CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

May 26, 2022

Ryan Morrissey, P.E. Burkhardt Engineering 28 North Cherry St. Germantown, OH, 45327

RE: Champion Xpress Car Wash 5307 4th Street NW Grading and Drainage Plan Engineer's Stamp Date: 05/09/22 Hydrology File: F14D036A

Dear Mr. Morrissey:

PO Box 1293 Based upon the information provided in your submittal received 05/09/2022, the Grading & Drainage Plan **is not** approved for Building Permit and SO19 Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

NM 87103

www.cabq.gov

1. The property to the southwest currently has a building, sidewalks and landscaping within Douglas MacArthur Rd R.O.W. None of this existing information is shown and there is shown proposed new sidewalk and an access road through this property.



- 2. I know that the owner of the property to the southwest and this project's tract is the same, Hydrology still needs a written consent to do grading and construction on that property.
- 3. Per the IDO § 6-4(Q), the property owner of the property is responsible for building sidewalk along the adjacent R.O.W. of the project. This project is only adjacent to 4th Street, which already has a sidewalk. Not sure why any of this work is being done.

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Please contact Transportation to confirm the need of replacing the existing sidewalk along 4th Street and the work along Douglas MacArthur which is not adjacent to this project.

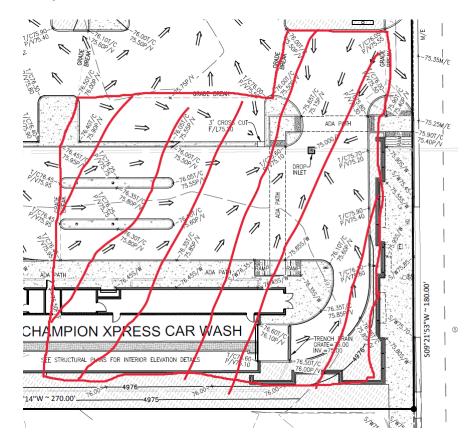
- 4. The calculations provided for the management onsite for the Stormwater Quality Volume (SWQV) is incorrect. The calculations used the number for a redevelopment and this site is new development. Therefore, per DPM Article 6-12 Stormwater Quality and Low-Impact Development for the sizing calculations. To calculate the required SWQV, multiply the impervious area draining to the BMP by 0.42 inches for new development sites.
- 5. 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 $Q = CLH^{2/3}$.
- 6. Please show all storm pipe sizing, inlet grate elevations and inverts on the Grading & Drainage Plan.
- 7. The shown drainage area appears to not get discharged into a stormwater quality pond prior to leaving the property. This cannot directly discharge into the City's storm drain system without doing so. This site has lots of landscape areas to provide the required SWQV.

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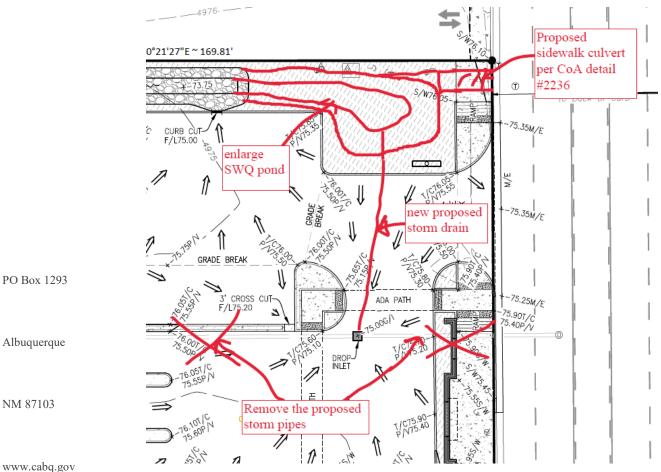
CITY OF ALBUQUERQUE

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8. A possible solution to Comment #7 is to direct the inlet to the landscape area and enlarge the stormwater quality pond. Also, the outlet for the pond can be a sidewalk culvert on 4th Street.



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**



City of Albuquerque

Planning Department Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

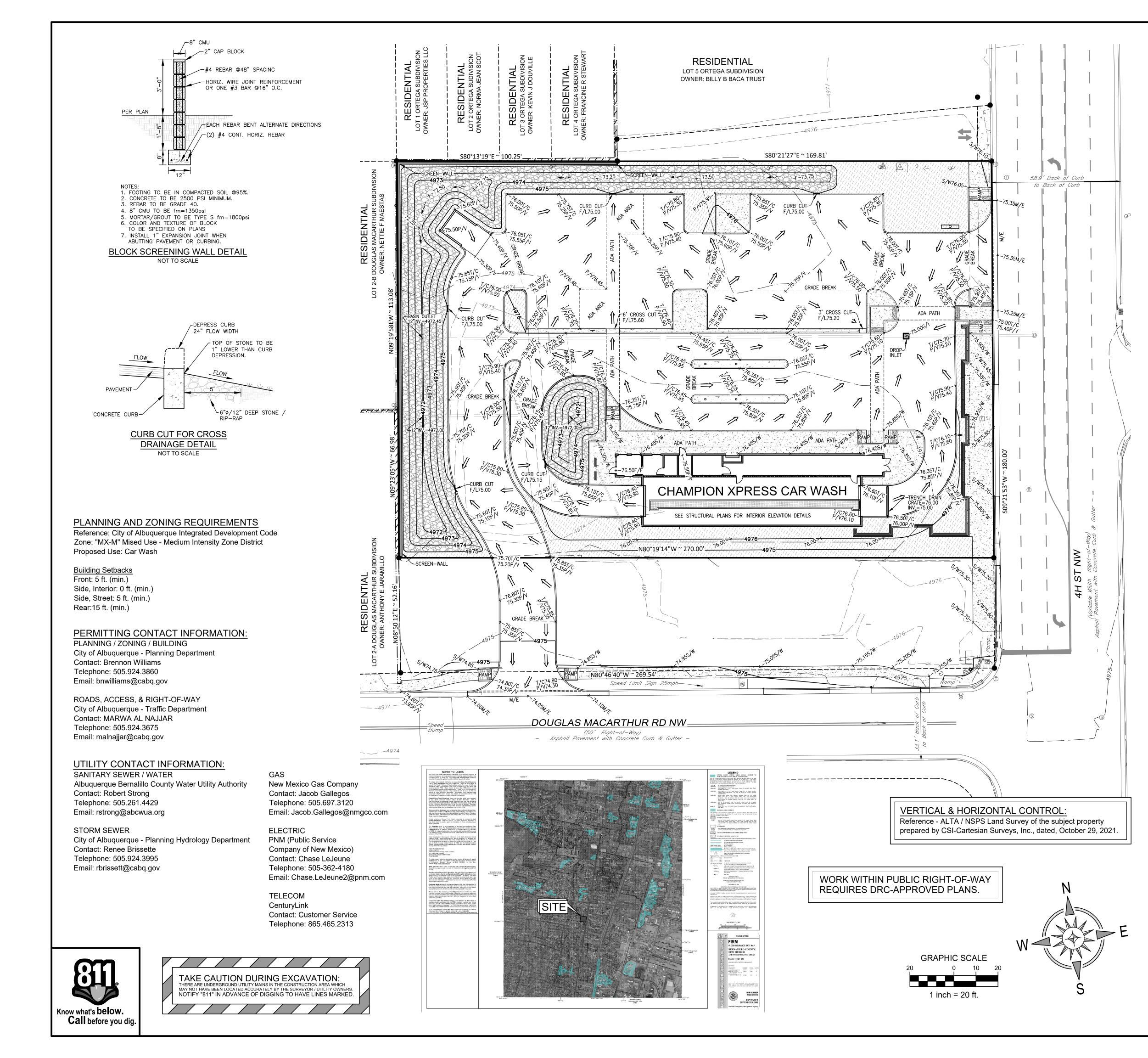
Project Title: Champion Xpress Car Wash	_Building Permit #	:	Hydrology File #:	
DRB#:	_ EPC#:		Work Order#:	
Legal Description: Legal Description: Lot 1	, Block 2 Douglas M	acArthur Subo	division and Tract 112-A-2 M.R.G.C.D	<u>) M</u> ap 32.
City Address: 5307 4TH Street NW, Albuque	erque NM, 87107			
Applicant: Mitchell Monnin			Contact:	
Address: 28 North Cherry Street Germantow	vn, OH 45327			
Phone#: <u>937-388-0060</u>	_Fax#:		E-mail: mmonnin@burkhardti	<u>nc</u> .com
Other Contact: Modulus Architects Address: 100 Sun Ave. NE, suite 600, Albuq	uerque, NM 87109		Contact: <u>Regina Okoye</u>	
Phone#: 505-267-7686	_Fax#:		E-mail: rokoye@modulusarc	hitects.com
TYPE OF DEVELOPMENT: PLAT	(# of lots) RI	ESIDENCE	DRB SITE <u>X</u> ADMIN SIT	E
IS THIS A RESUBMITTAL? Yes	X No			
DEPARTMENT TRANSPORTATION	X HYDROLO	OGY/DRAINA	GE	
Check all that Apply:			ROVAL/ACCEPTANCE SOUGHT:	
TYPE OF SUBMITTAL:			G PERMIT APPROVAL CATE OF OCCUPANCY	
ENGINEER/ARCHITECT CERTIFICATION			ATE OF OCCUPANCE	
PAD CERTIFICATION		PRELIMI	NARY PLAT APPROVAL	
CONCEPTUAL G & D PLAN			N FOR SUB'D APPROVAL	
X GRADING PLAN			N FOR BLDG. PERMIT APPROVAL	
DRAINAGE REPORT	—		AT APPROVAL	
DRAINAGE MASTER PLAN	-			
FLOODPLAIN DEVELOPMENT PERMIT A	APPLIC	SIA/ REL	EASE OF FINANCIAL GUARANTEE	
ELEVATION CERTIFICATE			TION PERMIT APPROVAL	
CLOMR/LOMR			G PERMIT APPROVAL	
TRAFFIC CIRCULATION LAYOUT (TCL)) —	SO-19 AP		
TRAFFIC IMPACT STUDY (TIS)			PERMIT APPROVAL	
STREET LIGHT LAYOUT			G/ PAD CERTIFICATION	
OTHER (SPECIFY)			DER APPROVAL	
PRE-DESIGN MEETING?		CLOMR/L		
			AIN DEVELOPMENT PERMIT	
	-		SPECIFY)	

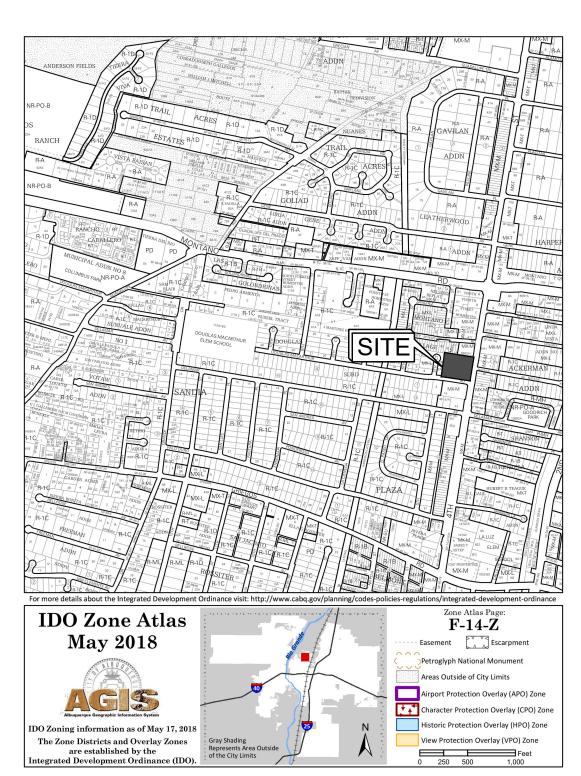
DATE SUBMITTED: May 09, 2022 By: Mitchell Monnin

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:_____





PROJECT SUMMARY

Project will include the demolition and removal of existing structures, vegetation, pavement, etc. as necessary to construct a new Champion Xpress Car Wash and its associated pavement, parking facilities, utilities, landscaping, signage and any other proposed improvements which are needed to service the site.

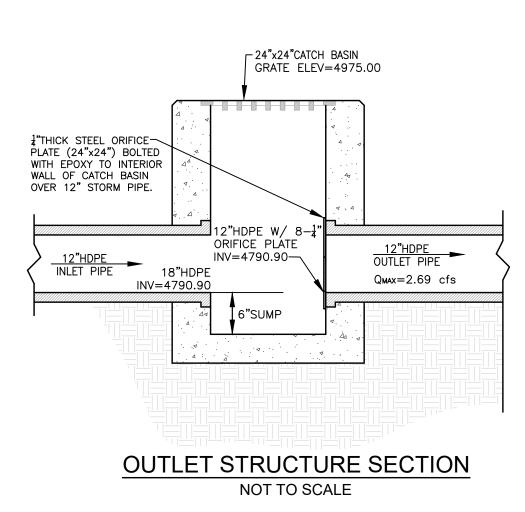
PROPERTY INFORMATION

Address:5307 4th Street NW, Albuquerque NM, 87107 Legal Description: Lot 1, Block 2 Douglas MacArthur Subdivision and Tract 112-A-2 M.R.G.C.D Map 32

Area: 1.1155 acres Zoning: Mixed Use - Moderate Intensity Zone District

Overlay District: CPO-9 Overlay & the UC-MS-PT Plan

Flood Zone Designation: FIRM # 35001C0119G,, effective date: February 4, 2011 Zone "X" : Areas of reduced flood risk due to levee..



GRADING	

I/E	MATCH EXISTING PAVEMENT GRADE
:/W	SIDEWALK PAVEMENT
·/c	TOP-OF-CURB
¢∕V	CONCRETE PAVEMENT
/F	FINISHED FLOOR GRADE
7/L	FLOW LINE OF 3' CURB CUT
=	SHEET FLOW
~	GUTTER FLOW
0.00	PROP. SPOT ELEVATION
000	PROP. CONTOUR
	LANDSCAPE AREA



Private Drainage Facilities within City Right-of-Way Notice to Contractor (Special Order 19 ~ "SO-19")

- 1. Build sidewalk culvert per COA STD DWG 2236. Work is
- permitted and inspected by DMD Construction Services Division. 2. An excavation permit will be required before beginning any
- work within City Right-of-Way.
- 3. 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.
- 4. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [of (505) 260-1990] for the location of existing utilities.
- 5. Prior to construction, the contractor shalle xcavate 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.
- 6. Backfill compaction shall be 95%.
- 7. Maintenance of the facility shall be the responsibility of the owner of the property being served.
- 8. Work on arterial streets may be required on a 24-hour basis. 9. For excavation and barricading inspections, contact DMD Construction Services Division.

STORM WATER MANAGEMENT NOTES:

Existing Lot Coverage - 100% pervious Proposed Lot Coverage - 72% impervious / 28% landscaping

Net Increase in Storm Water Runoff due to Development

Methodology:

Albuquerque Development Process Manual Chapter 6, Section 2, Part A;

"A simplified procedure for projects with sub-basins smaller than 40 acres has been developed based on initial abstraction / uniform infiltration precipitation losses and Rational Method procedures."

The proposed detention basin outlets to 4th St. NW at lower release rates than the existing conditions as shown in the table below. The Access road from the South partially drains into the Basin and the area south of the building does not. In calculating the Tributary area of the Basin, these two areas were considered offsetting.

Precipitation Zone:

Precipitation Zone 2: "Between the Rio Grande and San Mateo"

Drainage Summary:

Area = 1.06 acre (Tributary Area to Basin) Treatment C (Desert Landscaping Area) - 28% = 0.30 acres Treatment D (Impervious Area) - 72% = 0.76 acres 100-year peak Discharge Rate = 4.05 cfs/acre (Table 6.2.14)

$Q_{100} = 4.05$ cfs (Proposed)

Q₁₀₀ = 2.71 cfs (Existing 100-year Discharge Rate)

Provided Detention Storage Volume:

Elevation	Contour Area	Incremental Vol.	∑Volume
(ft)	(sq-ft)	(cu-ft)	(cu-ft)
4,972	340	0	0
4,973	1,695	1,017	1,017
4,974	3,942	2,818	3,836
4,975	6,649	5,295	9,131
*Average End Area Method used to calculate storage volumes.			

 V_{100} = 7,581 cu-ft (6-hour 100-year Storage Volume) *Table 6.2.13 & Equation 6.1

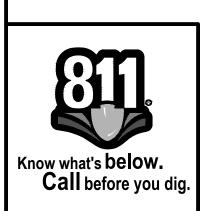
Provided Volume exceeds Required Volume (min.)

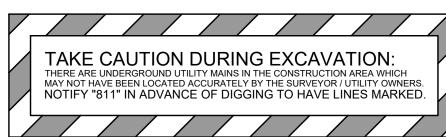
Stage Storage Discharge Summary:		
Elevation	Storage Volume	Discharge
(ft)	(sq-ft)	(cu-ft)_
4,972	340	0.00 WQV
4,972.45	806	0.00
4,973	1,017	0.80
4,974	3,836	1.96
4,975	9,131	2.66

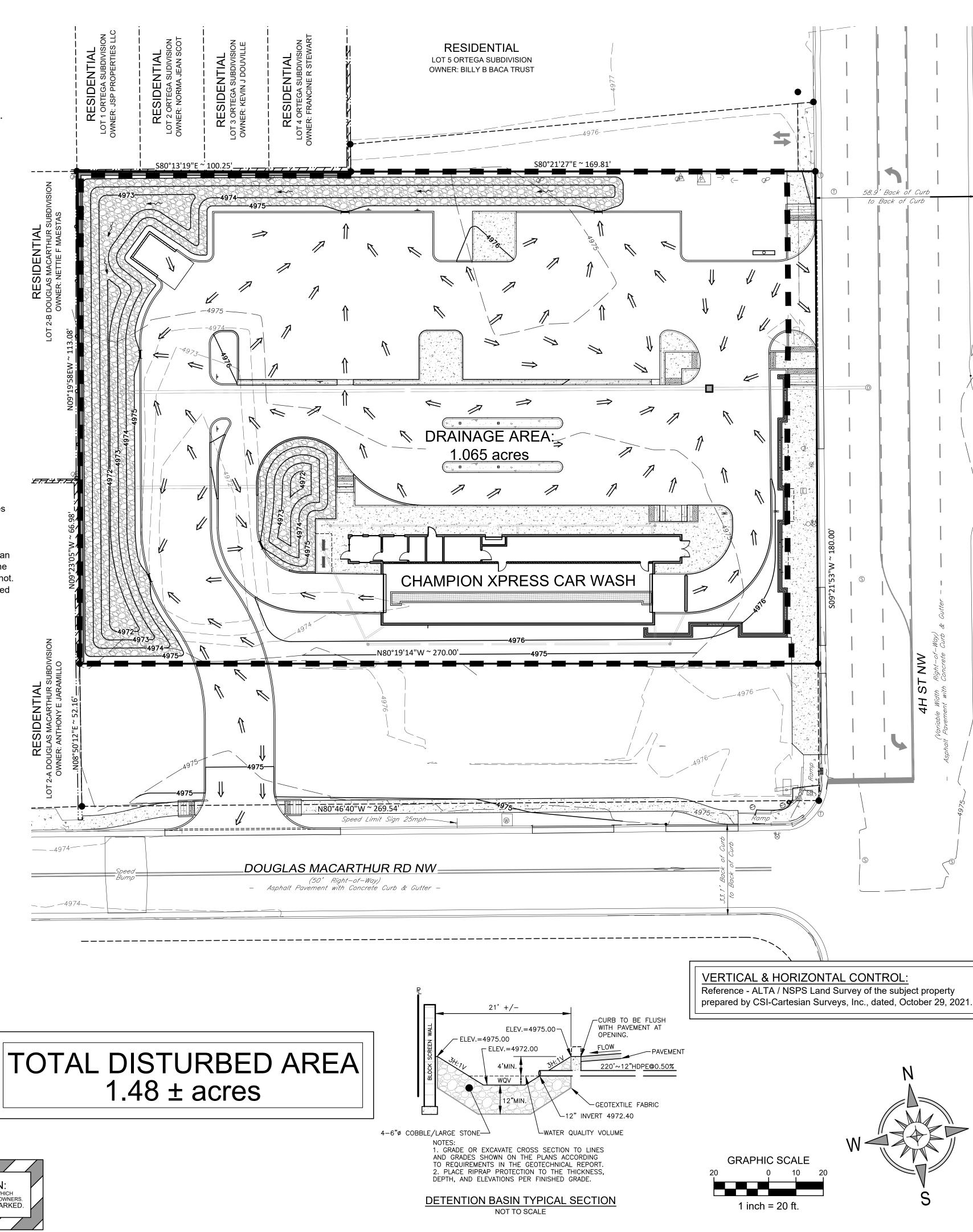
Storm Water Quality Volume (WQV) = Impervious Area x 0.26 inches WQV = 750 cu-ft (Required) WQV = 806 cu-ft (Provided)

 $Q_{\text{Discharge}} = 2.66 \text{ cu-ft} < 2.71 \text{ cu-ft} = Q_{\text{Existing}}$

No adverse effects to neighboring properties or public right-of-way is anticipated due to site development.







GENERAL GRADING, EARTHWORK & DRAINAGE NOTES

- 1. All spot elevations indicated in pavement areas are at bottom face of curb and/or finished pavement grade unless noted otherwise. All spot elevations indicated in grass or landscape areas are finished grade unless noted otherwise.
- 2. The Contractor shall be responsible for the removal and disposal of all vegetation and organic materials from the site that results from clearing & grubbing activities.
- 3. The Contractor shall be responsible for stripping and removal of all excess topsoil from the site. All topsoil that cannot be used on site shall be removed from the site at the Contractor's expense. The Contractor may dispose of excess topsoil by burying topsoil in landscape areas only at the direction of the Owner or the Owner's Representative.
- 4. The Contractor will be responsible for all safety requirements and for the protection of all existing and proposed utilities or structures during earthwork procedures.
- 5. The Contractor shall be responsible for the import of structural fill materials if suitable material is not available on site. The location and testing of suitable material shall be the Contractor's responsibility. The Contractor shall be responsible for the export and disposal of all excess or unsuitable materials.
- 6. The Contractor shall provide construction dewatering as necessary to complete construction as outlined in plans.
- 7. The Contractor shall exercise extreme care in establishing all grades and slopes in pavement areas, ramps and sidewalks in the vicinity of handicap parking and access areas and shall comply with Federal, State, and Local Codes.
- 8. In areas where sheet drainage flows from grass or landscape areas onto paved areas, the finished grade in grass or landscape areas shall be 1/2 inch above the top of curb or above the pavement in areas without curb. In areas where sheet drainage flows from pavement to grass or landscaped areas, the finished grade in grass or landscape areas shall be 1/2 inch below the pavement.
- 9. The Contractor shall provide positive drainage in all areas and away from all buildings.
- 10. All pavement shall be laid on a straight, even, and uniform grade with a minimum of 1:100 (1.0%) slope toward the collection points unless otherwise specified on plans. Cut or fill slopes in unpaved areas shall not exceed 3:1 (33.3%) maximum grade unless otherwise noted on plans.
- 11. ADA accessible areas shall not exceed the following slopes:
 - Ramps 1:12 (8.3%) max.
 - Routes 1:20 (5.0%) max.
 - Parking 1:50 (2.0%) max.
 - Cross Slopes 1:50 (2.0%) max.
- 12. The Contractor shall adjust tops/lids/grates of all cleanouts, manholes, inlets, valves, etc. to match final grade.
- 13. Following grading of subsoil to subgrade elevations, the Contractor shall provide 4" of topsoil (minimum) in all disturbed areas which are not to be paved. Final grades should be smoothly finished to surrounding areas and ensure positive drainage. Stockpiled topsoil shall be screened prior to respreading and should be free of subsoil, debris, and stones.
- 14. The Contractor shall be responsible for determining exact quantities of cut and/or fill for estimating and construction and should alert the Engineer of any excessive cut and/or fill, especially if additional cut and/or fill will be required due to poor existing soil conditions discovered during earthwork operations.
- 15. Refer to the Architectural and Structural Plans for information regarding any perimeter foundation drains.
- 16. The Contractor shall obtain a copy of the Geotechnical / Soils Report and become thoroughly familiar with site and subgrade information and fully implement recommendations given therein.

GRADING LEGEND		
M/E	MATCH EXISTING PAVEMENT GRADE	
E/P	EDGE-OF-PAVEMENT (NO CURB)	
S/P	SIDEWALK PAVEMENT	
T/C	TOP-OF-CURB	
C/P	CONCRETE PAVEMENT	
G/T	GUTTER FLOW LINE	
F/F	FINISHED FLOOR GRADE	
T/G	CONVEYOR TRENCH GRATE ELEVATION	
F/L	FLOW LINE OF 3' CURB CUT	
\Leftarrow	SHEET FLOW	
~ ~	GUTTER FLOW	
+00.00	PROP. SPOT ELEVATION	
0000	PROP. CONTOUR	
	LANDSCAPE AREA	
	ROCK LINER / RIP-RAP	

