

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

January 6, 2022

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

RE: 5400 Menaul Blvd NE
Grading and Drainage Plans
Engineer's Stamp Date: 11/08/21
Hydrology File: H18D074

Dear Mr. Bohannon:

Based upon the information provided in your submittal received 11/09/2021, the Grading & Drainage Plan is approved for Building Permit, Grading Permit, SO-19 Permit, and for action by the DRB on Site Plan for Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

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 Drainage Covenant with Exhibit A for the stormwater quality ponds per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit the original copies along with the \$ 25.00 recording fee check made payable to Bernalillo County to Marion G. Velasquez (mgvelasquez@cabq.gov) on the 4th floor of Plaza de Sol. Please note that Hydrology will need a pdf copy of the recorded Drainage Covenant prior to Hydrology's approval of Permanent Release of Occupancy.

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.

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 5400 Menaul Building Permit #: Hydrology File #:

DRB#: EPC#: Work Order#:

Legal Description: TR A PLAT OF TR A BLK 106 BEL-AIR AUBD BEING REPLAT OF LTS 8,9 & 10 BLK 106

City Address: 5400 Menaul Blvd NE, Albuquerque, NM 87110

Applicant: Tierra West, LLC Contact: Luis Noriega

Address: 5571 Midway Park Pl NE, Albuquerque, NM 87109

Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: lnoriega@tierrawestllc.com

Other Contact: Contact:

Address:

Phone#: Fax#: E-mail:

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

IS THIS A RESUBMITTAL? ☒ Yes ☐ No

DEPARTMENT 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
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ 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: 11/9/2021 By: Luis Noriega

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



TIERRA WEST, LLC

November 8, 2021

Ms. Renee C. Brissette, P.E.
Planning Department – Hydrology
PO BOX 1293
Albuquerque, NM 87103

**RE: 5400 MENAUL BLVD
GRADING AND DRAINAGE PLANS
HYDROLOGY FILE: H18D074**

Dear Ms. Brissette

Per the correspondence dated October 22, 2021, please find the following responses addressing the comments listed below:

SHEET C3.1

1. Please provide a vicinity map showing the location of the site. Typically this is the Zone Atlas. This can be downloaded in PDF format from the City of Albuquerque's website:

Response: Please see attached Vicinity Map.

2. Please provide the weir calculations, per DPM Article 6-16(A), for the curb cuts and sidewalk culverts. A coefficient of 2.7 is typically used for the weir equation $Q=CLH^{2/3}$

Response: Weir calculation for the sidewalk culvert and curb cut added to Sheet C3.1.

SHEET C3.2

1. Please contact Transportation. There are some existing drives that need to be closed on both Menaul and La Veta. Also, the ADA Ramps may need to be brought up to current standards on Menaul.

Response: Please see attached approved TCL.

2. Please show a label on both Menaul and La Veta where the existing drives are to be closed. This can be placed here or on C3.3

Response: Please see attached approved TCL.

3. Please Update the SO-19 Notes.

Response: Please see updated sheets C3.2 and C3.3.

4. The Sidewalk Culvert detail does not need to be shown. The correct COA Standard Drawing has been called out.

Response: Acknowledged.

5. Please add a note to the sidewalk culvert on the southwest corner of the site as "a private on-site sidewalk culvert". The City will only inspect the one in Menaul's ROW.

Response: Acknowledged.

5571 Midway Park Pl. NE
Albuquerque, NM 87109
(505) 858-3100 fax (505) 858-1118 1-800-245-3102
tierrawestllc.com

SHEET C3.3

1. Provide a section through all proposed screen walls on the south side of the property. This needs to show proposed screen walls, footer within the property, property/ROW lines, existing and proposed grades, stormwater quality pond, and label the public alley. In accordance with DPM, grading and wall construction near the property line may not endanger adjacent property or constrain its use.

Response: Acknowledged, see sheet C3.3.

If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

Sincerely,



Ronald R. Bohannon, P.E

JN: 2021077
RRB/ln/ye



For more current information and details visit: www.cabq.gov/gis

Note: Gray Shading Represents Area Outside of the City Limits

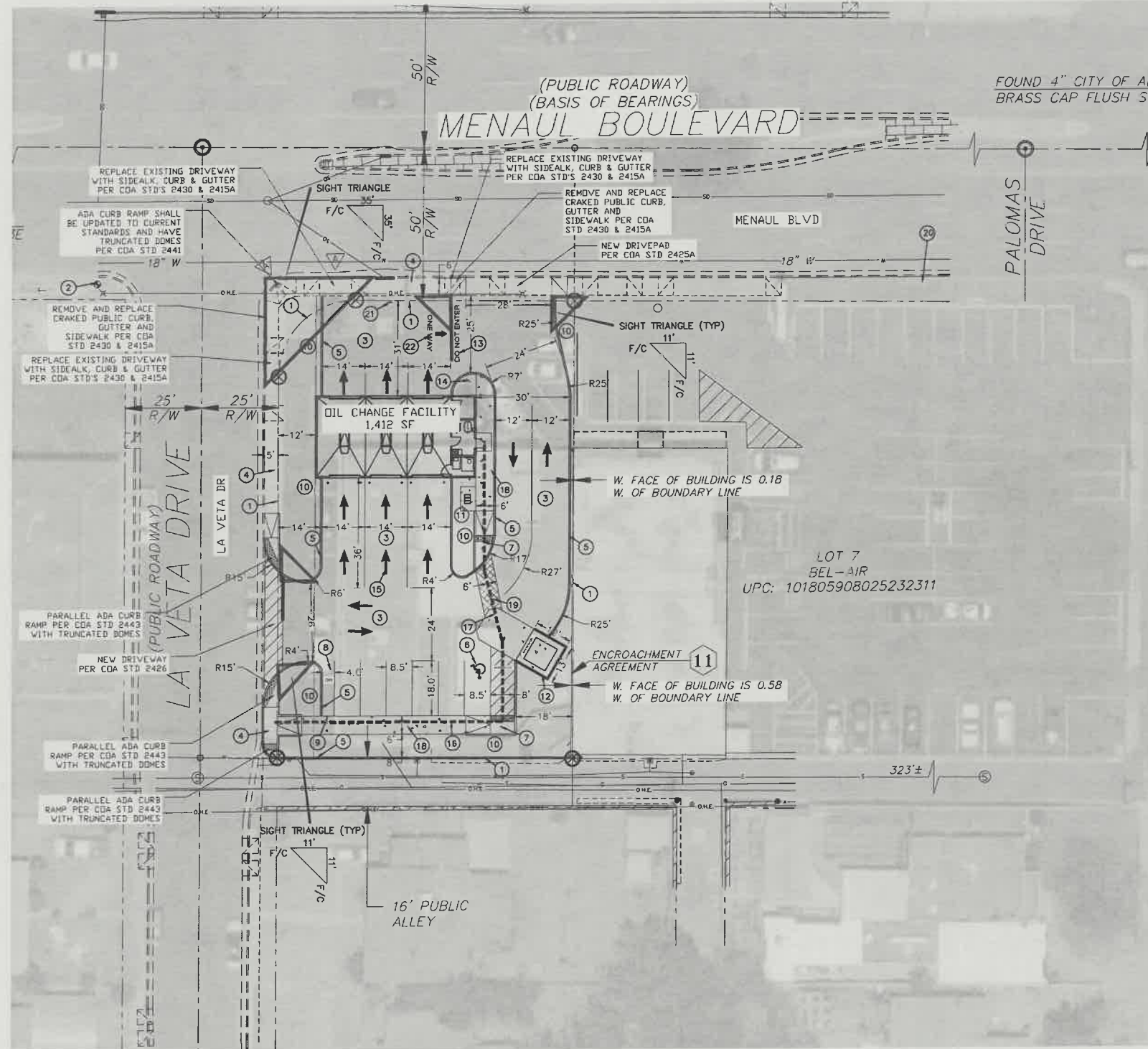
Address Map Page:

H-18-Z

Map Amended through:
3/17/2017

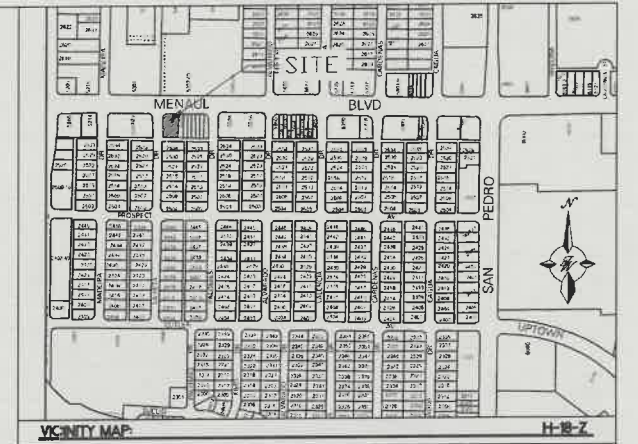
These addresses are for informational purposes only and are not intended for address verification.

City of Albuquerque
AGIS
Albuquerque Geographic Information System



- LEGEND**
- CURB & GUTTER
 - BOUNDARY LINE
 - EASEMENT
 - CENTERLINE
 - RIGHT-OF-WAY
 - BUILDING
 - SIDEWALK
 - SCREEN WALL
 - RETAINING WALL
 - STREET LIGHTS
 - LANE
 - STRIPING
 - EXISTING CURB & GUTTER
 - EXISTING BOUNDARY LINE
 - EXISTING SIDEWALK
 - EXISTING LANE
 - EXISTING STRIPING

- KEYED NOTES**
- 1 EXISTING PROPERTY LINE
 - 2 EXISTING FIRE HYDRANT
 - 3 SITE ASPHALT PAVEMENT (SEE DETAIL, SHEET C2)
 - 4 EXISTING SIDEWALK
 - 5 HEADER CURB (SEE DETAIL, SHEET C2)
 - 6 ADA PARKING (SEE DETAIL, SHEET C2)
 - 7 ADA PARALLEL CURB RAMP PER COA CURRENT STANDARDS #2443 AND SHALL HAVE TRUNCATED DOMES INSTALLED (SEE DETAIL, SHEET C5)
 - 8 MOTORCYCLE PARKING ADD PAINT LABEL PER COA CODE
 - 9 MOTORCYCLE PARKING SIGN (SEE DETAIL, SHEET C2)
 - 10 LANDSCAPE AREA
 - 11 BIKE RACK (SEE DETAIL SHEET C2)
 - 12 DUMPSTER (SEE DETAIL, SHEET C3)
 - 13 "DO NOT ENTER" STRIPING (SEE DETAIL, SHEET C3)
 - 14 "DO NOT ENTER" SIGNAGE (SEE DETAIL, SHEET C3)
 - 15 TRAFFIC ARROWS (SEE DETAIL, SHEET C3)
 - 16 ADA PUBLIC ACCESSIBLE PATHWAY
 - 17 ADA PARKING ACCESSIBLE PATHWAY
 - 18 SIDEWALK PER COA STD 2430 (SEE DETAIL, SHEET C2)
 - 19 PEDESTRIAN CROSSWALK (SEE DETAIL SHEET C3)
 - 20 EXISTING BUS STOP BENCH
 - 21 "ONE WAY" R6-1R SIGNAGE (SEE DETAIL, SHEET C3)
 - 22 "ONE WAY" STRIPING (SEE DETAIL, SHEET C3)



LEGAL DESCRIPTION
 TR A PLAT OF TR A BLK 106 BEL-AIR SUBD BEING A REPLAT OF LTS 8, 9 & 10 BLK 106 CONT 14,475 SF M/L

SITE DATA

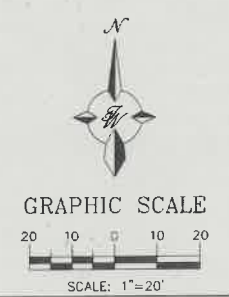
PROPOSED USAGE:	3-BAY DRIVE THRU OIL CHANGE
LOT AREA:	14,475 SF (0.33) ACRE
ZONING:	MX-M
BUILDING AREA:	1,412 SF
PARKING REQUIRED:	2 SPACES (1 SPACE PER 1,000 SF)
PARKING PROVIDED:	6 SPACES
HC PARKING REQUIRED:	1 SPACES (1 SPACE PER 1-25 PARKING SPACES)
HC PARKING PROVIDED:	1 SPACES 1 SPACE VAN ACCESSIBLE
MC PARKING REQUIRED:	1 SPACES (1 SPACE PER 1-25 PARKING SPACES)
MC PARKING PROVIDED:	1 SPACES
BICYCLE PARKING REQUIRED:	3 SPACES (3 SPACES PER SITE)
BICYCLE PARKING PROVIDED:	3 SPACES
LANDSCAPE AREA REQUIRED:	1,960 SF (15% OF NET LOT AREA)
LANDSCAPE AREA PROVIDED:	2,890 SF

- NOTES**
1. LANDSCAPING AND SIGNAGE WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES AND SHRUBBERY BETWEEN 3 AND 8 FEET TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE.
 2. ALL SIGNS TO BE COVERED WITH ANTI GRAFFITI COATING.
 3. ALL SIGNS AND STRIPING SHALL BE MADE IN ACCORDANCE WITH THE MUTCD (CURRENT EDITION) SPECIFICATIONS AND COA STANDARDS.
 4. ALL SYMBOLS AND ARROWS STRIPING TO BE PERFORMED HOT APPLIED THERMOPLASTIC TAPE.
 5. ALL IMPROVEMENTS LOCATED IN THE RIGHT OF WAY MUST BE INCLUDED ON THE WORK ORDER.
 6. ALL BROKEN OR CRACKED SIDEWALK MUST BE REPLACED WITH SIDEWALK AND CURB AND GUTTER PER COA STANDARDS.

ALL WHEELCHAIR RAMPS LOCATED WITHIN THE PUBLIC RIGHT OF WAY MUST HAVE TRUNCATED DOMES.

TRAFFIC CIRCULATION LAYOUT APPROVED

Signed _____ Date 9/3/21



ENGINEER'S SEAL RONALD R. BOHANNON P.E. #7868	3-BAY OIL CHANGE 5400 MENAUL BLVD NE TRAFFIC CIRCULATION LAYOUT	DRAWN BY LN DATE 08/31/2021 2021077-TCL
	TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawestllc.com	SHEET # C1 JOB # 2021077

H18-D074



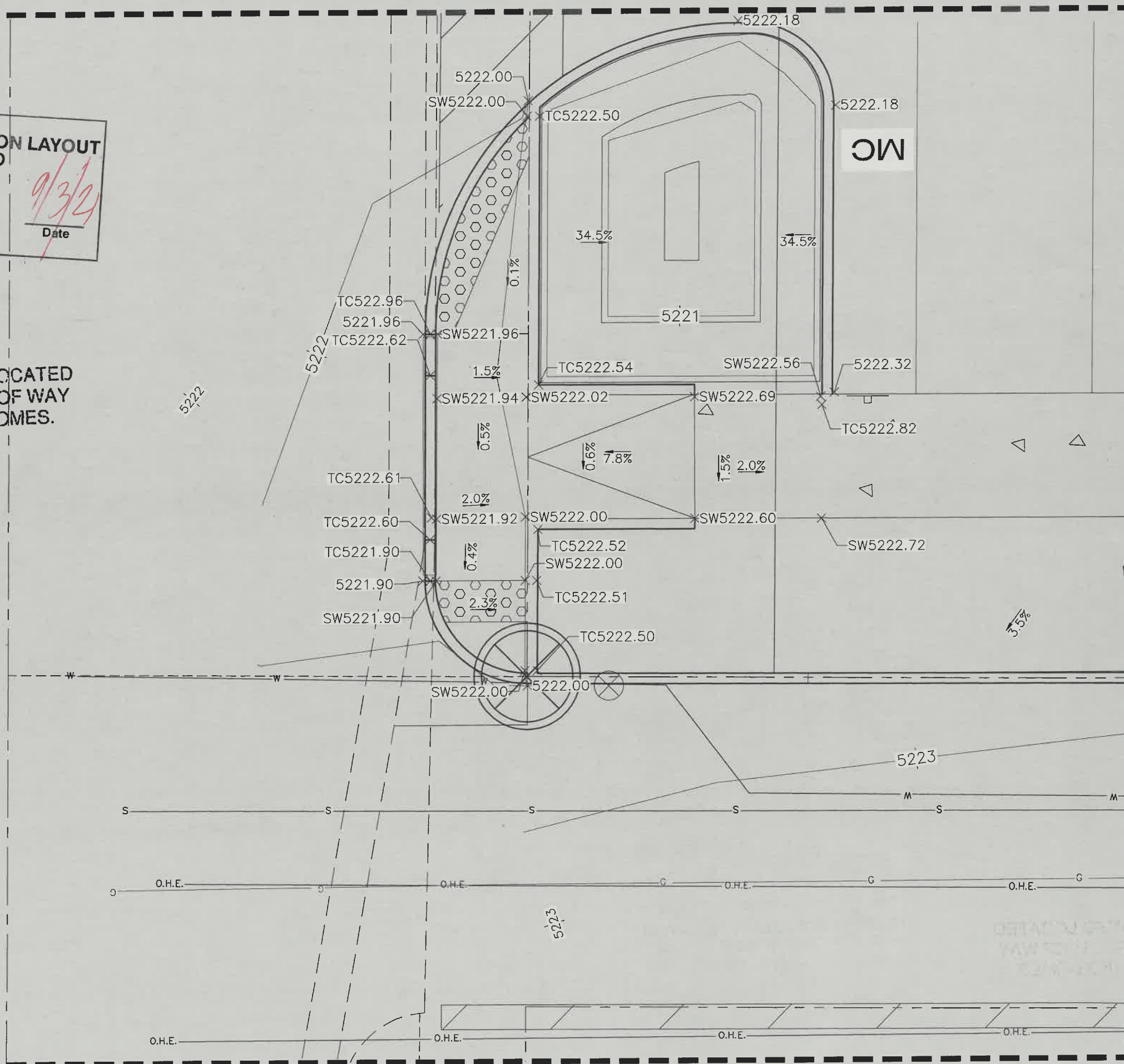
A rectangular stamp with a black border. The text "TRAFFIC CIRCULATION" is on the top line, "APPROVED" is on the second line, and "LAYOUT" is on the third line. Below the text is a horizontal line. To the left of the line is the word "Signed" and to the right is the word "Date". A red ink signature is written across the "Signed" line, and the date "9/3/21" is written in red ink above the "Date" line.

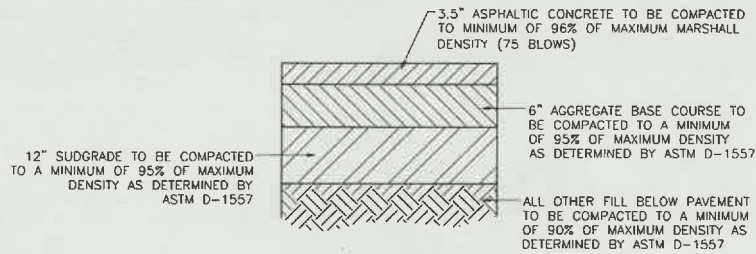
TRAFFIC CIRCULATION LAYOUT
APPROVED

Signed _____ Date _____

Date _____

ALL WHEELCHAIR RAMPS LOCATED
WITHIN THE PUBLIC RIGHT OF WAY
MUST HAVE TRUNCATED DOMES.

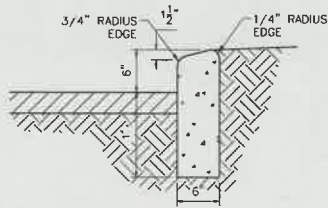




SITE ASPHALT PAVEMENT SECTION

NTS

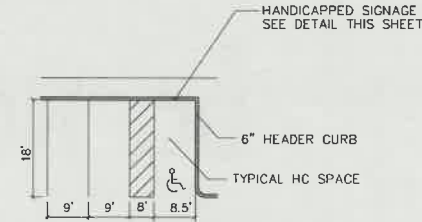
NOTE: CONTRACTOR TO VERIFY WITH SOILS REPORT BY TERRACON DATED JUNE 3, 2021



CURB GENERAL NOTES:
1. ALL CURBS TO BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE, PER WAL-MART SPECIFICATIONS.
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

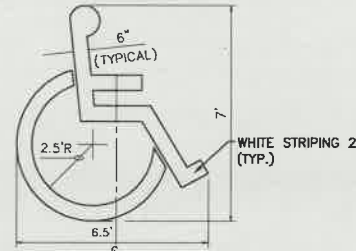
1"=1'



HC PARKING DETAIL

NTS

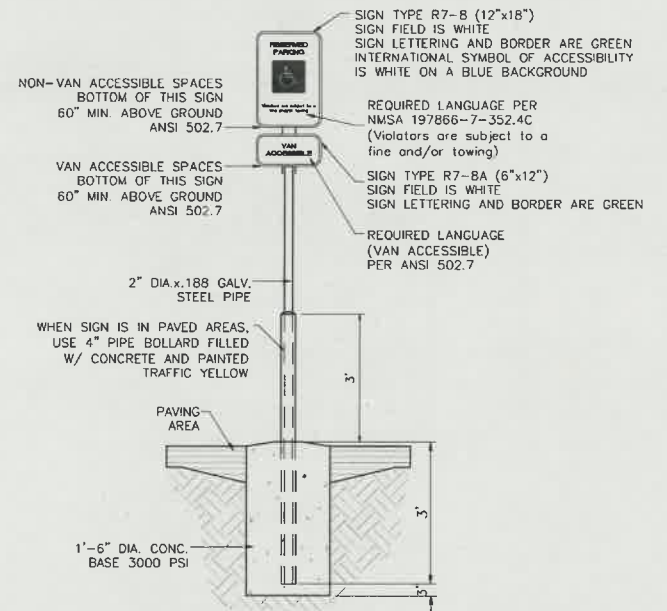
NOTES:
1) International Symbol of Accessibility shall be painted on the pavement at rear of space, white symbol on blue background.
2) Parking space lines and diagonal striping to be painted blue and shall be 4" wide. Diagonal lines shall be spaced 2' center to center.
3) Access aisle shall have the words "NO PARKING" in blue, capital letters, each of which shall be at least one foot high and at least two inches wide, placed at the rear of the parking space so as to be close to where an adjacent vehicle's rear tires would be placed.



LOCATE AT EDGE OF PARKING SPACE UNLESS ACCOMPANIED BY "VAN" LETTERING

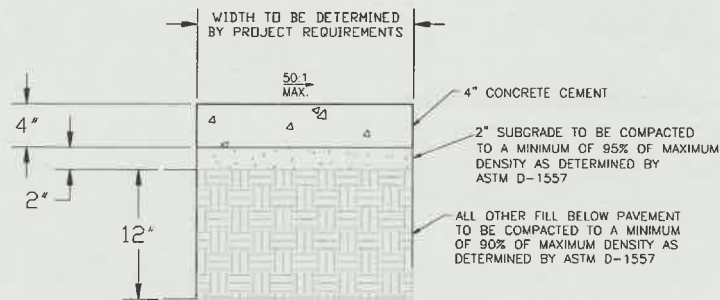
ACCESSIBLE PARKING SYMBOL

NTS

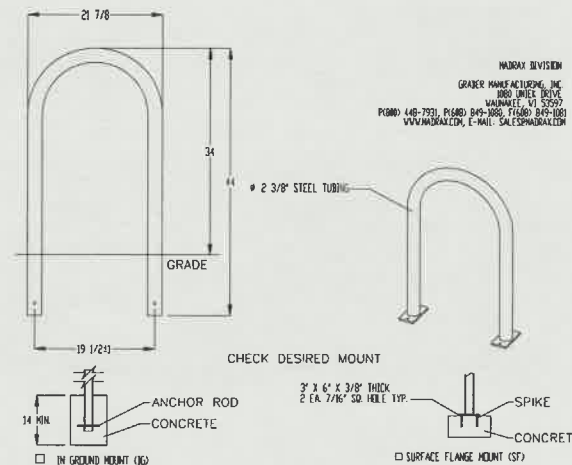


ACCESSIBLE PARKING SIGN

NTS



CONCRETE SIDEWALK SECTION

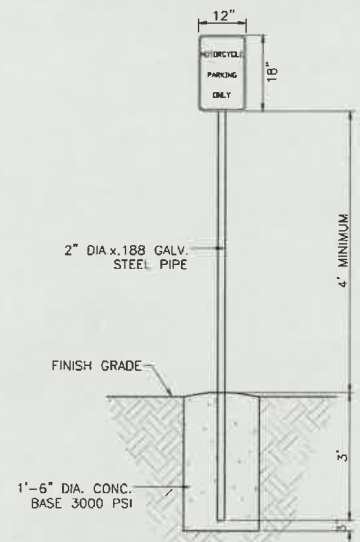


PRODUCT: 10238-10(SF)
DESCRIPTION: 10' BIKE RACK
2' BIKE, SURFACE OR IN GROUND MOUNT
DATE: 10-4-10
ENG: SHC
CONFIDENTIAL DRAWING AND INFORMATION IS NOT TO BE COPIED OR DISCLOSED TO OTHERS WITHOUT THE CONSENT OF GRADER MANUFACTURING, INC. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.
©2010 GRADER MANUFACTURING, INC. ALL PROPRIETARY RIGHTS RESERVED

NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULT WITH SELECT COLOR (FRESH). SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT DRAWING.
4. BIKE RACK SHALL HAVE A 1-FOOT CLEAR ZONE AT MOUNTING.
5. EACH BIKE RACK SPACE SHALL BE AT LEAST 6 FEET LONG AND 2 FEET WIDE.

BIKE RACK


SCALE: NONE



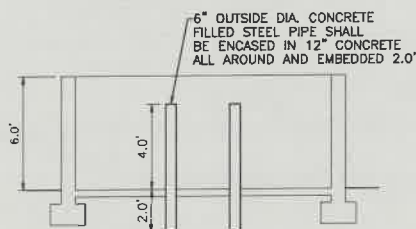
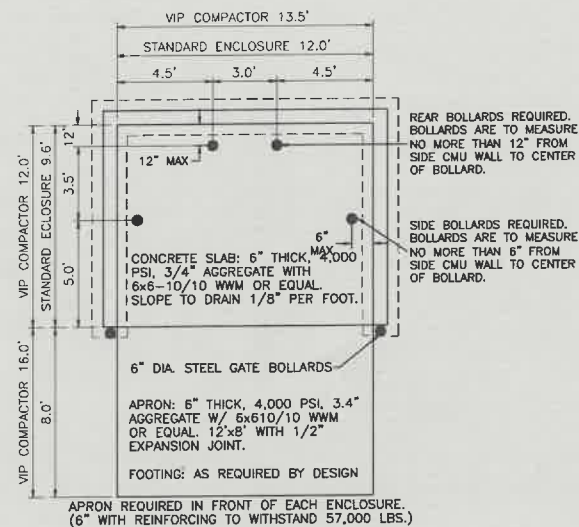
MOTORCYCLE PARKING SIGN

NTS



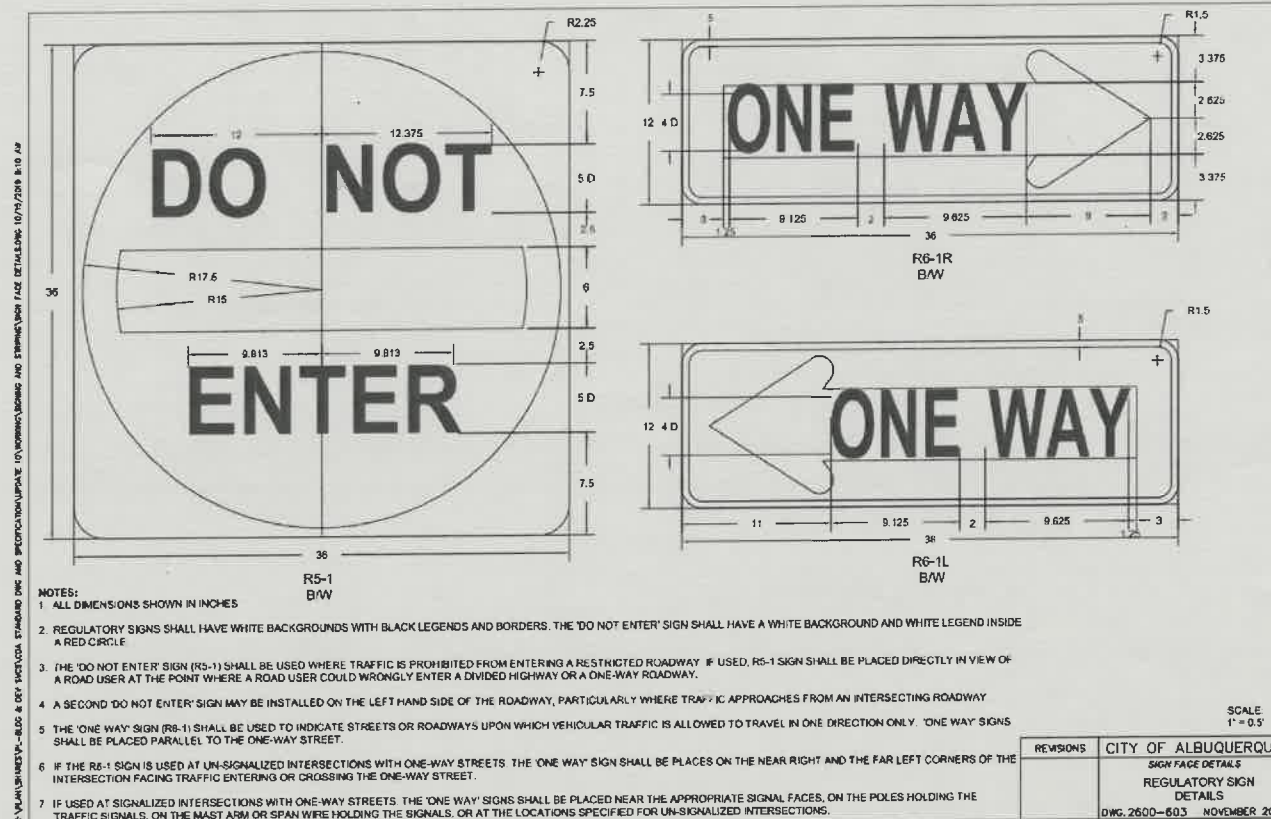
<div>ENGINEER'S SEAL</div> <div><div>09/02/2021</div></div> <div>RONALD R. BOHANNAN P.E. #7868</div>	3-BAY OIL CHANGE 5400 MENAUL BLVD NE	DRAWN BY LN
		DATE 08/31/2021
	<div>CONSTRUCTION DETAILS</div> <div><div>TERRA WEST, LLC</div><div>5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrowestllc.com</div></div>	2021077_0TE
		SHEET # C2
		JOB # 2021077

H18-D074

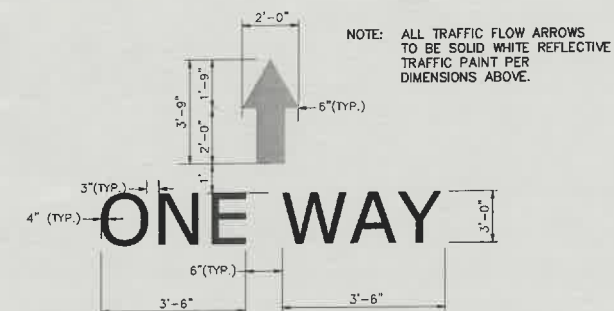


NOTE: THESE ARE THE MINIMUM REQUIREMENTS FOR TRASH ENCLOSURES. DESIGNS MAY VARY TO FIT THE SELECTED ENCLOSURE.

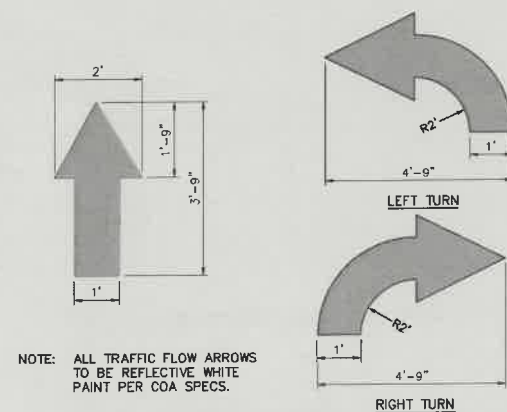
DUMPSTER ENCLOSURE DETAIL
NTS



DO NOT ENTER SIGN
NTS

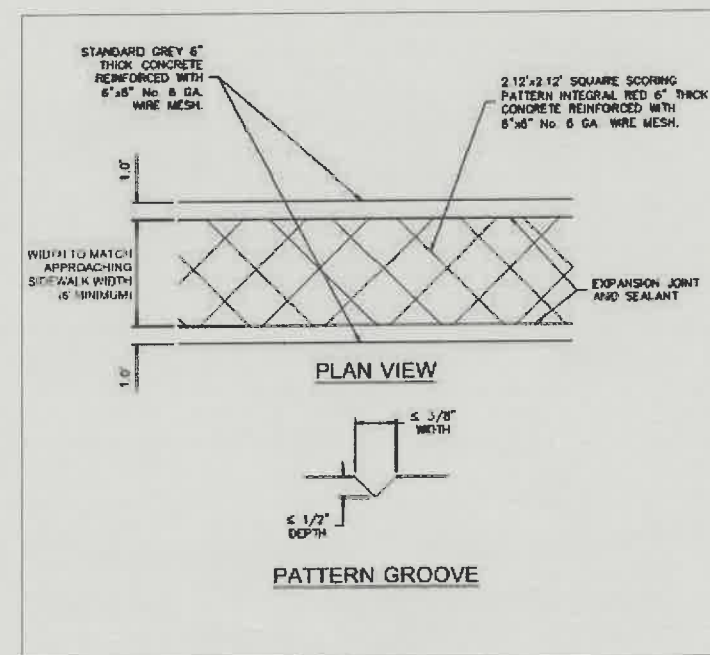


'ONE WAY' PAVEMENT MARKER W/ARROW
NTS

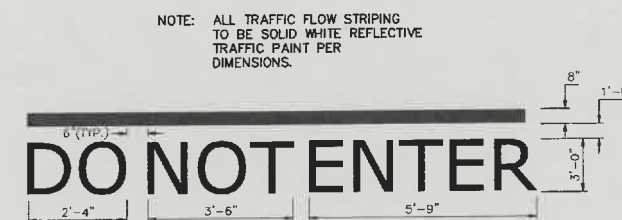


NOTE: ALL TRAFFIC FLOW ARROWS TO BE REFLECTIVE WHITE PAINT PER COA SPECS.

TRAFFIC FLOW ARROW
NTS



CROSSWALK/PED. CROSSING
NTS



DO NOT ENTER PAVEMENT MARKER
NTS

TRAFFIC CIRCULATION LAYOUT
APPROVED

Signed

Date

ENGINEER'S SEAL 	3-BAY OIL CHANGE 5400 MENAUL BLVD NE CONSTRUCTION DETAILS	DRAWN BY LN
		DATE 08/31/2021
TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrowestllc.com		2021077_DTE
		SHEET # C3
RONALD R. BOHANNAN P.E. #7868		JOB # 2021077

H18-D074

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

September 3, 2021

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

Re: 3-Bay Oil Change (5400 Menaul)
5400 Menaul Blvd NE
Traffic Circulation Layout
Architect's Stamp 09-02-2021 (H18-D074)

Dear Mr. Noriega,

The TCL submittal received 09-03-2021 is approved for Building Permit with. 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 front counter personnel for log in and evaluation by Transportation.

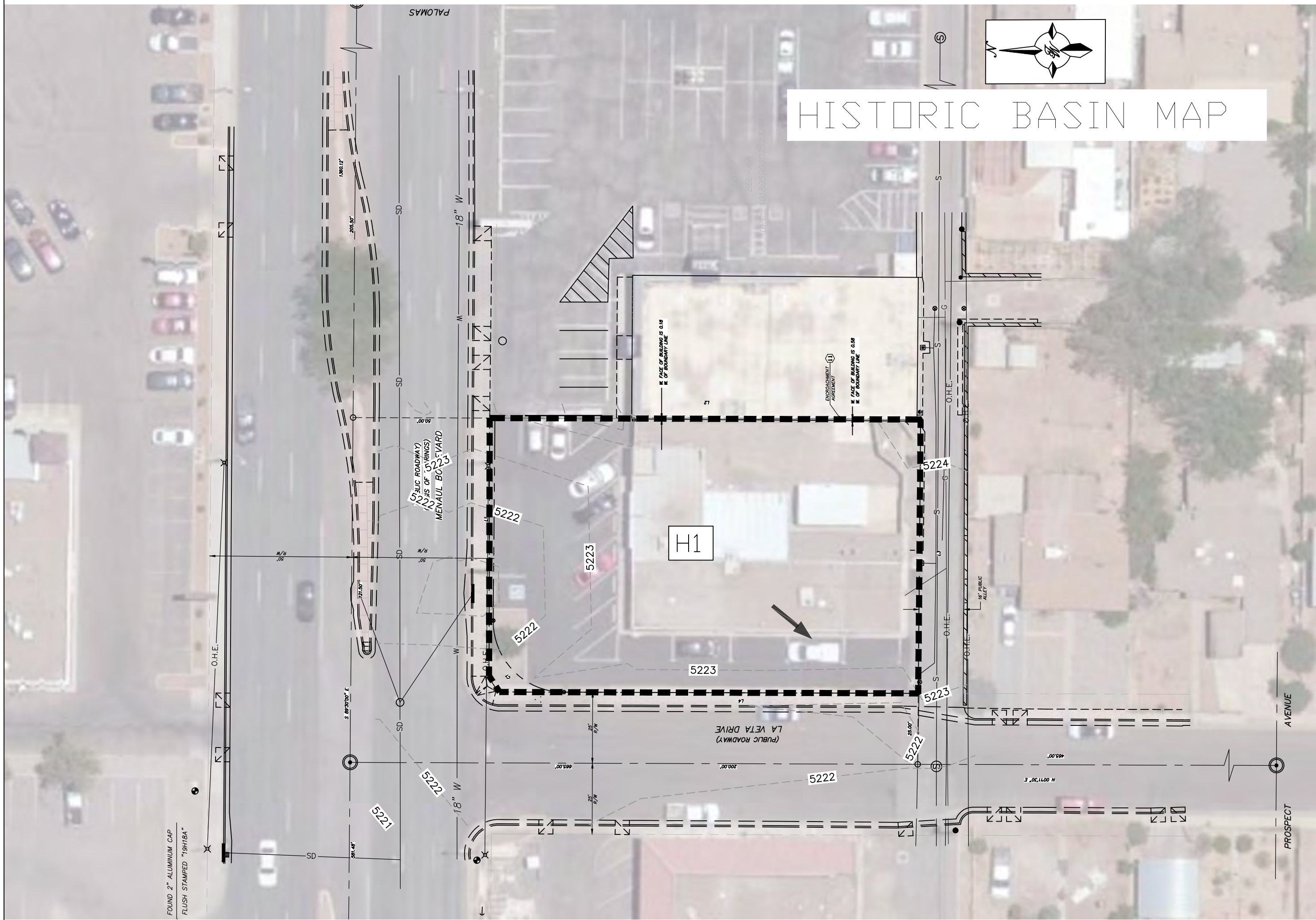
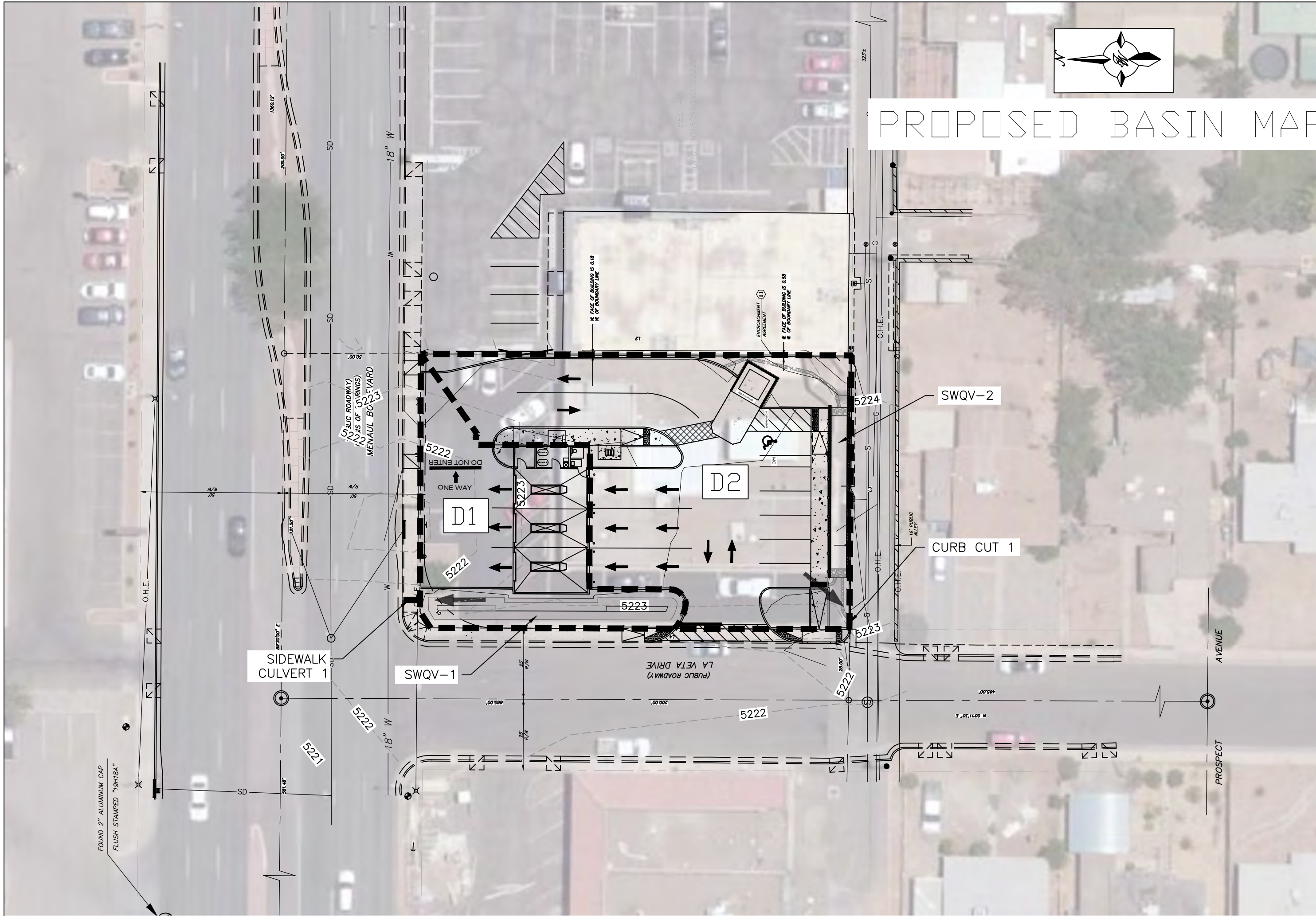
Once verification of certification is completed and approved, notification will be made to Building Safety to issue Final C.O. To confirm that a final C.O. has been issued, call Building Safety at 924-3690.

Sincerely,

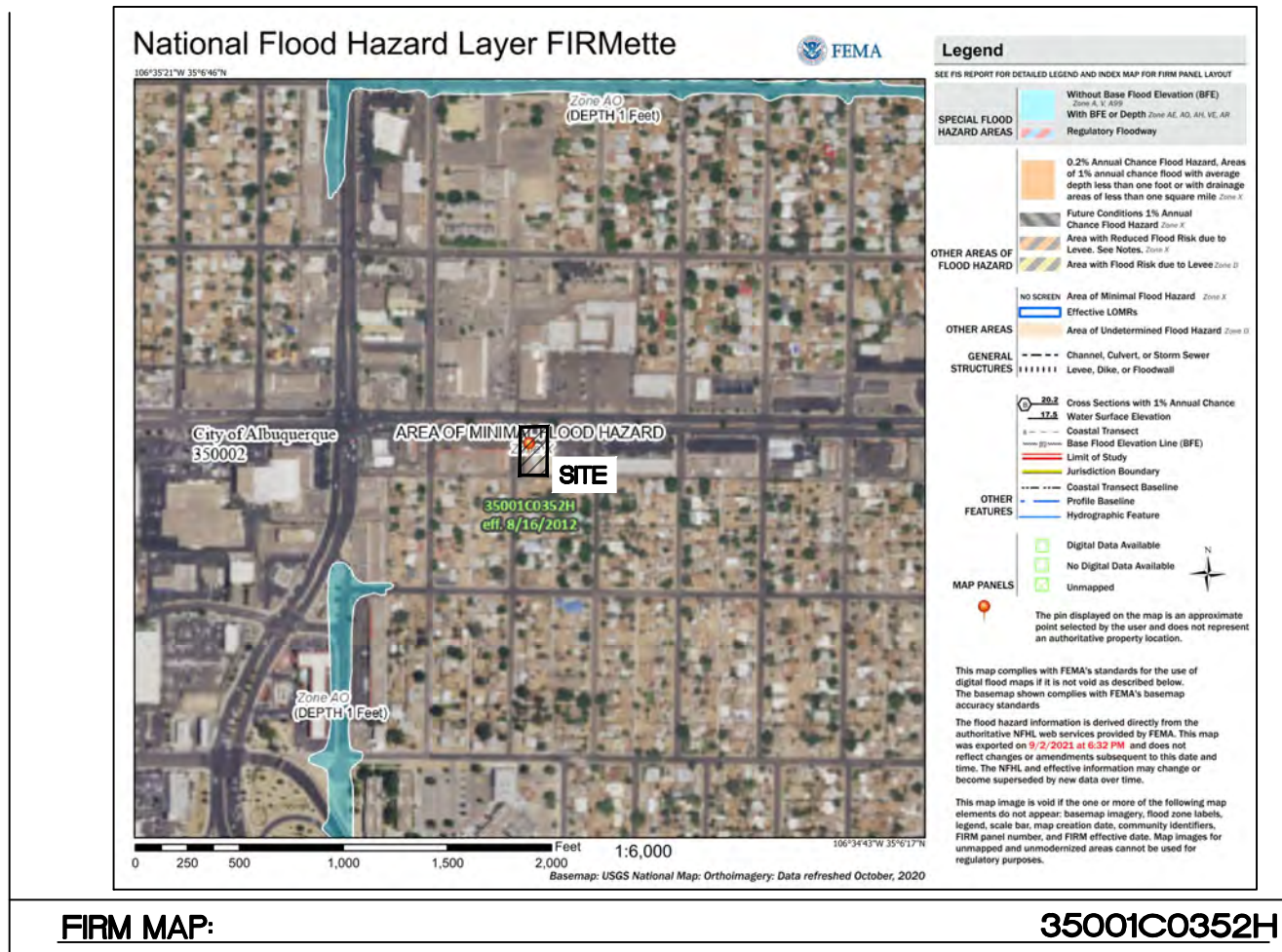
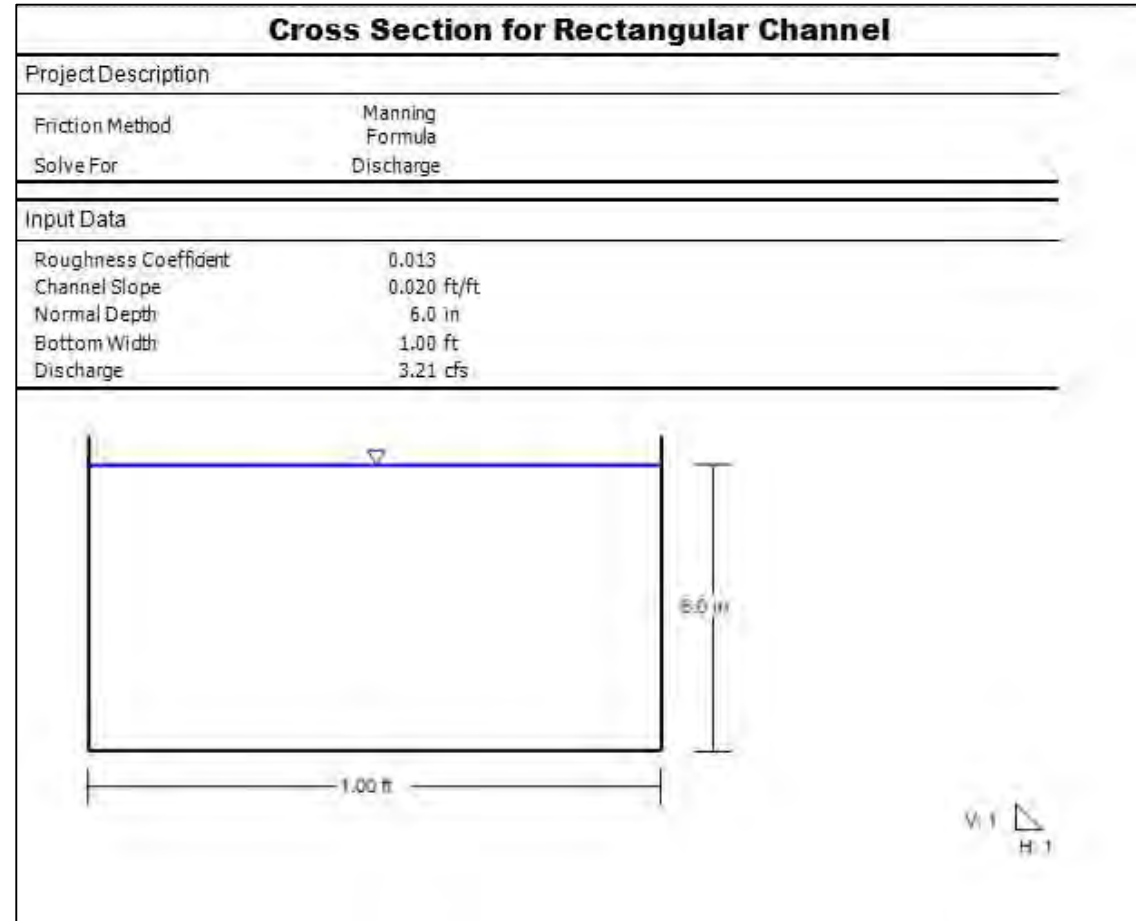
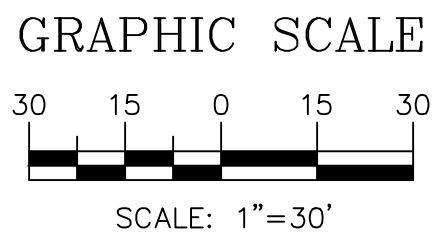
Nilo Salgado-Fernandez, P.E.
Senior Traffic Engineer, Planning Dept.
Development Review Services

C: CO Clerk, File

\\TNWAS\Z_Drive\2021\2021077 5400 Menaul Drive-Thru Oil Change Facility.dwg\2021077_BASINS.dwg Jun 06, 2022 - 9:25am



LEGEND
--- BASIN BOUNDARY



Existing Conditions

Basin ID	Tract	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions								100-Year, 6-Hr		
					Treatment A	Treatment B	Treatment C	Treatment D	Weighted E	Volume	Flow		(in)	(ac-ft)	cfs
H1	A	14,615	0.34	0.00052	0%	0.000	2%	0.007	0%	0.000	98%	0.329	2.546	0.071	1.49
Total		14,615	0.34	0.00052		0.000		0.007		0.000		0.329		0.071	1.493

Proposed Conditions

Basin ID	Tract	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions								100-Year, 6-Hr		
					Treatment A	Treatment B	Treatment C	Treatment D	Weighted E	Volume	Flow		(in)	(ac-ft)	cfs
D1	A	4,650	0.11	0.00017	0%	0.000	9%	0.010	18%	0.019	73%	0.0779	2.157	0.019	0.43
D2	A	9,965	0.23	0.00036	0%	0.000	6%	0.014	12%	0.027	82%	0.1876	2.298	0.044	0.96
Total		14,615	0.336	0.00052		0.000		0.023		0.047		0.266		0.063	1.398

SWQV-1 Pond Volume Requirement				
Total Impervious Area =	ΣArea in "Treatment D"			
Retention depth = 0.42" Per DPM Pg. 272	0.035	foot		
Retention Volume =	=0.035 x Area D			
Area D (0.0779 acres)	3400	SF		
Required Retention Volume	119	CF		
Pond Volume Provided	175	CF		

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed
Volume = Weighted E * Total Area
Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

Excess Precipitation, E (in.)			
Zone 3	100-Year	10-Year	
Ea	0.67	0.18	
Eb	0.86	0.34	
Ec	1.09	0.52	
Ed	2.58	1.64	

Peak Discharge (cfs/acre)			
Zone 3	100-Year	10-Year	
Qa	1.84	0.51	
Qb	2.49	1.07	
Qc	3.17	1.69	
Qd	4.49	2.81	

SWQV-2 Pond Volume Requirement				
Total Impervious Area =	ΣArea in "Treatment D"			
Retention depth = 0.42" Per DPM Pg. 272	0.035	foot		
Retention Volume =	=0.035 x Area D			
Area D (0.1876 acres)	8172	SF		
Required Retention Volume	286	CF		
Pond Volume Provided	318	CF		

SWQV-1 Pond Volume Calculation		
Area at Mid Depth	350	Sq. Ft.
Depth of Pond	1	Ft.
Total Volume	175	Cubic Ft.

SWQV-2 Pond Volume Calculation		
Area at Mid Depth	318	Sq. Ft.
Depth of Pond	1	Ft.
Total Volume	318	Cubic Ft.

SWQV-1 POND VOLUME CALCULATIONS			
ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5222	80	0	0
5222.5	620	175	175
5223	1210	457.5	633

SWQV-1 POND STORAGE-DISCHARGE FUNCTION				
ACTUAL ELEV.	H (FT)	VOLUME (CF)	Q (CFS)	VOLUME (AC-FT)
5222	0.00	0	0.000	
5222.5	0.00	175	0.00	0.0040
5223	0.50	633	0.95	0.0145

Weir Equation (SIDEWALK CULVERT 1)	
Q =	CLH ^{3/2}
C =	2.7
L (ft) =	1
H (ft) =	Depth of water above center of orifice
Q (CFS) =	Flow

SWQV-2 POND VOLUME CALCULATIONS			
ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5221	318	0	0
5222	318	318	318
5222.51	636	243.27	561




SWQV-2 POND STORAGE-DISCHARGE FUNCTION				
ACTUAL ELEV.	H (FT)	VOLUME (CF)	Q (CFS)	VOLUME (AC-FT)
5221	0.00	0	0.00	0.0000
5222	0.00	318	0.00	0.0073
5222.51	0.51	561	0.98	0.0129

Weir Equation (CURB CUT 1)	
Q =	CLH ^{3/2}
C =	2.7
L (ft) =	1
H (ft) =	Depth of water above center of orifice
Q (CFS) =	Flow

Stormwater Quality Volume

Total Impervious Area = ΣArea in "Treatment D"
Retention depth = 0.42" Per DPM Pg. 272 0.035 foot
Retention Volume = =0.035 x area CF



NO.	DATE	REMARKS		BY
		REVISIONS		
ENGINEER'S SEAL		3-BAY OIL CHANGE	DRAWN BY LN	
  11/08/2021		5400 MENAUL BLVD NE	DATE 11/03/2021	
		GRADING AND DRAINAGE BASIN MAP	2021077_BASINS	
		 TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawestllc.com	SHEET # C3.1	
RONALD R. BOHANNAN P.E. #7868		JOB # 2021077		

