CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



February 20, 2024

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

RE: Champion Xpress Car Wash

5307 4th Street NW

Permanent C.O. - Accepted

Engineer's Certification Date: 02/08/24

Engineer's Stamp Date: 08/12/22

Hydrology File: F14D036A

Dear Mr. Morrissey:

PO Box 1293

Based on the Certification received 02/12/2024 and site visit on 02/16/2024, this letter serves as a "green tag" from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque

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

NM 87103 Sincerely,

www.cabq.gov

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

Renée C. Brissette

Planning Department



City of Albuquerque Planning Department

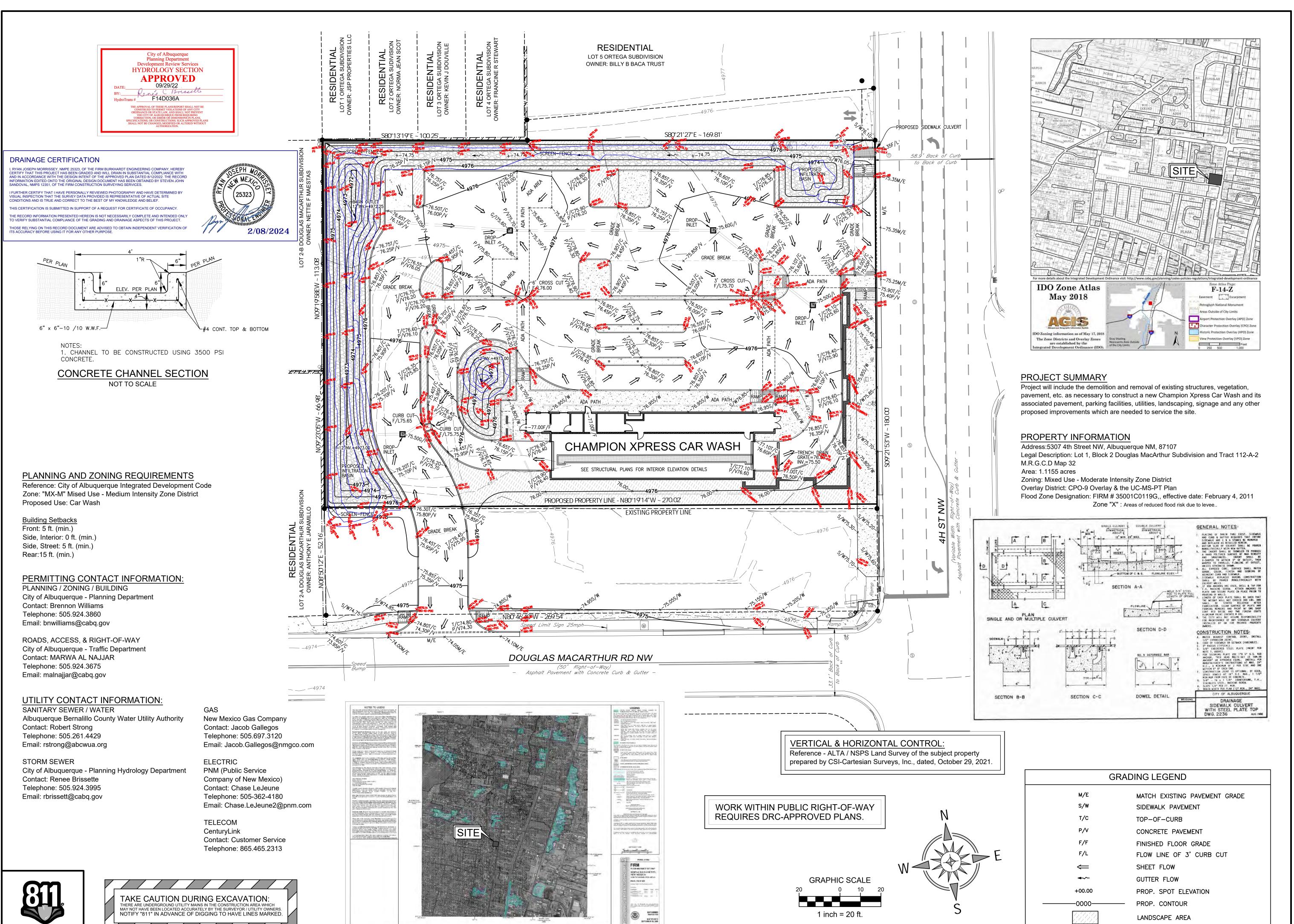
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: Champion Xpress Car Wash	Hydrology File # F14D036A	
Legal Description: Lot 1, Block 2 Douglas MacArthur Subdivision	and Tract 112-A-2 M.R.G.C.D Map 32.	
City Address, UPC, OR Parcel: 5307 4th street NW		
Applicant/Agent: Burkhardt Engineering	Contact: Mitchell Monnin	
Address: 28 North Cherry Street Germantown, OH 45327	Phone: 937-895-4488	
Email: mmonnin@burkhardtinc.com		
Applicant/Owner: Modulus Architects	Contact: Regina Okoye	
Address: 100 Sun Ave. NE, suite 600, Albuquerque, NM 87109	Phone: 505-267-7686	
Email: rokoye@modulusarchitects.com		
(Please note that a DFT SITE is one that needs Site Plan A	pproval & ADMIN SITE is one that does not need it.)	
TYPE OF DEVELOPMENT: PLAT (#of lots) RESIDENCE		
✓ DFT SITE	ADMIN SITE	
RE-SUBMITTAL: YES V NO		
RE-SOBWITTAL. TES V NO		
DEPARTMENT: ■ TRANSPORTATION •	HYDROLOGY/DRAINAGE	
Check all that apply under Both the Type of Submittal	and the Type of Approval Sought:	
TYPE OF SUBMITTAL:	TYPE OF APPROVAL SOUGHT:	
✓ ENGINEER/ARCHITECT CERTIFICATION	BUILDING PERMIT APPROVAL	
PAD CERTIFICATION	✓ CERTIFICATE OF OCCUPANCY	
CONCEPTUAL G&D PLAN	CONCEPTUAL TCL DFT APPROVAL	
GRADING & DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL	
DRAINAGE REPORT	FINAL PLAT APPROVAL	
DRAINAGE MASTER PLAN	SITE PLAN FOR BLDG PERMIT DFT	
CLOMR/LOMR	APPROVAL	
TRAFFIC CIRCULATION LAYOUT (TCL)	SIA/RELEASE OF FINANCIAL GUARANTEE	
ADMINISTRATIVE	FOUNDATION PERMIT APPROVAL	
TRAFFIC CIRCULATION LAYOUT FOR DFT APPROVAL	GRADING PERMIT APPROVAL	
TRAFFIC IMPACT STUDY (TIS)	SO-19 APPROVAL	
STREET LIGHT LAYOUT	PAVING PERMIT APPROVAL	
OTHER (SPECIFY)	GRADING PAD CERTIFICATION	
o Tilbit (of Boli 1)	WORK ORDER APPROVAL	
	CLOMR/LOMR	
	OTHER (SPECIFY)	

REV. 09/13/23

DATE SUBMITTED: <u>02/08/2024</u>



Know what's **below.**

Call before you dig.

 $\overline{\Box}$

53 Albuq

Design: RJM Proj: 21.262 Draw: MCM Dwg: 21-262.dwg Check: RJM Tab: C3.0-GP

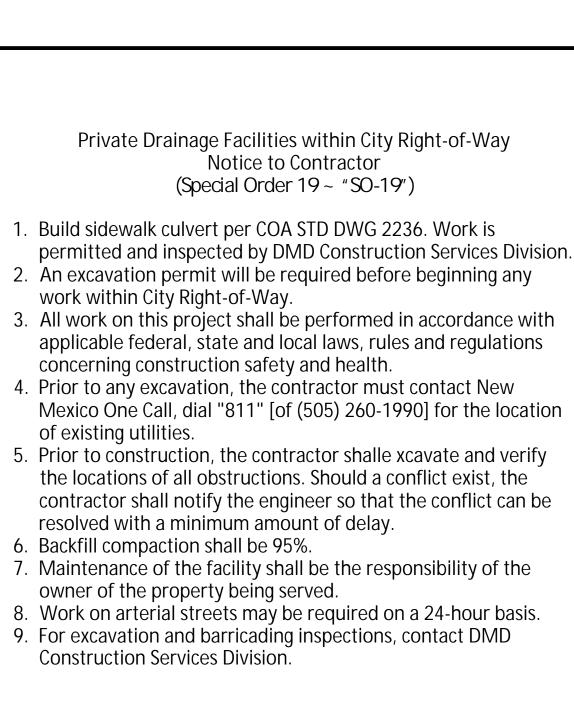
Scale: 1" = 20'

07.08.2022

GRADING PLAN

Sheet No.:

C - 3.0



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.
- 9. For excavation and barricading inspections, contact DMD

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."

£1.747.15

Basin Storage Volume (As-Built):

124

603

1,834

5,975

4972.00

4974.00

4975.72

Contour Area Surface Vol. Stone Vol.

375

1,538

4,039

7,287

*Average End Area Method used to calculate storage volumes.

*Stone Storage at Elevation = 5"(depth) x 40% void space.

The proposed infiltration basin has an emergency overflow that 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)

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

 Q_{100} = 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	56	0	0
4,973	517	286	286
4,974	1,989	1,253	1,539
4,975	4,447	3,218	4,757
4,975.5	5 5,998	3,299	8,056

*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.)

Site Overflow Check (Sidewalk Culvert)

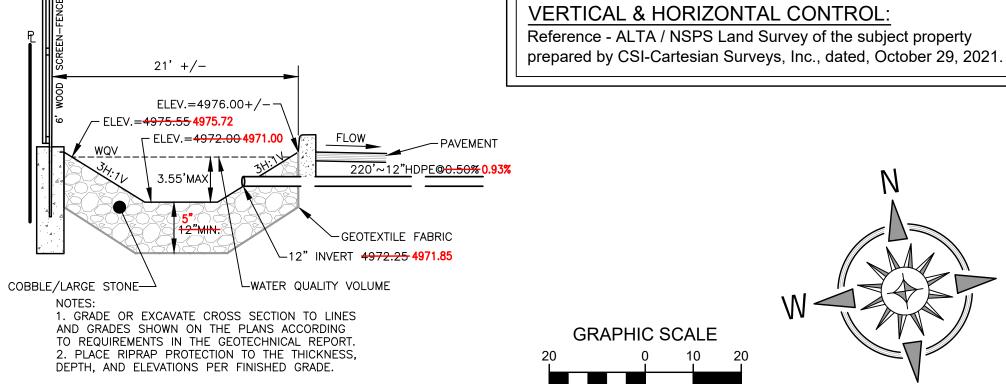
In an emergency the infiltration basin would overflow through a 4' wide sidewalk culvert and discharge on 4th street. Proposed Q-100 = 4.05 cfs

Solving for H @ (Q = 4.05), H = 0.23' < 0.5' *Hight was solved using Q=CLH $^{(\frac{2}{3})}$, (C=2.7), (L=4')

Storm Water Quality Volume (WQV) = Impervious Area x 0.42 inches WQV = 1,211 cu-ft (Required) WQV = 8,056 cu-ft (Provided)

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

TOTAL DISTURBED AREA 1.48 ± acres



DRAINAGE CERTIFICATION

RESIDENTIAL

LOT 5 ORTEGA SUBDIVISION

OWNER: BILLY B BACA TRUST

100'~12"HDPE@0.50%

24"x24" CATCH BASIN

 \Rightarrow

W/TRAFFIC DUTY GRATE GRATE=4975.60-4975.66 12"INV(E&W)=4972.30-4972.59

"x24" CATCH BASIN—

 \Rightarrow

 \gg

DRAINAGE AREA:

PROPOSED PROPERTY LINE - N80°19'14"W ~ 270.02'

N80° 46' 40' W ~ 269.54'

Speed Limit Sign 25mph—

DOUGLAS MACARTHUR RD NW

(50' Right-of-Way)

CHAMPION XPRESS CAR WASH

12"INV(SE&W)=4972.70\4973.05

SERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 8/12/2022. THE RECORD NFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY STEVEN JOHN

THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

ISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY

24"x24" CATCH BASIN— W/TRAFFIC DUTY GRATE A GRATE=4975.50 4975.24

 $12"INV(NW) = \frac{4972.95}{12}$

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
- 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.

2/08/2024

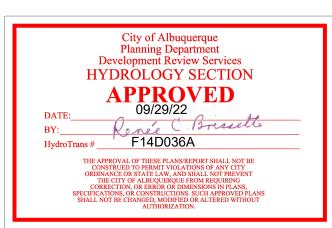
-PROPOSED SIDEWALK CULVERT

58.9' Back of Curb

- 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
- 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
- 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
- 9. The Contractor shall provide positive drainage in all areas and away from all
- 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
- 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	
	SHEET FLOW	
* ~	GUTTER FLOW	
+00.00	PROP. SPOT ELEVATION	
0000	PROP. CONTOUR	
	LANDSCAPE AREA	
	ROCK LINER / RIP-RAP	



53 ALBUC

Design: RJM Proj: 21.262 Draw: MCM Dwg: 21-262.dwg Check: RJM Tab: C3.1-GP

Scale: 1" = 20' 07.08.2022

GRADING PLAN

し-3.



TAKE CAUTION DURING EXCAVATION: THERE ARE UNDERGROUND UTILITY MAINS IN THE CONSTRUCTION AREA WHICH MAY NOT HAVE BEEN LOCATED ACCURATELY BY THE SURVEYOR / UTILITY OWNERS. NOTIFY "811" IN ADVANCE OF DIGGING TO HAVE LINES MARKED.

*Provided Volume exceeds Required Volume Asphalt Pavement with Concrete Curb & Gutter ______

(cu-ft)

101

543

1,004

476

1,846

4,582

8,291

-24"x24" CATCH BASIN

、12"INV(W)=4973.00**4973.3**

4-6"ø COBBLE/LARGE STONE-

DETENTION BASIN TYPICAL SECTION NOT TO SCALE

