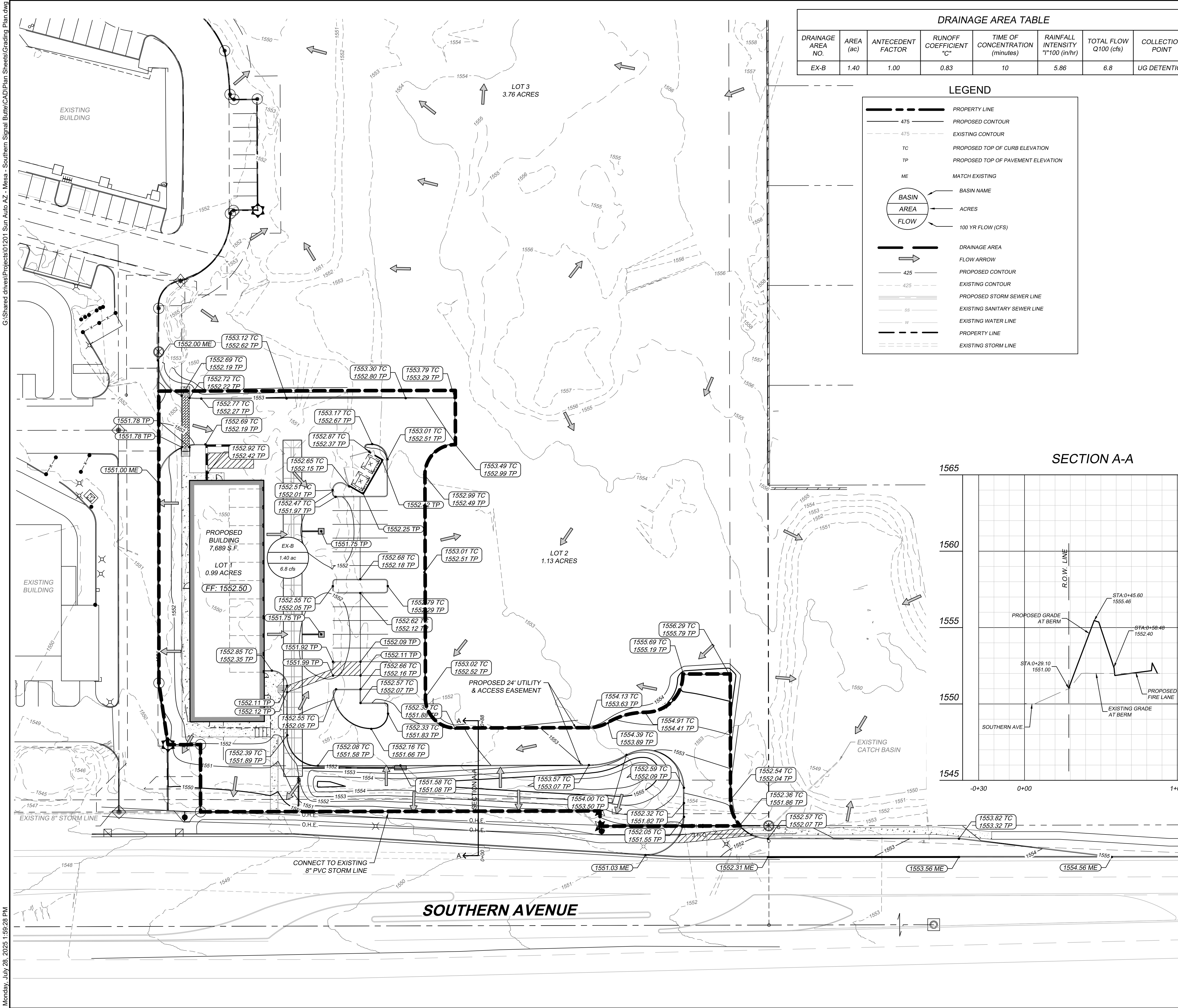


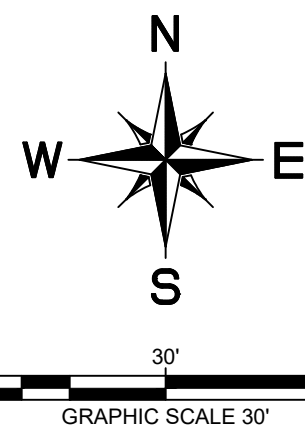


DRAINAGE AREA TABLE							
DRAINAGE AREA NO.	AREA (ac)	ANTECEDENT FACTOR	RUNOFF COEFFICIENT "C"	TIME OF CONCENTRATION (minutes)	RAINFALL INTENSITY "I" * 100 (in/hr)	TOTAL FLOW Q100 (cfs)	COLLECTION POINT
EX-B	1.40	1.00	0.83	10	5.86	6.8	UG DETENTION

LEGEND	
---	PROPERTY LINE
475	PROPOSED CONTOUR
475	EXISTING CONTOUR
TC	PROPOSED TOP OF CURB ELEVATION
TP	PROPOSED TOP OF PAVEMENT ELEVATION
ME	MATCH EXISTING
BASIN	BASIN NAME
AREA	ACRES
FLOW	100 YR FLOW (CFS)
---	DRAINAGE AREA
425	PROPOSED CONTOUR
425	EXISTING CONTOUR
SS	PROPOSED STORM SEWER LINE
SS	EXISTING SANITARY SEWER LINE
W	EXISTING WATER LINE
---	PROPERTY LINE
---	EXISTING STORM LINE



Know what's below.
Call before you dig.



RETENTION REQUIRED	
V(REQ) = CDA	
Cw	0.83 (Weighted)
D	0.18 Ft
A	55943 SF
Vreq	8524 CF
Vprov	8541 CF
RETENTION DRY CALCULATIONS	
MIN. PUMP OUTPUT (Q) = 100 GPM = 100 * 0.002228 = 0.2228 CFS	
T(sec) = V/Q	
Vreq	8524 CF
Q	0.2228 CFS
T(sec)	38261 SEC
T(hour)	10.6 HOURS
HW	1550.30 FT
14" MIN FFE	1.17 FT
	1551.47 FT

Pipe Storage				
Elevation (ft)	Pipe Depth (in)	Area (sf)	Storage (cf)	Storage (ac-ft)
1545.50	0	0.00	0.00	0.00
1545.58	1	0.07	31.40	0.00
1545.67	2	0.20	88.36	0.00
1545.75	3	0.37	161.50	0.00
1545.83	4	0.56	247.35	0.01
1545.92	5	0.78	343.87	0.01
1546.00	6	1.02	449.63	0.01
1546.08	7	1.28	563.55	0.01
1546.17	8	1.56	684.79	0.02
1546.25	9	1.85	812.62	0.02
1546.33	10	2.15	946.45	0.02
1546.42	11	2.47	1085.75	0.02
1546.50	12	2.80	1230.06	0.03
1546.58	13	3.13	1378.96	0.03
1546.67	14	3.48	1532.05	0.04
1546.75	15	3.84	1689.01	0.04
1546.83	16	4.20	1849.49	0.04
1546.92	17	4.58	2013.20	0.05
1547.00	18	4.95	2179.85	0.05
1547.08	19	5.34	2349.17	0.05
1547.17	20	5.73	2520.90	0.06
1547.25	21	6.12	2694.79	0.06
1547.33	22	6.52	2870.60	0.07
1547.42	23	6.93	3048.10	0.07
1547.50	24	7.33	3227.07	0.07
1547.58	25	7.74	3407.28	0.08
1547.67	26	8.16	3588.54	0.08
1547.75	27	8.57	3770.61	0.09
1547.83	28	8.98	3953.30	0.09
1547.92	29	9.40	4136.39	0.09
1548.00	30	9.82	4319.69	0.10
1548.08	31	10.23	4502.99	0.10
1548.17	32	10.65	4686.08	0.11
1548.25	33	11.07	4868.77	0.11
1548.33	34	11.48	5050.84	0.12
1548.42	35	11.89	5232.09	0.12
1548.50	36	12.30	5412.31	0.12
1548.58	37	12.71	5591.28	0.13
1548.67	38	13.11	5768.78	0.13
1548.75	39	13.51	5944.59	0.14
1548.83	40	13.91	6118.48	0.14
1548.92	41	14.30	6290.21	0.14
1549.00	42	14.68	6459.53	0.15
1549.08	43	15.06	6626.18	0.15
1549.17	44	15.43	6789.89	0.16
1549.25	45	15.80	6950.37	0.16
1549.33	46	16.15	7107.33	0.16
1549.42	47	16.50	7260.42	0.17
1549.50	48	16.84	7409.32	0.17
1549.58	49	17.17	7553.63	0.17
1549.67	50	17.48	7692.93	0.18
1549.75	51	17.79	7826.76	0.18
1549.83	52	18.08	7954.59	0.18
1549.92	53	18.35	8075.83	0.19
1550.00	54	18.61	8189.75	0.19
1550.08	55	18.85	8295.51	0.19
1550.17	56	19.07	8392.03	0.19
1550.25	57	19.27	8477.88	0.19
1550.33	58	19.43	8551.02	0.20
1550.42	59	19.56	8607.98	0.20
1550.50	60	19.63	8639.38	0.20

GRADING NOTES

- SPOT ELEVATIONS ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR SUBGRADE PREPARATIONS SPECIFICATIONS FOR ALL PROPOSED BUILDINGS.
- ALL FILL MATERIAL SHALL BE COMPACTED PER GEOTECH RECOMMENDATION. REFER TO PAVING SECTION DETAILS FOR SUBGRADE PREPARATION REQUIREMENTS UNDER ALL PAVED AREAS. (REFER TO GEOTECH REPORT)
- CONTRACTOR SHALL VERIFY ALL SIDEWALKS HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5% AND A MAXIMUM CROSS SLOPE OF 2%. IF THE CONTRACTOR IDENTIFIES SLOPES GREATER, CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION.
- SPOT ELEVATIONS IDENTIFIED AS "MATCH EXISTING" SHALL BE FIELD VERIFIED. CONTRACTOR SHALL NOTIFY CIVIL ENGINEERING CONSULTANT (CEC) OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH GRADING ACTIVITIES.

BY

DATE

REVISIONS

NO

© 2025 ANIMAS CIVIL ENGINEERING, LLC
PHONE: 214-803-1099
AZ 25881

PROJECT NAME:
SUN AUTO
NEC SOUTHERN AVE. &
SIGNAL BUTTE RD.
MESA, ARIZONA

SHEET TITLE:
GRADING PLAN

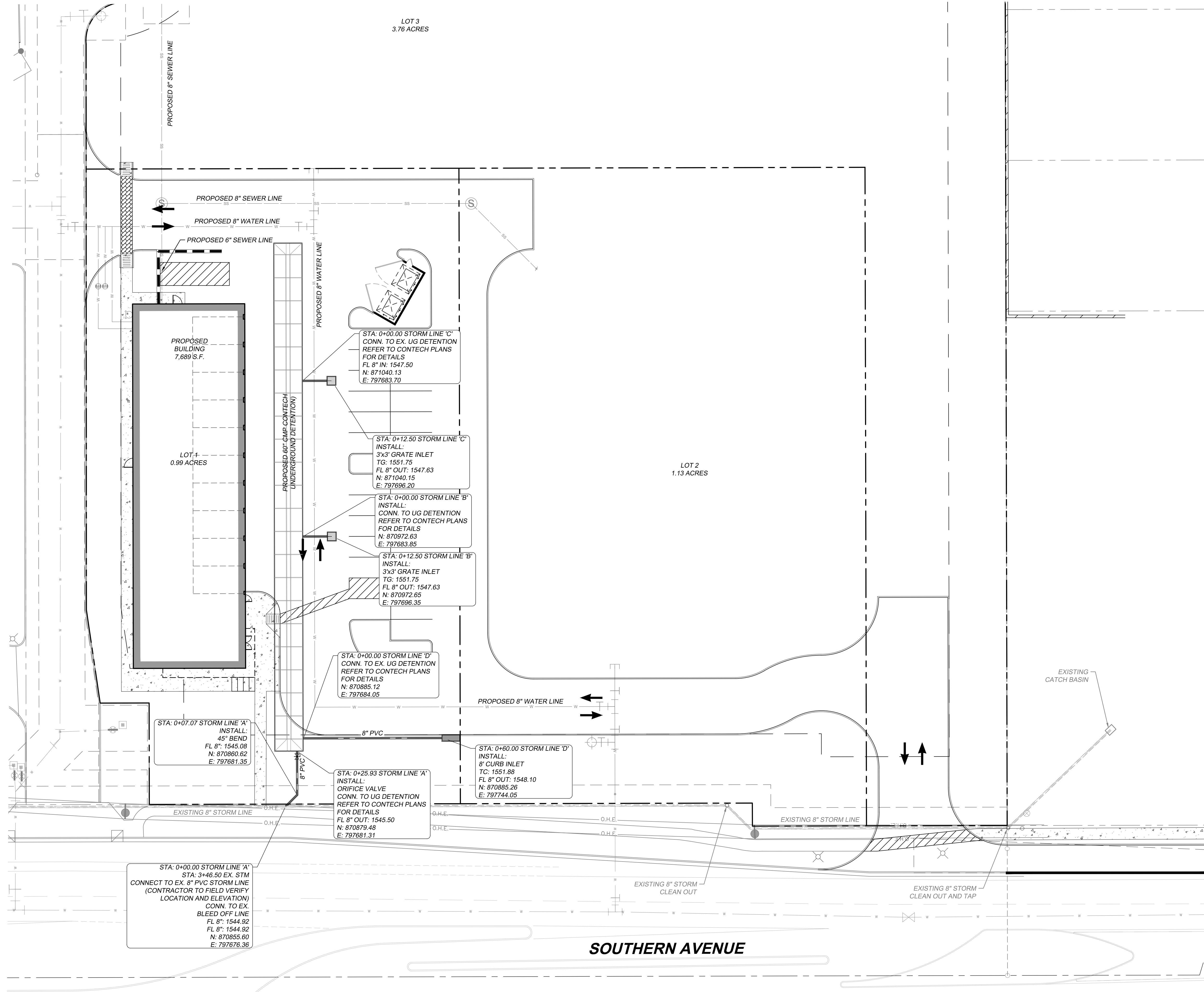
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01201

DATE
MARCH 2025

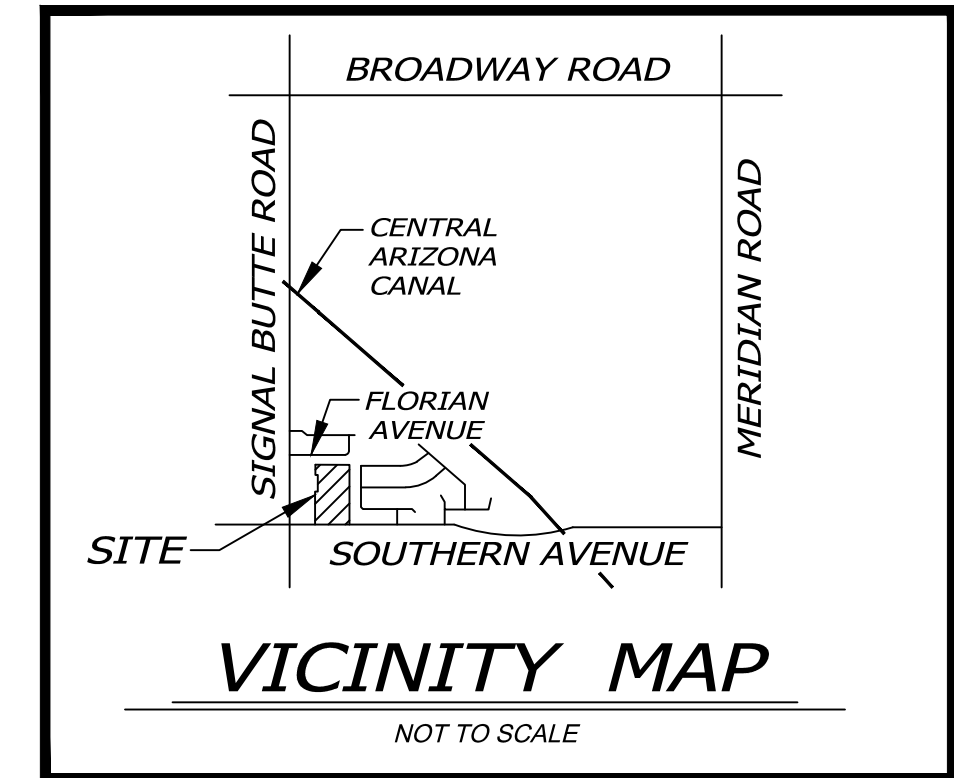
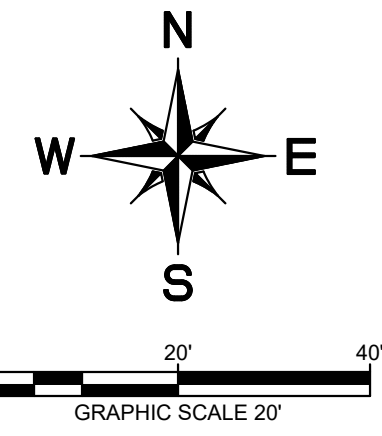
SCALE
AS SHOWN

DRAWN BY:
MD

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Know what's below.
Call before you dig.

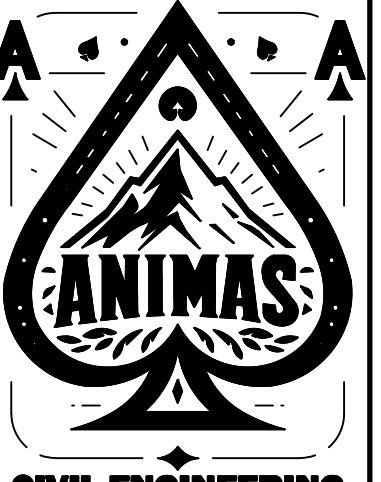


LEGEND

	PROPERTY LINE
	PROPOSED STORM LINE
	PROPOSED SANITARY SEWER LINE
	PROPOSED WATER LINE
	EXISTING STORM LINE
	EXISTING OVERHEAD ELECTRIC
	EXISTING WATER LINE
	EXISTING SEWER LINE
	PROPOSED SANITARY SEWER MANHOLE (SS MH)
	PROPOSED FIRE HYDRANT (FH)
	PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
	EXISTING FIRE HYDRANT
	EXISTING STORM MANHOLE
	EXISTING SAN. SWR. MANHOLE

STORM DRAINAGE NOTES:

1. 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 WATER UTILITY COMPANY AND NOT WHERE PIONEER 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 72 HOURS BEFORE EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
2. CONTRACTOR SHALL FIELD VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES IN FIELD PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
3. ALL EXISTING AND PROPOSED PIPES AND STRUCTURES ARE TO BE CLEANED OUT AT THE COMPLETION OF CONSTRUCTION TO REMOVE ALL SILT AND DEBRIS.
4. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
5. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.



CIVIL ENGINEERING
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ENGINEERING, LLC
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SUN AUTO
NEC SOUTHERN AVE. &
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MESA, ARIZONA

SHEET TITLE:

STORM PLAN

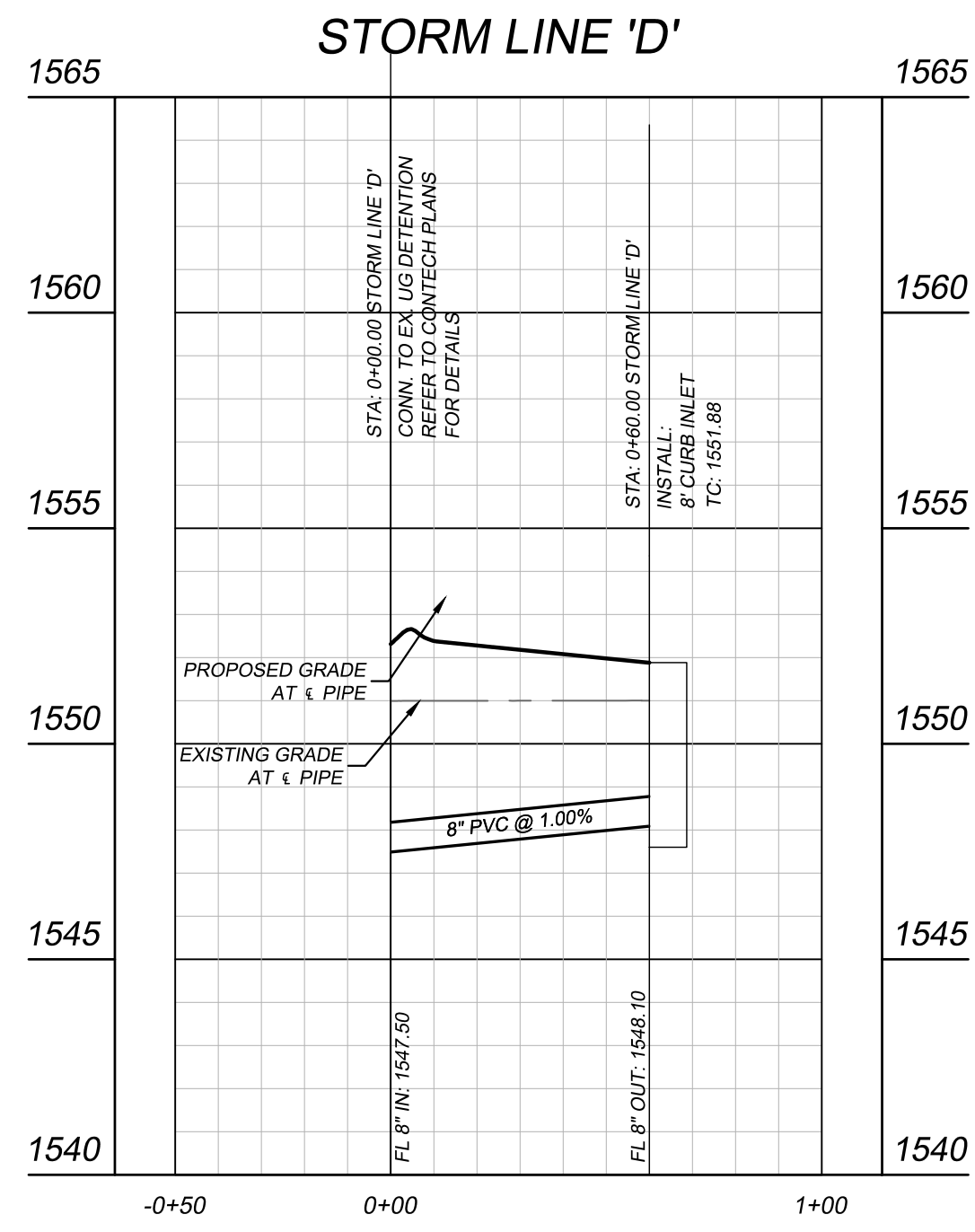
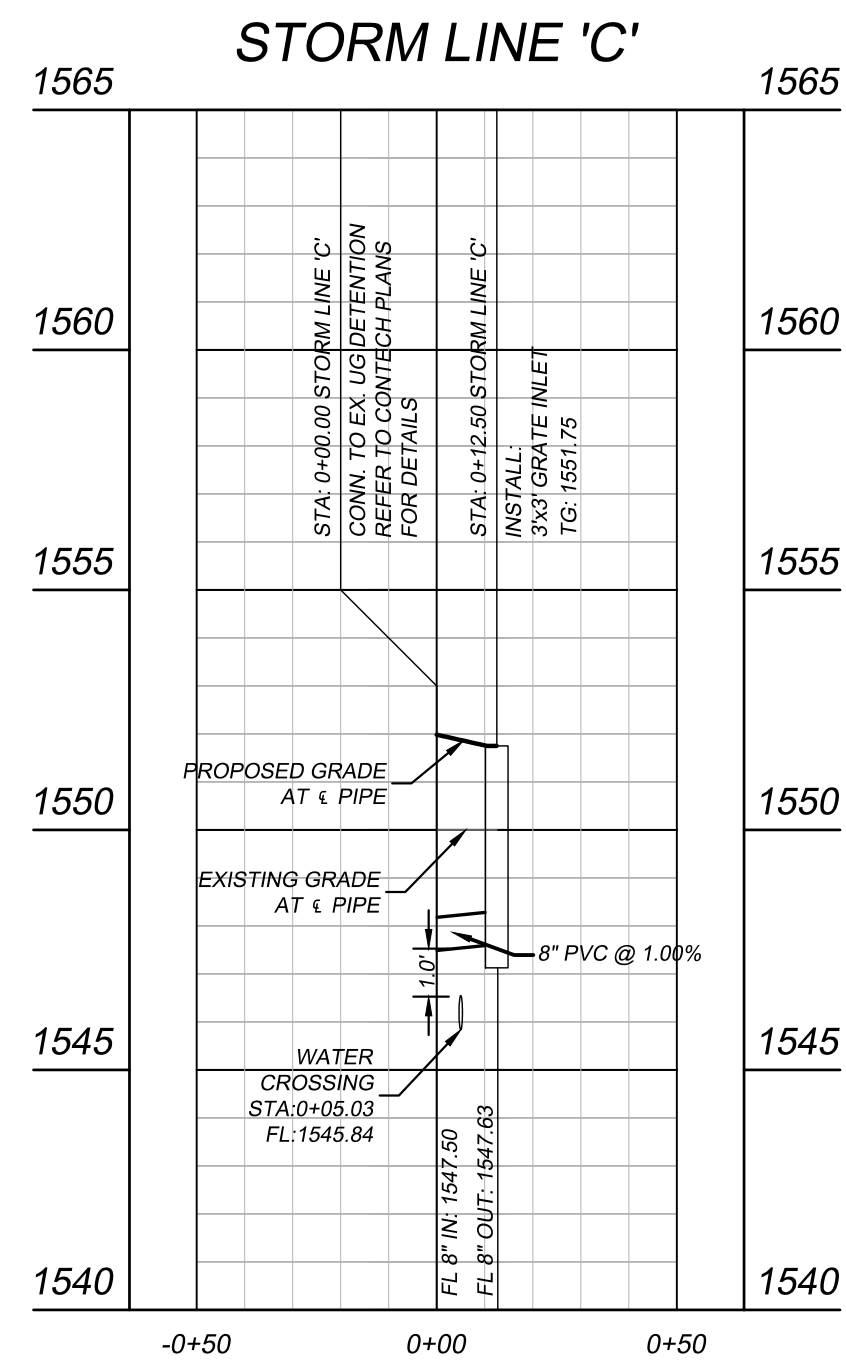
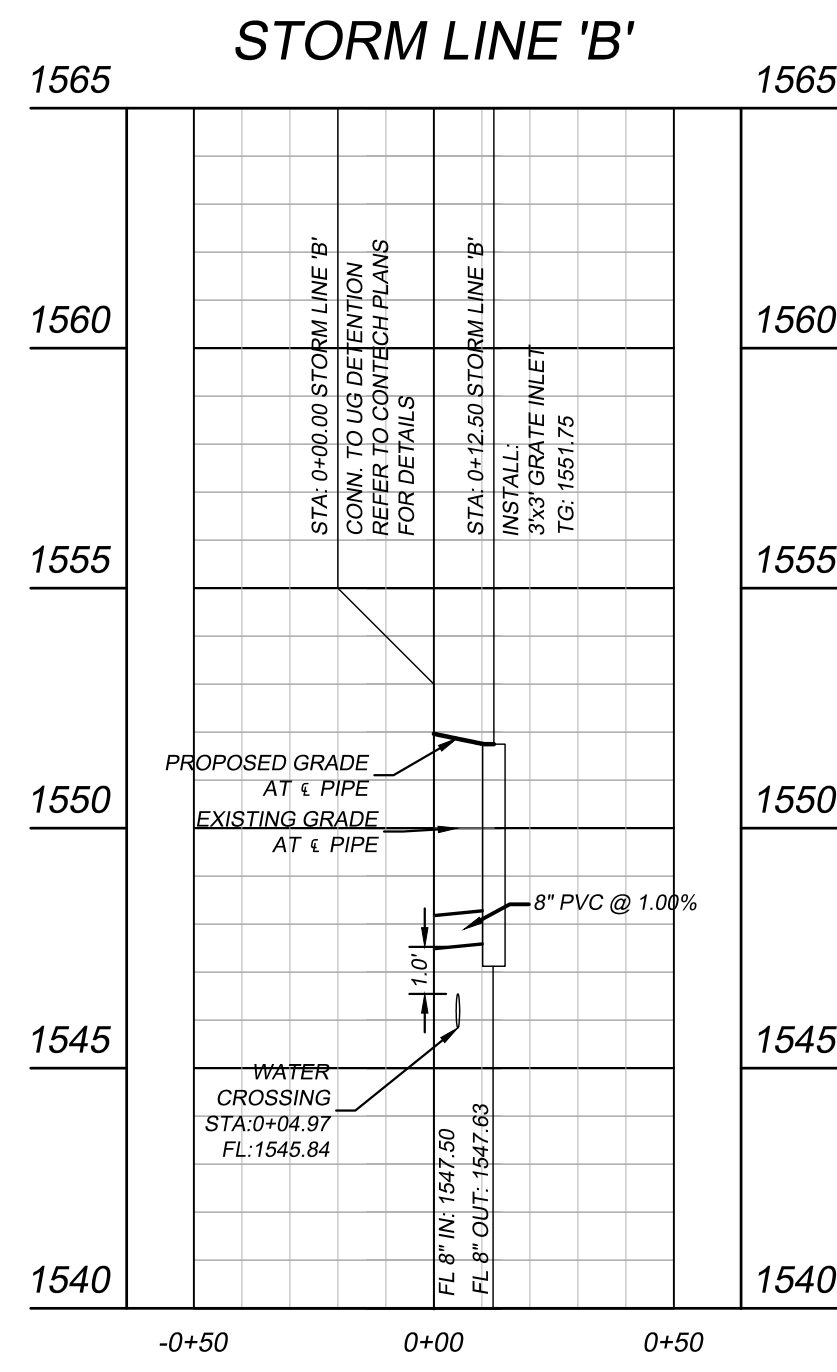
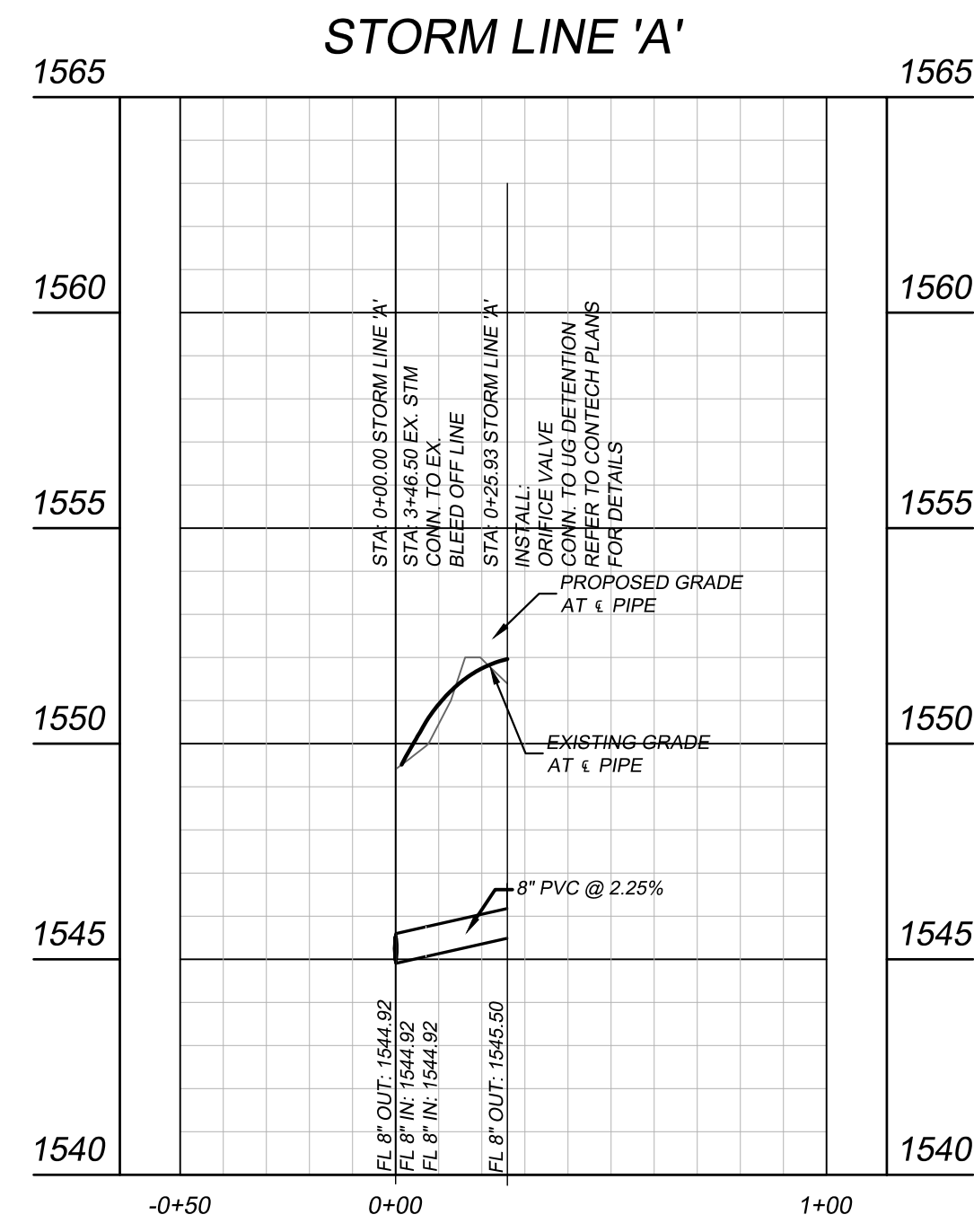
ACE PROJECT:
01201

DATE
MARCH 2025

SCALE
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C-4.01



PROFILE SCALE
 1"=40' HORIZONTAL
 1" = 4' VERTICAL

[illegible]

