	4	0	93	21	3	2	0	0	26	4	51	1	0	4	56	1	2	2	0	3	5	180
Total	30	202	92	8	1	332	74	7	4	0	3	85	19	204	9	0	16	232	3	2	10	0	9	15	664
Approach %	9.0	60.8	27.7	2.4	-	-	87.1	8.2	4.7	0.0	-	-	8.2	87.9	3.9	0.0	-	-	20.0	13.3	66.7	0.0	-	-	-
Total %	4.5	30.4	13.9	1.2	-	50.0	11.1	1.1	0.6	0.0	-	12.8	2.9	30.7	1.4	0.0	-	34.9	0.5	0.3	1.5	0.0	-	2.3	-
PHF	0.682	0.886	0.821	0.500	-	0.892	0.771	0.583	0.500	0.000	-	0.817	0.679	0.810	0.450	0.000	-	0.817	0.375	0.250	0.625	0.000	-	0.750	0.888
Lights	30	187	90	8	-	315	72	7	4	0	-	83	19	191	9	0	-	219	3	2	10	0	-	15	632
% Lights	100.0	92.6	97.8	100.0	-	94.9	97.3	100.0	100.0	-	-	97.6	100.0	93.6	100.0	-	-	94.4	100.0	100.0	100.0	-	-	100.0	95.2
Buses	0	6	0	0	-	6	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	6
% Buses	0.0	3.0	0.0	0.0	-	1.8	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.9
Trucks	0	8	2	0	-	10	2	0	0	0	-	2	0	9	0	0	-	9	0	0	0	0	-	0	21
% Trucks	0.0	4.0	2.2	0.0	-	3.0	2.7	0.0	0.0	-	-	2.4	0.0	4.4	0.0	-	-	3.9	0.0	0.0	0.0	-	-	0.0	3.2
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	5
% Bicycles on Road	0.0	0.5	0.0	0.0	-	0.3	0.0	0.0	0.0	-	-	0.0	0.0	2.0	0.0	-	-	1.7	0.0	0.0	0.0	-	-	0.0	0.8
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	33.3	-	-	-	-	-	6.3	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	15	-	-	-	-	-	9	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	66.7	-	-	-	-	-	93.8	-	-	-	-	-	100.0	-	-

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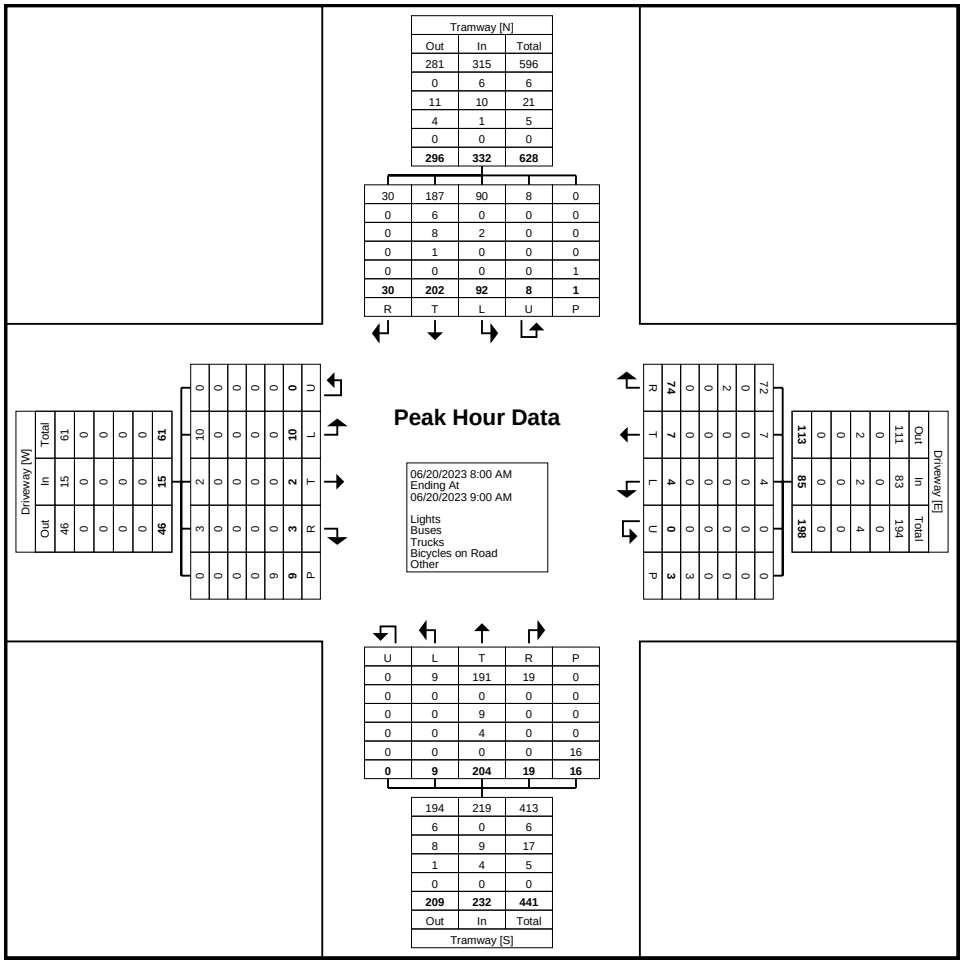

Turning Movement Peak Hour Data Plot (8:00 AM)

Lee Engineering, LLC
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Albuquerque, New Mexico, United States 87113
5053380988 jkruse@lee-eng.com

Count Name: NM328.02 Tramway Starbucks TIA
Site Code:
Start Date: 06/20/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Tramway Southbound						Driveway Westbound						Tramway Northbound						Driveway Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:45 PM	17	112	63	3	0	195	39	0	0	0	1	39	8	56	2	0	2	66	3	2	1	0	7	6	306
5:00 PM	15	96	54	1	0	166	58	2	3	0	1	63	9	63	3	0	2	75	4	2	6	0	2	12	316
5:15 PM	13	132	59	3	0	207	47	1	1	0	0	49	9	60	3	0	3	72	10	2	6	0	5	18	346
5:30 PM	14	105	58	5	0	182	47	1	4	0	0	52	1	63	2	0	4	66	5	1	0	0	6	6	306
Total	59	445	234	12	0	750	191	4	8	0	2	203	27	242	10	0	11	279	22	7	13	0	20	42	1274
Approach %	7.9	59.3	31.2	1.6	-	-	94.1	2.0	3.9	0.0	-	-	9.7	86.7	3.6	0.0	-	-	52.4	16.7	31.0	0.0	-	-	-
Total %	4.6	34.9	18.4	0.9	-	58.9	15.0	0.3	0.6	0.0	-	15.9	2.1	19.0	0.8	0.0	-	21.9	1.7	0.5	1.0	0.0	-	3.3	-
PHF	0.868	0.843	0.929	0.600	-	0.906	0.823	0.500	0.500	0.000	-	0.806	0.750	0.960	0.833	0.000	-	0.930	0.550	0.875	0.542	0.000	-	0.583	0.921
Lights	58	435	233	12	-	738	190	4	8	0	-	202	27	233	9	0	-	269	22	7	13	0	-	42	1251
% Lights	98.3	97.8	99.6	100.0	-	98.4	99.5	100.0	100.0	-	-	99.5	100.0	96.3	90.0	-	-	96.4	100.0	100.0	100.0	-	-	100.0	98.2
Buses	0	8	0	0	-	8	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	8
% Buses	0.0	1.8	0.0	0.0	-	1.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.6
Trucks	0	1	0	0	-	1	1	0	0	0	-	1	0	2	1	0	-	3	0	0	0	0	-	0	5
% Trucks	0.0	0.2	0.0	0.0	-	0.1	0.5	0.0	0.0	-	-	0.5	0.0	0.8	10.0	-	-	1.1	0.0	0.0	0.0	-	-	0.0	0.4
Bicycles on Road	1	1	1	0	-	3	0	0	0	0	-	0	0	7	0	0	-	7	0	0	0	0	-	0	10
% Bicycles on Road	1.7	0.2	0.4	0.0	-	0.4	0.0	0.0	0.0	-	-	0.0	0.0	2.9	0.0	-	-	2.5	0.0	0.0	0.0	-	-	0.0	0.8
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	50.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	11	-	-	-	-	-	20	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	50.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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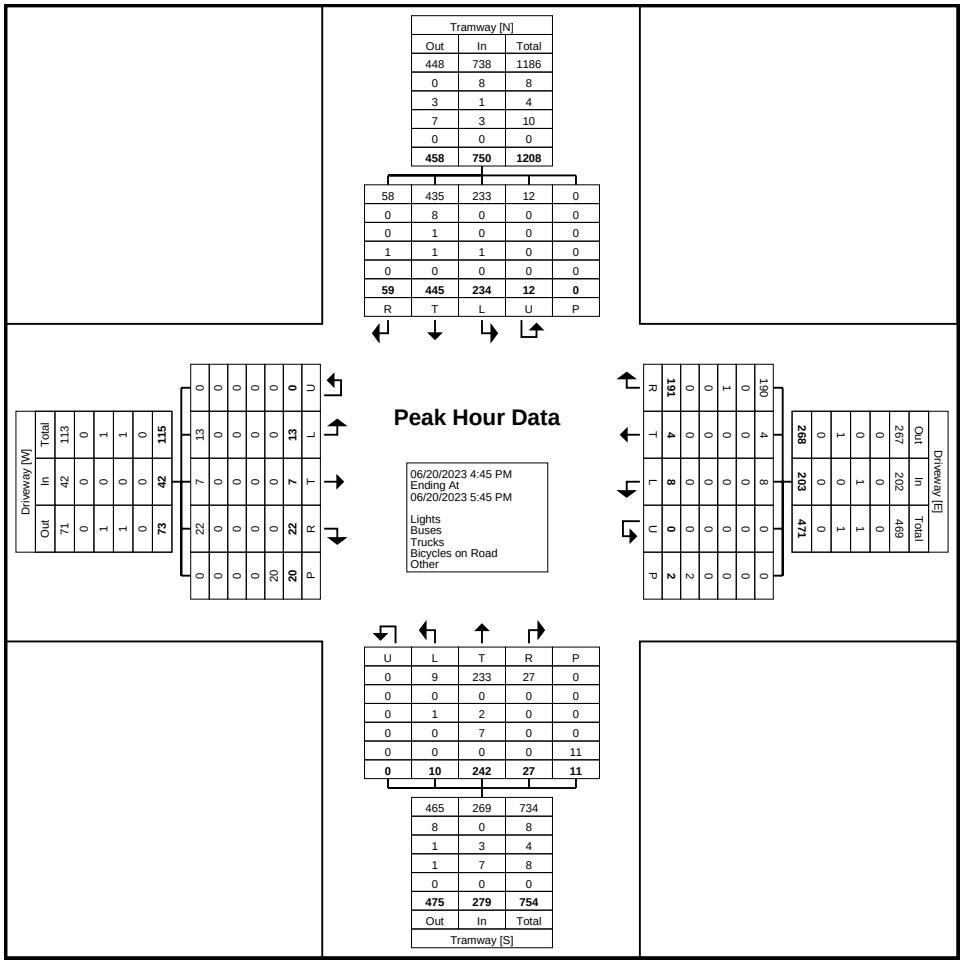


Turning Movement Peak Hour Data Plot (4:45 PM)

APPENDIX C:

HIGHWAY CAPACITY SOFTWARE ANALYSIS

HCS Two-Way Stop-Control Report

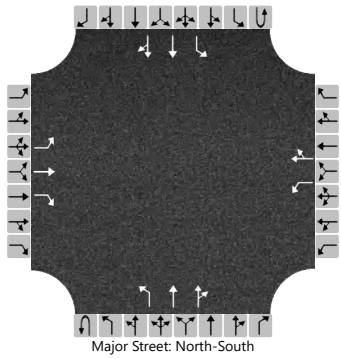
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Existing 2023 AM

Site Information

Intersection	Wenonah Ave & 4 Hills Ave
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	4 Hills Rd
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	1		1	1	0	0	1	2	0	0	1	2	0
Configuration		L	T	R		L		TR		L	T	TR		L	T	TR
Volume (veh/h)		11	7	127		2	12	16	0	112	297	0	0	2	70	16
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No															
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		12	7	134		2		29		118				2		
Capacity, c (veh/h)		453	361	1011		371		536		1495				1237		
v/c Ratio		0.03	0.02	0.13		0.01		0.06		0.08				0.00		
95% Queue Length, Q_{95} (veh)		0.1	0.1	0.5		0.0		0.2		0.3				0.0		
Control Delay (s/veh)		13.2	15.2	9.1		14.8		12.1		7.6				7.9		
Level of Service (LOS)		B	C	A		B		B		A				A		
Approach Delay (s/veh)	9.7				12.3				2.1				0.2			
Approach LOS	A				B				A				A			

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HCS Two-Way Stop-Control Report

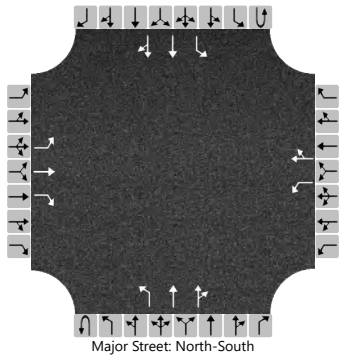
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Existing 2023 AM

Site Information

Intersection	Wenonah Ave & 4 Hills Ave
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	4 Hills Rd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	1		1	1	0	0	1	2	0	0	1	2	0
Configuration		L	T	R		L		TR		L	T	TR		L	T	TR
Volume (veh/h)		77	27	344		0	10	12	0	83	212	1	0	19	175	33
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No														
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		84	29	374		0		24		90				21		
Capacity, c (veh/h)		456	348	915		274		516		1332				1326		
v/c Ratio		0.18	0.08	0.41		0.00		0.05		0.07				0.02		
95% Queue Length, Q_{95} (veh)		0.7	0.3	2.0		0.0		0.1		0.2				0.0		
Control Delay (s/veh)		14.7	16.3	11.6		18.1		12.3		7.9				7.8		
Level of Service (LOS)		B	C	B		C		B		A				A		
Approach Delay (s/veh)		12.4				12.3				2.2				0.6		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

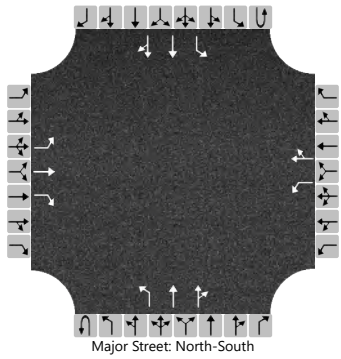
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Background 2025 AM

Site Information

Intersection	Wenonah Ave & 4 Hills Ave
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	4 Hills Rd
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	1		1	1	0	0	1	2	0	0	1	2	0
Configuration		L	T	R		L		TR		L	T	TR		L	T	TR
Volume (veh/h)		11	7	131		2	12	16	0	115	306	0	0	2	72	16
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No															
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		12	7	138		2		29		121				2		
Capacity, c (veh/h)		444	352	1010		361		525		1492				1227		
v/c Ratio		0.03	0.02	0.14		0.01		0.06		0.08				0.00		
95% Queue Length, Q_{95} (veh)		0.1	0.1	0.5		0.0		0.2		0.3				0.0		
Control Delay (s/veh)		13.3	15.5	9.1		15.0		12.3		7.6				7.9		
Level of Service (LOS)		B	C	A		C		B		A				A		
Approach Delay (s/veh)	9.7				12.4				2.1				0.2			
Approach LOS	A				B				A				A			

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HCS Two-Way Stop-Control Report

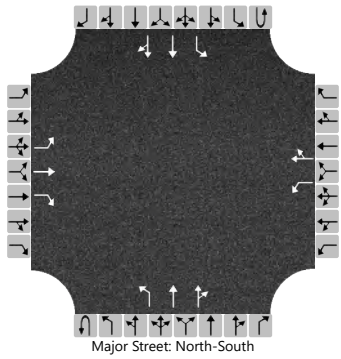
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Background 2023 PM

Site Information

Intersection	Wenonah Ave & 4 Hills Ave
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	4 Hills Rd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	1		1	1	0	0	1	2	0	0	1	2	0
Configuration		L	T	R		L		TR		L	T	TR		L	T	TR
Volume (veh/h)		79	28	354		0	10	12	0	86	218	1	0	20	180	34
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No														
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		86	30	385		0		24		93				22		
Capacity, c (veh/h)		446	337	911		259		504		1325				1319		
v/c Ratio		0.19	0.09	0.42		0.00		0.05		0.07				0.02		
95% Queue Length, Q_{95} (veh)		0.7	0.3	2.1		0.0		0.1		0.2				0.1		
Control Delay (s/veh)		15.0	16.8	11.8		18.9		12.5		7.9				7.8		
Level of Service (LOS)		B	C	B		C		B		A				A		
Approach Delay (s/veh)		12.7				12.5				2.2				0.7		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

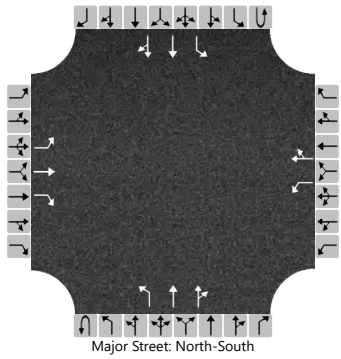
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Full Build-Out 2025 AM

Site Information

Intersection	Wenonah Ave & 4 Hills Ave
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	4 Hills Rd
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	1		1	1	0	0	1	2	0	0	1	2	0
Configuration		L	T	R		L		TR		L	T	TR		L	T	TR
Volume (veh/h)		18	7	157		2	12	16	0	142	306	0	0	2	72	23
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No															
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		19	7	165		2		29		149				2		
Capacity, c (veh/h)		401	317	1004		322		490		1483				1227		
v/c Ratio		0.05	0.02	0.16		0.01		0.06		0.10				0.00		
95% Queue Length, Q_{95} (veh)		0.1	0.1	0.6		0.0		0.2		0.3				0.0		
Control Delay (s/veh)		14.4	16.6	9.3		16.3		12.8		7.7				7.9		
Level of Service (LOS)		B	C	A		C		B		A				A		
Approach Delay (s/veh)	10.1				13.1				2.4				0.2			
Approach LOS	B				B				A				A			

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HCS Two-Way Stop-Control Report

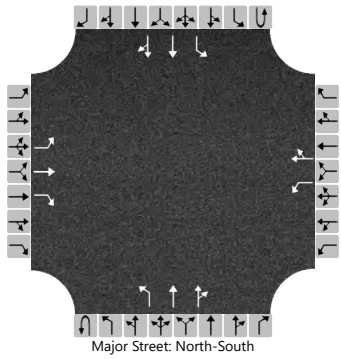
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Full Build-Out 2025 PM

Site Information

Intersection	Wenonah Ave & 4 Hills Ave
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	4 Hills Rd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	1		1	1	0	0	1	2	0	0	1	2	0
Configuration		L	T	R		L		TR		L	T	TR		L	T	TR
Volume (veh/h)		84	28	360		0	10	12	0	91	218	1	0	20	180	38
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No															
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		91	30	391		0		24		99				22		
Capacity, c (veh/h)		437	329	908		249		495		1320				1319		
v/c Ratio		0.21	0.09	0.43		0.00		0.05		0.07				0.02		
95% Queue Length, Q_{95} (veh)		0.8	0.3	2.2		0.0		0.2		0.2				0.1		
Control Delay (s/veh)		15.4	17.0	11.9		19.4		12.6		7.9				7.8		
Level of Service (LOS)		C	C	B		C		B		A				A		
Approach Delay (s/veh)	12.9				12.6				2.3				0.7			
Approach LOS	B				B				A				A			

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HCS Two-Way Stop-Control Report

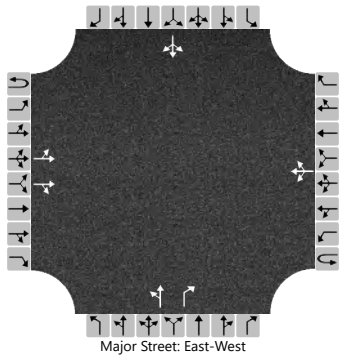
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	East-West
Project Description	Existing 2023 AM

Site Information

Intersection	Wenonah Ave & East Drivew
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	East Entrance Driveway
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	1	0		0	1	1		0	1	0
Configuration		LT		TR			LTR			LT		R			LTR	
Volume (veh/h)		10	152	2		1	110	24		3	0	0		13	0	26
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.2
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.26
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		11				1				3		0			44	
Capacity, c (veh/h)		1419				1392				552		950			812	
v/c Ratio		0.01				0.00				0.01		0.00			0.05	
95% Queue Length, Q_{95} (veh)		0.0				0.0				0.0		0.0			0.2	
Control Delay (s/veh)		7.6	0.1			7.6	0.0	0.0		11.6		8.8			9.7	
Level of Service (LOS)		A	A			A	A	A		B		A			A	
Approach Delay (s/veh)	0.5				0.1				11.6				9.7			
Approach LOS	A				A				B				A			

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HCS Two-Way Stop-Control Report

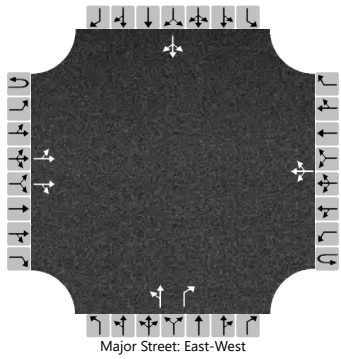
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	East-West
Project Description	Existing 2023 PM

Site Information

Intersection	Wenonah Ave & East Drivew
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	East Entrance Driveway
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	1	0		0	1	1		0	1	0
Configuration		LT		TR			LTR			LT		R			LTR	
Volume (veh/h)		28	361	4		4	82	42		3	0	2		75	0	77
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.2
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.26
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				5				3		2			177	
Capacity, c (veh/h)		1429				1124				303		790			660	
v/c Ratio		0.02				0.00				0.01		0.00			0.27	
95% Queue Length, Q_{95} (veh)		0.1				0.0				0.0		0.0			1.1	
Control Delay (s/veh)		7.6	0.2			8.2	0.0	0.0		17.0		9.6			12.4	
Level of Service (LOS)		A	A			A	A	A		C		A			B	
Approach Delay (s/veh)	0.7				0.3				14.0				12.4			
Approach LOS	A				A				B				B			

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HCS Two-Way Stop-Control Report

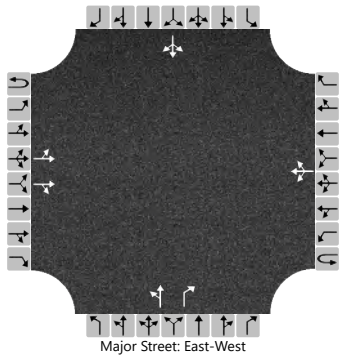
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	East-West
Project Description	Background 2023 AM

Site Information

Intersection	Wenonah Ave & East Drivew
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	East Entrance Driveway
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	1	0		0	1	1		0	1	0
Configuration		LT		TR			LTR			LT		R			LTR	
Volume (veh/h)		10	157	2		1	113	25		3	0	0		13	0	27
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.2
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.26
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		11				1				3		0			45	
Capacity, c (veh/h)		1413				1385				542		946			808	
v/c Ratio		0.01				0.00				0.01		0.00			0.06	
95% Queue Length, Q_{95} (veh)		0.0				0.0				0.0		0.0			0.2	
Control Delay (s/veh)		7.6	0.1			7.6	0.0	0.0		11.7		8.8			9.7	
Level of Service (LOS)		A	A			A	A	A		B		A			A	
Approach Delay (s/veh)	0.5				0.1				11.7				9.7			
Approach LOS	A				A				B				A			

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HCS Two-Way Stop-Control Report

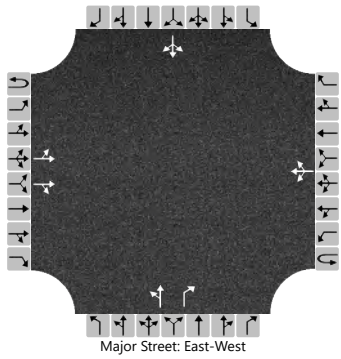
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	East-West
Project Description	Background 2025 PM

Site Information

Intersection	Wenonah Ave & East Drivew
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	East Entrance Driveway
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	1	0		0	1	1		0	1	0
Configuration		LT		TR			LTR			LT		R			LTR	
Volume (veh/h)		29	372	4		4	84	43		3	0	2		77	0	79
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.2
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.26
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				5				3		2			181	
Capacity, c (veh/h)		1424				1112				292		782			650	
v/c Ratio		0.02				0.00				0.01		0.00			0.28	
95% Queue Length, Q_{95} (veh)		0.1				0.0				0.0		0.0			1.1	
Control Delay (s/veh)		7.6	0.2			8.3	0.0	0.0		17.5		9.6			12.7	
Level of Service (LOS)		A	A			A	A	A		C		A			B	
Approach Delay (s/veh)	0.7				0.3				14.3				12.7			
Approach LOS	A				A				B				B			

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HCS Two-Way Stop-Control Report

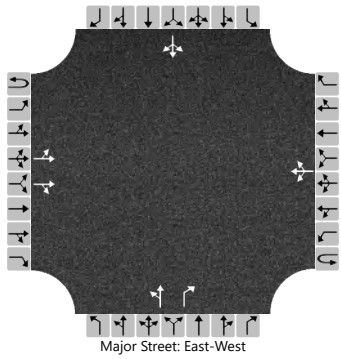
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	East-West
Project Description	Full BUild-Out 2025 AM

Site Information

Intersection	Wenonah Ave & East Drivew
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	East Entrance Driveway
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	1	0		0	1	1		0	1	0
Configuration		LT		TR			LTR			LT		R			LTR	
Volume (veh/h)		14	157	2		1	113	58		3	0	0		46	0	30
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.2
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.26
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				1				3		0			86	
Capacity, c (veh/h)		1369				1385				512		946			712	
v/c Ratio		0.01				0.00				0.01		0.00			0.12	
95% Queue Length, Q_{95} (veh)		0.0				0.0				0.0		0.0			0.4	
Control Delay (s/veh)		7.7	0.1			7.6	0.0	0.0		12.1		8.8			10.8	
Level of Service (LOS)		A	A			A	A	A		B		A			B	
Approach Delay (s/veh)	0.7				0.1				12.1				10.8			
Approach LOS	A				A				B				B			

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HCS Two-Way Stop-Control Report

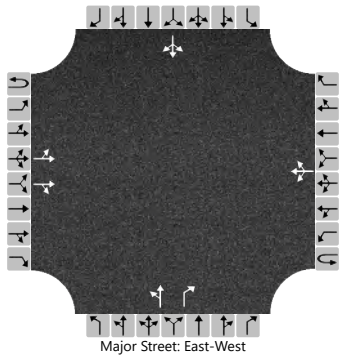
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	East-West
Project Description	Full Build-Out 2025 PM

Site Information

Intersection	Wenonah Ave & East Drivew
Jurisdiction	CABQ
East/West Street	Wenonah Ave
North/South Street	East Entrance Driveway
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	1	0		0	1	1		0	1	0
Configuration		LT		TR			LTR			LT		R			LTR	
Volume (veh/h)		30	372	4		4	84	53		3	0	2		87	0	81
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.2
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.26
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		35				5				3		2			195	
Capacity, c (veh/h)		1410				1112				286		782			633	
v/c Ratio		0.02				0.00				0.01		0.00			0.31	
95% Queue Length, Q_{95} (veh)		0.1				0.0				0.0		0.0			1.3	
Control Delay (s/veh)		7.6	0.2			8.3	0.0	0.0		17.7		9.6			13.2	
Level of Service (LOS)		A	A			A	A	A		C		A			B	
Approach Delay (s/veh)	0.7				0.3				14.5				13.2			
Approach LOS	A				A				B				B			

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HCS Two-Way Stop-Control Report

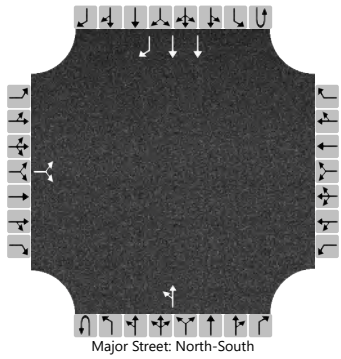
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Existing 2023 AM

Site Information

Intersection	Wenonah & Tramway
Jurisdiction	CABQ
East/West Street	Wenonah
North/South Street	Tramway Blvd
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	2	1
Configuration			LR							LT					T	R
Volume (veh/h)		117		21						27	110				150	62
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			153							30						
Capacity, c (veh/h)			689							1322						
v/c Ratio			0.22							0.02						
95% Queue Length, Q_{95} (veh)			0.8							0.1						
Control Delay (s/veh)			11.7							7.8	0.2					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		11.7								1.7						
Approach LOS		B								A						

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HCS Two-Way Stop-Control Report

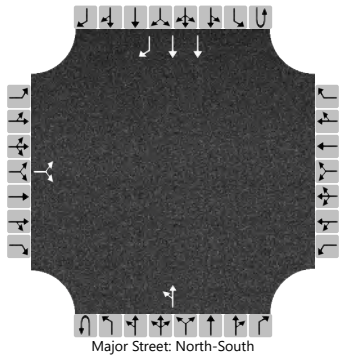
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Existing 2023 AM

Site Information

Intersection	Wenonah & Tramway
Jurisdiction	CABQ
East/West Street	Wenonah
North/South Street	Tramway Blvd
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	2	1
Configuration			LR							LT					T	R
Volume (veh/h)		118		59						59	117				353	127
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			203							68						
Capacity, c (veh/h)			545							1007						
v/c Ratio			0.37							0.07						
95% Queue Length, Q_{95} (veh)			1.7							0.2						
Control Delay (s/veh)			15.5							8.8	0.6					
Level of Service (LOS)			C							A	A					
Approach Delay (s/veh)		15.5								3.4						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

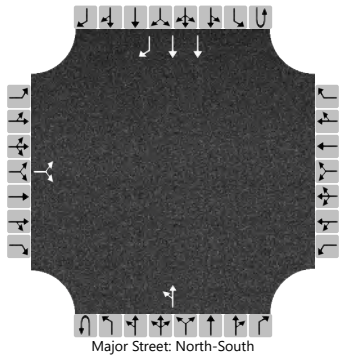
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Background 2025 AM

Site Information

Intersection	Wenonah & Tramway
Jurisdiction	CABQ
East/West Street	Wenonah
North/South Street	Tramway Blvd
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	2	1
Configuration			LR							LT					T	R
Volume (veh/h)		121		22						28	113				155	64
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			159							31						
Capacity, c (veh/h)			683							1313						
v/c Ratio			0.23							0.02						
95% Queue Length, Q_{95} (veh)			0.9							0.1						
Control Delay (s/veh)			11.9							7.8	0.2					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		11.9								1.7						
Approach LOS		B								A						

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HCS Two-Way Stop-Control Report

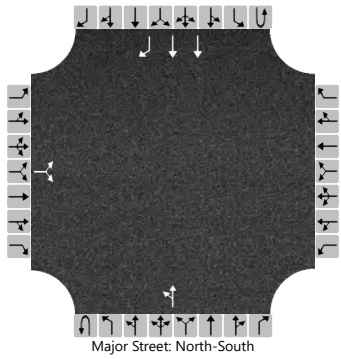
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Background 2025 PM

Site Information

Intersection	Wenonah & Tramway
Jurisdiction	CABQ
East/West Street	Wenonah
North/South Street	Tramway Blvd
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	2	1
Configuration			LR							LT					T	R
Volume (veh/h)		122		61						61	121				364	131
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			210							70						
Capacity, c (veh/h)			535							993						
v/c Ratio			0.39							0.07						
95% Queue Length, Q_{95} (veh)			1.9							0.2						
Control Delay (s/veh)			16.0							8.9	0.7					
Level of Service (LOS)			C							A	A					
Approach Delay (s/veh)		16.0								3.4						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

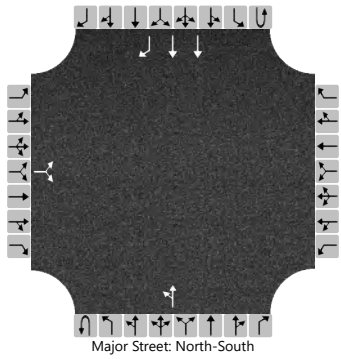
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Full BUild-Out 2025 AM

Site Information

Intersection	Wenonah & Tramway
Jurisdiction	CABQ
East/West Street	Wenonah
North/South Street	Tramway Blvd
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	2	1
Configuration			LR							LT					T	R
Volume (veh/h)		127		25						31	113				155	70
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			169							34						
Capacity, c (veh/h)			680							1305						
v/c Ratio			0.25							0.03						
95% Queue Length, Q_{95} (veh)			1.0							0.1						
Control Delay (s/veh)			12.0							7.8	0.2					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		12.0								1.9						
Approach LOS		B								A						

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HCS Two-Way Stop-Control Report

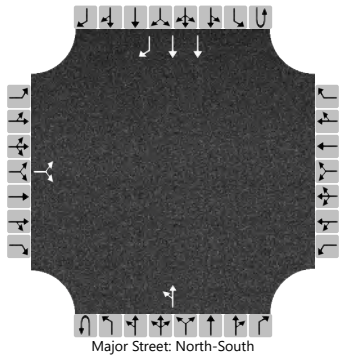
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Full Build-Out 2025 PM

Site Information

Intersection	Wenonah & Tramway
Jurisdiction	CABQ
East/West Street	Wenonah
North/South Street	Tramway Blvd
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	2	1
Configuration			LR							LT					T	R
Volume (veh/h)		124		62						62	121				364	134
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			214							71						
Capacity, c (veh/h)			534							990						
v/c Ratio			0.40							0.07						
95% Queue Length, Q_{95} (veh)			1.9							0.2						
Control Delay (s/veh)			16.2							8.9	0.7					
Level of Service (LOS)			C							A	A					
Approach Delay (s/veh)		16.2								3.5						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

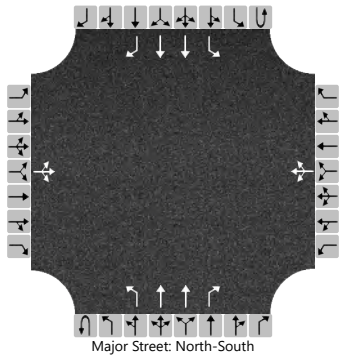
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Existing 2023 AM

Site Information

Intersection	Tramway & West Dwy
Jurisdiction	CABQ
East/West Street	West Dwy
North/South Street	Tramway Blvd
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	2	1
Configuration			LTR				LTR			L	T	R		L	T	R
Volume (veh/h)		10	2	3		4	7	74	0	9	204	19	8	92	202	30
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16			6.46	4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23			2.53	2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17				97			10				114		
Capacity, c (veh/h)			422				750			1290				1260		
v/c Ratio			0.04				0.13			0.01				0.09		
95% Queue Length, Q_{95} (veh)			0.1				0.4			0.0				0.3		
Control Delay (s/veh)			13.9				10.5			7.8				8.1		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	13.9				10.5				0.3				2.5			
Approach LOS	B				B				A				A			

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HCS Two-Way Stop-Control Report

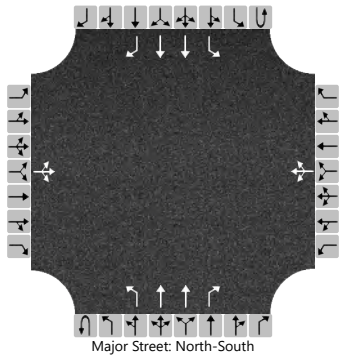
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Existing 2023 PM

Site Information

Intersection	Tramway & West Dwy
Jurisdiction	CABQ
East/West Street	West Dwy
North/South Street	Tramway Blvd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	2	1
Configuration			LTR				LTR			L	T	R		L	T	R
Volume (veh/h)		13	7	22		8	4	191	0	10	242	27	12	234	445	59
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16			6.46	4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23			2.53	2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			46				221			11				267		
Capacity, c (veh/h)			236				695			1011				1218		
v/c Ratio			0.19				0.32			0.01				0.22		
95% Queue Length, Q_{95} (veh)			0.7				1.4			0.0				0.8		
Control Delay (s/veh)			23.9				12.6			8.6				8.8		
Level of Service (LOS)			C				B			A				A		
Approach Delay (s/veh)	23.9				12.6				0.3				2.9			
Approach LOS	C				B				A				A			

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HCS Two-Way Stop-Control Report

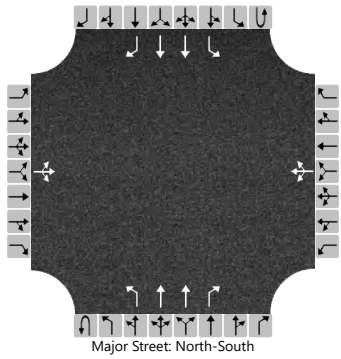
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Background 2023 AM

Site Information

Intersection	Tramway & West Dwy
Jurisdiction	CABQ
East/West Street	West Dwy
North/South Street	Tramway Blvd
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	2	1
Configuration			LTR				LTR			L	T	R		L	T	R
Volume (veh/h)		10	2	3		4	7	76	0	9	210	20	8	95	208	31
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16			6.46	4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23			2.53	2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17				99			10				117		
Capacity, c (veh/h)			411				745			1282				1252		
v/c Ratio			0.04				0.13			0.01				0.09		
95% Queue Length, Q_{95} (veh)			0.1				0.5			0.0				0.3		
Control Delay (s/veh)			14.1				10.6			7.8				8.2		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	14.1				10.6				0.3				2.5			
Approach LOS	B				B				A				A			

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HCS Two-Way Stop-Control Report

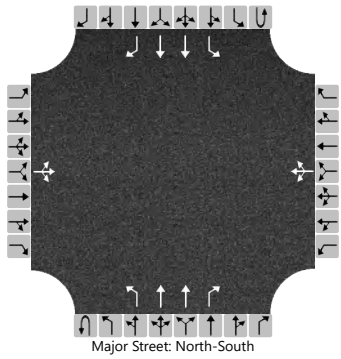
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Background 2023 PM

Site Information

Intersection	Tramway & West Dwy
Jurisdiction	CABQ
East/West Street	West Dwy
North/South Street	Tramway Blvd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	2	1
Configuration			LTR				LTR			L	T	R		L	T	R
Volume (veh/h)		13	7	23		8	4	197	0	10	249	28	12	241	458	61
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16			6.46	4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23			2.53	2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			47				227			11				275		
Capacity, c (veh/h)			227				686			997				1209		
v/c Ratio			0.21				0.33			0.01				0.23		
95% Queue Length, Q_{95} (veh)			0.8				1.4			0.0				0.9		
Control Delay (s/veh)			24.9				12.8			8.7				8.9		
Level of Service (LOS)			C				B			A				A		
Approach Delay (s/veh)	24.9				12.8				0.3				2.9			
Approach LOS	C				B				A				A			

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HCS Two-Way Stop-Control Report

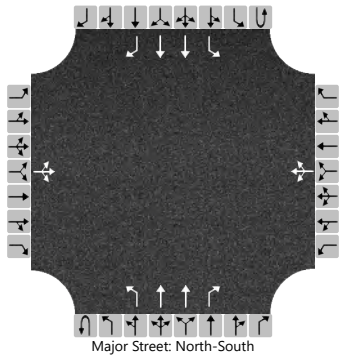
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Full Build-Out 2025 AM

Site Information

Intersection	Tramway & West Dwy
Jurisdiction	CABQ
East/West Street	West Dwy
North/South Street	Tramway Blvd
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	2	1
Configuration			LTR				LTR			L	T	R		L	T	R
Volume (veh/h)		10	2	3		11	7	99	0	9	210	26	8	118	208	31
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16			6.46	4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23			2.53	2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17				133			10				143		
Capacity, c (veh/h)			372				717			1282				1249		
v/c Ratio			0.05				0.19			0.01				0.11		
95% Queue Length, Q_{95} (veh)			0.1				0.7			0.0				0.4		
Control Delay (s/veh)			15.1				11.2			7.8				8.3		
Level of Service (LOS)			C				B			A				A		
Approach Delay (s/veh)	15.1				11.2				0.3				2.8			
Approach LOS	C				B				A				A			

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HCS Two-Way Stop-Control Report

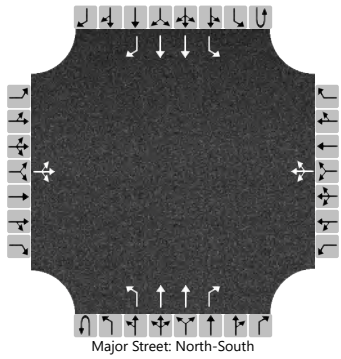
General Information

Analyst	PD
Agency/Co.	Lee Engineering
Date Performed	6/20/2023
Analysis Year	2023
Time Analyzed	
Intersection Orientation	North-South
Project Description	Full Build-Out 2025 PM

Site Information

Intersection	Tramway & West Dwy
Jurisdiction	CABQ
East/West Street	West Dwy
North/South Street	Tramway Blvd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	2	1
Configuration			LTR				LTR			L	T	R		L	T	R
Volume (veh/h)		13	7	23		11	4	211	0	10	249	31	12	256	458	61
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16			6.46	4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23			2.53	2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			47				246			11				291		
Capacity, c (veh/h)			213				657			997				1206		
v/c Ratio			0.22				0.37			0.01				0.24		
95% Queue Length, Q_{95} (veh)			0.8				1.7			0.0				0.9		
Control Delay (s/veh)			26.6				13.7			8.7				8.9		
Level of Service (LOS)			D				B			A				A		
Approach Delay (s/veh)	26.6				13.7				0.3				3.0			
Approach LOS	D				B				A				A			

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APPENDIX D:

SIGHT DISTANCE CALCULATIONS

Intersection Sight Distance Calculations and Tables

Reference: City of Albuquerque Development Process Manual chapter 7-4

TABLE 7.4.65 **Minimum Intersection Sight Distance**

Speed Limit (MPH)	Minimum Intersection Sight Distance					
	2 Lane Undivided		3 Lane Undivided or 2 Lane Divided w/ 12 ft. Median		4 Lane Undivided	
	Left Turn	Right Turn	Left Turn	Right Turn	Left Turn	Right Turn
20	230 ft.	200 ft.	240 ft.	200 ft.	250 ft.	200 ft.
25	280 ft.	240 ft.	300 ft.	240 ft.	320 ft.	240 ft.
30	340 ft.	290 ft.	360 ft.	290 ft.	380 ft.	290 ft.
35	390 ft.	340 ft.	420 ft.	340 ft.	440 ft.	340 ft.
40	450 ft.	390 ft.	480 ft.	390 ft.	500 ft.	390 ft.
45	500 ft.	430 ft.	530 ft.	430 ft.	570 ft.	430 ft.
50	560 ft.	480 ft.	590 ft.	480 ft.	630 ft.	480 ft.

Reference: 2018 AASHTO “Green Book” chapter 9.5
Design Vehicle: Pasenger Car
Major Road Lanes: 2 NB, 2 SB divided by a 15 ft raised median
Case B1: A stopped vehicle turning left from a minor street approach onto a major road
Case B2: A stopped vehicle turning right from a minor street approach onto a major road

FORMULA:
ISD= $1.47*V_{major},*t_g$

Units: ISD (ft), V_{major}(MPH), and t_g(seconds)
Speed(V_{major}): 35 MPH
Time Gaps (t_g):
7.5 sec (for passenger car crossing one lane of traffic)
1.5 sec (for extra lane of traffic crossed)

CASE B1 (LEFT TURN):
Time Gap (t_g)= 7.5s + 1.5s = 9.0 s
ISD = 1.47*35*9 = 463.05 ~ **465 ft**

CASE B2 (RIGHT TURN):
Assumption: Design vehicle is turning right into the first lane of major roadway.
Time Gap (t_g): 6.5s
ISD = 1.47*35*6.5 = 334.43 ~ **335 ft**

$$ISD = 1.47\ (V_{major})\ t_g$$

t_g Values				
CASE		Passenger Car	Single-Unit Truck	Combination Truck
B1	Left Turn from the Minor Road	7.5	9.5	11.5
B2	Right Turn from the Minor Road	6.5	8.5	10.5
B3	Crossing Maneuver from the Minor Road			
F	Left Turn from the Major Road	5.5	6.5	7.5

CASE B1 - For a stopped vehicle to turn left onto a 2-lane highway with no median and grades 3 percent or less

For left turns onto two-way highways with more than 2 lanes:
+0.5 seconds for passenger cars
+0.7 seconds for trucks
for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle.

For minor road approach grades:
+0.2 seconds for each percent grade
if the approach grade is an upgrade that exceeds 3 percent.

CASE B2 + B3 - For a stopped vehicle to turn right onto or cross a 2-lane highway with no median and grades 3 percent or less

For crossing a major road with more than 2 lanes:
+0.5 seconds for passenger cars
+0.7 seconds for trucks
for each additional lane to be crossed and narrow medians that cannot store the design vehicle.

For minor road approach grades:
+0.1 seconds for each percent grade
if the approach grade is an upgrade that exceeds 3 percent.

CASE F – For a stopped vehicle to turn across one lane of opposing traffic

For left-turning vehicles that cross more than 1 opposing lane:
+0.5 seconds for passenger cars
+0.7 seconds for trucks
for each additional lane to be crossed.

EXHIBIT 4 - Water Availability Statement

Albuquerque Bernalillo County
Water Utility Authority

PO Box 568
Albuquerque, NM 87103
www.abcwua.org

Chair
Eric C. Olivas
County of Bernalillo
Commissioner, District 5

Vice Chair
Tammy Fiebelkorn
City of Albuquerque
Councilor, District 7

Barbara Baca
County of Bernalillo
Commissioner, District 1

Adriann Barboa
County of Bernalillo
Commissioner, District 3

Pat Davis
City of Albuquerque
Councilor, District 6

Trudy E. Jones
City of Albuquerque
Councilor, District 8

Timothy M. Keller
City of Albuquerque
Mayor

Ex-Officio Member
Gilbert Benavides
Village of Los Ranchos
Board Trustee

Executive Director
Mark S. Sanchez

Website
www.abcwua.org

July 14, 2023

Luis Noriega
Tierra West LLC
5571 Midway Park Place NE,
Albuquerque, NM 87109

RE: Water and Sanitary Sewer Availability Statement #230609
Project Name: Starbucks - Tramway
Project Address: N/A
Legal Description: Tract J-1, Replat of Tracts F, H-1, J & Unplatted Land Four Hills Village Shopping Center & Apartment Complex
UPC: 102305602134521316
Zone Atlas Map: L-23-Z

Dear Mr. Noriega:

Project Description: The subject site is located north-east of the Tramway Boulevard and Wenonah Avenue intersection within the City of Albuquerque. The proposed development consists of approximately 0.49 acres and the property is currently zoned MX-M for moderate intensity mixed-use. The property lies within the Pressure Zone 6E in the Freeway Trunk.

The request for availability indicates plans for commercial development to develop a 1,468 square foot commercial food service business. Additionally, a concurrent platting action is taking place that will subdivide existing Tract J-1 into two Tracts: J-1-A and J-1-B. Existing businesses located on proposed Tract J-1-A already have service with the Water Authority. The aforementioned proposed food service business will be developed and located on proposed Tract J-1-B.

Existing Conditions:

Water infrastructure in the area consists of the following:

- 12-inch PVC distribution line (project #26-3340-90) along Wenonah Avenue.
- 12-inch capped PVC distribution line (project #26-3340-90) connected from the preceding distribution line and terminating at the project site.
- 12-inch PVC distribution line (project #26-2459-86) along Tramway Boulevard

Sanitary sewer infrastructure in the area consists of the following:

- Public Eight-inch PVC sanitary sewer collector (project #26-4361.90-93) extending along Wenonah Drive and terminating near the property boundary of currently platted Tract J-1 within public right-of-way.
- Private eight-inch PVC sanitary sewer collector on currently platted J-1 which extends from the existing public eight-inch PVC sanitary sewer collector described above.

Water Service: The existing development on proposed Tract J-1-A already receives water service. New metered water service to the proposed Tract J-1-B can be provided via routine connection to the existing distribution lines described in the preceding

Existing Conditions section. The engineer is responsible for determining pressure losses and sizing of the service line(s) downstream of the public water line to serve the proposed development.

Service is also contingent upon compliance with the Fire Marshal's instantaneous fire flow requirements. Water service will not be sold without adequate fire protection. Water service will only be sold in conjunction with sanitary sewer service. Each legally platted property shall have individual independent water services. No property shall share a water service with any other property. Existing service lines and fire lines that will not be utilized are to be removed by shutting the valve near the distribution main. For fire lines, the line shall be capped near the public valve and valve access shall be grouted and collar removed.

Non-Potable Water Service: Currently, there is no non-potable infrastructure available to serve the subject property.

Sanitary Sewer Service: The existing development on proposed Tract J-1-A already receives sanitary sewer service. However, since the proposed subdivision will cause a portion of the existing private sanitary sewer service serving proposed Tract J-1-A to be located within proposed Tract J-1-B, Tract J-1-B will be required to grant a private sanitary sewer easement for this portion of the private sanitary sewer service. This can be addressed with the platting action or separate document.

New sanitary sewer service to proposed Tract J-1-B can be provided contingent on the developer funded construction of a new manhole at the terminus of the existing eight-inch public sanitary sewer within public right-of-way. Tract J-1-B shall connect downstream of the proposed manhole for its routine service connection. No property shall share a private sewer service with any other property. The engineer is responsible for sizing the service line(s) upstream of the public sanitary sewer line to serve the proposed development. All food service establishments must install a grease trap upstream of the domestic private sewer connection prior to discharge into the public sanitary sewer lines.

Fire Protection: From the Fire Marshal's requirements, the instantaneous fire flow requirements for the project are 1,750 gallons-per-minute. One fire hydrant is required. There is one existing public hydrant available and zero new public hydrants are proposed with this project. As modeled using InfoWater™ computer software, the fire flow can be met by applying the required fire flow to the system as shown in the information provided by the requestor. Analysis was performed by simulating the required fire flow at existing public fire hydrant #200 southwest of proposed Tract J-1-B. The existing private hydrant located on proposed Tract J-1-A shall not be used for Tract J-1-B's fire protection. Any changes to the proposed connection points shall be coordinated through Utility Development. All new required hydrants as well as their exact locations must be determined through the City of Albuquerque Fire Marshal's Office and verified through the Utility Development Office prior to sale of service. The engineer is responsible for determining pressure losses and sizing of the fire line(s) downstream of the public water line to serve the proposed fire hydrants and/or fire suppression system.

Cross Connection Prevention: Per the Cross Connection Prevention and Control Ordinance, all new non-residential premises must have a reduced pressure principal backflow prevention assembly approved by the Water Authority installed at each

domestic service connection at a location accessible to the Water Authority. No tees, branches, possible connection fittings or openings are allowed between the reduced principal backflow prevention assembly and the service connection, unless protected by a backflow prevention assembly. These requirements also apply to all remodeled non-residential premises when the work area of the building undergoing repairs, alterations or rehabilitation, as defined in the International Existing Building Code, exceeds 50 percent of the aggregate area of the building regardless of the costs of repairs, alteration or rehabilitation.

All non-residential irrigation water systems connected to the public water system shall have a pressure vacuum breaker, spill-resistant pressure vacuum breaker or a reduced pressure principal backflow prevention assembly installed after the service connection. Such devices shall be approved by the Water Authority. No tees, branches, or possible connection fittings or openings are allowed between the containment backflow prevention assembly and the service connection.

All non-residential customers connected via piping to an alternative water source or an auxiliary water supply and the public water system shall install a containment reduced pressure principal backflow prevention assembly approved by the Water Authority after the potable service connection.

All new services to private fire protection systems shall be equipped with a containment reduced pressure principal backflow prevention assembly approved by the Water Authority and Fire Marshal having jurisdiction installed after the service connection. No tees, branches, possible connection fittings or openings are allowed between the containment backflow prevention assembly and the service connection. A double check valve assembly approved by the Water Authority and Fire Marshal having jurisdiction may be installed instead of a reduced pressure backflow prevention assembly provided the private fire protection system meets or exceeds ANSI/NSF Standard 60 61 throughout the entire private fire protection system, the fire sprinkler drain discharges into atmosphere, there are no reservoirs, fire department connections nor connections from auxiliary water supplies.

The Water Authority recommends that all backflow (containment) devices be located above ground just outside the easement or road right-of-way, the containment backflow device can be installed within the building if there are no tees, branches, possible connection fittings or openings between the reduced principal backflow prevention assembly, and the service connection unless protected by another reduced pressure backflow prevention assembly device. Contact Cross Connection at (505) 289-3465 for more information.

Pretreatment – Fats, Oils and Greases: The development is for commercial use and has the potential to discharge Fats, Oils, Grease and/or Solids (FOGS) to the sanitary sewer and/or falls under one of the applicable users in the SUO:

FOGS Applicability SUO Section 3-3-2 A.:

> Users "…such as food service establishments, commercial food processors, automotive shops, auto wash racks, car washes, vehicle fueling stations, septic tank pumpers, grease rendering facilities, breweries/distilleries, bottling plants, commercial and industrial laundries, slaughterhouses and meat packing establishments (fish, fowl, meat, curing, hide curing), oil tank firms and transporters…"

Such Users must comply with all FOGS discharge requirements defined in SUO Section 3-3-2 and FOGS Policy including but not limited to:

1. Installation of an adequately sized Grease Interceptor (GI) approved by the appropriate code enforcement authority (City of Albuquerque, and/or Bernalillo County)

   a. Interceptors and/or Separators are required for outdoor pools, dumpsters pads and outdoor washdown areas that have the potential to discharge grease, sand, solids, flammable liquids to the sanitary sewer. Pad shall be installed at an elevation higher than surrounding grade. It is not required for dumpster pads to have a sewer connection.

   b. Placement of Interceptors in drive-thru or traffic lanes is not allowed.
2. All FOGS source within the facility are plumbed to the GI as required by the appropriate plumbing code.
3. Long term Best Management Practices (BMP), and GI maintenance such as pumping and manifest requirements.
4. Unobstructed access to inspections of the facility and records.

A copy of the Sewer Use and Wastewater Control Ordinance and FOGS Policy can be found on the Pretreatment page of the Water Authority Website: https://www.abcwua.org/sewer-system-industrial-pretreatment-overview/

Contact the Industrial Pretreatment Engineer, Travis Peacock, at (505) 289-3439 or pretreatment@abcwua.org for coordination or clarification of any of the above requirements.

Easements and Property: Exclusive public water and sanitary sewer easements are required for all public lines that are to be constructed outside of any dedicated Rights-of-Way. A minimum width easement of 20 feet is required for a single utility and 25 feet for water and sewer both within the same easement. Easements for standard sized water meters need to be five feet by five feet and include the length of the water service if located on private property. For larger meters that require a meter vault, a 35 feet by 35 feet easement is required. Actual easement widths may vary depending on the depth of the lines to be installed. Acceptable easements must be documented prior to approval of service. A Warranty Deed shall be required when a property will be transferred to the Water Authority for the installation of Water Authority owned facilities such as pump stations, reservoirs, wells, lift stations, or any other facility.

Required public water and/or sanitary sewer easements shall be for the construction, installation, maintenance, repair, modification, replacement and operation of public water and sanitary service lines, equipment and facilities reasonably necessary to provide service together with free access on and over the easement, the right to remove trees, shrubs, undergrowth and any other obstacles, modifications, or structures which interfere with use of the easement.

Pro Rata: Pro Rata is not owed and the property can utilize the services available upon completion of the requirements of this statement to connect to water and sanitary sewer.

Design and Construction: Design and construction of all required improvements will be at the developer/property owner's expense. Improvements must be coordinated through the Water Authority Connection Permit process. Construction must be performed by a licensed and bonded public utility contractor.

Utility Expansion Charge (UEC): In addition to installation and construction costs, any new metered water services will be subject to both water and sanitary sewer Utility Expansion Charges (UEC) payable at the time of service application. All charges and rates collected will be based on the ordinances and policies in effect at the time service is actually requested and authorized. Per the Rate Ordinance, each customer classification on the same premise requires a separate meter. Contact Customer Service at (505) 842-9287 (option 3) for more information regarding UECs.

Water Use: All new commercial developments shall be subject to the requirements for water usage and water conservation requirements as defined by the Water Authority, particularly the Water Waste Reduction Ordinance. Where available, outdoor water usage shall utilize reclaimed water.

Closure: This availability statement provides a commitment from the Water Authority to provide services to the development as long as identified conditions are met. It will remain in effect for a period of one year from the date of issue and applies only to the development identified herein. Its validity is in part, contingent upon the continuing accuracy of the information supplied by the developer. Changes in the proposed development may require reevaluation of availability and should be brought to the attention of the Utility Development Section of the Water Authority as soon as possible.

Please feel free to contact Mr. Kristopher Cadena in our Utility Development Section at (505) 289-3301 or email at kcadena@abcwua.org if you have questions regarding the information presented herein or need additional information.

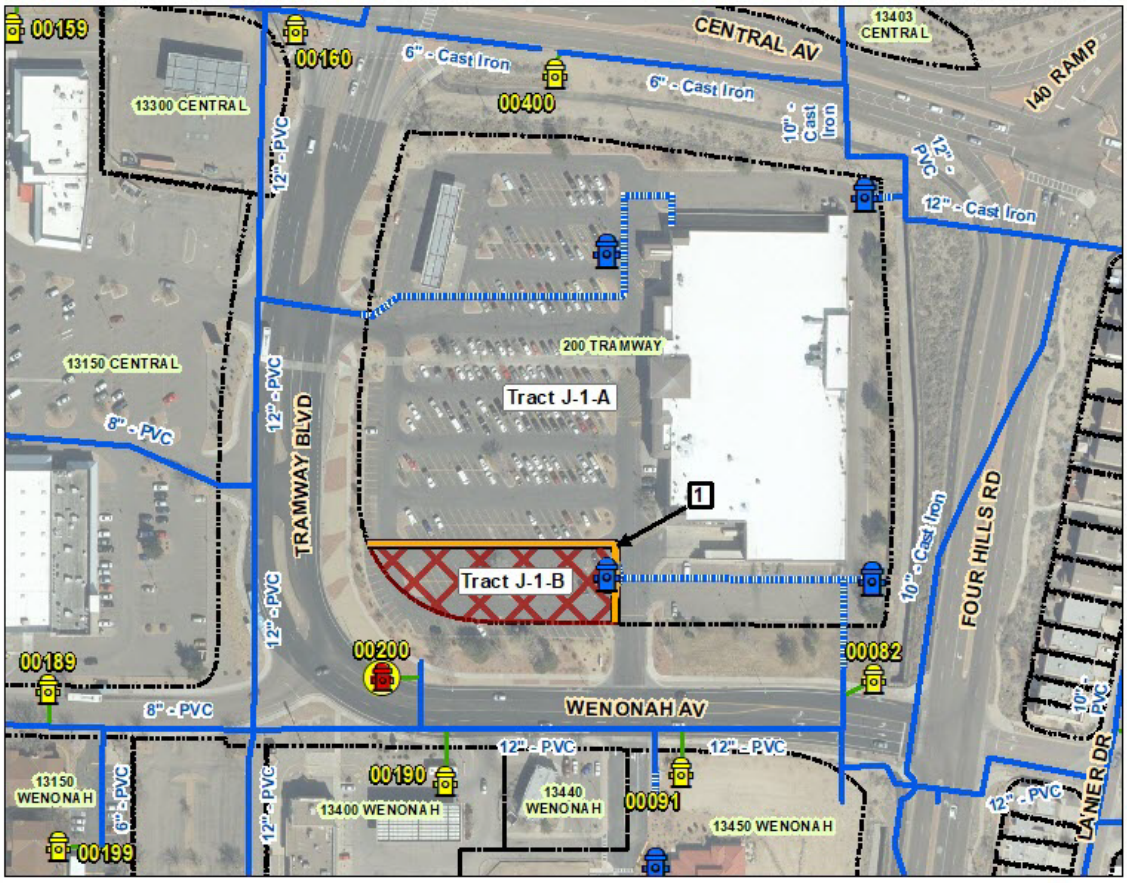
Sincerely,

Mark S. Sanchez
Executive Director

Enclosures: Infrastructure Maps

f/ **Availability Statement #230609**

230609 - Water



0 335 670 Feet

N W E S

Legend

- Hydrant
- Private Hydrant

Water Pipe

Subtype

- Distribution Line
- Hydrant Leg
- Private Fire Line

- Base Map City
- Project Location

Fire Flow Analysis Points

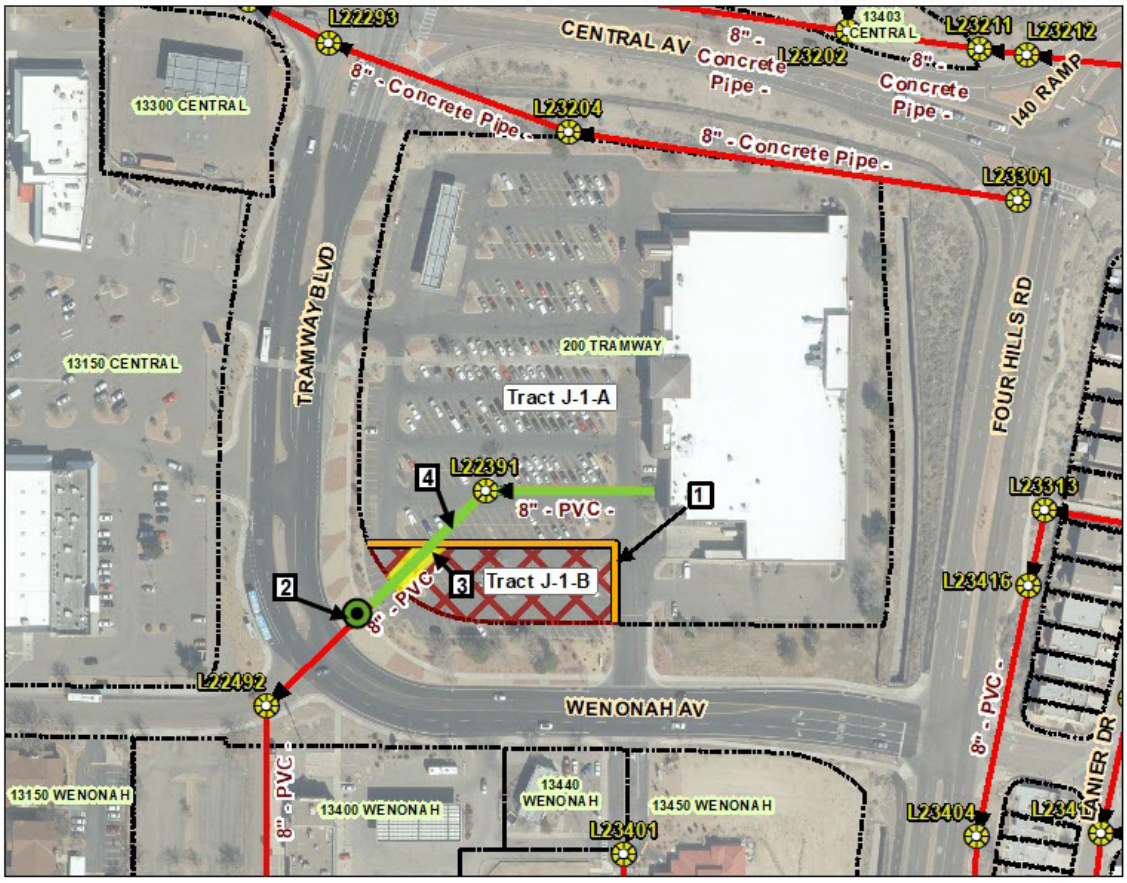
- Analysis Point - Existing Hydrant (1)

--- General Map Keyed Notes

1 - Proposed Lot Line

Water Utility Authority

230609 - Sanitary Sewer



0 335 670 Feet

N W E S

Base Map City

Project Location

Legend

Sewer Manhole

Sewer Pipe

Subtype

COLLECTOR

--- General Map Keyed Notes

1 - Proposed Lot Line

2 - Proposed Public SAS Manhole

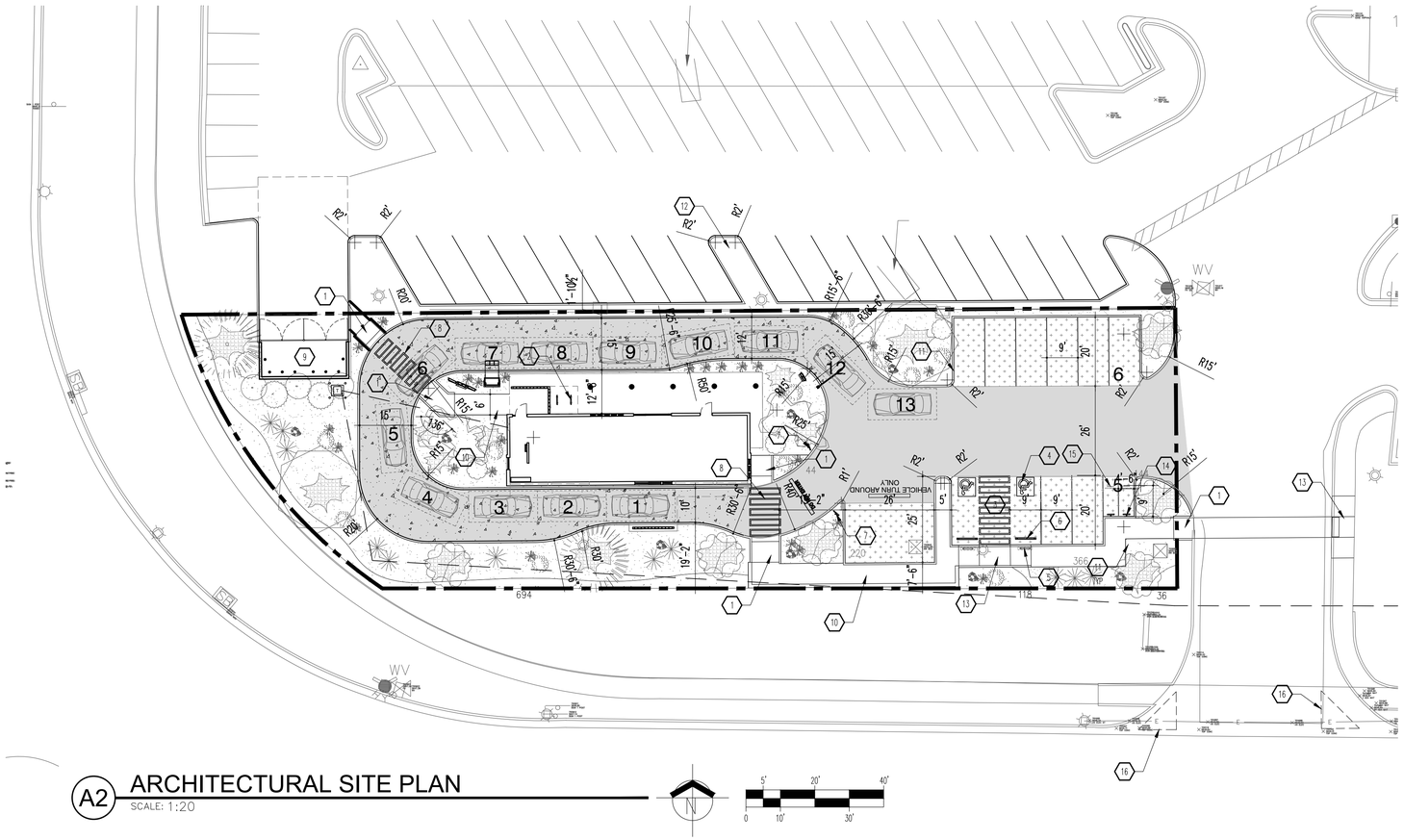
3 - Private SAS Easement for Tract J-1-A

4 - Existing Private SAS for Tract J-1-A

Water Utility Authority

EXHIBIT 5 - SOLID WASTE APPROVAL

Approved for access by the Solid Waste Department
for a double trash enclosure. The dumpsters must be accessible
for pickup by 5:00AM to 8:00PM. Herman Gallegos 06-06-23 *Herman Gallegos*

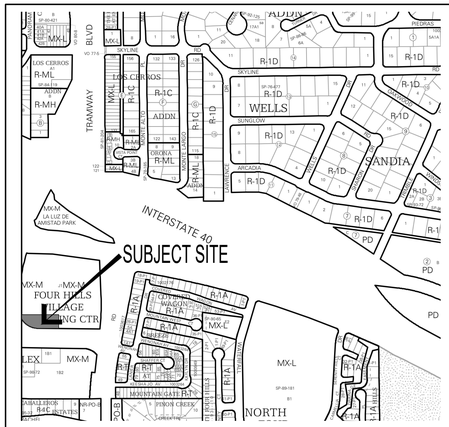


A2 ARCHITECTURAL SITE PLAN

SCALE: 1:20

N

0 5' 10' 20' 30' 40'



VICINITY MAP

Zone Atlas Map L-23-Z NTS

LEGAL DESCRIPTION: TRACT J-1-A AND J-1-B, FOUR HILLS VILLAGE SHOPPING CENTER AND APARTMENT COMPLEX, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO.

GENERAL NOTES

A. "C" SERIES SHEETS APPLY TO THE ENTIRE SET OF DRAWINGS.
B. INDICATED DIMENSIONS ARE TO FACE OF FINISH; UNLESS OTHERWISE NOTED.
C. PARKING AND ACCESSIBLE PAVEMENT MARKING AND STRIPING SHALL CONFORM TO THE NEW MEXICO COMMERCIAL BUILDING CODE SECTION 1110.3 F7.2.
D. LANDSCAPING AND SIGNAGE SHALL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBS BETWEEN 3' AND 8' TALL (AS MEASURED FROM THE GUTTER PLAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE.

KEYED NOTES

1. CURBED RAMP: SEE A1/A1.1.
2. BIKE RACK: SEE B1/A1.2; TYPICAL OF (2).
3. HANDICAP PARKING: SEE A1/A1.2 AND A3/A1.2.
4. HANDICAP PAVEMENT MARKING: SEE A5/A1.2.
5. HANDICAP SIGNAGE: SEE B4/A1.2; TYPICAL OF (2).
6. WHEEL STOP: SEE B5/A1.2; TYPICAL OF (2).
7. 'DO NOT ENTER' SIGNAGE: SEE B3/A1.2; TYPICAL OF (2).
8. WALKWAY PAVEMENT MARKING: SEE C5/A1.2.
9. REFUSE ENCLOSURE: SEE B2/A1.3.
10. SIDEWALK: SEE B3/A1.1.
11. CURB & GUTTER: SEE B1/A1.1.
12. PARKING ISLAND: SEE C3/A1.1.
13. TAPERED RAMP: SEE C1/A1.1.
14. MOTORCYCLE PARKING SIGNAGE: SEE B2/A1.2; TYPICAL OF (2).
15. "MOTORCYCLE PARKING": 12" HIGH x 4" WIDE PAVEMENT MARKING, WHITE IN COLOR.
16. DASHED LINE INDICATES 11' x 11' CLEAR SITE TRIANGLE.

GRAPHIC LEGEND

6" THICK NORMAL WEIGHT REINFORCED CONCRETE PAVING.

HEAVY DUTY: SEE A5/A1.3.

LIGHT DUTY ASPHALT: SEE A3/A1.3.

EASEMENTS

NO EASEMENTS AT IMMEDIATE SITE.

PARKING CALCULATION

PARKING SPACES REQUIRED	PARKING SPACES PROVIDED
8 PER 1,000 GSF @1,310 GSF	(8) SPACES
PARKING SPACES REQUIRED FOR PATIO	PARKING SPACES PROVIDED
3 PER 1,000 GSF @725 GSF	(2) SPACES
MOTORCYCLE PARKING REQUIRED	
(1) REQUIRED	(2) SPACES
BICYCLE PARKING REQUIRED	
(1) REQUIRED	(4) SPACES

REV	DATE	BY	REVISION
6			
5			
4			
3			
2			
1			

MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 600
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498

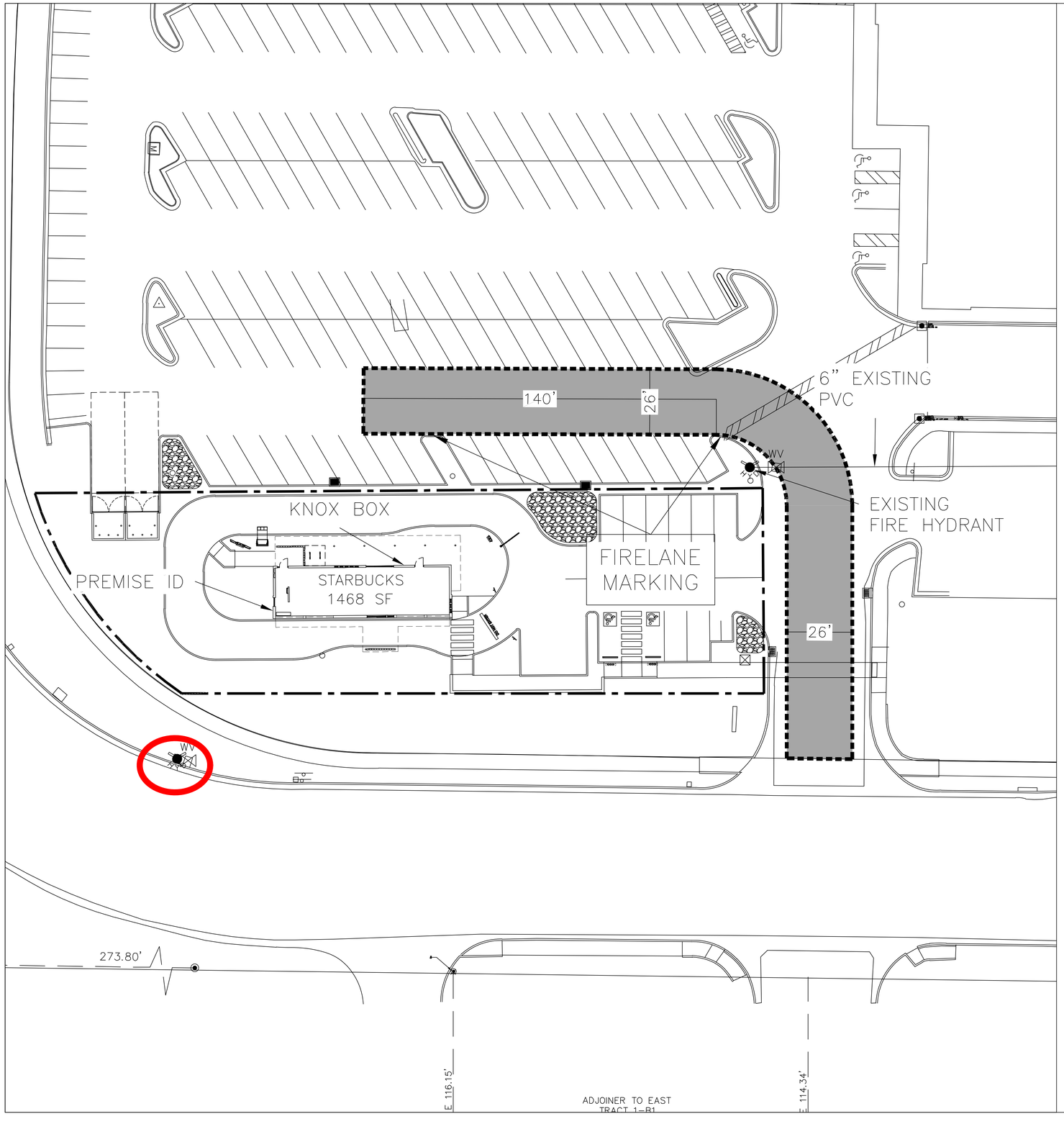
STATE OF NEW MEXICO
STEPHEN A. DUNBAR
No. 4218
REGISTERED ARCHITECT
xx xxx 2022

PROJECT TITLE: STARBUCKS – TRAMWAY
200 TRAMWAY BLVD. NE
ALBUQUERQUE, NEW MEXICO 87123

DRAWN BY: DTN
JOB NO.: 23-TRAMWAY
PROJECT MANAGER: DEVIN NGUYEN
SHEET TITLE: SITE PLAN

DATE: 25 Jan 2023
SCALE: AS NOTED
sheet- AS101
of-

EXHIBIT 6 - FIRE 1 APPROVAL



ALBUQUERQUE FIRE MARSHAL'S
DIVISION OFFICE PLANS
CHECKING DIVISION

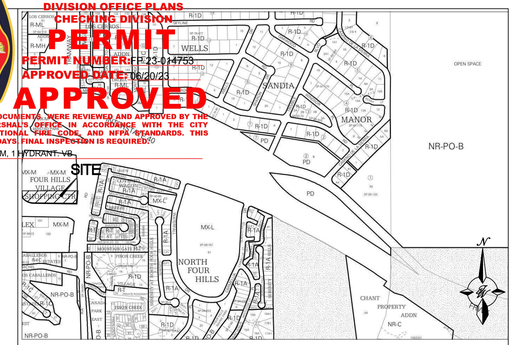
PERMIT

PERMIT NUMBER: FP 23-04753
APPROVED DATE: 06/20/23

APPROVED

THESE CONSTRUCTION DOCUMENTS WERE REVIEWED AND APPROVED BY THE ALBUQUERQUE FIRE MARSHAL'S OFFICE IN ACCORDANCE WITH THE CITY ORDINACE, THE INTERNATIONAL FIRE CODE, AND NFPA STANDARDS. THIS PERMIT IS VALID FOR 180 DAYS. FINAL INSPECTION IS REQUIRED

FIRE FLOW: 1750 GPM, 1 HYDRANT, VB



VICINITY MAP: L-23-Z

LEGAL DESCRIPTION:

TR J-1 REPL OF TRS F, H-1, J & UNPLATTED LAND FOUR HILLS VILLAGE SHOPPING CENTER & APT COMPLEX CONT 7.9444 AC +/- OR 346,058 SF +/-

TOTAL PROPERTY
21,500 S.F.
.49 ACRES

Max. Building Footprint= 1468 SF
Occupancy Type = A-2
Construction Type = V-B
Non-Sprinklered System in Bldg
Fire-Flow = 1,500 gpm

NOTES

1. ON SITE FIRE LANE ROAD SHALL BE MARKED ON BOTH SIDES, AS DIRECTED BY FIRE MARSHALL.
2. FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 10 PERCENT IN GRADE AND SHALL HAVE AN ALL WEATHER DRIVING SURFACE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 75000 LBS.
3. KEY BOX (KNOX BOX) SHALL BE MOUNTED BETWEEN 4 AND 6 FEET ABOVE GRADE AND SHALL BE ILLUMINATED.

LEGEND

- CURB & GUTTER
- PROPERTY LINE
- BUILDING
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- FIRE ACCESS
- EXISTING HYDRANT
- FIRE MARKINGS

N

GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=20

CAUTION

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

STARBUCKS AT TRAMWAY
ALBUQUERQUE, NM

FIRE ONE PLAN

TIERRA WEST, LLC
5571 MIDWAY PARK PL NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY: PB
DATE: 6-5-2023
DRAWING: 2023047-F1
SHEET #: F1
JOB #: 2023047