

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

February 22, 2024

Genny Donart, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM 87108

**RE: Aspire Subdivision Unit 3 - 4
Amendment to Drainage Report
Engineer's Stamp Date: 02/09/24
Hydrology File: N08D006F**

Dear Ms. Donart:

Based upon the information provided in your submittal received 02/13/2024, the Amendment to Drainage Report is approved for Work Order.

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, 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 (DTIS)

Project Title: Aspire Subdivision, Units 1-4 Hydrology File # N08D006F

Legal Description: Tracts A1A & B1, Anderson Heights, Unit 4

City Address, UPC, OR Parcel: East of 118th St between Amole Mesa Ave and Colobel Ave

Applicant/Agent: Isaacson & Arfman, Inc. Contact: Genny Donart

Address: 128 Monroe St NE, Albuquerque, NM 87108 Phone: 505-268-8828

Email: gennyd@iacivil.com

Applicant/Owner: Success Land Holdings, LLC Contact: Scott Steffen

Address: 3030 Roma Ave NW, Ste 110, Albuquerque, NM 87102 Phone: 505-243-3949

Email: ssteffen@pricedg.com

(Please note that a DFT SITE is one that needs Site Plan Approval & ADMIN SITE is one that does not need it.)

TYPE OF DEVELOPMENT: ☒ PLAT (#of lots) 200 ☐ RESIDENCE
☐ DFT SITE ☐ ADMIN SITE

RE-SUBMITTAL: ☒ YES ☐ NO

DEPARTMENT: ☐ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G&D PLAN
- ☐ GRADING & DRAINAGE PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE
- ☐ TRAFFIC CIRCULATION LAYOUT FOR DFT APPROVAL
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☒ OTHER (SPECIFY) REVISION TO STORM CALCULATIONS

TYPE OF APPROVAL SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ CONCEPTUAL TCL DFT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SITE PLAN FOR BLDG PERMIT DFT 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
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 02/13/2024

FEBRUARY 8, 2024

AMENDMENT TO DRAINAGE REPORT

for

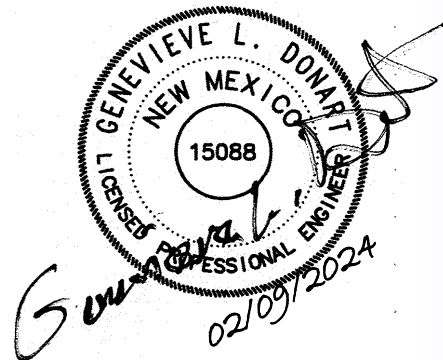
ASPIRE SUBDIVISION UNITS 3 & 4

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION

APPROVED

DATE: 02/22/24
BY: *Renee C. Brissette*
HydroTrans # N08D006F

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE
CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY
ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT
THE CITY OF ALBUQUERQUE FROM REQUIRING
CORRECTION, OR ERROR OR DIMENSIONS IN PLANS,
SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT
AUTHORIZATION.



BY

Isaacson & Arfman, Inc.
Civil Engineering Consultants
EST 1980
128 Monroe Street NE
Albuquerque, New Mexico | 505-268-8828 | www.iacivil.com

I&A Project No. 2591

M:\PROJECT DOCUMENTS\25599\2591\REPORTSS

This amendment to the existing Aspire Subdivision Drainage Report eliminates the storm drain outfall at Crestone Way, and redirects that storm drain to continue down Caresso Loop to connect with the proposed storm drain in Cantara Lane.

Field investigations have shown that the existing storm manhole SD MH-29 in Colobel has a 72" stub to the north. This is large enough to allow all the Unit 3 & 4 flows along with a small amount from previous units to discharge to that location.

With this change storm water will enter the existing storm drain in Colobel Ave farther downstream. In the previous design some of that existing pipe was replaced with larger pipes. This change allows the existing pipe to remain the same size.

To account for the increased flow entering the Cantarra Lane storm drain the pipe will be increased to 66" and 72" diameter.

Other than the changes mentioned above, the system will remain as previously designed.

Attached are revised plans and storm drain capacity calculations using Stormwater Studio 2024 to model the revised system.

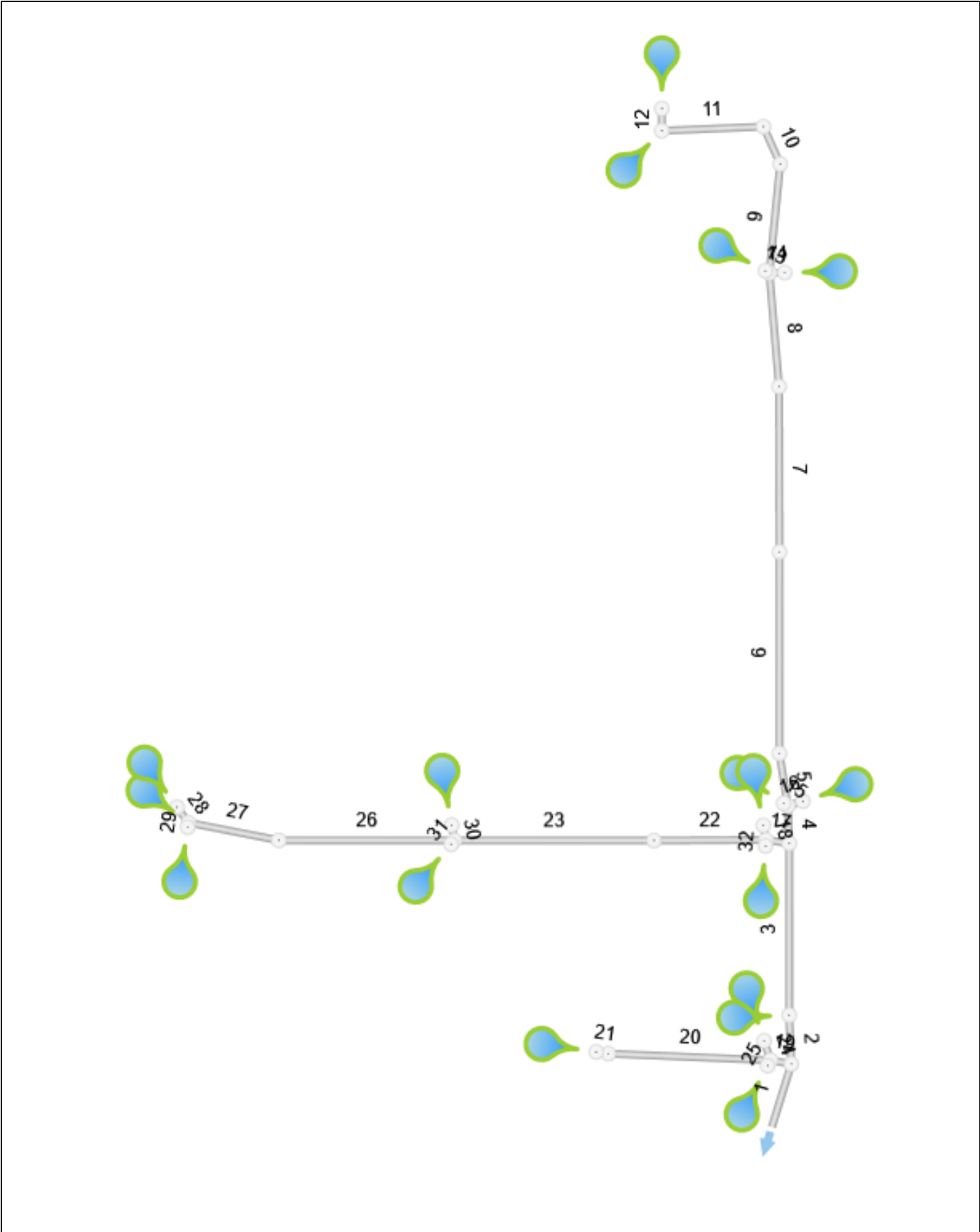


Plan View

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024



Energy Grade Line Calculations

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

Line No	Line Size	Q	Downstream							Length	Upstream							Pipe		Junction		
			Invert Elev	Depth	Area	HGL Elev	Vel	Vel Head	EGL Elev		Invert Elev	Depth	Area	HGL Elev	Vel	Vel Head	EGL Elev	n Value	Enrgy Loss	HGLa Elev	EGLa Elev	Enrgy Loss
	(in)	(cfs)	(ft)	(ft)	(sqft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	(ft)	(sqft)	(ft)	(ft/s)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)
1	78	317.60	5139.37	6.50	33.18	5145.87	9.57	1.42	5147.30	93.05	5140.30	5.65	30.61	5145.95	10.38	1.67	5147.62	0.013	0.325	5147.32	5149.00	1.38
2	72	247.40	5142.27	6.00	28.27	5148.28	8.75	1.19	5149.47	70.58	5143.60	4.19 ²	21.07	5147.79	11.74	2.14	5149.93	0.013	0.458	5147.79	5149.93	0.00
3	66	216.00	5143.70	5.45	23.73	5149.16	9.10	1.29	5150.44	247.81	5146.53	4.00 ²	18.52	5150.53	11.67	2.12	5152.65	0.013	2.204	5150.53	5152.65	0.00
4	48	71.00	5146.63	4.00	12.56	5152.35	5.65	0.50	5152.85	53.94	5146.90	4.00	12.57	5152.48	5.65	0.50	5152.98	0.013	0.131	5152.66	5153.16	0.18
5	42	53.80	5147.00	3.50	9.62	5152.86	5.59	0.49	5153.35	76.75	5147.38	3.50	9.62	5153.08	5.59	0.49	5153.57	0.013	0.220	5153.22	5153.70	0.13
6	42	53.80	5147.48	3.50	9.62	5153.41	5.59	0.49	5153.90	290.82	5148.95	3.50	9.62	5154.24	5.59	0.49	5154.73	0.013	0.832	5154.34	5154.83	0.10
7	42	53.80	5149.05	3.50	9.62	5154.53	5.59	0.49	5155.02	238.47	5150.25	3.50	9.62	5155.22	5.59	0.49	5155.70	0.013	0.682	5155.33	5155.82	0.12
8	42	53.80	5150.35	3.50	9.62	5155.53	5.59	0.49	5156.01	164.54	5151.18	3.50	9.62	5156.00	5.59	0.49	5156.48	0.013	0.471	5156.30	5156.79	0.31
9	24	14.80	5151.28	2.00	3.14	5156.58	4.71	0.35	5156.93	157.92	5154.05	2.00	3.14	5157.26	4.71	0.35	5157.60	0.013	0.676	5157.41	5157.75	0.15
10	24	14.80	5154.15	2.00	3.14	5157.55	4.71	0.35	5157.89	59.10	5155.90	1.86	3.05	5157.76	4.86	0.37	5158.13	0.013	0.236	5158.02	5158.39	0.26
11	24	14.80	5156.10	2.00	3.14	5158.18	4.71	0.35	5158.52	146.72	5159.09	1.36 ²	2.28	5160.45	6.49	0.66	5161.11	0.013	2.584	5160.45	5161.11	0.00
12	18	7.40	5159.35	1.50	1.77	5160.94	4.19	0.27	5161.22	32.00	5160.01	1.04 ²	1.31	5161.05	5.67	0.50	5161.55	0.013	0.331	5161.05	5161.55	0.00
13	18	20.00	5152.30	1.50 ³	1.77	5155.60	11.32	1.99	5157.59	6.51	5152.50	1.50	1.77	5155.83	11.32	1.99	5157.82	0.013	0.236	5156.23	5158.22	0.40
14	18	19.00	5152.30	1.50 ³	1.77	5155.71	10.75	1.80	5157.51	22.12	5152.68	1.50	1.77	5156.44	10.75	1.80	5158.23	0.013	0.724	5156.80	5158.59	0.36
15	18	8.60	5150.60	1.50	1.77	5152.94	4.87	0.37	5153.30	7.20	5150.74	1.50	1.77	5152.98	4.87	0.37	5153.35	0.013	0.048	5153.06	5153.43	0.07
16	18	8.60	5150.60	1.50	1.77	5152.94	4.87	0.37	5153.30	22.93	5150.78	1.50	1.77	5153.09	4.87	0.37	5153.46	0.013	0.154	5153.16	5153.53	0.07
17	54	145.00	5146.73	4.50	15.90	5151.87	9.12	1.29	5153.16	33.83	5147.06	4.50	15.90	5152.06	9.12	1.29	5153.35	0.013	0.184	5152.49	5153.79	0.44
18	18	8.80	5150.10	1.50	1.77	5153.55	4.98	0.39	5153.94	21.34	5151.50	1.50	1.77	5153.70	4.98	0.39	5154.09	0.013	0.150	5153.78	5154.17	0.08
19	36	70.20	5142.90	3.00	7.07	5148.08	9.93	1.53	5149.61	30.49	5143.30	3.00	7.07	5148.41	9.93	1.53	5149.95	0.013	0.337	5148.86	5150.40	0.45
20	36	58.60	5143.40	3.00	7.07	5149.75	8.29	1.07	5150.82	234.23	5150.70	2.44 ²	6.16	5153.14	9.52	1.41	5154.55	0.013	3.726	5153.14	5154.55	0.00
21	36	58.60	5150.80	3.00 ³	7.07	5153.91	8.29	1.07	5154.98	17.57	5150.87	3.00	7.07	5154.04	8.29	1.07	5155.11	0.013	0.136	5154.26	5155.33	0.21
22	42	127.40	5147.10	3.50	9.62	5152.15	13.24	2.73	5154.88	161.74	5152.50	3.30 ²	9.40	5155.80	13.55	2.85	5158.66	0.013	3.778	5155.80	5158.66	0.00

Notes: Return Period = 2-yrs. ² Critical depth. ³ Normal depth.

Energy Grade Line Calculations

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

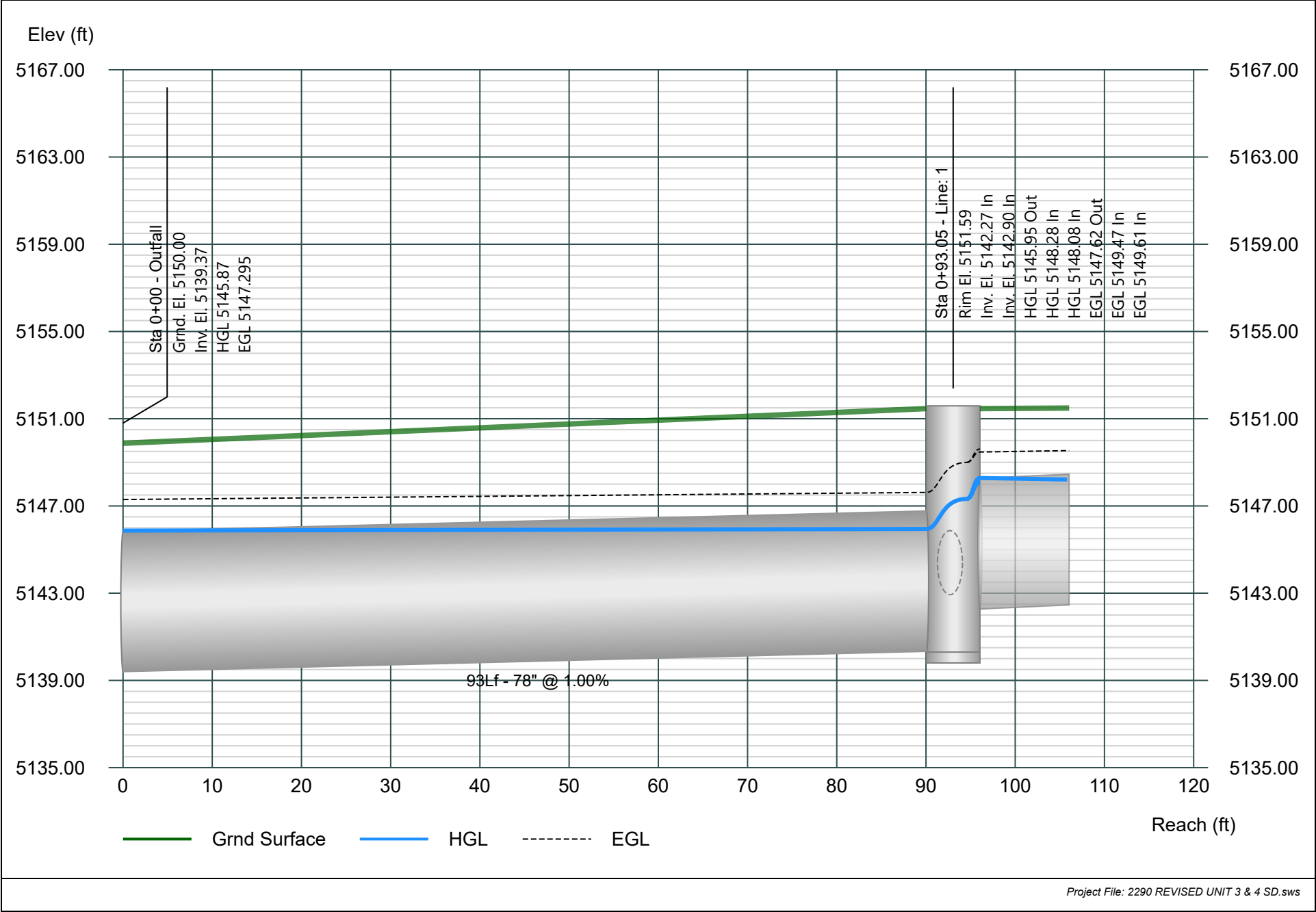
Line No	Line Size	Q	Downstream							Length	Upstream							Pipe		Junction		
			Invert Elev	Depth	Area	HGL Elev	Vel	Vel Head	EGL Elev		Invert Elev	Depth	Area	HGL Elev	Vel	Vel Head	EGL Elev	n Value	Enrgy Loss	HGLa Elev	EGLa Elev	Enrgy Loss
	(in)	(cfs)	(ft)	(ft)	(sqft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	(ft)	(sqft)	(ft)	(ft/s)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)
23	42	127.40	5152.60	3.50	9.62	5157.02	13.24	2.73	5159.75	287.74	5163.65	3.30 ²	9.40	5166.95	13.55	2.85	5169.81	0.013	10.059	5166.95	5169.81	0.00
24	18	5.80	5148.60	1.50	1.77	5150.29	3.28	0.17	5150.46	29.50	5149.06	1.29	1.61	5150.35	3.59	0.20	5150.55	0.013	0.085	5150.39	5150.59	0.04
25	18	5.80	5150.10	0.92'	1.14	5151.02	5.11	0.41	5151.43	9.05	5151.19	0.92 ²	1.14	5152.11	5.11	0.41	5152.52	0.013	1.090	5152.11	5152.52	0.00
26	42	114.20	5163.93	3.50	9.62	5168.49	11.87	2.19	5170.68	253.19	5173.23	3.21 ²	9.25	5176.44	12.35	2.37	5178.81	0.013	8.133	5176.44	5178.81	0.00
27	42	114.20	5173.33	3.50 ³	9.62	5177.50	11.87	2.19	5179.69	133.04	5174.35	3.50	9.62	5179.22	11.87	2.19	5181.41	0.013	1.714	5179.79	5181.98	0.57
28	18	7.00	5179.10	1.50	1.77	5181.83	3.96	0.24	5182.08	27.69	5179.38	1.50	1.77	5181.96	3.96	0.24	5182.20	0.013	0.123	5182.00	5182.25	0.05
29	18	7.00	5178.70	1.50	1.77	5181.83	3.96	0.24	5182.08	6.60	5178.91	1.50	1.77	5181.86	3.96	0.24	5182.11	0.013	0.029	5181.91	5182.15	0.05
30	18	6.60	5168.80	0.98'	1.22	5169.78	5.39	0.45	5170.23	22.42	5169.05	0.98 ²	1.22	5170.03	5.39	0.45	5170.48	0.013	0.248	5170.03	5170.48	0.00
31	18	6.60	5168.80	0.98'	1.22	5169.78	5.39	0.45	5170.23	7.39	5168.93	0.98 ²	1.22	5169.92	5.39	0.45	5170.37	0.013	0.134	5169.92	5170.37	0.00
32	18	8.80	5148.81	1.50	1.77	5153.55	4.98	0.39	5153.94	8.84	5148.91	1.50	1.77	5153.62	4.98	0.39	5154.00	0.013	0.062	5153.69	5154.08	0.08

Line 1

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

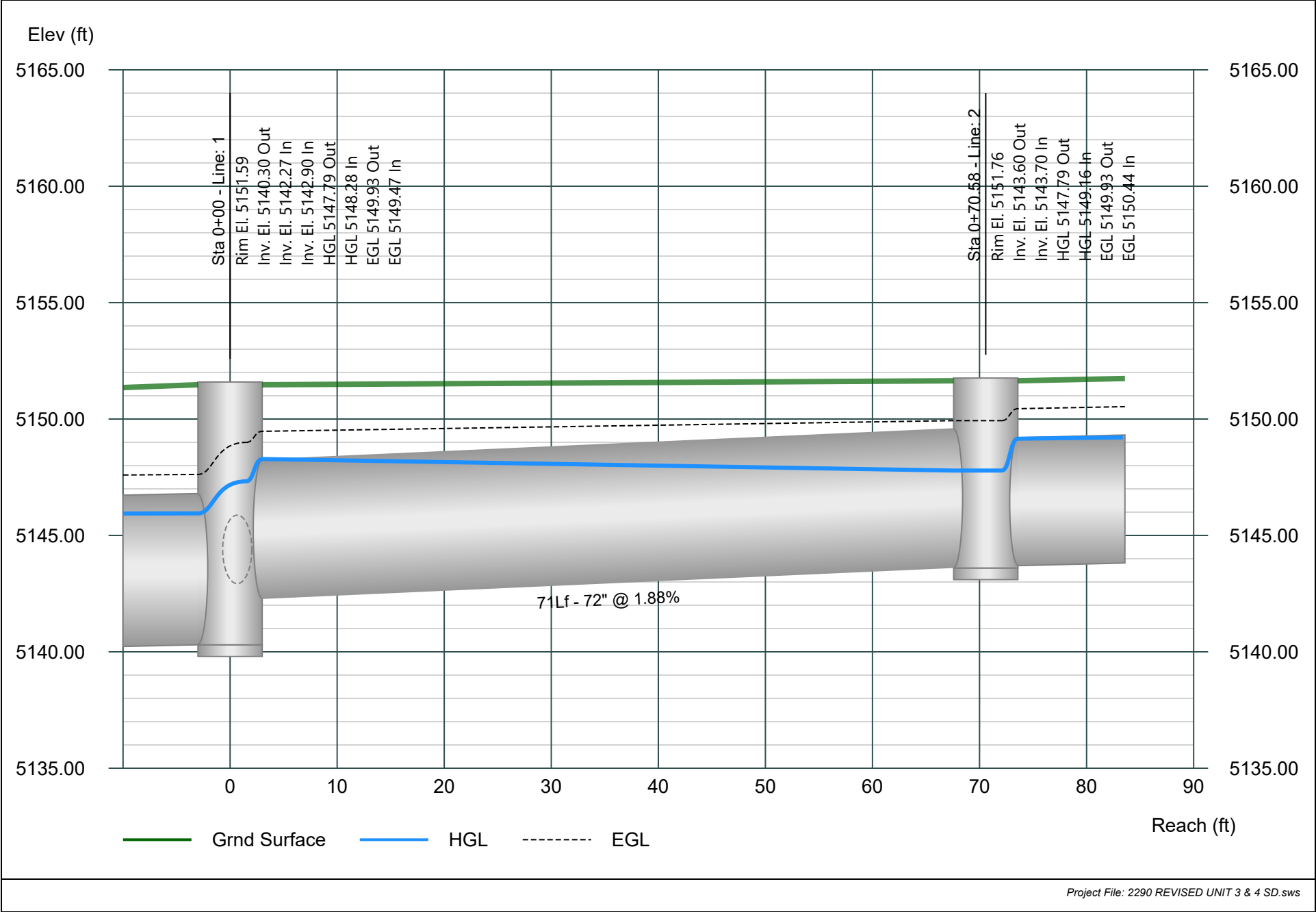


Line 2

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

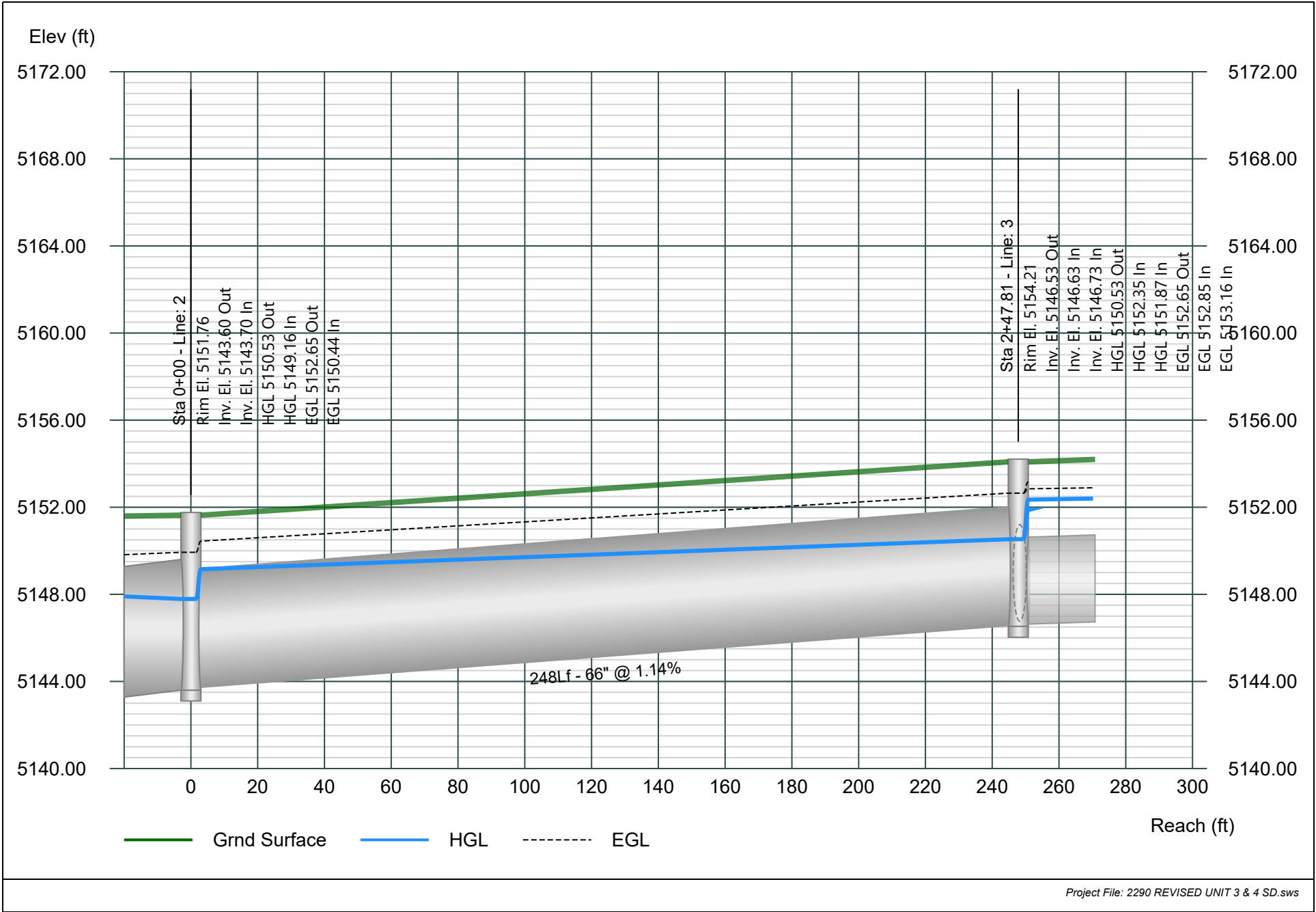


Line 3

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

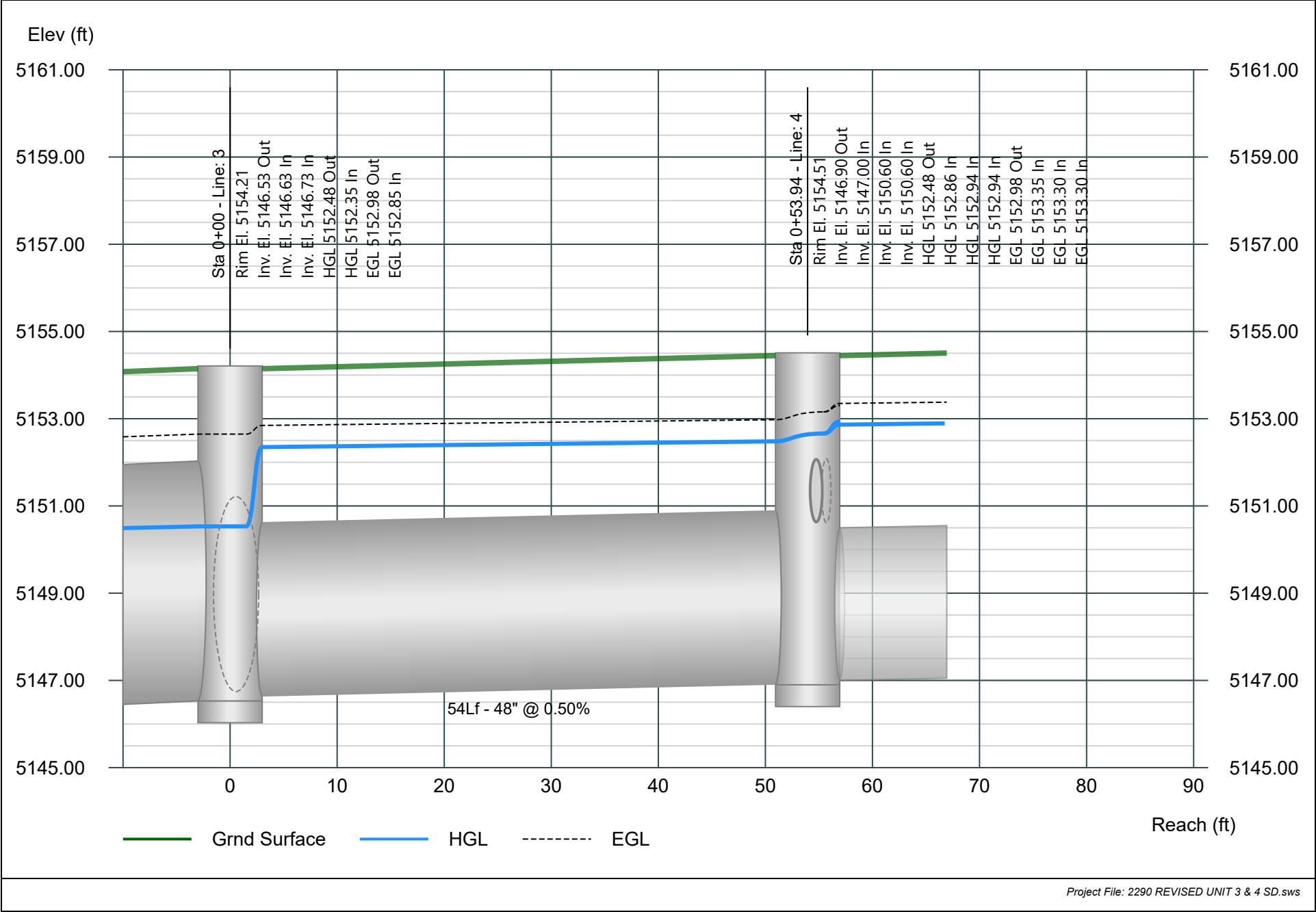


Line 4

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

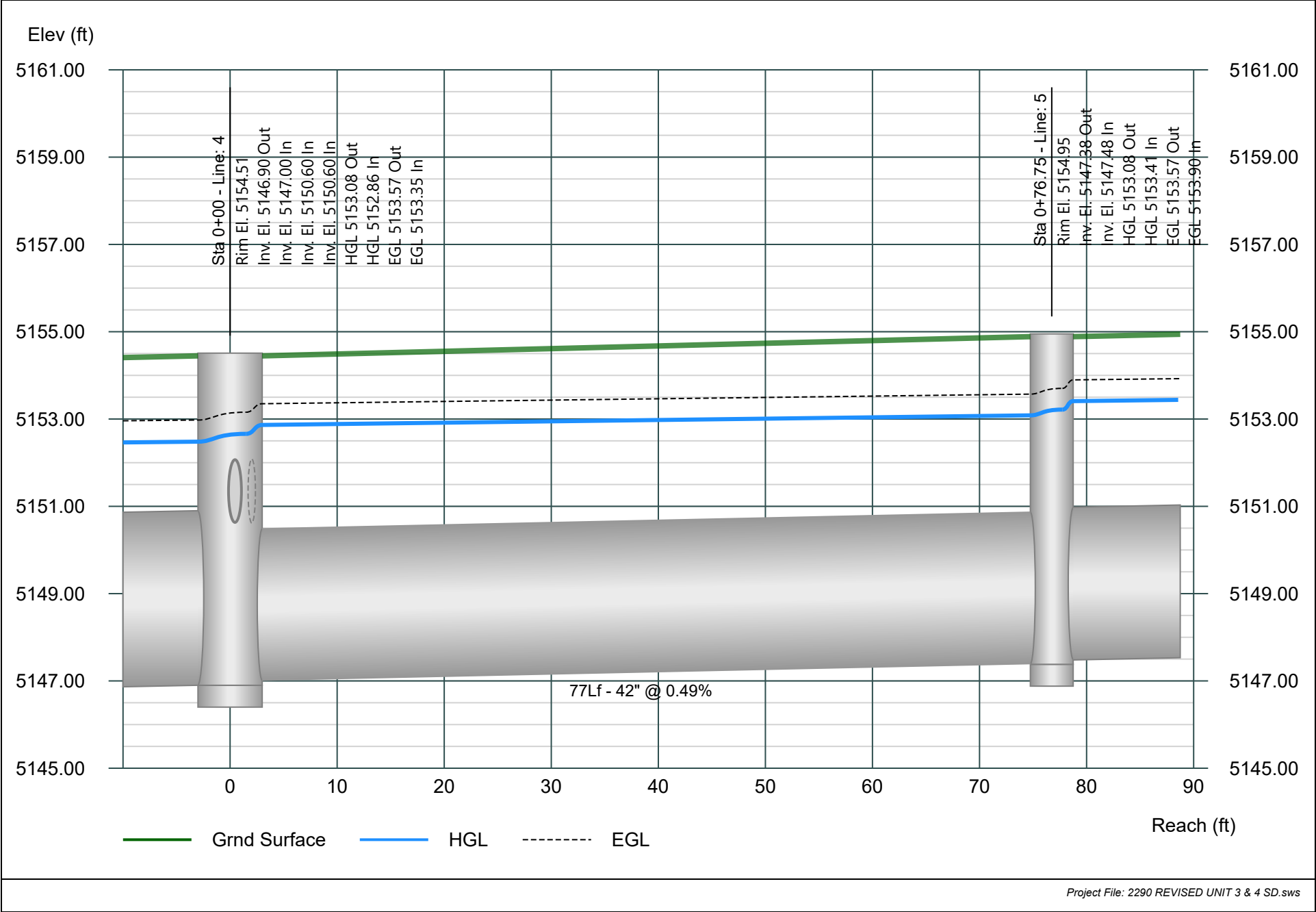


Line 5

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

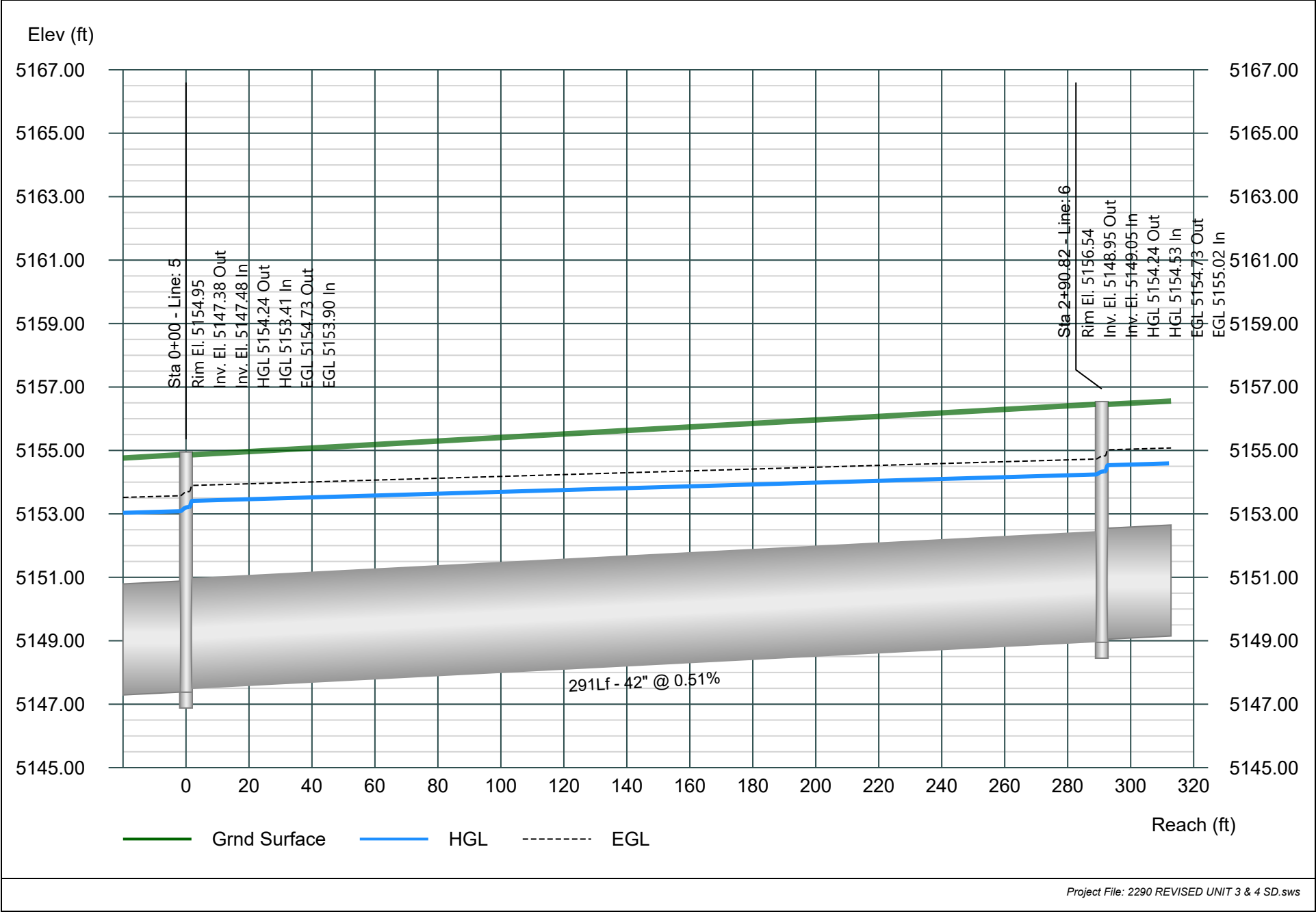


Line 6

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

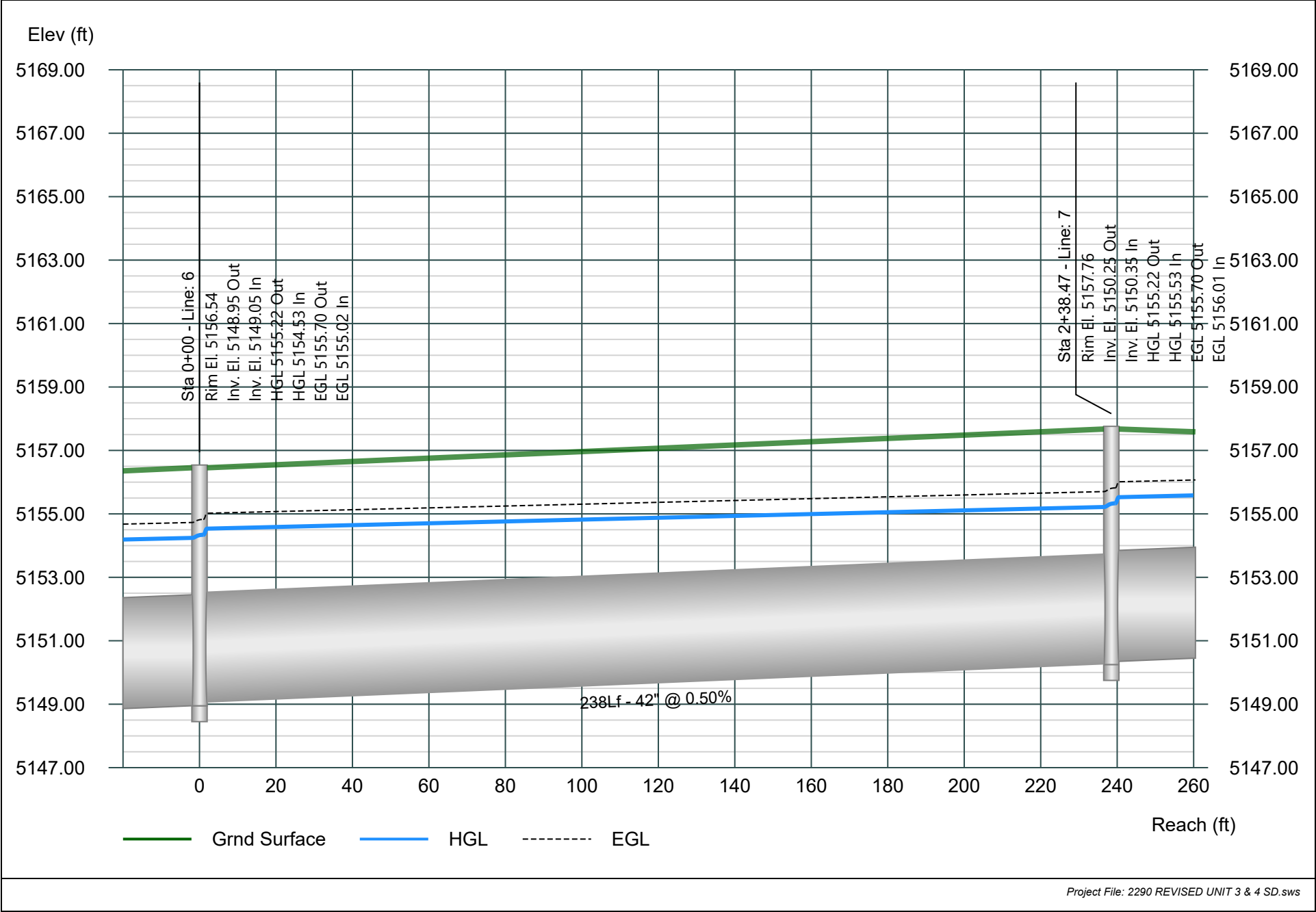


Line 7

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

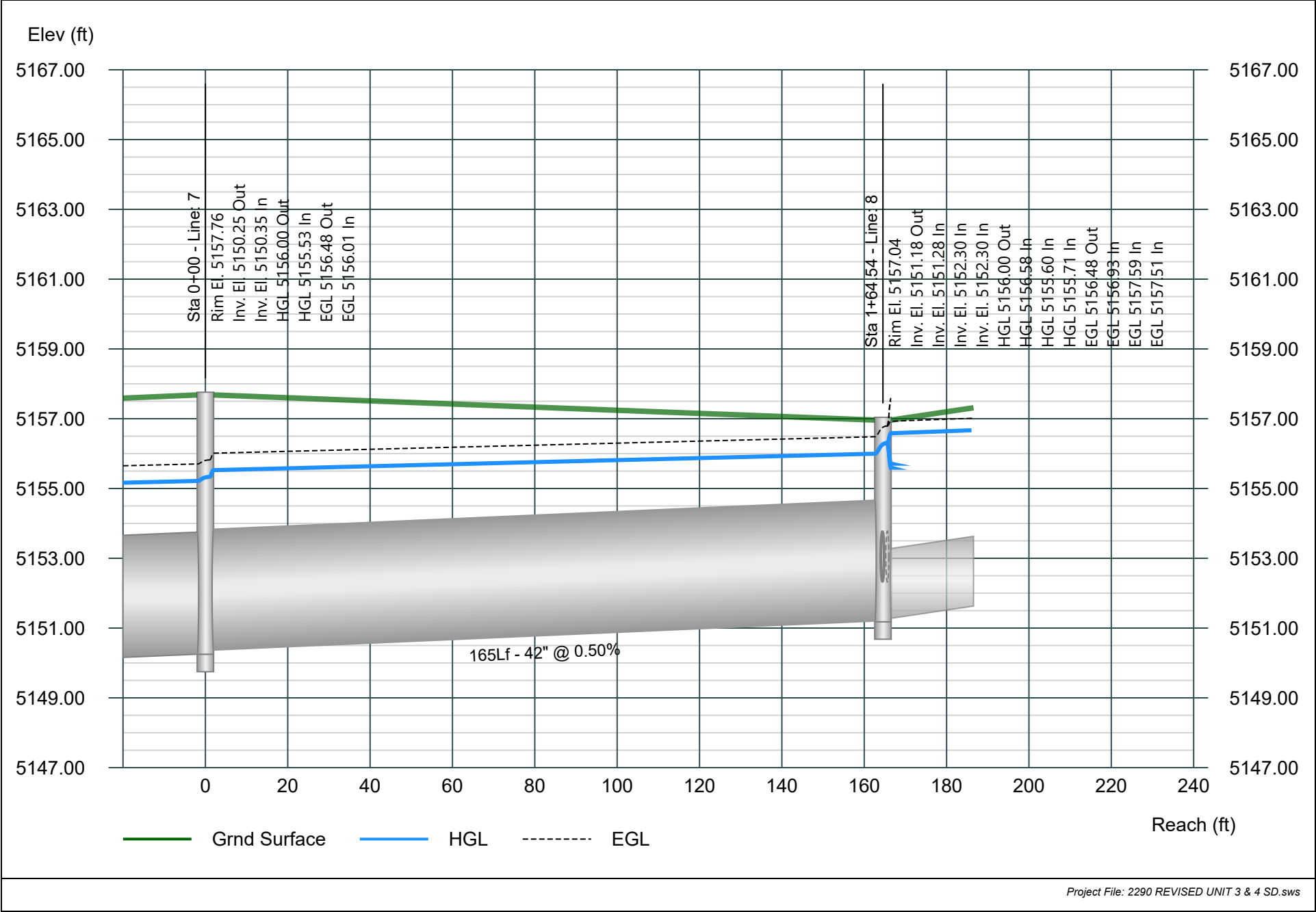


Line 8

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

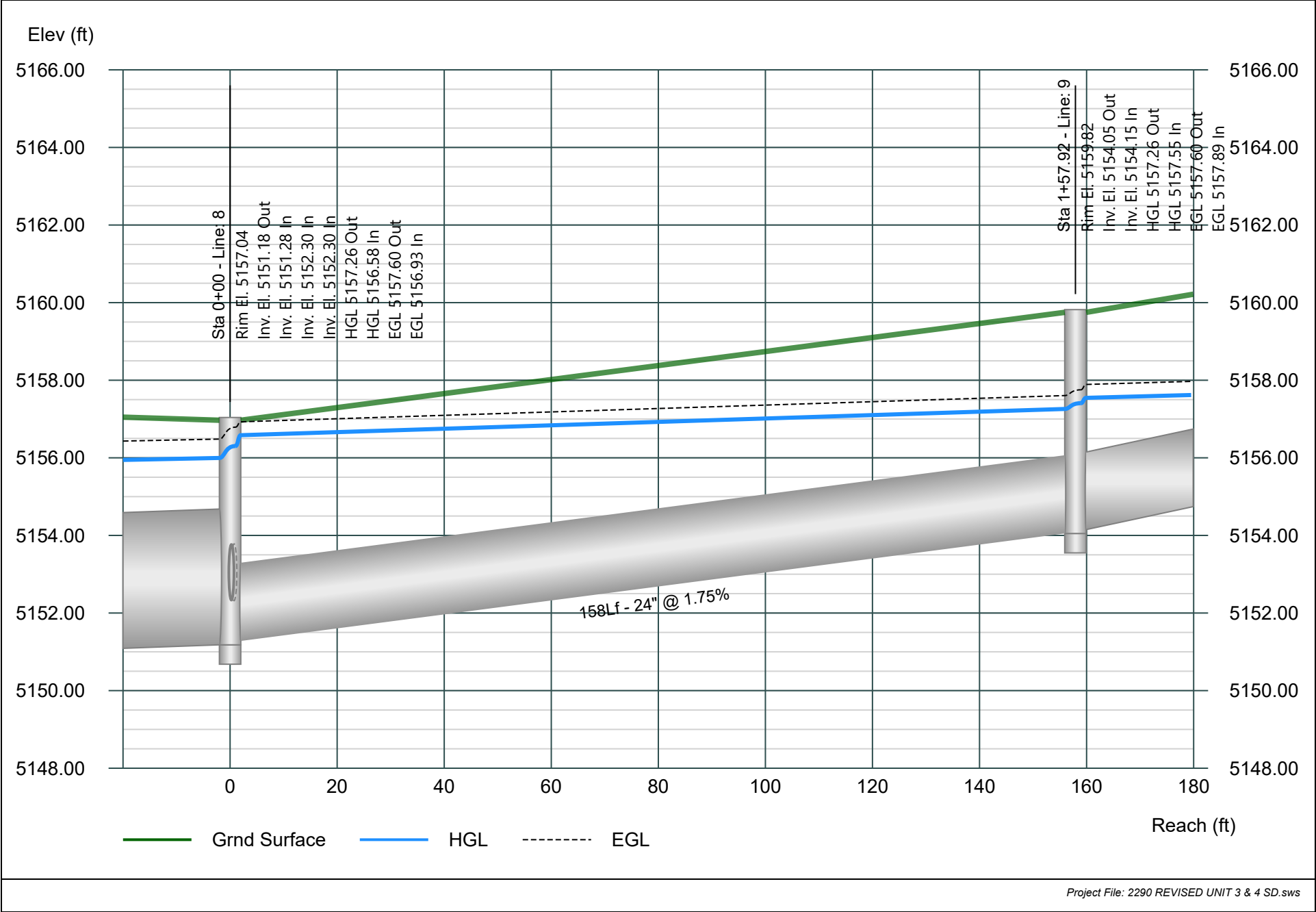


Line 9

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

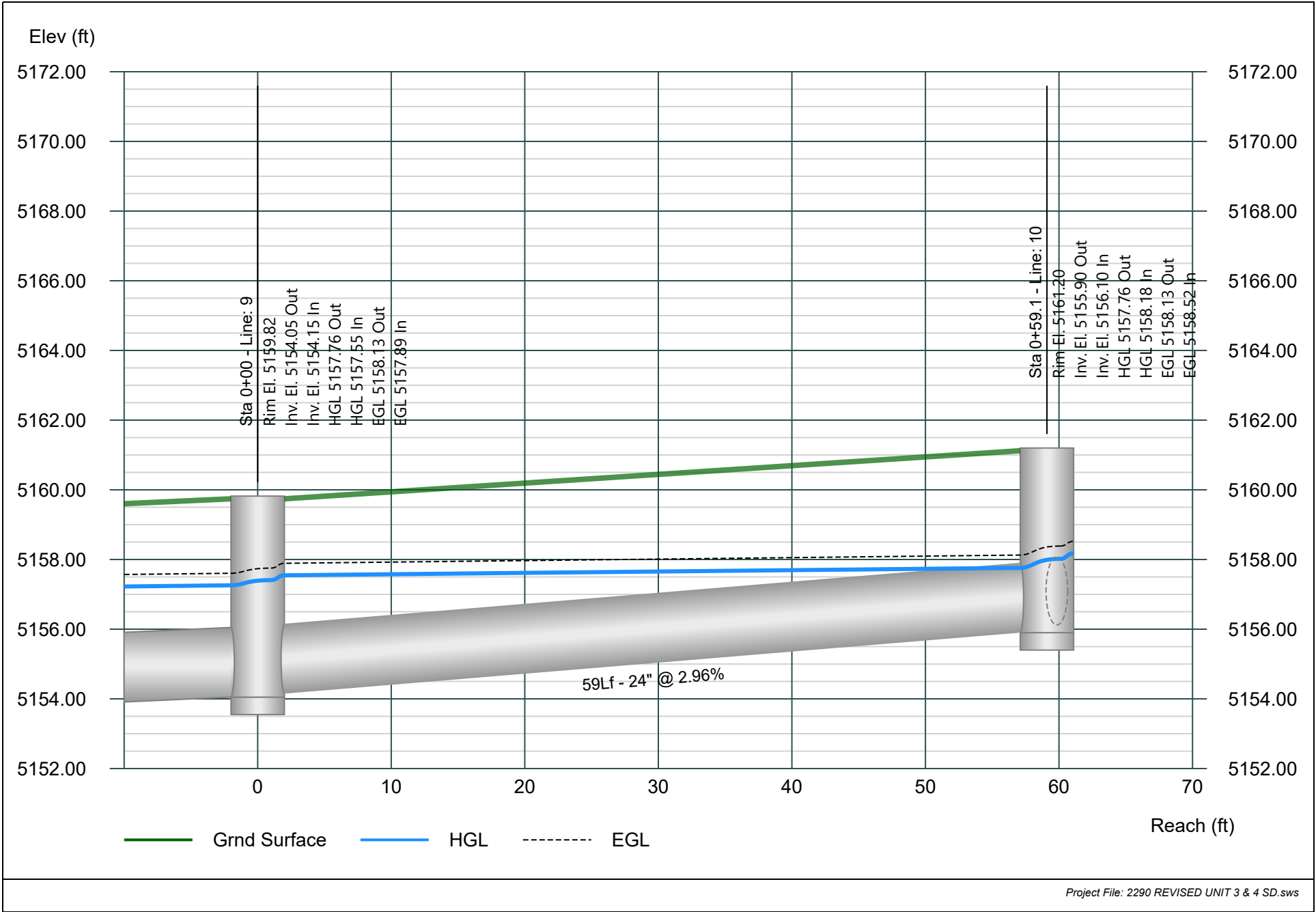


Line 10

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

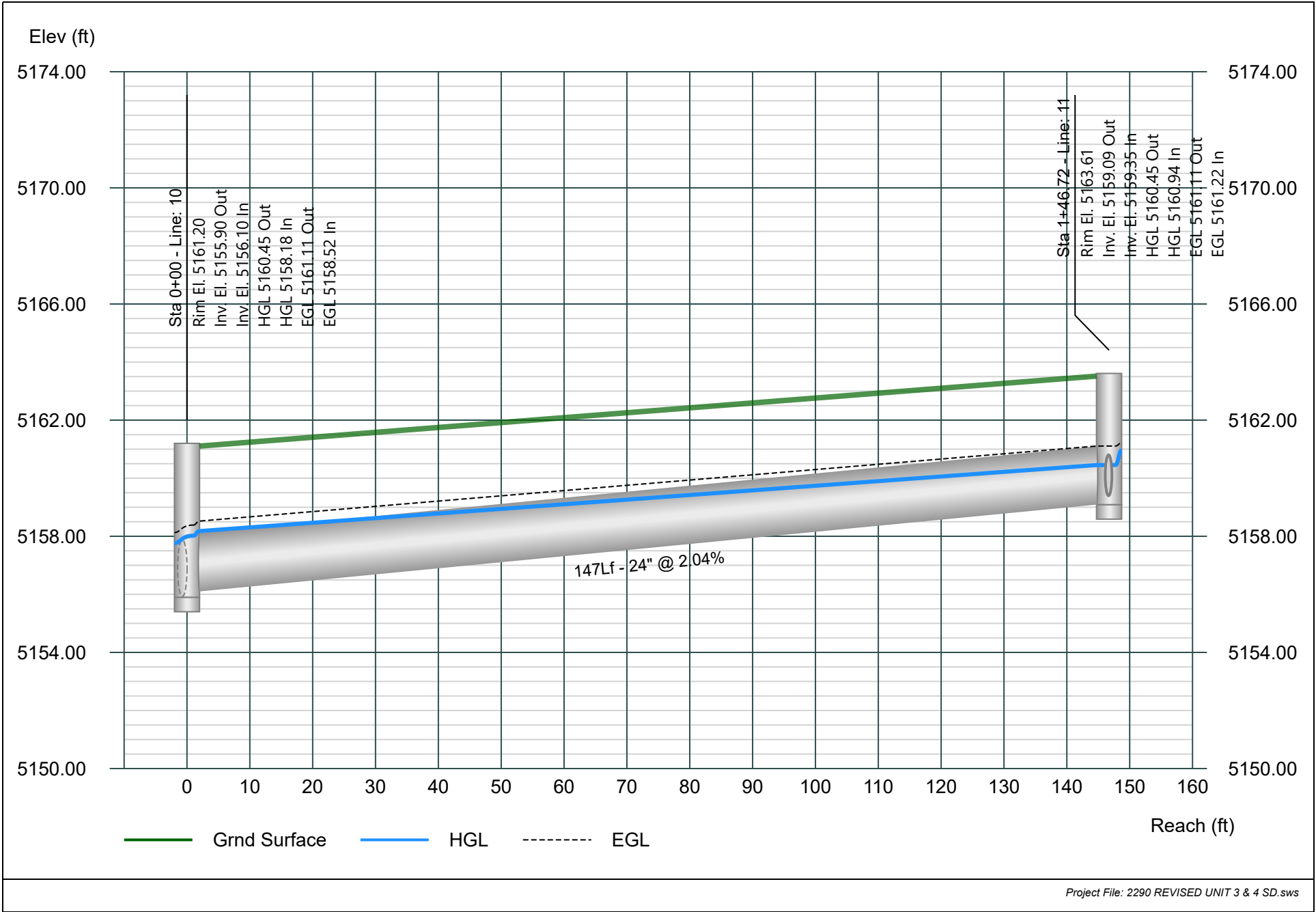


Line 11

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

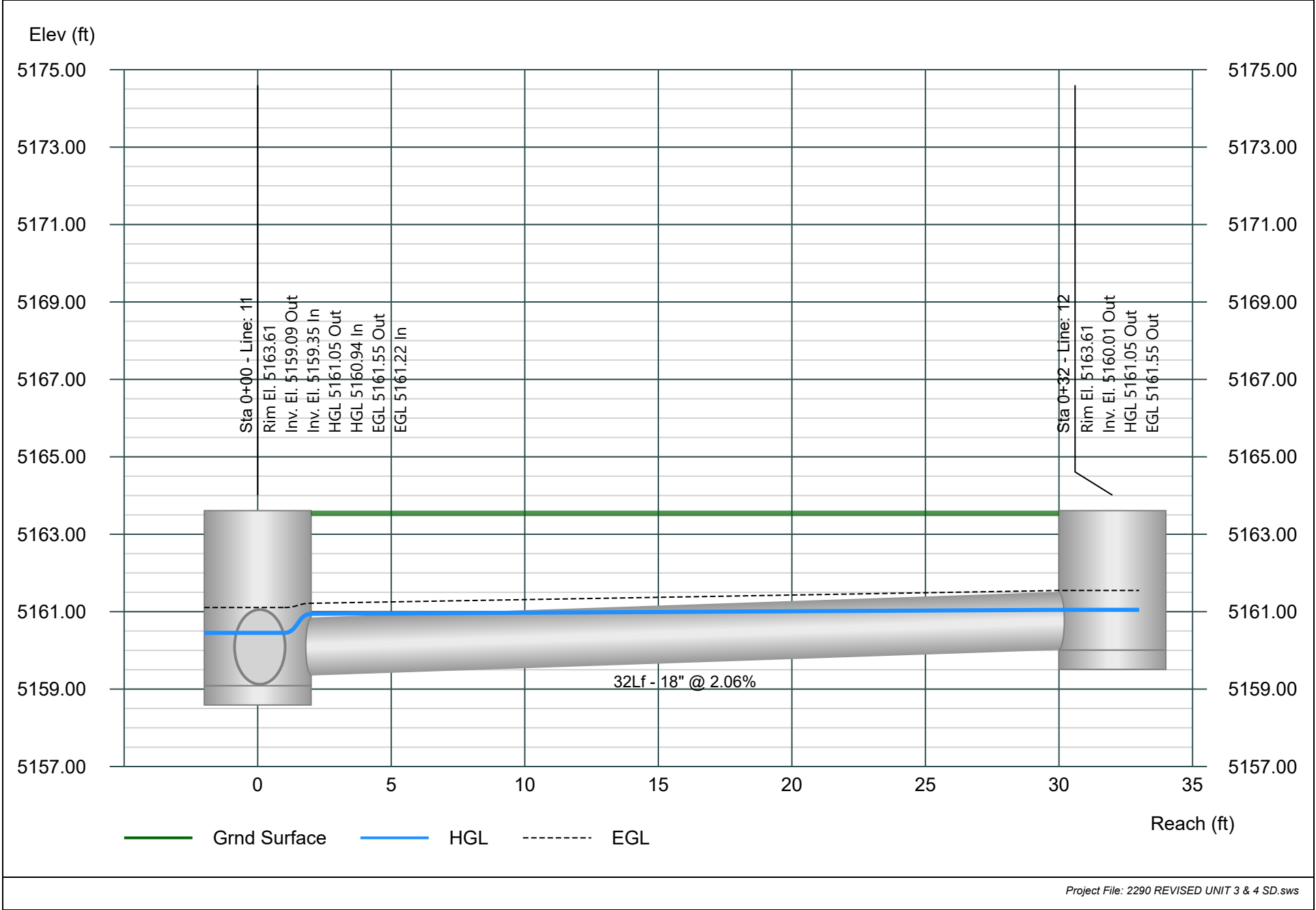


Line 12

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

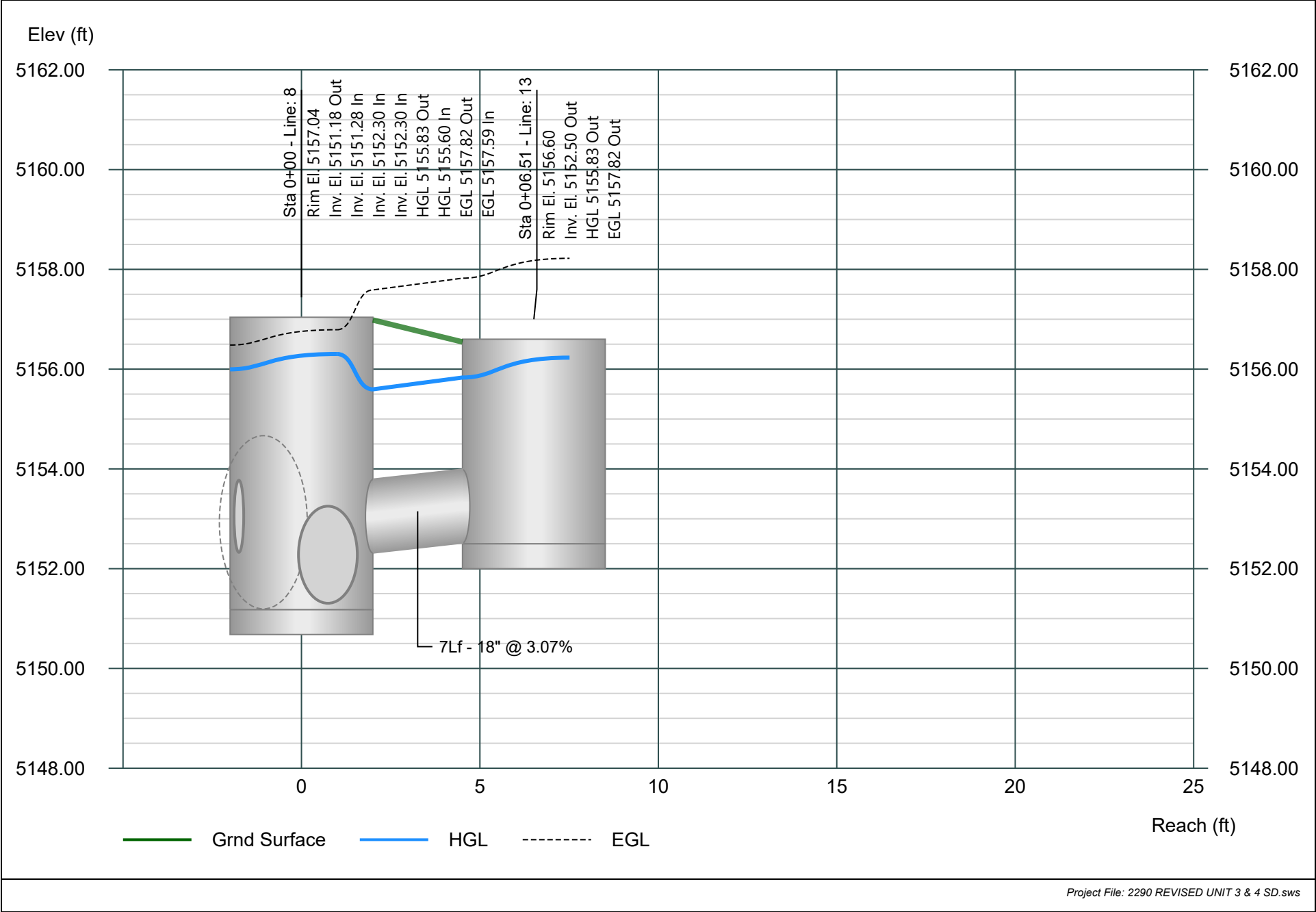


Line 13

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

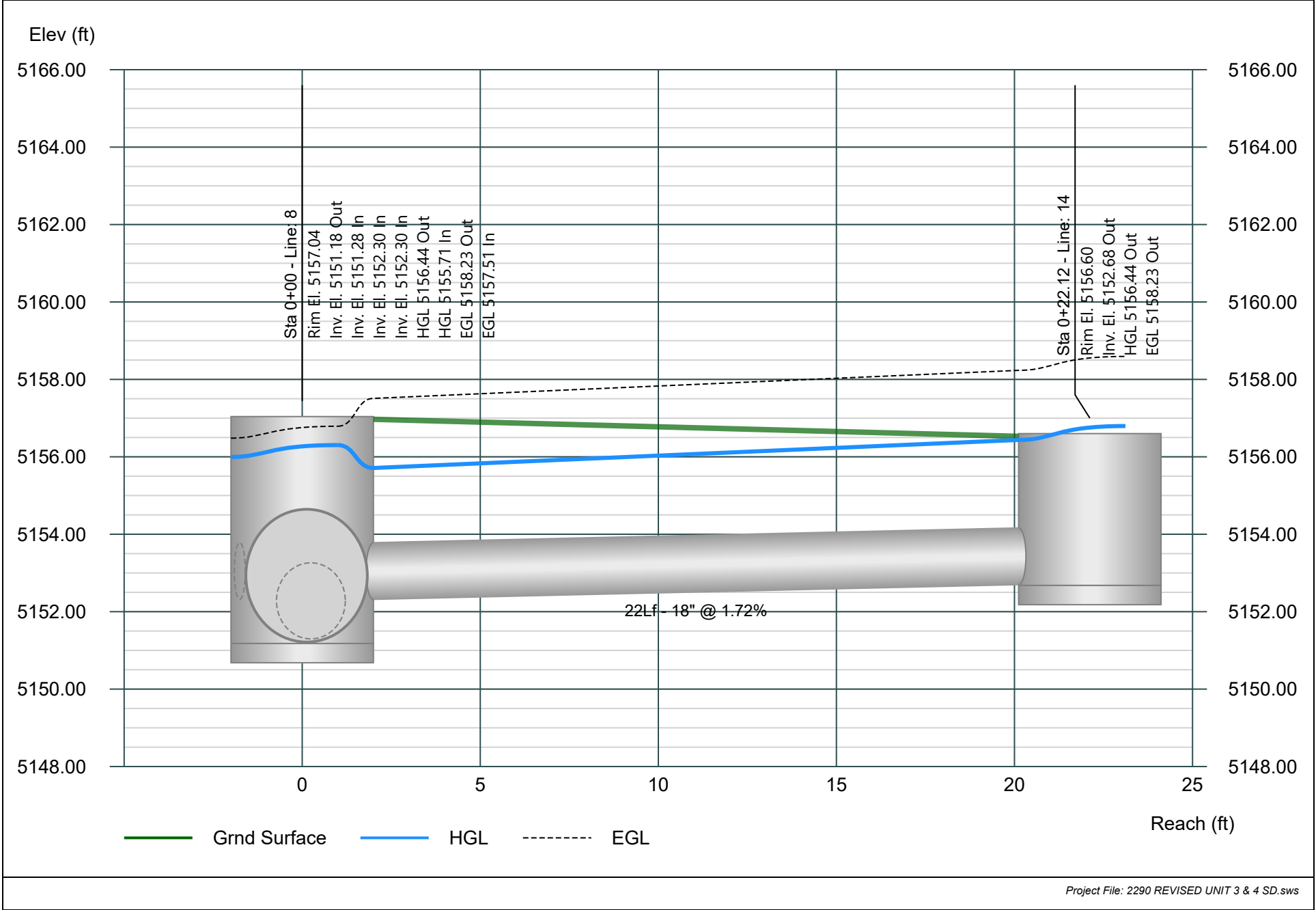


Line 14

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

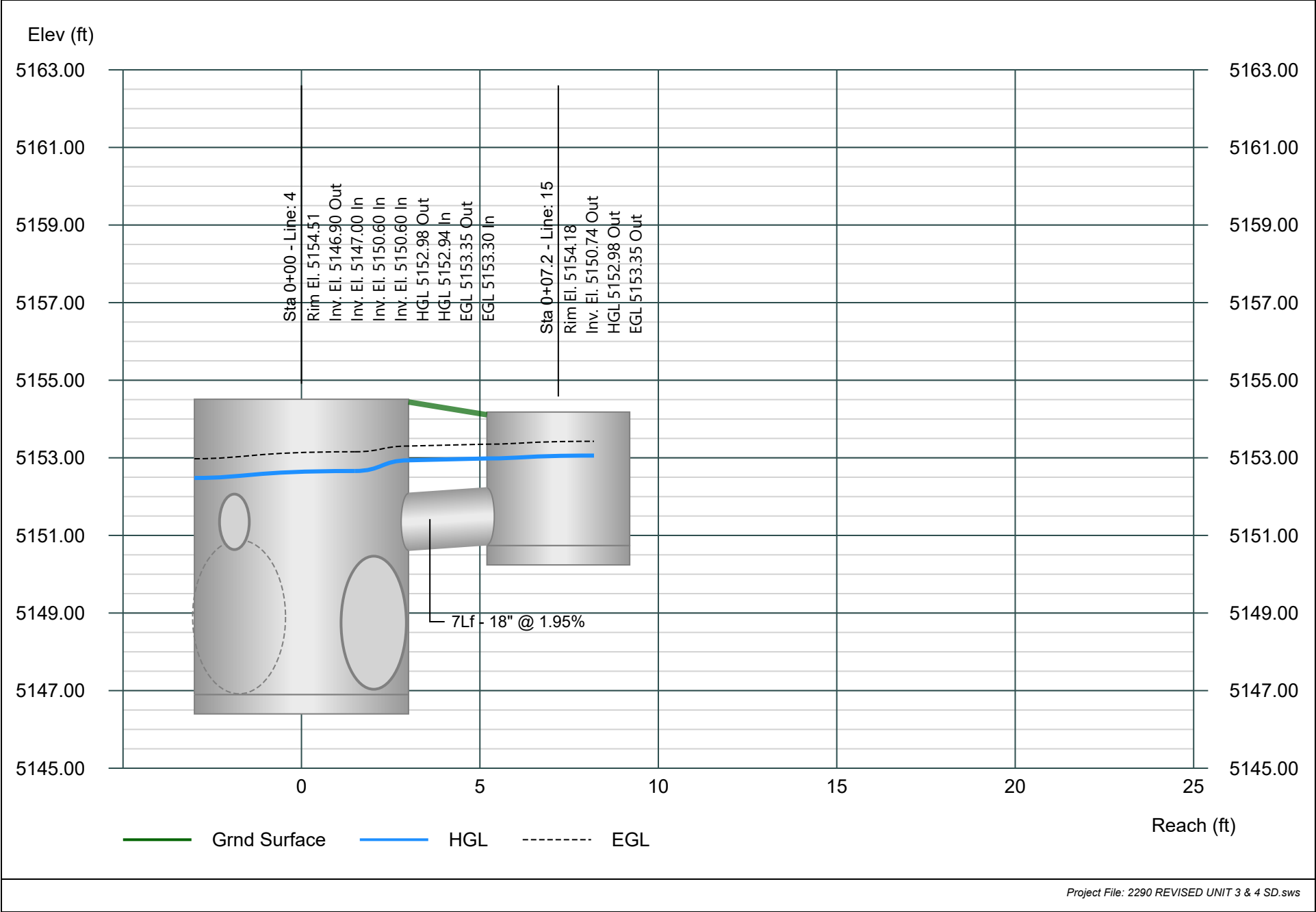


Line 15

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

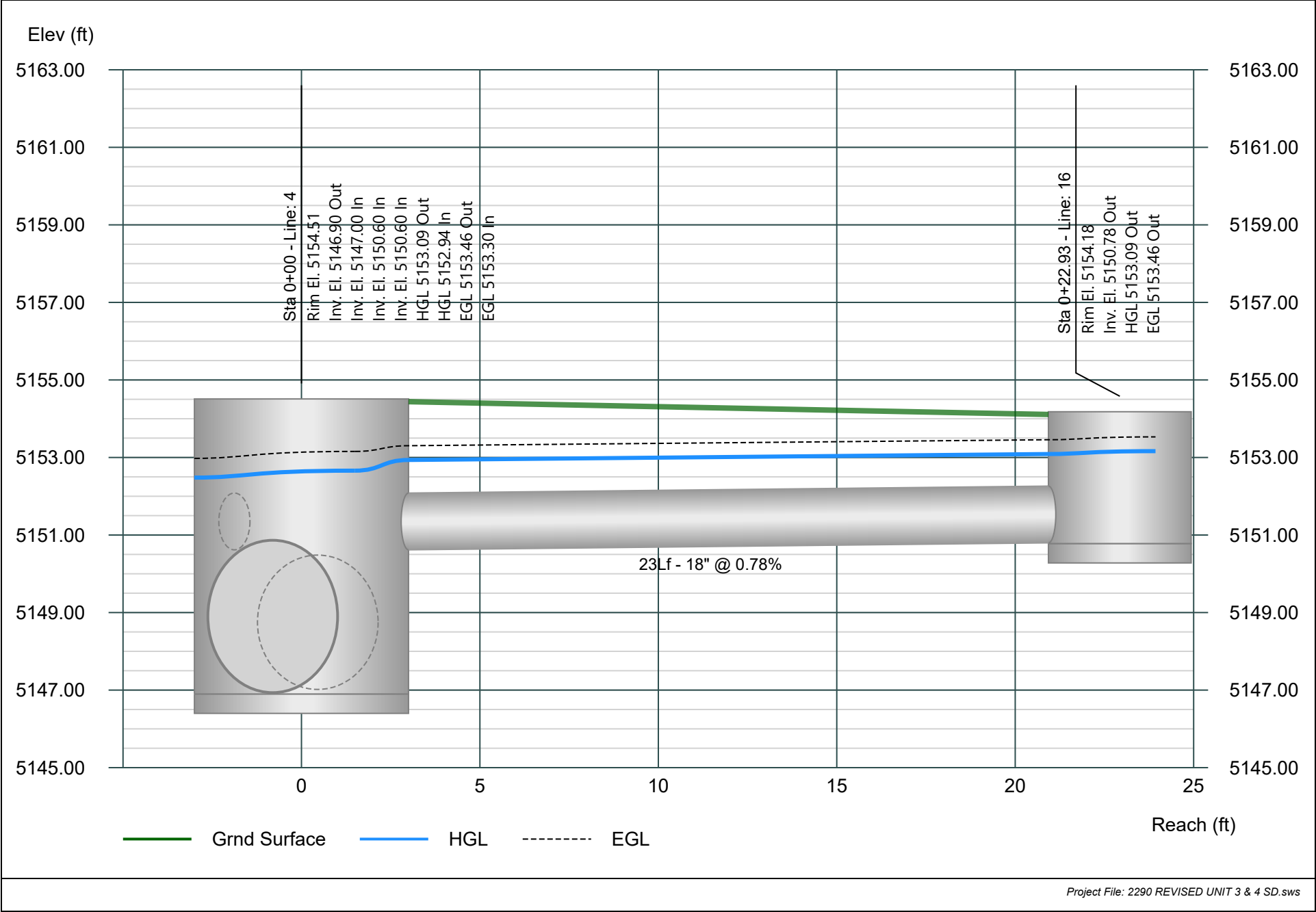


Line 16

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

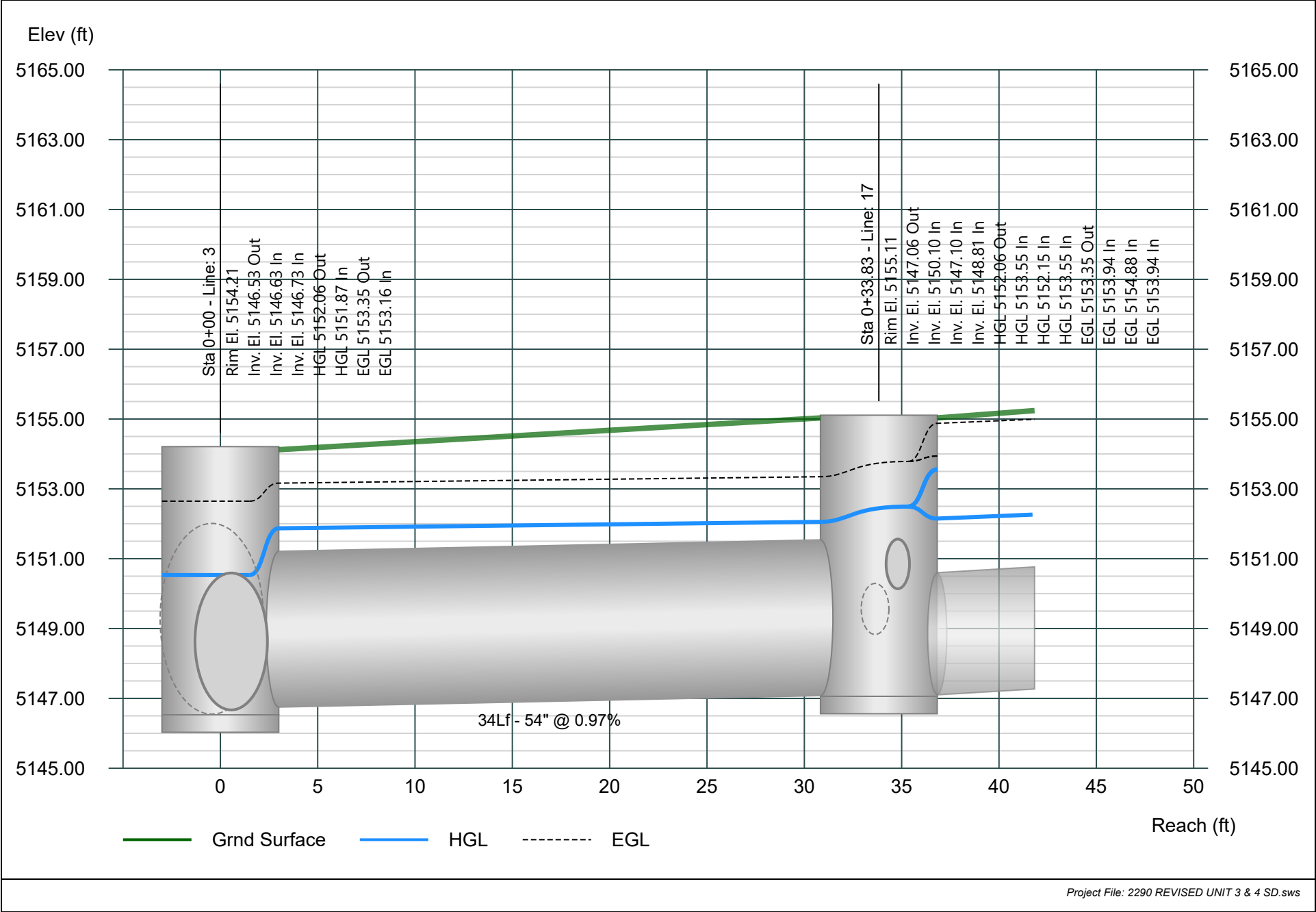


Line 17

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

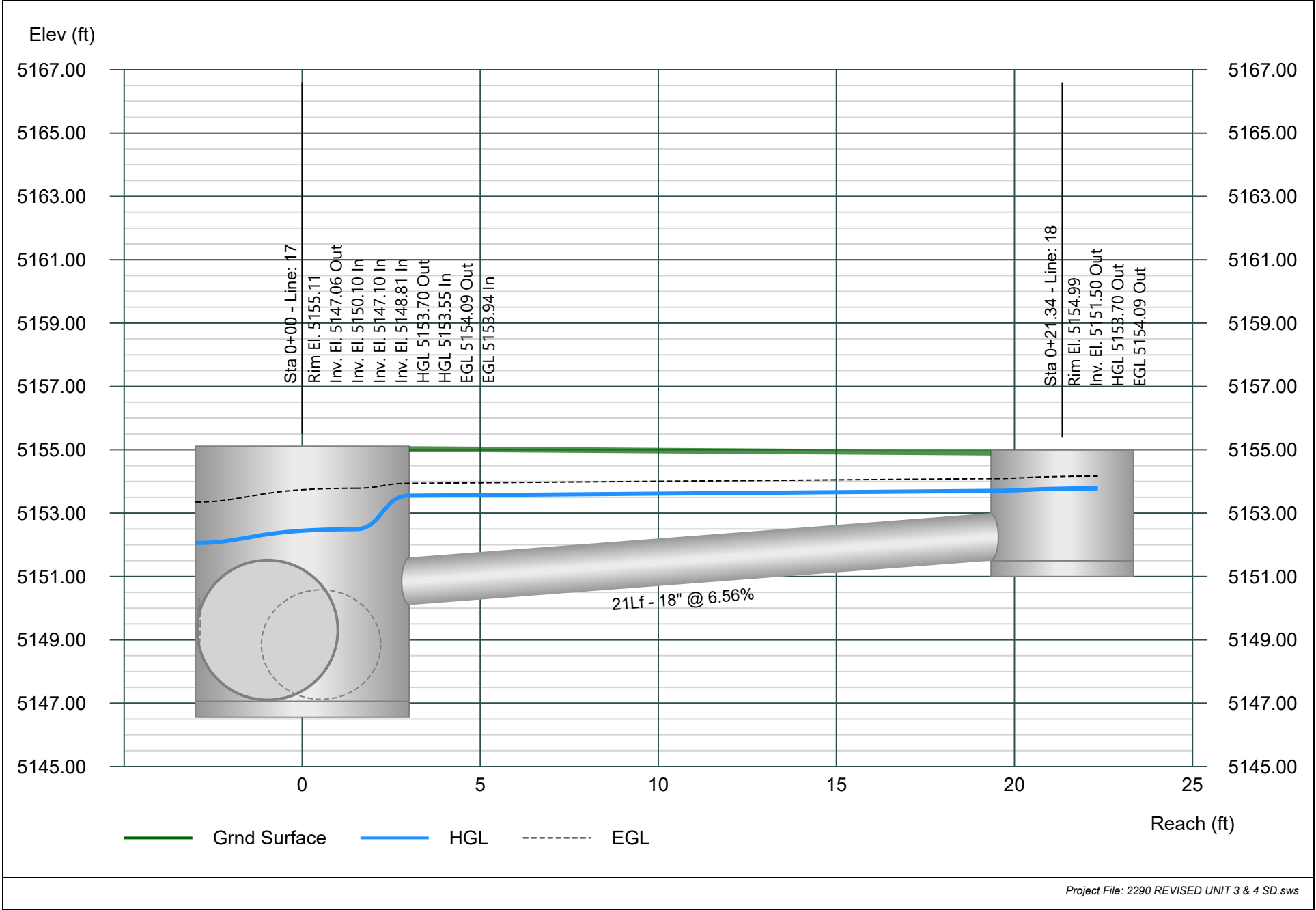


Line 18

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

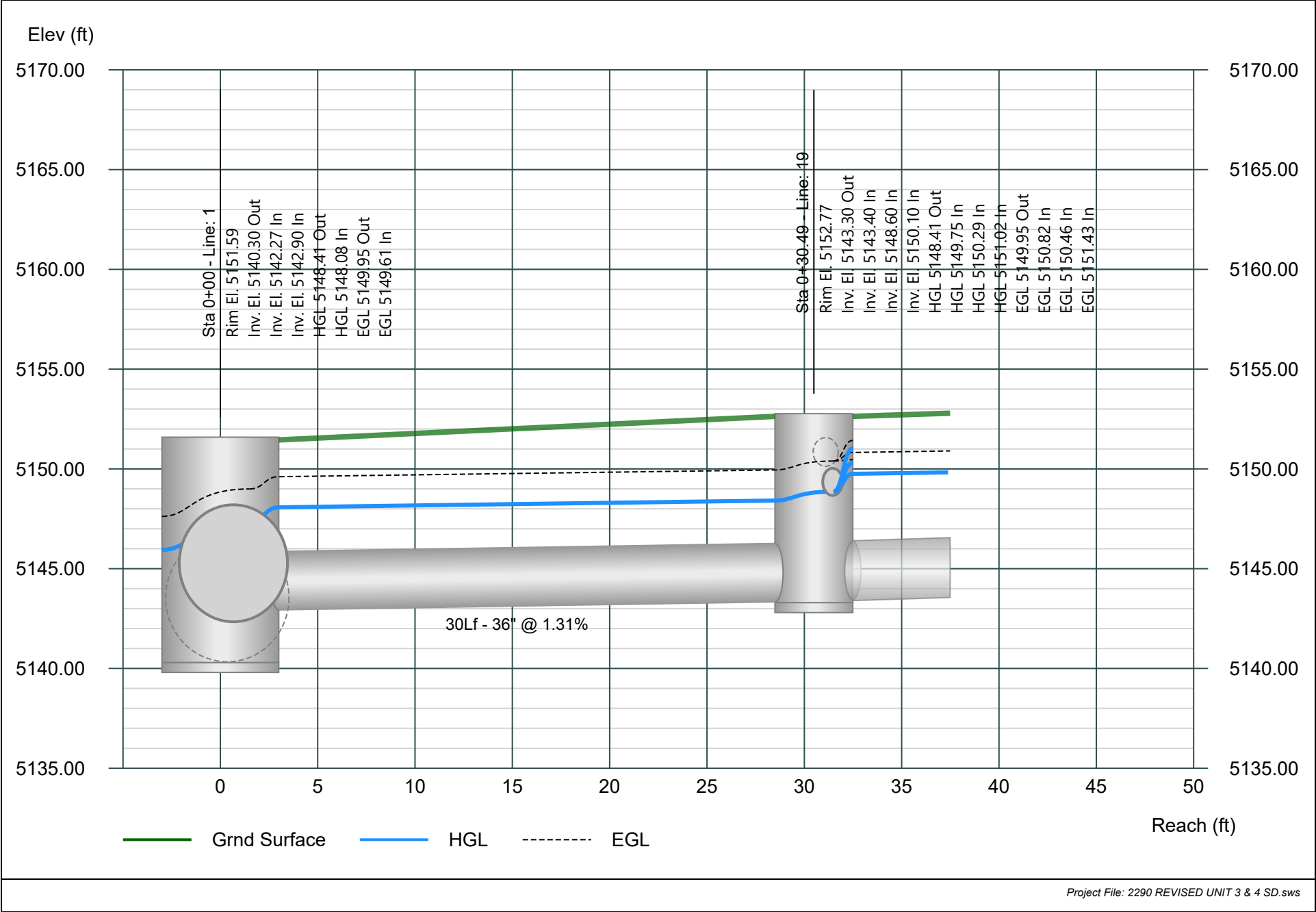


Line 19

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

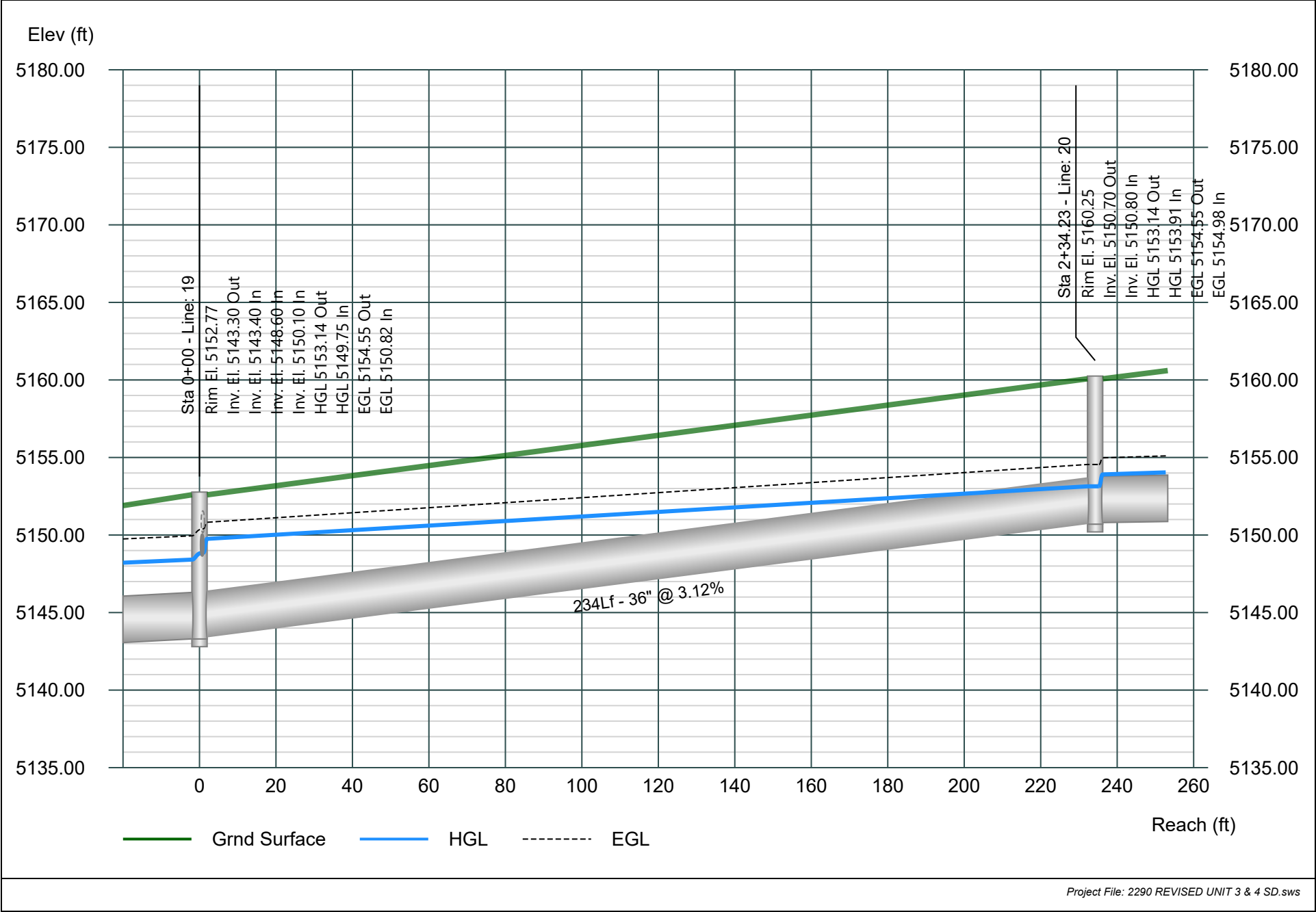


Line 20

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

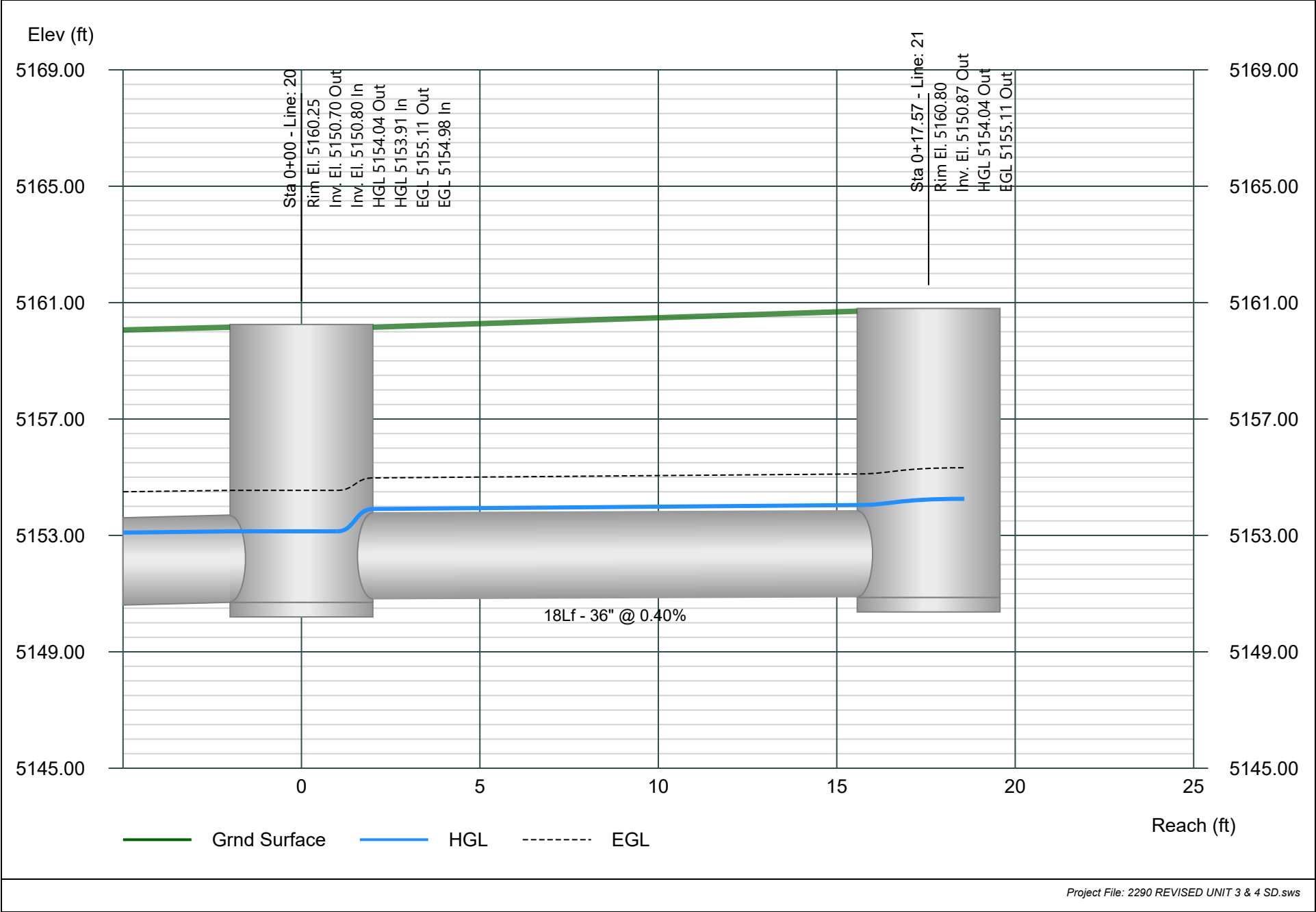


Line 21

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

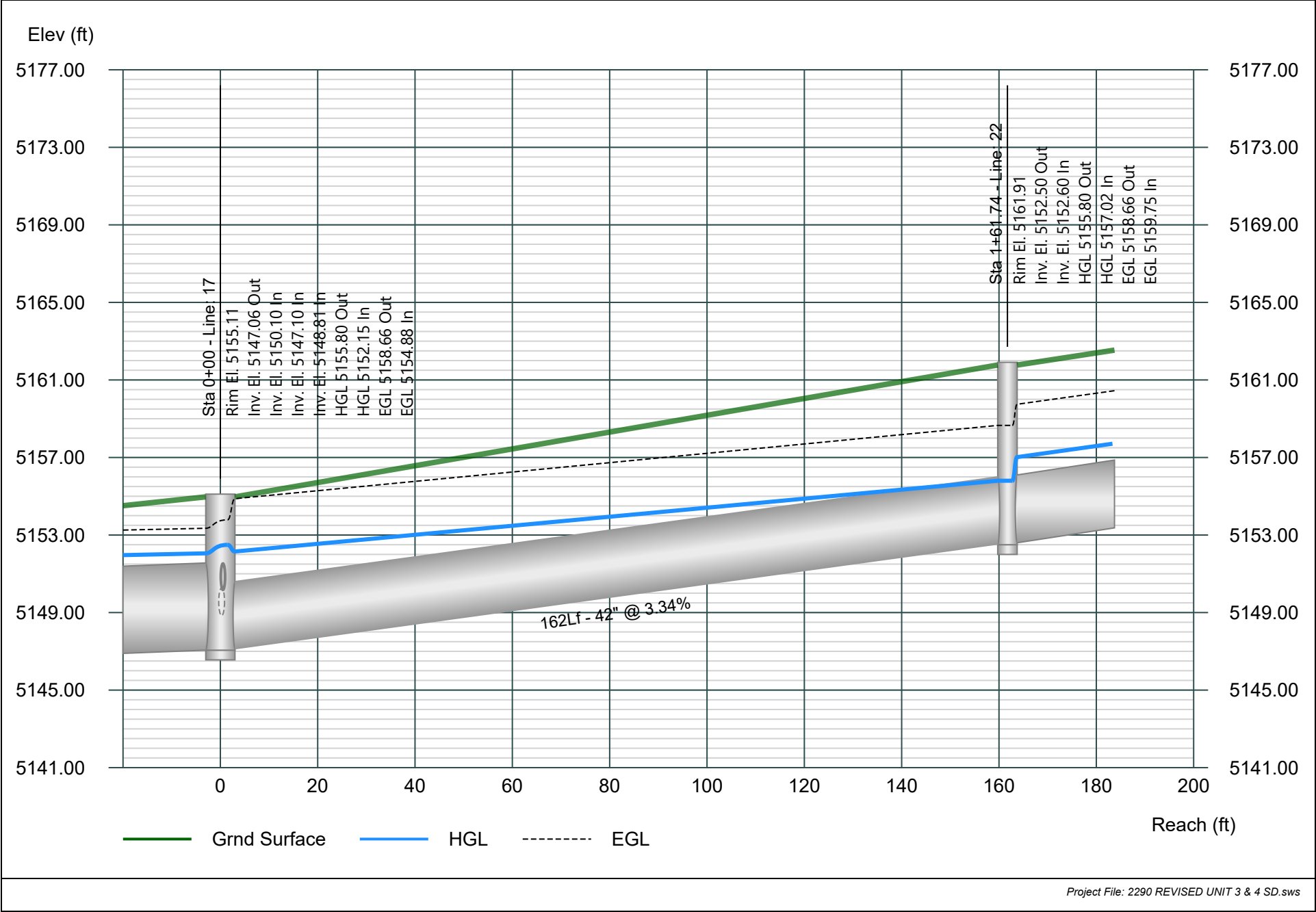


Line 22

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

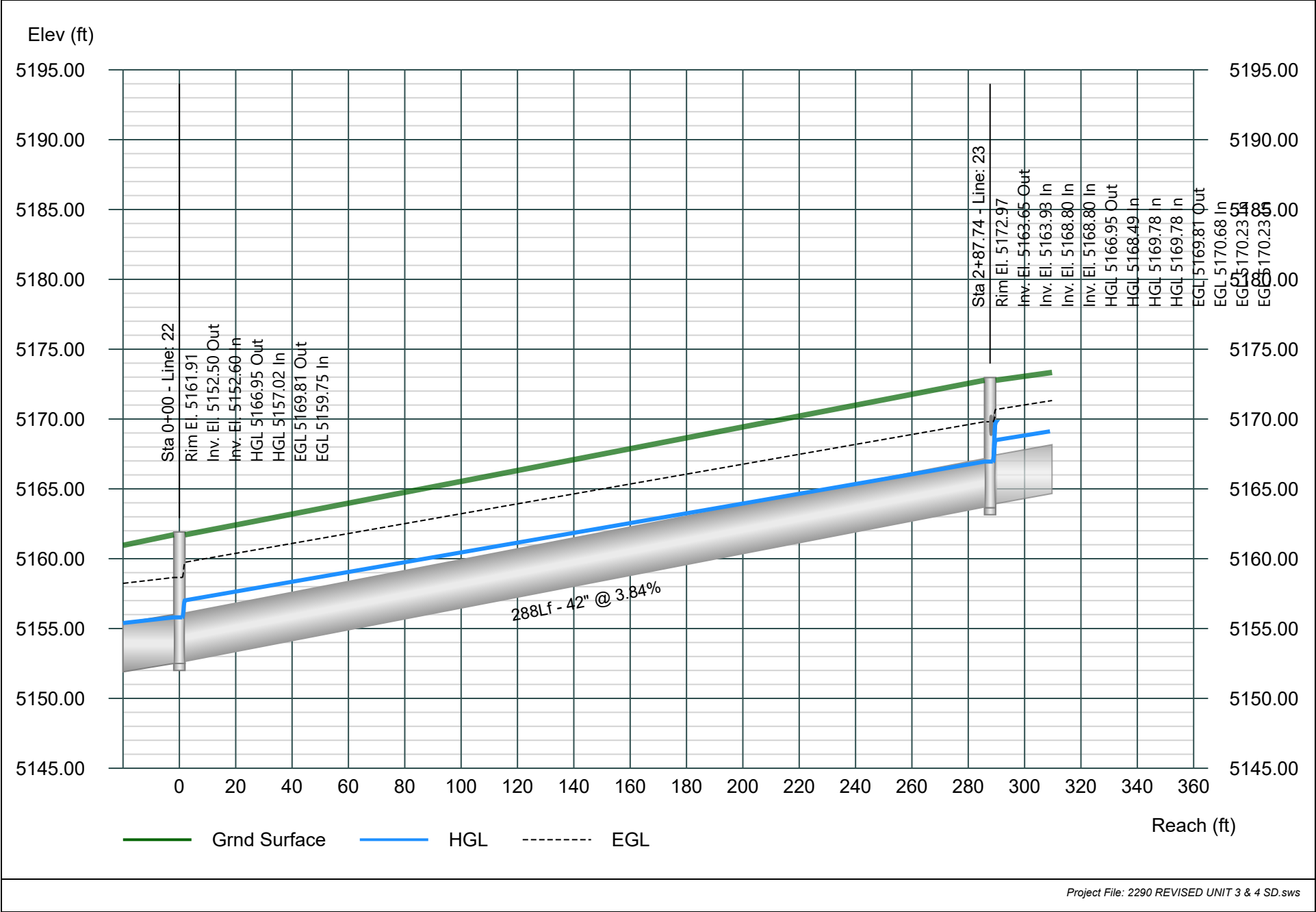


Line 23

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

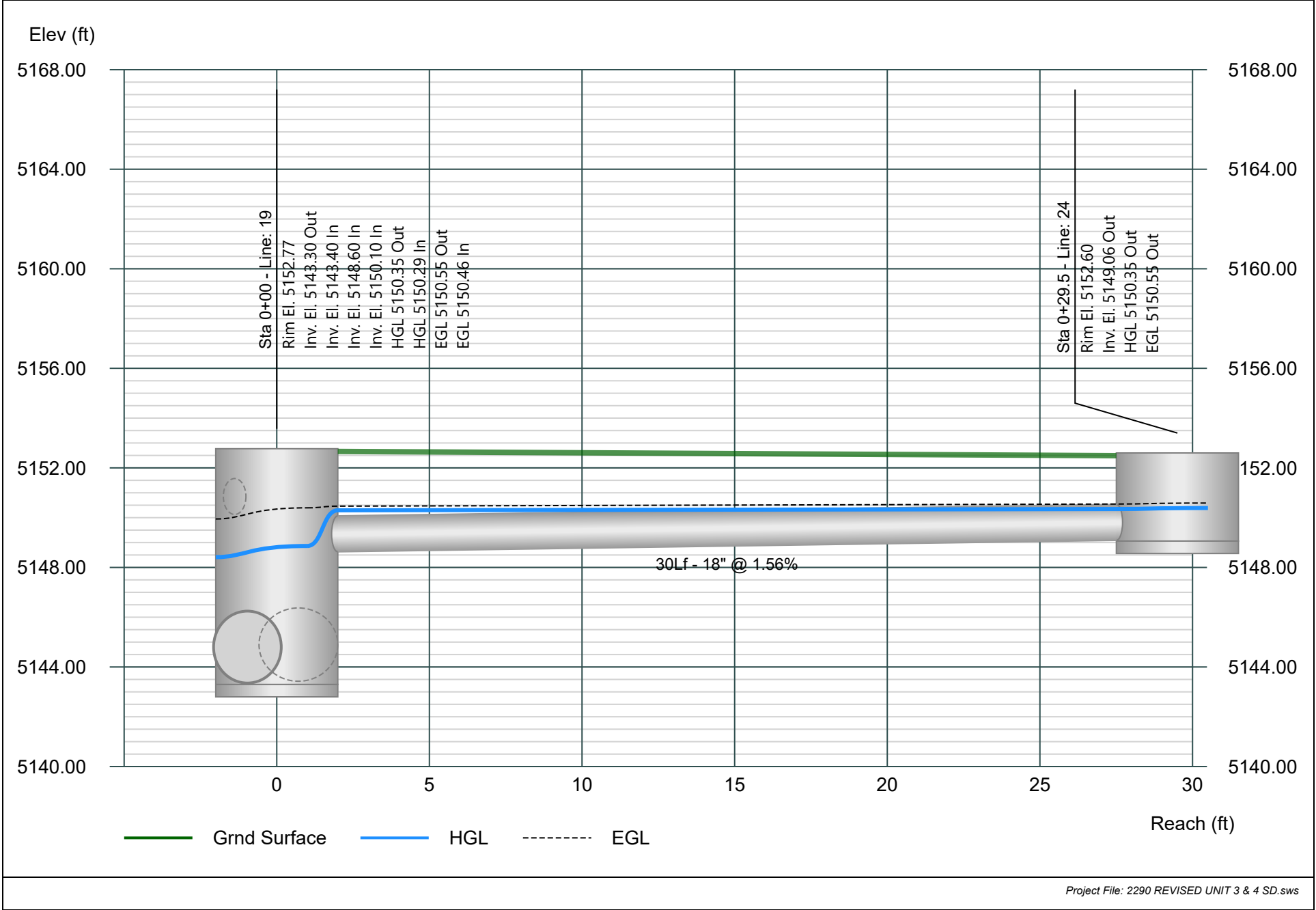


Line 24

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

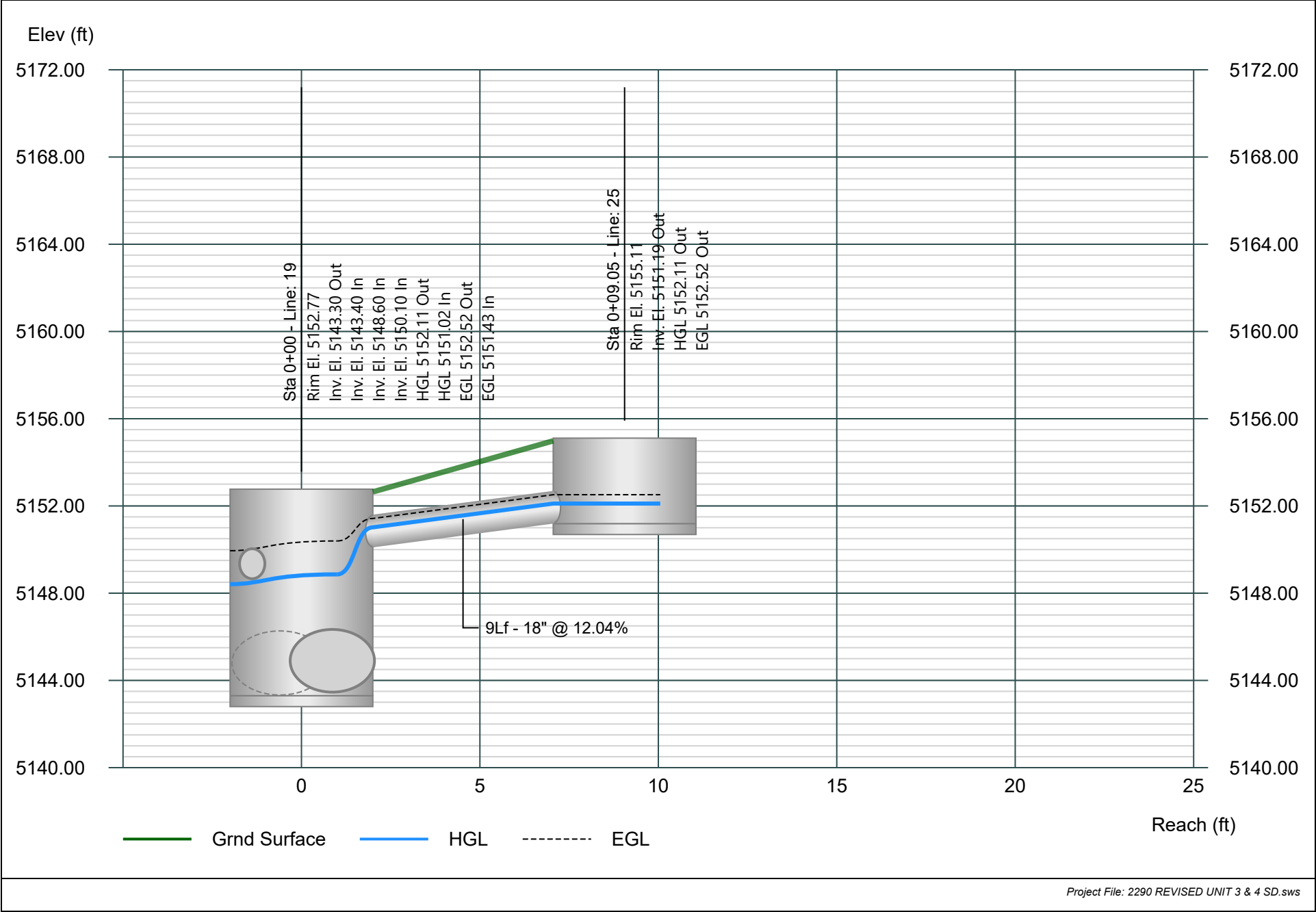


Line 25

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

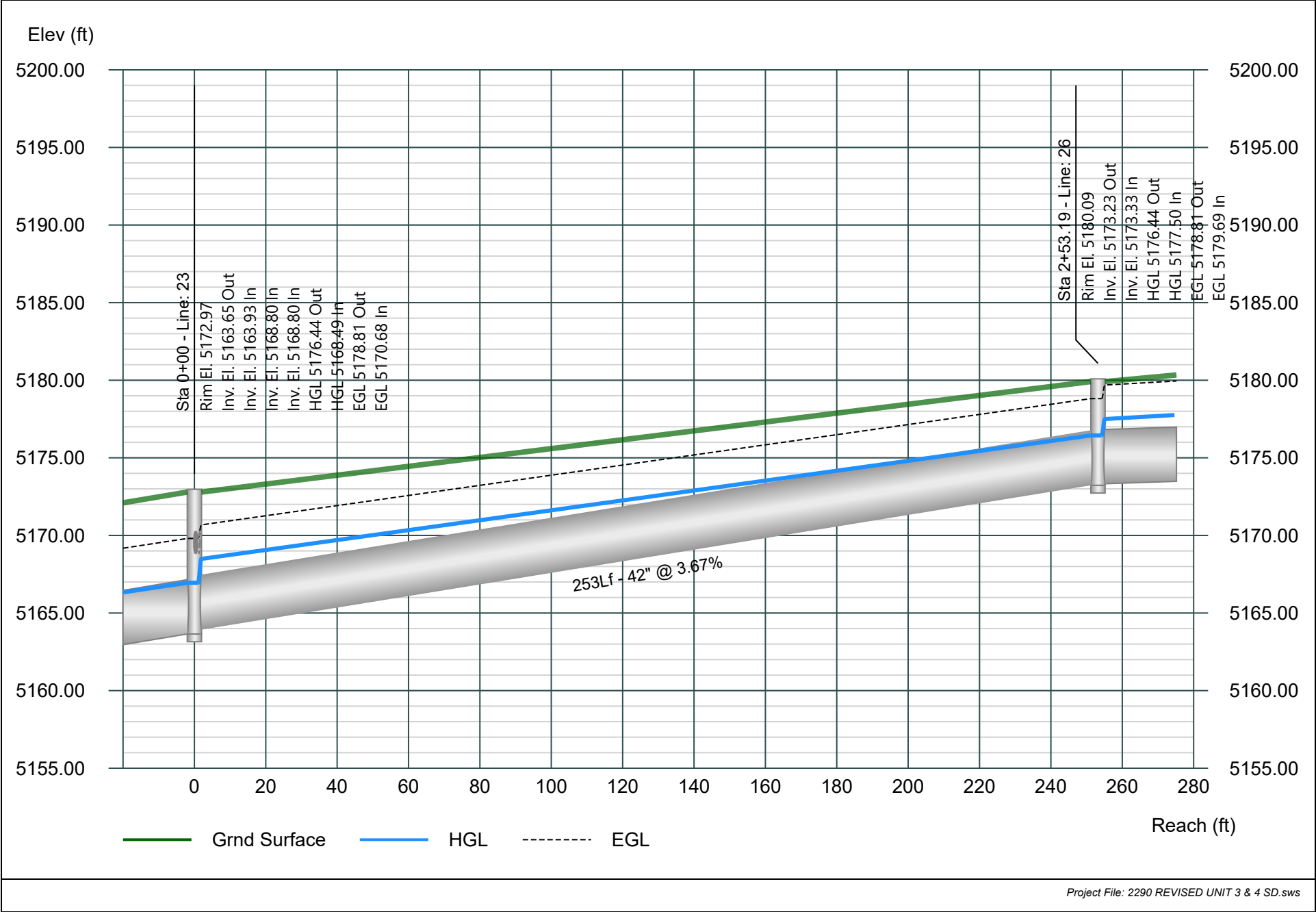


Line 26

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

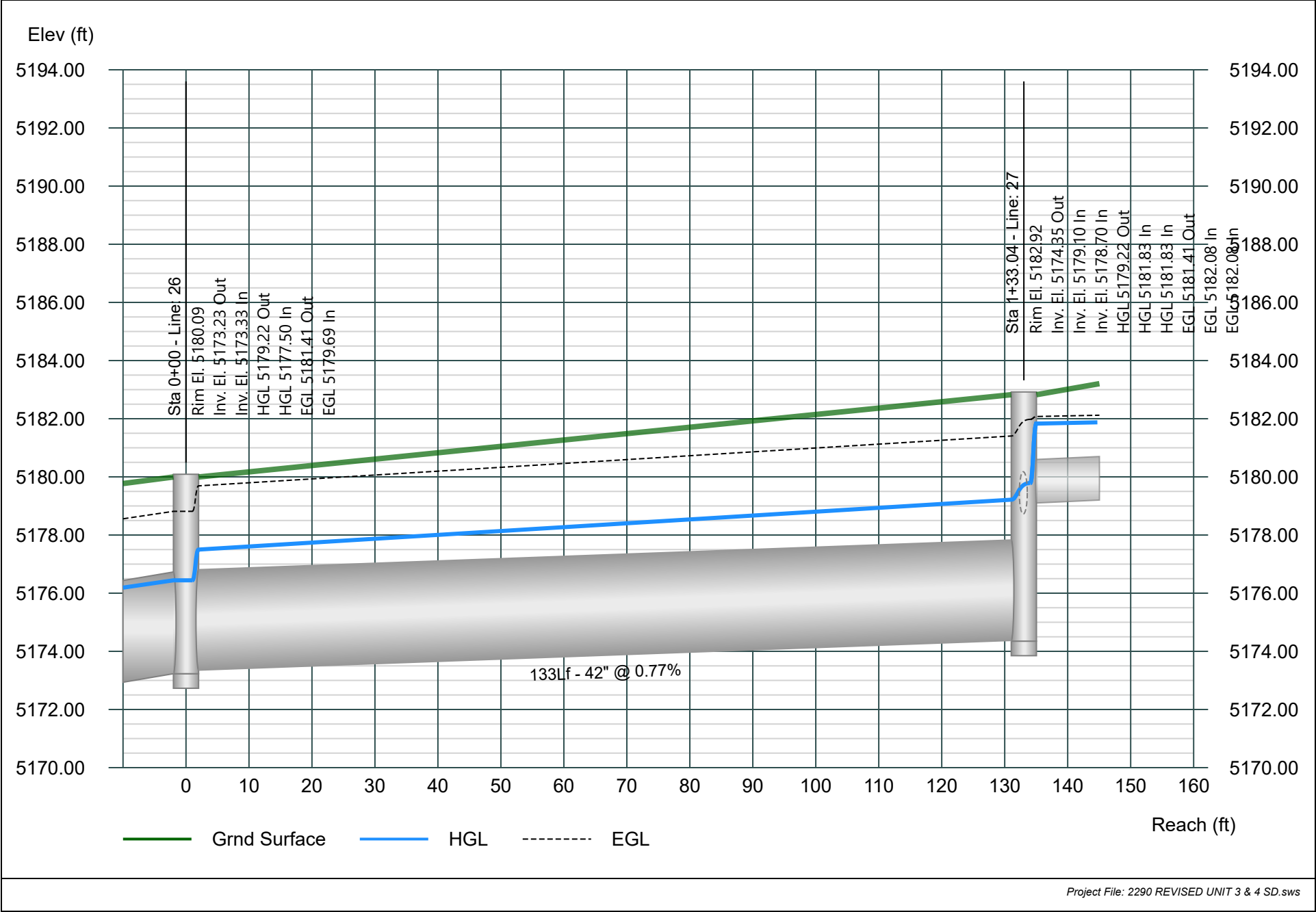


Line 27

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

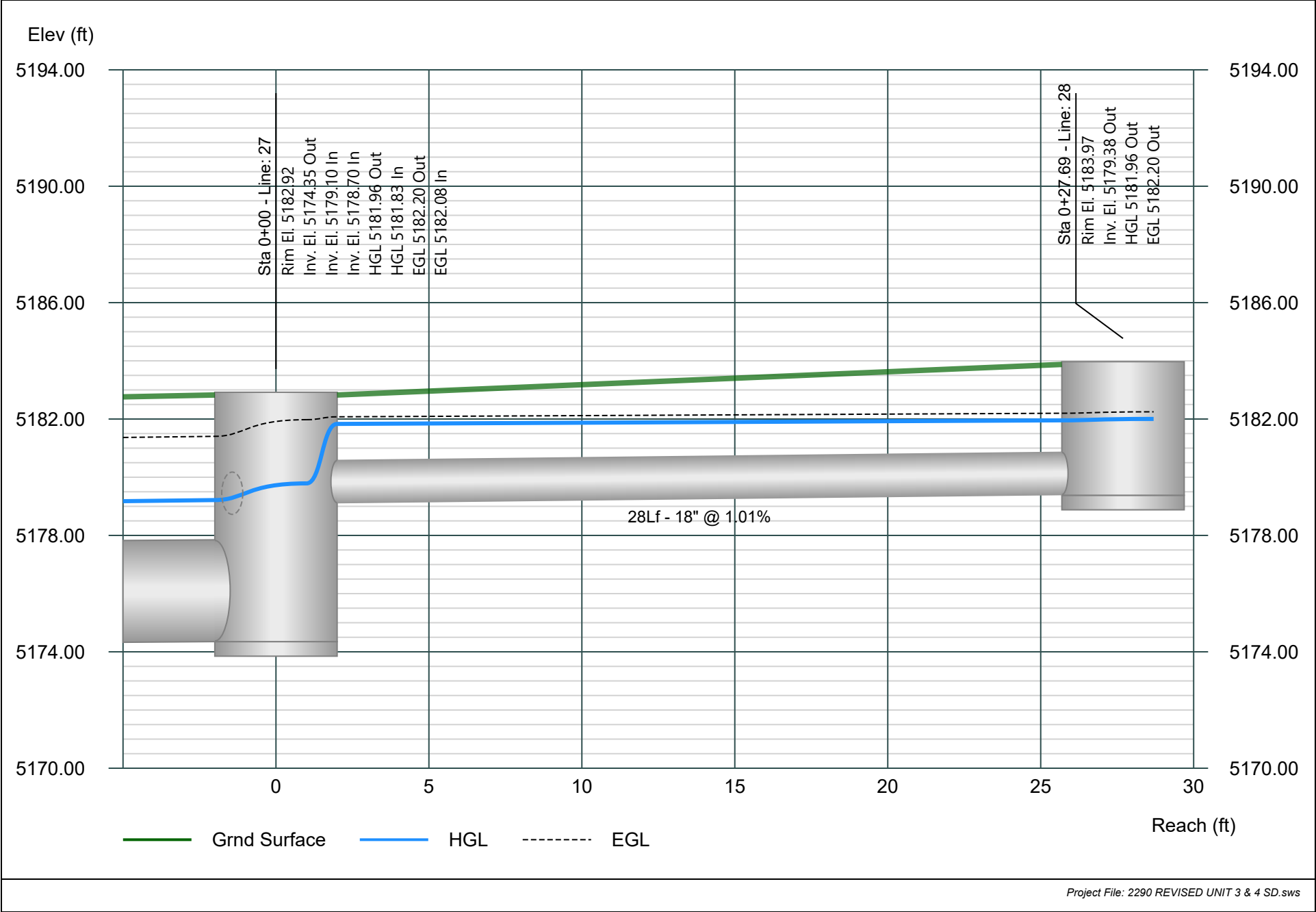


Line 28

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

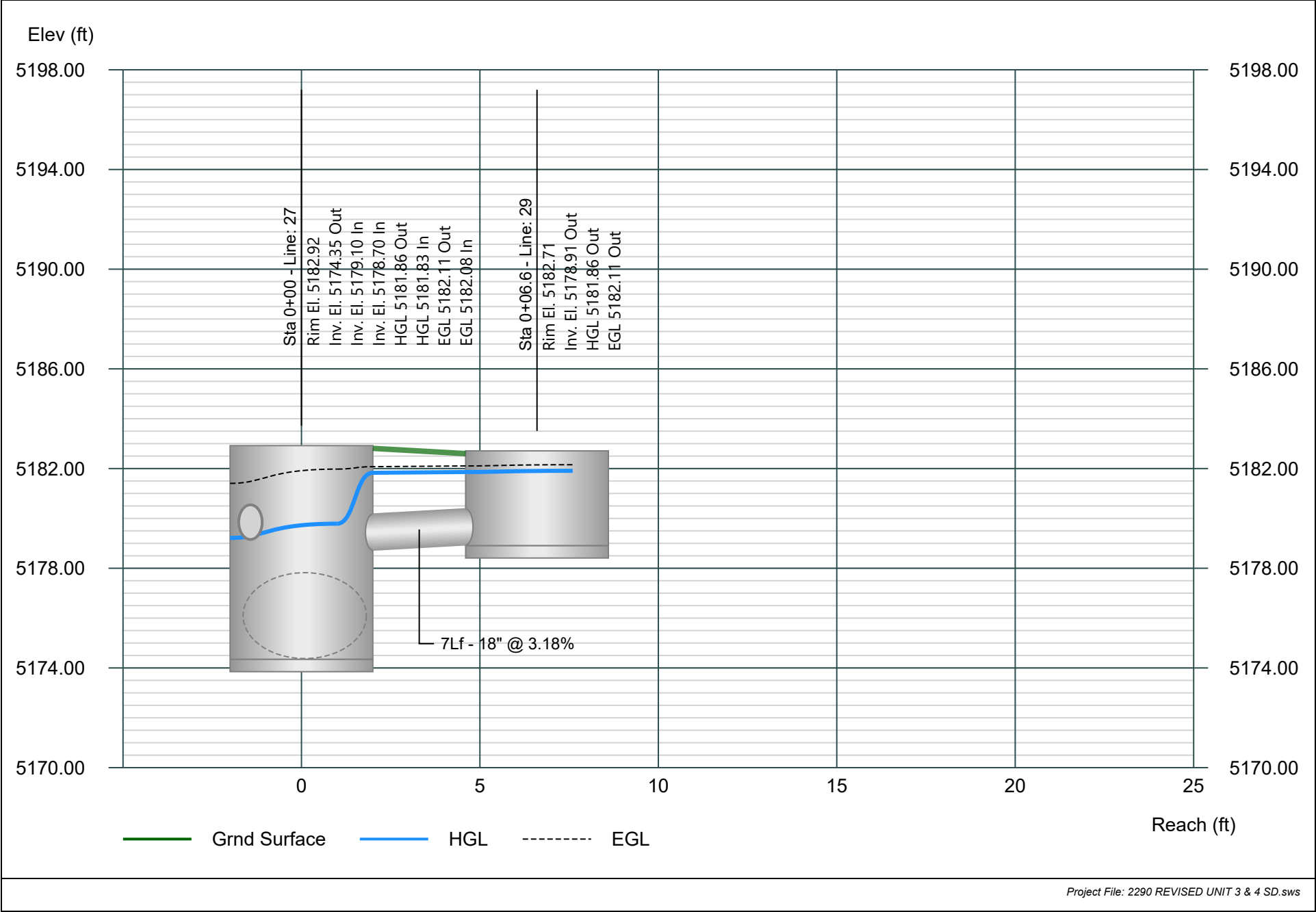


Line 29

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

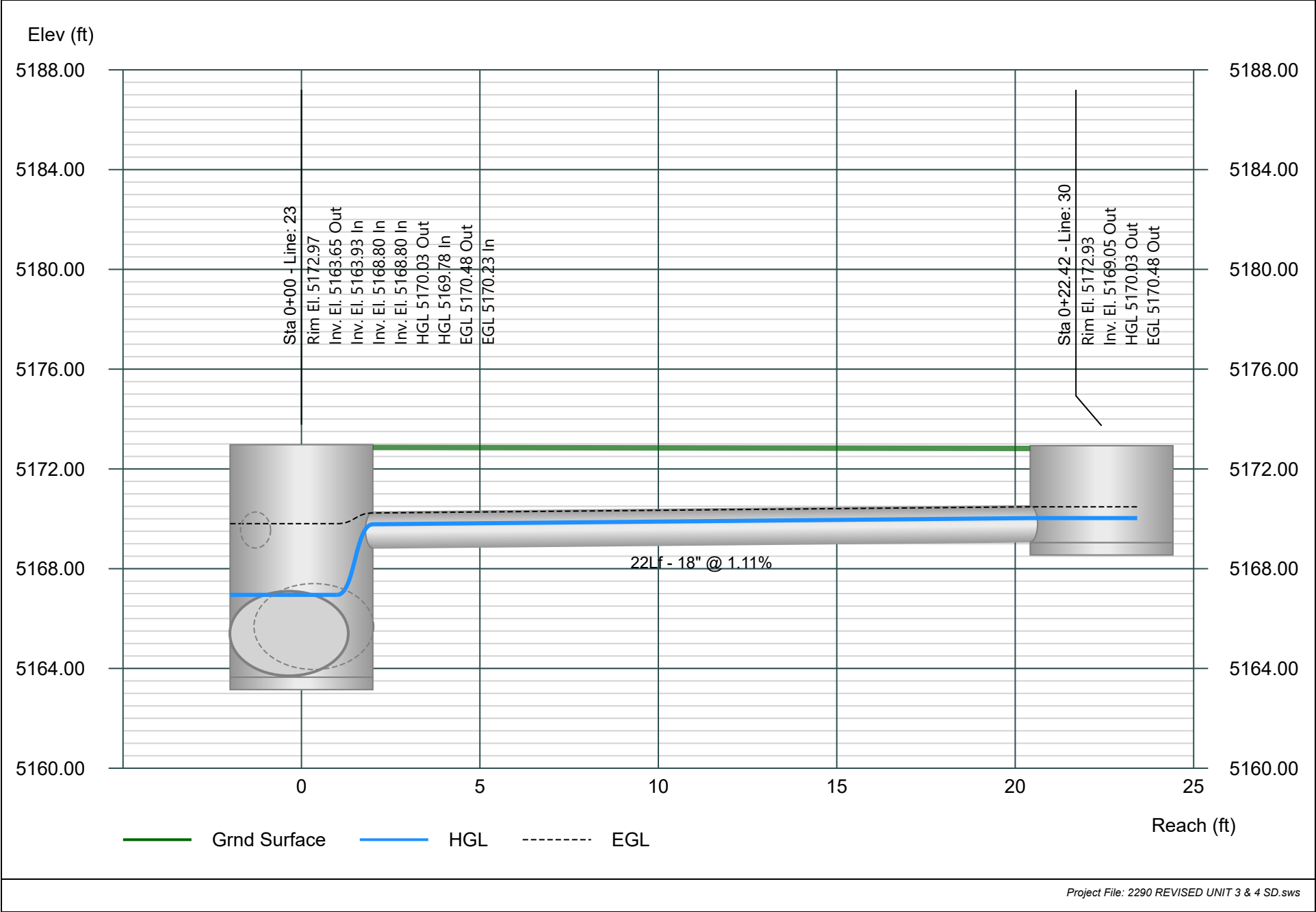


Line 30

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

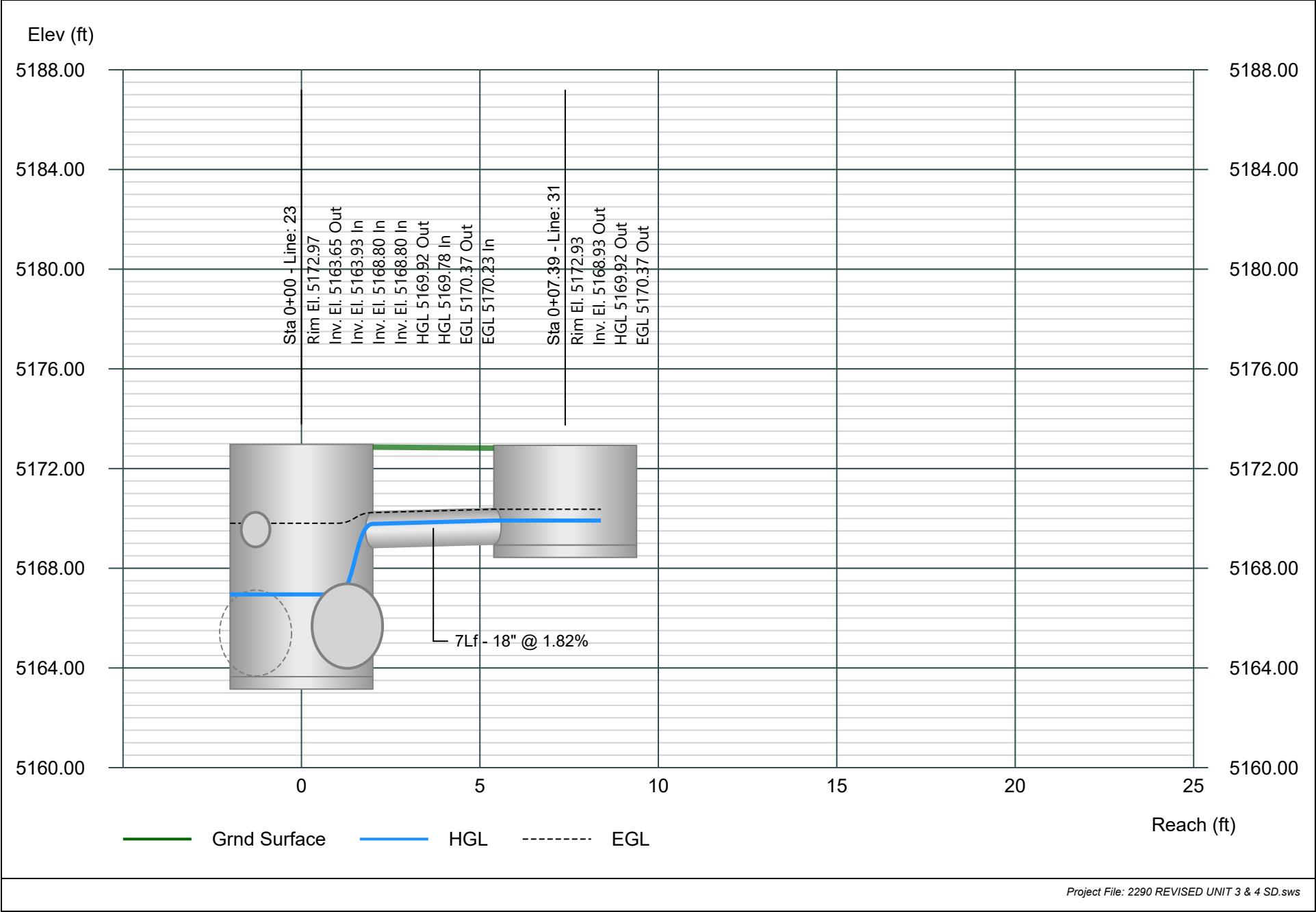


Line 31

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

02-08-2024

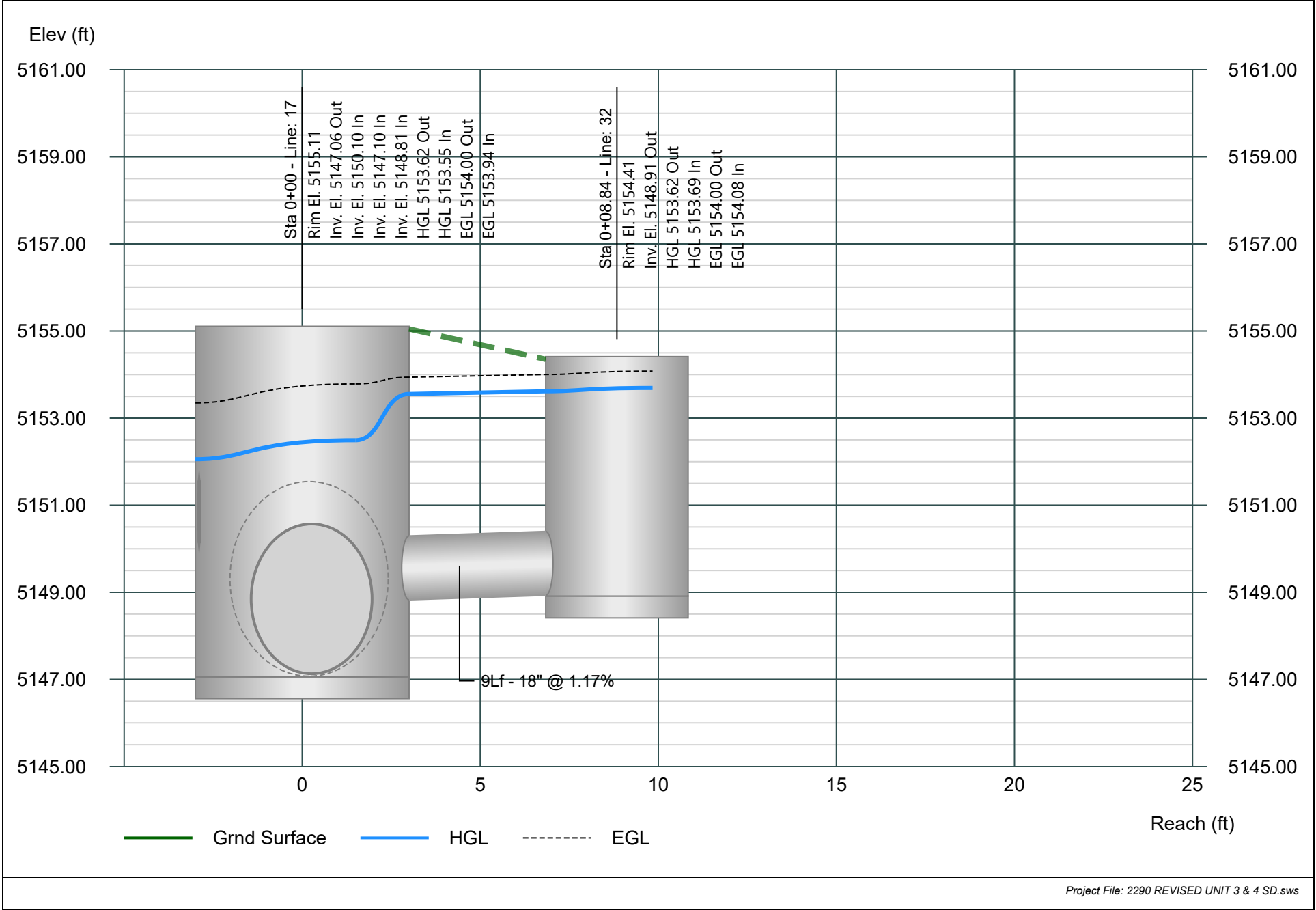


Line 32

Stormwater Studio 2024 v 3.0.0.33

Project Name: Aspire Subdivision Units 3&4

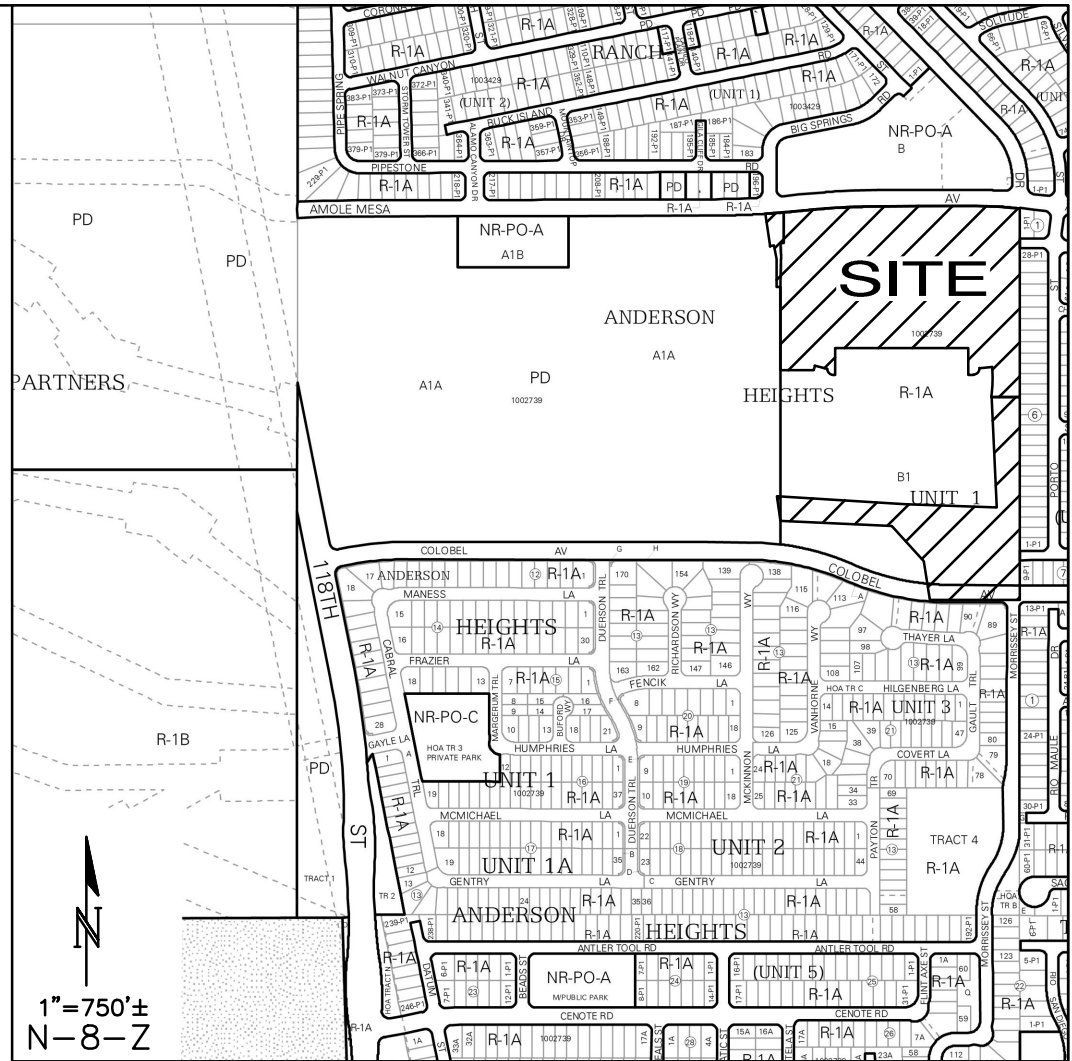
02-08-2024



NOVEMBER 2023

PREPARED FOR:
DR HORTON, INC.
4400 ALAMEDA BLVD. NE, STE B
ALBUQUERQUE, NM 87113

PREPARED BY:
ISAACSON & ARFMAN, INC
128 MONROE ST. NE
ALBUQUERQUE, NM 87108



GENERAL NOTES

5. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2020 EDITION THROUGH UPDATE #1, AND WILL BE REFERRED TO HEREIN AS "STANDARD SPECIFICATIONS".
6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
7. CONTRACTOR SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER AND ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
8. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
9. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION ENGINEER (OR PROJECT MANAGER) NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. ONLY THE CITY SURVEYOR SHALL REPLACE SURVEY MONUMENTS. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO STANDARD SPECIFICATIONS SECTION 4.4.
10. EXISTING UTILITY LINE LOCATIONS ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND LINES MAY EXIST WHERE NONE ARE SHOWN. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL THEN EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL PERTINENT EXISTING UTILITIES AND/OR OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. CONTRACTOR SHALL THEN COORDINATE RELOCATION OF UTILITY LINES WITH UTILITY COMPANIES AS REQUIRED. ANY DAMAGE CAUSED BY FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY EXISTING UTILITIES IS THE FULL RESPONSIBILITY OF THE CONTRACTOR.
11. CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS BUILT" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
12. CONTRACTOR SHALL ASSUME FINANCIAL RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENT, PAVEMENT MARKINGS, SIGNAGE, CURB AND GUTTER, HANDICAP RAMPS, AND SIDEWALK DURING CONSTRUCTION APART FROM THOSE SECTIONS INDICATED ON THE PLANS, AND SHALL REPAIR OR REPLACE, PER THE STANDARD SPECIFICATIONS, ANY SUCH DAMAGE.
13. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
14. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND MAINTAIN ALL CONSTRUCTION SIGNING UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITY AND OTHER JURISDICTIONAL AUTHORITIES WHERE APPLICABLE.
15. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS SHOWN. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR, INCLUDING ANY SUCH COSTS INCURRED.
16. REMOVALS SHALL BE DISPOSED OF OFF-SITE AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

WATER & SEWER

3. ALL WORK REGARDING PUBLIC WATER AND PUBLIC SANITARY SEWER INFRASTRUCTURE DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, BE CONSTRUCTED IN ACCORDANCE WITH WATER AUTHORITY STANDARD SPECIFICATIONS. PLANS SHALL FOLLOW THE MOST CURRENT UPDATE WHICH CAN BE FOUND ONLINE AT http://www.abcwua.org/For_Builders.aspx
14. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING. EXISTING VALVES AND MANHOLES SHALL NOT BE BURIED OR PAVED OVER BUT RIMS SHALL BE ADJUSTED TO MATCH NEW GRADE PER COA STANDARD DRAWINGS 2460 AND 2461.
15. NON-RESIDENTIAL USERS SHALL COORDINATE WITH THE WATER AUTHORITY PRETREATMENT ENGINEER TO ENSURE THE PROPER IMPROVEMENTS ARE IN PLACE FOR THE DEVELOPMENT FOR DISCHARGE INTO THE PUBLIC SANITARY SEWER COLLECTION SYSTEM.
16. NON-RESIDENTIAL USERS SHALL COORDINATE WITH THE WATER AUTHORITY CROSS CONNECTION SECTION TO ENSURE THE PROPER IMPROVEMENTS ARE IN PLACE FOR THE TO ENSURE PROPER BACKFLOW CONTAINMENT IS IN PLACE FOR THE WATER SYSTEM.
17. MANHOLE RIMS, FIRE HYDRANT ELEVATIONS, AND FLANGE ELEVATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND ADJUST TO FINAL PAVEMENT OR SURFACE GRADES.
18. THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST BE MADE ONLINE AT http://www.abcwua.org/WATER_SHUT_OFF_AND_TURN_ON_PROCEDURES.ASPX
19. PROPOSED WATERLINE MATERIALS SHALL BE PVC PIPE MEETING AWWA C-900: DR11 REQUIREMENTS (6" - 12") OR DUCTILE IRON PIPE MEETING AWWA C-150 REQUIREMENTS (6" - 48").
20. ALL WATERLINE FITTINGS, VALVES, BENDS, TEES, CROSSES AND APPURTENANCES SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE NOTED ON THE PLANS. THE JOINT RESTRAINT REQUIREMENTS SHOULD BE DELINEATED WITHIN A JOINT RESTRAINT TABLE.
21. ALL SANITARY SEWER LINE STATIONING REFERS TO SANITARY SEWER CENTERLINE STATIONING. EXCEPT WHEN PROFILED WITHIN A PROPOSED OR EXISTING STREET, WHERE STREET STATIONING SHALL GOVERN.
22. ALL PROPOSED SANITARY SEWER SLOPES SHALL BE VERIFIED DURING CONSTRUCTION TO MEET THE APPROVED DESIGN. AS-BUILT SLOPES SHALL BE RECORDED FOR EACH LINE SEGMENT.
23. ALL FINAL BACKFILL FOR TRENCHES SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY PER ASTM D-1557 AND AS DIRECTED BY STANDARD SPECIFICATIONS SECTION 701.14.2 AND STANDARD DRAWING NUMBER 2465.
24. ELECTRONIC MARKER SPHERES (EMS) WILL BE PLACED ACCORDING TO THE ABCWUA STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL INSTALL A 4" X 4" X 5" POST AND EMS AT THE END OF EACH SANITARY SEWER SERVICE.
25. TRACER WIRE SHALL BE INCLUDED FOR ALL PUBLIC WATER AND SEWER MAINS AND FOR WATER SERVICES IN ACCORDANCE WITH WATER AUTHORITY DETAILS.
26. CONTRACTOR SHALL PROVIDE THE PROPOSED HYDRO TESTING PLANS TO THE WUA INSPECTORS FOR APPROVAL PRIOR TO BEGINNING TESTING OPERATIONS.
27. AT UTILITY CROSSINGS, WHERE LESS THAN 18" OF VERTICAL SEPARATION FROM STORM DRAIN PIPING OR STRUCTURES IS PROPOSED, LEAN FILL CONSTRUCTION (PER SECTION 207 OF THE STANDARD SPECIFICATIONS) SHALL BE USED TO PROTECT THE WATER OR SEWER LINE. LEAN FILL SHALL EXTEND A PERPENDICULAR DISTANCE OF 5 FEET ON EACH SIDE OF THE STORM PIPE OR STRUCTURE.
28. ALL DESIGNS AND CONSTRUCTION OF ANY UNDERGROUND UTILITIES SHALL COMPLY WITH ADMINISTRATIVE INSTRUCTION NO. 9 FOR WORK NEARBY OR AFFECTING SAN JUAN CHAMA TRANSMISSION LINES AND APPURTENANCES. INFORMATION SHALL BE PROVIDED TO THE WATER AUTHORITY ONE (1) MONTH IN ADVANCE OF THE CONSTRUCTION START DATE. INFORMATION CAN BE FOUND AT http://www.abcwua.org/WATER_SHUT_OFF_AND_TURN_ON_PROCEDURES.ASPX

29. ALL WATER AND SANITARY SEWER INFRASTRUCTURE SHALL BE CONSTRUCTED UTILIZING MATERIALS LISTED IN THE APPROVED PRODUCTS LIST AND BE CONSTRUCTED PER THE MOST CURRENT WATER AUTHORITY STANDARD DETAILS AND SPECIFICATIONS. MATERIAL SUBMITTALS SHALL BE PROVIDED PRIOR TO CONSTRUCTION FOR THE WATER AUTHORITY ENGINEER TO REVIEW PRIOR TO THE START OF CONSTRUCTION. INFORMATION CAN BE FOUND AT [HTTP://WWW.ABCWUA.ORG/FOR_BUILDERS.ASPX](http://www.abcwua.org/for_builders.aspx)

TRANSPORTATION

3. ANY STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH THERMO-PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO THE SAME LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
 31. REMOVAL OF EXISTING CURB & GUTTER AND SIDEWALKS SHALL BE TO THE NEAREST JOINT.
 32. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
 33. CURB AND GUTTER, SIDEWALKS, AND DRIVE PADS SHALL MATCH THE LINE AND GRADE OF ABUTTING EXISTING AREAS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE PROJECT ENGINEER.
 34. THE SUBGRADE PREP SHALL EXTEND ONE FOOT BEYOND THE FREE EDGE OF NEW CURB AND GUTTER AND SIDEWALK.
 35. CONTRACTOR TO TEST SUBGRADE R-VALUE PRIOR TO CONSTRUCTION. IN THE EVENT THE R-VALUE IS LESS THAN 50, REMOVE 2 FEET OF SUBGRADE MATERIAL AND IMPORT MATERIAL WITH R-VALUE GREATER THAN 50 OR CONTACT THE ENGINEER IMMEDIATELY SO THE PAVEMENT SECTION CAN BE MODIFIED.
 36. AT ALL PAVEMENT REMOVAL AND REPLACEMENTS, SAW-CUT EDGES SHALL BE STRAIGHT AND CLEAN, AND LONGITUDINAL JOINTS SHALL NOT BE PLACED WITHIN WHEEL PATHS. PATCHES SHALL BE REGULAR AND SQUARE OR RECTANGULAR, WITH FOUR STRAIGHT SIDES. FINISHED PAVEMENT SURFACE SHALL BE FLUSH WITH EXISTING PAVEMENT SURFACE, WITH NO SPILLOVER OF ASPHALT OR TACK COAT. CARE MUST BE TAKEN TO AVOID DAMAGING THE INTEGRITY OR APPEARANCE OF SURROUNDING PAVEMENTS; IF DAMAGED, THE ENTIRE SURFACE PATCH MUST BE EXPANDED TO COVER DAMAGES.
 37. CONTRACTOR WILL ENSURE THE ASPHALT HAS A SMOOTH, UNIFORM EDGE WHEN REMOVING AND REPLACING CURB AND GUTTER. IF THE ASPHALT EDGE IS NOT SMOOTH AND UNIFORM, CONTRACTOR WILL SAW CUT AND REPLACE A ONE-FOOT STRIP OF ASPHALT ALONG THE FULL SECTION BEING REPLACED; REFER TO C.O.A. STANDARD DRAWING # 2465 WITH THE APPROPRIATE PAVING SECTION BASED ON ROADWAY CLASSIFICATION.
- HYDROLOGY**
38. ALL STORM DRAINS SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED ON THE PLANS.
 39. RCP SHALL BE INSTALLED SO THAT THE JOINT GAP AT THE HOME POSITION SHALL CONFORM TO THE APPROVED MANUFACTURER'S RECOMMENDATION. MANUFACTURER'S RECOMMENDED JOINT GAP TOLERANCES FOR EACH PIPE SIZE AND TYPE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF PIPE. RCP JOINTS SHALL NOT BE GROUTED UNLESS DIRECTED BY THE ENGINEER AND WITH CITY APPROVAL.

HYDROLOGY

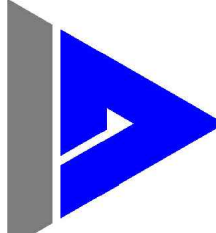
OTHER COMMON NOTES

40. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE ACCOMPLISHED IN ACCORDANCE WITH OSHA 29CFR 1926.650 SUPPORT P.
41. WHEN DISTURBING MORE THAN ¼ ACRES, CONTRACTOR SHALL SECURE A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.
42. IN ADVANCE OF CONSTRUCTION, CONTRACTOR SHALL DETERMINE IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC., ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION TO CONSTRUCTION OPERATIONS IS EVIDENT, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY OWNER TO REMOVE OR SUPPORT THE UTILITY OBSTRUCTION. ANY COST ASSOCIATED WITH THIS EFFORT SHALL BE THE RESPONSIBILITY OF CONTRACTOR
43. PNM WILL PROVIDE AT NO COST TO THE CITY OR THE CONTRACTOR THE REQUIRED PERSONNEL FOR INSPECTION OR OBSERVATION DEEMED NECESSARY BY PNM WHILE THE CONTRACTOR IS EXPOSING PNM'S CABLES. HOWEVER, THE CONTRACTOR SHALL BE CHARGED THE TOTAL COST ASSOCIATED WITH REPAIRS TO ANY DAMAGED CABLES OR FOR ANY COST ASSOCIATED WITH SUPPORTING OR RELOCATING THE POLES AND CABLES DURING CONSTRUCTION.

44. CONTRACTOR SHALL SUPPORT AND PROTECT ALL EXISTING, UNDERGROUND UTILITY LINES WHICH BECOME EXPOSED DURING CONSTRUCTION. PAYMENT FOR SUPPORTING WORK SHALL BE INCIDENTAL TO WATERLINE AND/OR SEWER LINE COSTS.
45. CONTRACTOR IS TO SUPPORT, PROTECT, AND MAINTAIN THE INTEGRITY OF ALL UNDERGROUND TELEPHONE, ELECTRIC CABLES AND CABLE TELEVISION UTILITIES AT NO ADDITIONAL COST TO THE OWNER. CABLE IS TO BE SUPPORTED AT A MAXIMUM SPACING OF FIFTEEN (15) FEET. CONTRACTOR SHALL COORDINATE WITH AND MAKE NECESSARY PAYMENT (IF ANY) TO UTILITY OWNER FOR DE-ENERGIZATION OF CABLES OR SUPPORT OF CABLES BY THE UTILITY OWNER.
46. CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR PRIVATE ROADWAY EASEMENTS TO PREVENT ANY EXCAVATED MATERIAL BEING WASHED DOWN THE STREET OR INTO ANY PUBLIC DRAINAGE FACILITY.
47. CONTRACTOR SHALL CONDUCT ALL WORK IN A MANNER WHICH WILL MINIMIZE INTERFERENCE WITH LOCAL TRAFFIC.
48. ALL EXISTING SIGNS, MARKERS, DELINEATORS, ETC., WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, STORED AND RE-SET BY THE CONTRACTOR.
49. DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL AND UNSUITABLE MATERIAL SHALL BE ARRANGED BY THE CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE ENVIRONMENTAL REGULATIONS. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR COSTS ASSOCIATED WITH OBTAINING A DISPOSAL SITE AND HAUL THERETO.
50. IF CULTURAL RESOURCES, SUCH AS HISTORIC OR PREHISTORIC ARTIFACTS, OR HUMAN REMAINS ARE DISCOVERED DURING EXCAVATION OR CONSTRUCTION, WORK SHALL CEASE AND THE CONSTRUCTION ENGINEER SHALL NOTIFY THE COUNTY OFFICE OF THE MEDICAL EXAMINER AT (505) 272-3053. IF THE MEDICAL EXAMINER DETERMINES THAT HUMAN REMAINS ARE NOT PRESENT, THE CONSTRUCTION ENGINEER SHALL NOTIFY THE STATE HISTORIC PRESERVATION OFFICER (SHP/O) AT 827-6320.

GENERAL NOTES USED SELECTIVELY, BASED ON SCOPE OF WORK

51. WORK AFFECTING ARTERIAL ROADWAYS MAY REQUIRE TWENTY-FOUR-HOUR CONSTRUCTION.
52. TWO WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHOULD NOTIFY THE TRANSIT DEPARTMENT OF ANY IMPACT THE PROPOSED PROJECT WILL HAVE ON THE TRANSIT SYSTEM SUCH AS CAUSING A DETOUR, OR CAUSE THE CLOSING OR RELOCATION OF A BUS STOP. THE CONTACT PERSON IS DOUGLAS GOFF. OFFICE PHONE 505-724-3137, CELL PHONE 505-206-0151, AND E-MAIL DGOFF@CABQ.GOV.
53. STREET NAME SIGNS, REGULATORY SIGNAGE, AND ANY NECESSARY STRIPING ON PRIVATE STREETS ARE THE DEVELOPER'S RESPONSIBILITY.
54. IN ALL AREAS WHERE PUBLIC STREETS OR INFRASTRUCTURE ARE TO BE CONSTRUCTED OVER FILLS, THE GEOTECHNICAL ENGINEER SHALL CERTIFY THAT PLACEMENT, COMPACTION, AND ALL OTHER WORK HAS BEEN COMPLETED IN ACCORDANCE WITH COA SPECIFICATION SECTION 204. SAID CERTIFICATION, ALONG WITH SUPPORTING TESTING DOCUMENTATION, SHALL BE PROVIDED TO THE CONSTRUCTION ENGINEER PRIOR TO OR AT THE PRE-CONSTRUCTION CONFERENCE BEFORE WORK ORDER CONSTRUCTION.

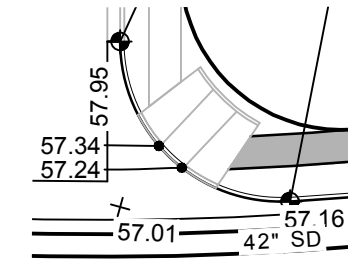
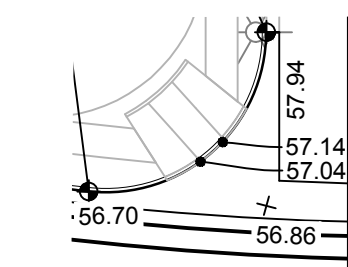
DRB NO. PR-2019-002411													
Availability Statement # 200528		REV.	SHEETS	CITY ENGINEER		DATE	USER DEPARTMENT		DATE	USER DEPARTMENT		DATE	
Isaacson & Arfman, Inc. Civil Engineering Consultants  128 Monroe Street NE Albuquerque, NM 87108 505-268-8828 www.iacivil.com		ENGINEERS STAMP & SIGNATURE		APPROVALS		ENGINEER		DATE	*****				
		PRELIMINARY NOT FOR CONSTRUCTION		DRC Chairman					APPROVED FOR CONSTRUCTION				
				Transportation									
				ABCWUA									
				Hydrology									
				City Project No.		757585				Sheet Of 1 27			



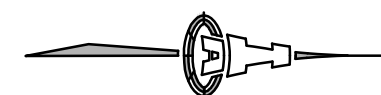
STORM DRAIN IN CANTARA LANE
TO BE CONSTRUCTED WITH UNIT 3.
PAVING & CURB TO BE
CONSTRUCTED WITH UNIT 4.

STRUCTURE NAME:	STRUCTURE TYPE:	STATION* & OFFSET:	TOP OF GRATE ELEV.	TOP OF CURB ELEV:	INVERT IN:	INVERT OUT:
INLET 53	TYPE A	20+37.39, 14.00' LT	5156.60	5157.50	N/A	5152.50
INLET 54	TYPE A	20+37.20, 14.00' RT	5156.60	5157.50	N/A	5152.68

UPSTREAM STRUCTURE:	DOWNSTREAM INVERT:	DIA.:	LENGTH	SLOPE	Q (CFS)	V (FPS)
INLET 53	5152.30	18"	6.51'	3.13%	20.00	11.32
INLET 54	5152.30	18"	22.12'	1.71%	19.00	10.75



FC8	TC	FL
1	60.08	59.41
2	--	59.50
3	59.25	58.58



SCALES:
 1"=40' HOR.
 1"=10' VERT.

Elevation Datum:
 NAVD 88

- A. CONSTRUCT 4' WIDE ADA PATH BETWEEN ALL ADA RAMP PER DETAIL ON SHEET 5.
- B. SIDEWALK CONSTRUCTION IS DEFERRED WHERE NOTED BY *
- C. INSTALL DETECTABLE WARNING SURFACES ON ALL ADA RAMP PER COA STD DWG #2446.

1. CONSTRUCT STANDARD CURB & GUTTER PER COA STD DWG #2415A.
2. CONSTRUCT MEDIAN CURB & GUTTER PER COA STD DWG #2415A.
3. CROWN TO NO-CROWN TRANSITION OVER 50' MIN. PER COA STD DWG #2401.
4. 5' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
5. CONSTRUCT 6' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
6. CONSTRUCT PCC VALLEY GUTTER 6' WIDE, 1 1/2" INVERT PER COA STD DWG #2420. MODIFY GUTTER THICKNESS PER DETAIL ON SHEET 5.
7. CONSTRUCT PCC VALLEY GUTTER 4' WIDE, 1 1/2" INVERT PER COA STD DWG #2421.
8. CONSTRUCT ADA CORNER RAMP PER COA STD DWG #2441, DETAIL B.
9. CONSTRUCT UNI-DIRECTIONAL ADA RAMP PER COA STD DWG #2443, DETAIL C.
10. CONSTRUCT 4" TEXTURED, COLORED MEDIAN PAVEMENT FROM MEDIAN NOSE TO 10' FROM NOSE. COLOR AND PATTERN TO BE DETERMINED PRIOR TO PLACEMENT. PAINT MEDIAN NOSE YELLOW TO APPROXIMATELY 6" BEHIND PC/PT PER COA STD DWGS 2408 & 2502.
11. REMOVE & DISPOSE CUT-OFF WALL.
12. CONSTRUCT 24" CUT-OFF WALL PER COA STD DWG #2415C.
13. INSTALL THERMOPLASTIC MARKINGS:
4" SOLID WHITE STRIPE (47 LF±);
24" STOP BAR (19')
1-RIGHT TURN ARROW; 1-LEFT TURN ARROW.
14. SAWCUT, REMOVE & REPLACE 1' STRIP OF ASPHALT.
15. CONSTRUCT DEPRESSIONED 8" CURB & GUTTER PER COA STD DWG #2415A.
16. CONSTRUCT DEPRESSIONED MEDIAN CURB & GUTTER PER COA STD DWG #2415A.

[illegible]

FACE OF CURB CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
FC5	94.19'	60.00'	89°56'44"
FC6	17.62'	25.00'	40°23'30"
FC7	157.25'	54.00'	166°51'09"
FC8	17.62'	25.00'	40°23'30"
FC9	4.64'	90.00'	2°57'12"
FC18	37.44'	25.00'	85°49'01"
FC19	37.47'	25.00'	85°53'03"
FC20	40.78'	25.00'	93°27'41"
FC21	42.00'	25.00'	96°14'51"

Isaacson & Arfman, Inc.
Civil Engineering Consultants

128 Monroe Street NE
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DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST DESIGN UPDATE	Mo./DAY/YR.	
City Project No. 757585			Zone Map No. N-8-Z		Sheet 10	Of 27

STORM DRAIN IN CANTARA LANE TO BE
CONSTRUCTED WITH UNIT 3. PAVING &
CURB TO BE CONSTRUCTED WITH UNIT 4.

CONTRACTOR TO FIELD VERIFY THE EXISTING 72" STUB INVERT AND SLOPE AT MANHOLE. IF STUB LOCATION AND SLOPE MATCH PROPOSED, PIPE SHALL REMAIN TO INLET 59.

CONTRACTOR TO BUILD INLET AND 2' CURB ON BOTH SIDES. PROTECT WITH SILT FENCE AND EROSION PROTECTION.

** PLUG CONNECTOR PIPE AT UPSTREAM END. INLET TO BE CONSTRUCTED WITH ASPIRE UNIT 4.

Elevation Datum:
NAVD 88



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
ASPIRE SUBDIVISION, UNIT 3

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	Mo./DAY/YR.	Mo./DAY/YR.
City Project No. 757585		Zone Map No. N-8-Z	Sheet 11	Of 27

- A. CONSTRUCT 4' WIDE ADA PATH BETWEEN ALL ADA RAMP PER DETAIL ON SHEET 5.
- B. SIDEWALK CONSTRUCTION IS DEFERRED WHERE NOTED BY *
- C. INSTALL DETECTABLE WARNING SURFACES ON ALL ADA RAMP PER COA STD DWG #2446.

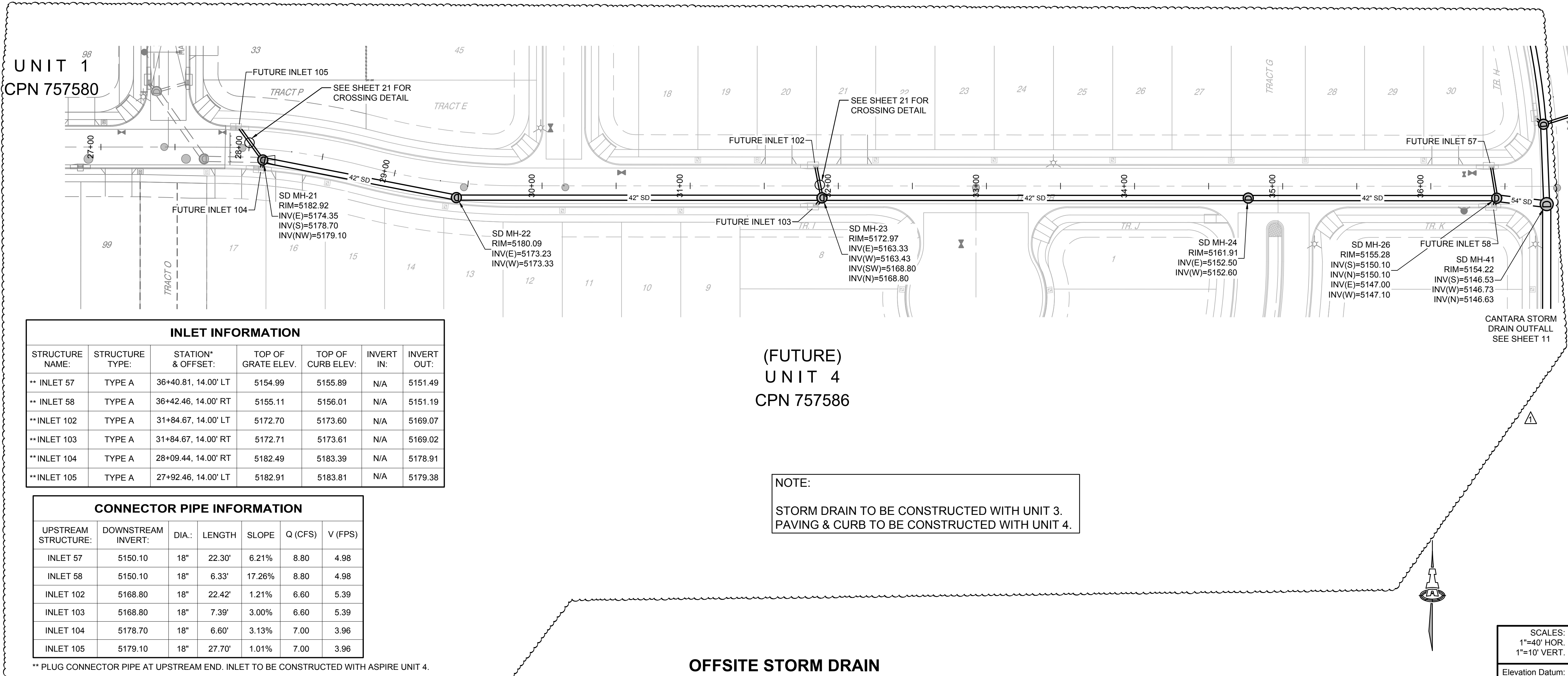
1. CONSTRUCT STANDARD CURB & GUTTER PER COA STD DWG #2415A.
2. CONSTRUCT MEDIAN CURB & GUTTER PER COA STD DWG #2415A.
3. CROWN TO NO-CROWN TRANSITION OVER 50' MIN. PER COA STD DWG #2401.
4. 5' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
5. CONSTRUCT 6' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
6. CONSTRUCT PCC VALLEY GUTTER 6' WIDE, 1 1/2" INVERT PER COA STD DWG #2420. MODIFY GUTTER THICKNESS PER DETAIL ON SHEET 5.
7. CONSTRUCT PCC VALLEY GUTTER 4' WIDE, 1 1/2" INVERT PER COA STD DWG #2421.
8. CONSTRUCT ADA CORNER RAMP PER COA STD DWG #2441, DETAIL B.
9. CONSTRUCT UNI-DIRECTIONAL ADA RAMP PER COA STD DWG #2443, DETAIL C.
10. CONSTRUCT 4" TEXTURED, COLORED MEDIAN PAVEMENT FROM MEDIAN NOSE TO 10' FROM NOSE. COLOR AND PATTERN TO BE DETERMINED PRIOR TO PLACEMENT. PAINT MEDIAN NOSE YELLOW TO APPROXIMATELY 6' BEHIND PC/PT PER COA STD DWGS 2408 & 2502.
11. REMOVE & DISPOSE CUT-OFF WALL.
12. CONSTRUCT 24" CUT-OFF WALL PER COA STD DWG #2415C.
13. INSTALL THERMOPLASTIC MARKINGS:
4" SOLID WHITE STRIPE (47 LF±);
24" STOP BAR (19')
1-RIGHT TURN ARROW; 1-LEFT TURN ARROW.
14. SAWCUT, REMOVE & REPLACE 1' STRIP OF ASPHALT.
15. CONSTRUCT DEPRESSED 8" CURB & GUTTER PER COA STD DWG #2415A.
16. CONSTRUCT DEPRESSED MEDIAN CURB & GUTTER PER COA STD DWG #2415A.

ENGINEER'S SEAL

PRELIMINARY
NOT FOR CONSTRUCTION

[illegible][illegible]

UNIT 1⁹⁸
CPN 757580



INLET INFORMATION						
STRUCTURE NAME:	STRUCTURE TYPE:	STATION* & OFFSET:	TOP OF GRATE ELEV.	TOP OF CURB ELEV:	INVERT IN:	INVERT OUT:
** INLET 57	TYPE A	36+40.81, 14.00' LT	5154.99	5155.89	N/A	5151.49
** INLET 58	TYPE A	36+42.46, 14.00' RT	5155.11	5156.01	N/A	5151.19
** INLET 102	TYPE A	31+84.67, 14.00' LT	5172.70	5173.60	N/A	5169.07
**INLET 103	TYPE A	31+84.67, 14.00' RT	5172.71	5173.61	N/A	5169.02
**INLET 104	TYPE A	28+09.44, 14.00' RT	5182.49	5183.39	N/A	5178.91
**INLET 105	TYPE A	27+92.46, 14.00' LT	5182.91	5183.81	N/A	5179.38

CONNECTOR PIPE INFORMATION						
UPSTREAM STRUCTURE:	DOWNSTREAM INVERT:	DIA.:	LENGTH	SLOPE	Q (CFS)	V (FPS)
INLET 57	5150.10	18"	22.30'	6.21%	8.80	4.98
INLET 58	5150.10	18"	6.33'	17.26%	8.80	4.98
INLET 102	5168.80	18"	22.42'	1.21%	6.60	5.39
INLET 103	5168.80	18"	7.39'	1.00%	6.60	5.39
INLET 104	5178.70	18"	6.60'	3.13%	7.00	3.96
INLET 105	5179.10	18"	27.70'	1.01%	7.00	3.96

** PLUG CONNECTOR PIPE AT UPSTREAM END. INLET TO BE CONSTRUCTED WITH ASPIRE UNIT 4.

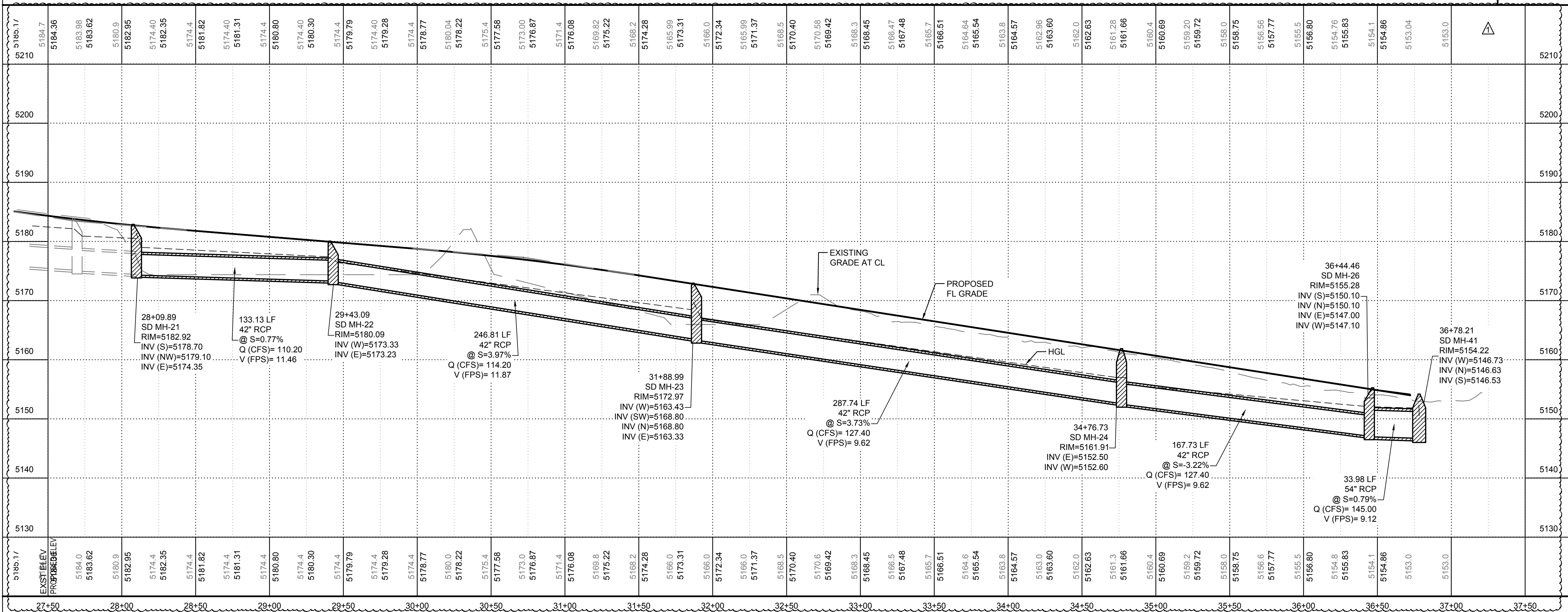
(FUTURE)
UNIT 4
CPN 757586

NOTE:

STORM DRAIN TO BE CONSTRUCTED WITH UNIT 3.
PAVING & CURB TO BE CONSTRUCTED WITH UNIT 4.

SCALES:
1"=40' HOR.
1"=10' VERT.

Elevation Datum:
NAVD 88

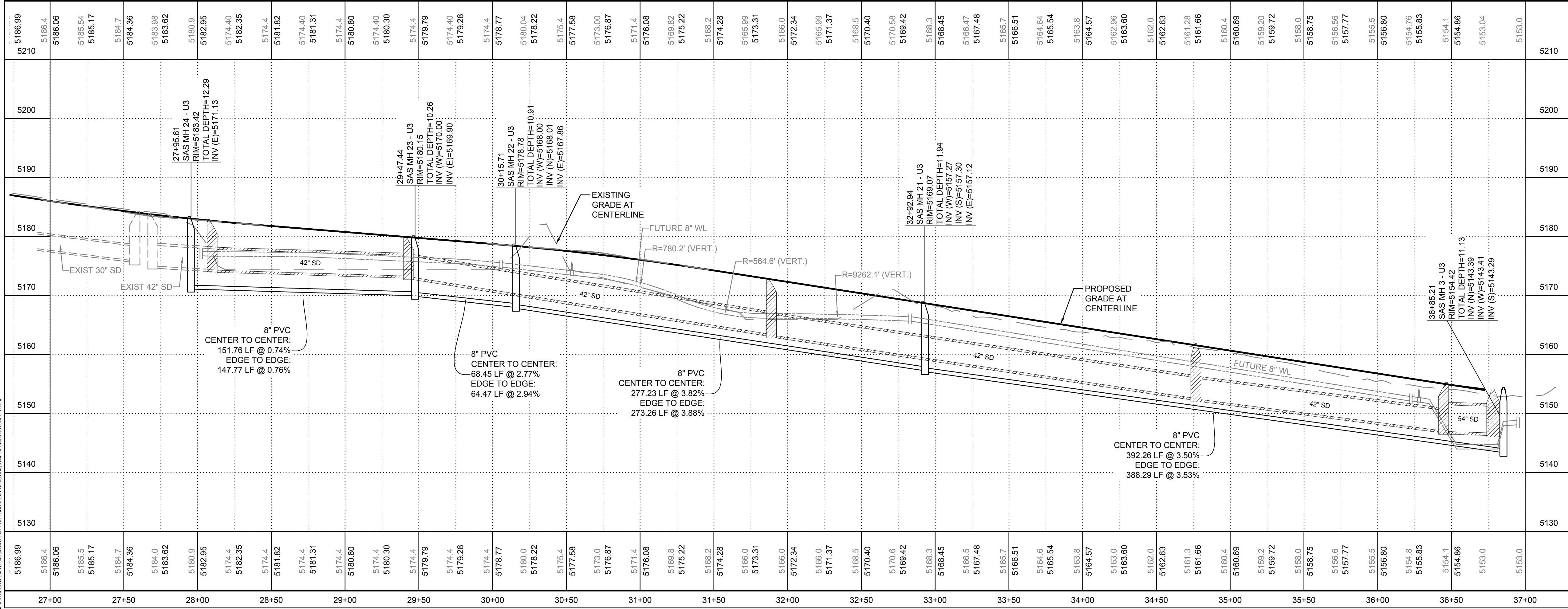
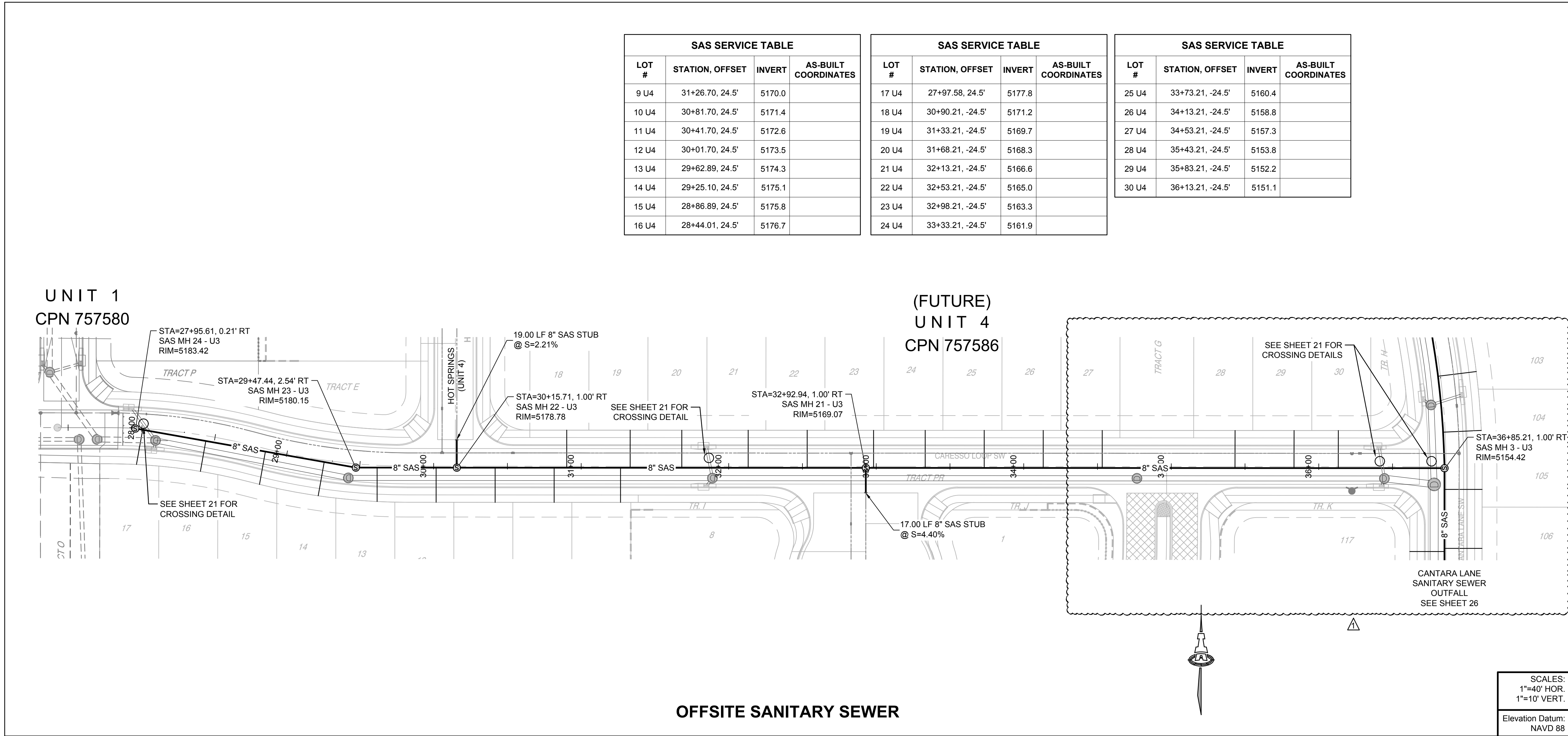


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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
ASPIRE SUBDIVISION, UNIT 3
**OFFSITE STORM DRAIN
PLAN & PROFILE**

DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST DESIGN UPDATE	Mo./DAY/YR.		Mo./DAY/YR.	
City Project No.		Zone Map No.		Sheet		Of		
757585		N-8-Z		12		27		



UTILITY NOTES

- CONSTRUCT 4" SAS SERVICES PER ABCWUA STD DWG #2125 EXCEPT WHERE RISERS ARE NOTED WITH "*****" ON THE PLAN AND IN THE SERVICE TABLE. INSTALL SAS SERVICES WITH RISERS AT MAIN PER ABCWUA STD DWG #2136.
- CONSTRUCT SAS MANHOLES W/ FRAME & COVER PER ABCWUA STD DWG #2102 & #2109 (CONCENTRIC).
- WATERLINE CONNECTIONS PER ABCWUA STD DWG 2301.
- INSTALL NON-PRESSURE CONNECTIONS PER ABCWUA STD DWG 2301.
- INSTALL WATER VALVE BOX WITH RING AND COVER PER ABCWUA STD DWG 2326 & 2328.
- CONSTRUCT 3/4" WATER SERVICES AND METER BOXES PER ABCWUA STD DWG #2361, 2362, 2366 & 2368.
- CONSTRUCT FIRE HYDRANTS PER DESIGNATED DEPTHS & LENGTHS PER ABCWUA STD DWG #2340.
- SEE SHEET 19 FOR WATER SHUT-OFF PLAN.
- SEE SHEET 19 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
- SEE SHEET 20 FOR AS-BUILT COORDINATE TABLES.
- ALL WATERLINES SHALL BE C-900 DR18 UNLESS OTHERWISE NOTED.
- ALL SANITARY SEWER LINES SHALL BE SDR-35. ALL CURVILINEAR SANITARY SEWER LINES SHALL BE C-900 WITH GREEN POLYWRAP.
- TRACER WIRE AND APPURTENANCES SHALL BE INSTALLED PER ABCWUA STD DWGS 2190, 2191, 2302, 2327, 2365, 2342, 2379, 2740 & 2741. COST FOR TRACER WIRES & APPURTENANCES SHALL BE INCLUDED IN WATER & SEWER LINE PIPE PAY ITEMS.
- REMOVE & REPLACE PAVING PER COA STD DWG 2465.
- TRACT PR TO BE ENCUMBERED BY A BLANKET PUBLIC WATER AND SEWER EASEMENT BY FINAL PLAT.
- WATERLINE DEFLECTION UNDER STORM DRAINS SHALL BE INSTALLED PER ABCWUA STD DWG 2381.
- MANHOLES IN UNPAVED AREAS NEED TO BE SET TO STANDARD DETAIL 2461.
- CONTRACTOR TO MAINTAIN TYPICAL 3' SEPARATION OF WATERLINE AND UP OF GUTTER AND 10' SEPARATION OF WATER AND SANITARY SEWER LINES.

AS-BUILT INFORMATION

CONTRACTOR	DATE
ISACSON & ARFMAN, INC.	02/20/2023

BENCH MARKS

AGRS MONUMENT AND BENCHMARK "1-IN8"	DATE
N=1470741.879, E=1488701.82	02/20/2023

SURVEY INFORMATION

FIELD NOTES	DATE
CS-CARTESIAN SURVEYS INC.	02/20/2023

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
1	02/20/2023	DESIGN	ISACSON & ARFMAN, INC.

PRELIMINARY NOT FOR CONSTRUCTION

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Civil Engineering Consultants

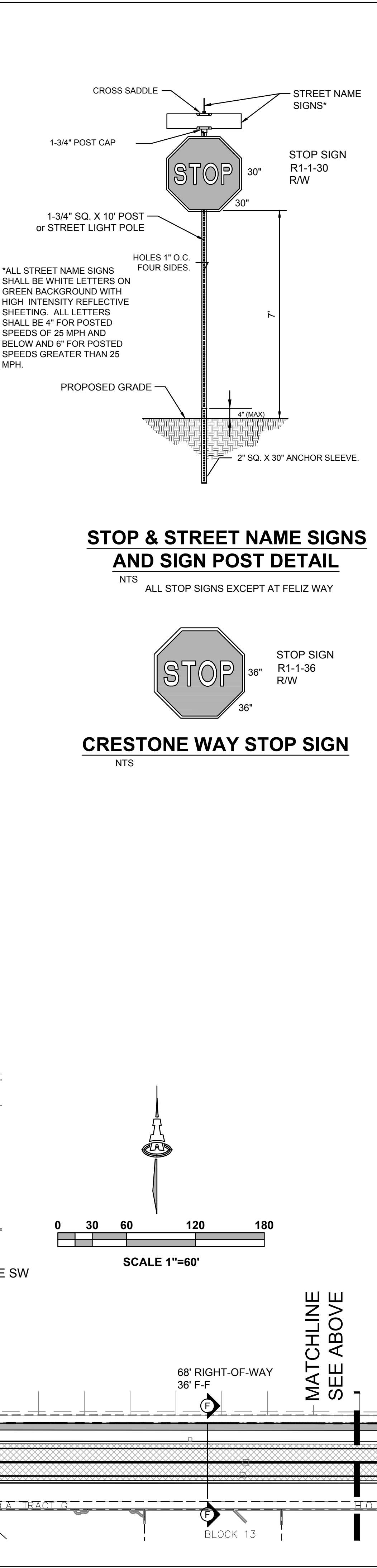
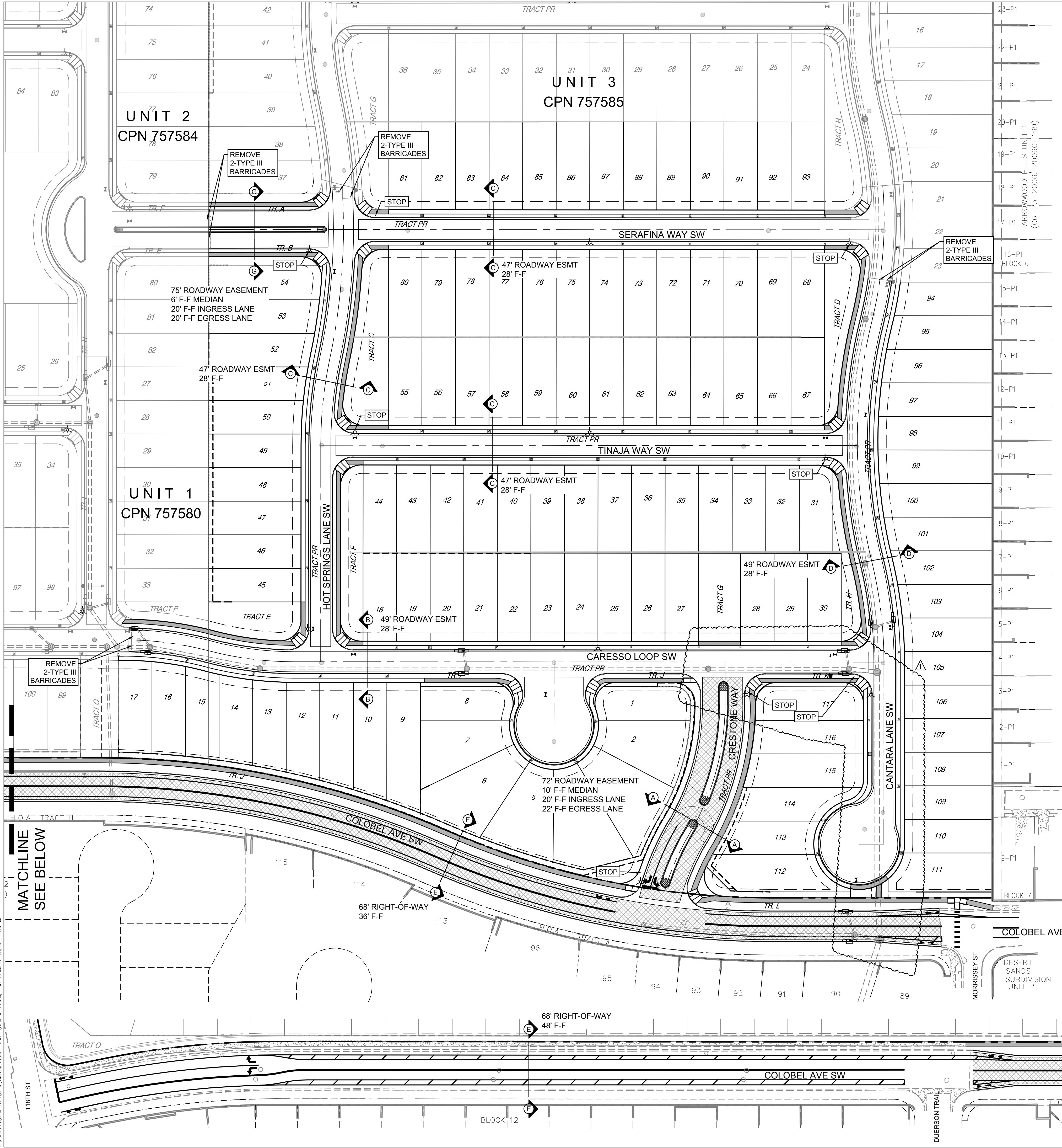
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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP ASPIRE SUBDIVISION, UNIT 3 OFFSITE SANITARY SEWER PLAN & PROFILE

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	Mo./DAY/YR.	Mo./DAY/YR.

LAST DESIGN UPDATE	Mo./DAY/YR.	Mo./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
757585	N-8-Z	27	27



GENERAL PAVING NOTES

A. SEE SHEET 5 FOR STREET SECTIONS AND SHEET 6 FOR PAVING DETAILS.

B. CONSTRUCT 4" MAJOR LOCAL ASPHALT PAVING IN CROSS-HATCHED AREAS PER COA STD DWG 2405B.

C. CONSTRUCT 3" LOCAL ASPHALT PAVING IN ALL OTHER STREETS PER COA STD DWG 2405A.

D. CONSTRUCT SIDEWALKS PER COA STD DWG 2430. ALL SIDEWALKS ARE 5' WIDE, EXCEPT AT FELIZ WAY AND AMOLE MESA AVE. WHERE SIDEWALKS ARE 6' WIDE AS NOTED ON PLAN.

E. SIDEWALKS FRONTING LOTS ARE DEFERRED (SEE LEGEND).

F. CONSTRUCT STANDARD CURB AND MEDIAN CURB PER COA STD DWG 2415A AND MOUNTABLE CURB PER COA STD DWG 2415B.

G. CONSTRUCT CROWN-NO CROWN TRANSITION PER COA STD DWG 2401.

H. ALL STREETS AND STORM DRAIN SHALL BE PRIVATELY MAINTAINED.

LEGEND

EXISTING STREET IMPROVEMENTS

PROPOSED STD CURB & GUTTER

DEFERRED SIDEWALK (BY HOME BUILDER)

SIDEWALK THIS CONTRACT

ADA RAMP

VALLEY GUTTER

CROWN TO NO-CROWN TRANSITION

4" MAJOR LOCAL PAVING SECTION

LOT NO.

PROPOSED STREET LIGHT

STORM DRAIN INLET

STORM DRAIN MANHOLE

STOP & STREET NAME SIGNS

WATER METER

SAS MANHOLE

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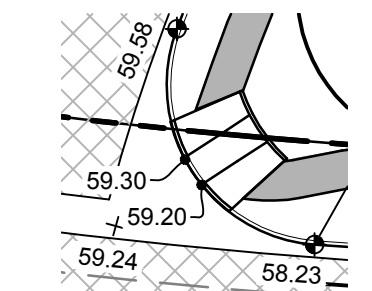
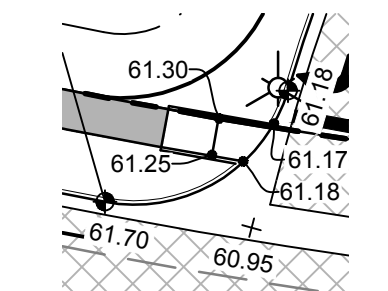
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
ASPIRE SUBDIVISION, UNIT 4
MASTER PAVING PLAN

DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST DESIGN UPDATE	
NO.	DATE	REMARKS	BY	Mo./DAY/YR.	Mo./DAY/YR.

DESIGNED BY	GLD	DATE	07/2023
DRAWN BY	thor	DATE	07/2023
CHECKED BY	GLD	DATE	07/2023

City Project No.	757586	Zone Map No.	N-8-Z	Sheet	4	Of	28
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FC25	TC	FL
1	--	61.07
2	61.87	61.20
3	62.00	61.33

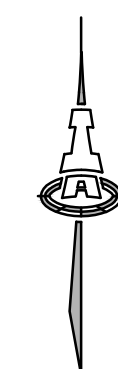
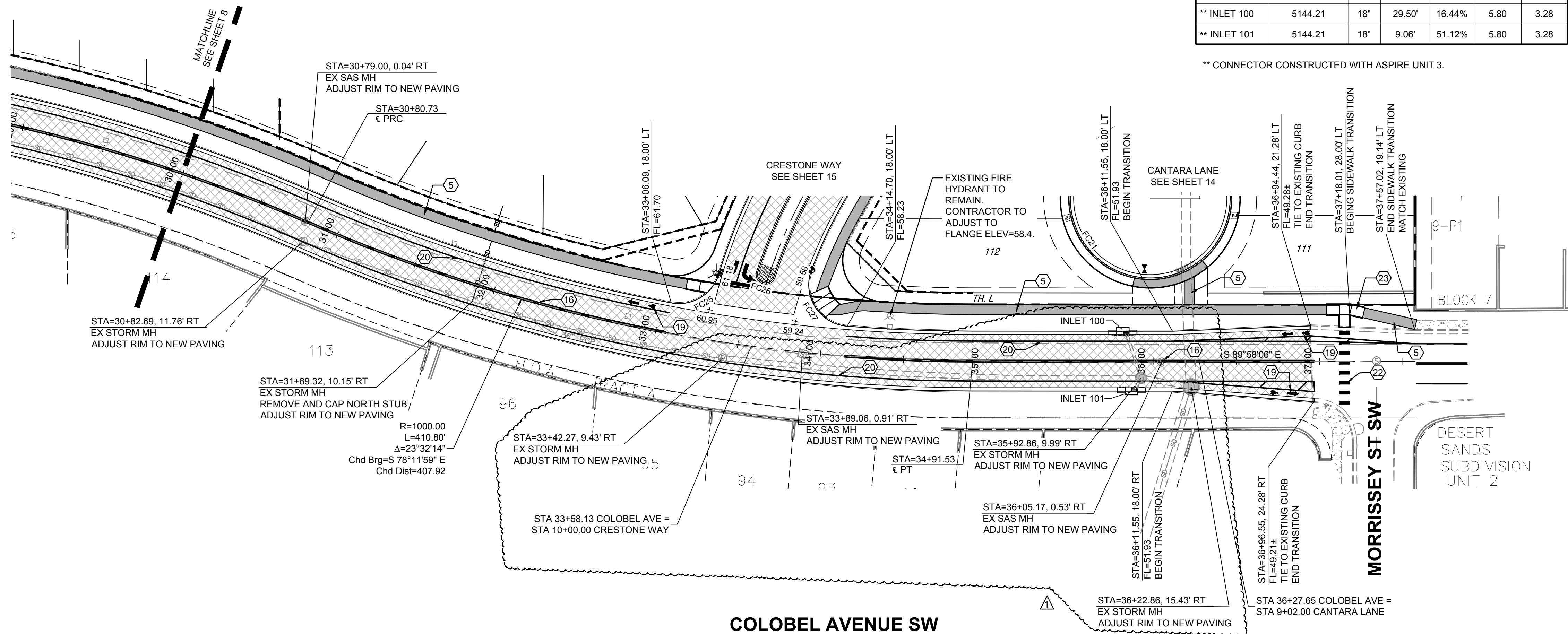


FC27	TC	FL
1	59.41	58.74
2	—	59.25
3	60.08	59.41

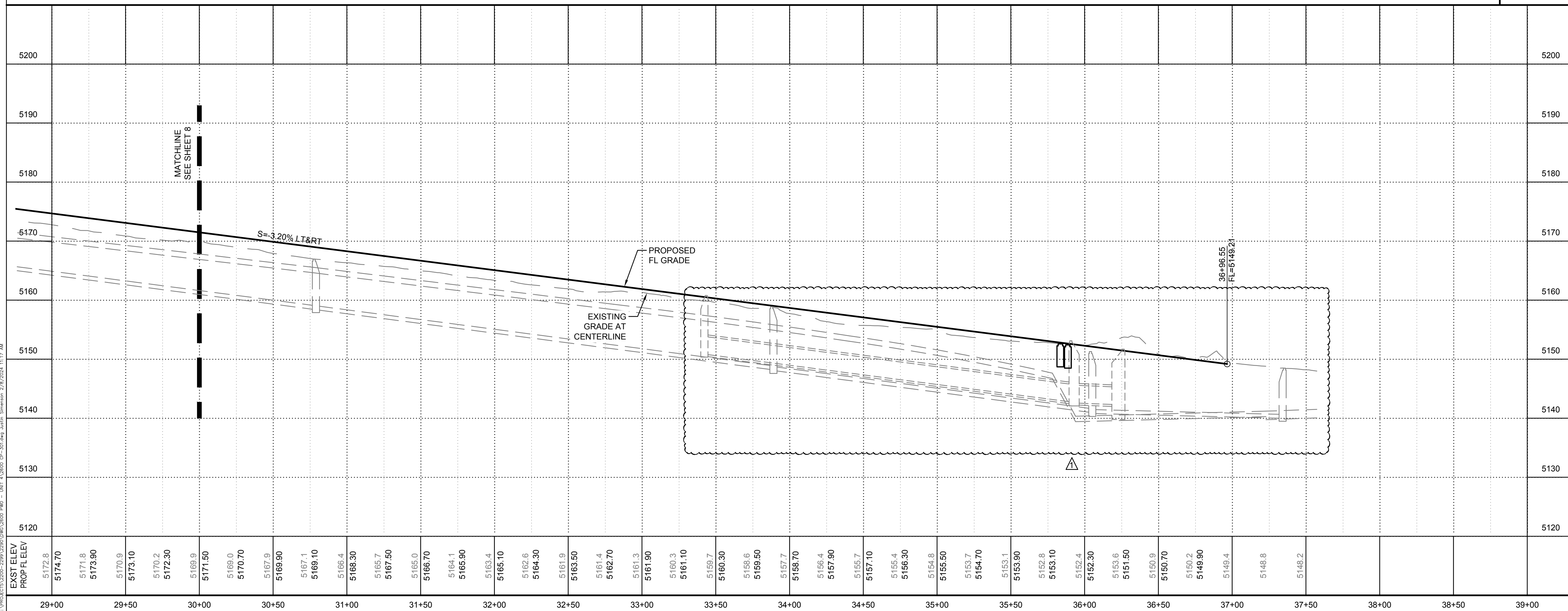
INLET INFORMATION						
STRUCTURE NAME:	STRUCTURE TYPE:	STATION* & OFFSET:	TOP OF GRATE ELEV.	TOP OF CURB ELEV.:	INVERT IN:	INVERT OUT:
INLET 100	TYPE A	35+83.51, 17.99' LT	5152.60	5153.50	N/A	5149.06
INLET 101	TYPE A	35+88.62, 18.00' RT	5152.43	5153.33	N/A	5148.84

CONNECTOR PIPE INFORMATION						
UPSTREAM STRUCTURE:	DOWNSTREAM INVERT:	DIA.:	LENGTH	SLOPE	Q (CFS)	V (FPS)
** INLET 100	5144.21	18"	29.50'	16.44%	5.80	3.28
** INLET 101	5144.21	18"	9.06'	51.12%	5.80	3.28

** CONNECTOR CONSTRUCTED WITH ASPIRE UNIT 3



SCALES: 1"=40' HOR. 1"=10' VERT.
Elevation Datum: NAVD 88



GENERAL NOTES	
A.	CONSTRUCT 4' WIDE ADA PATH BETWEEN ALL ADA RAMPS PER DETAIL ON SHEET 6.
B.	SIDEWALK CONSTRUCTION IS DEFERRED WHERE NOTED BY *
C.	INSTALL DETECTABLE WARNING SURFACES ON ALL ADA RAMPS PER COA STD DWG #246.

KEYED CONSTRUCTION NOTES

1. CONSTRUCT STANDARD CURB & GUTTER PER COA STD DWG #2415A.
2. CONSTRUCT MEDIAN CURB & GUTTER PER COA STD DWG #2415A.
3. CROWN TO NO-CROWN TRANSITION OVER 50' MIN. PER COA STD DWG #2401.
4. 5' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
5. CONSTRUCT 6' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
6. CONSTRUCT PCC VALLEY GUTTER 6' WIDE, 1 1/2" INVERT PER COA STD DWG #2420. MODIFY GUTTER THICKNESS PER DETAIL ON SHEET 6.
7. CONSTRUCT PCC VALLEY GUTTER 4' WIDE, 1 1/2" INVERT PER COA STD DWG #2421.
8. CONSTRUCT ADA CORNER RAMP PER COA STD DWG #2441, DETAIL B.
9. CONSTRUCT UNI-DIRECTIONAL ADA RAMP PER COA STD DWG #2443, DETAIL C.
10. CONSTRUCT 4" TEXTURED, COLORED MEDIAN PAVEMENT FROM MEDIAN NOSE TO 10' FROM NOSE. COLOR AND PATTERN TO BE DETERMINED PRIOR TO PLACEMENT. PAINT MEDIAN NOSE YELLOW TO APPROXIMATELY 6' BEHIND PC/PT PER COA STD DWGS 2408 & 2502.
11. REMOVE & DISPOSE CUT-OFF WALL.
12. INSTALL THERMOPLASTIC MARKINGS:
4" SOLID WHITE STRIPE (317 LF);
24" STOP BAR (19')
1-RIGHT TURN ARROW; 1-LEFT TURN ARROW.
13. CONSTRUCT DEPRESSED MEDIAN CURB & GUTTER PER COA STD DWG #2415A.
14. INSTALL THERMOPLASTIC 4" SOLID WHITE STRIPE.
15. INSTALL THERMOPLASTIC 4" SOLID WHITE STRIPES @ 45° ANGLE, 30' O.C..
16. INSTALL THERMOPLASTIC 4" SOLID DOUBLE YELLOW STRIPES.
17. INSTALL THERMOPLASTIC RIGHT TURN ARROW.
18. INSTALL THERMOPLASTIC LEFT TURN ARROW.
19. INSTALL THERMOPLASTIC BIKE LANE SYMBOL.
20. INSTALL THERMOPLASTIC 6" SOLID WHITE STRIPE.
21. INSTALL THERMOPLASTIC 24" STOP BAR.
22. INSTALL CROSSWALK STRIPING; THERMOPLASTIC 24" WIDE x 5' LONG, 6' O.C.
23. 9CONSTRUCT UNI-DIRECTIONAL ADA RAMP PER COA STD DWG #2443, DETAIL A.

CURVE	LENGTH	RADIUS	DELTA
FC25	36.61'	25.00'	83°53'35"
FC26	15.71'	5.00'	180°00'00"
FC27	46.30'	25.00'	106°07'00"

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT ASPIRE SUBDIVISION, UNIT 4		
COLOBEL AVENUE PA PLAN & PROFILE		
CITY ENGINEER APPROVAL	CITY PROJECT NO.	
	757586	Zone Map No. N-8-Z

FC10 ADA RAMP DETAIL
1"=30'

FC10	TC	FL
1	79.61	78.94
2	--	78.98
3	79.69	79.02

FC11 ADA RAMP DETAIL
1"=30'

FC11	TC	FL
1	78.48	77.81
2	--	78.23
3	79.10	78.43

INLET INFORMATION						
STRUCTURE NAME:	STRUCTURE TYPE:	STATION* & OFFSET:	TOP OF GRATE ELEV.	TOP OF CURB ELEV:	INVERT IN:	INVERT OUT:
INLET 57	TYPE A	36+40.81, 14.00' LT	5155.99	5155.89	N/A	5151.49
INLET 58	TYPE A	36+42.46, 14.00' RT	5155.11	5156.01		5151.19
INLET 102	TYPE A	31+84.67, 14.00' LT	5172.70	5173.60	N/A	5169.07
INLET 103	TYPE A	31+84.67, 14.00' RT	5172.71	5173.61	N/A	5169.02
INLET 104	TYPE A	28+09.44, 14.00' RT	5182.49	5183.39	N/A	5178.91
INLET 105	TYPE A	27+92.46, 14.00' LT	5182.91	5183.81	N/A	5179.38

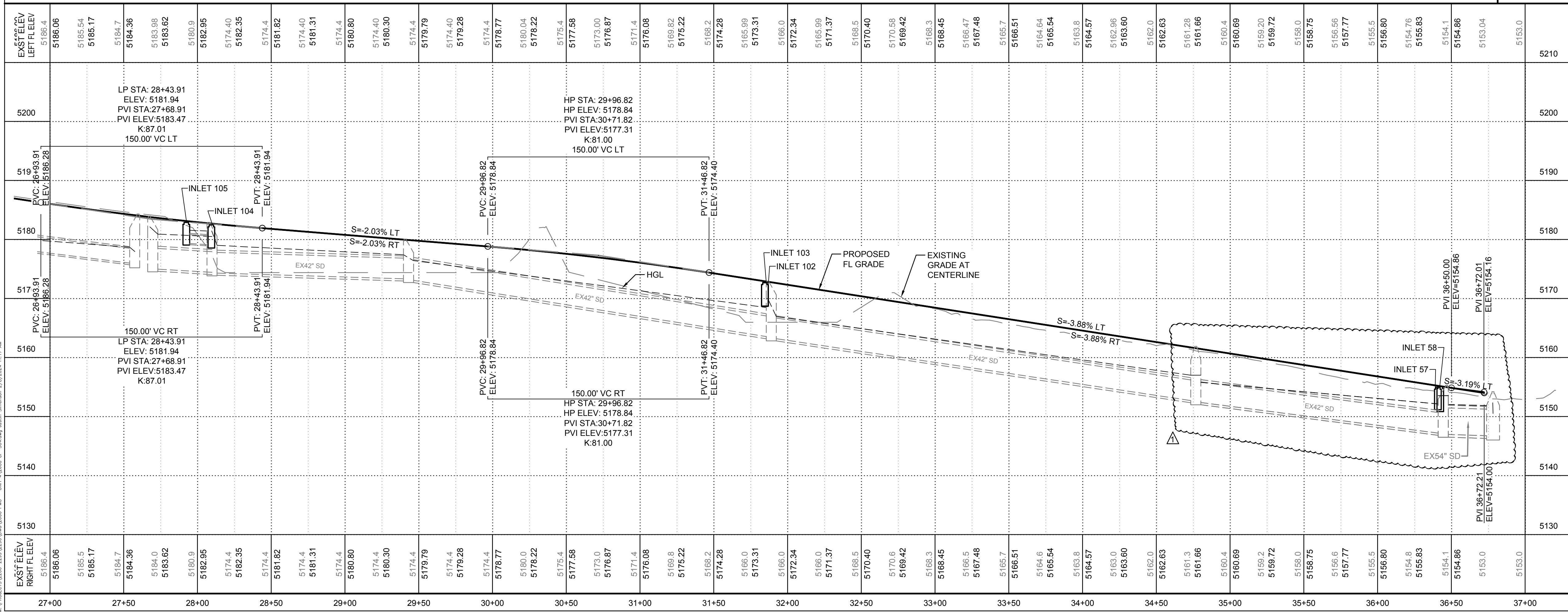
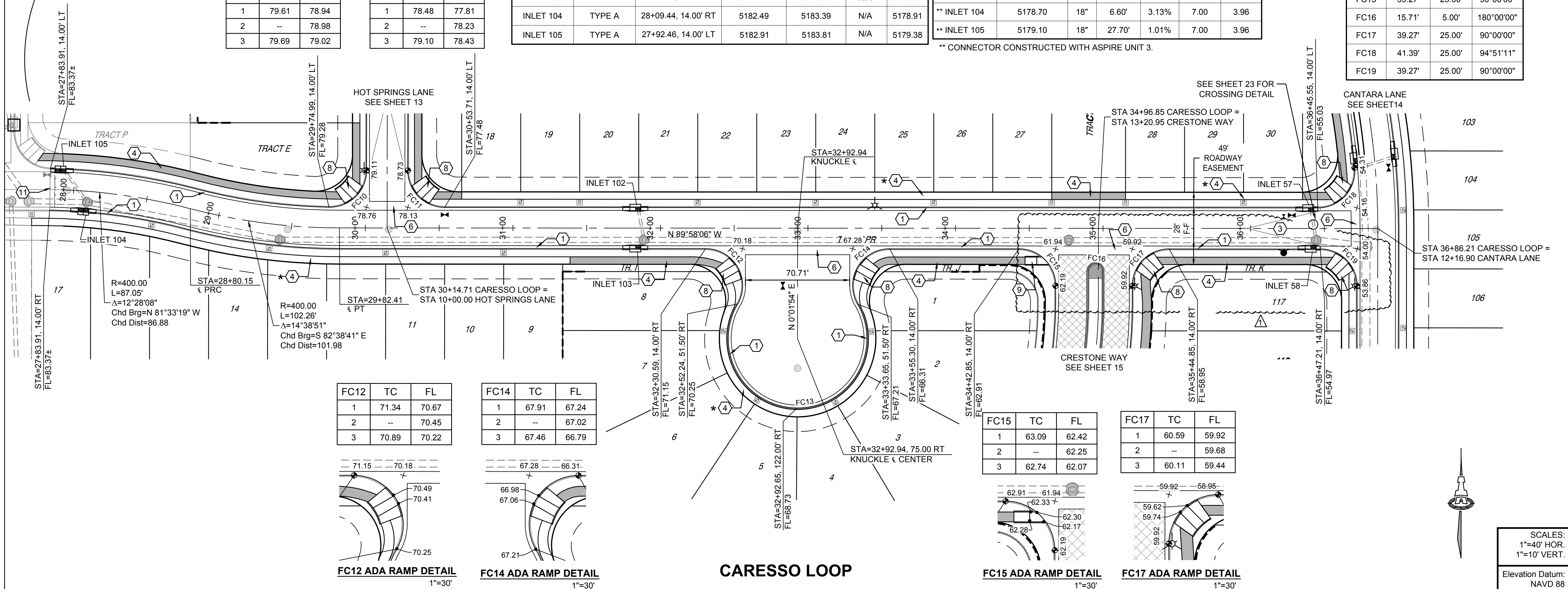
CONNECTOR PIPE INFORMATION						
UPSTREAM STRUCTURE:	DOWNSTREAM INVERT:	DIA.:	LENGTH	SLOPE	Q (CFS)	V (FPS)
INLET 57	5150.10	18"	22.30'	6.21%	8.80	4.98
INLET 58	5150.10	18"	6.33'	17.26%	8.80	4.98
** INLET 102	5168.80	18"	22.42'	1.21%	6.60	5.39
** INLET 103	5168.80	18"	7.39'	3.00%	6.60	5.39
** INLET 104	5178.70	18"	6.60'	3.13%	7.00	3.96
** INLET 105	5179.10	18"	27.70'	1.01%	7.00	3.96

** CONNECTOR CONSTRUCTED WITH ASPIRE UNIT 3.

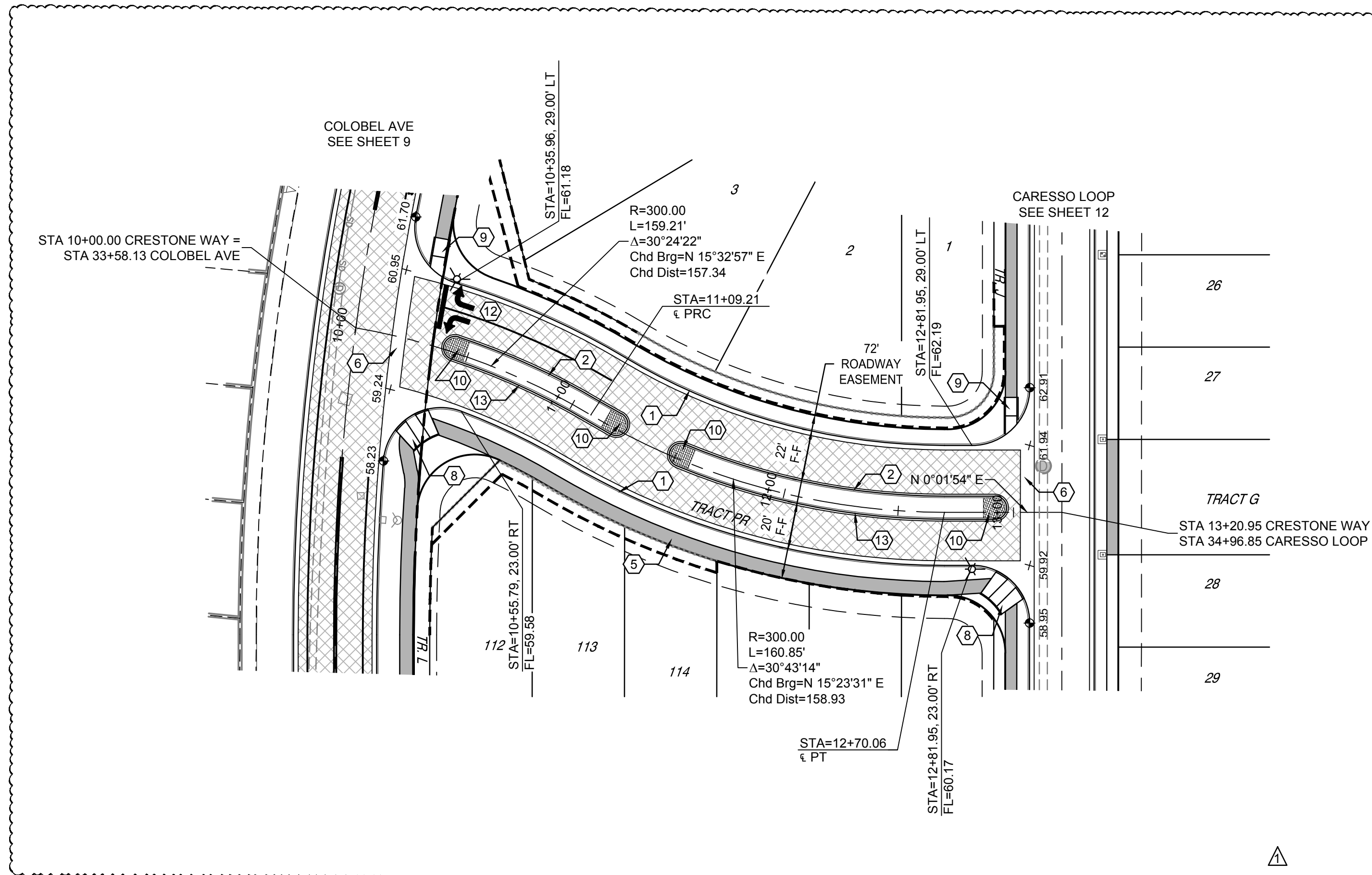
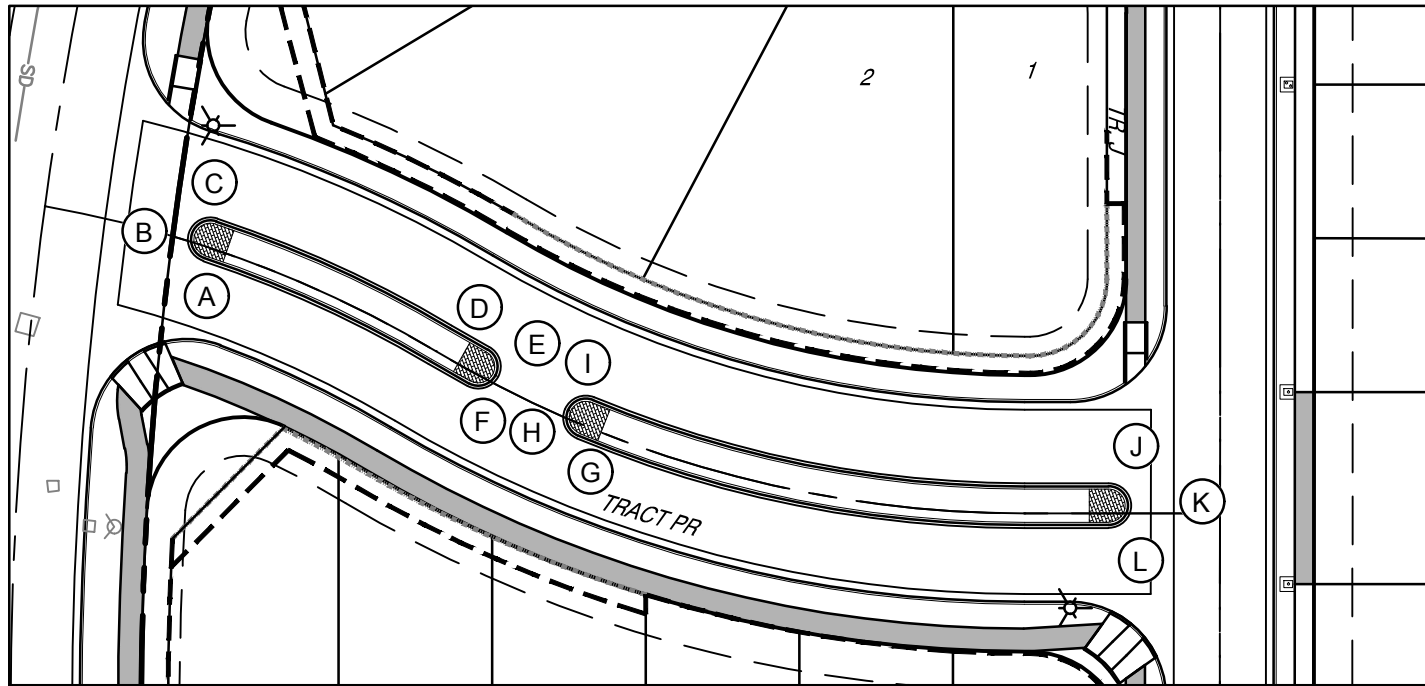
FACE OF CURB CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
FC10	39.73'	25.00'	91°03'48"
FC11	39.27'	25.00'	90°00'00"
FC12	52.36'	25.00'	120°00'00"
FC13	196.87'	47.00'	240°00'00"
FC14	52.36'	25.00'	120°00'00"
FC15	39.27'	25.00'	90°00'00"
FC16	15.71'	5.00'	180°00'00"
FC17	39.27'	25.00'	90°00'00"
FC18	41.39'	25.00'	94°51'11"
FC19	39.27'	25.00'	90°00'00"

- A. CONSTRUCT 4' WIDE ADA PATH BETWEEN ALL ADA RAMPS PER DETAIL ON SHEET 6.
- B. SIDEWALK CONSTRUCTION IS DEFERRED WHERE NOTED BY *
- C. INSTALL DETECTABLE WARNING SURFACES ON ALL ADA RAMPS PER COA STD DWG #2446.

1. CONSTRUCT STANDARD CURB & GUTTER PER COA STD DWG #2415A.
2. CONSTRUCT MEDIAN CURB & GUTTER PER COA STD DWG #2415A.
3. CROWN TO NO-CROWN TRANSITION OVER 50' MIN. PER COA STD DWG #2401.
4. 5' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
5. CONSTRUCT 6' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
6. CONSTRUCT PCC VALLEY GUTTER 6' WIDE, 1 1/2" INVERT PER COA STD DWG #2420. MODIFY GUTTER THICKNESS PER DETAIL ON SHEET 6.
7. CONSTRUCT PCC VALLEY GUTTER 4' WIDE, 1 1/2" INVERT PER COA STD DWG #2421.
8. CONSTRUCT ADA CORNER RAMP PER COA STD DWG #2441, DETAIL B.
9. CONSTRUCT UNI-DIRECTIONAL ADA RAMP PER COA STD DWG #2443, DETAIL C.
10. CONSTRUCT 4" TEXTURED, COLORED MEDIAN PAVEMENT FROM MEDIAN NOSE TO 10' FROM NOSE. COLOR AND PATTERN TO BE DETERMINED PRIOR TO PLACEMENT. PAINT MEDIAN NOSE YELLOW TO APPROXIMATELY 6' BEHIND PC/PT PER COA STD DWGS 2408 & 2502.
11. REMOVE & DISPOSE CUT-OFF WALL.
12. INSTALL THERMOPLASTIC MARKINGS:
4" SOLID WHITE STRIPE (317 LF±);
24" STOP BAR (19')
1-RIGHT TURN ARROW; 1-LEFT TURN ARROW.
13. CONSTRUCT DEPRESSION MEDIAN CURB & GUTTER PER COA STD DWG #2415A.
14. INSTALL THERMOPLASTIC 4" SOLID WHITE STRIPE.
15. INSTALL THERMOPLASTIC 4" SOLID WHITE STRIPES @ 45° ANGLE, 30' O.C..
16. INSTALL THERMOPLASTIC 4" SOLID DOUBLE YELLOW STRIPES.
17. INSTALL THERMOPLASTIC RIGHT TURN ARROW.
18. INSTALL THERMOPLASTIC LEFT TURN ARROW.
19. INSTALL THERMOPLASTIC BIKE LANE SYMBOL.
20. INSTALL THERMOPLASTIC 6" SOLID WHITE STRIPE.
21. INSTALL THERMOPLASTIC 24" STOP BAR.
22. INSTALL CROSSWALK STRIPING; THERMOPLASTIC 24" WIDE x 5' LONG, 6' O.C..
23. 9CONSTRUCT UNI-DIRECTIONAL ADA RAMP PER COA STD DWG #2443, DETAIL A.

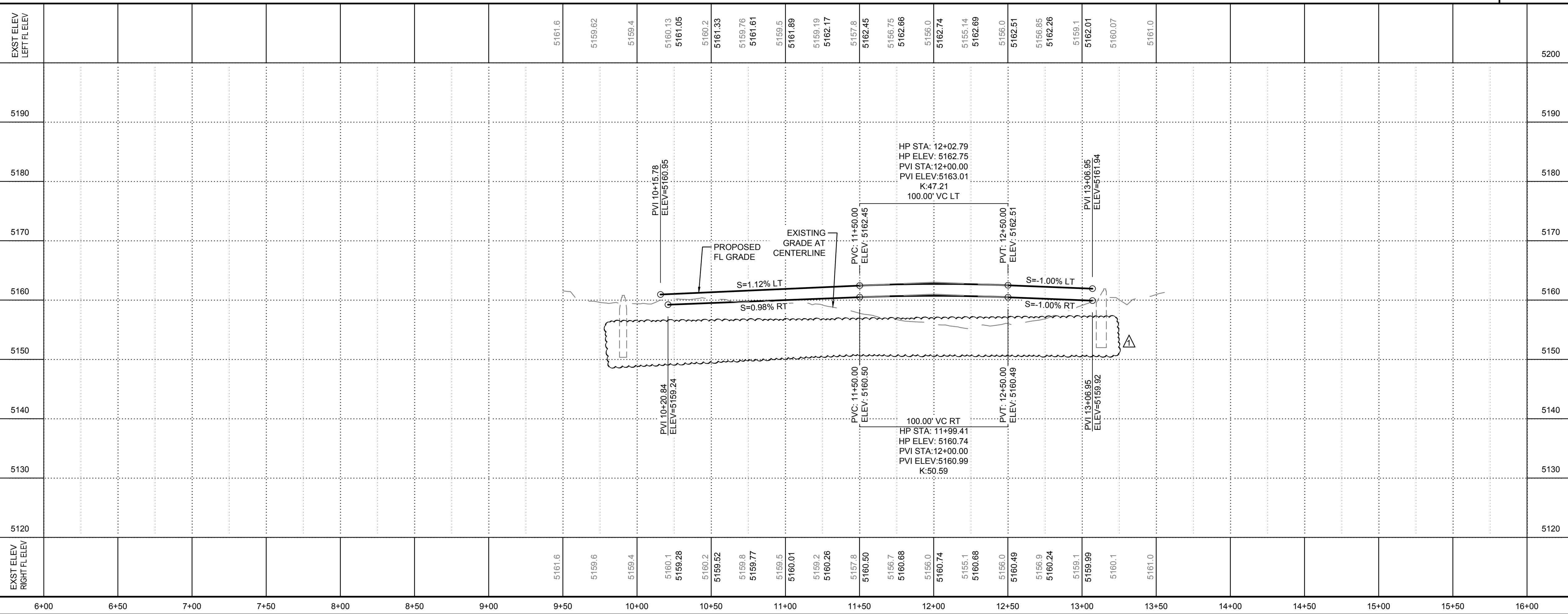
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○	STA. OFFSET	FL ELEV	CONSTRUCTION NOTES
A	10+43.75, 3.00' RT	60.20	
B	10+38.79, 2.04' LT	60.35	
C	10+43.75, 7.00' LT	60.50	TRANS. TO DEPRESSED MEDIAN CURB OVER 5' BACK
D	11+20.72, 7.00' LT	61.30	TRANS. TO DEPRESSED MEDIAN CURB OVER 5'
E	11+25.75, 2.04' LT	61.12	
F	11+20.72, 3.00' RT	60.94	
G	11+51.99, 3.00' RT	61.20	
H	11+46.96, 2.04' LT	61.40	
I	11+51.99, 7.00' LT	61.60	TRANS. TO DEPRESSED MEDIAN CURB OVER 5' BACK
J	12+91.95, 7.00' LT	61.29	TRANS. TO DEPRESSED MEDIAN CURB OVER 5'
K	12+96.95, 2.00' LT	61.10	
L	12+91.95, 3.00' RT	60.90	



SCALES:
 1"=40' HOR.
 1"=10' VERT.

Elevation Datum:
 NAVD 88

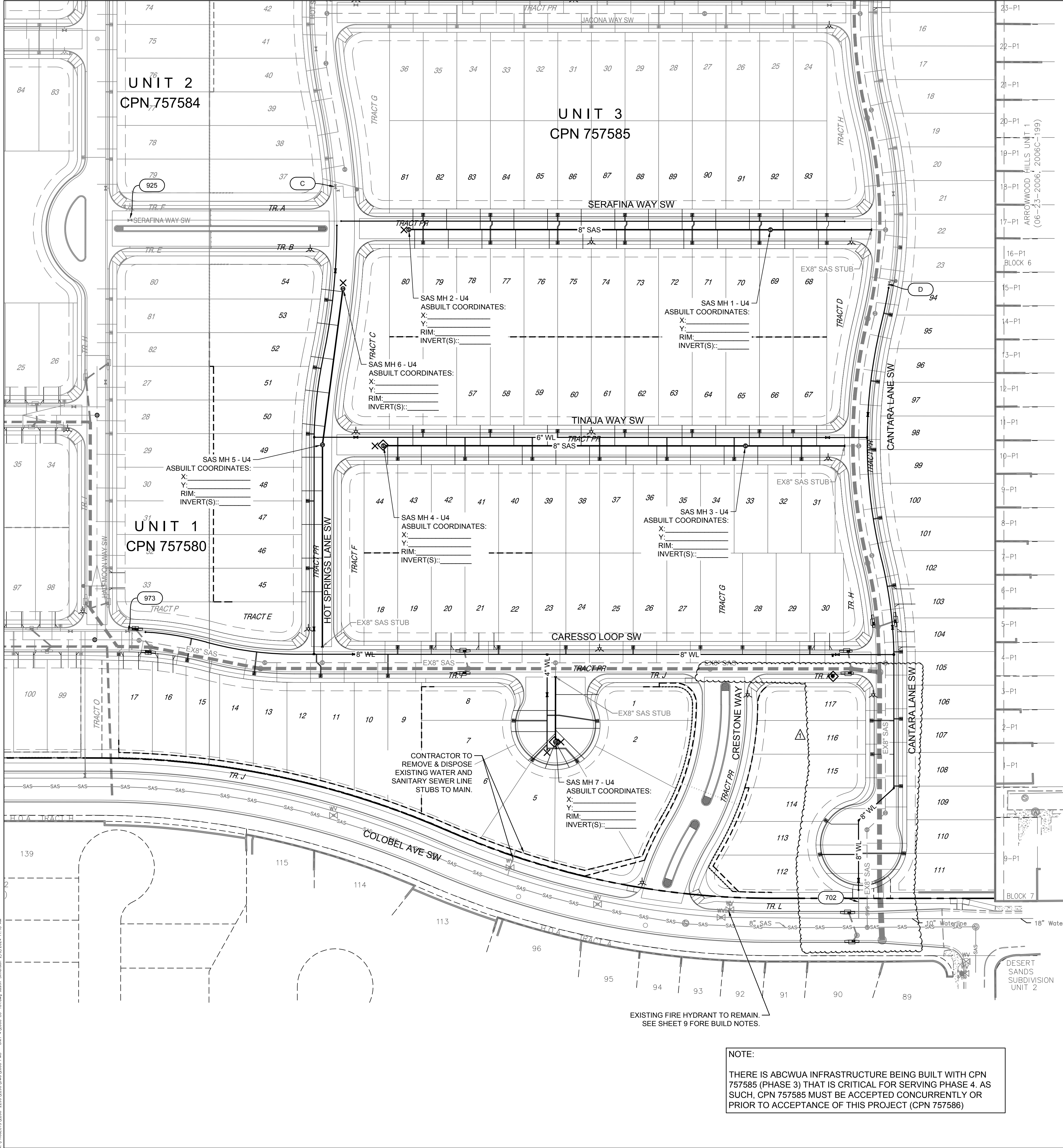


- A. CONSTRUCT 4' WIDE ADA PATH BETWEEN ALL ADA RAMPS PER DETAIL ON SHEET 6.
- B. SIDEWALK CONSTRUCTION IS DEFERRED WHERE NOTED BY *
- C. INSTALL DETECTABLE WARNING SURFACES ON ALL ADA RAMPS PER COA STD DWG #2446.

1. CONSTRUCT STANDARD CURB & GUTTER PER COA STD DWG #2415A.
2. CONSTRUCT MEDIAN CURB & GUTTER PER COA STD DWG #2415A.
3. CROWN TO NO-CROWN TRANSITION OVER 50' MIN. PER COA STD DWG #2401.
4. 5' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
5. CONSTRUCT 6' SIDEWALK PER COA STD DWG #2430. SEE GENERAL NOTE B.
6. CONSTRUCT PCC VALLEY GUTTER 6' WIDE, 1 1/2" INVERT PER COA STD DWG #2420. MODIFY GUTTER THICKNESS PER DETAIL ON SHEET 6.
7. CONSTRUCT PCC VALLEY GUTTER 4' WIDE, 1 1/2" INVERT PER COA STD DWG #2421.
8. CONSTRUCT ADA CORNER RAMP PER COA STD DWG #2441, DETAIL B.
9. CONSTRUCT UNI-DIRECTIONAL ADA RAMP PER COA STD DWG #2443, DETAIL C.
10. CONSTRUCT 4" TEXTURED, COLORED MEDIAN PAVEMENT FROM MEDIAN NOSE TO 10' FROM NOSE. COLOR AND PATTERN TO BE DETERMINED PRIOR TO PLACEMENT. PAINT MEDIAN NOSE YELLOW TO APPROXIMATELY 6' BEHIND PC/PT PER COA STD DWGS 2408 & 2502.
11. REMOVE & DISPOSE CUT-OFF WALL.
12. INSTALL THERMOPLASTIC MARKINGS:
4" SOLID WHITE STRIPE (317 LF±);
24" STOP BAR (19')
1-RIGHT TURN ARROW; 1-LEFT TURN ARROW.
13. CONSTRUCT DEPRESSED MEDIAN CURB & GUTTER PER COA STD DWG #2415A.
14. INSTALL THERMOPLASTIC 4" SOLID WHITE STRIPE.
15. INSTALL THERMOPLASTIC 4" SOLID WHITE STRIPES @ 45° ANGLE, 30' O.C..
16. INSTALL THERMOPLASTIC 4" SOLID DOUBLE YELLOW STRIPES.
17. INSTALL THERMOPLASTIC RIGHT TURN ARROW.
18. INSTALL THERMOPLASTIC LEFT TURN ARROW.
19. INSTALL THERMOPLASTIC BIKE LANE SYMBOL.
20. INSTALL THERMOPLASTIC 6" SOLID WHITE STRIPE.
21. INSTALL THERMOPLASTIC 24" STOP BAR.
22. INSTALL CROSSWALK STRIPING; THERMOPLASTIC 24" WIDE x 5' LONG, 6' O.C.
23. 9CONSTRUCT UNI-DIRECTIONAL ADA RAMP PER COA STD DWG #2443, DETAIL A.

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RESTRAINED JOINT LENGTHS, L₁,
FOR REDUCERS, (FT.)
MINIMUM UNOBSTRUCTED, STRAIGHT-RUN LENGTH:
RESTRAIN EITHER LARGE PIPE, OR SMALL PIPE.

SIZE	LARGE SIDE	SIZE	LARGE SIDE
12x10	30	10x6	53
12x8	54	10x4	71
12x6	74	8x6	31
12x4	89	8x4	52
10x8	29	6x4	29

NOTES:

- ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF A MECHANICAL JOINT SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ON THIS SHEET.
- THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

RESTRAINED JOINT LENGTHS, L₁,
FOR HORIZONTAL BENDS, VALVES,
AND DEAD ENDS, (FT.)

SIZE	HORIZ. BENDS				VALVES & DEAD ENDS
	90°	45°	22 1/2°	11 1/4°	
12	37	15	8	4	102
10	31	13	7	4	87
8	27	11	6	3	72
6	20	9	4	2	55
4	15	6	3	2	39

THESE TABLES ARE BASED UPON THE FOLLOWING CRITERIA:

DEPTH OF BURY: 3.0 FT. MINIMUM
FACTOR OF SAFETY: 1.50
MATERIAL: PVC
SOIL TYPE: GM/SM - SILTY GRAVELS AND SILTY SANDS, GRAVEL-SAND-SILT MIXTURES.
TEST PRESSURE: 150 PSI
TRENCH TYPE 4: PIPE BEDDED IN SAND, GRAVEL, OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH MINIMUM, BACKFILL COMPACTED TO TOP OF PIPE.

DIFFERENT CRITERIA, E.G., GREATER DEPTH OF BURY, ETC., WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED BY ABCWUA.

**RESTRAINED JOINT LENGTHS
FOR WATERLINE FITTINGS**

WATER SHUT-OFF PLAN

1 - NON-PRESSURE CONNECTION IN CARESSO LOOP. SHUT OFF VALVE 973 AS SHOWN ON PLAN.

1 - NON-PRESSURE CONNECTION IN HOT SPRINGS LANE. SHUT OFF VALVE 925 & C AS SHOWN ON PLAN.

1 - NON-PRESSURE CONNECTION IN CANTARA LANE. SHUT OFF VALVE D & 702 AS SHOWN ON PLAN.

THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST BE MADE ONLINE AT: http://www.abcwua.org/Water_Shut_off_and_Turn_on_Procedures.aspx.

GENERAL UTILITY NOTES

A. ALL WATER AND SEWER WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE SPECIFICATIONS.

B. SEE SHEET 2 FOR EASEMENT NOTES.

C. SEE THIS SHEET FOR WATER SHUT-OFF PLAN.

D. ALL FITTINGS AND VALVES SHALL HAVE JOINT RESTRAINTS. SEE THIS SHEET FOR TABLES.

E. ALL CROSSINGS OF WATER AND SEWER LINES SHALL HAVE 18" MIN CLEARANCE. IF 18" CLEARANCE IS NOT POSSIBLE, BOTH PIPES SHALL BE ENCASED IN CONCRETE AND NOTED ON THIS PAGE WHEN IT IS IMPRACTICAL TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION, THE SEWER LINE SHOULD BE DESIGNED AND CONSTRUCTED OF PRESSURE RATED (125 PSI) PIPE, AND SHOULD BE PRESSURE TESTED LIKE A WATER LINE TO ASSURE WATER TIGHTNESS. WHEN PRESSURE RATED PIPE IS REQUIRED FOR A SEWER CROSSING, IT SHALL BE INSTALLED THE ENTIRE DISTANCE BETWEEN THE ADJACENT MANHOLES.

F. DRY UTILITY LOCATIONS AND DESIGN ARE NOT A PART OF THIS PLAN. CONTRACTOR SHALL COORDINATE WITH THE LOCAL DRY UTILITY COMPANIES.

G. SURVEYOR SHALL VERIFY ALL TP ELEVATIONS, RIM AND INVERT ELEVATIONS ON MANHOLES.

H. WATER AUTHORITY SPECIFICATIONS AND NOTES CAN BE FOUND ONLINE: <https://www.abcwua.org/info-for-builders-construction-information-for-builders/>

I. ALL SANITARY SEWER LINES SHALL BE AS-BUILT WITH LENGTHS, INVERT ELEVATIONS AND SLOPES.

J. WATER SERVICES ON PUBLIC SIDE FROM MAIN TO METER AND ON PRIVATE SIDE FROM METER SHALL BE EITHER COPPER OR MUNICIPEX PER ABCWUA APPROVED PRODUCTS LIST. IF MUNICIPEX PIPE IS USED, STIFFENERS SHALL BE USED AT THE COMPRESSION COUPLINGS.

K. All work performed on privately owned sewer line and service lines must be inspected by the City of Albuquerque's Code Administration Division. In order that inspection by the Planning Department, Code Administration Division, Plumbing Section can be efficiently handled, with a minimum loss of time to CONTRACTOR, the following shall be noted:

K.A. Inspection arrangements for a sewer service line shall be made by the CONTRACTOR calling the City of Albuquerque, Code Administration Division, Plumbing Section.

K.B. Inspection requests called in between the hours of 8:00 a.m. and 12:00 noon will be inspected the same afternoon. Inspection requests called in between the hours of 1:00 p.m. and 5:00 p.m. will be inspected the following morning, except in cases of emergency.

L. TRACER WIRE AND APPURTENANCES SHALL BE INSTALLED PER ABCWUA STD DWGS 2190, 2191, 2302, 2327, 2365, 2342, 2379, 2740 & 2741. COST FOR TRACER WIRES & APPURTENANCES SHALL BE INCLUDED IN WATER & SEWER LINE PIPE PAY ITEMS.

LEGEND

Isaacson & Arfman, Inc.
Civil Engineering Consultants

128 Monroe Street NE
Albuquerque, NM 87108
505-268-8828 | www.iacivil.com

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
ASPIRE SUBDIVISION, UNIT 4

MASTER UTILITY PLAN

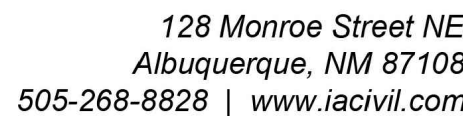
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City Project No.	Zone Map No.	Sheet	Of
757586	N-8-Z	21	28

* INDICATES SINGLE METERS ALL OTHER ARE DOUBLE

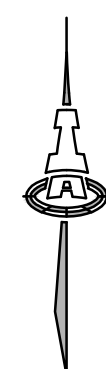
ENGINEER'S SEAL

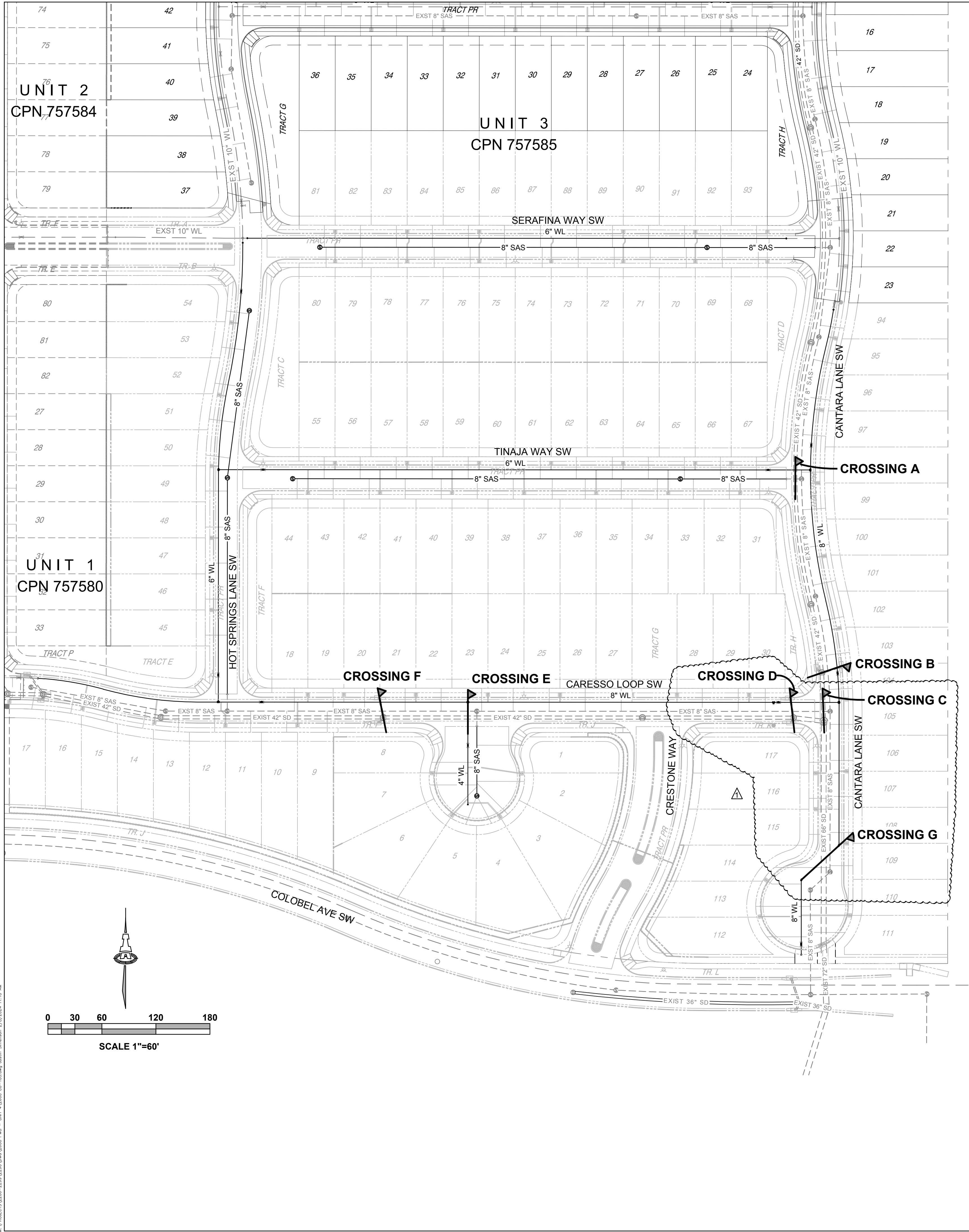
PRELIMINARY
NOT FOR CONSTRUCTION



WATER AS-BUILT COORDINATES

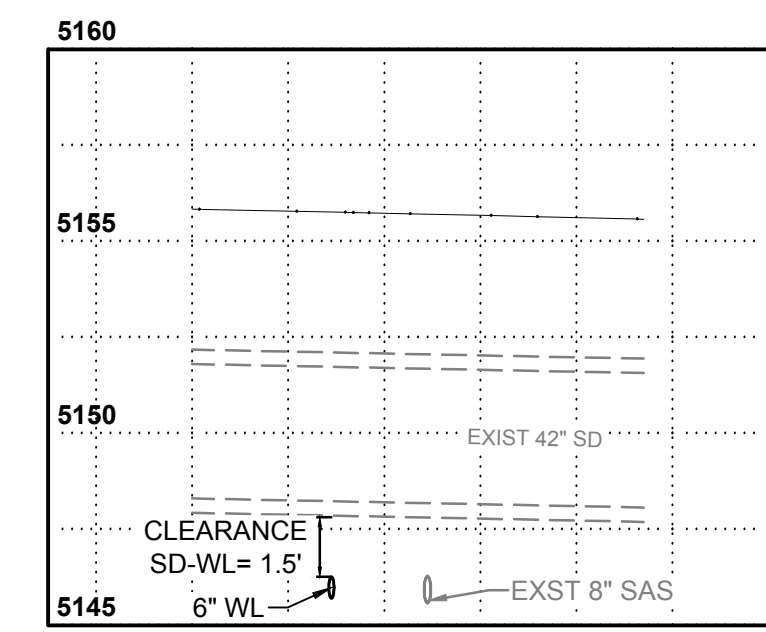
City Project No. 757586	Zone Map No. N-8-Z	Sheet 22 Of 28
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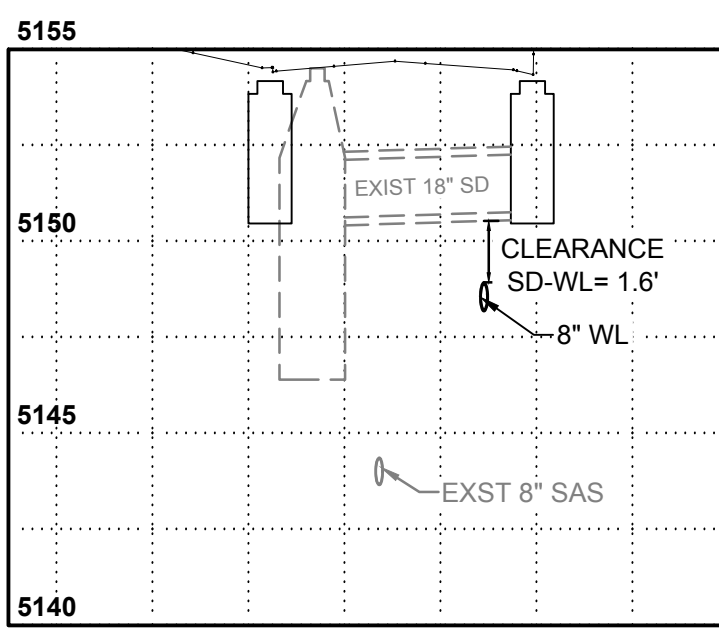


GENERAL NOTES:

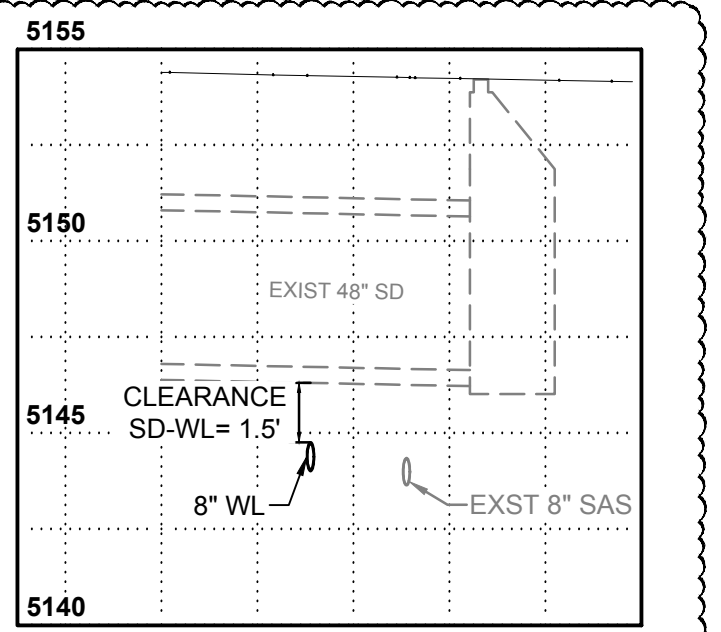
- A. ALL CROSSINGS OF WATER AND SEWER LINES SHALL HAVE 18" MIN CLEARANCE. IF 18" CLEARANCE IS NOT POSSIBLE, BOTH PIPES SHALL BE ENCASED IN CONCRETE AND NOTED ON THIS PAGE.
- B. WATERLINE DEFLECTION UNDER STORM DRAINS SHALL BE INSTALLED PER ABCWUA STD DWG 2381.
- C. CONTRACTOR TO FIELD LOCATE ALL EXISTING UTILITIES AND VERIFY ELEVATIONS PRIOR TO CONSTRUCTION.



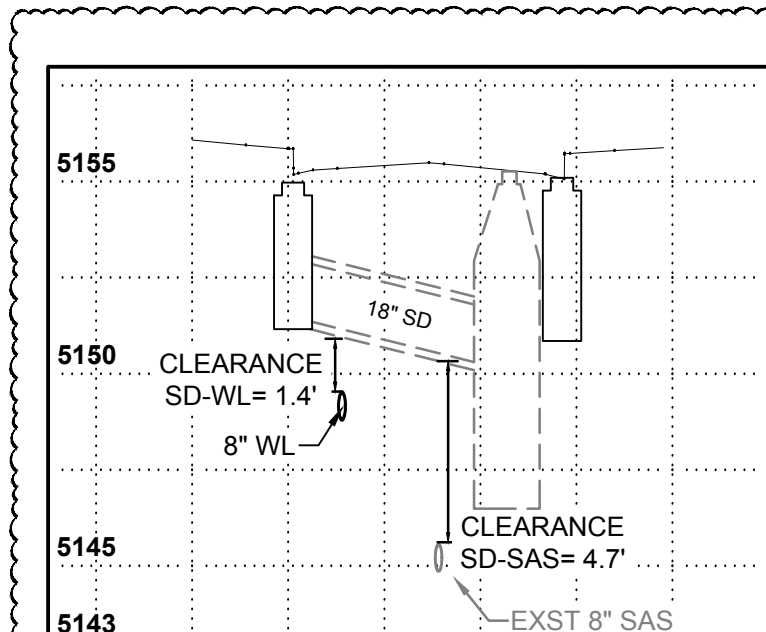
CROSSING A DETAIL



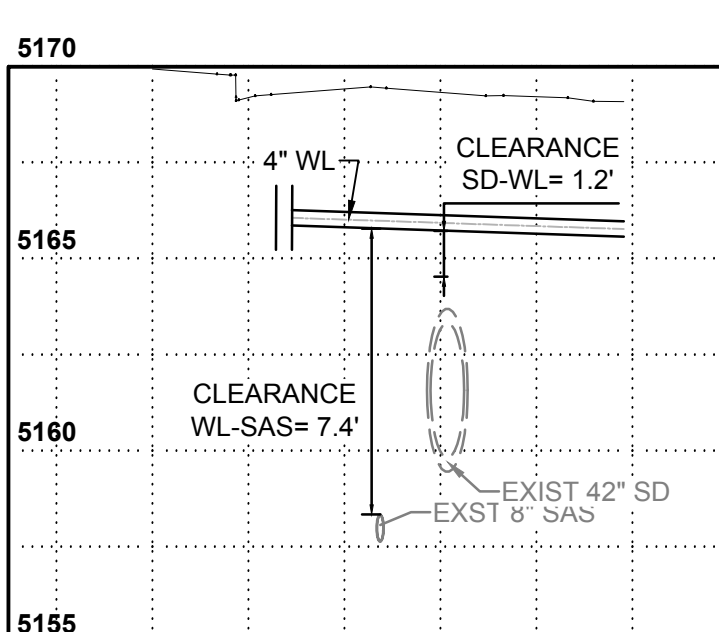
CROSSING B DETAIL



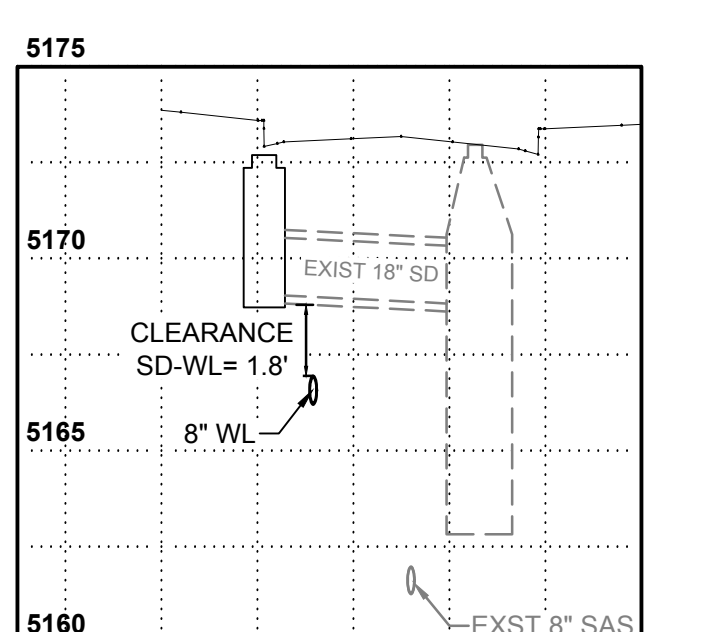
CROSSING C DETAIL



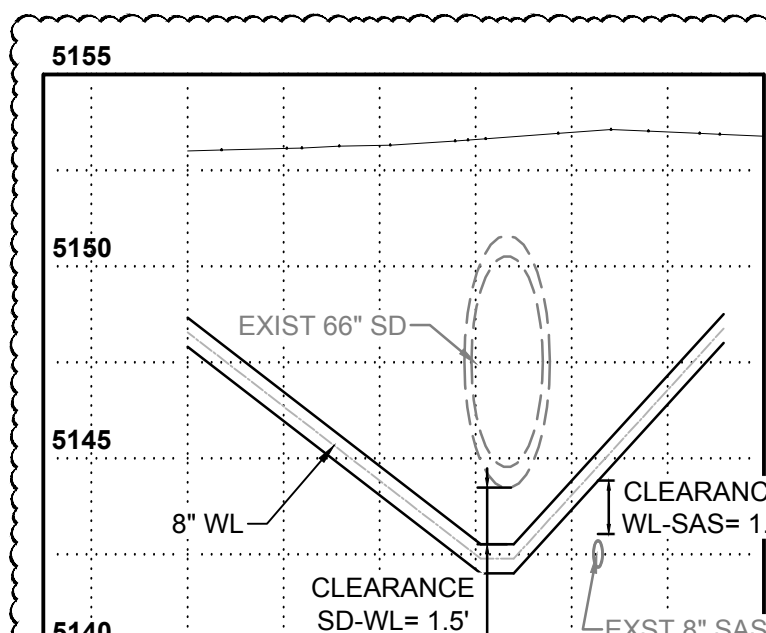
CROSSING D DETAIL



CROSSING E DETAIL



CROSSING F DETAIL



CROSSING G DETAIL

CROSSING DETAIL SCALES: 1"=20' HORIZ. & 1"=5' VERT.



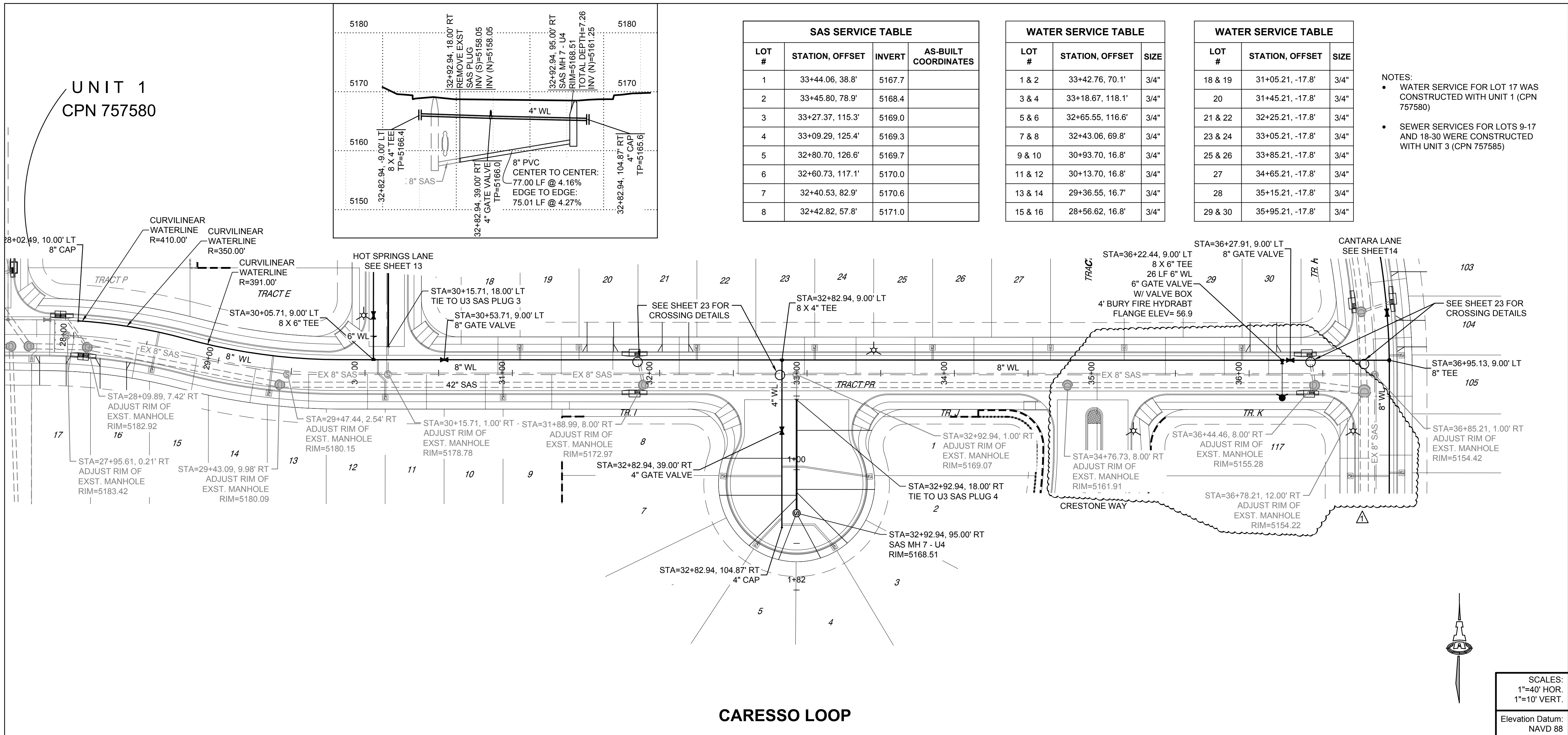
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
ASPIRE SUBDIVISION, UNIT 4
UTILITY CROSSING DETAILS

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ENGINEER'S SEAL				SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
PRELIMINARY NOT FOR CONSTRUCTION				FIELD NOTES					
				1	CSI-CARTESIAN SURV	AGRS MONUMENT AND BENCHMARK "1-N8"			
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						G-G=0.999676466		DATE	
						Δα=00°17'27.70"		DATE	
						CENTRAL ZONE			
						ELEVATION=5307.25		DATE	
						(NAD83NAVD88)		NO	
REMARKS		BY							
DESIGN									
DESIGNED BY	GLD	DATE	07/2023						
DRAWN BY	lfor	DATE	07/2023						
CHECKED BY	GLD	DATE	07/2023						

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UNIT 1
CPN 757580



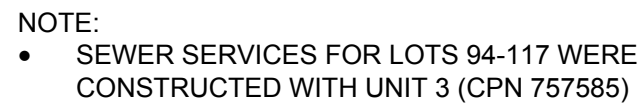
UTILITY NOTES

- CONSTRUCT 4" SAS SERVICES PER ABCWUA STD DWG #2125 EXCEPT WHERE RISERS ARE NOTED WITH "*****" ON THE PLAN AND IN THE SERVICE TABLE. INSTALL SAS SERVICES WITH RISERS AT MAIN PER ABCWUA STD DWG #2136.
- CONSTRUCT SAS MANHOLES W/ FRAME & COVER PER ABCWUA STD DWG #2102 & #2109 (CONCENTRIC).
- WATERLINE CONNECTIONS PER ABCWUA STD DWG 2301.
- INSTALL NON-PRESSURE CONNECTIONS PER ABCWUA STD DWG 2301.
- INSTALL WATER VALVE BOX WITH RING AND COVER PER ABCWUA STD DWG 2326 & 2328.
- CONSTRUCT 3/4" WATER SERVICES AND METER BOXES PER ABCWUA STD DWG #2361, 2362, 2366 & 2368.
- CONSTRUCT FIRE HYDRANTS PER DESIGNATED DEPTHS & LENGTHS PER ABCWUA STD DWG #2340.
- SEE SHEET 21 FOR WATER SHUT-OFF PLAN.
- SEE SHEET 21 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
- SEE SHEET 22 FOR AS-BUILT COORDINATE TABLES.
- ALL WATERLINES SHALL BE C-900 DR18 UNLESS OTHERWISE NOTED.
- ALL SANITARY SEWER LINES SHALL BE SDR-35. ALL CURVILINEAR SANITARY SEWER LINES SHALL BE C-900 WITH GREEN POLYWRAP.
- TRACER WIRE AND APPURTENANCES SHALL BE INSTALLED PER ABCWUA STD DWGS 2190, 2191, 2302, 2327, 2365, 2342, 2379, 2740 & 2741. COST FOR TRACER WIRES & APPURTENANCES SHALL BE INCLUDED IN WATER & SEWER LINE PIPE PAY ITEMS.
- REMOVE & REPLACE PAVING PER COA STD DWG 2465.
- TRACT PR TO BE ENCUMBERED BY A BLANKET PUBLIC WATER AND SEWER EASEMENT BY FINAL PLAT.
- WATERLINE DEFLECTION UNDER STORM DRAINS SHALL BE INSTALLED PER ABCWUA STD DWG 2381.
- CONTRACTOR TO MAINTAIN TYPICAL 3' SEPARATION OF WATERLINE AND LIP OF GUTTER AND 10' SEPARATION OF WATER AND SANITARY SEWER LINES.



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
ASPIRE SUBDIVISION, UNIT 4
**CARESSO LOOP UTILITY
PLAN & PROFILE**

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				Mo./DAY/YR.	Mo./DAY/YR.
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757586		N-8-Z		26	28



SCALES:
1"=40' HOR.
1"=10' VERT.

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CANTARA LANE UTILITY PLAN & PROFILE

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