# CITY OF ALBUQUERQUE

*Planning Department* Brennon Williams, Director



Mayor Timothy M. Keller

January 29, 2021

Jeffery Wooten, P.E. Wooten Engineering 1005 21<sup>st</sup> St SE, Suite A5 Rio Rancho, NM 87124

# RE: Mesa Del Sol International School Bobby Foster and Newhall Grading Plan Stamp Date: 1/18/2021 Hydrology File: R16D099

Dear Mr. Wooten:

Based on the submittal received on 1/19/21, the Grading and Drainage Plan is approved for Grading Permit.

Prior to Building Permit:

- Albuquerque 1. Once a Plat with related Infrastructure List is recorded and in place to account for offsite access and other site supporting infrastructure you come back for Building Permit.
- NM 87103
  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.

## Prior to Certificate of Occupancy (For Information):

- 3. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision is required.*
- 4. A Bernalillo County Recorded <u>Drainage Covenant (No Public Easement)</u> is required for the stormwater ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.

# CITY OF ALBUQUERQUE

*Planning Department* Brennon Williams, Director



Mayor Timothy M. Keller

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

Sincerely,

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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



# City of Albuquerque

Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Building Permit #:	Hydrology File #:
EPC#:	Work Order#:
Del Sol Innovation Park	
	Contact: Jeffrey T. Wooten, P.E.
1 87171	
	E-mail: jeffwooten.pe@gmail.com
	Contact:
Fax#:	E-mail:
	DRB SITE X ADMIN SITE
$\frac{X}{Y}$	GY/ DRAINAGE
X    BUIL      ON    CER      PRE    PRE      SITE    SITE      SITE    <	APPROVAL/ACCEPTANCE SOUGHT: LDING PERMIT APPROVAL TIFICATE OF OCCUPANCY LIMINARY PLAT APPROVAL E PLAN FOR SUB'D APPROVAL E PLAN FOR BLDG. PERMIT APPROVAL AL PLAT APPROVAL 'RELEASE OF FINANCIAL GUARANTEE INDATION PERMIT APPROVAL ADING PERMIT APPROVAL 19 APPROVAL 'ING PERMIT APPROVAL ADING/ PAD CERTIFICATION RK ORDER APPROVAL OMR/LOMR
	EPC#: Del Sol Innovation Park Fax#: Fax#: OF LOTS)RESIDENCE YesNo DRTATION HYDROLO ORTATION HYDROLO ON

DATE SUBMITTED: November 17, 2020 By: Jeffrey T. Wooten, P.E.

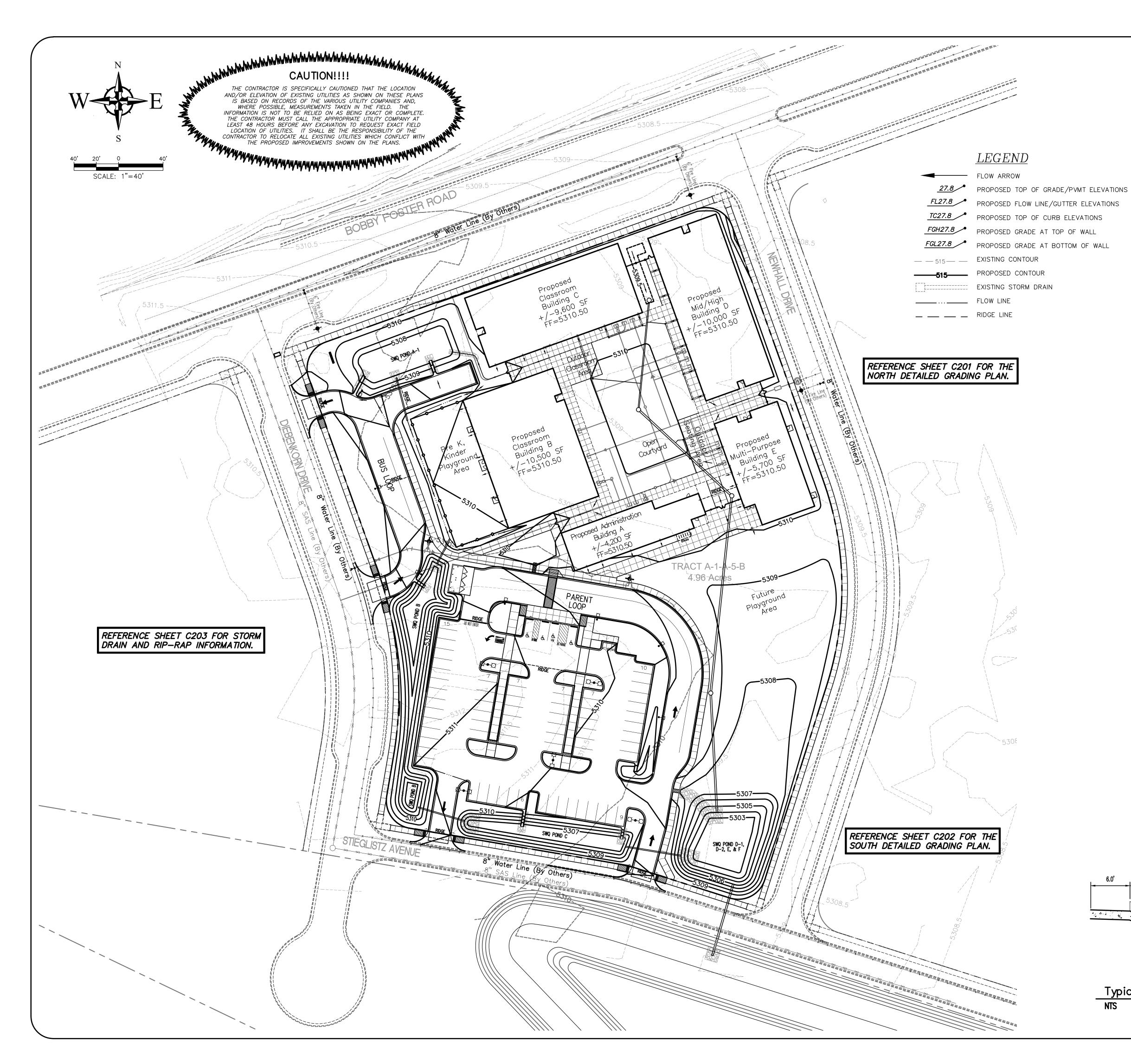
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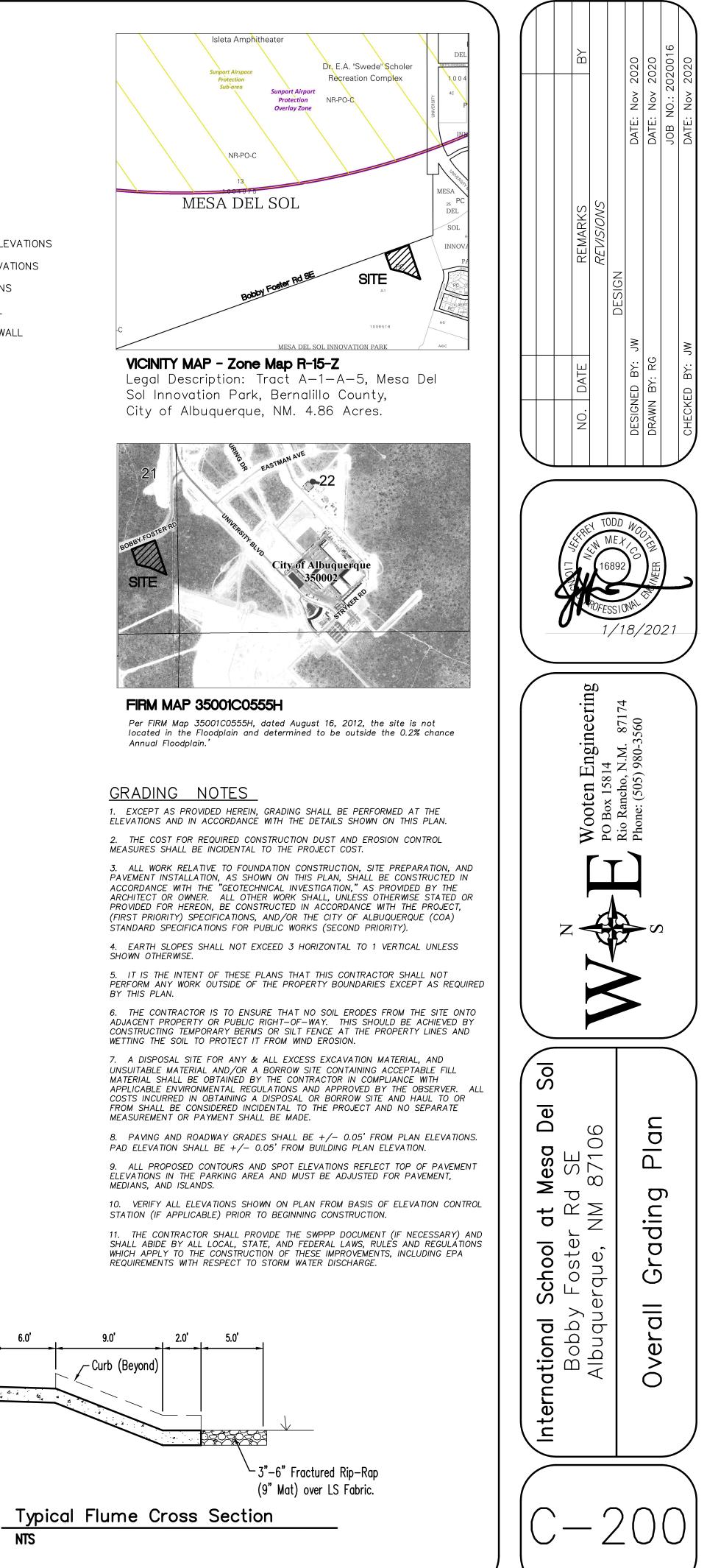
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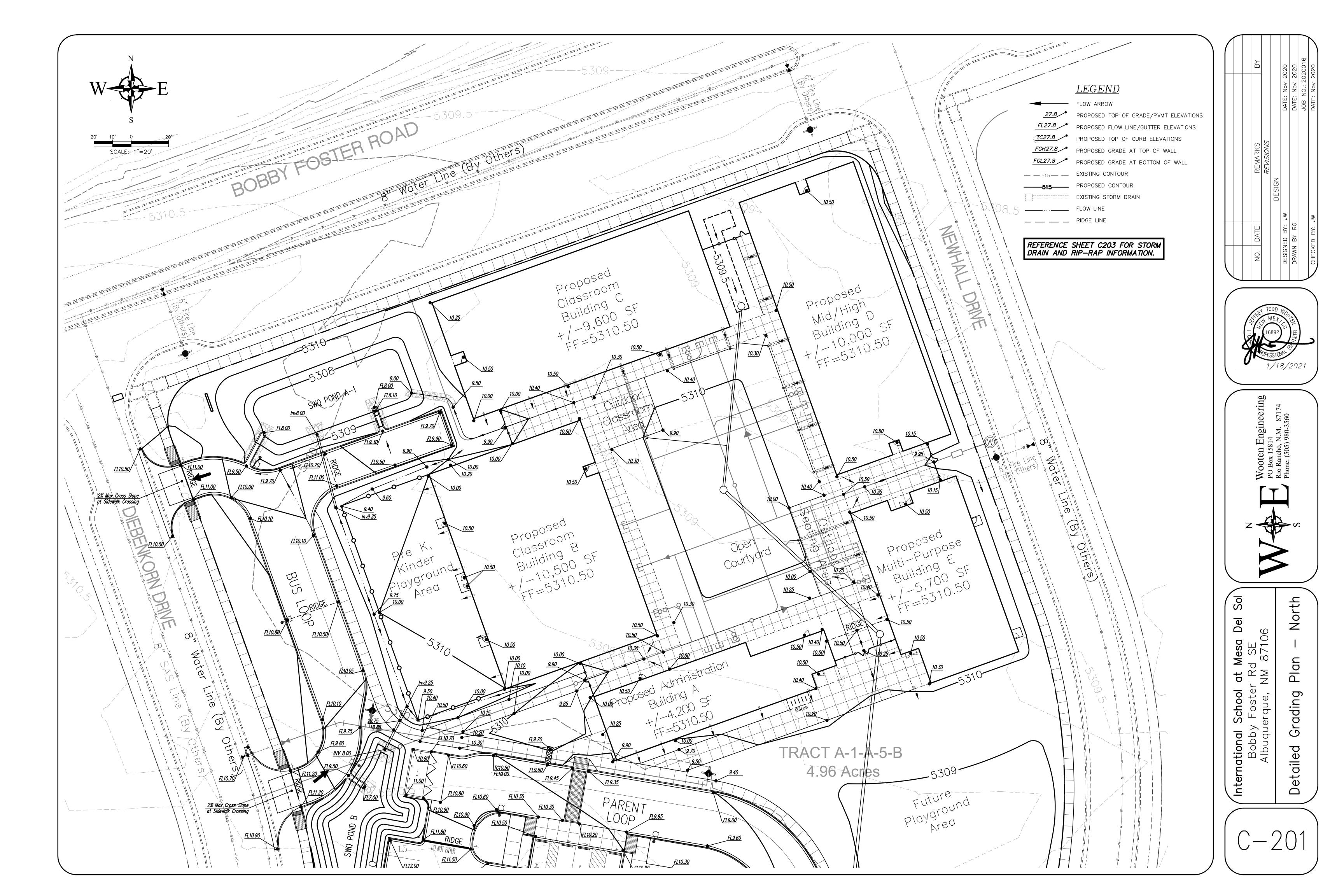
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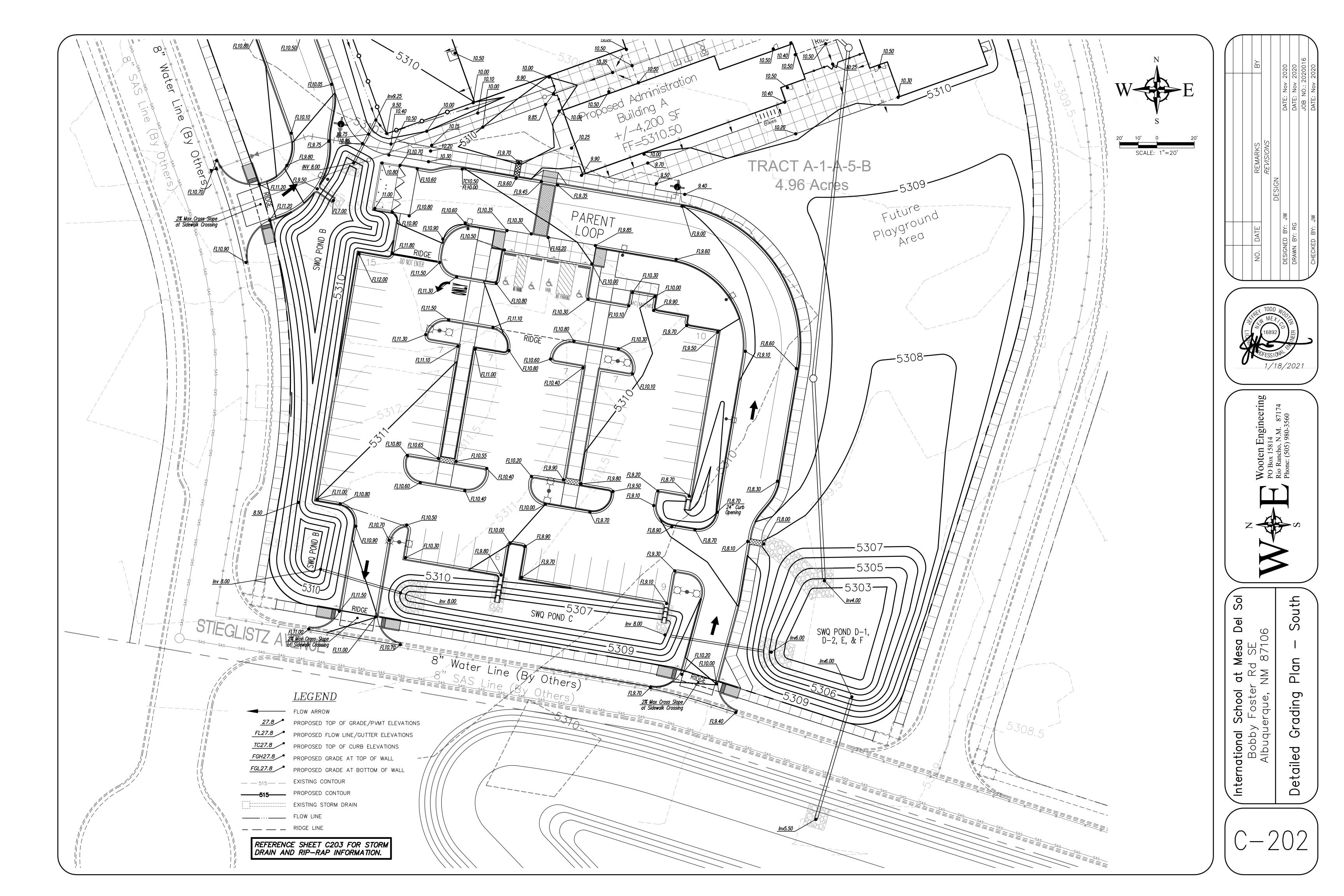
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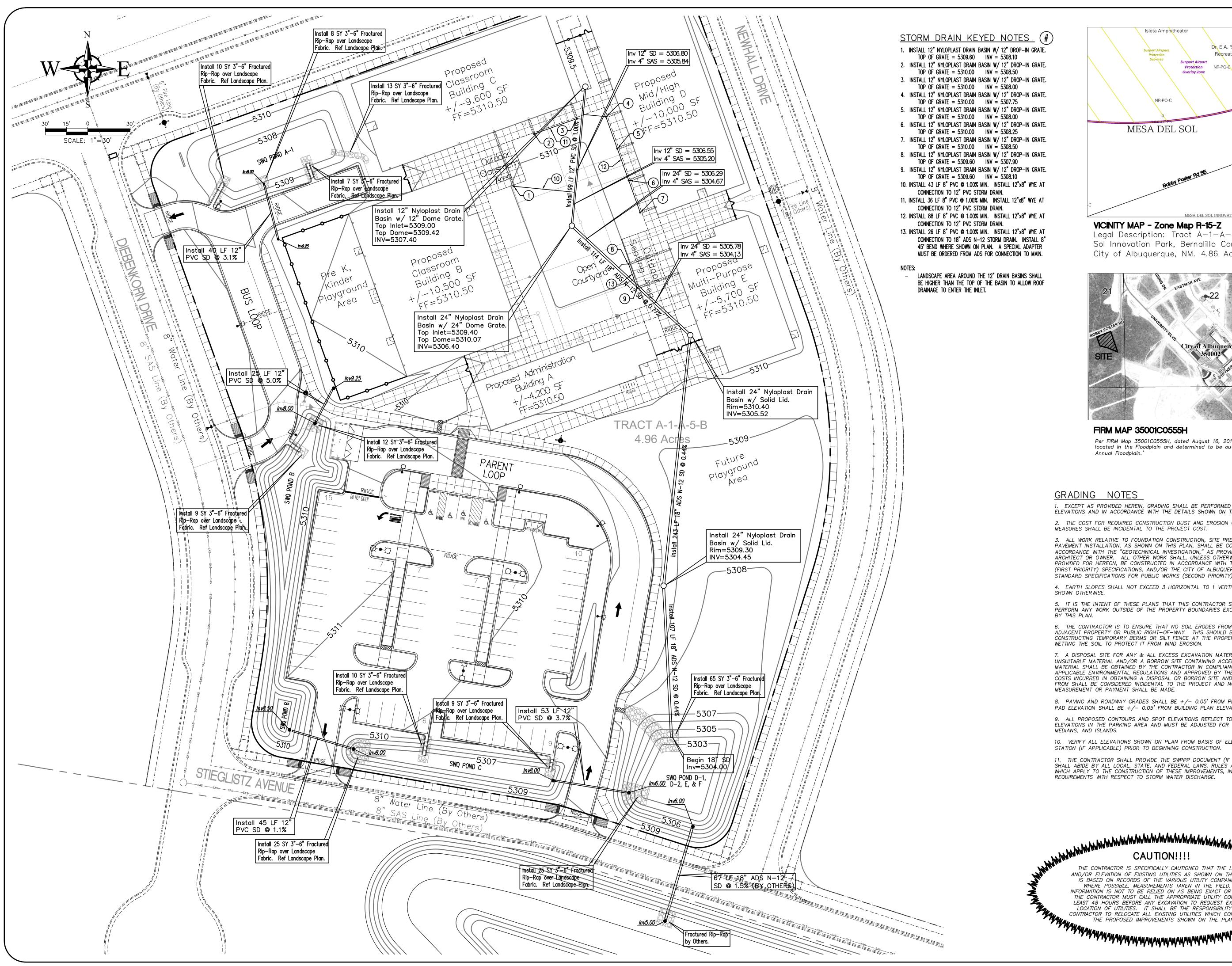
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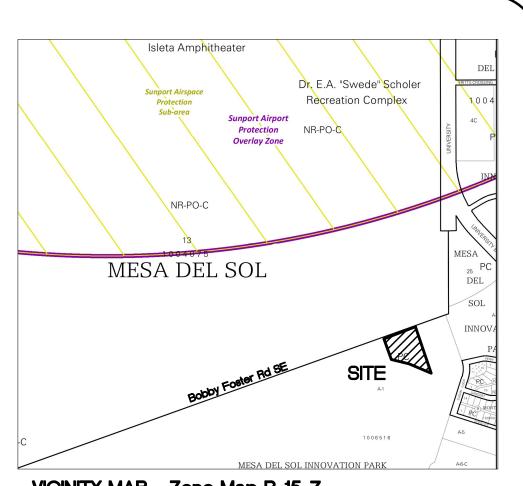




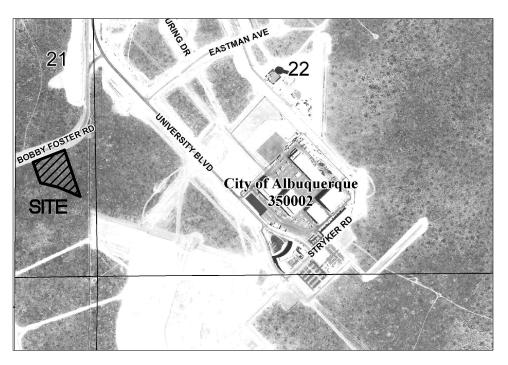








VICINITY MAP - Zone Map R-15-Z Legal Description: Tract A-1-A-5, Mesa Del Sol Innovation Park, Bernalillo County, City of Albuquerque, NM. 4.86 Acres.



FIRM MAP 35001C0555H

Per FIRM Map 35001C0555H, dated August 16, 2012, the site is not located in the Floodplain and determined to be outside the 0.2% chance Annual Floodplain.'

# <u>GRADING NOTES</u>

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.

2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.

3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).

4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.

5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.

6. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.

7. A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

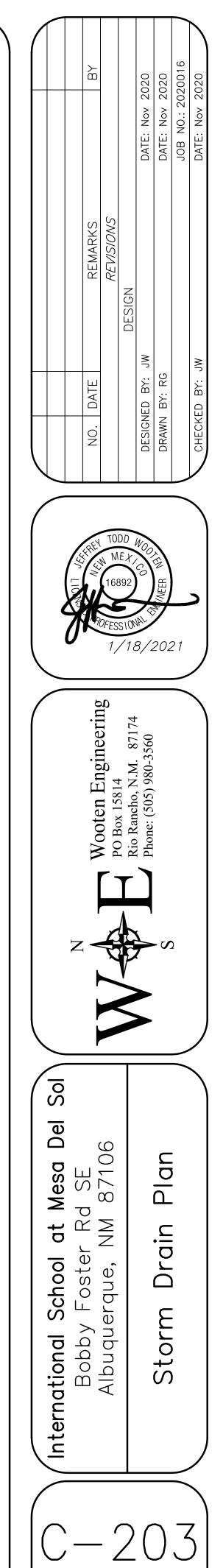
8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.05' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.

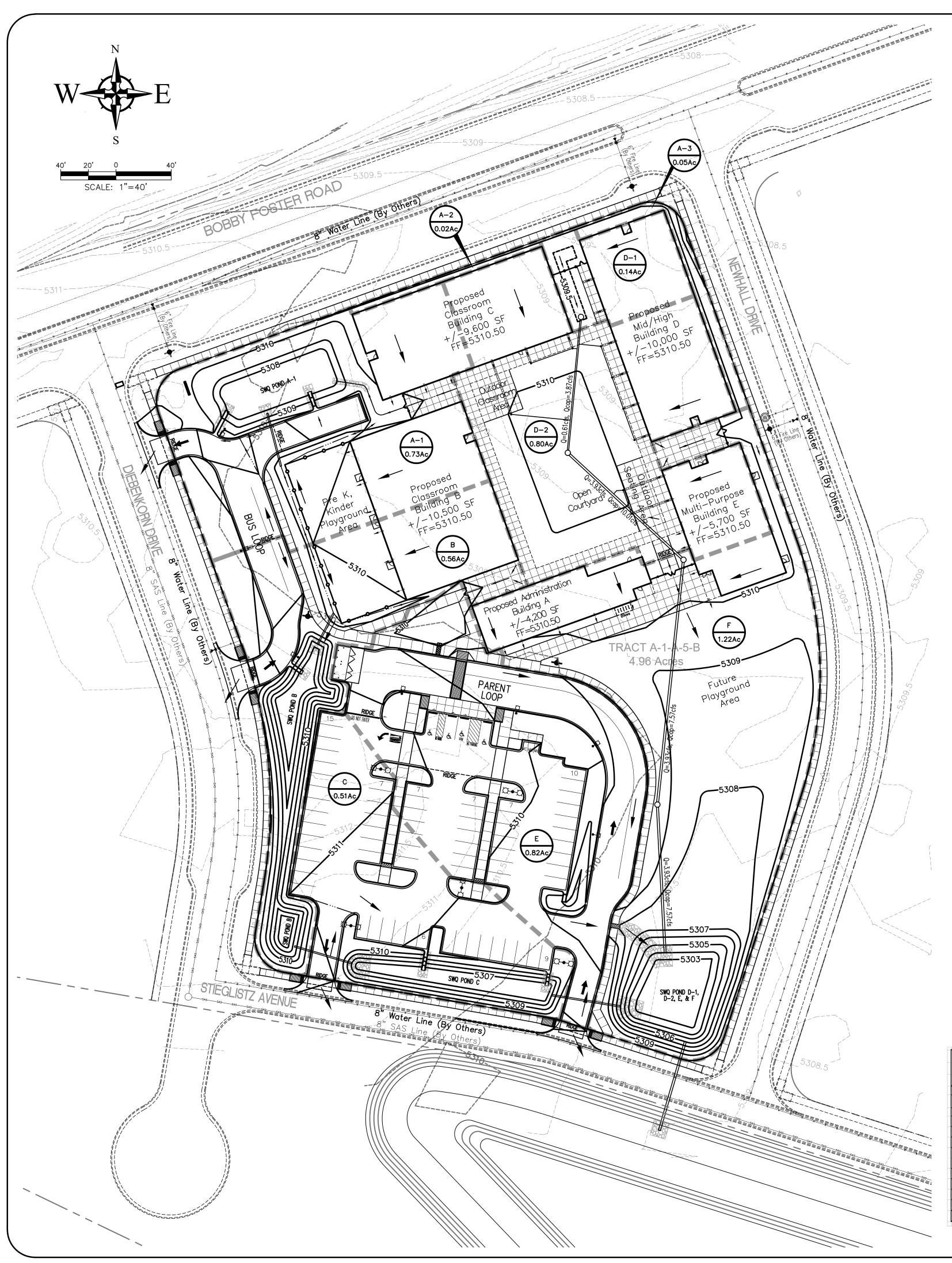
9. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR PAVEMENT, MEDIANS, AND ISLANDS.

10. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION (IF APPLICABLE) PRIOR TO BEGINNING CONSTRUCTION.

11. THE CONTRACTOR SHALL PROVIDE THE SWPPP DOCUMENT (IF NECESSARY) AND SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.

CAUTION !!!! IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.





# DRAINAGE MANAGEMENT PLAN

## INTRODUCTION

The purpose of this submittal is to provide a final grading plan for the subject site located along Bobby Foster Rd SE in Albuquerque, NM. The site is legally described as Tract A-1-A-5, Mesa Del Sol Innovation Park. The overall development contains approximately 4.86 acres and is located at the southwest corner of Bobby Foster Rd SE and the proposed Newhall Drive SE. The site is being developed as a new Charter School serving grades Pre-K through 12. The site does not currently have a City Drainage File Number assigned to it; however, it is our understanding that Huitt Zollars is in the process of making a Master Drainage Plan submittal for this area on bable of Masa Del Sol Innovation Park. for this area on behalf of Mesa Del Sol Innovation Park.

## EXISTING HYDROLOGIC CONDITIONS

The site is currently undeveloped and generally slopes from northwest to southeast. The only existing road adjacent to the site is Bobby Foster to the north.

## PROPOSED HYDROLOGIC CONDITIONS

The proposed development is a new Charter School that will consist of five new buildings as shown on these plans. The perimeter roads shown on the plan other than Bobby Foster are proposed by Mesa Del Sol Innovation Park (designed by Huitt Zollars) and are to be built prior to the opening of this facility. The site will continue to conform with existing drainage patterns; however, the drainage from impervious areas will be routed through new onsite Stormwater Quality Ponds and ultimately discharge to a community pond to the south of the site. This pond is currently being design by Huitt Zollars. Reference the Drainage Calculations Table this sheet as well as the Impervious Area Calculations and the Stormwater Quality Ponding Calculations for additional information.

#### CONCLUSION

This drainage management plan conforms to the requirements of the City of Albuqueruque DPM, Chapter 6.2, and will drain per the Huitt Zollars Master Drainage Plan that is currently being prepared. With this submittal, we are requesting Building Permit approval.

# IMPERVIOUS AREA CALCULATIONS

<u>BASIN A-1</u> TOTAL BASIN AREA: 31,742 SF PERVIOUS AREA: 18,200 SF (57.3%) IMPERVIOUS AREA: 13,542 SF (42.7%)

<u>BASIN A-2</u> TOTAL BASIN AREA: 730 SF PERVIOUS AREA: 730 SF (100.0%) IMPERVIOUS AREA: 0 SF (0.0%)

<u>BASIN A-3</u> TOTAL BASIN AREA: 2,170 SF PERVIOUS AREA: 2,170 SF (100.0%)

IMPERVIOUS AREA: 0 SF (0.0%) <u>BASIN B</u>

TOTAL BASIN AREA: 24,381 SF PERVIOUS AREA: 14,496 SF (59.5%) IMPERVIOUS AREA: 9,885 SF (40.5%)

<u>BASIN C</u> TOTAL BASIN AREA: 22,414 SF PERVIOUS AREA: 6,722 SF (30.0%)

IMPERVIOUS AREA: 15,692 SF (70.0%) BASIN D-1 TOTAL BASIN AREA: 6,200 SF

PERVIOUS AREA: 1,567 SF (25.3%) IMPERVIOUS AREA: 4,633 SF (74.7%) <u>BASIN D-2</u>

TOTAL BASIN AREA: 34,830 SF PERVIOUS AREA: 12,229 SF (35.1%) IMPERVIOUS AREA: 22,601 SF (64.9%)

<u>BASIN E</u> TOTAL BASIN AREA: 35,857 SF

PERVIOUS AREA: 5,750 SF (16.0%) IMPERVIOUS AREA: 30,107 SF (84.0%) <u>BASIN F</u>

# TOTAL BASIN AREA: 53,322 SF

PERVIOUS AREA: 40,676 SF (76.3%) IMPERVIOUS AREA: 12,646 SF (23.7%)

<u>ENTIRE SITE</u> TOTAL BASIN AREA: 211,636 SF

PERVIOUS AREA: 100,735 SF (47.6%) IMPERVIOUS AREA: 110,901 SF (52.4%) STORMWATER QUALITY POND CALCULATIONS

<u>BASIN A-1</u> TOTAL IMPERVIOUS AREA = 13,542 SF SWQ VOLUME REQ'D =  $13,542 \times 0.42$ " / 12 = 474 CF TOTAL VOLUME PROVIDED = 8.234 CF <u>BASIN A-2</u>

TOTAL IMPERVIOUS AREA = 0 SF SWQ VOLUME REQ'D = 0 \* 0.42" / 12 = 0 CFTOTAL VOLUME PROVIDED = 0 CF

<u>BASIN A-3</u> TOTAL IMPERVIOUS AREA = 0 SF SWQ VOLUME REQ'D = 0 \* 0.42" / 12 = 0 CFTOTAL VOLUME PROVIDED = 0 CF

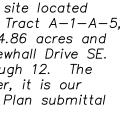
<u>BASIN B</u>

SWQ VOLUME REQ'D = 9,885 \* 0.42" / 12 = <u>346 CF</u> TOTAL VOLUME PROVIDED = <u>1.495 CF</u> <u>BASIN C</u> TOTAL IMPERVIOUS AREA = 15,692 SF

<u>BASINS D-1, D-2, E, & F</u> TOTAL IMPERVIOUS AREA = 69,987 SF SWQ VOLUME REQ'D = 69,987 \* 0.42" / 12 = 2.450 CF TOTAL VOLUME PROVIDED = <u>10,157 CF</u>

FOR FUTURE EXPANSION OF IMPERVIOUS AREA.

			Post	Develo	ped Dra	ainage	Calcula	ations					
	This	table is based o	on the COA D	PM Chapter	6.2, Zone:	2							
BASIN	Area	Area	Lan	d Treatmen	Percentage	es	Q(100)	Q(100)	WT E	V(100) <sub>360</sub>	V(100) <sub>1440</sub>	V(100) <sub>10day</sub>	Comments
	(SQ. FT)	(AC.)	A	В	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)	(CF)	
A-1	31742	0.73	0.0%	0.0%	57.3%	42.7%	3.81	2.77	1.55	4107	4559	5914	Retention Ponding. Overflows to Bobby Foster.
A-2	730	0.02	0.0%	0.0%	100.0%	0.0%	3.14	0.05	1.13	69	69	69	Drains to Bobby Foster - Landscape Only
A-3	2170	0.05	0.0%	0.0%	100.0%	0.0%	3.14	0.16	1.13	204	204	204	Drains to Bobby Foster - Landscape Only
В	24381	0.56	0.0%	0.0%	59.5%	40.5%	3.77	2.11	1.53	3111	3440	4427	Drains to Basin B Ponds; then to Basin C Ponds
С	22414	0.51	0.0%	0.0%	30.0%	70.0%	4.23	2.18	1.82	3405	3928	5497	Drains to Basin C Ponds; then to Basin F Pond
D-1	6200	0.14	0.0%	0.0%	25.3%	74.7%	4.31	0.61	1.87	966	1120	1583	Drains to Basin D-2 Storm Drain
D-2	34830	0.80	0.0%	0.0%	35.1%	64.9%	4.15	3.32	1.77	5145	5898	8159	Drains to Basin D-2 Storm Drain; then to Basin F Pon
E	35857	0.82	0.0%	0.0%	16.0%	84.0%	4.45	3.66	1.96	5861	6865	9877	Drains to Basin F Pond
F	53322	1.22	0.0%	0.0%	76.3%	23.7%	3.51	4.30	1.36	6064	6485	7749	Discharges to Mesa Del Sol Common Ponding
TOTAL	211646	4.86						19.16		28932	32569	43480	



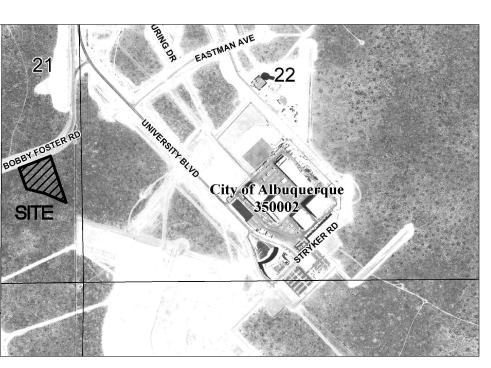
TOTAL IMPERVIOUS AREA = 9,885 SF

SWQ VOLUME REQ'D = 15,692 \* 0.42" / 12 = 549 CFTOTAL VOLUME PROVIDED = 1.860 CF

NOTE THAT PONDS HAVE BEEN OVERSIZED TO ALLOW



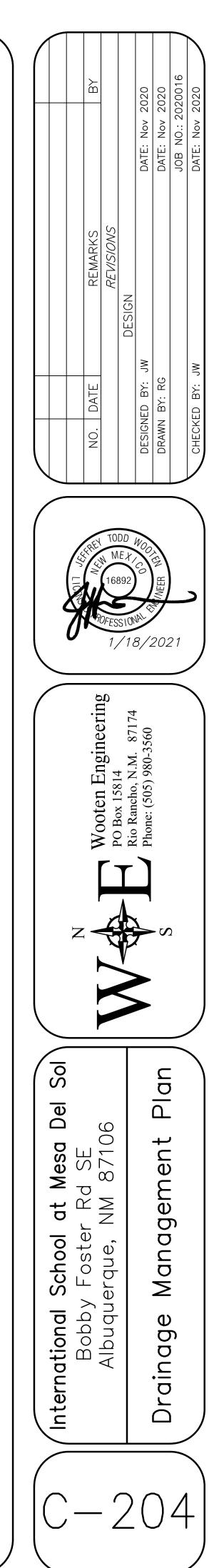
VICINITY MAP - Zone Map R-15-Z Legal Description: Tract A-1-A-5, Mesa Del Sol Innovation Park, Bernalillo County, City of Albuquerque, NM. 4.86 Acres.



FIRM MAP 35001C0555H

Per FIRM Map 35001C0555H, dated August 16, 2012, the site is not located in the Floodplain and determined to be outside the 0.2% chance Annual Floodplain.'

tormwater	Quality	Pond Volume	Calculations
		Volume (cu-ft)	Volume Sum (cu-ft)
POND A-1 5308.0 5309.0 5309.75	5160	0.0 3024.0 5210.0	
POND B 5307.0 5308.0	1030 1960	0.0 1495.0	0.0 1495.0
POND C 5307.0 5308.0	888 2320	0.0 1860.0	0.0 1860.0
	1960 2916 3820 4882	0.0 2438.0 3368.0 4351.0	5806.0



white the second of the second CAUTION!!!! THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT EAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. MAN MANANANANANANANANANANANANANANANA SCALE: 1"=40 Pond Shall be excavated prior to major 🚟 earthwork operations in order to provide 'Stilling' of Sediment prior to leaving the Site. Concrete Washout Area-Alternate Location shall be on the High Side of the site. NOTE: INSTALL SILT FENCE TO TEMPORARY CONSTRUCTION FENCING TO PROTECT AGAINST BLOWING DUST. NOTE: CONTRACTOR SHALL REMOVE SEDIMENT AND DEBRIS ON ADJACENT ROADWAYS DAILY. NOTE: PRE-CONSTRUCTION RUNOFF COEFFICIENT: 0.30 POST-CONSTRUCTION RUNOFF COEFFICIENT: 0.70 NOTE: TOTAL DISTURBED AREA IS ABOUT 5.00 ACRES. PLEASE SEE THE LANDSCAPE AND SITE PLAN FOR AREAS TO BE STABILIZED VEGETATIVELY AND PAVED/ROOFED NOTE: PRE-MANUFACTURED INLET PROTECTION DEVICES SHALL BE USED TO PROTECT ALL INLETS. DEVICES INSTALLED IN THE ROADWAYS SHALL NOT IMPEDE TRAFFIC FLOW. STIEGLISTZ AVENUE WIRE MESH BACKING SUPPORT 4x4 W1.4xW1.4 SILT FENCE. MIN HEIGHT 24" ABOVE EXIST GROUND STEEL FENCE POST MAX 6' SPACING. MIN EMBEDMENT 12" Ponds Shall be excavated prior to major earthwork operations in order to provide 'Stilling' of Sediment prior to leaving the Site. ABRIC TOE-IN TRENCH. BACKFILLED AND COMPACTED SILT FENCE DETAIL NOT TO SCALE

