

PEARCE FARM – CD PKG 1

ROLESVILLE, NORTH CAROLINA

STORM DRAINAGE CALCULATIONS

PROJECT NUMBER: AGN23001
DESIGNED BY: W. T. O'DANIEL, PE

DATE: DECEMBER 2, 2024
REVISED: JANUARY 30, 2025



McADAMS

2905 MERIDIAN PARKWAY
DURHAM, NORTH CAROLINA 27713
NC LIC. # C-0293

PEARCE FARM – CD PKG 1

STORM DRAINAGE SYSTEM CALCULATIONS

GENERAL DESCRIPTION

Pearce Farm is a proposed residential development located between Forestville Road and Burlington Mills Road in Rolesville, NC. This 224-acre site will consist of single-family lots, along with the associated infrastructure. The total development will consist of approximately 559 lots, including various types of single-family housing, seven stormwater control measures, sidewalks, roadways, greenway trails, and associated infrastructure and various amenities.

The Pearce Farm development is located within the Neuse River basin with the site's stormwater runoff draining into Toms Creek. The proposed development shall be subject to erosion control requirements set forth in the Rolesville Land Development Ordinance and Wake County standards.

CALCULATION METHODOLOGY

- > Rainfall data for the Rolesville, NC region was taken from NOAA Atlas 14. This data describes a depth-duration-frequency (DDF) table describing rainfall depth versus time for varying return periods in the Rolesville, NC area. These rainfall depths are entered into the "Stormwater Studio" application to determine design flows associated with the storm drainage system. Please reference the rainfall data section within this report for additional information.
- > The time of concentration was calculated using the Kirpich Method.
- > The existing on-site topography used in the analysis is from a field survey by BNK.
- > For each individual storm drainage inlet, a drainage area was measured as well as assigning impervious surface percentage. From this impervious percentage, a rational c factor was calculated based on 0.95 for impervious areas. For drainage areas with a combination of both pervious (Open Space and Lawns, C=0.35) and impervious areas, a composite "c" factor was interpolated.
- > The pipes were sized using "Stormwater Studio 2021 Ver. 3.0.0.25". This program accepts the input data from each inlet, as well as physical characteristics of the storm system to be designed, and calculates flow rates and pipe sizes throughout the system. The final results of this program as well as calculated pipe sizes and hydraulic grade lines may be found in the appropriate section of this report. The minimum pipe size was 15" unless otherwise shown on the plans. Pipe material is RCP or HDPE as indicated on the plans.
- > The inlet types included for this project are primarily NCDOT type combination catch basins with curb inlets and grates. The calculations include an analysis to determine gutter spread at these inlets based on a 4-in per hour rainfall intensity.

- > The storm water network was analyzed for the 10-year storm event using a starting time of concentration of 5 minutes.
- > The various inlet types are shown on the stormwater detail sheets, within the plan set. Flared end sections or Endwalls are used at discharge points. Headwalls or structures are used at inlet points. Velocity dissipators are provided at discharge points to prevent erosion and scour in these areas. The dissipators have been sized using the NYDOT method.
- > For Wall Drains, the pipes were sized using "Studio Express" by "Hydrology Studio Ver. 1.0.0.10". This program accepts the input data from each inlet, as well as physical characteristics of the storm system to be designed, and calculates flow rates and pipe sizes throughout the system. The final results of this program as well as calculated pipe sizes may be found in the appropriate section of this report. The minimum pipe size is 8" unless otherwise shown on the plans. Pipe material is PVC as indicated on the plans.

PRECIPITATION FREQUENCY DATA TABLES

Pearce Farm – CD Pkg 1
AGN23001



NOAA Atlas 14, Volume 2, Version 3

Location name: Wake Forest, North Carolina, USA*

Latitude: 35.9206°, Longitude: -78.5002°

Elevation: 329 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M. Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerials](#)

PF tabular

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	4.84 (4.43-5.28)	5.62 (5.15-6.14)	6.42 (5.88-7.00)	7.19 (6.58-7.84)	7.97 (7.26-8.69)	8.58 (7.79-9.35)	9.12 (8.23-9.94)	9.60 (8.60-10.5)	10.1 (9.01-11.1)	10.6 (9.35-11.6)
10-min	3.86 (3.54-4.22)	4.49 (4.12-4.91)	5.14 (4.71-5.60)	5.75 (5.26-6.27)	6.35 (5.78-6.92)	6.83 (6.20-7.45)	7.25 (6.53-7.90)	7.61 (6.82-8.30)	8.02 (7.12-8.75)	8.35 (7.36-9.13)
15-min	3.22 (2.95-3.52)	3.77 (3.45-4.12)	4.33 (3.97-4.73)	4.85 (4.44-5.29)	5.37 (4.89-5.85)	5.77 (5.23-6.28)	6.11 (5.51-6.65)	6.40 (5.74-6.98)	6.72 (5.98-7.34)	6.98 (6.16-7.64)
30-min	2.21 (2.02-2.41)	2.60 (2.38-2.84)	3.08 (2.82-3.36)	3.51 (3.21-3.83)	3.97 (3.62-4.33)	4.34 (3.94-4.73)	4.68 (4.22-5.10)	4.98 (4.47-5.44)	5.35 (4.76-5.84)	5.65 (4.98-6.18)
60-min	1.38 (1.26-1.50)	1.63 (1.50-1.78)	1.97 (1.81-2.15)	2.29 (2.09-2.49)	2.65 (2.41-2.88)	2.94 (2.67-3.21)	3.22 (2.90-3.51)	3.49 (3.13-3.81)	3.84 (3.41-4.19)	4.13 (3.64-4.51)
2-hr	0.803 (0.730-0.886)	0.957 (0.874-1.05)	1.17 (1.06-1.28)	1.37 (1.24-1.50)	1.61 (1.45-1.76)	1.81 (1.63-1.98)	2.01 (1.79-2.20)	2.21 (1.96-2.42)	2.47 (2.17-2.71)	2.70 (2.35-2.96)
3-hr	0.566 (0.515-0.627)	0.675 (0.617-0.745)	0.828 (0.754-0.913)	0.977 (0.887-1.07)	1.16 (1.04-1.27)	1.32 (1.18-1.45)	1.48 (1.31-1.62)	1.64 (1.45-1.80)	1.86 (1.62-2.04)	2.06 (1.78-2.26)
6-hr	0.341 (0.311-0.376)	0.406 (0.372-0.447)	0.499 (0.455-0.548)	0.589 (0.536-0.647)	0.702 (0.635-0.768)	0.802 (0.721-0.876)	0.903 (0.804-0.985)	1.01 (0.889-1.10)	1.15 (1.00-1.25)	1.28 (1.10-1.40)
12-hr	0.200 (0.183-0.220)	0.238 (0.219-0.261)	0.294 (0.269-0.322)	0.349 (0.318-0.382)	0.419 (0.379-0.457)	0.482 (0.433-0.524)	0.546 (0.486-0.592)	0.614 (0.540-0.666)	0.708 (0.613-0.768)	0.794 (0.678-0.862)
24-hr	0.119 (0.110-0.128)	0.143 (0.134-0.154)	0.180 (0.168-0.194)	0.209 (0.194-0.225)	0.249 (0.230-0.267)	0.280 (0.259-0.301)	0.312 (0.287-0.336)	0.345 (0.317-0.371)	0.391 (0.357-0.421)	0.426 (0.388-0.460)
2-day	0.069 (0.064-0.074)	0.083 (0.077-0.089)	0.103 (0.096-0.111)	0.119 (0.111-0.128)	0.141 (0.131-0.152)	0.158 (0.146-0.170)	0.176 (0.162-0.189)	0.194 (0.178-0.209)	0.218 (0.200-0.236)	0.238 (0.216-0.257)
3-day	0.048 (0.045-0.052)	0.058 (0.054-0.062)	0.072 (0.067-0.077)	0.083 (0.078-0.089)	0.098 (0.091-0.105)	0.110 (0.102-0.118)	0.123 (0.113-0.131)	0.135 (0.124-0.145)	0.152 (0.139-0.164)	0.166 (0.151-0.179)
4-day	0.038 (0.036-0.041)	0.046 (0.043-0.049)	0.057 (0.053-0.061)	0.065 (0.061-0.070)	0.077 (0.072-0.082)	0.086 (0.080-0.092)	0.096 (0.089-0.103)	0.106 (0.097-0.113)	0.119 (0.109-0.128)	0.130 (0.118-0.139)
7-day	0.025 (0.024-0.027)	0.030 (0.028-0.032)	0.037 (0.034-0.039)	0.042 (0.039-0.045)	0.049 (0.046-0.053)	0.055 (0.051-0.059)	0.061 (0.057-0.065)	0.067 (0.062-0.072)	0.075 (0.069-0.081)	0.082 (0.075-0.088)
10-day	0.020 (0.019-0.021)	0.024 (0.022-0.025)	0.029 (0.027-0.031)	0.033 (0.031-0.035)	0.038 (0.035-0.040)	0.042 (0.039-0.045)	0.046 (0.043-0.049)	0.050 (0.047-0.054)	0.056 (0.052-0.060)	0.060 (0.056-0.065)
20-day	0.013 (0.012-0.014)	0.016 (0.015-0.017)	0.019 (0.017-0.020)	0.021 (0.020-0.022)	0.024 (0.023-0.026)	0.027 (0.025-0.028)	0.029 (0.027-0.031)	0.032 (0.029-0.034)	0.035 (0.032-0.038)	0.038 (0.035-0.040)
30-day	0.011 (0.010-0.012)	0.013 (0.012-0.014)	0.015 (0.014-0.016)	0.017 (0.016-0.018)	0.019 (0.018-0.020)	0.021 (0.019-0.022)	0.022 (0.021-0.024)	0.024 (0.022-0.026)	0.026 (0.024-0.028)	0.028 (0.026-0.030)
45-day	0.009 (0.009-0.010)	0.011 (0.010-0.011)	0.012 (0.012-0.013)	0.014 (0.013-0.014)	0.015 (0.014-0.016)	0.017 (0.016-0.018)	0.018 (0.017-0.019)	0.019 (0.018-0.020)	0.021 (0.019-0.022)	0.022 (0.020-0.023)
60-day	0.008 (0.008-0.009)	0.010 (0.009-0.010)	0.011 (0.010-0.012)	0.012 (0.011-0.013)	0.013 (0.013-0.014)	0.014 (0.013-0.015)	0.015 (0.014-0.016)	0.016 (0.015-0.017)	0.017 (0.016-0.018)	0.018 (0.017-0.019)

1 Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

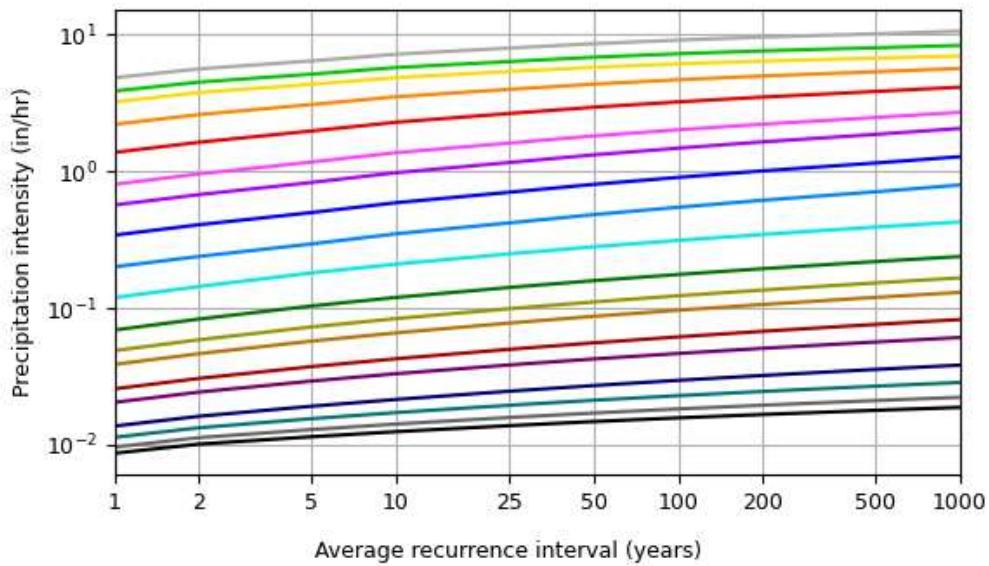
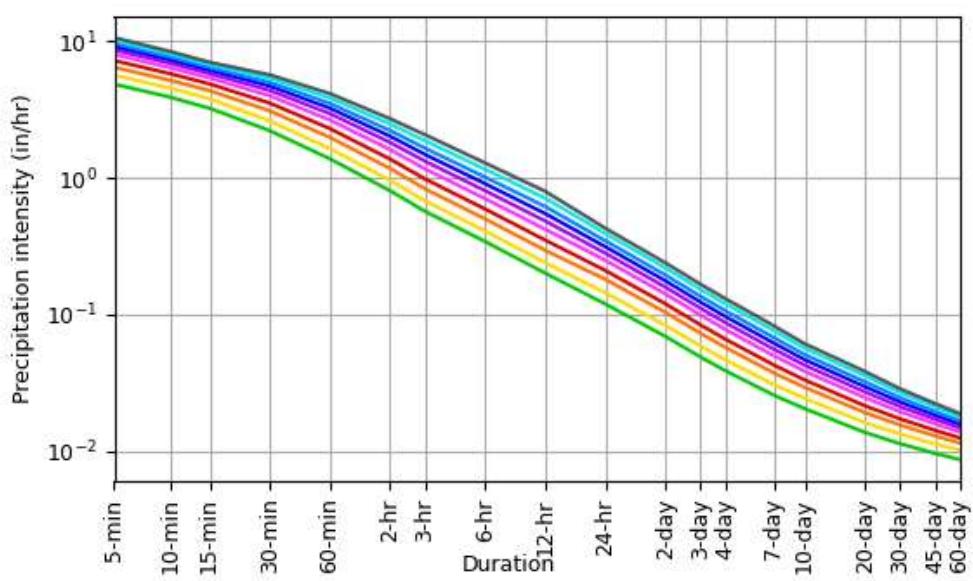
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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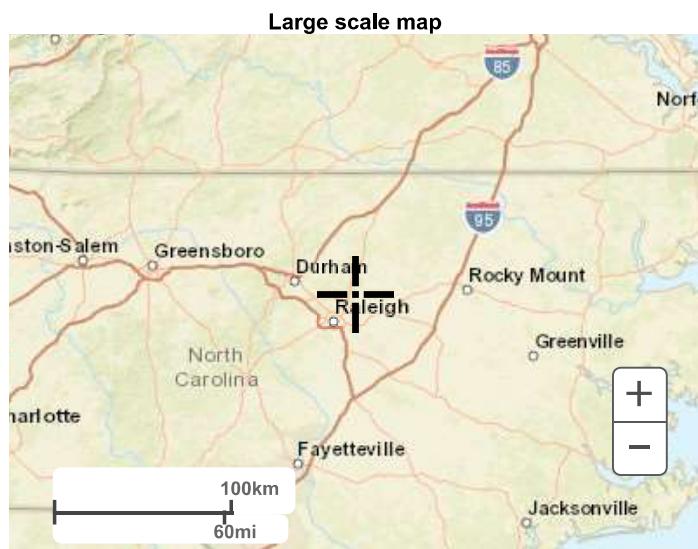
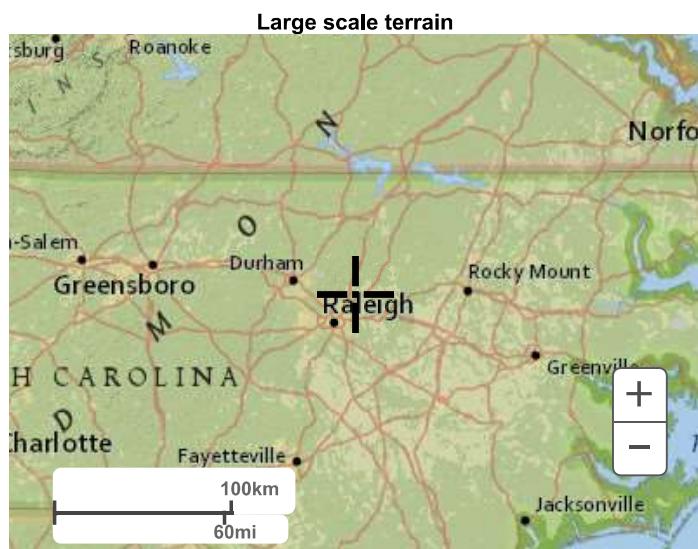
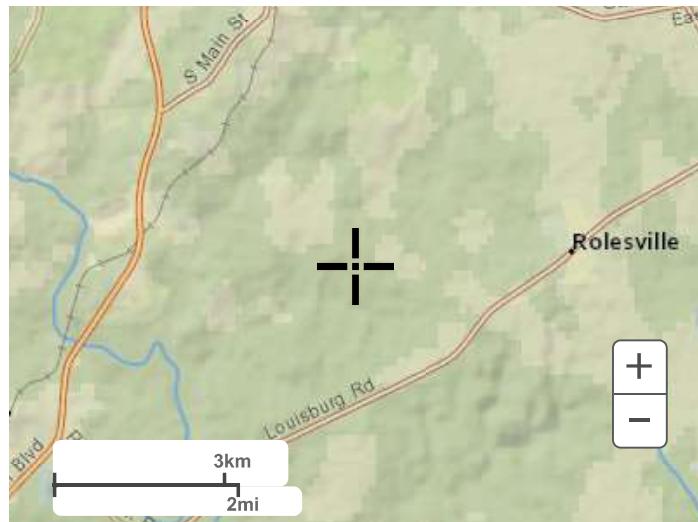
PF graphical

PDS-based intensity-duration-frequency (IDF) curves
Latitude: 35.9206°, Longitude: -78.5002°

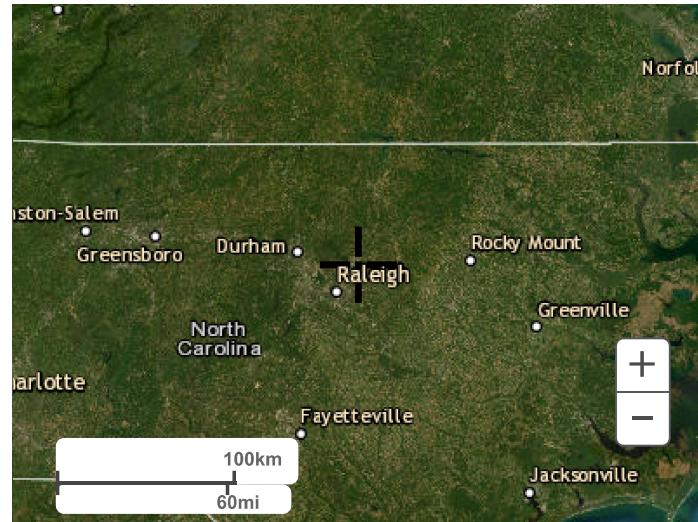


Maps & aerials

[Small scale terrain](#)



Large scale aerial

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IDF Report

Stormwater Studio 2024 v 3.0.0.35

IDF filename: Pearce Farm IDF.idf

12-02-2024

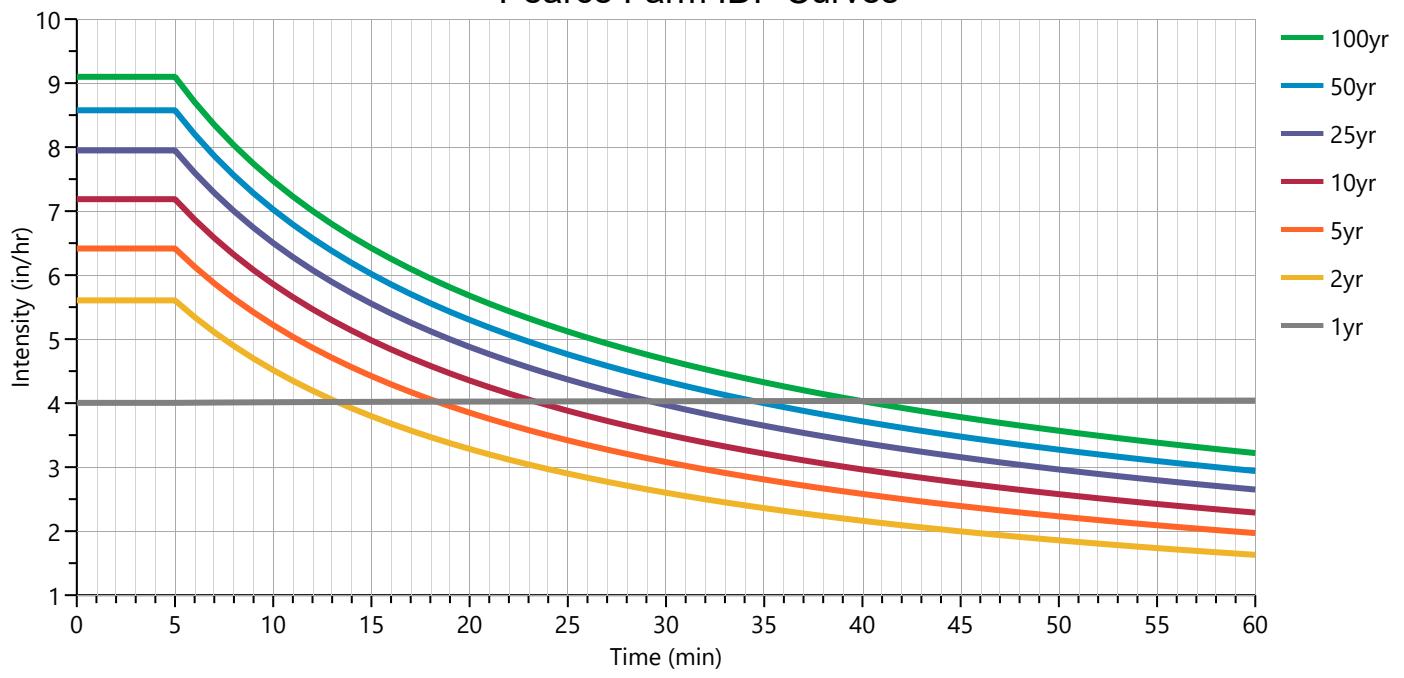
Equation Coefficients	Intensity = B / (Tc + D)^E (in/hr)								
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
B	3.9811	71.7923	0.0000	74.3298	67.8360	60.6704	56.9292	52.9729	
D	0.1000	13.0000	0.0000	13.1000	12.0000	10.9000	10.1000	9.4000	
E	-0.0036	0.8822	0.0000	0.8459	0.7923	0.7347	0.6973	0.6605	

Minimum Tc = 5 minutes

Tc (min)	Intensity Values (in/hr)								
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
Cf	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
5	4.00	5.61	0	6.42	7.19	7.95	8.58	9.10	
10	4.01	4.52	0	5.22	5.86	6.50	7.02	7.47	
15	4.02	3.80	0	4.42	4.98	5.55	6.02	6.42	
20	4.02	3.28	0	3.85	4.35	4.88	5.30	5.68	
25	4.03	2.90	0	3.42	3.88	4.37	4.76	5.12	
30	4.03	2.60	0	3.08	3.51	3.97	4.34	4.68	
35	4.03	2.36	0	2.81	3.21	3.65	4.00	4.32	
40	4.03	2.16	0	2.58	2.96	3.38	3.72	4.03	
45	4.04	2.00	0	2.39	2.76	3.16	3.48	3.78	
50	4.04	1.86	0	2.23	2.58	2.96	3.27	3.57	
55	4.04	1.74	0	2.09	2.42	2.80	3.10	3.38	
60	4.04	1.63	0	1.97	2.29	2.65	2.94	3.22	

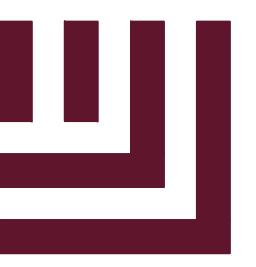
Cf = Correction Factor applied to Rational Method runoff coefficient.

Pearce Farm IDF Curves



DRAINAGE AREA MAP

Pearce Farm – CD Pkg 1
AGN23001



MCADAMS

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PEARCE FARM - PHASES 1-3 CONSTRUCTION DRAWINGS - PACKAGE

4-08

BURLINGTON MILLS ROAD

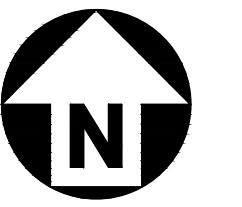
BURLINGTON MILLS ROAD
TOWN OF ROLESVILLE, NORTH CAROLINA

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO.	AGN23001
FILENAME	AGN23001-DA1
CHECKED BY	.
DRAWN BY	.
SCALE	1"=150'
DATE	12. 02. 2024

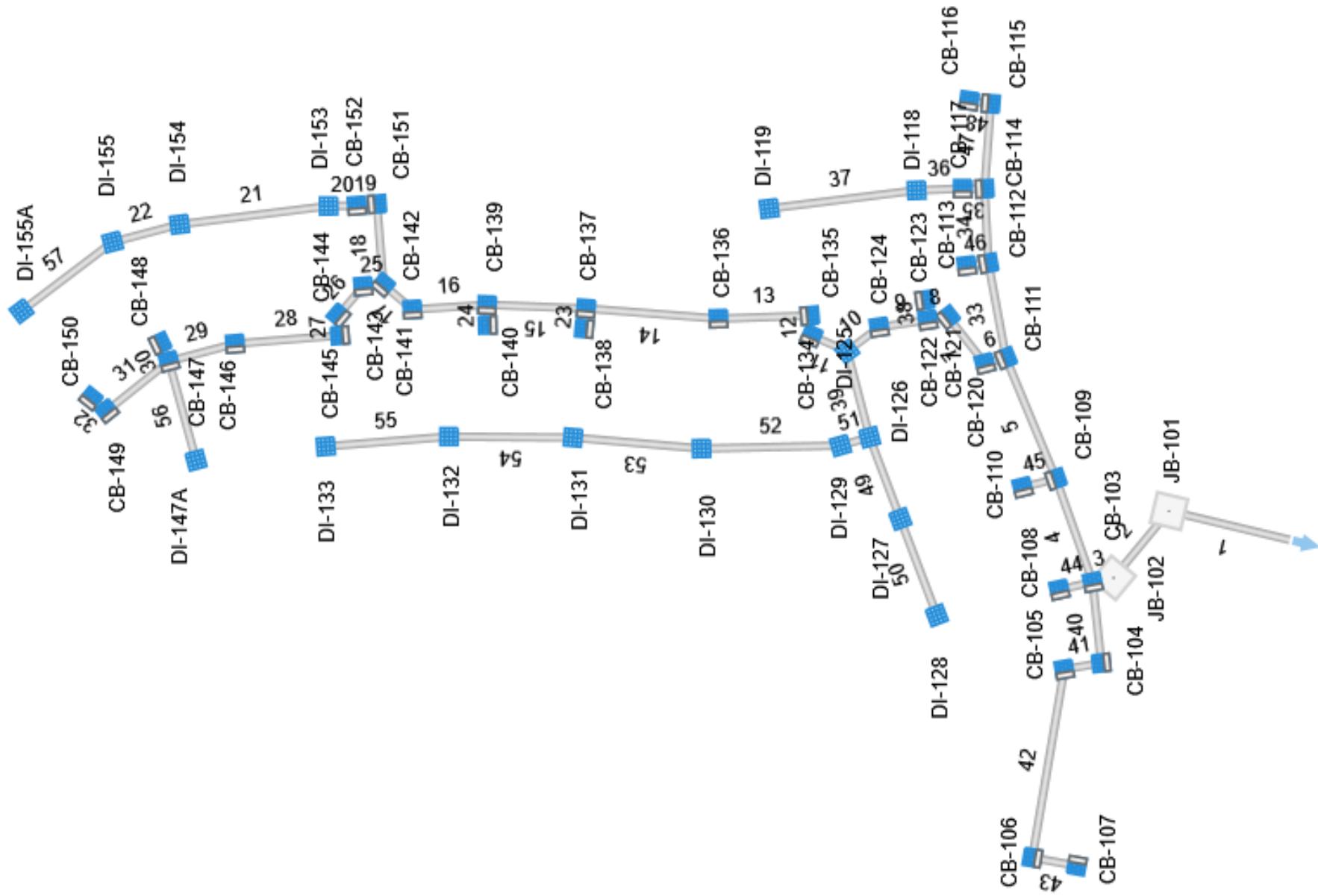


DRAINAGE AREA MAP

1 OF 1

SYSTEM 100 – REPORTS AND PROFILES

Pearce Farm – CD Pkg 1
AGN23001



Storm Sewer Tabulation*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-06-2025

Line ID	Length (ft)	Drng Area		Rationa		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
100-101	149.04	0.000	0.000	0.00	0.00	5.0	0.00	0.00	0.00	166.06	0.00	48	1.34	254.99	253.00	0.00	0.00	271.69	257.00	1	
101-102	105.40	0.000	0.000	0.00	0.00	0.0	0.00	0.00	0.00	129.31	0.00	48	0.81	255.95	255.09	0.00	0.00	267.48	271.69	2	
102-103	25.78	0.100	0.000	0.80	0.08	0.00	5.0	0.00	0.00	143.65	0.00	48	1.00	256.30	256.05	0.00	0.00	271.94	267.48	3	
103-109	132.94	0.120	0.000	0.80	0.10	0.00	5.0	0.00	0.00	130.63	0.00	48	0.83	260.70	259.60	0.00	0.00	272.92	271.94	4	
109-111	158.72	0.090	0.000	0.80	0.07	0.00	5.0	0.00	0.00	117.24	0.00	48	0.67	261.85	260.80	0.00	0.00	278.54	272.92	5	
111-120	26.50	0.060	0.000	0.80	0.05	0.00	5.0	0.00	0.00	86.30	0.00	42	0.74	262.45	262.25	0.00	0.00	278.54	278.54	6	
120-121	71.68	0.010	0.000	0.85	0.01	0.00	5.0	0.00	0.00	60.85	0.00	36	0.83	263.15	262.55	0.00	0.00	280.39	278.54	7	
121-122	25.09	0.080	0.000	0.80	0.06	0.00	5.0	0.00	0.00	66.69	0.00	36	1.00	263.50	263.25	0.00	0.00	280.31	280.39	8	
122-124	59.62	0.020	0.000	0.85	0.02	0.00	5.0	0.00	0.00	61.46	0.00	36	0.85	264.10	263.60	0.00	0.00	280.72	280.39	9	
124-125	48.51	0.050	0.000	0.65	0.03	0.00	5.0	0.00	0.00	60.18	0.00	36	0.81	264.60	264.20	0.00	0.00	280.63	280.72	10	
125-134	47.11	0.280	0.000	0.80	0.22	0.00	5.0	0.00	0.00	72.74	0.00	30	3.15	276.19	274.70	0.00	0.00	282.63	280.63	11	
134-135	24.50	0.110	0.000	0.80	0.09	0.00	5.0	0.00	0.00	37.51	0.00	30	0.84	276.50	276.30	0.00	0.00	282.63	282.63	12	
135-136	110.83	0.140	0.000	0.80	0.11	0.00	5.0	0.00	0.00	86.64	0.00	30	4.46	281.55	276.60	0.00	0.00	287.51	282.63	13	
136-137	161.14	0.060	0.000	0.85	0.05	0.00	5.0	0.00	0.00	64.63	0.00	30	2.48	285.65	281.65	0.00	0.00	295.25	287.51	14	
137-139	120.02	0.050	0.000	0.85	0.04	0.00	5.0	0.00	0.00	31.77	0.00	30	0.60	286.47	285.75	0.00	0.00	300.91	295.25	15	
139-141	90.82	0.040	0.000	0.85	0.03	0.00	5.0	0.00	0.00	39.16	0.00	30	0.91	287.40	286.57	0.00	0.00	304.31	300.91	16	
141-142	46.32	0.060	0.000	0.85	0.05	0.00	5.0	0.00	0.00	35.81	0.00	30	0.76	287.85	287.50	0.00	0.00	305.61	304.31	17	
142-151	98.12	0.080	0.000	0.80	0.06	0.00	5.0	0.00	0.00	9.49	0.00	18	0.82	288.85	288.05	0.00	0.00	309.69	305.61	18	
151-152	24.50	0.120	0.000	0.75	0.09	0.00	5.0	0.00	0.00	9.37	0.00	18	0.80	289.15	288.95	0.00	0.00	309.69	309.69	19	
152-153	34.30	0.100	0.000	0.50	0.05	0.00	5.0	0.00	0.00	8.08	0.00	18	0.59	289.45	289.25	0.00	0.00	303.17	309.69	20	
153-154	182.03	0.510	0.000	0.60	0.31	0.00	5.0	0.00	0.00	8.17	0.00	18	0.60	290.65	289.55	0.00	0.00	298.59	303.17	21	
154-155	83.99	0.170	0.000	0.65	0.11	0.00	5.0	0.00	0.00	8.10	0.00	18	0.60	291.25	290.75	0.00	0.00	297.97	298.59	22	

* Results NOT current with inputs.

Project File: Storm System 100.sws

Storm Sewer Tabulation*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-06-2025

Line ID	Length (ft)	Drng Area		Rationa		C x A		Tc		Intensity	Total Q	Capacity (cfs)	Velocity (ft/s)	Size (in)	Slope (%)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (min)	Dn (min)							Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
137-138	24.50	0.120	0.000	0.80	0.10	0.00	5.0	0.00	0.00	0.00	0.00	6.46	0.00	15	1.00	290.50	290.26	0.00	0.00	295.25	295.25	23		
139-140	24.50	0.140	0.000	0.80	0.11	0.00	5.0	0.00	0.00	0.00	0.00	6.46	0.00	15	1.00	296.16	295.92	0.00	0.00	300.91	300.91	24		
142-143	24.50	0.060	0.000	0.80	0.05	0.00	5.0	0.00	0.00	0.00	0.00	9.37	0.00	18	0.80	289.20	289.00	0.00	0.00	305.61	305.61	25		
143-144	46.32	0.050	0.000	0.80	0.04	0.00	5.0	0.00	0.00	0.00	0.00	9.80	0.00	18	0.87	289.70	289.30	0.00	0.00	305.05	305.61	26		
144-145	24.50	0.020	0.000	0.80	0.02	0.00	5.0	0.00	0.00	0.00	0.00	9.61	0.00	18	0.84	290.00	289.80	0.00	0.00	305.05	305.05	27		
145-146	127.68	0.120	0.000	0.80	0.10	0.00	5.0	0.00	0.00	0.00	0.00	9.28	0.00	18	0.78	291.10	290.10	0.00	0.00	301.75	305.05	28		
146-147	82.81	0.090	0.000	0.80	0.07	0.00	5.0	0.00	0.00	0.00	0.00	8.19	0.00	18	0.61	291.70	291.20	0.00	0.00	298.81	301.75	29		
147-148	24.50	0.220	0.000	0.80	0.18	0.00	5.0	0.00	0.00	0.00	0.00	6.46	0.00	15	1.00	294.06	293.82	0.00	0.00	298.81	298.81	30		
147-149	96.52	0.330	0.000	0.65	0.21	0.00	5.0	0.00	0.00	0.00	0.00	5.48	0.00	15	0.72	292.50	291.80	0.00	0.00	297.49	298.81	31		
149-150	24.50	0.280	0.000	0.75	0.21	0.00	5.0	0.00	0.00	0.00	0.00	6.46	0.00	15	1.00	292.84	292.60	0.00	0.00	297.49	297.49	32		
111-112	117.03	0.070	0.000	0.80	0.06	0.00	5.0	0.00	0.00	0.00	0.00	22.62	0.00	24	1.00	272.32	271.15	0.00	0.00	282.34	278.54	33		
112-114	90.28	0.070	0.000	0.80	0.06	0.00	5.0	0.00	0.00	0.00	0.00	22.62	0.00	24	1.00	273.32	272.42	0.00	0.00	285.27	282.34	34		
114-117	26.50	0.080	0.000	0.80	0.06	0.00	5.0	0.00	0.00	0.00	0.00	10.50	0.00	18	1.00	274.09	273.82	0.00	0.00	285.27	285.27	35		
117-118	55.96	0.580	0.000	0.60	0.35	0.00	5.0	0.00	0.00	0.00	0.00	10.50	0.00	18	1.00	274.75	274.19	0.00	0.00	279.75	285.27	36		
118-119	180.20	0.390	0.000	0.60	0.23	0.00	5.0	0.00	0.00	0.00	0.00	7.77	0.00	15	1.45	277.61	275.00	0.00	0.00	282.36	279.75	37		
122-123	24.50	0.230	0.000	0.80	0.18	0.00	5.0	0.00	0.00	0.00	0.00	6.46	0.00	15	1.00	275.56	275.32	0.00	0.00	280.31	280.31	38		
125-126	107.76	0.310	0.000	0.65	0.20	0.00	5.0	0.00	0.00	0.00	0.00	17.53	0.00	24	0.60	265.45	264.80	0.00	0.00	278.20	280.63	39		
103-104	98.60	0.080	0.000	0.80	0.06	0.00	5.0	0.00	0.00	0.00	0.00	8.16	0.00	18	0.60	258.05	257.45	0.00	0.00	270.60	271.94	40		
104-105	45.59	0.120	0.000	0.80	0.10	0.00	5.0	0.00	0.00	0.00	0.00	9.79	0.00	18	0.87	258.55	258.15	0.00	0.00	270.36	270.60	41		
105-106	231.69	0.620	0.000	0.60	0.37	0.00	5.0	0.00	0.00	0.00	0.00	8.18	0.00	18	0.61	260.05	258.65	0.00	0.00	264.81	270.36	42		
106-107	54.75	0.240	0.000	0.80	0.19	0.00	5.0	0.00	0.00	0.00	0.00	4.76	0.00	15	0.54	260.45	260.15	0.00	0.00	264.91	264.81	43		
103-108	41.50	0.160	0.000	0.80	0.13	0.00	5.0	0.00	0.00	0.00	0.00	6.46	0.00	15	1.00	267.19	266.78	0.00	0.00	271.94	271.94	44		

* Results NOT current with inputs.

Project File: Storm System 100.sws

Storm Sewer Tabulation*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-06-2025

Line ID	Length (ft)	Drng Area		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No	
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)		
109-110	41.91	0.200	0.000	0.80	0.16	0.00	5.0	0.00	0.00	10.56	0.00	15	2.67	269.29	268.17	0.00	0.00	274.04	272.92	45
112-113	26.50	0.070	0.000	0.80	0.06	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	277.58	277.32	0.00	0.00	282.33	282.34	46
114-115	103.40	0.180	0.000	0.80	0.14	0.00	5.0	0.00	0.00	9.60	0.00	15	2.21	282.80	280.52	0.00	0.00	287.81	285.27	47
115-116	26.54	0.390	0.000	0.75	0.29	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	283.17	282.90	0.00	0.00	287.82	287.81	48
126-127	105.93	0.300	0.000	0.65	0.20	0.00	5.0	0.00	0.00	8.89	0.00	18	0.72	266.45	265.70	0.00	0.00	275.09	278.20	49
127-128	124.97	0.410	0.000	0.65	0.27	0.00	5.0	0.00	0.00	5.32	0.00	15	0.68	267.55	266.70	0.00	0.00	271.38	275.09	50
126-128	36.69	0.390	0.000	0.65	0.25	0.00	5.0	0.00	0.00	27.94	0.00	18	7.08	276.80	274.20	0.00	0.00	280.60	278.20	51
129-130	168.62	0.370	0.000	0.65	0.24	0.00	5.0	0.00	0.00	19.31	0.00	18	3.38	282.60	276.90	0.00	0.00	286.27	280.60	52
130-131	156.50	0.380	0.000	0.65	0.25	0.00	5.0	0.00	0.00	13.76	0.00	15	4.54	289.95	282.85	0.00	0.00	293.39	286.27	53
131-132	150.33	0.210	0.000	0.65	0.14	0.00	5.0	0.00	0.00	14.71	0.00	15	5.19	297.85	290.05	0.00	0.00	301.43	293.39	54
132-133	150.00	0.160	0.000	0.65	0.10	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	299.45	297.95	0.00	0.00	302.77	301.43	55
147-147A	124.43	0.330	0.000	0.60	0.20	0.00	5.0	0.00	0.00	6.14	0.00	15	0.90	293.12	292.00	0.00	0.00	296.37	298.81	56
155-155A	138.58	0.730	0.000	0.65	0.47	0.00	5.0	0.00	0.00	4.92	0.00	15	0.58	292.30	291.50	0.00	0.00	295.55	297.97	57

* Results NOT current with inputs.

Project File: Storm System 100.sws

Energy Grade Line Calculations*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-06-2025

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction		
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)		
1	48	0.00	253.00	0.00	0.00	0.00	0.00	149.04	254.99	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
2	48	0.00	255.09	0.00	0.00	0.00	0.00	105.40	255.95	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
3	48	0.00	256.05	0.00	0.00	0.00	0.00	25.78	256.30	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
4	48	0.00	259.60	0.00	0.00	0.00	0.00	132.94	260.70	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
5	48	0.00	260.80	0.00	0.00	0.00	0.00	158.72	261.85	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
6	42	0.00	262.25	0.00	0.00	0.00	0.00	26.50	262.45	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
7	36	0.00	262.55	0.00	0.00	0.00	0.00	71.68	263.15	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
8	36	0.00	263.25	0.00	0.00	0.00	0.00	25.09	263.50	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
9	36	0.00	263.60	0.00	0.00	0.00	0.00	59.62	264.10	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
10	36	0.00	264.20	0.00	0.00	0.00	0.00	48.51	264.60	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
11	30	0.00	274.70	0.00	0.00	0.00	0.00	47.11	276.19	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
12	30	0.00	276.30	0.00	0.00	0.00	0.00	24.50	276.50	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
13	30	0.00	276.60	0.00	0.00	0.00	0.00	110.83	281.55	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
14	30	0.00	281.65	0.00	0.00	0.00	0.00	161.14	285.65	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
15	30	0.00	285.75	0.00	0.00	0.00	0.00	120.02	286.47	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
16	30	0.00	286.57	0.00	0.00	0.00	0.00	90.82	287.40	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
17	30	0.00	287.50	0.00	0.00	0.00	0.00	46.32	287.85	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
18	18	0.00	288.05	0.00	0.00	0.00	0.00	98.12	288.85	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
19	18	0.00	288.95	0.00	0.00	0.00	0.00	24.50	289.15	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
20	18	0.00	289.25	0.00	0.00	0.00	0.00	34.30	289.45	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
21	18	0.00	289.55	0.00	0.00	0.00	0.00	182.03	290.65	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
22	18	0.00	290.75	0.00	0.00	0.00	0.00	83.99	291.25	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		

Results are NOT current with inputs.

Project File: Storm System 100.sws

Energy Grade Line Calculations*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-06-2025

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction		
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)		
23	15	0.00	290.26	0.00	0.00	0.00	0.00	24.50	290.50	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
24	15	0.00	295.92	0.00	0.00	0.00	0.00	24.50	296.16	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
25	18	0.00	289.00	0.00	0.00	0.00	0.00	24.50	289.20	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
26	18	0.00	289.30	0.00	0.00	0.00	0.00	46.32	289.70	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
27	18	0.00	289.80	0.00	0.00	0.00	0.00	24.50	290.00	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
28	18	0.00	290.10	0.00	0.00	0.00	0.00	127.68	291.10	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
29	18	0.00	291.20	0.00	0.00	0.00	0.00	82.81	291.70	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
30	15	0.00	293.82	0.00	0.00	0.00	0.00	24.50	294.06	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
31	15	0.00	291.80	0.00	0.00	0.00	0.00	96.52	292.50	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
32	15	0.00	292.60	0.00	0.00	0.00	0.00	24.50	292.84	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
33	24	0.00	271.15	0.00	0.00	0.00	0.00	117.03	272.32	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
34	24	0.00	272.42	0.00	0.00	0.00	0.00	90.28	273.32	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
35	18	0.00	273.82	0.00	0.00	0.00	0.00	26.50	274.09	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
36	18	0.00	274.19	0.00	0.00	0.00	0.00	55.96	274.75	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
37	15	0.00	275.00	0.00	0.00	0.00	0.00	180.20	277.61	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
38	15	0.00	275.32	0.00	0.00	0.00	0.00	24.50	275.56	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
39	24	0.00	264.80	0.00	0.00	0.00	0.00	107.76	265.45	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
40	18	0.00	257.45	0.00	0.00	0.00	0.00	98.60	258.05	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
41	18	0.00	258.15	0.00	0.00	0.00	0.00	45.59	258.55	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
42	18	0.00	258.65	0.00	0.00	0.00	0.00	231.69	260.05	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
43	15	0.00	260.15	0.00	0.00	0.00	0.00	54.75	260.45	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
44	15	0.00	266.78	0.00	0.00	0.00	0.00	41.50	267.19	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		

Results are NOT current with inputs.

Project File: Storm System 100.sws

Energy Grade Line Calculations*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-06-2025

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						n Value	EGL Elev (ft)	HGLa Elev (ft)	Energy Loss (ft)	Junction	
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)						
45	15	0.00	268.17	0.00	0.00	0.00	0.00	41.91	269.29	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
46	15	0.00	277.32	0.00	0.00	0.00	0.00	0.00	26.50	277.58	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
47	15	0.00	280.52	0.00	0.00	0.00	0.00	0.00	103.40	282.80	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
48	15	0.00	282.90	0.00	0.00	0.00	0.00	0.00	26.54	283.17	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
49	18	0.00	265.70	0.00	0.00	0.00	0.00	0.00	105.93	266.45	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
50	15	0.00	266.70	0.00	0.00	0.00	0.00	0.00	124.97	267.55	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
51	18	0.00	274.20	0.00	0.00	0.00	0.00	0.00	36.69	276.80	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
52	18	0.00	276.90	0.00	0.00	0.00	0.00	0.00	168.62	282.60	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
53	15	0.00	282.85	0.00	0.00	0.00	0.00	0.00	156.50	289.95	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
54	15	0.00	290.05	0.00	0.00	0.00	0.00	0.00	150.33	297.85	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
55	15	0.00	297.95	0.00	0.00	0.00	0.00	0.00	150.00	299.45	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
56	15	0.00	292.00	0.00	0.00	0.00	0.00	0.00	124.43	293.12	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
57	15	0.00	291.50	0.00	0.00	0.00	0.00	0.00	138.58	292.30	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	

Results are NOT current with inputs.

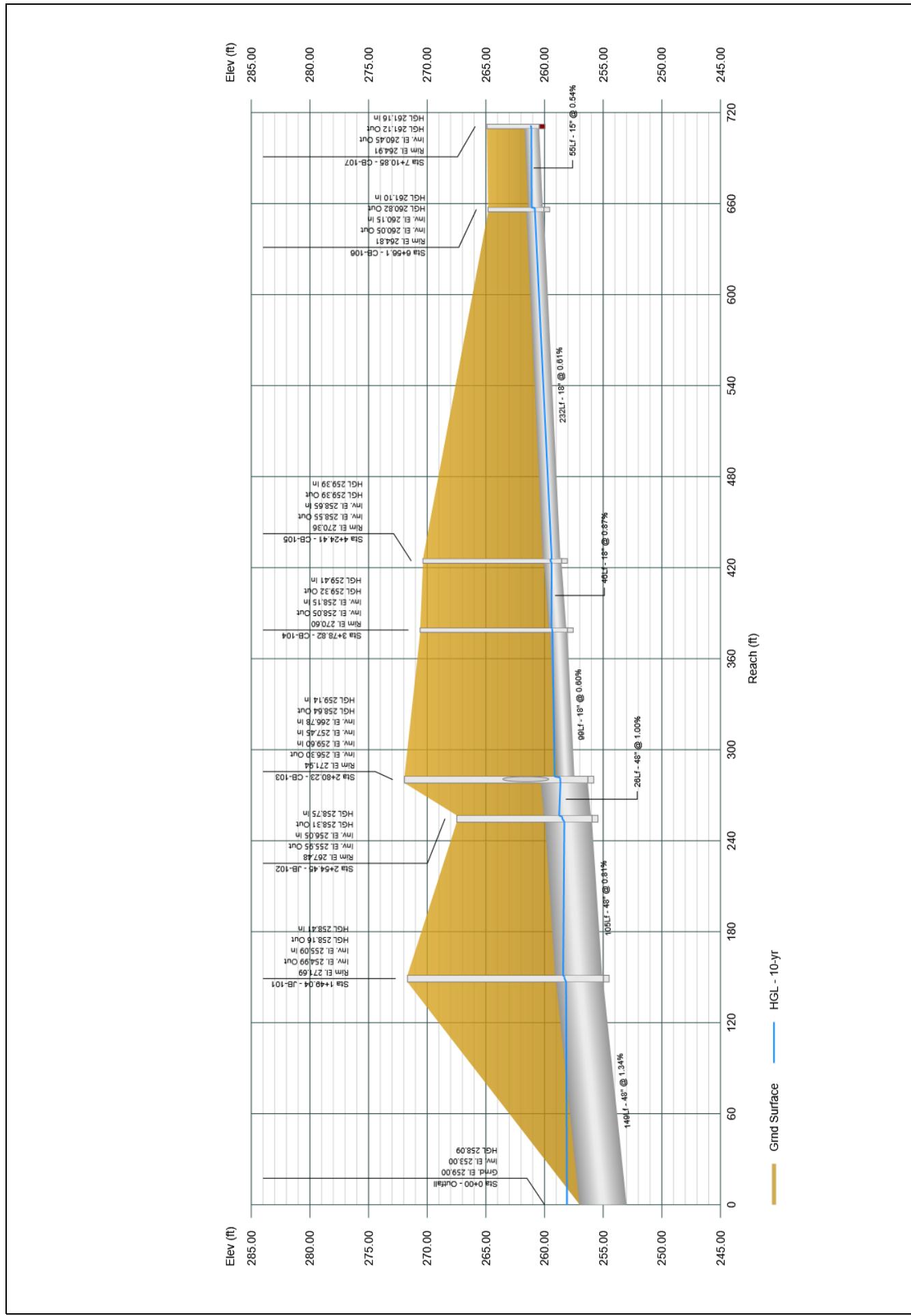
Project File: Storm System 100.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-22-2024

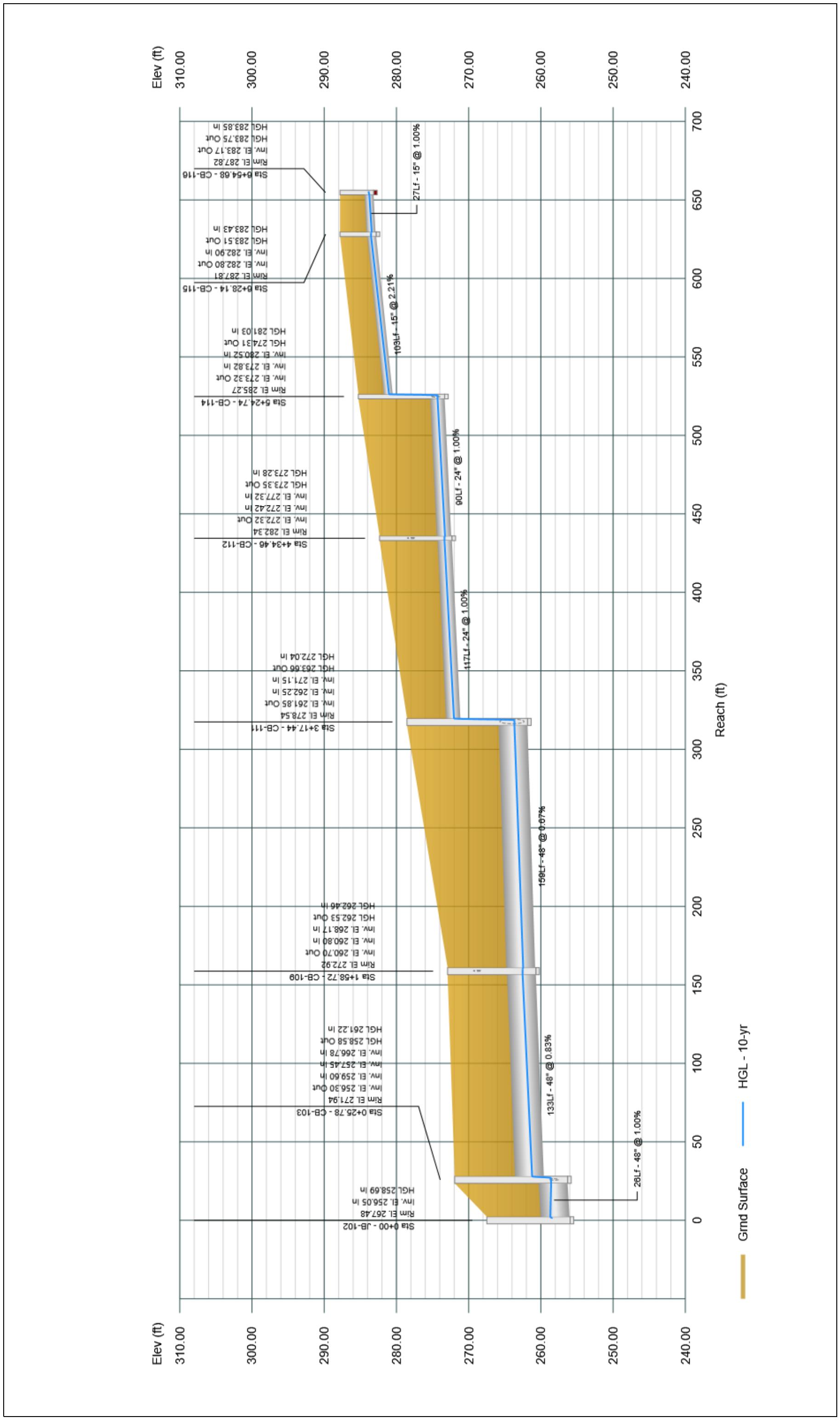


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-19-2024

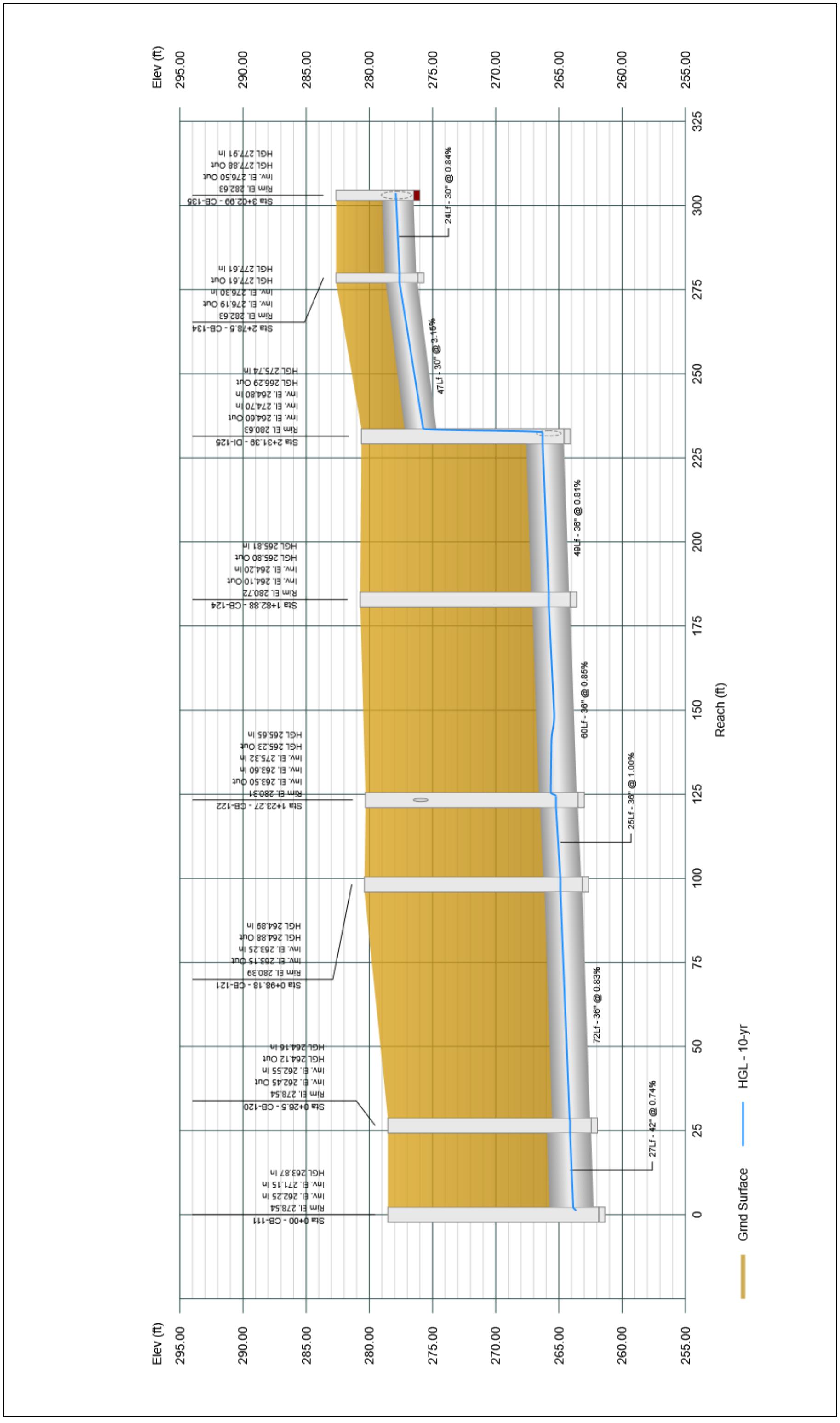


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-19-2024

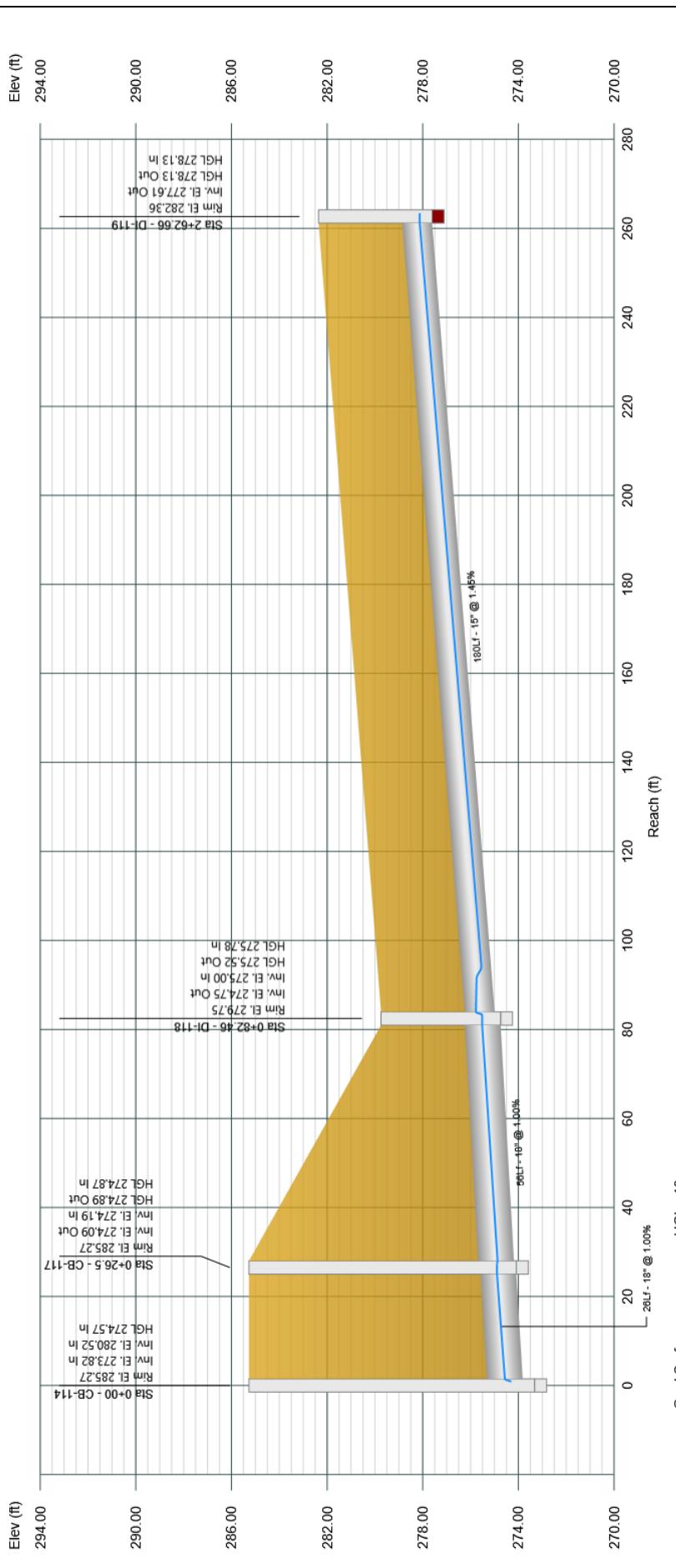


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-06-2025



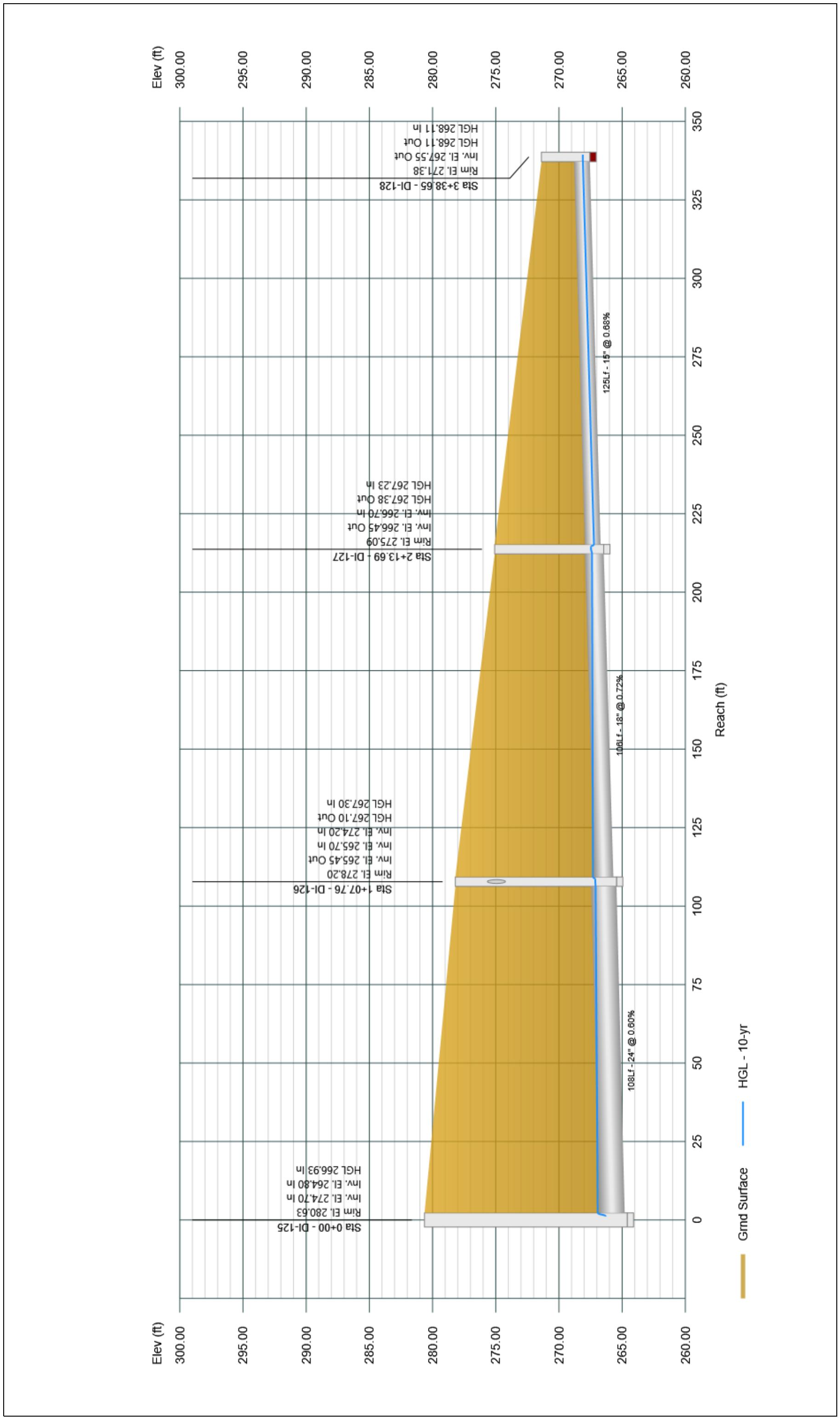
Project File: Storm System 100.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-19-2024

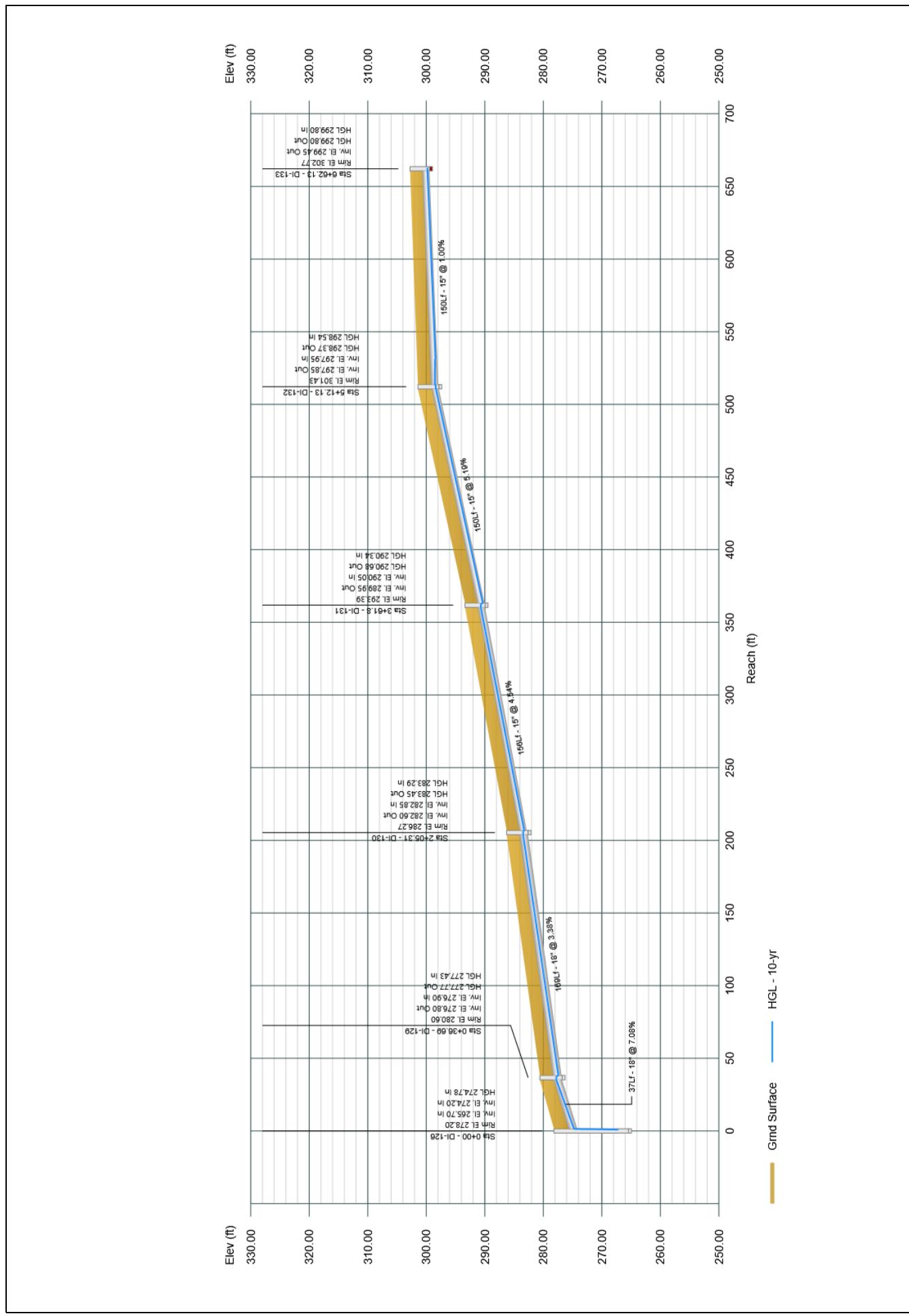


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-06-2025



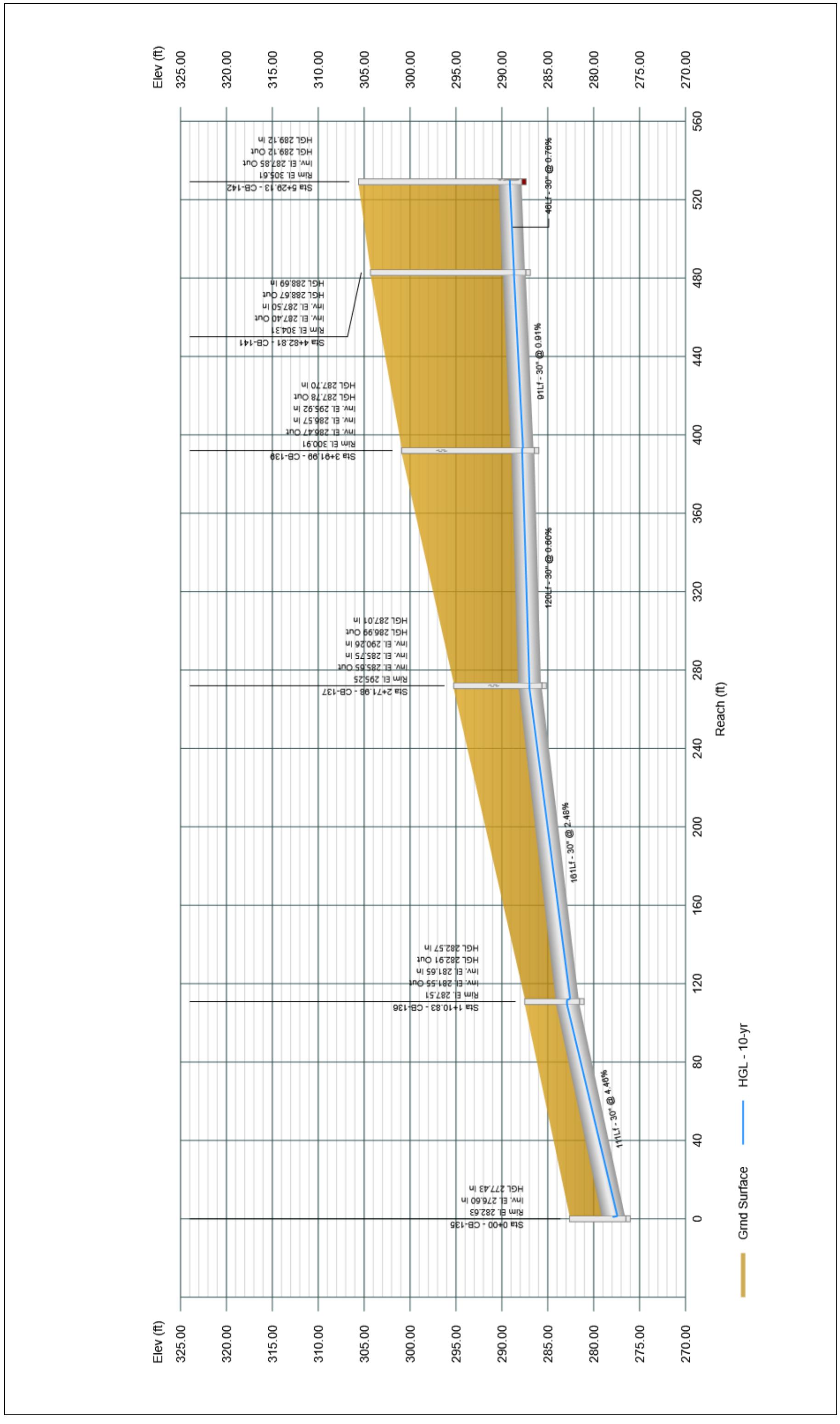
Project File: Storm System 100.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-19-2024

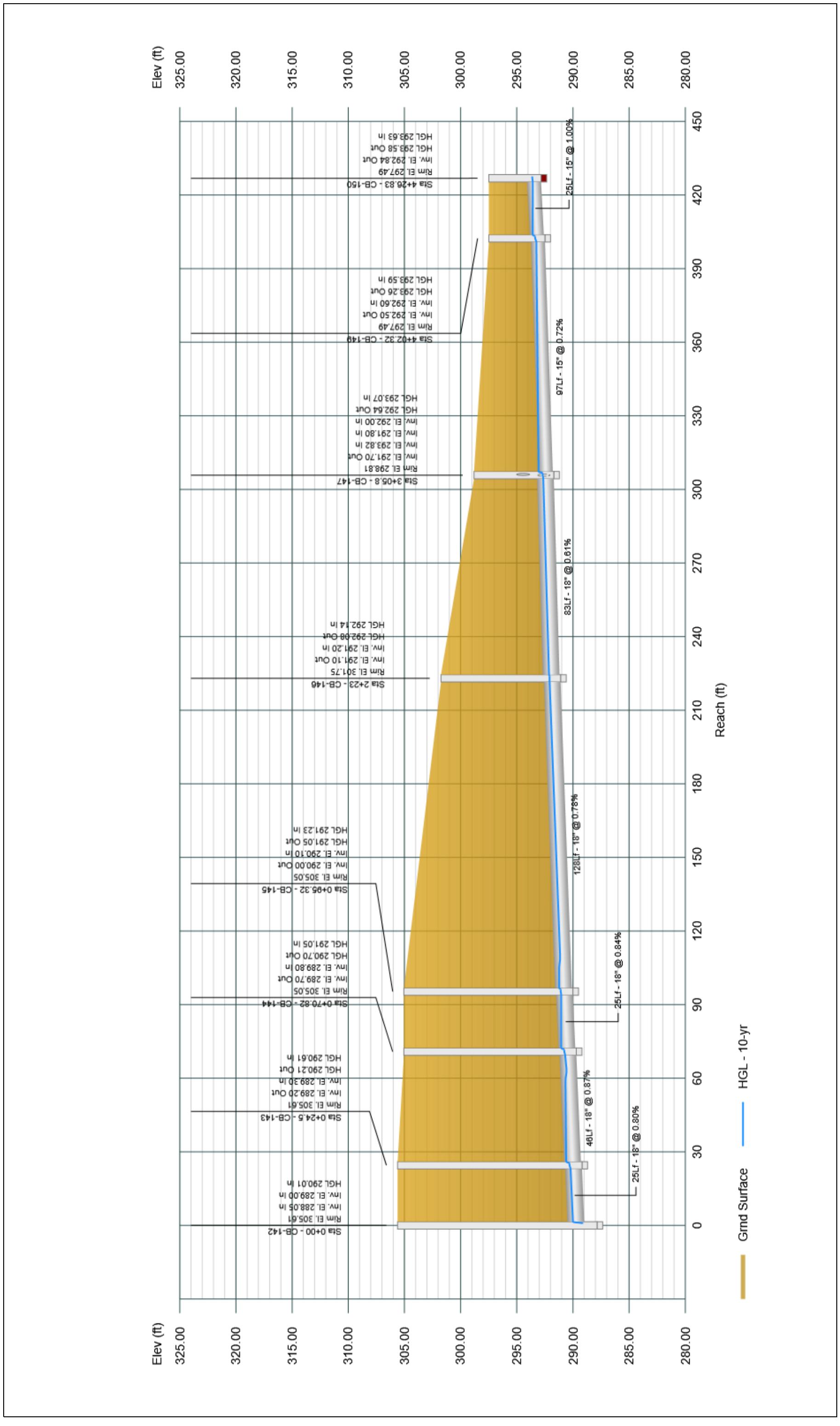


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-19-2024

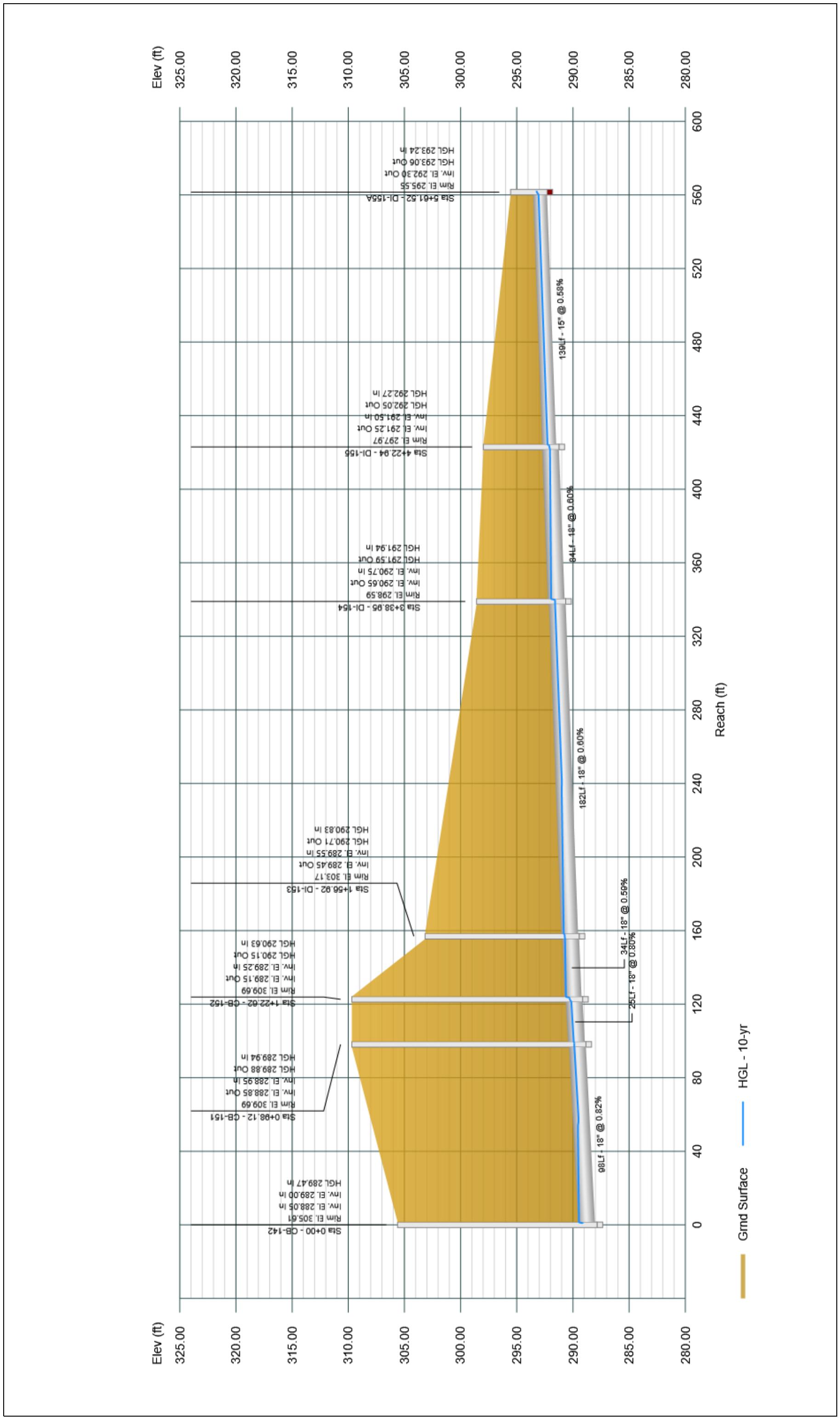


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-19-2024



SYSTEM 200 – REPORTS AND PROFILES

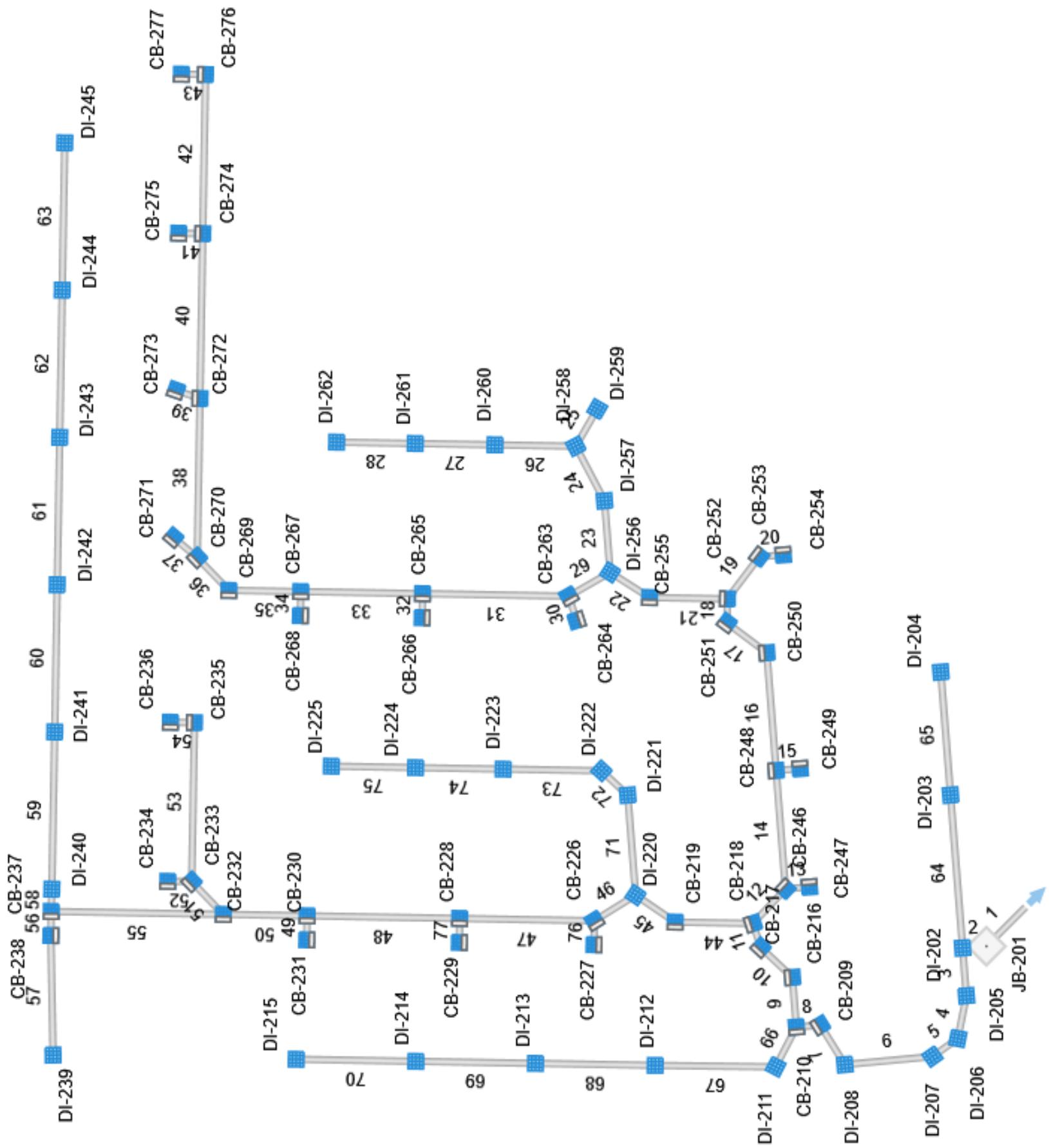
Pearce Farm – CD Pkg 1
AGN23001

Plan View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024



Storm Sewer Tabulation*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-06-2025

Line ID	Length (ft)	Drng Area		Ratиона		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
200-201	75.97	0.000	0.000	0.00	0.00	0.0	0.00	0.00	0.00	386.57	0.00	48	7.24	283.50	278.00	0.00	0.00	306.60	282.00	1	
201-202	24.30	0.480	0.000	0.65	0.31	0.00	5.0	0.00	0.00	454.25	0.00	48	10.00	301.53	299.10	0.00	0.00	313.33	306.60	2	
202-205	48.82	0.140	0.000	0.65	0.09	0.00	5.0	0.00	0.00	143.64	0.00	48	1.00	302.25	301.76	0.00	0.00	312.33	313.33	3	
205-206	44.45	0.130	0.000	0.65	0.08	0.00	5.0	0.00	0.00	143.64	0.00	48	1.00	302.80	302.35	0.00	0.00	311.69	312.33	4	
206-207	31.70	0.110	0.000	0.65	0.07	0.00	5.0	0.00	0.00	143.64	0.00	48	1.00	303.21	302.90	0.00	0.00	311.56	311.69	5	
207-208	89.70	0.005	0.000	0.80	0.00	0.00	5.0	0.00	0.00	143.65	0.00	48	1.00	304.21	303.31	0.00	0.00	312.52	311.56	6	
208-209	47.29	0.140	0.000	0.80	0.11	0.00	5.0	0.00	0.00	143.65	0.00	48	1.00	304.78	304.31	0.00	0.00	314.99	312.52	7	
209-210	24.50	0.040	0.000	0.80	0.03	0.00	5.0	0.00	0.00	110.47	0.00	48	0.59	305.03	304.88	0.00	0.00	314.99	314.99	8	
210-216	50.75	0.120	0.000	0.75	0.09	0.00	5.0	0.00	0.00	143.65	0.00	48	1.00	305.64	305.13	0.00	0.00	316.26	314.99	9	
216-217	44.25	0.170	0.000	0.80	0.14	0.00	5.0	0.00	0.00	143.65	0.00	48	1.00	306.18	305.74	0.00	0.00	317.42	316.26	10	
217-218	25.89	0.100	0.000	0.75	0.08	0.00	5.0	0.00	0.00	143.65	0.00	48	1.00	306.54	306.28	0.00	0.00	317.59	317.42	11	
218-246	48.28	0.380	0.000	0.70	0.27	0.00	5.0	0.00	0.00	66.69	0.00	36	1.00	311.31	310.82	0.00	0.00	318.05	317.59	12	
246-247	24.50	0.120	0.000	0.80	0.10	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	313.30	313.06	0.00	0.00	318.05	318.05	13	
246-248	120.85	0.320	0.000	0.70	0.22	0.00	5.0	0.00	0.00	89.06	0.00	36	1.78	313.71	311.55	0.00	0.00	320.45	318.05	14	
248-249	24.50	0.220	0.000	0.80	0.18	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	315.70	315.46	0.00	0.00	320.45	320.45	15	
248-250	120.27	0.140	0.000	0.75	0.11	0.00	5.0	0.00	0.00	92.03	0.00	36	1.90	316.24	313.95	0.00	0.00	322.84	322.84	16	
250-251	50.75	0.160	0.000	0.75	0.12	0.00	5.0	0.00	0.00	84.40	0.00	36	1.60	317.15	316.34	0.00	0.00	324.21	322.84	17	
251-252	24.50	0.100	0.000	0.75	0.08	0.00	5.0	0.00	0.00	66.70	0.00	36	1.00	317.50	317.25	0.00	0.00	324.21	324.21	18	
252-253	53.73	0.500	0.000	0.65	0.33	0.00	5.0	0.00	0.00	5.83	0.00	15	0.81	319.69	319.25	0.00	0.00	324.78	324.21	19	
253-254	24.50	0.160	0.000	0.80	0.13	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	320.03	319.79	0.00	0.00	324.78	324.78	20	
254-255	79.38	0.090	0.000	0.75	0.07	0.00	5.0	0.00	0.00	102.09	0.00	36	2.34	319.57	317.71	0.00	0.00	326.07	324.21	21	
255-256	47.58	0.120	0.000	0.75	0.09	0.00	5.0	0.00	0.00	29.05	0.00	24	1.65	321.35	320.57	0.00	0.00	327.06	326.07	22	

* Results NOT current with inputs.

Project File: Storm System 200.sws

Storm Sewer Tabulation*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-06-2025

Line ID	Length (ft)	Drng Area		Ratиона		C x A		Tc		Intensity	Total Q	Capacity (cfs)	Velocity (ft/s)	Size (in)	Slope (%)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (min)	Dn (min)							Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
256-257	73.10	0.140	0.000	0.75	0.11	0.00	5.0	0.00	0.00	0.00	14.94	0.00	18	2.02	324.14	322.66	0.00	0.00	328.64	327.06	23			
257-258	62.86	0.210	0.000	0.70	0.15	0.00	5.0	0.00	0.00	0.00	16.96	0.00	18	2.61	325.88	324.24	0.00	0.00	330.43	328.64	24			
258-259	43.79	0.210	0.000	0.70	0.15	0.00	5.0	0.00	0.00	0.00	6.46	0.00	15	1.00	326.67	326.23	0.00	0.00	330.82	330.43	25			
258-260	82.41	0.290	0.000	0.65	0.19	0.00	5.0	0.00	0.00	0.00	14.40	0.00	18	1.88	327.58	326.03	0.00	0.00	331.98	330.43	26			
260-261	81.22	0.280	0.000	0.65	0.18	0.00	5.0	0.00	0.00	0.00	8.25	0.00	15	1.63	329.15	327.83	0.00	0.00	333.50	331.98	27			
261-262	80.18	0.390	0.000	0.65	0.25	0.00	5.0	0.00	0.00	0.00	8.85	0.00	15	1.88	330.76	329.25	0.00	0.00	335.01	333.50	28			
256-263	48.63	0.490	0.000	0.65	0.32	0.00	5.0	0.00	0.00	0.00	20.16	0.00	24	0.79	322.16	321.77	0.00	0.00	327.86	327.06	29			
263-264	25.89	0.160	0.000	0.80	0.13	0.00	5.0	0.00	0.00	0.00	6.46	0.00	15	1.00	323.05	322.79	0.00	0.00	327.70	327.86	30			
263-265	149.02	0.400	0.000	0.65	0.26	0.00	5.0	0.00	0.00	0.00	28.43	0.00	24	1.58	324.72	322.36	0.00	0.00	330.46	327.86	31			
265-266	24.50	0.120	0.000	0.80	0.10	0.00	5.0	0.00	0.00	0.00	6.46	0.00	15	1.00	325.71	325.47	0.00	0.00	330.46	330.46	32			
265-267	124.14	0.170	0.000	0.65	0.11	0.00	5.0	0.00	0.00	0.00	13.04	0.00	18	1.54	327.38	325.46	0.00	0.00	332.62	330.46	33			
267-268	24.50	0.090	0.000	0.80	0.07	0.00	5.0	0.00	0.00	0.00	6.46	0.00	15	1.00	327.87	327.63	0.00	0.00	332.62	332.62	34			
267-269	73.35	0.050	0.000	0.75	0.04	0.00	5.0	0.00	0.00	0.00	13.54	0.00	18	1.66	328.84	327.62	0.00	0.00	333.94	332.62	35			
269-270	46.32	0.100	0.000	0.80	0.08	0.00	5.0	0.00	0.00	0.00	20.41	0.00	18	3.78	330.69	328.94	0.00	0.00	335.69	333.94	36			
270-271	31.70	0.150	0.000	0.80	0.12	0.00	5.0	0.00	0.00	0.00	7.25	0.00	15	1.26	331.34	330.94	0.00	0.00	336.09	335.69	37			
270-272	162.00	0.100	0.000	0.75	0.08	0.00	5.0	0.00	0.00	0.00	8.98	0.00	15	1.93	334.07	330.94	0.00	0.00	338.92	335.69	38			
272-273	25.79	0.160	0.000	0.75	0.12	0.00	5.0	0.00	0.00	0.00	6.46	0.00	15	1.00	334.43	334.17	0.00	0.00	339.08	338.92	39			
272-274	168.00	0.100	0.000	0.75	0.08	0.00	5.0	0.00	0.00	0.00	8.78	0.00	15	1.85	337.28	334.17	0.00	0.00	342.27	338.92	40			
274-275	24.50	0.160	0.000	0.80	0.13	0.00	5.0	0.00	0.00	0.00	6.46	0.00	15	1.00	337.62	337.38	0.00	0.00	342.27	342.27	41			
274-276	162.00	0.100	0.000	0.75	0.08	0.00	5.0	0.00	0.00	0.00	8.62	0.00	15	1.78	340.41	337.52	0.00	0.00	345.50	342.27	42			
276-277	24.50	0.120	0.000	0.80	0.10	0.00	5.0	0.00	0.00	0.00	6.46	0.00	15	1.00	340.75	340.51	0.00	0.00	345.50	345.50	43			
218-219	79.38	0.100	0.000	0.75	0.08	0.00	5.0	0.00	0.00	0.00	149.54	0.00	42	2.21	312.20	310.45	0.00	0.00	319.39	317.59	44			

* Results NOT current with inputs.

Project File: Storm System 200.sws

Storm Sewer Tabulation*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-06-2025

Line ID	Length (ft)	Drng Area		Rationa		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
219-220	48.76	0.200	0.000	0.70	0.14	0.00	5.0	0.00	0.00	77.45	0.00	36	1.35	312.89	0.00	0.00	320.43	319.39	45		
220-226	49.48	0.410	0.000	0.65	0.27	0.00	5.0	0.00	0.00	52.35	0.00	36	0.62	313.95	313.65	0.00	0.00	321.22	320.43	46	
227-228	137.27	0.440	0.000	0.65	0.29	0.00	5.0	0.00	0.00	55.27	0.00	36	0.69	315.00	314.05	0.00	0.00	323.56	321.22	47	
228-230	155.52	0.240	0.000	0.65	0.16	0.00	5.0	0.00	0.00	54.76	0.00	36	0.67	316.15	315.10	0.00	0.00	326.19	323.56	48	
230-231	24.50	0.110	0.000	0.80	0.09	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	321.44	321.20	0.00	0.00	326.19	326.19	49	
230-232	85.43	0.090	0.000	0.75	0.07	0.00	5.0	0.00	0.00	32.74	0.00	30	0.64	317.20	316.65	0.00	0.00	327.59	326.19	50	
232-233	46.32	0.080	0.000	0.80	0.06	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	323.24	322.77	0.00	0.00	328.23	327.59	51	
233-234	24.50	0.160	0.000	0.80	0.13	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	323.58	323.34	0.00	0.00	328.23	328.23	52	
233-235	162.00	0.100	0.000	0.75	0.08	0.00	5.0	0.00	0.00	9.84	0.00	15	2.32	327.25	323.48	0.00	0.00	332.34	328.23	53	
235-236	24.50	0.190	0.000	0.80	0.15	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	327.59	327.35	0.00	0.00	332.34	332.34	54	
232-237	175.43	0.150	0.000	0.75	0.11	0.00	5.0	0.00	0.00	33.27	0.00	30	0.66	318.45	317.30	0.00	0.00	324.63	327.59	55	
237-238	24.50	0.120	0.000	0.80	0.10	0.00	5.0	0.00	0.00	9.37	0.00	18	0.80	319.15	318.95	0.00	0.00	324.63	324.63	56	
238-239	121.74	0.270	0.000	0.65	0.18	0.00	5.0	0.00	0.00	5.26	0.00	15	0.66	320.05	319.25	0.00	0.00	323.21	324.63	57	
237-240	22.69	0.310	0.000	0.65	0.20	0.00	5.0	0.00	0.00	112.22	0.00	30	7.49	321.35	319.65	0.00	0.00	326.26	324.63	58	
240-241	160.07	0.360	0.000	0.65	0.23	0.00	5.0	0.00	0.00	35.78	0.00	24	2.50	325.85	321.85	0.00	0.00	330.24	326.26	59	
241-242	150.00	0.400	0.000	0.65	0.26	0.00	5.0	0.00	0.00	31.43	0.00	24	1.93	328.85	325.95	0.00	0.00	333.26	330.24	60	
242-243	150.00	0.550	0.000	0.50	0.28	0.00	5.0	0.00	0.00	31.17	0.00	24	1.90	331.80	328.95	0.00	0.00	336.25	333.26	61	
243-244	150.00	0.880	0.000	0.55	0.48	0.00	5.0	0.00	0.00	32.25	0.00	24	2.03	334.95	331.90	0.00	0.00	339.24	336.25	62	
244-245	150.00	1.140	0.000	0.50	0.57	0.00	5.0	0.00	0.00	14.85	0.00	18	2.00	338.45	335.45	0.00	0.00	342.23	339.24	63	
202-203	156.11	0.370	0.000	0.65	0.24	0.00	5.0	0.00	0.00	9.25	0.00	15	2.05	312.19	308.98	0.00	0.00	316.54	313.33	64	
203-204	125.70	0.380	0.000	0.65	0.25	0.00	5.0	0.00	0.00	9.25	0.00	15	2.05	314.87	312.29	0.00	0.00	319.12	316.54	65	
210-211	45.65	0.260	0.000	0.65	0.17	0.00	5.0	0.00	0.00	9.28	0.00	18	0.78	310.60	310.24	0.00	0.00	314.50	314.99	66	

* Results NOT current with inputs.

Project File: Storm System 200.sws

Storm Sewer Tabulation*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-06-2025

Line ID	Length (ft)	Drng Area		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No	
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)		
211-212	122.82	0.260	0.000	0.65	0.17	0.00	5.0	0.00	0.00	17.61	0.00	18	2.81	314.15	310.70	0.00	0.00	317.95	314.50	67
212-213	122.00	0.260	0.000	0.65	0.17	0.00	5.0	0.00	0.00	9.03	0.00	15	1.96	316.79	314.40	0.00	0.00	320.34	317.95	68
213-214	122.00	0.260	0.000	0.65	0.17	0.00	5.0	0.00	0.00	8.18	0.00	15	1.61	318.85	316.89	0.00	0.00	322.40	320.34	69
214-215	122.00	0.200	0.000	0.65	0.13	0.00	5.0	0.00	0.00	8.39	0.00	15	1.69	321.01	318.95	0.00	0.00	324.46	322.40	70
220-221	102.09	0.250	0.000	0.65	0.16	0.00	5.0	0.00	0.00	15.08	0.00	18	2.06	318.03	315.93	0.00	0.00	322.63	320.43	71
221-222	36.46	0.320	0.000	0.65	0.21	0.00	5.0	0.00	0.00	16.80	0.00	18	2.56	319.07	318.13	0.00	0.00	323.67	322.63	72
222-223	100.33	0.310	0.000	0.65	0.20	0.00	5.0	0.00	0.00	13.87	0.00	18	1.75	320.92	319.17	0.00	0.00	325.42	323.67	73
223-224	89.26	0.290	0.000	0.65	0.19	0.00	5.0	0.00	0.00	8.53	0.00	15	1.75	322.73	321.17	0.00	0.00	326.98	325.42	74
224-225	85.90	0.400	0.000	0.65	0.26	0.00	5.0	0.00	0.00	8.53	0.00	15	1.75	324.33	322.83	0.00	0.00	328.48	326.98	75
226-227	24.50	0.140	0.000	0.80	0.11	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	316.47	316.23	0.00	0.00	321.22	321.22	76
228-229	24.50	0.160	0.000	0.80	0.13	0.00	5.0	0.00	0.00	6.46	0.00	15	1.00	318.81	318.57	0.00	0.00	323.56	323.56	77

* Results NOT current with inputs.

Project File: Storm System 200.sws

Energy Grade Line Calculations*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-06-2025

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction		
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)		
1	48	0.00	278.00	0.00	0.00	0.00	0.00	75.97	283.50	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
2	48	0.00	299.10	0.00	0.00	0.00	0.00	0.00	301.53	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
3	48	0.00	301.76	0.00	0.00	0.00	0.00	0.00	48.82	302.25	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
4	48	0.00	302.35	0.00	0.00	0.00	0.00	0.00	44.45	302.80	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
5	48	0.00	302.90	0.00	0.00	0.00	0.00	0.00	31.70	303.21	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
6	48	0.00	303.31	0.00	0.00	0.00	0.00	0.00	89.70	304.21	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
7	48	0.00	304.31	0.00	0.00	0.00	0.00	0.00	47.29	304.78	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
8	48	0.00	304.88	0.00	0.00	0.00	0.00	0.00	24.50	305.03	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
9	48	0.00	305.13	0.00	0.00	0.00	0.00	0.00	50.75	305.64	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
10	48	0.00	305.74	0.00	0.00	0.00	0.00	0.00	44.25	306.18	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
11	48	0.00	306.28	0.00	0.00	0.00	0.00	0.00	25.89	306.54	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
12	36	0.00	310.82	0.00	0.00	0.00	0.00	0.00	48.28	311.31	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
13	15	0.00	313.06	0.00	0.00	0.00	0.00	0.00	24.50	313.30	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
14	36	0.00	311.55	0.00	0.00	0.00	0.00	0.00	120.85	313.71	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
15	15	0.00	315.46	0.00	0.00	0.00	0.00	0.00	24.50	315.70	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
16	36	0.00	313.95	0.00	0.00	0.00	0.00	0.00	120.27	316.24	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
17	36	0.00	316.34	0.00	0.00	0.00	0.00	0.00	50.75	317.15	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
18	36	0.00	317.25	0.00	0.00	0.00	0.00	0.00	24.50	317.50	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
19	15	0.00	319.25	0.00	0.00	0.00	0.00	0.00	53.73	319.69	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
20	15	0.00	319.79	0.00	0.00	0.00	0.00	0.00	24.50	320.03	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
21	36	0.00	317.71	0.00	0.00	0.00	0.00	0.00	79.38	319.57	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
22	24	0.00	320.57	0.00	0.00	0.00	0.00	0.00	47.58	321.35	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	

Results are NOT current with inputs.

Project File: Storm System 200.sws

Energy Grade Line Calculations*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-06-2025

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)
23	18	0.00	322.66	0.00	0.00	0.00	0.00	73.10	324.14	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
24	18	0.00	324.24	0.00	0.00	0.00	0.00	62.86	325.88	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
25	15	0.00	326.23	0.00	0.00	0.00	0.00	43.79	326.67	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
26	18	0.00	326.03	0.00	0.00	0.00	0.00	82.41	327.58	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
27	15	0.00	327.83	0.00	0.00	0.00	0.00	81.22	329.15	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
28	15	0.00	329.25	0.00	0.00	0.00	0.00	80.18	330.76	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
29	24	0.00	321.77	0.00	0.00	0.00	0.00	48.63	322.16	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
30	15	0.00	322.79	0.00	0.00	0.00	0.00	25.89	323.05	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
31	24	0.00	322.36	0.00	0.00	0.00	0.00	149.02	324.72	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
32	15	0.00	325.47	0.00	0.00	0.00	0.00	24.50	325.71	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
33	18	0.00	325.46	0.00	0.00	0.00	0.00	124.14	327.38	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
34	15	0.00	327.63	0.00	0.00	0.00	0.00	24.50	327.87	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
35	18	0.00	327.62	0.00	0.00	0.00	0.00	73.35	328.84	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
36	18	0.00	328.94	0.00	0.00	0.00	0.00	46.32	330.69	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
37	15	0.00	330.94	0.00	0.00	0.00	0.00	31.70	331.34	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
38	15	0.00	330.94	0.00	0.00	0.00	0.00	162.00	334.07	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
39	15	0.00	334.17	0.00	0.00	0.00	0.00	25.79	334.43	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
40	15	0.00	334.17	0.00	0.00	0.00	0.00	168.00	337.28	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
41	15	0.00	337.38	0.00	0.00	0.00	0.00	24.50	337.62	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
42	15	0.00	337.52	0.00	0.00	0.00	0.00	162.00	340.41	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
43	15	0.00	340.51	0.00	0.00	0.00	0.00	24.50	340.75	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00
44	42	0.00	310.45	0.00	0.00	0.00	0.00	79.38	312.20	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00

Results are NOT current with inputs.

Project File: Storm System 200.sws

Energy Grade Line Calculations*

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-06-2025

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction		
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)		
45	36	0.00	312.89	0.00	0.00	0.00	0.00	48.76	313.55	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
46	36	0.00	313.65	0.00	0.00	0.00	0.00	49.48	313.95	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
47	36	0.00	314.05	0.00	0.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
48	36	0.00	315.10	0.00	0.00	0.00	0.00	0.00	316.15	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
49	15	0.00	321.20	0.00	0.00	0.00	0.00	24.50	321.44	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
50	30	0.00	316.65	0.00	0.00	0.00	0.00	85.43	317.20	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
51	15	0.00	322.77	0.00	0.00	0.00	0.00	46.32	323.24	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
52	15	0.00	323.34	0.00	0.00	0.00	0.00	0.00	24.50	323.58	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
53	15	0.00	323.48	0.00	0.00	0.00	0.00	0.00	162.00	327.25	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
54	15	0.00	327.35	0.00	0.00	0.00	0.00	0.00	24.50	327.59	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
55	30	0.00	317.30	0.00	0.00	0.00	0.00	0.00	175.43	318.45	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
56	18	0.00	318.95	0.00	0.00	0.00	0.00	24.50	319.15	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
57	15	0.00	319.25	0.00	0.00	0.00	0.00	121.74	320.05	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
58	30	0.00	319.65	0.00	0.00	0.00	0.00	22.69	321.35	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
59	24	0.00	321.85	0.00	0.00	0.00	0.00	0.00	160.07	325.85	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
60	24	0.00	325.95	0.00	0.00	0.00	0.00	0.00	150.00	328.85	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
61	24	0.00	328.95	0.00	0.00	0.00	0.00	0.00	150.00	331.80	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
62	24	0.00	331.90	0.00	0.00	0.00	0.00	0.00	150.00	334.95	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	
63	18	0.00	335.45	0.00	0.00	0.00	0.00	150.00	338.45	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
64	15	0.00	308.98	0.00	0.00	0.00	0.00	156.11	312.19	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
65	15	0.00	312.29	0.00	0.00	0.00	0.00	125.70	314.87	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		
66	18	0.00	310.24	0.00	0.00	0.00	0.00	45.65	310.60	0.00	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00		

Results are NOT current with inputs.

Project File: Storm System 200.sws

Energy Grade Line Calculations*

Stormwater Studio 2024 v 3.0.0.35

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction		
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)		
67	18	0.00	310.70	0.00	0.00	0.00	0.00	0.00	122.82	314.15	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
68	15	0.00	314.40	0.00	0.00	0.00	0.00	0.00	122.00	316.79	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
69	15	0.00	316.89	0.00	0.00	0.00	0.00	0.00	122.00	318.85	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
70	15	0.00	318.95	0.00	0.00	0.00	0.00	0.00	122.00	321.01	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
71	18	0.00	315.93	0.00	0.00	0.00	0.00	0.00	102.09	318.03	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
72	18	0.00	318.13	0.00	0.00	0.00	0.00	0.00	36.46	319.07	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
73	18	0.00	319.17	0.00	0.00	0.00	0.00	0.00	100.33	320.92	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
74	15	0.00	321.17	0.00	0.00	0.00	0.00	0.00	89.26	322.73	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
75	15	0.00	322.83	0.00	0.00	0.00	0.00	0.00	85.90	324.33	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
76	15	0.00	316.23	0.00	0.00	0.00	0.00	0.00	24.50	316.47	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00
77	15	0.00	318.57	0.00	0.00	0.00	0.00	0.00	24.50	318.81	0.00	0.00	0.00	0.00	0.013	0.000	0.00	0.00	0.00	0.00

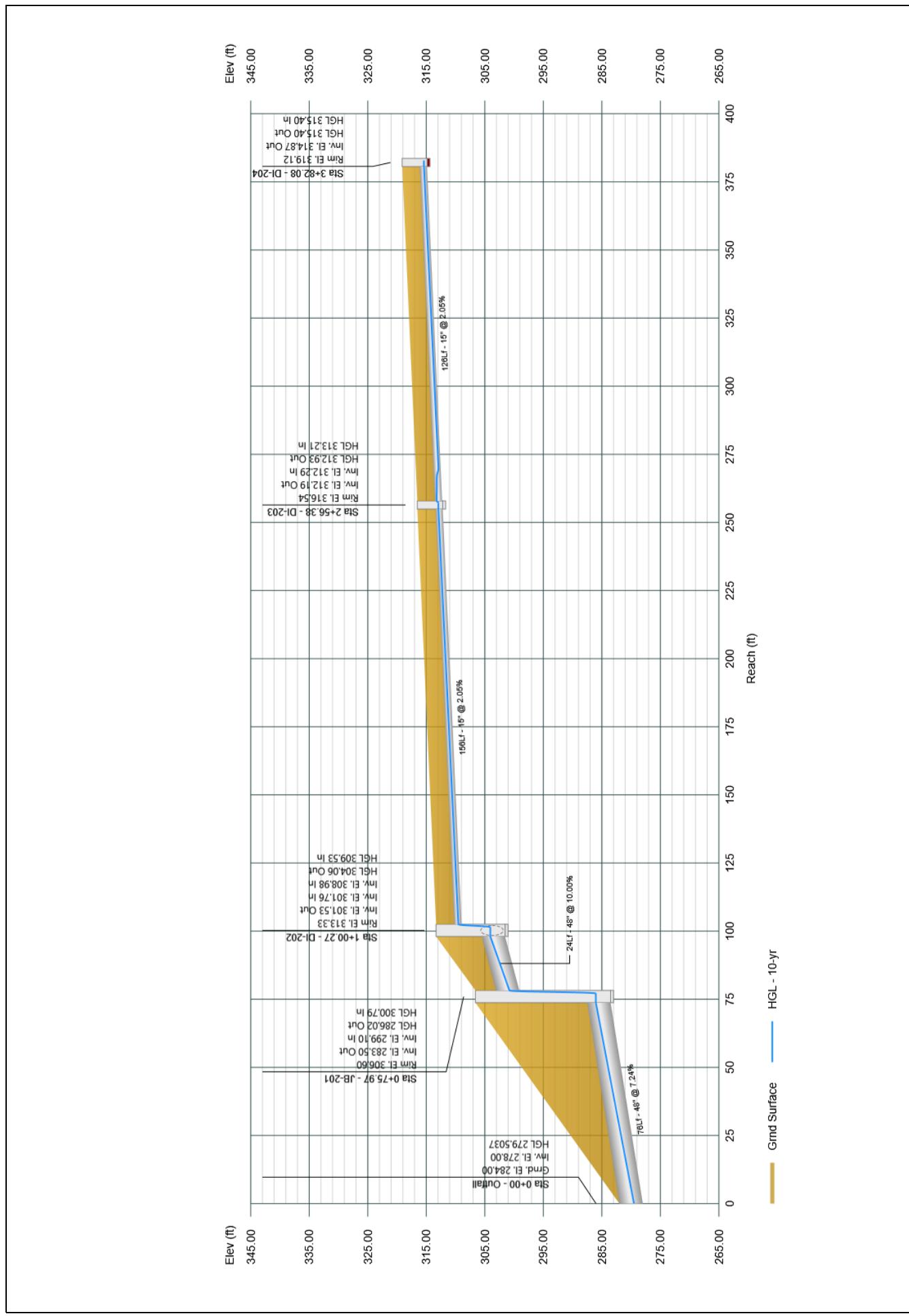
Results are NOT current with inputs.

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-22-2024



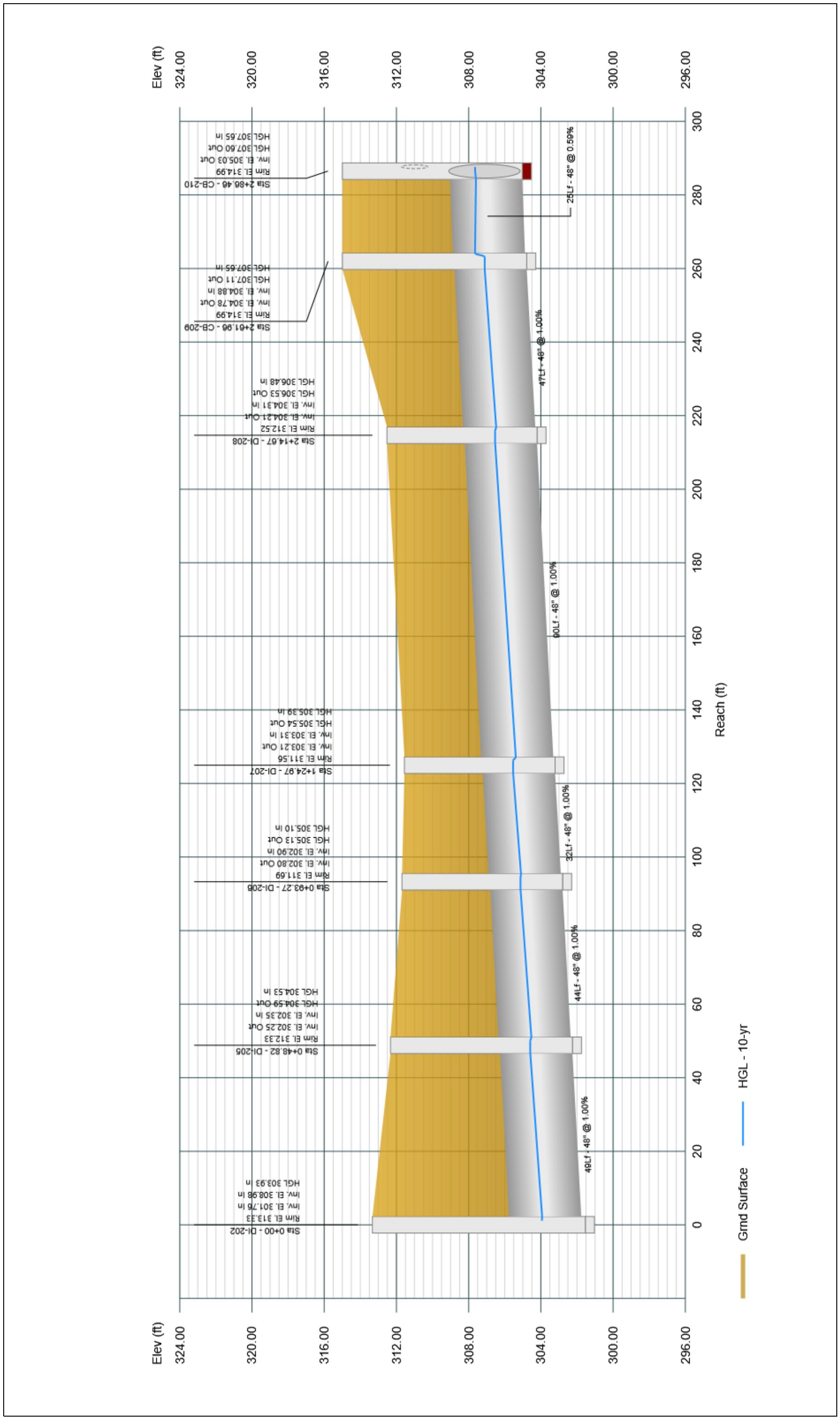
Project File: Storm System 200.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

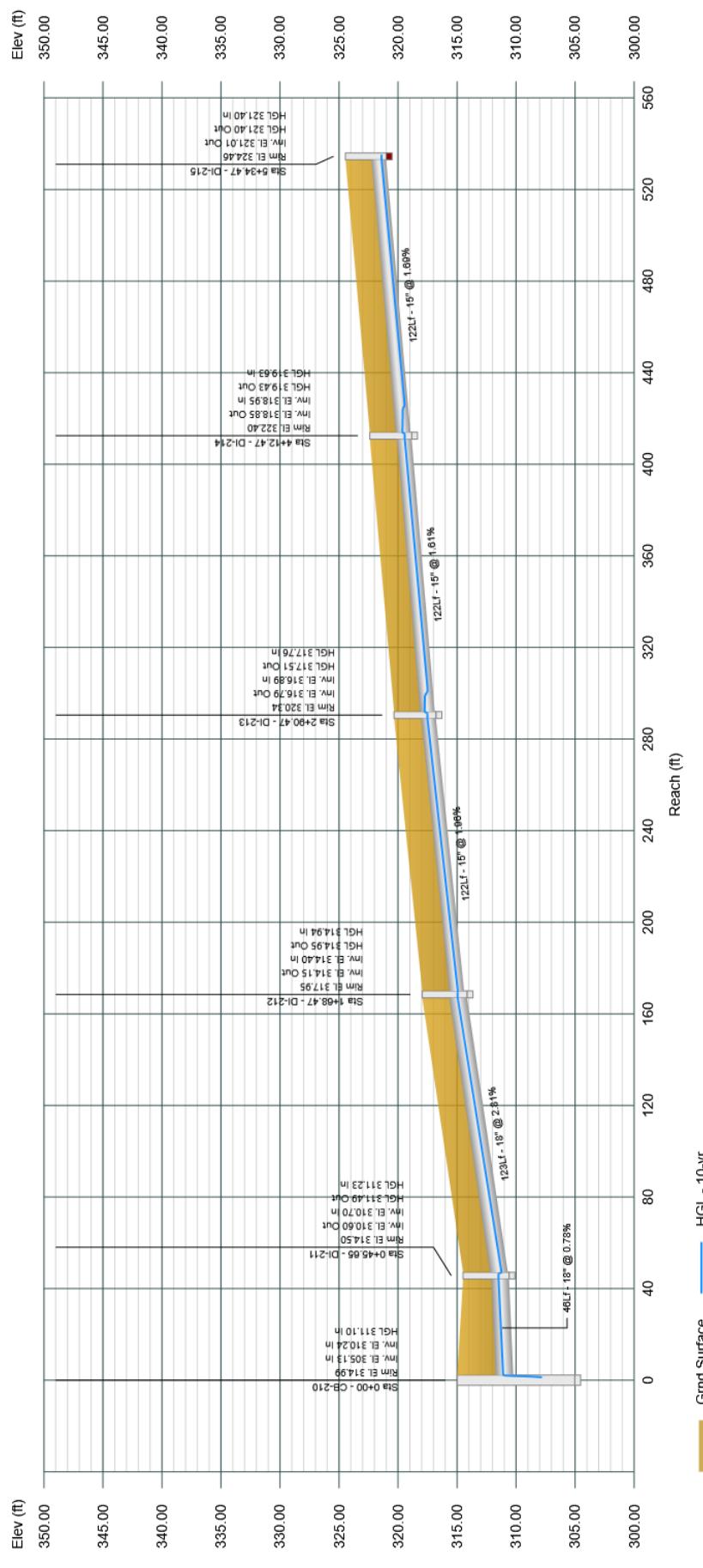


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-06-2025



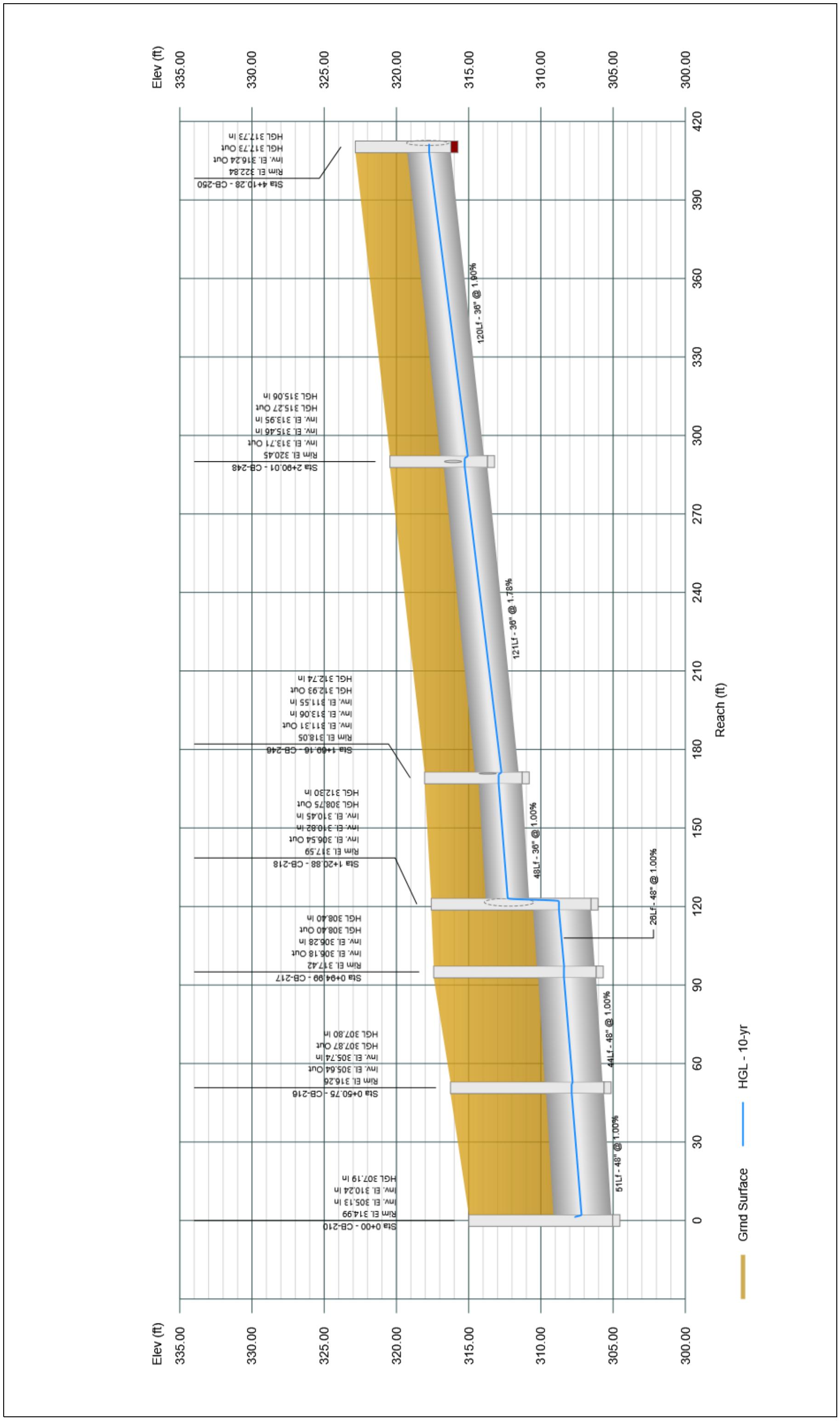
Project File: Storm System 200.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

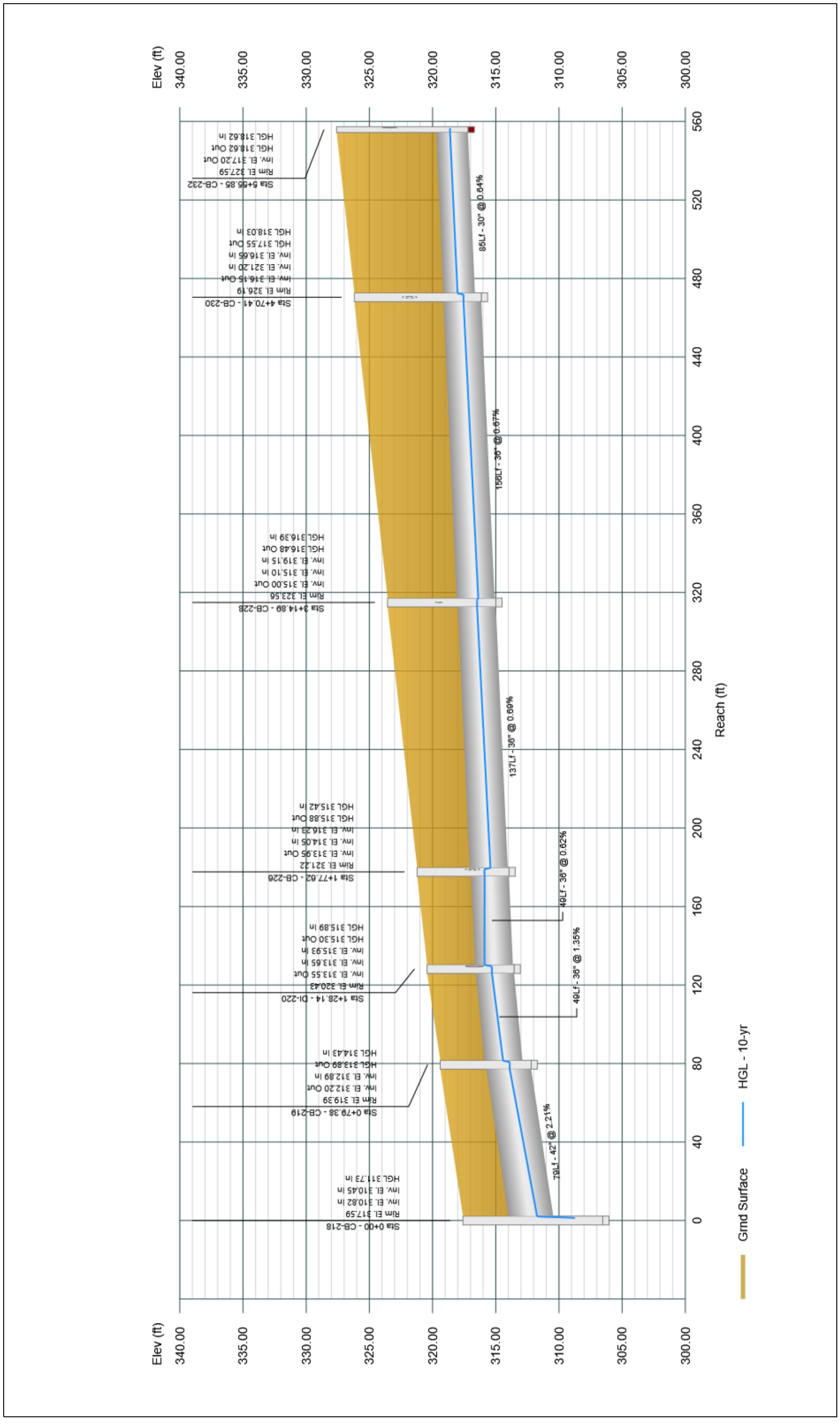


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024



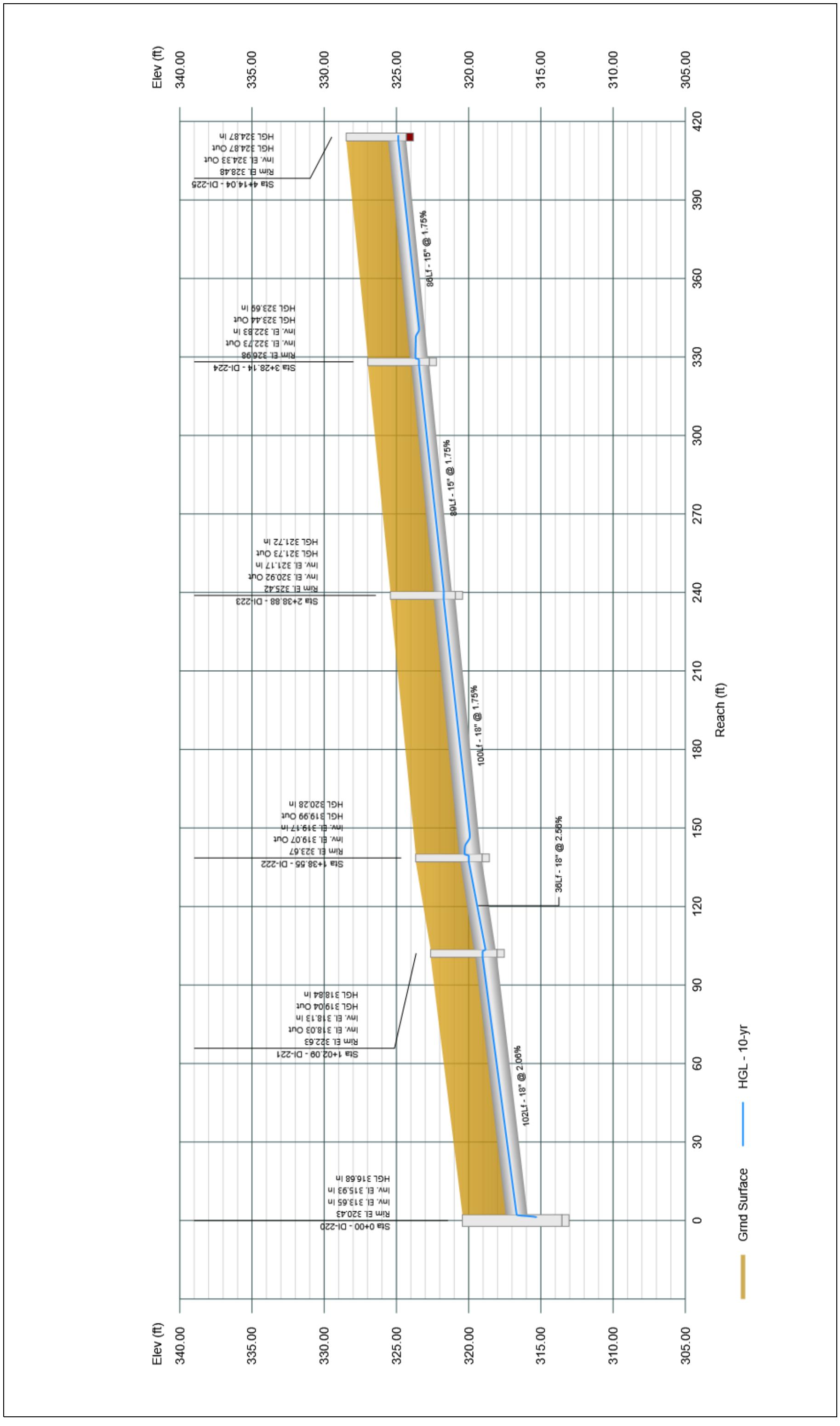
Project File: Storm System 200.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

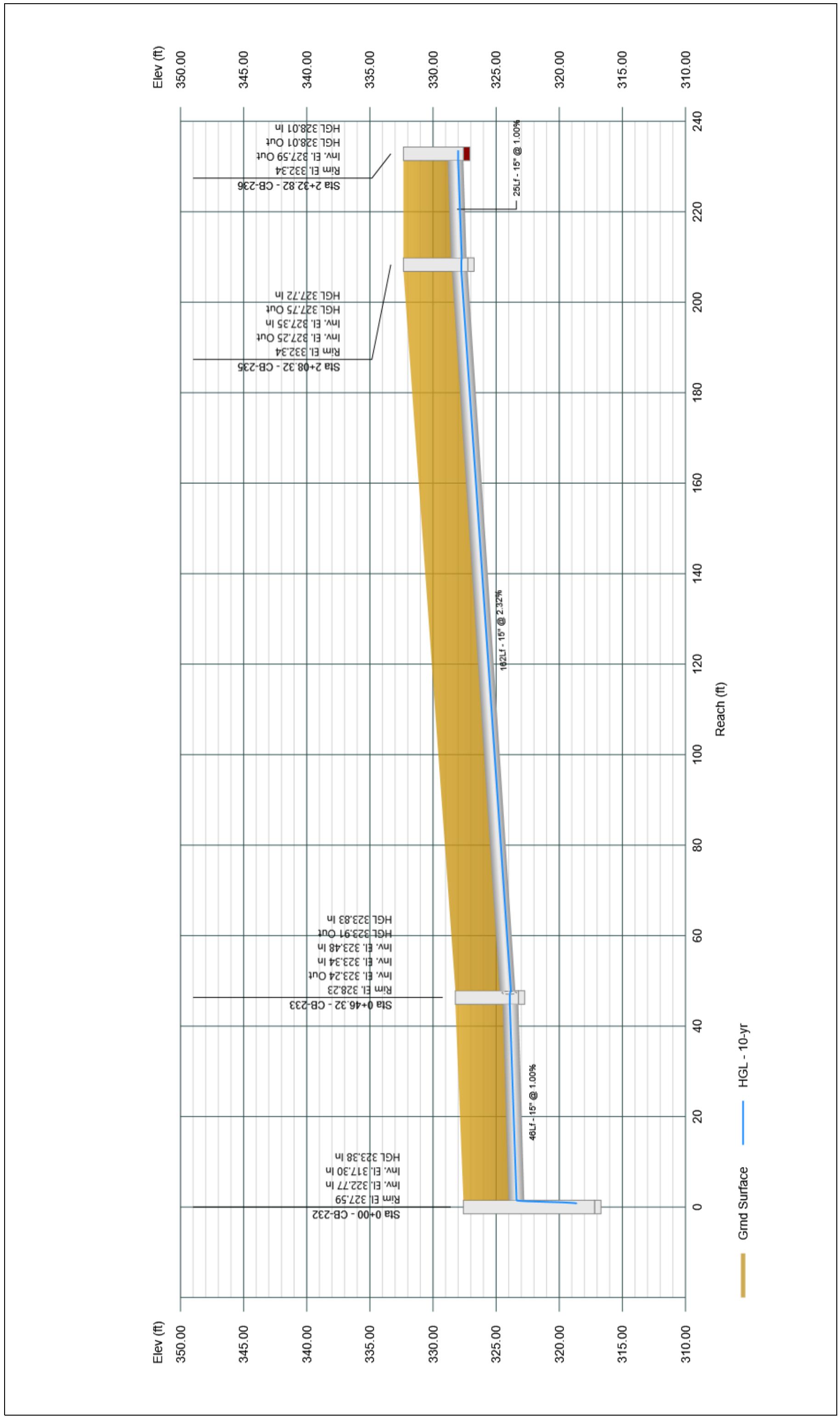


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

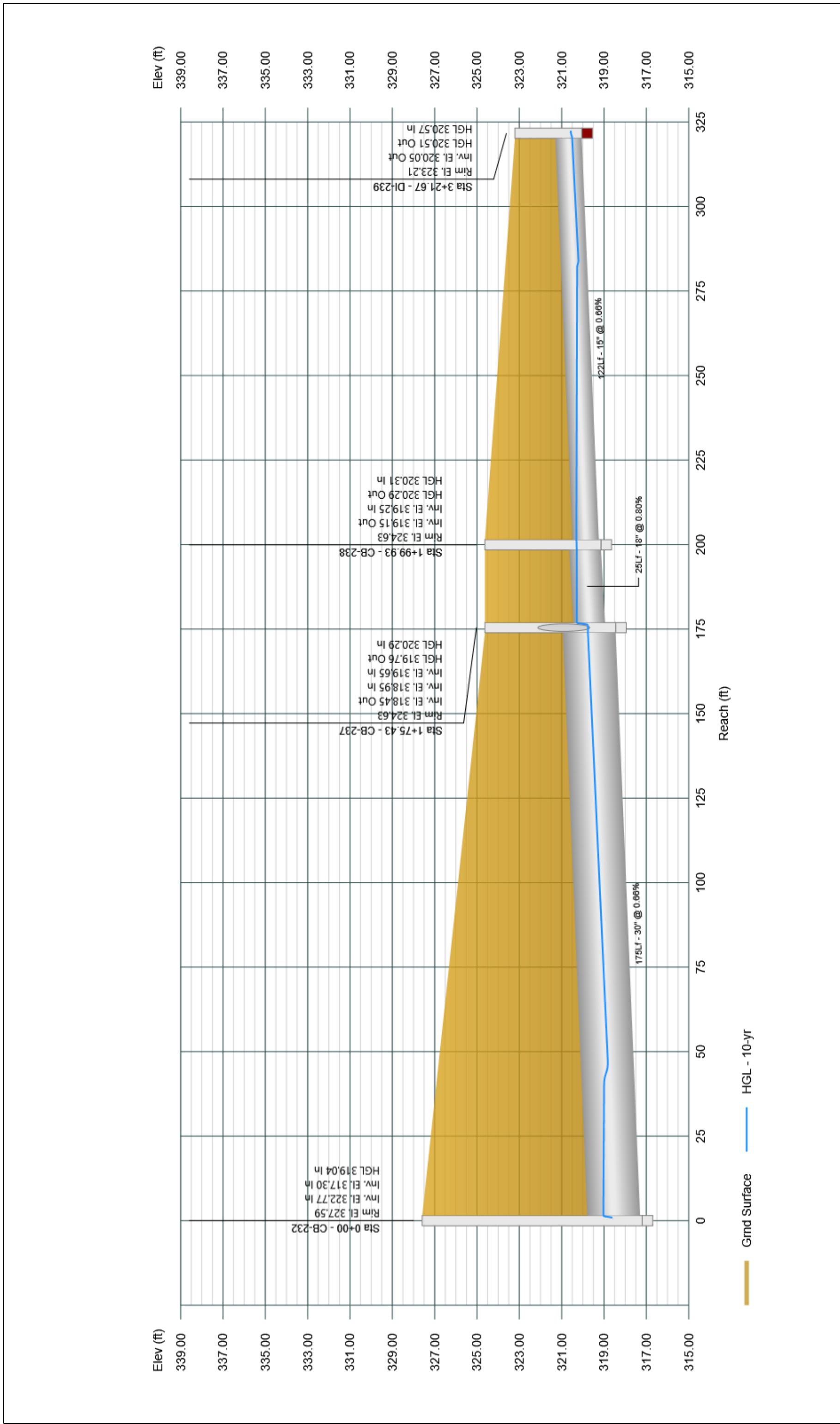


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024



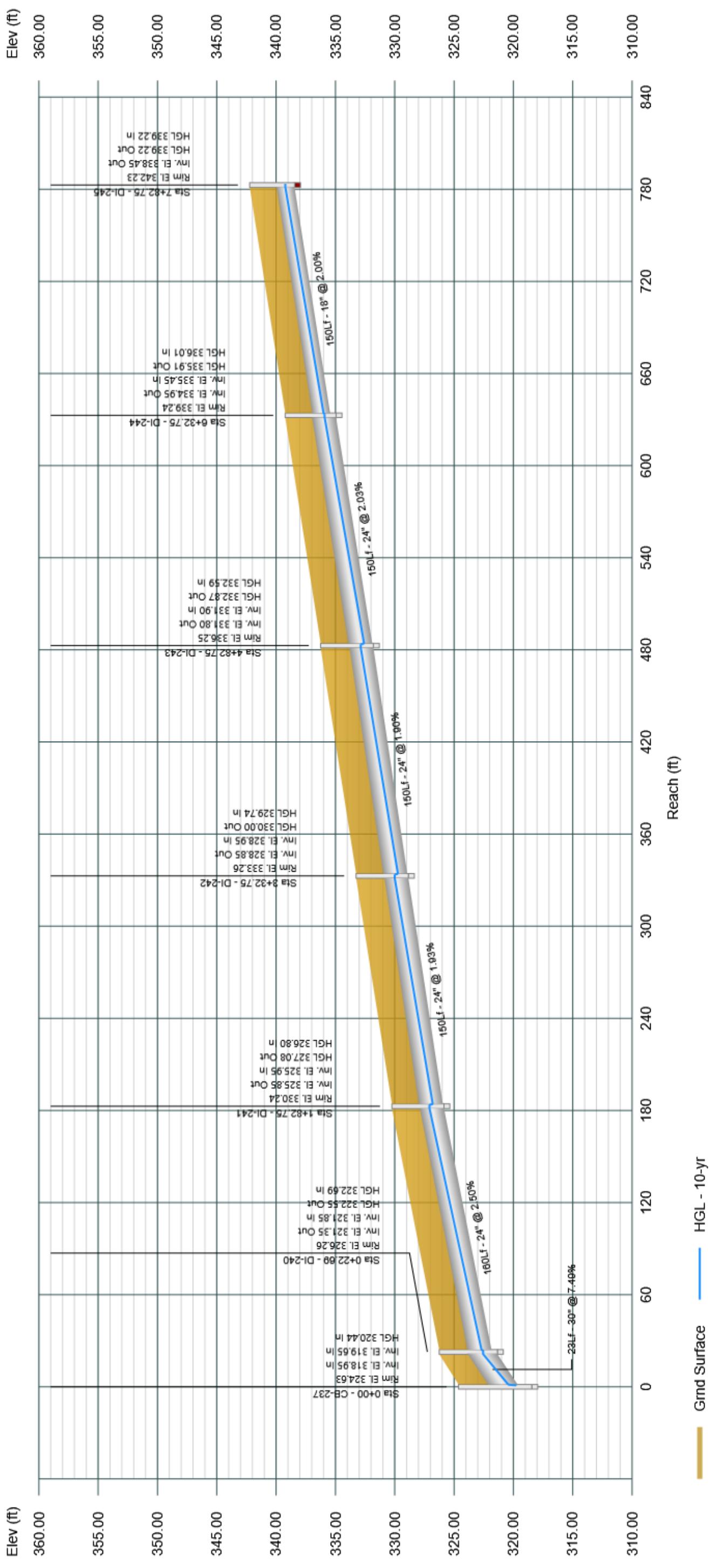
Project File: Storm System 200.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

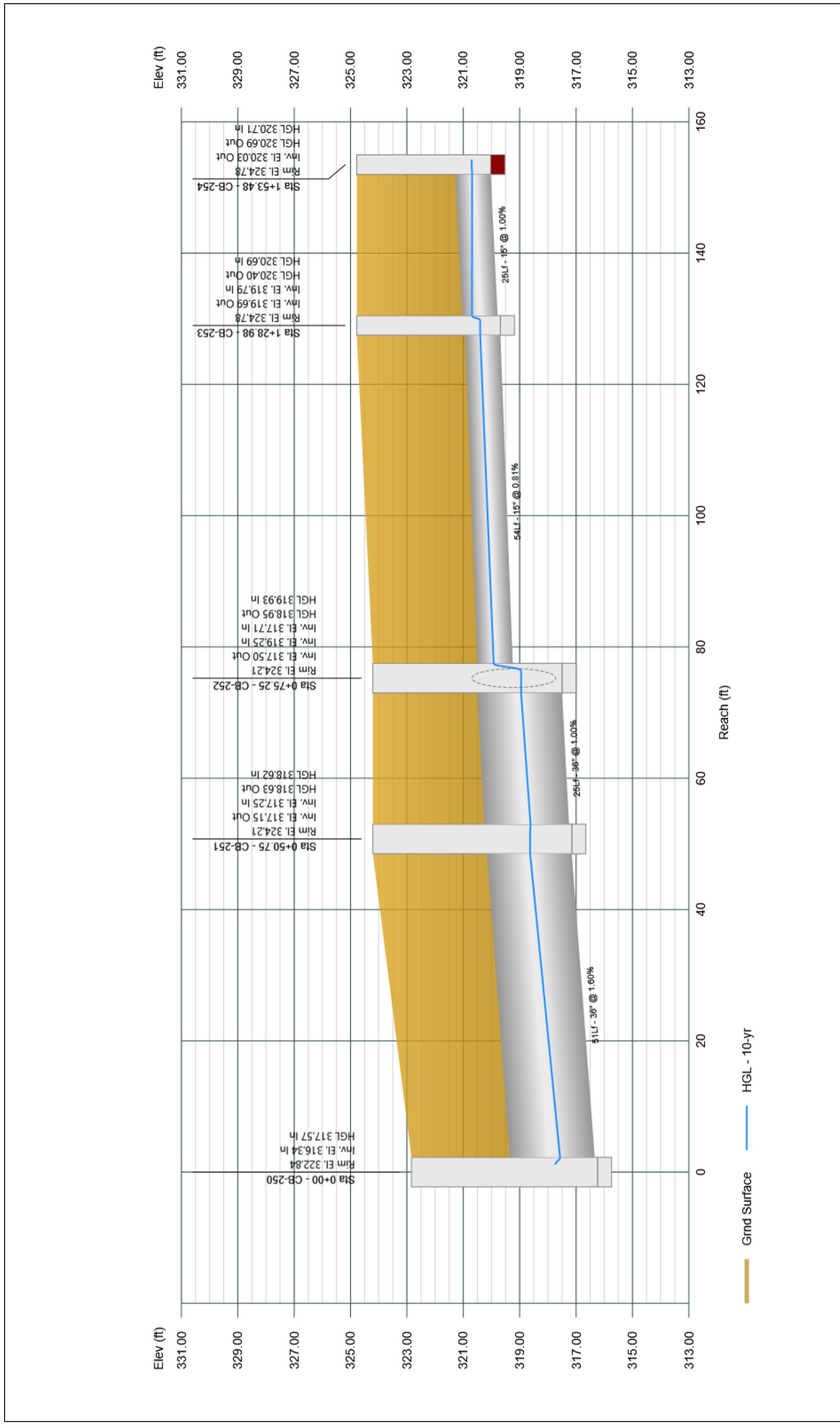


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

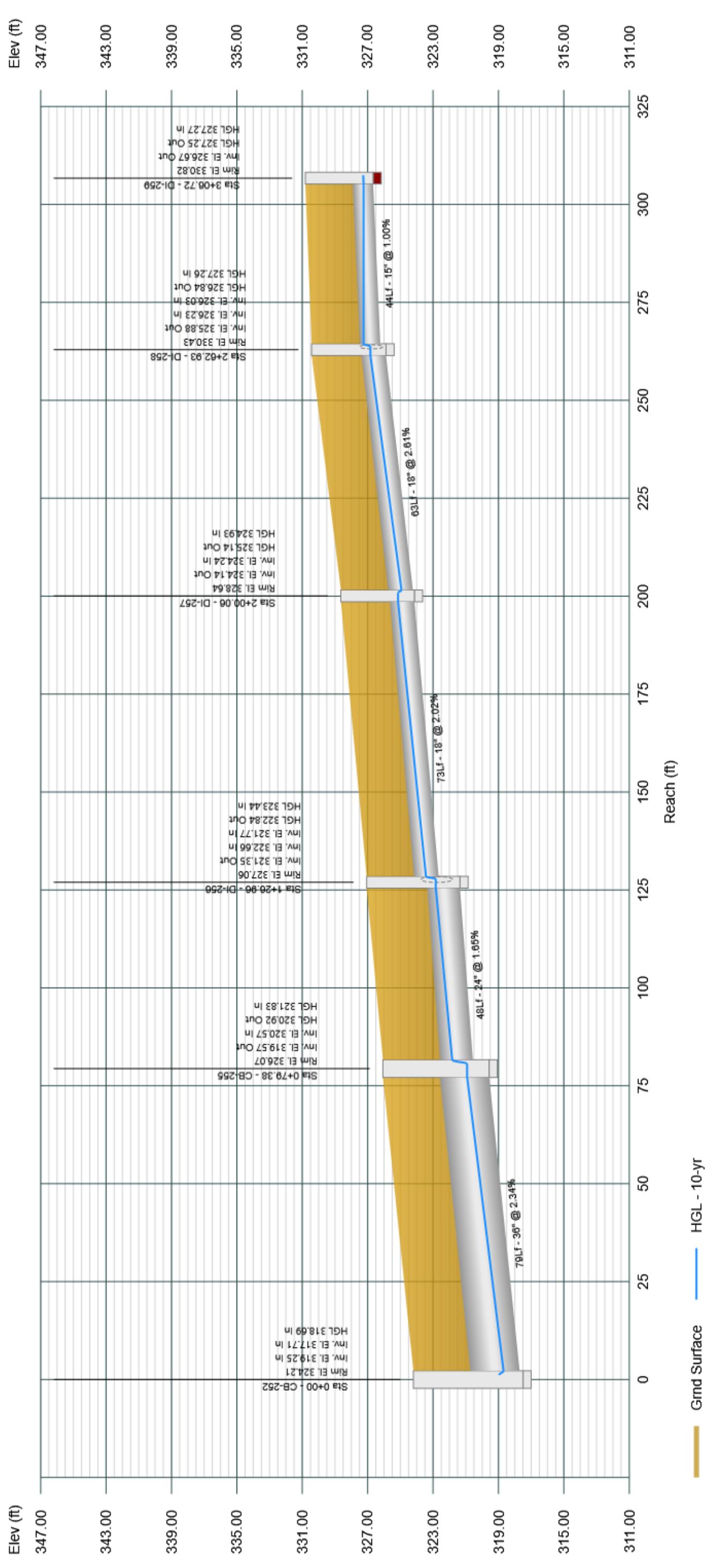


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

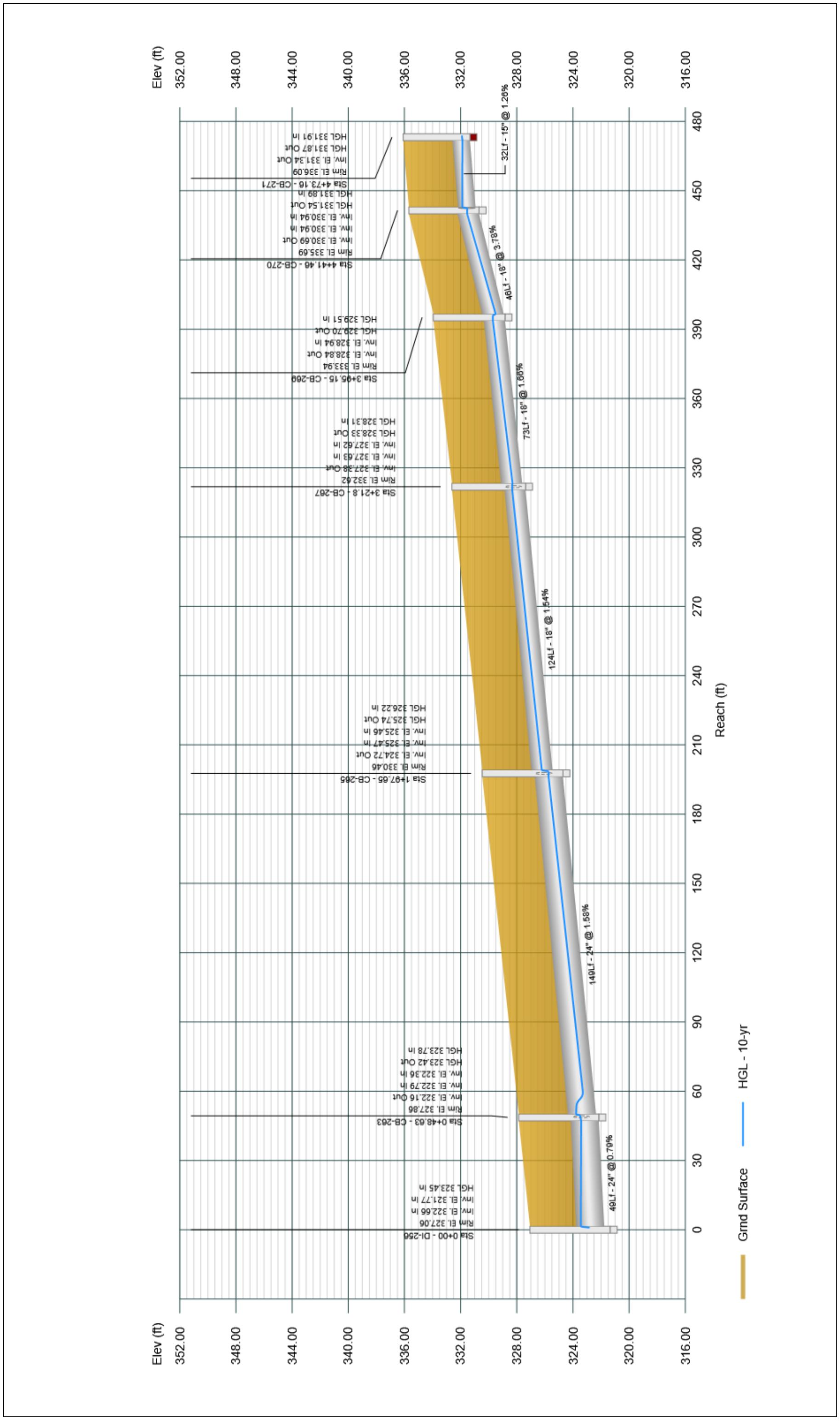


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

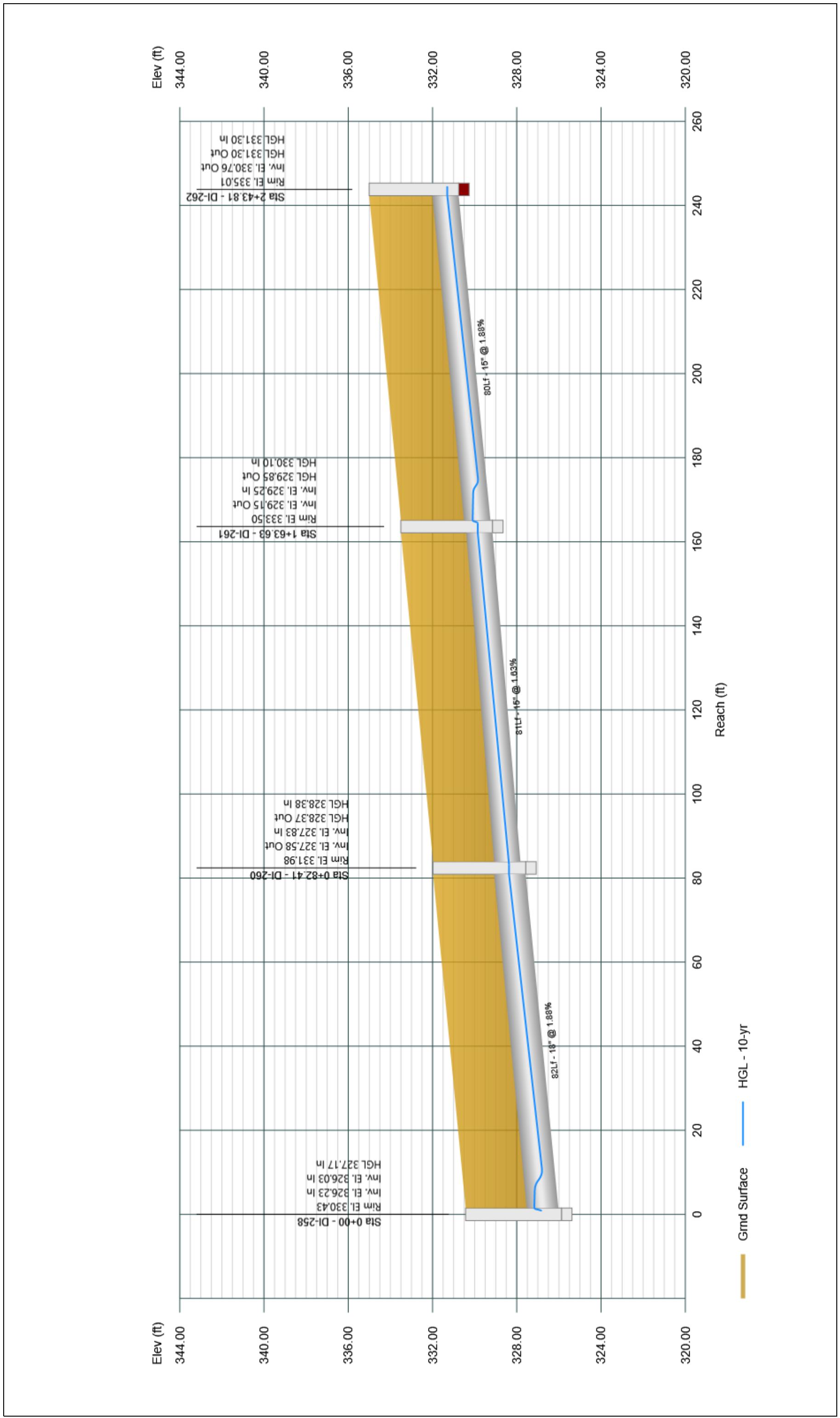


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024

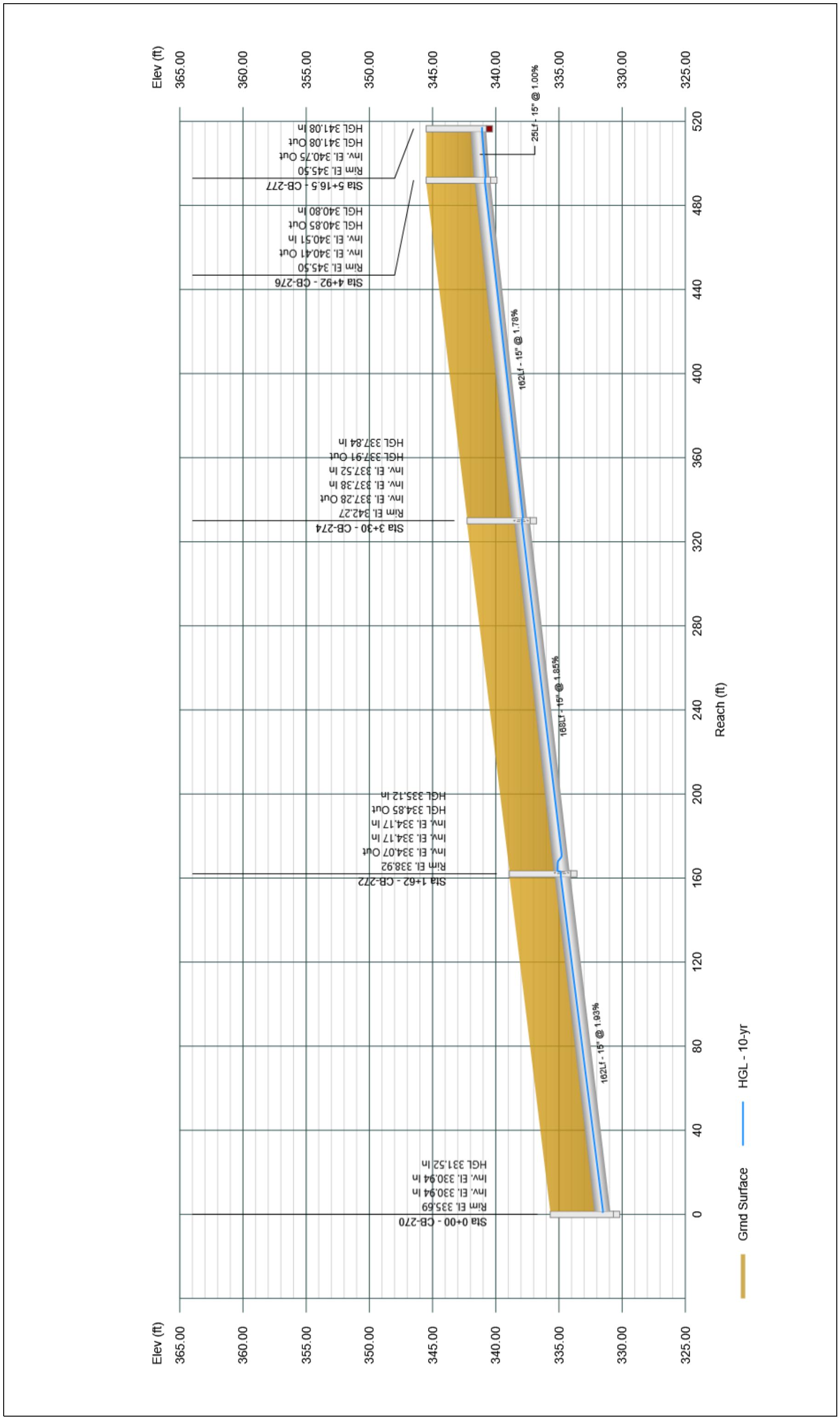


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

11-19-2024



Project File: Storm System 200.sws

SYSTEM 300 – REPORTS AND PROFILES

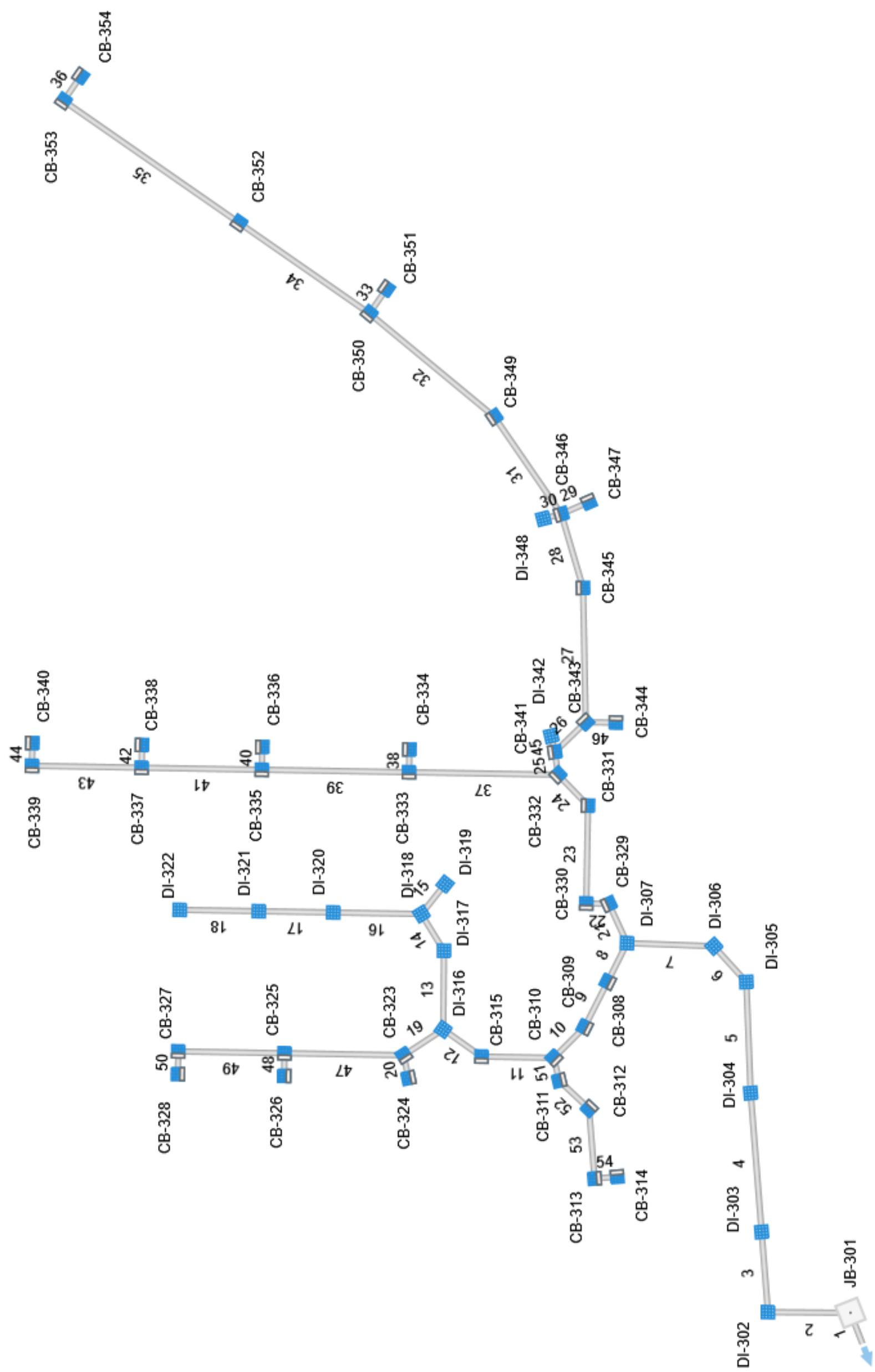
Pearce Farm – CD Pkg 1
AGN23001

Plan View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024



Project File: Storm System 300.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35
Project Name: Storm System 300
11-22-2024

Project File: Storm System 300.sws

Line ID	Length (ft)	Drng Area		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No		
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)			
300-301	49.71	0.000	15.370	0.00	0.00	11.10	0.0	8.92	6.10	67.65	263.03	12.34	42	6.84	281.60	278.20	284.12	279.82	295.33	282.00	1
301-302	89.07	0.260	15.370	0.70	0.18	11.10	5.0	8.86	6.11	67.81	317.08	14.48	42	9.93	297.20	288.35	299.72	289.70	321.81	295.33	2
302-303	86.82	0.410	15.110	0.65	0.27	10.91	5.0	8.77	6.13	66.94	163.69	10.97	42	2.65	314.30	312.00	316.80	313.86	323.59	321.81	3
303-304	150.36	0.370	14.700	0.65	0.24	10.65	5.0	8.51	6.19	65.95	90.01	9.33	42	0.80	315.60	314.40	318.09	316.74	326.68	323.59	4
304-305	119.96	0.040	14.330	0.75	0.03	10.41	5.0	8.30	6.24	64.97	91.84	9.29	42	0.83	316.70	315.70	319.17	318.02	329.14	326.68	5
305-306	52.10	0.090	14.290	0.75	0.07	10.38	5.0	8.21	6.27	65.02	88.27	7.83	42	0.77	317.20	316.80	319.82	319.87	330.27	329.14	6
306-307	93.88	0.010	14.200	0.85	0.01	10.31	5.0	8.07	6.30	64.97	101.14	9.45	42	1.01	318.25	317.30	320.72	319.55	332.13	330.27	7
307-308	46.59	0.050	4.260	0.80	0.04	2.95	5.0	6.43	6.74	19.86	58.29	3.12	36	0.76	319.50	319.15	321.88	321.88	332.13	332.13	8
308-309	54.90	0.410	4.210	0.65	0.27	2.91	5.0	6.31	6.78	19.70	60.32	3.80	36	0.82	320.05	319.60	321.91	321.95	331.16	332.13	9
309-310	46.99	0.090	3.800	0.80	0.07	2.64	5.0	6.20	6.81	17.97	65.26	4.79	36	0.96	320.60	320.15	321.95	322.07	330.77	331.16	10
310-315	78.04	0.100	3.070	0.75	0.08	2.09	5.0	6.08	6.85	14.28	34.82	7.77	24	2.37	327.12	325.27	328.46	326.26	332.72	330.77	11
315-316	50.74	0.140	2.970	0.70	0.10	2.01	5.0	5.99	6.87	13.82	33.15	7.36	24	2.15	328.31	327.22	329.63	328.25	333.91	332.72	12
316-317	84.88	0.110	1.470	0.75	0.08	0.98	5.0	5.81	6.93	6.76	14.38	6.41	18	1.88	330.50	328.91	331.49	329.68	335.60	333.91	13
317-318	46.64	0.320	1.360	0.65	0.21	0.89	5.0	5.72	6.95	6.22	15.61	6.22	18	2.21	331.63	330.60	332.58	331.34	336.89	335.60	14
318-319	41.18	0.200	0.70	0.14	0.14	0.50	5.00	7.19	1.01	6.46	1.13	15	1.00	332.29	331.88	333.00	333.00	337.04	336.89	15	
318-320	95.13	0.280	0.840	0.65	0.18	0.55	5.0	5.49	7.03	3.84	14.86	5.42	18	2.00	334.30	332.40	335.05	332.95	338.79	336.89	16
320-321	80.41	0.300	0.560	0.65	0.20	0.36	5.0	5.28	7.10	2.58	8.79	4.91	15	1.85	336.05	334.55	336.69	335.05	340.41	338.79	17
321-322	85.37	0.260	0.260	0.65	0.17	0.17	5.0	5.00	7.19	1.21	9.11	2.33	15	1.99	337.85	336.15	338.29	336.92	342.12	340.41	18
316-323	50.87	0.400	1.360	0.65	0.26	0.94	5.0	5.84	6.92	6.48	10.50	4.74	18	1.00	329.32	328.81	330.29	330.06	334.69	333.91	19
323-324	25.12	0.140	0.80	0.11	0.11	0.50	5.00	7.19	0.80	6.46	0.76	15	1.00	329.82	329.57	330.73	330.73	334.57	334.69	20	
307-329	46.59	0.120	9.930	0.80	0.10	7.36	5.0	7.99	6.32	46.49	143.64	7.73	48	1.00	323.51	323.04	325.53	324.90	333.80	332.13	21
329-330	24.50	0.290	9.810	0.65	0.19	7.26	5.0	7.95	6.33	45.96	143.65	7.53	48	1.00	323.85	323.61	325.86	325.52	333.80	333.80	22

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 300.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-22-2024

Line ID	Length (ft)	Drng Area		Ratиона		C x A		Tc		Intensity	Q	Capacity (cfs)	Velocity (ft/s)	Size (in)	Slope (%)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (min)	Dn (min)							Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
330-331	105.61	0.100	9.520	0.75	0.08	7.07	5.0	7.76	6.38	45.10	143.65	7.95	48	1.00	325.01	323.95	327.00	325.68	335.89	333.80	333.80	23		
331-332	46.32	0.110	9.420	0.75	0.08	7.00	5.0	7.68	6.40	44.76	143.64	6.66	48	1.00	325.57	325.11	327.55	327.38	337.22	335.89	335.89	24		
332-341	24.82	0.130	7.120	0.75	0.10	5.40	5.0	7.64	6.41	34.64	100.60	7.19	42	1.00	328.40	328.15	330.20	329.86	337.30	337.22	337.22	25		
341-343	46.32	0.050	3.580	0.85	0.04	2.75	5.0	7.53	6.44	17.70	38.27	4.06	30	0.87	328.90	328.50	330.82	330.82	337.60	337.30	337.30	26		
343-345	144.91	0.050	3.480	0.80	0.04	2.66	5.0	7.16	6.54	17.41	32.31	6.35	30	0.62	329.90	329.00	331.30	330.34	337.56	337.60	337.60	27		
345-346	83.12	0.370	3.430	0.75	0.28	2.62	5.0	6.96	6.59	17.30	34.59	5.90	30	0.71	330.60	330.00	331.99	331.50	336.59	337.56	337.56	28		
346-347	32.50	0.390	0.80	0.31	0.31	5.0	5.00	7.19	2.24	6.46	2.73	15	1.00	331.84	331.52	332.51	332.53	336.59	336.59	336.59	29			
346-348	19.98	0.250	0.250	0.75	0.19	0.19	5.0	5.00	7.19	1.35	20.42	5.29	15	10.00	333.84	331.84	334.30	332.10	338.81	336.59	336.59	30		
346-349	127.38	0.500	2.420	0.75	0.38	1.85	5.0	6.72	6.66	12.30	29.79	7.13	24	1.73	333.30	331.09	334.54	332.05	338.90	336.59	336.59	31		
349-350	175.09	0.600	1.920	0.75	0.45	1.47	5.0	6.43	6.74	9.92	39.15	7.56	24	3.00	338.65	333.40	339.76	334.13	344.45	338.90	338.90	32		
350-351	32.50	0.150	0.150	0.85	0.13	0.13	5.0	5.00	7.19	0.92	6.25	1.50	15	0.94	339.70	339.40	340.21	340.22	344.45	344.45	344.45	33		
350-352	171.29	0.060	1.170	0.75	0.05	0.89	5.0	5.91	6.90	6.17	8.95	5.33	18	0.73	340.65	339.40	341.60	340.32	349.36	344.45	344.45	34		
352-353	230.78	0.940	1.110	0.75	0.71	0.85	5.0	5.17	7.13	6.06	8.46	5.19	18	0.65	342.25	340.75	343.19	341.69	347.47	349.36	349.36	35		
353-354	32.50	0.170	0.85	0.14	0.14	0.14	5.0	5.00	7.19	1.04	5.13	0.85	15	0.63	342.70	342.50	343.91	343.90	347.47	347.47	347.47	36		
332-333	161.00	0.160	2.190	0.80	0.13	1.51	5.0	5.94	6.89	10.39	30.90	6.92	24	1.87	334.73	331.72	335.87	332.56	340.47	337.22	337.22	37		
333-334	24.50	0.230	0.230	0.75	0.17	0.17	5.0	5.00	7.19	1.24	6.46	1.75	15	1.00	335.72	335.48	336.32	336.34	340.47	340.47	340.47	38		
333-335	158.88	0.130	1.800	0.80	0.10	1.21	5.0	5.62	6.99	8.44	31.16	6.50	24	1.90	337.99	334.97	339.01	335.72	343.73	340.47	340.47	39		
333-336	24.50	0.250	0.250	0.75	0.19	0.19	5.0	5.00	7.19	1.35	6.46	2.68	15	1.00	338.98	338.74	339.44	339.38	343.73	343.73	343.73	40		
335-337	129.89	0.050	1.420	0.75	0.04	0.92	5.0	5.35	7.07	6.49	14.35	6.40	18	1.87	341.16	338.73	342.13	339.47	346.40	343.73	343.73	41		
337-338	24.50	0.460	0.460	0.65	0.30	0.30	5.0	5.00	7.19	2.15	6.46	2.07	15	1.00	341.65	341.41	342.54	342.54	346.40	346.40	346.40	42		
337-339	118.39	0.230	0.910	0.75	0.17	0.58	5.0	5.08	7.16	4.16	15.52	5.70	18	2.18	343.99	341.40	344.76	341.96	346.40	346.40	346.40	43		
339-340	24.50	0.680	0.680	0.60	0.41	0.41	5.0	5.00	7.19	2.93	6.46	4.48	15	1.00	344.48	344.24	345.17	344.87	349.23	349.23	349.23	44		

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 300.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-22-2024

Line ID	Length (ft)	Drng Area		C x A		Tc		Intensity (in/hr)	Total Q (cfs)	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No	
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)					Up	Dn	Up	Dn	Up	Dn	Up	Dn		
341-342	17.86	3.410	3.410	0.75	2.56	5.0	5.00	7.19	18.38	66.69	6.05	36	1.00	329.24	329.06	330.62	330.36	336.74	337.30	45	
343-344	32.50	0.050	0.050	0.85	0.04	5.0	5.00	7.19	0.31	6.46	2.32	15	1.00	332.85	332.53	333.07	332.72	337.60	337.60	46	
323-325	128.73	0.380	0.820	0.65	0.25	5.56	5.0	5.52	7.02	3.96	13.87	5.38	18	1.74	331.94	329.69	332.69	330.26	337.18	334.69	47
325-326	24.50	0.120	0.120	0.80	0.10	5.0	5.00	7.19	0.69	6.46	1.07	15	1.00	332.43	332.19	332.99	332.99	337.18	337.18	48	
325-327	114.74	0.230	0.320	0.65	0.15	0.22	5.0	5.15	7.14	1.58	8.41	4.21	15	1.70	334.40	332.45	334.90	332.83	339.40	337.18	49
327-328	24.50	0.090	0.090	0.80	0.07	0.07	5.0	5.00	7.19	0.52	5.14	1.18	15	0.63	334.65	334.50	335.07	335.07	339.40	339.40	50
310-311	25.28	0.130	0.640	0.75	0.10	0.48	5.0	5.54	7.01	3.38	6.46	3.85	15	1.00	321.63	321.37	322.36	322.37	330.64	330.77	51
311-312	44.25	0.120	0.510	0.75	0.09	0.38	5.0	5.39	7.06	2.71	6.46	3.33	15	1.00	322.17	321.73	322.83	322.75	329.42	330.64	52
312-313	75.64	0.180	0.390	0.70	0.13	0.29	5.0	5.12	7.15	2.10	6.46	3.04	15	1.00	322.93	322.17	323.51	323.04	327.92	329.42	53
313-314	24.50	0.210	0.210	0.80	0.17	0.17	5.0	5.00	7.19	1.21	4.97	2.16	15	0.59	323.17	323.03	323.69	323.69	327.92	327.92	54

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.s.

Project File: Storm System 300.sws

Energy Grade Line Calculations

Project Name: Storm System 300

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	Energy Loss (ft)	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)			
1	42	67.65	278.20	1.62‡	4.35	279.82	15.56	3.77	283.37	49.71	281.60	2.52 ²	7.41	284.12	9.13	1.30	285.41	0.043	284.12	285.41	0.00	
2	42	67.81	288.35	1.35‡	3.42	289.70	19.82	6.11	292.17	89.07	297.20	2.52 ²	7.42	298.72	9.14	1.30	301.02	0.013	8.847	299.72	301.02	0.00
3	42	66.94	312.00	1.86‡	5.20	313.86	12.86	2.57	315.79	86.82	314.30	2.51 ²	7.37	316.80	9.08	1.28	318.08	0.013	2.298	316.80	318.08	0.00
4	42	65.95	314.40	2.34‡	6.84	316.74	9.65	1.45	318.37	150.36	315.60	2.49 ²	7.31	318.09	9.02	1.27	319.35	0.013	0.982	318.09	319.35	0.00
5	42	64.97	315.70	2.32‡	6.76	318.02	9.62	1.44	319.63	119.96	316.70	2.47 ²	7.25	319.17	8.96	1.25	320.41	0.013	0.786	319.17	320.41	0.00
6	42	65.02	316.80	3.07	8.95	319.87	7.26	0.82	320.69	52.10	317.20	2.62	7.74	319.82	8.40	1.10	320.92	0.013	0.229	319.89	320.99	0.07
7	42	64.97	317.30	2.25‡	6.53	319.55	9.94	1.54	321.27	93.88	318.25	2.47 ²	7.25	320.72	8.96	1.25	321.96	0.013	0.698	320.72	321.96	0.00
8	36	19.86	319.15	2.73	6.76	321.88	2.94	0.13	322.02	46.59	319.50	2.38	6.01	321.88	3.30	0.17	322.05	0.013	0.039	321.89	322.06	0.01
9	36	19.70	319.60	2.35	5.93	321.95	3.32	0.17	322.12	54.90	320.05	1.86	4.61	321.91	4.28	0.28	322.20	0.013	0.076	321.94	322.22	0.02
10	36	17.97	320.15	1.92	4.77	322.07	3.77	0.22	322.29	46.99	320.60	1.35 ²	3.09	321.95	5.82	0.53	322.48	0.013	0.190	321.95	322.48	0.00
11	24	14.28	325.27	0.99‡	1.56	326.26	9.16	1.30	327.24	78.04	327.12	1.34 ²	2.23	328.46	6.39	0.63	329.09	0.013	1.850	328.46	329.09	0.00
12	24	13.82	327.22	1.03‡	1.64	328.25	8.43	1.10	329.21	50.74	328.31	1.32 ²	2.19	329.63	6.30	0.62	330.24	0.013	1.033	329.63	330.24	0.00
13	18	6.76	328.91	0.77‡	0.92	329.68	7.38	0.85	330.36	84.88	330.50	0.99 ²	1.24	331.49	5.45	0.46	331.95	0.013	1.592	331.49	331.95	0.00
14	18	6.22	330.60	0.74‡	0.87	331.34	7.18	0.80	332.03	46.64	331.63	0.95 ²	1.18	332.58	5.26	0.43	333.01	0.013	0.983	332.58	333.01	0.00
15	15	1.01	331.88	1.12	1.16	333.00	0.87	0.01	333.02	41.18	332.29	0.71	0.72	333.00	1.39	0.03	333.03	0.013	0.018	333.01	333.04	0.01
16	18	3.84	332.40	0.55‡	0.59	332.95	6.49	0.65	333.44	95.13	334.30	0.75 ²	0.88	335.05	4.36	0.30	335.35	0.013	1.905	335.35	335.35	0.00
17	15	2.58	334.55	0.49‡	0.45	335.05	5.77	0.52	335.46	80.41	336.05	0.64 ²	0.64	336.69	4.06	0.26	336.94	0.013	1.482	336.69	336.94	0.00
18	15	1.21	336.15	0.78	0.80	336.92	1.52	0.04	336.96	85.37	337.85	0.44 ²	0.39	338.29	3.14	0.15	338.44	0.013	0.483	338.29	338.44	0.00
19	18	6.48	328.81	1.25	1.57	330.06	4.12	0.26	330.32	50.87	329.32	0.97 ²	1.21	330.29	5.35	0.45	330.74	0.013	0.412	330.29	330.74	0.00
20	15	0.80	329.57	1.16	1.19	330.73	0.68	0.01	330.74	25.12	329.82	0.91	0.96	330.73	0.84	0.01	330.74	0.013	0.004	330.74	330.75	0.01
21	48	46.49	323.04	1.86‡	5.72	324.90	8.13	1.03	325.89	46.59	323.51	2.02 ²	6.35	325.53	7.32	0.83	326.36	0.013	0.466	325.53	326.36	0.00
22	48	45.96	323.61	1.91‡	5.92	325.52	7.77	0.94	326.50	24.50	323.85	2.01 ²	6.30	325.86	7.29	0.83	326.69	0.013	0.184	325.86	326.69	0.00

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 300.sws

Energy Grade Line Calculations

Project Name: Storm System 300

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	Energy Loss (ft)	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)			
23	48	45.10	323.95	1.73‡	5.20	325.68	8.67	1.17	326.83	105.61	325.01	1.99 ²	6.23	327.00	7.24	0.82	327.81	0.013	0.986	327.00	327.81	0.00
24	48	44.76	325.11	2.27	7.34	327.38	6.10	0.58	327.95	46.32	325.57	1.98 ²	6.20	327.55	7.22	0.81	328.36	0.013	0.409	327.55	328.36	0.00
25	42	34.64	328.15	1.70‡	4.65	329.86	7.45	0.86	330.70	24.82	328.40	1.80 ²	4.99	330.20	6.94	0.75	330.95	0.013	0.248	330.20	330.95	0.00
26	30	17.70	328.50	2.31	4.74	330.82	3.73	0.22	331.03	46.32	328.90	1.91	4.03	330.82	4.39	0.30	331.12	0.013	0.087	330.83	331.13	0.01
27	30	17.41	329.00	1.34‡	2.67	330.34	6.52	0.66	331.22	144.91	329.90	1.39 ²	2.82	331.30	6.19	0.59	331.89	0.013	0.673	331.30	331.89	0.00
28	30	17.30	330.00	1.50	3.07	331.50	5.63	0.49	332.00	83.12	330.60	1.39 ²	2.80	331.99	6.17	0.59	332.58	0.013	0.581	331.99	332.58	0.00
29	15	2.24	331.52	1.02	1.07	332.53	2.10	0.07	332.60	32.50	331.84	0.67	0.67	332.51	3.36	0.18	332.68	0.013	0.084	332.63	332.80	0.12
30	15	1.35	331.84	0.26‡	0.18	332.10	7.34	0.84	332.59	19.98	333.84	0.46 ²	0.42	334.30	3.24	0.16	334.47	0.013	1.872	334.30	334.47	0.00
31	24	12.30	331.09	0.96‡	1.49	332.05	8.26	1.06	332.89	127.38	333.30	1.24 ²	2.05	334.54	6.00	0.56	335.10	0.013	2.211	334.54	335.10	0.00
32	24	9.92	333.40	0.73‡	1.03	334.13	9.61	1.43	335.17	175.09	338.65	1.12 ²	1.80	339.76	5.51	0.47	340.23	0.013	5.061	339.76	340.23	0.00
33	15	0.92	339.40	0.83	0.86	340.22	1.07	0.02	340.24	32.50	339.70	0.51	0.47	340.21	1.94	0.06	340.27	0.013	0.032	340.25	340.31	0.04
34	18	6.17	339.40	0.92‡	1.14	340.32	5.43	0.46	340.78	171.29	340.65	0.95 ²	1.18	341.60	5.24	0.43	342.02	0.013	1.243	341.60	342.02	0.00
35	18	6.06	340.75	0.94‡	1.16	341.69	5.21	0.42	342.11	230.78	342.25	0.94	1.17	343.19	5.18	0.42	343.61	0.013	1.498	343.49	343.91	0.30
36	15	1.04	342.50	1.25	1.23	343.90	0.85	0.01	343.91	32.50	342.70	1.21	1.21	343.91	0.86	0.01	343.92	0.013	0.007	343.91	343.93	0.01
37	24	10.39	331.72	0.84‡	1.26	332.56	8.24	1.05	333.35	161.00	334.73	1.14 ²	1.85	335.87	5.61	0.49	336.36	0.013	3.005	335.87	336.36	0.00
38	15	1.24	335.48	0.86	0.90	336.34	1.37	0.03	336.37	24.50	335.72	0.60	0.59	336.32	2.12	0.07	336.39	0.013	0.027	336.37	336.44	0.05
39	24	8.44	334.97	0.75‡	1.08	335.72	7.82	0.95	336.42	158.88	337.99	1.03 ²	1.63	339.01	5.18	0.42	339.43	0.013	3.010	339.01	339.43	0.00
40	15	1.35	338.74	0.64	0.64	339.38	2.11	0.07	339.45	24.50	338.98	0.46 ²	0.42	339.44	3.24	0.16	339.61	0.013	0.159	339.44	339.61	0.00
41	18	6.49	338.73	0.74‡	0.87	339.47	7.44	0.86	340.15	129.89	341.16	0.97 ²	1.21	342.13	5.35	0.45	342.57	0.013	2.425	342.13	342.57	0.00
42	15	2.15	341.41	1.13	1.17	342.54	1.84	0.05	342.59	24.50	341.65	0.89	0.94	342.54	2.30	0.08	342.62	0.013	0.031	342.58	342.66	0.04
43	18	4.16	341.40	0.56‡	0.60	341.96	6.90	0.74	342.62	118.39	343.99	0.78 ²	0.93	344.76	4.49	0.31	345.08	0.013	2.461	344.76	345.08	0.00
44	15	2.93	344.24	0.63‡	0.62	344.87	4.69	0.34	345.21	24.50	344.48	0.69 ²	0.69	345.17	4.26	0.28	345.45	0.013	0.239	345.17	345.45	0.00

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 300.sws

Energy Grade Line Calculations

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						n Value	EGL Elev (ft)	HGLa Elev (ft)	Energy Loss (ft)	Junction			
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)								
45	36	18.38	329.06	1.30‡	2.93	330.36	6.28	0.61	331.04	17.86	329.24	1.37	3.16	330.62	5.82	0.53	331.14	0.013	330.83	331.35	0.21	
46	15	0.31	332.53	0.19‡	0.12	332.72	2.56	0.10	332.81	32.50	332.85	0.22‡	0.15	333.07	2.08	0.07	333.14	0.013	333.07	333.14	0.00	
47	18	3.96	329.69	0.57‡	0.62	330.26	6.36	0.63	330.78	128.73	331.94	0.76‡	0.90	332.69	4.41	0.30	333.00	0.013	332.17	332.69	0.00	
48	15	0.69	332.19	0.81	0.84	332.99	0.83	0.01	333.00	24.50	332.43	0.56	0.53	332.99	1.31	0.03	333.01	0.013	333.00	333.03	0.02	
49	15	1.58	332.45	0.38‡	0.32	332.83	4.99	0.39	333.13	114.74	334.40	0.50‡	0.46	334.90	3.42	0.18	335.08	0.013	334.90	335.08	0.00	
50	15	0.52	334.50	0.58	0.55	335.07	0.94	0.01	335.08	24.50	334.65	0.42	0.36	335.07	1.43	0.03	335.10	0.013	335.09	335.12	0.02	
51	15	3.38	321.37	0.99	1.05	322.37	3.23	0.16	322.53	25.28	321.63	0.74	0.75	322.36	4.47	0.31	322.68	0.013	322.50	322.82	0.14	
52	15	2.71	321.73	1.02	1.08	322.75	2.52	0.10	322.85	44.25	322.17	0.66‡	0.66	322.83	4.13	0.27	323.09	0.013	322.83	323.09	0.00	
53	15	2.10	322.17	0.87	0.91	323.04	2.31	0.08	323.12	75.64	322.93	0.58‡	0.56	323.51	3.77	0.22	323.73	0.013	323.51	323.73	0.00	
54	15	1.21	323.03	0.66	0.66	323.69	1.82	0.05	323.74	24.50	323.17	0.52	0.49	323.69	2.49	0.10	323.79	0.013	0.047	323.75	323.84	0.05

Notes: Return Period = 10-yr. ‡ Critical depth. † Supercritical.

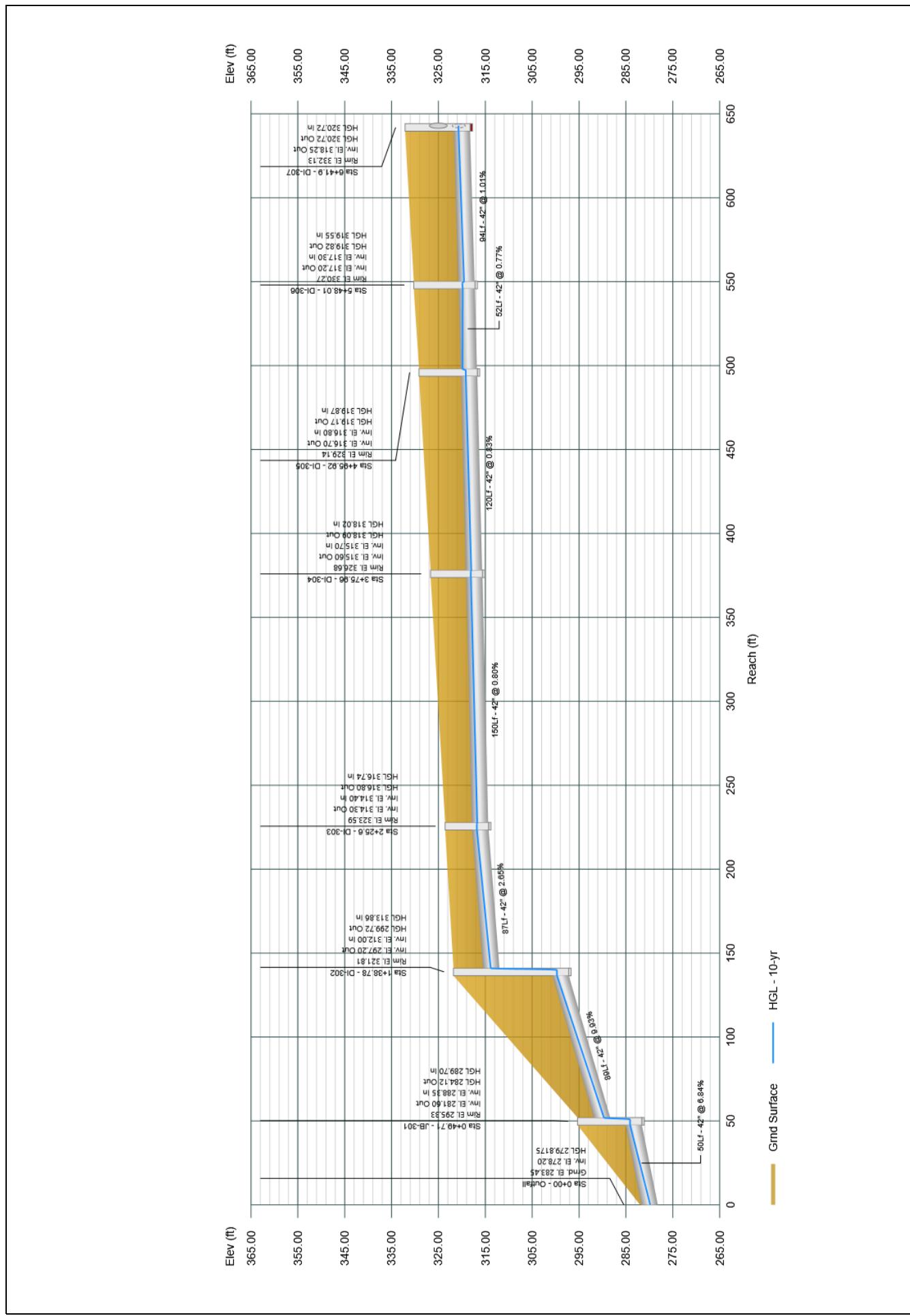
Project File: Storm System 300.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-22-2024



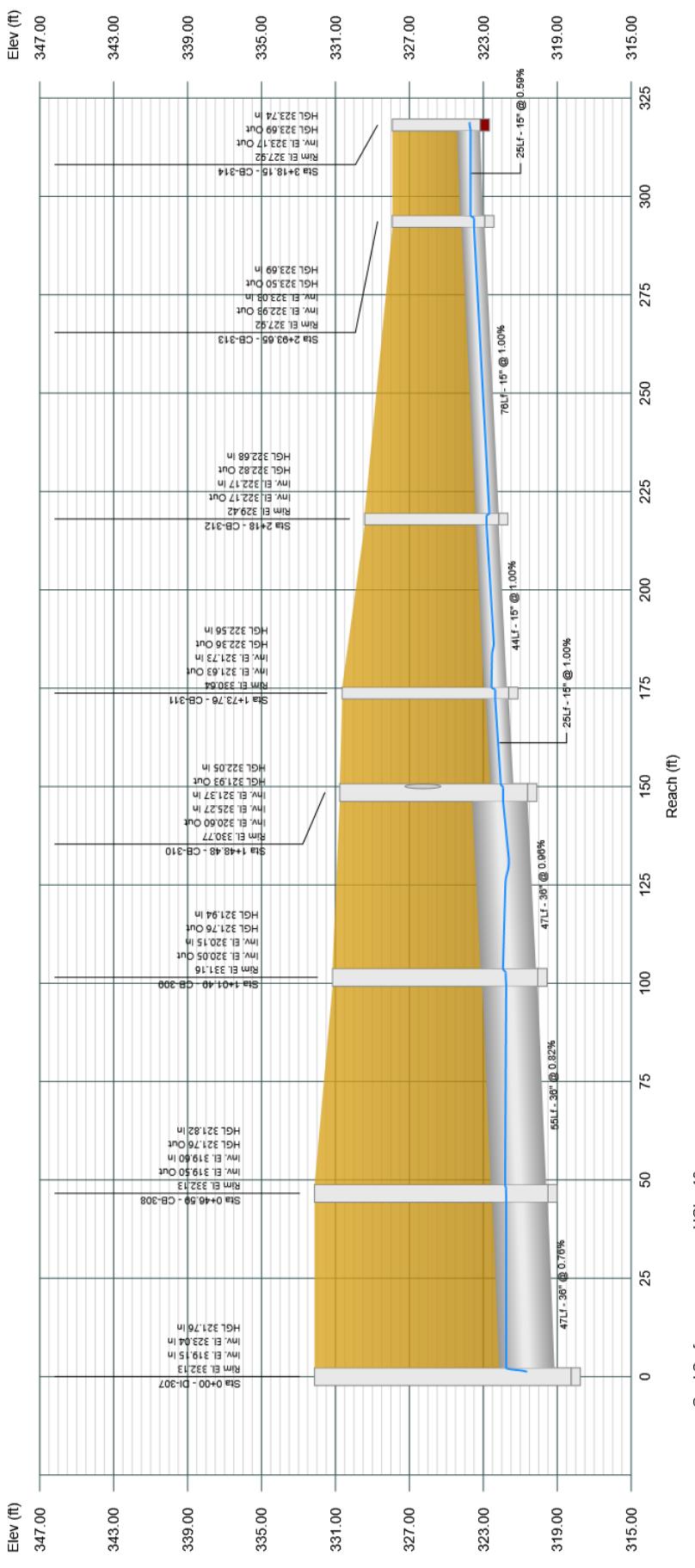
Project File: Storm System 300.sws

Profile View

Profile View
Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024

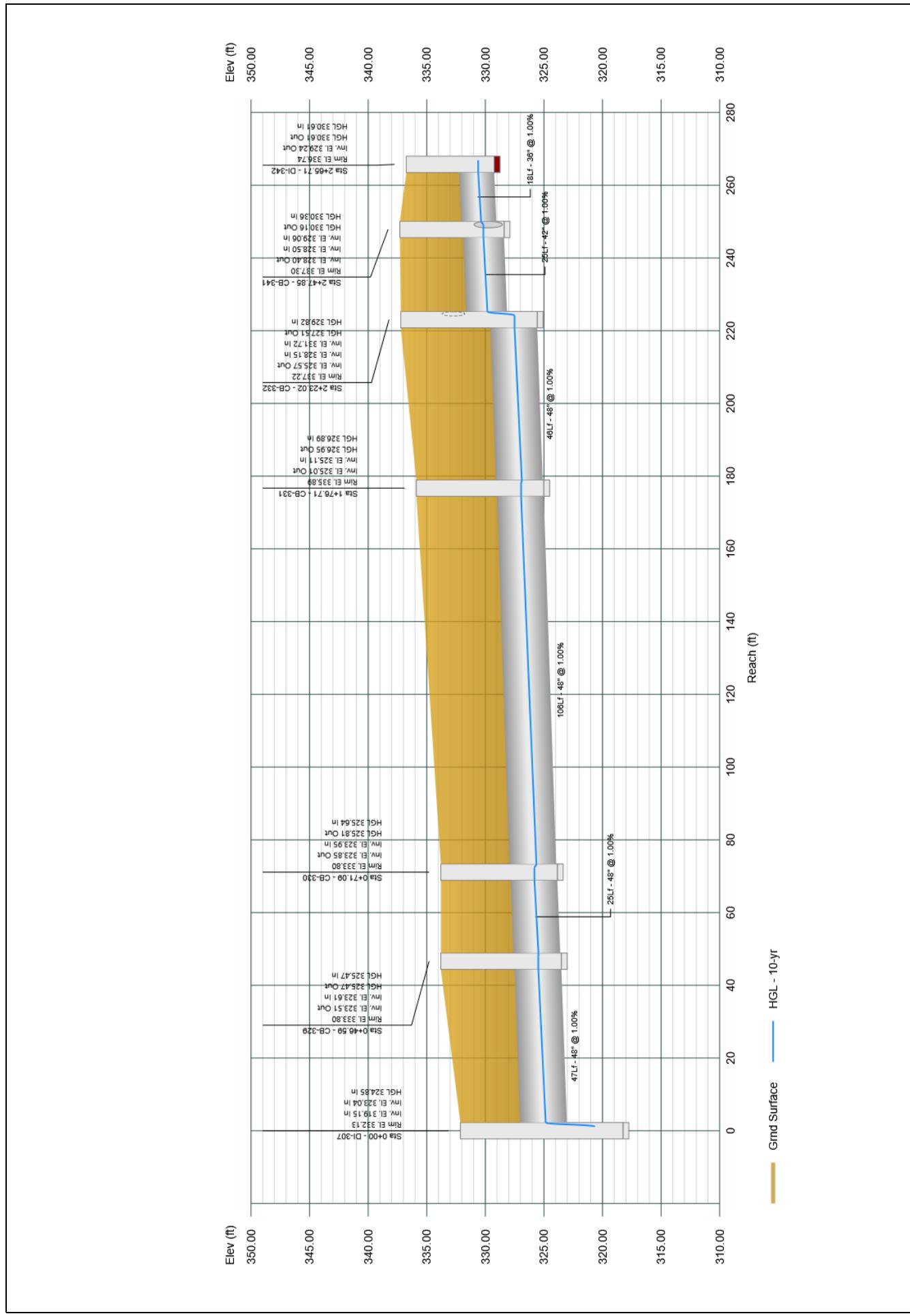


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024

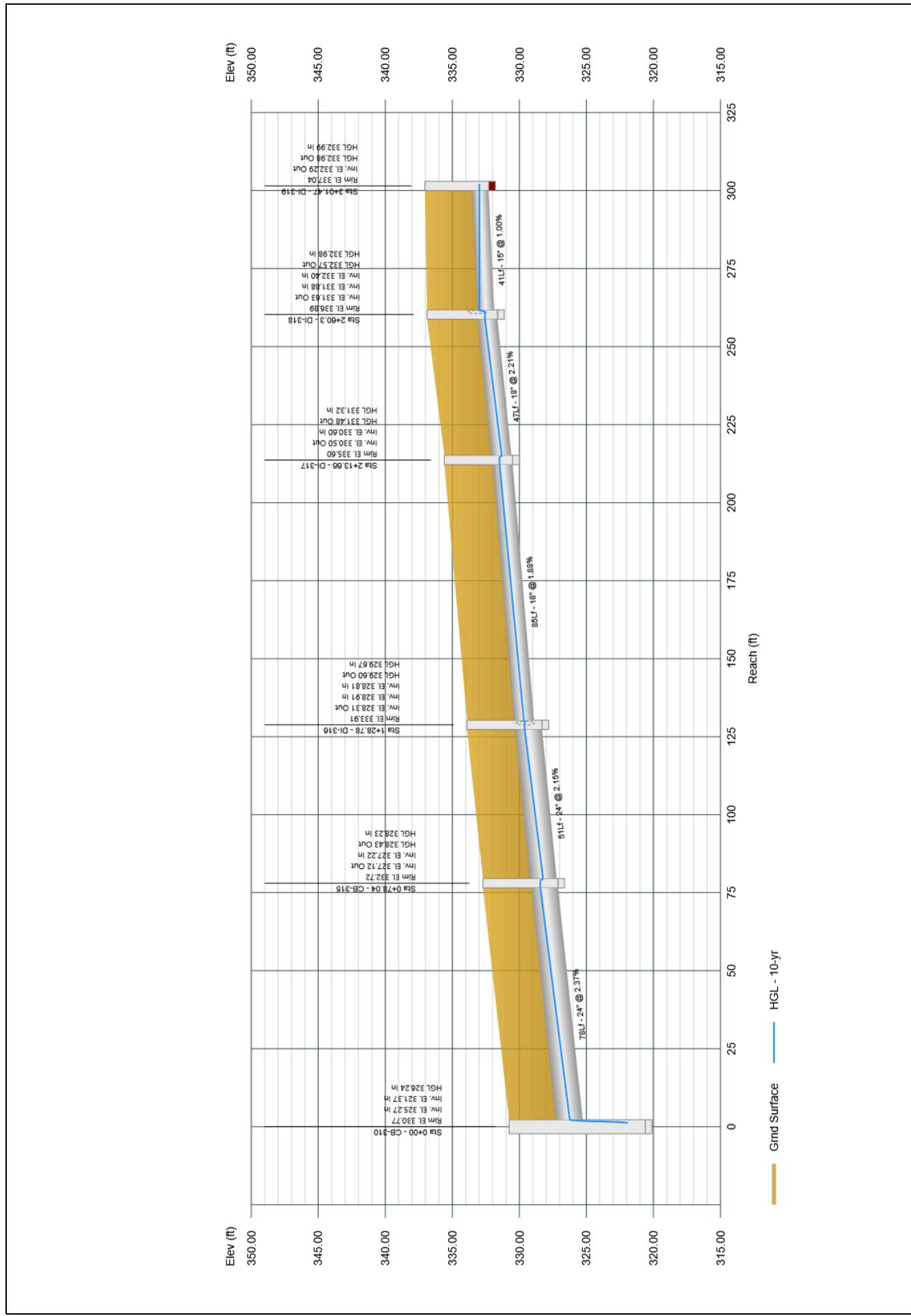


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024



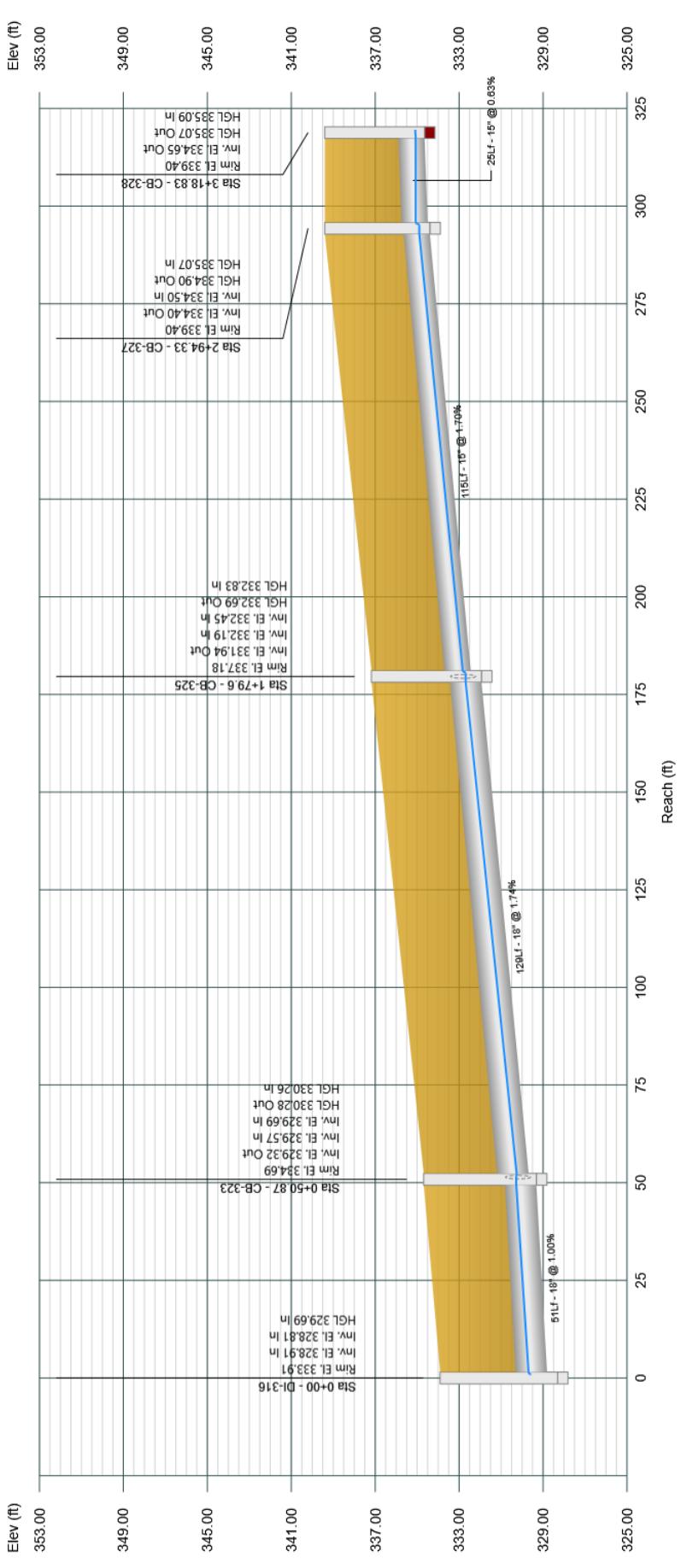
Project File: Storm System 300.sws

Profile View

Profile View
Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024

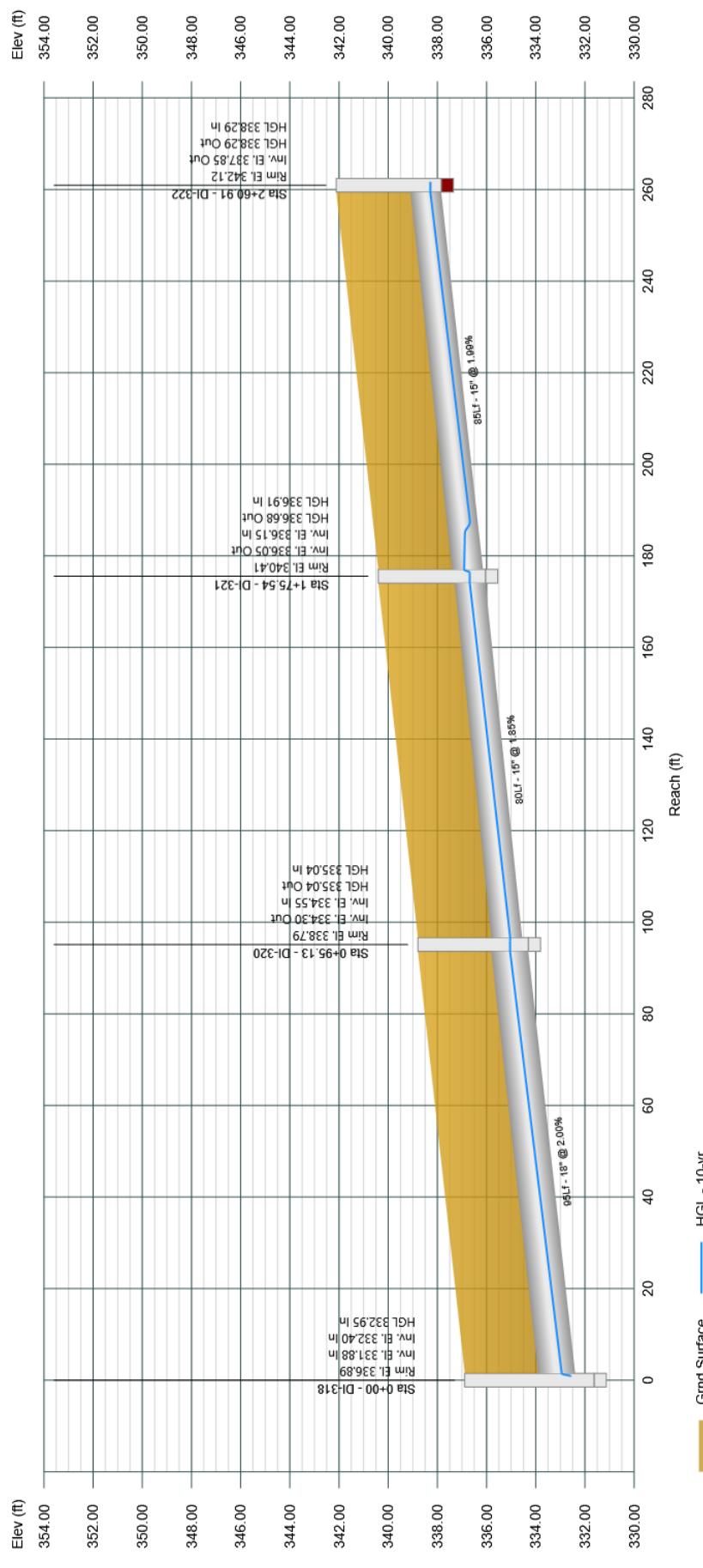


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024

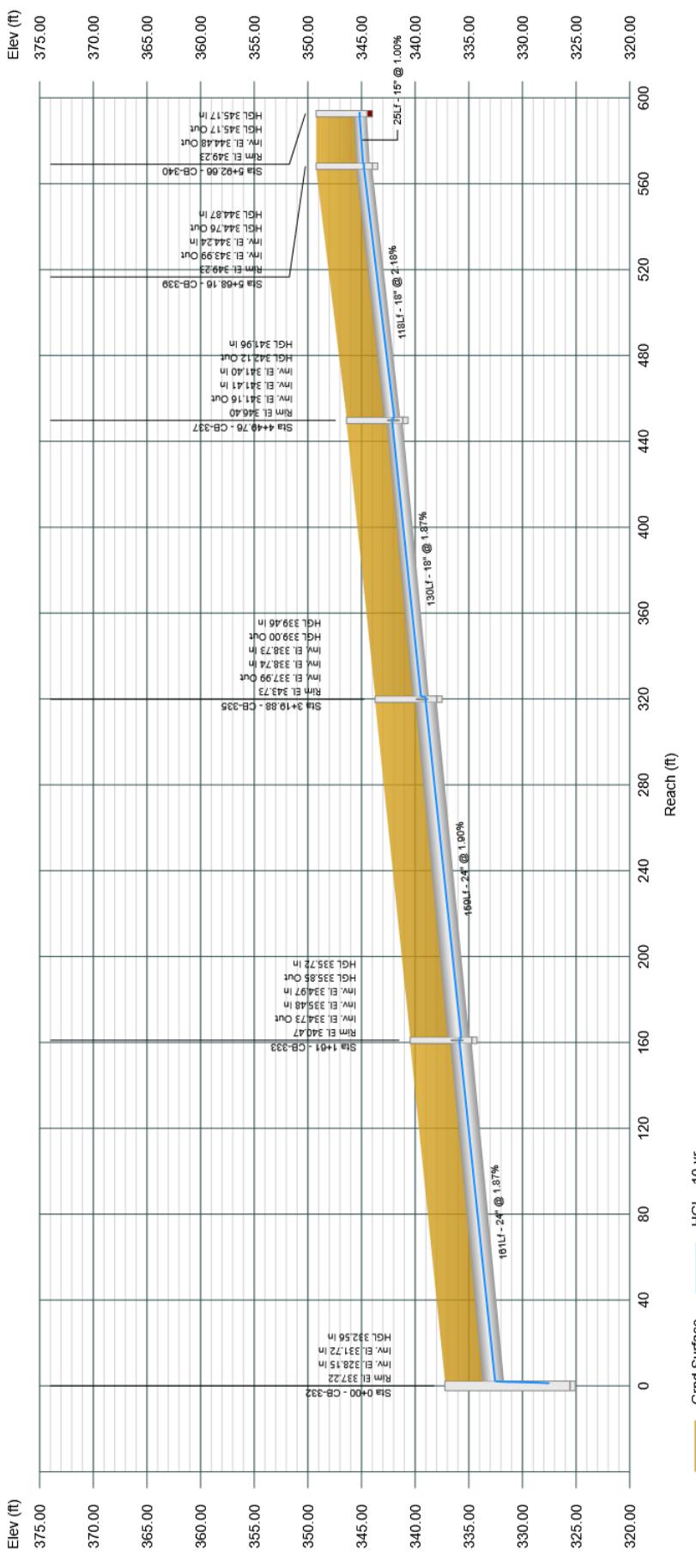


Profile View

Profile View
Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024

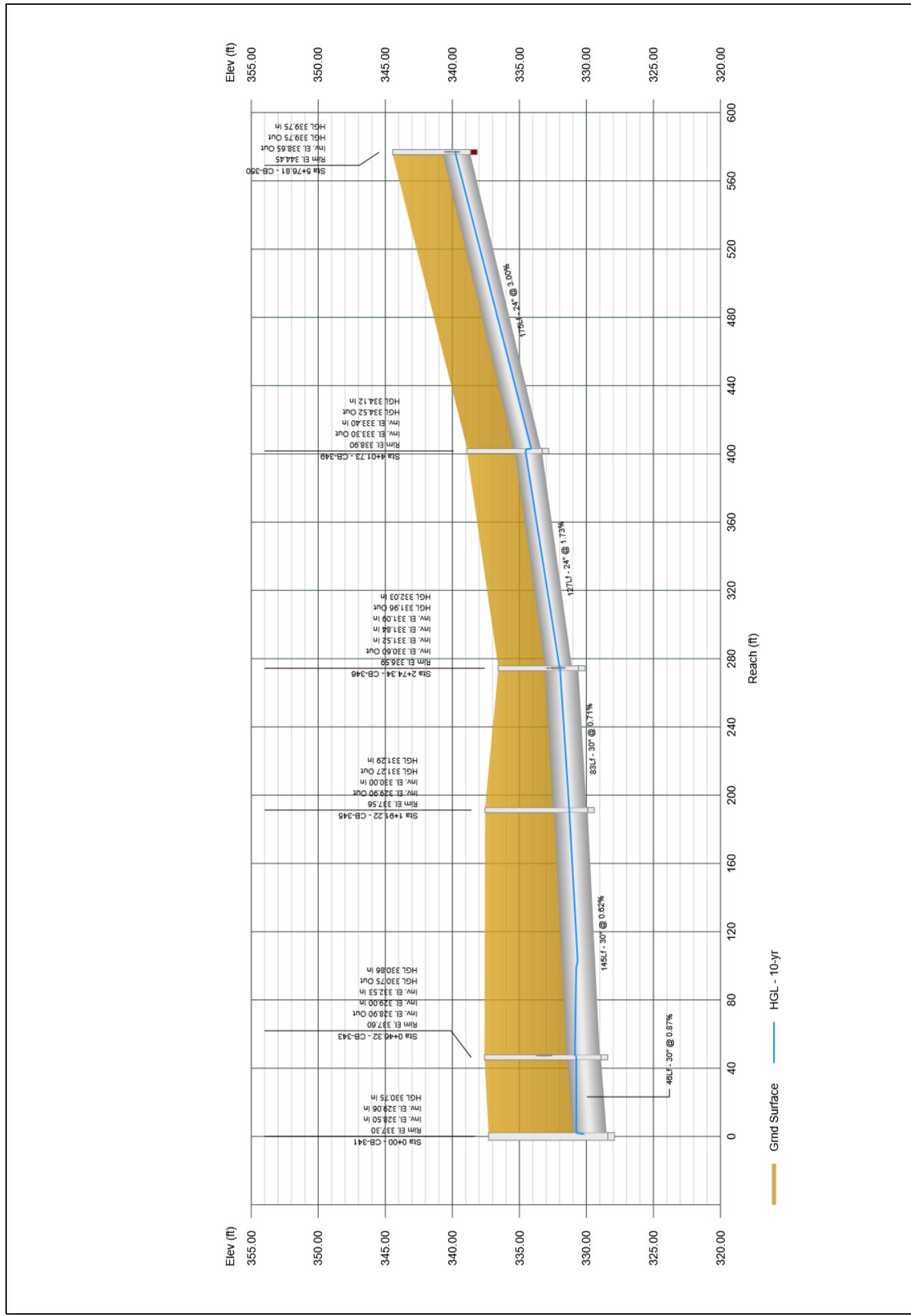


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024

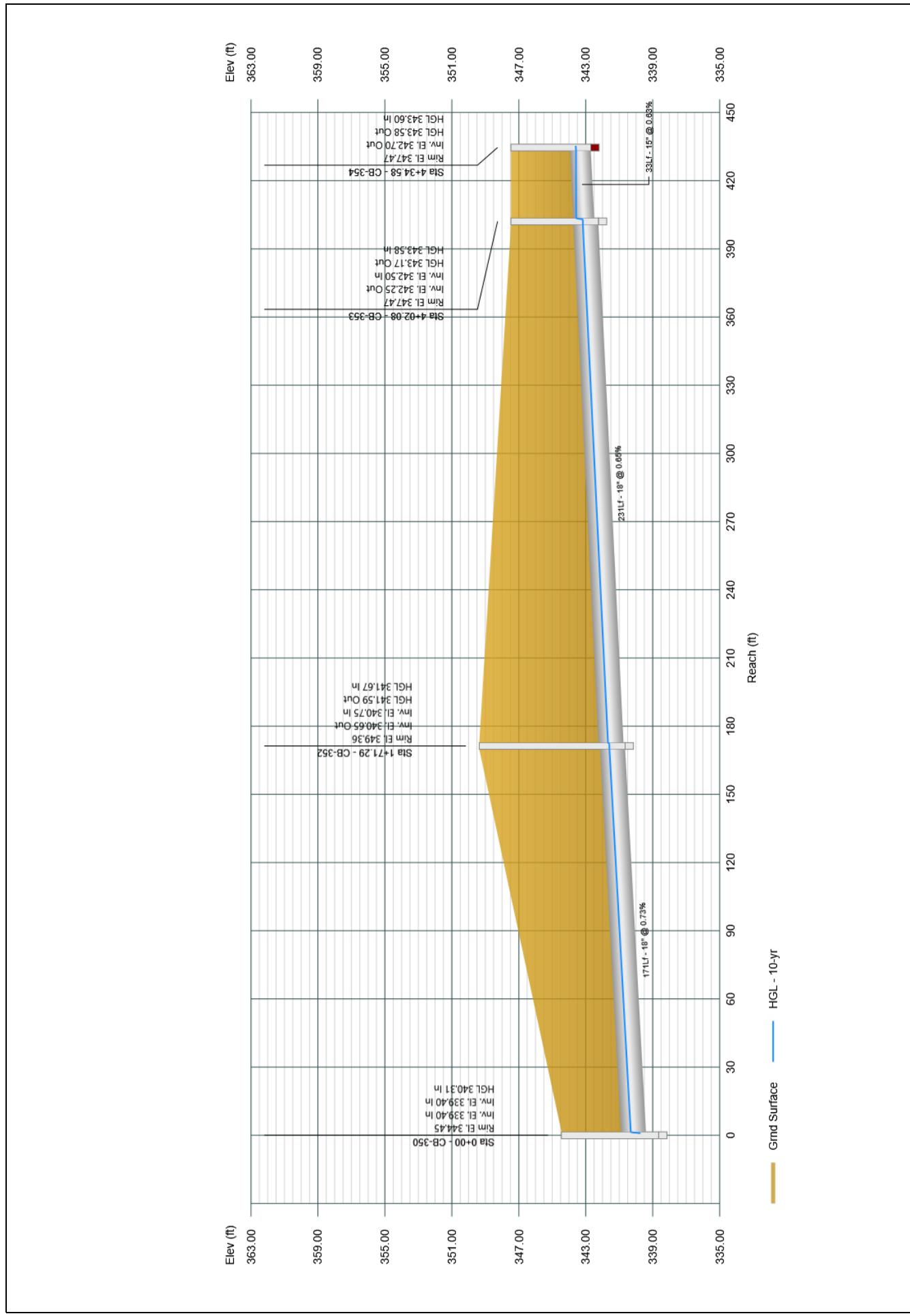


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

11-19-2024

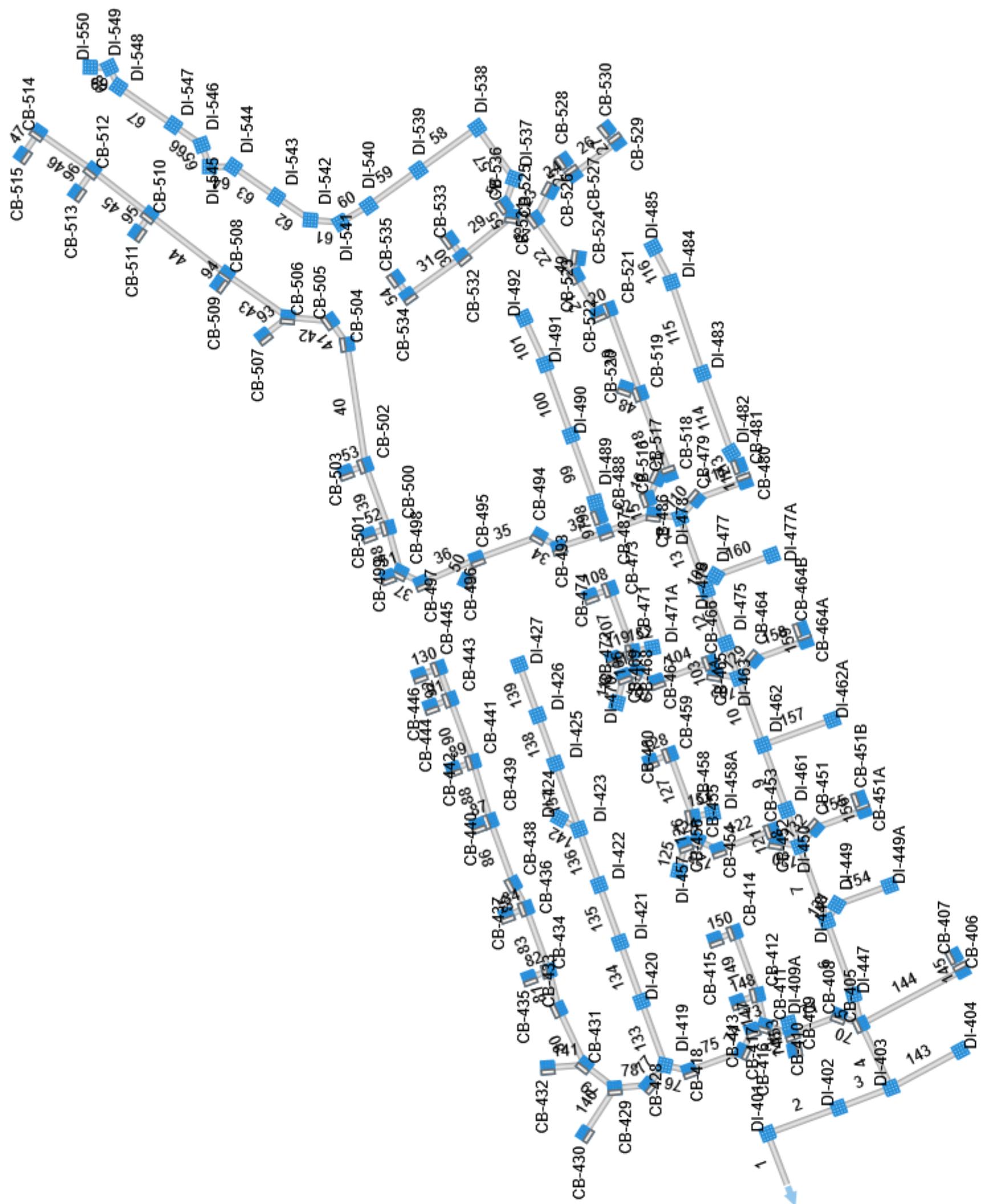


SYSTEM 400 – REPORTS AND PROFILES

Pearce Farm – CD Pkg 1
AGN23001

Plan View

Stormwater Studio 2024 v 3.0.0.35



Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-22-2024

Line ID	Length (ft)	Drng Area		Rationa		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
400-401	111.24	0.320	43.010	0.65	0.21	29.37	5.0	11.25	5.61	164.68	661.88	15.60	60	6.46	263.68	256.50	267.26	258.66	287.57	261.00	1
401-402	150.00	0.370	42.690	0.65	0.24	29.16	5.0	11.05	5.65	164.62	260.47	11.64	60	1.00	269.87	268.37	273.45	271.59	285.76	287.57	2
402-403	111.45	0.260	42.320	0.65	0.17	28.92	5.0	10.91	5.67	164.09	196.66	12.20	54	1.00	271.59	270.47	275.26	273.91	284.68	285.76	3
403-405	139.39	0.160	41.600	0.80	0.13	28.45	5.0	10.72	5.71	162.46	196.66	10.68	54	1.00	273.18	271.79	277.06	276.45	286.49	284.68	4
405-447	60.42	0.530	31.010	0.65	0.34	21.17	5.0	10.64	5.73	121.27	196.67	10.54	54	1.00	275.29	274.69	278.45	277.66	286.67	286.49	5
447-448	155.23	0.370	30.480	0.65	0.24	20.83	5.0	10.42	5.77	120.22	196.67	10.83	54	1.00	279.95	278.39	283.09	281.20	291.00	286.67	6
448-450	159.00	0.030	29.690	0.80	0.02	20.32	5.0	10.20	5.82	118.18	196.66	10.77	54	1.00	281.64	280.05	284.75	282.82	292.87	291.00	7
450-461	76.20	0.420	26.830	0.65	0.27	18.40	5.0	10.09	5.84	107.46	196.66	10.12	54	1.00	284.83	284.07	287.81	286.81	293.29	292.87	8
461-462	136.77	0.340	26.410	0.65	0.22	18.13	5.0	9.89	5.88	106.62	196.66	10.33	54	1.00	286.30	284.93	289.26	287.56	297.82	293.29	9
462-463	142.06	0.030	25.600	0.80	0.02	17.60	5.0	9.69	5.93	104.29	196.66	10.25	54	1.00	288.13	286.71	291.06	289.31	299.75	297.82	10
463-475	72.18	0.350	23.020	0.65	0.23	15.82	5.0	9.58	5.95	94.13	143.64	10.17	48	1.00	292.58	291.86	295.45	294.53	299.95	299.75	11
475-476	112.56	0.430	22.670	0.65	0.28	15.60	5.0	9.41	5.99	93.35	143.65	10.28	48	1.00	293.81	292.68	296.66	295.27	304.28	299.95	12
476-478	153.34	0.020	21.870	0.85	0.02	15.07	5.0	9.18	6.04	91.01	133.95	10.09	48	0.87	295.24	293.91	298.06	296.50	307.15	304.28	13
478-486	53.21	0.130	19.940	0.75	0.10	13.76	5.0	9.09	6.06	83.37	133.02	9.46	48	0.86	297.85	297.40	300.55	299.99	307.70	307.15	14
486-516	32.50	0.120	6.900	0.75	0.09	4.81	5.0	9.03	6.07	29.22	41.01	7.88	30	1.00	300.65	300.32	302.46	302.05	307.70	307.70	15
516-517	45.61	0.190	6.780	0.80	0.15	4.72	5.0	8.93	6.10	28.78	36.24	6.68	30	0.78	301.11	300.75	303.02	302.98	307.55	307.70	16
517-518	24.50	0.170	6.590	0.80	0.14	4.57	5.0	8.88	6.11	27.90	41.01	6.11	30	1.00	301.45	301.21	303.54	303.53	307.55	307.55	17
518-519	169.60	0.180	6.420	0.80	0.14	4.43	5.0	8.64	6.16	27.33	62.11	6.59	30	2.29	305.44	301.55	307.19	303.90	311.74	307.55	18
519-521	178.11	0.120	6.080	0.80	0.10	4.16	5.0	8.38	6.22	25.90	64.99	9.32	30	2.51	310.21	305.74	311.91	306.92	316.83	311.74	19
521-522	24.50	0.090	5.960	0.80	0.07	4.07	5.0	8.33	6.24	25.35	41.01	7.38	30	1.00	310.56	310.31	312.25	311.93	316.83	316.83	20
522-523	87.69	0.130	5.870	0.80	0.10	3.99	5.0	8.17	6.28	25.06	45.45	7.84	30	1.23	311.83	310.76	313.51	312.21	316.83	316.83	21
523-525	138.11	0.040	5.620	0.80	0.03	3.79	5.0	7.87	6.35	24.09	36.28	7.32	30	0.78	313.02	311.93	314.66	313.47	322.91	319.44	22

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 400.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-22-2024

Line ID	Length (ft)	Drng Area		Ratиона		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
525-526	63.62	0.020	0.810	0.85	0.02	0.58	5.0	5.74	6.95	4.02	9.64	3.18	18	0.84	314.55	315.39	315.37	323.07	322.91	23	
526-527	57.02	0.040	0.790	0.80	0.03	0.56	5.0	5.55	7.01	3.93	5.69	4.85	15	0.78	315.25	314.80	316.04	315.58	322.28	323.07	24
527-528	32.50	0.310	0.310	0.75	0.23	0.23	5.0	5.00	7.19	1.67	6.46	3.76	15	1.00	318.03	317.71	318.55	318.17	322.28	322.28	25
527-529	107.29	0.070	0.440	0.80	0.06	0.30	5.0	5.12	7.15	2.12	5.48	3.94	15	0.72	316.15	315.37	316.73	315.92	320.82	322.28	26
529-530	32.50	0.370	0.370	0.65	0.24	0.24	5.0	5.00	7.19	1.73	6.46	3.81	15	1.00	316.57	316.25	317.10	316.71	320.82	320.82	27
525-531	46.34	0.100	4.770	0.80	0.08	0.18	5.0	7.79	6.37	20.29	29.08	8.16	24	1.65	318.10	317.34	319.70	318.72	324.37	322.91	28
531-532	128.23	0.100	0.810	0.80	0.08	0.55	5.0	5.65	6.98	3.83	12.03	3.40	18	1.31	320.97	319.28	321.71	320.52	325.98	324.37	29
532-533	41.50	0.430	0.430	0.65	0.28	0.28	5.0	5.00	7.19	2.01	6.46	4.01	15	1.00	321.73	321.32	322.30	321.82	325.98	325.98	30
533-534	132.00	0.050	0.280	0.80	0.04	0.19	5.0	5.18	7.13	1.35	7.58	2.47	15	1.38	323.03	321.21	323.49	321.98	327.79	325.98	31
486-487	102.89	0.020	12.910	0.80	0.02	0.85	5.0	8.15	6.28	55.61	90.92	8.72	42	0.82	299.24	298.40	301.52	300.53	309.29	307.70	32
487-493	96.66	0.270	7.280	0.75	0.20	4.95	5.0	7.98	6.32	31.32	77.15	8.04	36	1.34	304.08	302.79	305.87	304.28	310.84	309.29	33
493-494	44.66	0.250	7.010	0.75	0.19	4.75	5.0	7.90	6.34	30.14	66.70	6.13	36	1.00	304.53	304.08	306.28	306.37	311.13	310.84	34
494-495	132.00	0.200	6.760	0.70	0.14	4.56	5.0	7.68	6.40	29.21	81.06	8.12	36	1.48	306.58	304.63	308.30	306.00	313.18	311.13	35
495-497	119.27	0.050	6.440	0.80	0.04	4.33	5.0	7.49	6.45	27.94	56.70	8.88	30	1.91	309.46	307.18	311.23	308.54	315.56	313.18	36
497-498	47.39	0.040	6.390	0.85	0.03	4.29	5.0	7.43	6.46	27.76	71.12	9.01	30	3.01	310.99	309.56	312.75	310.88	317.25	315.56	37
498-500	91.69	0.100	6.210	0.85	0.09	4.15	5.0	7.28	6.50	27.02	54.09	8.52	30	1.74	312.85	311.25	314.58	312.64	319.26	317.25	38
500-502	132.00	0.170	5.900	0.85	0.14	3.91	5.0	7.12	6.55	25.62	74.24	9.65	30	3.28	317.59	313.26	319.28	314.38	324.00	319.26	39
502-504	242.49	0.310	5.370	0.70	0.22	3.50	5.0	6.69	6.67	23.31	49.35	8.14	30	1.45	321.51	318.00	323.12	319.27	328.28	324.00	40
504-505	56.90	0.500	5.060	0.70	0.35	3.28	5.0	6.58	6.70	21.98	41.01	6.06	30	1.00	322.18	321.61	323.75	323.56	328.28	328.28	41
505-506	84.98	0.590	4.560	0.65	0.38	2.93	5.0	6.45	6.73	19.73	67.72	8.25	30	2.73	324.60	322.28	326.08	323.34	330.61	328.28	42
506-508	148.69	0.670	3.700	0.65	0.44	2.36	5.0	6.22	6.80	16.04	33.92	8.26	24	2.25	328.46	325.11	329.87	326.14	334.06	330.61	43
508-510	192.67	0.530	2.430	0.65	0.34	1.56	5.0	5.86	6.91	10.80	32.03	4.60	24	2.00	332.42	328.56	333.59	330.46	337.86	334.06	44

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 400.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-22-2024

Line ID	Length (ft)	Drng Area		Ratиона		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
510-512	143.66	0.660	1.410	0.65	0.92	5.0	5.56	7.01	6.47	14.27	6.41	18	1.85	335.51	332.86	336.49	333.60	340.57	337.86	45	
512-514	131.10	0.140	0.300	0.75	0.11	0.23	5.0	5.25	7.10	1.60	12.93	2.42	15	4.01	341.07	335.82	341.58	336.91	345.87	340.57	46
514-515	54.75	0.160	0.160	0.75	0.12	0.12	5.0	5.00	7.19	0.86	6.46	2.11	15	1.00	341.72	341.17	342.09	341.80	345.97	345.87	47
519-520	31.52	0.160	0.160	0.80	0.13	0.13	5.0	5.00	7.19	0.92	8.68	2.39	15	1.81	308.06	307.49	308.44	308.01	312.31	311.74	48
523-524	35.70	0.120	0.120	0.80	0.10	0.10	5.0	5.00	7.19	0.69	9.30	3.28	15	2.07	315.93	315.19	316.26	315.44	320.18	319.44	49
495-496	48.11	0.120	0.120	0.75	0.09	0.09	5.0	5.00	7.19	0.65	8.01	3.10	15	1.54	309.67	308.93	309.99	309.18	313.92	313.18	50
498-499	26.50	0.140	0.140	0.75	0.11	0.11	5.0	5.00	7.19	0.75	6.46	1.04	15	1.00	313.00	312.74	313.61	313.62	317.25	317.25	51
500-501	41.50	0.210	0.210	0.75	0.16	0.16	5.0	5.00	7.19	1.13	6.46	2.18	15	1.00	315.01	314.60	315.44	315.42	319.26	319.26	52
502-503	41.50	0.360	0.360	0.75	0.27	0.27	5.0	5.00	7.19	1.94	6.46	3.38	15	1.00	319.75	319.34	320.31	319.97	324.00	324.00	53
534-535	41.50	0.230	0.230	0.65	0.15	0.15	5.0	5.00	7.19	1.07	6.46	3.32	15	1.00	323.54	323.13	323.95	323.49	327.79	327.79	54
531-536	26.50	0.400	0.3860	0.65	0.26	0.25	5.0	7.73	6.39	16.32	22.62	5.19	24	1.00	318.47	318.20	320.46	320.33	324.37	324.37	55
536-537	55.99	0.140	0.3460	0.80	0.11	0.229	5.0	7.59	6.42	14.74	20.50	4.75	24	0.82	319.03	318.57	320.91	320.71	324.13	324.37	56
537-538	124.82	0.490	3.320	0.65	0.32	0.18	5.0	7.39	6.48	14.14	34.29	5.44	24	2.30	322.00	319.13	323.33	321.09	327.10	324.13	57
538-539	144.17	0.460	2.830	0.65	0.30	0.86	5.0	7.08	6.56	12.23	25.42	5.19	24	1.26	323.92	322.10	325.16	323.75	329.02	327.10	58
539-540	121.40	0.190	2.370	0.65	0.12	1.57	5.0	6.80	6.64	10.38	25.29	6.36	24	1.25	325.53	324.02	326.68	324.96	330.63	329.02	59
540-541	64.52	0.110	2.180	0.70	0.08	1.44	5.0	6.66	6.68	9.62	26.20	6.11	24	1.34	326.50	325.63	327.60	326.56	331.50	330.63	60
541-542	60.48	0.390	2.070	0.65	0.25	1.36	5.0	6.52	6.72	9.16	11.61	6.60	18	1.22	327.74	327.00	328.90	328.05	332.34	331.50	61
542-543	81.65	0.280	1.680	0.65	0.18	1.11	5.0	6.33	6.77	7.52	12.55	4.98	18	1.43	329.01	327.84	330.05	329.34	333.61	332.34	62
543-544	104.45	0.310	1.400	0.65	0.20	0.93	5.0	6.10	6.84	6.35	13.77	4.62	18	1.72	330.90	329.11	331.87	330.40	335.50	333.61	63
544-545	47.24	0.060	1.090	0.80	0.05	0.73	5.0	6.00	6.87	5.00	16.18	4.08	18	2.37	332.12	331.00	332.98	332.18	336.71	335.50	64
545-546	46.08	0.270	1.030	0.65	0.18	0.68	5.0	5.85	6.91	4.70	9.29	4.87	18	0.78	332.22	333.41	333.01	337.09	336.71	335.50	65
546-547	68.30	0.420	0.760	0.65	0.27	0.50	5.0	5.69	6.96	3.51	9.23	5.49	15	2.04	334.23	332.84	334.98	333.41	338.58	337.09	66

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 400.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35
Project Name: Storm System 400
11-22-2024

Project File: Storm System 400.sws

Line ID	Length (ft)	Drng Area		Rationa		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
547-548	133.03	0.110	0.340	0.70	0.08	0.23	5.0	5.30	7.09	1.64	9.39	2.55	15	2.11	337.14	334.33	335.28	341.49	338.58	67	
548-549	42.30	0.030	0.230	0.80	0.02	0.15	5.0	5.17	7.13	1.10	10.00	3.91	15	2.40	338.26	337.24	338.68	337.55	342.62	341.49	68
549-550	38.33	0.200	0.200	0.65	0.13	0.13	5.0	5.00	7.19	0.93	6.46	3.18	15	1.00	338.74	338.36	339.13	338.70	342.99	342.62	69
405-408	46.43	0.120	0.400	0.80	0.10	0.45	5.0	7.94	6.33	40.82	66.69	7.44	36	1.00	276.87	276.40	278.90	278.75	286.89	286.49	70
408-409	101.07	0.150	0.280	0.75	0.11	0.35	5.0	7.76	6.38	40.50	66.69	7.06	36	1.00	277.88	276.87	279.91	279.51	289.66	286.89	71
409-411	55.06	0.050	0.490	0.85	0.04	0.87	5.0	7.66	6.41	37.59	66.69	8.09	36	1.00	278.53	277.98	280.48	279.78	289.22	289.66	72
411-416	26.50	0.190	0.500	0.65	0.12	4.89	5.0	7.61	6.42	31.40	66.69	5.28	36	1.00	278.89	278.63	281.11	281.15	289.22	289.22	73
416-417	45.61	0.150	0.860	0.70	0.11	4.77	5.0	7.52	6.44	30.72	66.70	6.13	36	1.00	279.45	278.99	281.22	281.35	289.34	289.22	74
417-418	112.50	0.110	0.710	0.75	0.08	4.66	5.0	7.29	6.50	30.32	60.48	6.48	36	0.82	280.48	279.55	282.23	281.59	290.58	289.34	75
418-419	49.73	0.350	0.600	0.65	0.23	4.58	5.0	7.20	6.53	29.90	66.70	6.45	36	1.00	281.07	280.58	282.82	282.61	291.00	290.58	76
419-428	51.49	0.110	0.430	0.70	0.08	2.52	5.0	7.08	6.56	16.53	41.01	6.47	30	1.00	281.99	281.47	283.35	282.70	290.53	291.00	77
428-429	66.72	0.320	0.75	0.24	0.44	5.0	6.94	6.60	16.13	41.02	6.47	30	1.00	282.75	282.09	284.10	283.29	289.61	290.53	78	
429-431	74.60	0.140	0.2750	0.75	0.11	2.02	5.0	6.80	6.63	13.38	60.79	6.95	30	2.20	285.25	283.61	286.47	284.52	291.75	289.61	79
431-433	121.93	0.090	0.420	0.75	0.07	1.77	5.0	6.62	6.69	11.83	40.50	7.99	24	3.21	290.16	286.25	291.38	287.05	295.76	291.75	80
433-434	79.15	0.160	0.230	0.75	0.12	1.70	5.0	6.47	6.73	11.45	33.29	7.09	24	2.17	291.98	290.26	293.17	291.16	297.57	295.76	81
434-435	41.50	0.180	0.180	0.75	0.14	0.14	5.0	5.00	7.19	0.97	6.46	3.21	15	1.00	293.32	292.91	293.72	293.25	297.57	297.57	82
434-436	132.00	0.070	0.990	0.75	0.05	1.45	5.0	6.23	6.80	9.84	33.73	7.00	24	2.22	295.02	292.08	296.13	292.87	300.62	297.57	83
436-437	41.50	0.260	0.260	0.75	0.20	0.20	5.0	5.00	7.19	1.40	6.46	3.02	15	1.00	296.37	295.96	296.84	296.50	300.62	300.62	84
436-438	54.30	0.220	1.660	0.75	0.17	1.20	5.0	6.13	6.83	8.19	36.32	6.42	24	2.58	296.52	295.12	297.53	295.86	302.02	300.62	85
438-439	133.21	0.140	1.440	0.75	0.11	1.03	5.0	5.87	6.91	7.14	15.27	6.79	18	2.11	300.00	297.18	301.02	297.94	305.10	302.02	86
439-440	26.50	0.180	0.180	0.60	0.11	0.11	5.0	5.00	7.19	0.78	6.46	1.02	15	1.00	300.85	300.59	301.49	305.10	305.10	305.10	87
439-441	122.20	0.160	1.120	0.75	0.12	0.82	5.0	5.61	6.99	5.74	15.51	6.32	18	2.18	302.77	300.10	303.68	300.77	307.78	305.10	88

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 400.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35
Project Name: Storm System 400
11-22-2024

Project File: Storm System 400.sws

Line ID	Length (ft)	Drng Area		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
441-442	41.50	0.230	0.230	0.75	0.17	0.17	5.0	5.00	7.19	1.24	6.46	1.89	15	1.00	303.53	303.12	304.05	307.78	89
441-443	132.00	0.070	0.730	0.75	0.05	0.53	5.0	5.31	7.08	3.74	9.65	5.84	15	2.23	305.98	303.03	306.75	303.59	90
443-444	41.50	0.110	0.110	0.75	0.08	0.08	5.0	5.00	7.19	0.59	6.46	0.94	15	1.00	306.58	306.17	307.09	307.09	91
443-445	66.00	0.170	0.550	0.75	0.13	0.39	5.0	5.15	7.14	2.81	9.78	5.23	15	2.30	307.60	306.08	308.27	306.57	92
506-507	61.28	0.270	0.270	0.70	0.19	0.19	5.0	5.00	7.19	1.36	6.46	2.37	15	1.00	326.46	325.85	326.93	326.72	93
508-509	24.50	0.600	0.600	0.60	0.36	0.36	5.0	5.00	7.19	2.59	6.46	4.27	15	1.00	329.81	329.57	330.46	330.16	94
510-511	43.73	0.490	0.490	0.60	0.29	0.29	5.0	5.00	7.19	2.11	6.46	4.08	15	1.00	333.61	333.17	334.19	333.69	95
512-513	54.58	0.450	0.450	0.60	0.27	0.27	5.0	5.00	7.19	1.94	6.46	4.00	15	1.00	336.41	335.86	336.97	336.36	96
487-488	32.50	0.090	5.610	0.85	0.08	0.88	5.0	5.89	6.90	26.81	66.70	3.83	36	1.00	299.66	299.34	302.52	302.48	97
488-489	29.90	4.390	5.520	0.70	3.07	3.81	5.0	5.83	6.92	26.35	41.01	6.00	30	1.00	300.46	300.16	302.42	302.44	98
489-490	141.44	0.360	1.130	0.65	0.23	0.73	5.0	5.53	7.01	5.15	15.87	3.89	18	2.28	304.79	301.56	305.66	303.20	99
490-491	150.00	0.300	0.770	0.65	0.20	0.50	5.0	5.21	7.12	3.56	10.87	6.09	15	2.83	309.39	305.14	310.15	305.65	100
491-492	100.48	0.470	0.470	0.65	0.31	0.31	5.0	5.00	7.19	2.20	12.91	5.57	15	4.00	313.51	309.49	314.10	309.86	101
463-465	48.16	0.110	1.930	0.70	0.08	1.32	5.0	6.20	6.81	8.98	22.62	5.67	24	1.00	294.60	294.11	295.66	295.07	102
465-466	24.50	0.170	1.820	0.70	0.12	1.24	5.0	6.14	6.83	8.48	22.62	5.44	24	1.00	295.03	294.79	296.06	295.74	103
466-467	112.50	0.050	1.650	0.75	0.04	1.12	5.0	5.90	6.90	7.75	28.35	6.01	24	1.57	296.90	295.13	297.88	295.90	104
467-468	45.96	0.030	1.600	0.80	0.02	1.09	5.0	5.78	6.94	7.53	22.62	5.36	24	1.00	297.46	297.00	298.43	297.87	105
468-471	40.45	0.100	1.190	0.85	0.09	0.82	5.0	5.66	6.97	5.68	10.50	5.33	18	1.00	299.32	298.92	300.23	299.76	106
471-473	132.00	0.060	0.350	0.80	0.05	0.24	5.0	5.17	7.13	1.69	6.46	3.89	15	1.00	302.92	301.60	303.43	302.04	107
473-474	41.50	0.290	0.290	0.65	0.19	0.19	5.0	5.00	7.19	1.35	6.46	3.56	15	1.00	303.43	303.90	303.43	307.68	108
476-477	33.28	0.020	0.370	0.85	0.02	0.24	5.0	5.48	7.03	1.72	6.46	2.71	15	1.00	297.58	297.24	298.10	298.09	109
478-479	48.37	0.100	1.910	0.80	0.08	1.29	5.0	6.41	6.75	8.72	22.62	3.10	24	1.00	297.92	297.44	299.44	299.42	110

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 400.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-22-2024

Line ID	Length (ft)	Drng Area		Ratиона		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Size (in)	Slope (%)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)						Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
479-480	103.10	0.110	1.810	0.80	0.09	1.21	5.0	6.13	6.83	8.28	9.93	6.08	18	0.89	299.35	298.42	300.44	299.49	304.38	306.27	111		
480-481	32.50	0.190	1.700	0.75	0.14	1.12	5.0	6.04	6.86	7.71	9.30	4.98	18	0.78	299.70	299.45	300.85	300.77	304.38	304.38	112		
481-482	30.78	0.420	1.510	0.65	0.27	0.98	5.0	5.99	6.87	6.74	21.18	6.94	18	4.07	301.05	299.80	302.04	300.49	305.64	304.38	113		
482-483	167.06	0.470	1.090	0.65	0.31	0.71	5.0	5.64	6.98	4.94	16.24	6.20	18	2.39	305.15	301.15	306.00	301.75	309.66	305.64	114		
483-484	191.26	0.170	0.620	0.65	0.11	0.40	5.0	5.20	7.12	2.87	10.55	5.63	15	2.67	310.50	305.40	311.18	305.85	314.86	309.66	115		
484-485	77.55	0.450	0.450	0.65	0.29	0.29	5.0	5.00	7.19	2.10	9.84	4.83	15	2.32	312.40	310.60	312.98	311.02	316.63	314.86	116		
488-469	26.50	0.160	0.380	0.65	0.10	0.25	5.0	5.23	7.11	1.76	6.46	3.80	15	1.00	298.68	298.42	299.21	298.90	304.35	304.35	117		
469-470	54.24	0.220	0.220	0.65	0.14	0.14	5.0	5.00	7.19	1.03	6.46	2.39	15	1.00	299.33	298.78	299.73	299.37	303.58	304.35	118		
471-472	41.50	0.490	0.490	0.65	0.32	0.32	5.0	5.00	7.19	2.29	6.46	4.18	15	1.00	300.77	300.36	301.38	300.90	305.02	306.58	119		
450-452	46.93	0.120	2.190	0.75	0.09	1.45	5.0	6.19	6.81	9.90	22.62	5.87	24	1.00	287.71	287.24	288.82	288.25	293.66	292.87	120		
452-453	24.50	0.120	2.070	0.75	0.09	1.36	5.0	6.13	6.83	9.31	22.61	5.62	24	1.00	288.05	287.81	289.13	288.82	293.66	293.66	121		
453-454	113.50	0.110	1.950	0.75	0.08	1.27	5.0	5.88	6.91	8.79	27.15	6.17	24	1.44	289.79	288.15	290.84	288.99	295.36	293.66	122		
454-455	45.96	0.030	1.840	0.80	0.02	1.19	5.0	5.76	6.94	8.26	22.62	5.52	24	1.00	290.35	289.89	291.37	290.80	297.01	295.36	123		
455-456	26.50	0.680	0.870	0.65	0.44	0.58	5.0	5.23	7.11	4.16	10.50	4.74	18	1.00	291.11	290.85	291.89	291.56	297.01	297.01	124		
456-457	53.58	0.190	0.190	0.75	0.14	0.14	5.0	5.00	7.19	1.02	6.46	3.31	15	1.00	291.90	291.36	292.30	291.71	296.15	297.01	125		
455-458	46.99	0.100	0.940	0.85	0.09	0.58	5.0	5.62	6.99	4.07	10.50	4.79	18	1.00	292.36	291.89	293.13	292.58	299.37	297.01	126		
458-459	132.00	0.090	0.590	0.80	0.07	0.40	5.0	5.14	7.14	2.83	5.68	4.38	15	0.77	295.78	294.76	296.45	295.39	300.54	299.37	127		
459-460	41.50	0.500	0.500	0.65	0.33	0.33	5.0	5.00	7.19	2.34	6.46	3.53	15	1.00	296.29	295.88	296.90	296.60	300.54	300.54	128		
463-464	48.16	0.090	0.620	0.80	0.07	0.43	5.0	5.50	7.02	3.04	6.46	2.83	15	1.00	291.56	291.08	292.47	292.41	299.01	299.75	129		
445-446	41.50	0.380	0.380	0.70	0.27	0.27	5.0	5.00	7.19	1.91	6.46	3.94	15	1.00	308.11	307.70	308.66	308.19	312.36	312.36	130		
448-449	38.00	0.010	0.420	0.75	0.01	0.27	5.0	5.46	7.04	1.93	6.46	3.95	15	1.00	284.45	285.01	284.07	284.57	291.34	291.00	131		
450-451	46.93	0.080	0.640	0.75	0.06	0.44	5.0	5.46	7.04	3.09	6.46	2.75	15	1.00	285.36	284.89	286.34	286.27	292.42	292.87	132		

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 400.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-22-2024

Line ID	Length (ft)	Drng Area		Rationa		C x A		Tc		Intensity	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)	Up (ft)	Dn (ft)				Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
419-420	134.83	0.440	2.820	0.65	0.29	1.83	5.0	6.52	6.71	12.31	39.32	8.03	24	3.02	290.08	286.00	291.32	286.83	295.18	291.00	133
420-421	124.24	0.4420	2.380	0.65	0.27	1.55	5.0	6.29	6.78	10.49	32.56	7.00	24	2.07	292.75	290.18	293.90	291.02	297.85	295.18	134
421-422	121.52	0.350	1.960	0.65	0.23	1.27	5.0	6.06	6.85	8.73	33.19	6.67	24	2.15	295.47	292.85	296.51	293.60	300.47	297.85	135
422-423	117.45	0.390	1.610	0.65	0.25	1.05	5.0	5.82	6.92	7.24	15.10	6.76	18	2.07	298.40	295.97	299.42	296.74	303.00	300.47	136
423-425	138.12	0.310	1.150	0.65	0.20	0.75	5.0	5.53	7.02	5.24	15.15	4.05	18	2.08	301.37	298.50	302.24	299.81	305.97	303.00	137
425-426	102.40	0.400	0.840	0.65	0.26	0.55	5.0	5.29	7.09	3.87	15.41	3.64	18	2.15	303.67	301.47	304.42	302.53	308.17	305.97	138
426-427	106.98	0.440	0.440	0.65	0.29	0.29	5.0	5.00	7.19	2.06	9.47	4.77	15	2.15	306.23	303.92	306.80	304.34	310.48	308.17	139
429-430	108.52	0.250	0.250	0.75	0.19	0.19	5.0	5.00	7.19	1.35	5.49	2.31	15	0.72	284.49	283.70	284.95	284.64	288.74	289.61	140
431-432	74.10	0.190	0.190	0.75	0.14	0.14	5.0	5.00	7.19	1.02	6.46	3.33	15	1.00	287.24	286.50	287.65	286.85	291.49	291.75	141
423-424	44.33	0.070	0.070	0.65	0.05	0.05	5.0	5.00	7.19	0.33	10.29	1.20	15	2.54	299.87	298.75	300.10	299.91	304.12	303.00	142
403-404	156.29	0.460	0.460	0.65	0.30	0.30	5.0	5.00	7.19	2.15	5.94	4.08	15	0.85	278.52	277.20	279.11	277.72	282.77	284.68	143
405-406	227.32	0.230	1.030	0.80	0.18	0.70	5.0	5.10	7.15	5.04	9.01	3.83	18	0.74	278.86	277.18	279.72	279.02	283.78	286.49	144
406-407	32.50	0.800	0.800	0.65	0.52	0.52	5.0	5.00	7.19	3.74	10.50	3.47	18	1.00	279.28	278.96	280.02	280.07	283.78	283.78	145
409-410	32.93	0.280	0.280	0.80	0.22	0.22	5.0	5.00	7.19	1.61	6.46	3.71	15	1.00	283.41	283.08	283.92	283.54	288.16	289.66	146
411-412	63.18	0.100	1.390	0.80	0.08	0.93	5.0	5.45	7.04	6.57	12.75	6.01	18	1.47	285.14	284.20	286.11	285.02	290.15	289.22	147
412-413	41.50	0.520	0.520	0.65	0.34	0.34	5.0	5.00	7.19	2.43	6.46	3.10	15	1.00	285.90	285.49	286.53	286.51	290.15	290.15	148
412-414	132.00	0.100	0.770	0.80	0.08	0.52	5.0	5.13	7.14	3.68	9.11	5.67	15	1.99	288.03	285.40	288.79	285.97	292.79	290.15	149
414-415	41.50	0.670	0.670	0.65	0.44	0.44	5.0	5.00	7.19	3.13	6.46	4.63	15	1.00	288.54	288.13	289.25	288.77	292.79	292.79	150
458-458A	39.76	0.250	0.40	0.10	0.10	0.10	5.0	5.00	7.19	0.72	6.46	1.41	15	1.00	293.00	292.61	293.42	293.43	297.25	299.37	151
471-471A	39.76	0.250	0.250	0.70	0.18	0.18	5.0	5.00	7.19	1.26	6.46	1.89	15	1.00	300.07	299.67	300.61	300.62	304.32	306.58	152
409-409A	20.90	0.360	0.40	0.14	0.14	0.14	5.0	5.00	7.19	1.03	6.46	3.21	15	1.00	284.23	284.02	284.63	284.38	288.48	289.66	153
Line 154	112.05	0.410	0.410	0.65	0.27	0.27	5.0	5.00	7.19	1.92	5.53	3.83	15	0.73	285.37	284.55	285.92	285.07	289.62	291.34	154

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.

Project File: Storm System 400.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-22-2024

Line ID	Length (ft)	Drng Area		C x A		Tc		Intensity	Total Q	Capacity	Velocity	Line		Invert Elev		HGL Elev		Surface Elev		Line No	
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)					Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)		
Line 155	102.96	0.100	0.560	0.80	0.08	0.38	5.0	5.09	7.16	2.71	5.80	3.39	15	0.81	286.29	285.46	286.94	286.43	290.88	292.42	155
Line 156	24.50	0.460	0.460	0.65	0.30	0.30	5.0	5.00	7.19	2.15	6.46	4.05	15	1.00	286.63	286.39	287.22	286.92	290.88	290.88	156
Line 157	146.76	0.470	0.470	0.65	0.31	0.31	5.0	5.00	7.19	2.20	5.76	4.06	15	0.80	291.57	290.40	292.16	290.95	295.82	297.82	157
Line 158	108.06	0.110	0.530	0.80	0.09	0.36	5.0	5.09	7.16	2.58	5.49	4.19	15	0.72	292.45	291.66	293.09	292.28	297.04	299.01	158
Line 159	24.50	0.420	0.420	0.65	0.27	0.27	5.0	5.00	7.19	1.96	6.46	3.19	15	1.00	292.79	292.55	293.35	293.26	297.04	297.04	159
Line 160	119.36	0.350	0.350	0.65	0.23	0.23	5.0	5.00	7.19	1.63	5.89	3.74	15	0.83	298.67	297.68	299.18	298.13	302.92	304.81	160

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.s.

Project File: Storm System 400.sws

Energy Grade Line Calculations

Project Name: Storm System 400

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)				
1	60	164.68	256.50	2.16‡	8.13	258.66	20.26	6.38	262.58	111.24	263.68	3.58 ²	15.05	267.26	10.94	1.86	269.13	0.013	6.542	267.26	269.13	0.00
2	60	164.62	288.37	3.21‡	13.33	271.59	12.35	2.37	273.81	150.00	269.87	3.58 ²	15.05	273.45	10.94	1.86	275.31	0.013	1.500	273.45	275.31	0.00
3	54	164.09	270.47	3.43‡	13.02	273.91	12.60	2.47	276.32	111.45	271.59	3.67 ²	13.90	275.26	11.80	2.17	277.43	0.013	1.110	275.26	277.43	0.00
4	54	162.46	271.79	4.50	15.90	276.45	10.22	1.62	278.08	139.39	273.18	3.88	14.58	277.06	11.14	1.93	278.99	0.013	0.915	277.16	279.09	0.10
5	54	121.27	274.69	2.97‡	11.12	277.66	10.90	1.85	279.45	60.42	275.29	3.16 ²	11.93	278.45	10.17	1.61	280.06	0.013	0.606	278.45	280.06	0.00
6	54	120.22	278.39	2.80‡	10.42	281.20	11.53	2.07	283.13	155.23	279.95	3.15 ²	11.87	283.09	10.13	1.59	284.69	0.013	1.552	283.09	284.69	0.00
7	54	118.18	280.05	2.77‡	10.28	282.82	11.50	2.05	285.02	159.00	281.64	3.12 ²	11.76	284.75	10.05	1.57	286.32	0.013	1.302	284.75	286.32	0.00
8	54	107.46	284.07	2.74‡	10.14	286.81	10.60	1.75	288.49	76.20	284.83	2.97 ²	11.15	287.81	9.64	1.44	289.25	0.013	0.762	287.81	289.25	0.00
9	54	106.62	284.93	2.63‡	9.65	287.56	11.05	1.90	289.53	136.77	286.30	2.96 ²	11.10	289.26	9.60	1.43	290.70	0.013	1.167	289.26	290.70	0.00
10	54	104.29	286.71	2.60‡	9.50	289.31	10.98	1.87	291.19	142.06	288.13	2.93 ²	10.96	291.06	9.51	1.41	292.47	0.013	1.284	291.06	292.47	0.00
11	48	94.13	291.86	2.67‡	8.90	294.53	10.58	1.74	296.21	72.18	292.58	2.87 ²	9.65	295.45	9.76	1.48	296.93	0.013	0.722	295.45	296.93	0.00
12	48	93.35	292.88	2.59‡	8.61	295.27	10.85	1.83	297.27	112.56	293.81	2.86 ²	9.61	296.66	9.72	1.47	298.13	0.013	0.864	296.66	298.13	0.00
13	48	91.01	293.91	2.59‡	8.61	296.50	10.57	1.74	298.45	153.34	295.24	2.82 ²	9.47	298.06	9.61	1.43	299.50	0.013	1.043	298.06	299.50	0.00
14	48	83.37	297.40	2.59‡	8.61	299.99	9.69	1.46	301.42	53.21	297.85	2.70 ²	9.03	300.55	9.24	1.33	301.88	0.013	0.456	300.55	301.88	0.00
15	30	29.22	300.32	1.73‡	3.62	302.05	8.06	1.01	303.05	32.50	300.65	1.81 ²	3.80	302.46	7.69	0.92	303.38	0.013	0.325	302.46	303.38	0.00
16	30	28.78	300.75	2.23	4.62	302.98	6.22	0.60	303.58	45.61	301.11	1.91	4.03	303.02	7.14	0.79	303.81	0.013	0.229	303.02	303.81	0.06
17	30	27.90	301.21	2.33	4.76	303.53	5.86	0.53	304.07	24.50	301.45	2.09	4.39	303.54	6.36	0.63	304.17	0.013	0.104	303.59	304.21	0.04
18	30	27.33	301.55	2.35	4.78	303.90	5.71	0.51	304.40	169.60	305.44	1.75 ²	3.66	307.19	7.46	0.87	308.05	0.013	0.649	307.19	308.05	0.00
19	30	25.90	305.74	1.18‡	2.28	306.92	11.36	2.01	308.34	178.11	310.21	1.70 ²	3.56	311.91	7.28	0.82	312.74	0.013	4.394	311.91	312.74	0.00
20	30	25.35	310.31	1.61‡	3.35	311.93	7.57	0.89	312.90	24.50	310.56	1.69	3.53	312.25	7.19	0.80	313.05	0.013	0.152	312.30	313.10	0.05
21	30	25.06	310.76	1.45‡	2.95	312.21	8.50	1.12	313.26	87.69	311.83	1.67 ²	3.49	313.51	7.18	0.80	314.31	0.013	1.053	313.51	314.31	0.00
22	30	24.09	311.93	1.54‡	3.17	313.47	7.59	0.90	314.46	138.11	313.02	1.64 ²	3.41	314.66	7.06	0.77	315.43	0.013	0.973	314.66	315.43	0.00

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 400.sws

Energy Grade Line Calculations

Project Name: Storm System 400

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)				
23	18	4.02	314.02	1.36	1.68	315.37	2.39	0.09	315.46	63.62	314.55	0.84	1.01	315.39	3.97	0.24	315.63	0.013	0.170	315.40	315.65	0.02
24	15	3.93	314.80	0.77‡	0.80	315.58	4.93	0.38	315.95	57.02	315.25	0.80	0.83	316.04	4.76	0.35	316.39	0.013	0.443	316.09	316.44	0.05
25	15	1.67	317.71	0.46‡	0.41	318.17	4.03	0.25	318.41	32.50	318.03	0.52‡	0.48	318.55	3.48	0.19	318.74	0.013	0.325	318.55	318.74	0.00
26	15	2.12	315.37	0.55‡	0.52	315.92	4.11	0.26	316.46	107.29	316.15	0.58‡	0.56	316.73	3.78	0.22	316.95	0.013	0.486	316.73	316.95	0.00
27	15	1.73	316.25	0.47‡	0.42	316.71	4.10	0.26	316.97	32.50	316.57	0.53‡	0.49	317.10	3.52	0.19	317.29	0.013	0.316	317.10	317.29	0.00
28	24	20.29	317.34	1.38‡	2.31	318.72	8.78	1.20	319.82	46.34	318.10	1.60‡	2.69	319.70	7.55	0.89	320.58	0.013	0.766	319.70	320.58	0.00
29	18	3.83	319.28	1.24	1.56	320.52	2.45	0.09	320.62	128.23	320.97	0.75‡	0.88	321.71	4.36	0.30	322.01	0.013	1.390	321.71	322.01	0.00
30	15	2.01	321.32	0.51‡	0.47	321.82	4.31	0.29	322.10	41.50	321.73	0.57‡	0.54	322.30	3.71	0.21	322.51	0.013	0.408	322.30	322.51	0.00
31	15	1.35	321.21	0.77	0.79	321.98	1.70	0.04	322.02	132.00	323.03	0.47‡	0.42	323.49	3.25	0.16	323.65	0.013	1.633	323.49	323.65	0.00
32	42	55.61	298.40	2.13‡	6.13	300.53	9.07	1.28	302.08	102.89	299.24	2.28‡	6.65	301.52	8.36	1.09	302.61	0.013	0.527	301.52	302.61	0.00
33	36	31.32	302.79	1.49‡	3.51	304.28	8.93	1.24	305.37	96.66	304.08	1.78‡	4.38	305.87	7.15	0.79	306.66	0.013	1.293	305.87	306.66	0.00
34	36	30.14	304.98	2.28	5.78	306.37	5.22	0.42	306.79	44.66	304.53	1.75‡	4.28	306.28	7.04	0.77	307.05	0.013	0.259	306.28	307.05	0.00
35	36	29.21	304.63	1.37‡	3.15	306.00	9.28	1.34	307.18	132.00	306.58	1.72‡	4.20	308.30	6.96	0.75	309.05	0.013	1.873	308.30	309.05	0.00
36	30	27.94	307.18	1.36‡	2.73	308.54	10.23	1.63	309.83	119.27	309.46	1.77‡	3.71	311.23	7.54	0.88	312.11	0.013	2.280	311.23	312.11	0.00
37	30	27.76	309.56	1.32‡	2.64	310.88	10.52	1.72	312.30	47.39	310.99	1.76‡	3.69	312.75	7.51	0.88	313.62	0.013	1.324	312.75	313.62	0.00
38	30	27.02	311.25	1.39‡	2.81	312.64	9.62	1.44	313.93	91.69	312.85	1.74‡	3.64	314.58	7.42	0.86	315.44	0.013	1.513	314.58	315.44	0.00
39	30	25.62	313.26	1.12‡	2.12	314.38	12.06	2.26	315.79	132.00	317.59	1.69‡	3.54	319.28	7.25	0.82	320.09	0.013	4.302	319.28	320.09	0.00
40	30	23.31	318.00	1.27‡	2.50	319.27	9.33	1.35	320.40	242.49	321.51	1.61‡	3.35	323.12	6.96	0.75	323.88	0.013	3.477	323.12	323.88	0.00
41	30	21.98	321.61	1.95	4.11	323.56	5.34	0.44	324.01	56.90	322.18	1.57‡	3.24	323.75	6.79	0.72	324.46	0.013	0.456	323.75	324.46	0.00
42	30	19.73	322.28	1.06‡	1.97	323.34	10.01	1.56	324.57	84.98	324.60	1.48‡	3.04	326.08	6.50	0.66	326.74	0.013	2.166	326.08	326.74	0.00
43	24	16.04	325.11	1.03‡	1.64	326.14	9.79	1.49	327.23	148.69	328.46	1.42‡	2.38	329.87	6.73	0.70	330.58	0.013	3.345	329.87	330.58	0.00
44	24	10.80	328.56	1.90	3.08	330.46	3.50	0.19	330.65	192.67	332.42	1.16‡	1.90	333.59	5.69	0.50	334.09	0.013	3.440	333.59	334.09	0.00

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 400.sws

Energy Grade Line Calculations

Project Name: Storm System 400

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	Energy Loss (ft)	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)			
45	18	6.47	332.86	0.74‡	0.87	333.60	7.48	0.87	334.29	143.66	335.51	0.97 ²	1.21	336.49	0.44	336.93	0.013	2.642	336.49	336.93	0.00	
46	15	1.60	335.82	1.09	1.14	336.91	1.41	0.03	336.94	131.10	341.07	0.51	0.47	341.58	3.43	0.18	341.76	0.013	4.820	341.64	341.82	0.06
47	15	0.86	341.17	0.63	0.62	341.80	1.40	0.03	341.83	54.75	341.72	0.37 ²	0.31	342.09	2.82	0.12	342.22	0.013	0.386	342.09	342.22	0.00
48	15	0.92	307.49	0.52	0.48	308.01	1.91	0.06	308.07	31.52	308.06	0.38 ²	0.32	308.44	2.88	0.13	308.57	0.013	0.507	308.44	308.57	0.00
49	15	0.69	315.19	0.25‡	0.18	315.44	3.92	0.24	315.63	35.70	315.93	0.33 ²	0.26	316.26	2.64	0.11	316.37	0.013	0.740	316.26	316.37	0.00
50	15	0.65	308.93	0.25‡	0.18	309.18	3.62	0.20	309.36	48.11	309.67	0.32 ²	0.25	309.99	2.59	0.10	310.10	0.013	0.740	309.99	310.10	0.00
51	15	0.75	312.74	0.88	0.92	313.62	0.82	0.01	313.63	26.50	313.00	0.61	0.60	313.61	1.26	0.02	313.64	0.013	0.011	313.63	313.66	0.02
52	15	1.13	314.60	0.83	0.86	315.42	1.32	0.03	315.45	41.50	315.01	0.43	0.37	315.44	3.04	0.14	315.58	0.013	0.135	315.53	315.68	0.10
53	15	1.94	319.34	0.64	0.63	319.97	3.09	0.15	320.12	41.50	319.75	0.56 ²	0.53	320.31	3.67	0.21	320.52	0.013	0.396	320.31	320.52	0.00
54	15	1.07	323.13	0.36‡	0.30	323.49	3.62	0.20	323.68	41.50	323.54	0.41 ²	0.36	323.95	3.02	0.14	324.10	0.013	0.414	323.95	324.10	0.00
55	24	16.32	318.20	2.00	3.14	320.33	5.19	0.42	320.75	26.50	318.47	2.00	3.14	320.46	5.19	0.42	320.88	0.013	0.132	320.49	320.91	0.03
56	24	14.74	318.57	2.00	3.14	320.71	4.69	0.34	321.05	55.99	319.03	1.89	3.07	320.91	4.80	0.36	321.27	0.013	0.221	320.92	321.28	0.01
57	24	14.14	319.13	1.96	3.13	321.09	4.52	0.32	321.41	124.82	322.00	1.33 ²	2.22	323.33	6.36	0.63	323.96	0.013	2.549	323.33	323.96	0.00
58	24	12.23	322.10	1.65	2.78	323.75	4.40	0.30	324.05	144.17	323.92	1.24 ²	2.04	325.16	5.98	0.56	325.71	0.013	1.661	325.16	325.71	0.00
59	24	10.38	324.02	0.94‡	1.46	324.96	7.12	0.79	325.79	121.40	325.53	1.14 ²	1.85	326.68	5.61	0.49	327.16	0.013	1.375	326.68	327.16	0.00
60	24	9.62	325.63	0.92‡	1.42	326.56	6.78	0.71	327.24	64.52	326.50	1.10 ²	1.77	327.60	5.44	0.46	328.06	0.013	0.819	327.60	328.06	0.00
61	18	9.16	327.00	1.05‡	1.32	328.05	6.92	0.74	328.77	60.48	327.74	1.16 ²	1.46	328.90	6.27	0.61	329.51	0.013	0.740	328.90	329.51	0.00
62	18	7.52	327.84	1.50	1.77	328.34	4.26	0.28	329.62	81.65	329.01	1.05 ²	1.32	330.05	5.71	0.51	330.56	0.013	0.942	330.05	330.56	0.00
63	18	6.35	329.11	1.29	1.62	330.40	3.93	0.24	330.64	104.45	330.90	0.96 ²	1.20	331.87	5.31	0.44	332.30	0.013	1.666	331.87	332.30	0.00
64	18	5.00	331.00	1.18	1.49	332.18	3.35	0.17	332.36	47.24	332.12	0.85 ²	1.04	332.98	4.81	0.36	333.34	0.013	0.981	332.98	333.34	0.00
65	18	4.70	332.22	0.78‡	0.93	333.01	5.03	0.39	333.40	46.08	332.59	0.83 ²	1.00	333.41	4.70	0.34	333.76	0.013	0.360	333.41	333.76	0.00
66	15	3.51	332.84	0.57‡	0.55	333.41	6.42	0.64	333.91	68.30	334.23	0.75 ²	0.77	334.98	4.57	0.32	335.30	0.013	1.392	334.98	335.30	0.00

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 400.sws

Energy Grade Line Calculations

Project Name: Storm System 400

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)				
67	15	1.64	334.33	0.95	1.00	335.28	1.64	0.04	335.32	133.03	337.14	0.51 ²	0.47	337.66	0.19	337.84	0.013	2.523	337.66	337.84	0.00	
68	15	1.10	337.24	0.30‡	0.23	337.55	4.78	0.35	337.86	42.30	338.26	0.42 ²	0.36	338.68	3.04	0.14	338.82	0.013	0.963	338.68	338.82	0.00
69	15	0.93	338.36	0.34‡	0.27	338.70	3.48	0.19	338.88	38.33	338.74	0.39 ²	0.32	339.13	2.89	0.13	339.26	0.013	0.378	339.13	339.26	0.00
70	36	40.82	276.40	2.34	5.92	278.75	6.89	0.74	279.49	46.43	276.87	2.04 ²	5.11	278.90	7.99	0.99	279.90	0.013	0.412	278.90	279.90	0.00
71	36	40.50	276.87	2.64	6.58	279.51	6.15	0.59	280.09	101.07	277.88	2.03 ²	5.09	279.91	7.96	0.99	280.89	0.013	0.799	279.91	280.89	0.00
72	36	37.59	277.98	1.80‡	4.44	279.78	8.46	1.11	281.07	55.06	278.53	1.95 ²	4.88	280.48	7.71	0.92	281.41	0.013	0.342	280.48	281.41	0.00
73	36	31.40	278.63	2.52	6.35	281.15	4.95	0.38	281.53	26.50	278.89	2.22	5.60	281.11	5.61	0.49	281.60	0.013	0.065	281.14	281.63	0.03
74	36	30.72	278.99	2.35	5.95	281.35	5.17	0.41	281.76	45.61	279.45	1.77 ²	4.33	281.22	7.09	0.78	282.00	0.013	0.238	281.22	282.00	0.00
75	36	30.32	279.55	2.04	5.13	281.59	5.91	0.54	282.14	112.50	280.48	1.76 ²	4.30	282.23	7.06	0.77	283.01	0.013	0.867	282.23	283.01	0.00
76	36	29.90	280.58	2.03	5.09	282.61	5.87	0.54	283.14	49.73	281.07	1.74 ²	4.26	282.82	7.02	0.77	283.58	0.013	0.440	282.82	283.58	0.00
77	30	16.53	281.47	1.23‡	2.41	282.70	6.87	0.73	283.66	51.49	281.99	1.36 ²	2.73	283.35	6.06	0.57	283.92	0.013	0.254	283.35	283.92	0.00
78	30	16.13	282.09	1.20‡	2.33	283.29	6.93	0.75	284.02	66.72	282.75	1.34 ²	2.68	284.10	6.01	0.56	284.66	0.013	0.643	284.10	284.66	0.00
79	30	13.38	283.61	0.91‡	1.61	284.52	8.29	1.07	285.32	74.60	285.25	1.22 ²	2.39	286.47	5.61	0.49	286.96	0.013	1.639	286.47	286.96	0.00
80	24	11.83	286.25	0.80‡	1.17	287.05	10.07	1.58	288.01	121.93	290.16	1.22 ²	2.00	291.38	5.90	0.54	291.92	0.013	3.910	291.38	291.92	0.00
81	24	11.45	290.26	0.90‡	1.37	291.16	8.36	1.09	292.01	79.15	291.98	1.20 ²	1.96	293.17	5.83	0.53	293.70	0.013	1.688	293.17	293.70	0.00
82	15	0.97	292.91	0.34‡	0.27	293.25	3.53	0.19	293.71	41.50	293.32	0.40	0.34	293.72	2.89	0.13	293.85	0.013	0.139	293.81	293.94	0.09
83	24	9.84	292.08	0.79‡	1.16	292.87	8.51	1.13	293.78	132.00	295.02	1.11 ²	1.79	296.13	5.49	0.47	296.59	0.013	2.819	296.13	296.59	0.00
84	15	1.40	295.96	0.54	0.51	296.50	2.75	0.12	296.61	41.50	296.37	0.47 ²	0.43	296.84	3.29	0.17	297.01	0.013	0.398	296.84	297.01	0.00
85	24	8.19	295.12	0.74‡	1.06	295.86	7.72	0.93	296.66	54.30	296.52	1.01 ²	1.60	297.53	5.12	0.41	297.94	0.013	1.286	297.53	297.94	0.00
86	18	7.14	297.18	0.76‡	0.89	297.94	7.99	0.99	298.68	133.21	300.00	1.02 ²	1.28	301.02	5.58	0.48	301.50	0.013	2.815	301.02	301.50	0.00
87	15	0.78	300.59	0.91	0.96	301.49	0.81	0.01	301.50	26.50	300.85	0.64	0.63	301.49	1.23	0.02	301.51	0.013	0.010	301.51	301.53	0.02
88	18	5.74	300.10	0.67‡	0.76	300.77	7.55	0.89	301.56	122.20	302.77	0.91 ²	1.13	303.68	5.09	0.40	304.08	0.013	2.517	303.68	304.08	0.00

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 400.sws

Energy Grade Line Calculations

Project Name: Storm System 400

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	Energy Loss (ft)	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)			
89	15	1.24	303.12	0.95	1.00	304.07	1.24	0.02	304.09	41.50	303.53	0.52	0.49	304.05	2.54	0.10	304.15	0.013	0.065	304.21	0.06	
90	15	3.74	303.03	0.56‡	0.54	303.59	7.00	0.76	304.15	132.00	305.98	0.77 ²	0.80	306.75	4.69	0.34	307.09	0.013	2.945	306.75	307.09	0.00
91	15	0.59	306.17	0.92	0.97	307.09	0.61	0.01	307.09	41.50	306.58	0.51	0.47	307.09	1.27	0.03	307.11	0.013	0.018	307.11	307.14	0.03
92	15	2.81	306.08	0.49‡	0.45	306.57	6.27	0.61	307.13	66.00	307.60	0.67 ²	0.67	308.27	4.19	0.27	308.54	0.013	1.409	308.27	308.54	0.00
93	15	1.36	325.85	0.87	0.91	326.72	1.49	0.03	326.75	61.28	326.46	0.47 ²	0.42	326.93	3.25	0.16	327.09	0.013	0.341	326.93	327.09	0.00
94	15	2.59	329.57	0.59‡	0.57	330.16	4.51	0.32	330.61	24.50	329.81	0.65	0.64	330.46	4.04	0.25	330.71	0.013	0.099	330.59	330.84	0.13
95	15	2.11	333.17	0.52‡	0.48	333.69	4.39	0.30	334.12	43.73	333.61	0.58 ²	0.56	334.19	3.78	0.22	334.41	0.013	0.297	334.19	334.41	0.00
96	15	1.94	335.86	0.49‡	0.45	336.36	4.34	0.29	336.95	54.58	336.41	0.56 ²	0.53	336.97	3.67	0.21	337.18	0.013	0.229	336.97	337.18	0.00
97	36	26.81	299.34	3.00	7.07	302.48	3.79	0.22	302.70	32.50	299.66	2.85	6.94	302.52	3.86	0.23	302.75	0.013	0.049	302.53	302.76	0.01
98	30	26.35	300.16	2.28	4.70	302.44	5.61	0.49	302.93	29.90	300.46	1.96	4.12	302.42	6.39	0.63	303.06	0.013	0.121	302.64	303.28	0.22
99	18	5.15	301.56	1.50	1.77	303.20	2.92	0.13	303.33	141.44	304.79	0.87 ²	1.06	305.66	4.87	0.37	306.03	0.013	2.699	305.66	306.03	0.00
100	15	3.56	305.14	0.51‡	0.47	305.65	7.58	0.89	306.23	150.00	309.39	0.76 ²	0.78	310.15	4.59	0.33	310.47	0.013	4.247	310.15	310.47	0.00
101	15	2.20	309.49	0.37‡	0.30	309.86	7.31	0.83	310.50	100.48	313.51	0.59 ²	0.57	314.10	3.83	0.23	314.33	0.013	3.831	314.10	314.33	0.00
102	24	8.98	294.11	0.96‡	1.49	295.07	6.03	0.57	295.61	48.16	294.60	1.06 ²	1.69	295.66	5.30	0.44	296.09	0.013	0.482	295.66	296.09	0.00
103	24	8.48	294.79	0.96‡	1.49	295.74	5.70	0.50	296.26	24.50	295.03	1.03 ²	1.63	296.06	5.19	0.42	296.48	0.013	0.220	296.06	296.48	0.00
104	24	7.75	295.13	0.77‡	1.11	295.90	7.00	0.76	296.54	112.50	296.90	0.99 ²	1.54	297.88	5.02	0.39	298.28	0.013	1.733	297.88	298.28	0.00
105	24	7.53	297.00	0.87‡	1.31	297.87	5.75	0.51	298.35	45.96	297.46	0.97 ²	1.52	298.43	4.97	0.38	298.81	0.013	0.460	298.43	298.81	0.00
106	18	5.68	298.92	0.84‡	1.02	299.76	5.59	0.49	300.23	40.45	299.32	0.91 ²	1.12	300.23	5.07	0.40	300.63	0.013	0.404	300.23	300.63	0.00
107	15	1.69	301.60	0.45‡	0.39	302.04	4.29	0.29	302.30	132.00	302.92	0.52 ²	0.48	303.43	3.49	0.19	303.62	0.013	1.320	303.43	303.62	0.00
108	15	1.35	303.02	0.41‡	0.35	303.43	3.87	0.23	303.65	41.50	303.43	0.47 ²	0.42	303.90	3.25	0.16	304.06	0.013	0.412	303.90	304.06	0.00
109	15	1.72	297.24	0.85	0.89	298.09	1.93	0.06	298.15	33.28	297.58	0.53	0.49	298.10	3.49	0.19	298.29	0.013	0.142	298.12	298.31	0.02
110	24	8.72	297.44	1.98	3.14	299.42	2.78	0.12	299.54	48.37	297.92	1.51	2.55	299.44	3.41	0.18	299.62	0.013	0.076	299.45	299.63	0.01

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 400.sws

Energy Grade Line Calculations

Project Name: Storm System 400

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)	n Value	Energy Loss (ft)	HGLa Elev (ft)	EGLa Elev (ft)	Energy Loss (ft)			
111	18	8.28	298.42	1.06‡	1.34	299.49	6.19	0.59	300.08	103.10	299.35	1.10 ²	1.39	300.44	5.97	0.55	301.00	0.013	0.921	300.44	301.00	0.00
112	18	7.71	299.45	1.33	1.65	300.77	4.66	0.34	301.11	32.50	299.70	1.15	1.46	300.85	5.29	0.44	301.29	0.013	0.178	300.93	301.37	0.08
113	18	6.74	299.80	0.69‡	0.80	300.49	8.45	1.11	301.45	30.78	301.05	0.99 ²	1.24	302.04	5.44	0.46	302.50	0.013	1.052	302.04	302.50	0.00
114	18	4.94	301.15	0.59‡	0.65	301.75	7.61	0.90	302.55	167.06	305.15	0.85 ²	1.03	306.00	4.79	0.36	306.35	0.013	3.799	306.00	306.35	0.00
115	15	2.87	305.40	0.46‡	0.41	305.85	7.05	0.77	306.40	191.26	310.50	0.68 ²	0.68	311.18	4.22	0.28	311.46	0.013	5.062	311.18	311.46	0.00
116	15	2.10	310.60	0.42‡	0.36	311.02	5.88	0.54	311.49	77.55	312.40	0.58 ²	0.56	312.98	3.77	0.22	313.20	0.013	1.716	312.98	313.20	0.00
117	15	1.76	298.42	0.48‡	0.43	298.90	4.06	0.26	299.14	26.50	298.88	0.53 ²	0.50	299.21	3.54	0.20	299.41	0.013	0.265	299.21	299.41	0.00
118	15	1.03	298.78	0.59	0.57	299.37	1.81	0.05	299.42	54.24	299.33	0.41 ²	0.35	299.73	2.98	0.14	299.87	0.013	0.446	299.73	299.87	0.00
119	15	2.29	300.36	0.54‡	0.51	300.90	4.47	0.31	301.20	41.50	300.77	0.61 ²	0.59	301.38	3.88	0.23	301.61	0.013	0.415	301.38	301.61	0.00
120	24	9.90	287.24	1.01‡	1.59	288.25	6.23	0.60	288.82	46.93	287.71	1.11 ²	1.80	288.82	5.50	0.47	289.29	0.013	0.469	288.82	289.29	0.00
121	24	9.31	287.81	1.01‡	1.59	288.82	5.86	0.53	289.37	24.50	288.05	1.08 ²	1.73	289.13	5.38	0.45	289.58	0.013	0.217	289.13	289.58	0.00
122	24	8.79	288.15	0.83‡	1.24	288.99	7.08	0.78	289.65	113.50	289.79	1.05 ²	1.67	290.84	5.26	0.43	291.27	0.013	1.616	290.84	291.27	0.00
123	24	8.26	289.89	0.91‡	1.40	290.80	5.90	0.54	291.33	45.96	290.35	1.02 ²	1.61	291.37	5.14	0.41	291.78	0.013	0.443	291.37	291.78	0.00
124	18	4.16	290.85	0.72‡	0.83	291.56	4.99	0.39	291.94	26.50	291.11	0.78 ²	0.93	291.89	4.49	0.31	292.20	0.013	0.263	291.89	292.20	0.00
125	15	1.02	291.36	0.35‡	0.28	291.71	3.64	0.21	292.21	53.58	291.90	0.41 ²	0.34	292.30	2.97	0.14	292.44	0.013	0.229	292.30	292.44	0.00
126	18	4.07	291.89	0.69‡	0.79	292.58	5.13	0.41	292.96	46.99	292.36	0.77 ²	0.91	293.13	4.45	0.31	293.43	0.013	0.470	293.13	293.43	0.00
127	15	2.83	294.76	0.63‡	0.62	295.39	4.57	0.32	295.70	132.00	295.78	0.67 ²	0.67	296.45	4.20	0.27	296.72	0.013	1.020	296.45	296.72	0.00
128	15	2.34	295.88	0.73	0.74	296.60	3.15	0.15	296.76	41.50	296.29	0.61 ²	0.60	296.90	3.91	0.24	297.14	0.013	0.382	296.90	297.14	0.00
129	15	3.04	291.08	1.25	1.23	292.41	2.48	0.10	292.51	48.16	291.56	0.91	0.96	292.47	3.18	0.16	292.63	0.013	0.123	292.51	292.66	0.03
130	15	1.91	307.70	0.49‡	0.45	308.19	4.24	0.28	308.56	41.50	308.11	0.55 ²	0.52	308.66	3.65	0.21	308.87	0.013	0.307	308.66	308.87	0.00
131	15	1.93	284.07	0.50‡	0.46	284.57	4.24	0.28	284.83	38.00	284.45	0.56 ²	0.53	285.01	3.66	0.21	285.21	0.013	0.380	285.01	285.21	0.00
132	15	3.09	284.89	1.25	1.23	286.27	2.52	0.10	286.36	46.93	285.36	0.98	1.03	286.34	2.99	0.14	286.48	0.013	0.111	286.36	286.50	0.03

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 400.sws

Energy Grade Line Calculations

Stormwater Studio 2024 v 3.0.0.35
Project Name: Storm System 400
11-22-2024

Project Name: Storm System 400

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						Pipe			Junction				
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel (ft/s)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel (ft/s)	Vel Head (ft)	EGL Elev (ft)	n Value	Energy Loss (ft)	EGLa Elev (ft)	Energy Loss (ft)		
133	24	12.31	286.00	0.83‡	1.22	286.83	10.06	1.57	287.80	134.83	290.08	1.24 ²	2.05	291.32	6.00	0.56	291.88	0.013	4.075	291.32	291.88	0.00
134	24	10.49	290.18	0.84‡	1.25	291.02	8.38	1.09	291.96	124.24	292.75	1.15 ²	1.86	293.90	5.63	0.49	294.39	0.013	2.433	293.90	294.39	0.00
135	24	8.73	292.85	0.75‡	1.08	293.60	8.08	1.02	294.45	121.52	295.47	1.05 ²	1.66	296.51	5.25	0.43	296.94	0.013	2.487	296.51	296.94	0.00
136	18	7.24	295.97	0.77‡	0.92	296.74	7.90	0.97	297.48	117.45	298.40	1.03 ²	1.29	299.42	5.62	0.49	299.91	0.013	2.429	299.42	299.91	0.00
137	18	5.24	298.50	1.31	1.64	299.81	3.20	0.16	299.97	138.12	301.37	0.87 ²	1.07	302.24	4.91	0.37	302.62	0.013	2.650	302.24	302.62	0.00
138	18	3.87	301.47	1.06	1.33	302.53	2.91	0.13	302.66	102.40	303.67	0.75 ²	0.89	304.42	4.37	0.30	304.72	0.013	2.065	304.42	304.72	0.00
139	15	2.06	303.92	0.41‡	0.35	304.34	5.81	0.52	304.75	106.98	306.23	0.57 ²	0.55	306.80	3.74	0.22	307.02	0.013	2.267	306.80	307.02	0.00
140	15	1.35	283.70	0.93	0.98	284.64	1.37	0.03	284.67	108.52	284.49	0.46 ²	0.42	284.95	3.24	0.16	285.12	0.013	0.450	284.95	285.12	0.00
141	15	1.02	286.50	0.35‡	0.28	286.85	3.68	0.21	287.04	74.10	287.24	0.41 ²	0.34	287.65	2.97	0.14	287.78	0.013	0.741	287.65	287.78	0.00
142	15	0.33	298.75	1.17	1.19	299.91	0.27	0.00	299.91	44.33	299.87	0.23 ²	0.15	300.10	2.12	0.07	300.17	0.013	0.256	300.10	300.17	0.00
143	15	2.15	277.20	0.53‡	0.49	277.72	4.36	0.30	278.01	156.29	278.52	0.59 ²	0.57	279.11	3.80	0.22	279.33	0.013	1.323	279.11	279.33	0.00
144	18	5.04	277.18	1.50	1.77	279.02	2.85	0.13	279.14	227.32	278.86	0.86	1.05	279.72	4.80	0.36	280.07	0.013	0.929	279.72	280.15	0.07
145	18	3.74	278.96	1.12	1.41	280.07	2.65	0.11	280.18	32.50	279.28	0.74	0.87	280.02	4.29	0.29	280.31	0.013	0.126	280.14	280.43	0.12
146	15	1.61	283.08	0.45‡	0.40	283.54	3.99	0.25	283.77	32.93	283.41	0.51 ²	0.47	283.92	3.44	0.18	284.10	0.013	0.329	283.92	284.10	0.00
147	18	6.57	284.20	0.82‡	0.99	285.02	6.64	0.69	285.63	63.18	285.14	0.98 ²	1.22	286.11	5.38	0.45	286.56	0.013	0.932	286.11	286.56	0.00
148	15	2.43	285.49	1.03	1.08	286.51	2.25	0.08	286.59	41.50	285.90	0.63	0.62	286.53	3.94	0.24	286.77	0.013	0.178	286.65	286.89	0.13
149	15	3.68	285.40	0.57‡	0.55	285.97	6.69	0.70	286.62	132.00	288.03	0.77 ²	0.79	288.79	4.66	0.34	289.13	0.013	2.511	288.79	289.13	0.00
150	15	3.13	288.13	0.65‡	0.64	288.77	4.89	0.37	289.18	41.50	288.54	0.71 ²	0.72	289.25	4.36	0.30	289.54	0.013	0.368	289.25	289.54	0.00
151	15	0.72	292.61	0.82	0.85	293.43	0.84	0.01	293.44	39.76	293.00	0.42	0.36	293.42	1.99	0.06	293.49	0.013	0.047	293.46	293.52	0.04
152	15	1.26	299.67	0.94	0.99	300.62	1.27	0.02	300.64	39.76	300.07	0.53	0.50	300.61	2.51	0.10	300.70	0.013	0.062	300.67	300.76	0.06
153	15	1.03	284.02	0.37‡	0.30	284.38	3.45	0.18	284.56	20.90	284.23	0.41 ²	0.35	284.63	2.98	0.14	284.77	0.013	0.209	284.63	284.77	0.00
154	15	1.92	284.55	0.52‡	0.48	285.07	4.01	0.25	285.31	112.05	285.37	0.55 ²	0.52	285.92	3.65	0.21	286.13	0.013	0.817	285.92	286.13	0.00

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

Project File: Storm System 400.sws

Energy Grade Line Calculations

Project Name: Storm System 400

Stormwater Studio 2024 v 3.0.0.35

11-22-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						n Value	EGL Elev (ft)	HGLa Elev (ft)	Energy Loss (ft)	Junction			
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)								
155	15	2.71	285.46	0.97	1.02	286.43	2.65	0.11	286.54	102.96	286.29	0.66 ²	0.66	286.94	4.13	0.27	287.21	0.013	286.94	287.21	0.00	
156	15	2.15	286.39	0.53‡	0.50	286.92	4.29	0.29	287.24	24.50	286.63	0.59 ²	0.57	287.22	3.80	0.22	287.44	0.013	0.200	287.22	287.44	0.00
157	15	2.20	290.40	0.54‡	0.51	290.95	4.29	0.29	291.22	146.76	291.57	0.59 ²	0.57	292.16	3.83	0.23	292.39	0.013	1.168	292.16	292.39	0.00
158	15	2.58	291.66	0.61‡	0.60	292.28	4.33	0.29	292.70	108.06	292.45	0.64 ²	0.64	293.09	4.06	0.26	293.34	0.013	0.648	293.09	293.34	0.00
159	15	1.96	292.55	0.71	0.73	293.26	2.70	0.11	293.37	24.50	292.79	0.56 ²	0.53	293.35	3.68	0.21	293.56	0.013	0.187	293.35	293.56	0.00
160	15	1.63	297.68	0.46‡	0.41	298.13	4.02	0.25	298.39	119.36	298.67	0.51 ²	0.47	299.18	3.46	0.19	299.37	0.013	0.982	299.18	299.37	0.00

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical.

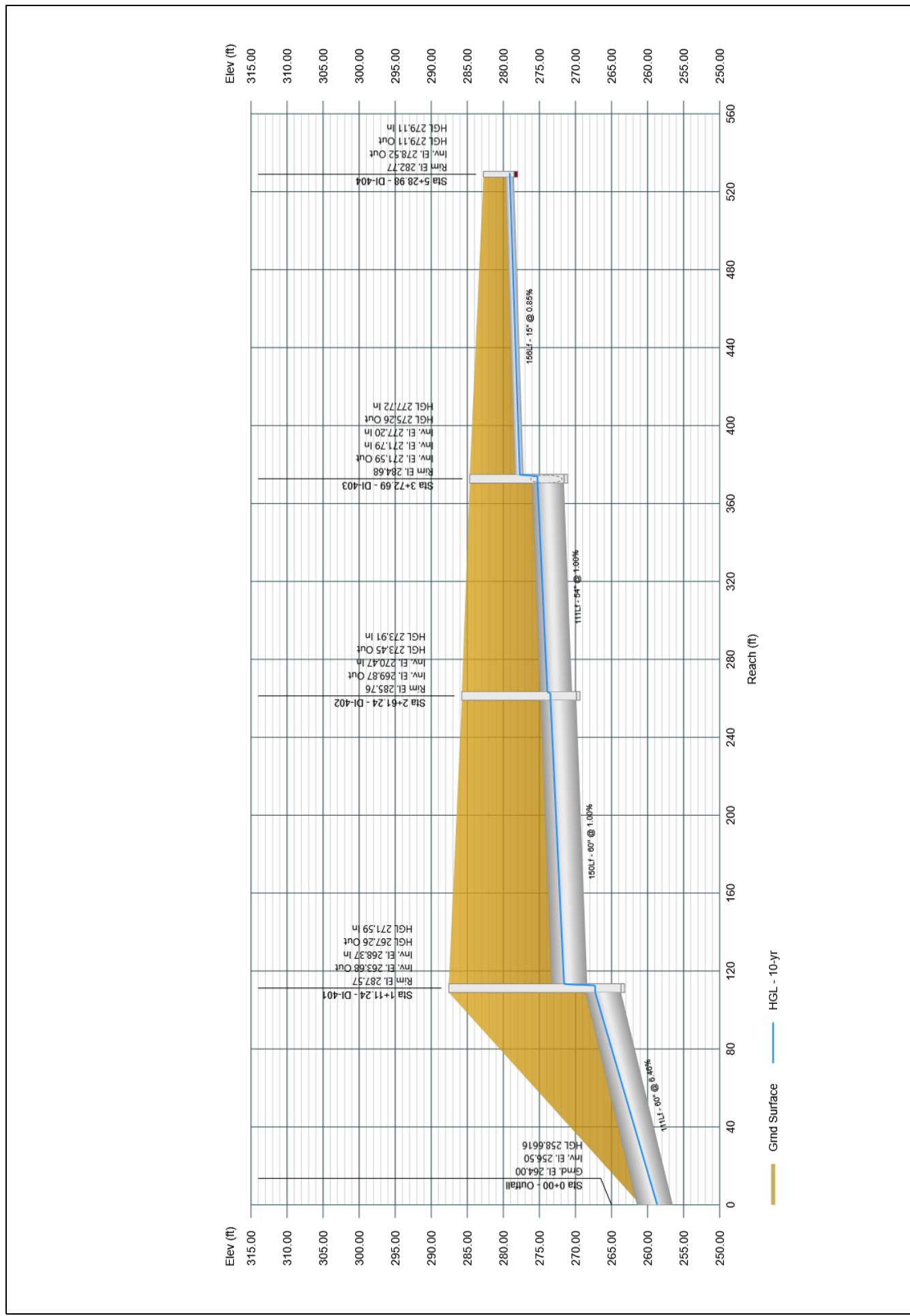
Project File: Storm System 400.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-22-2024

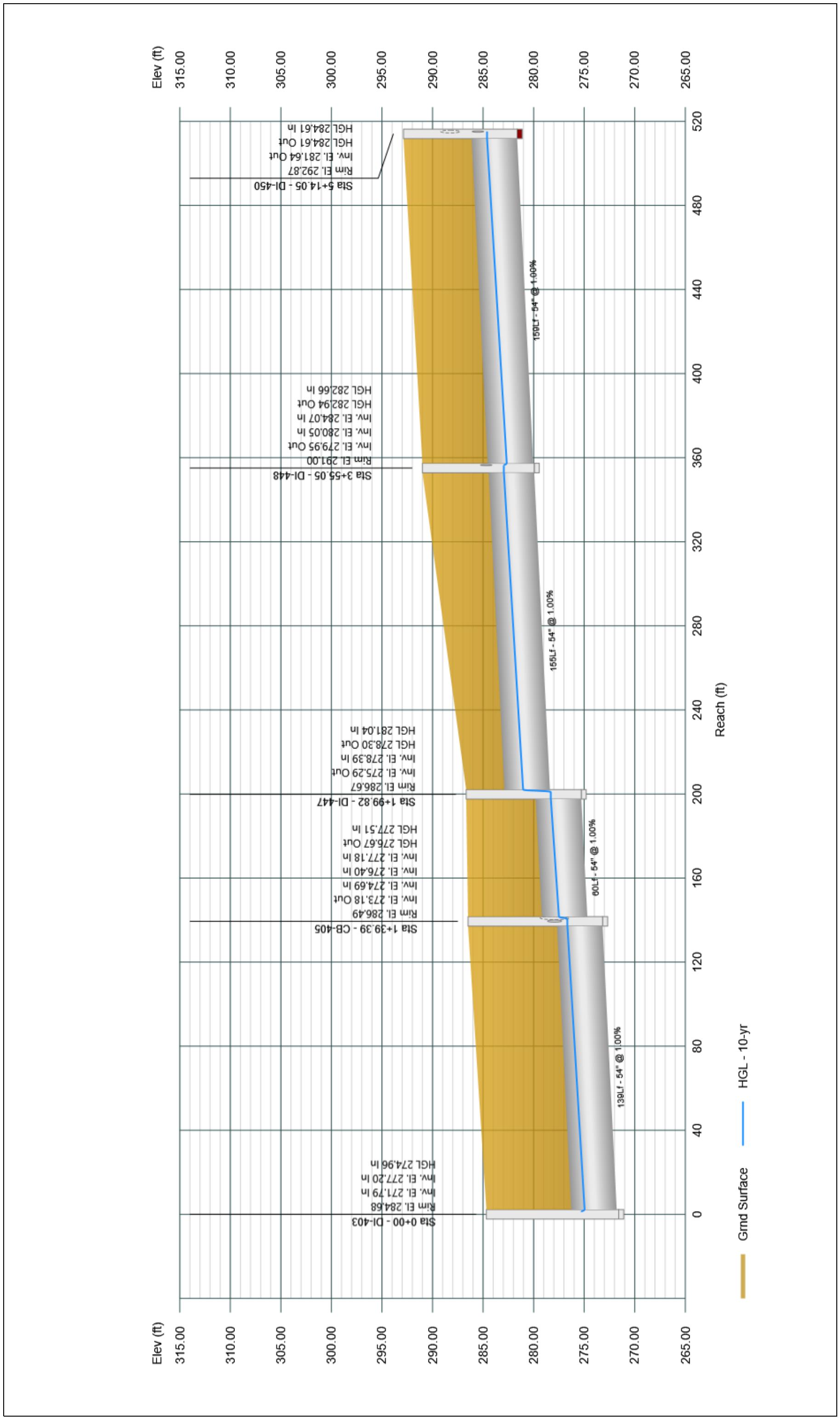


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

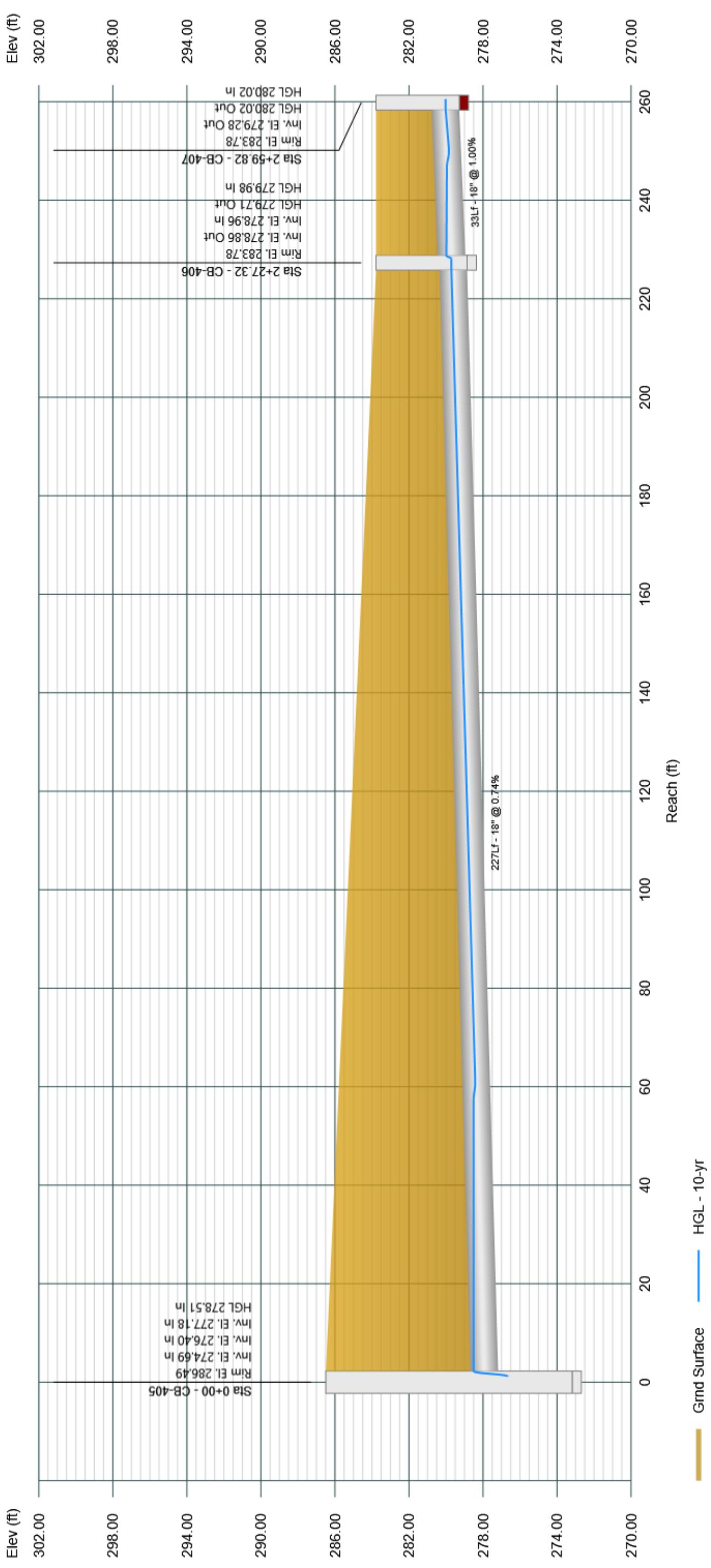


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

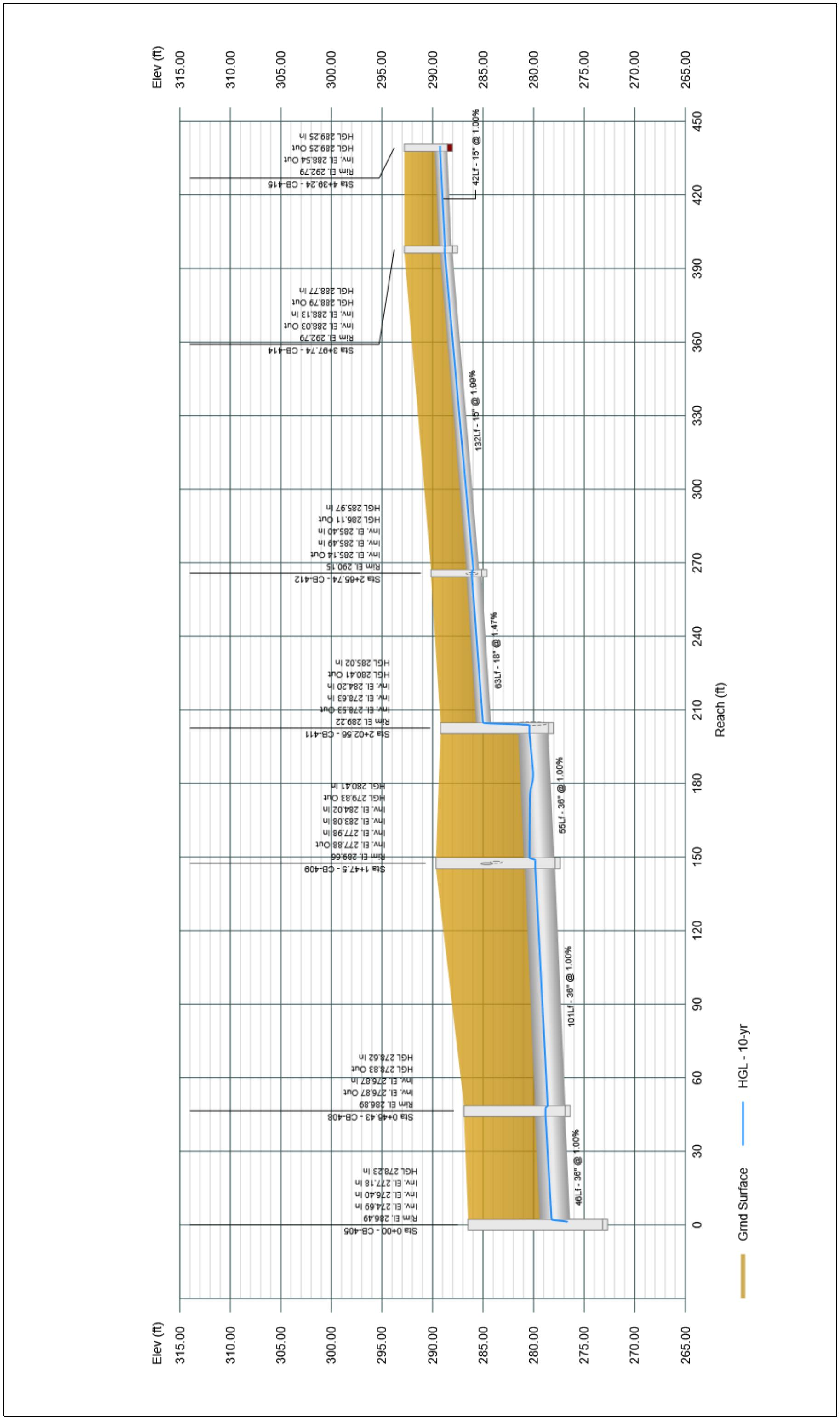


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

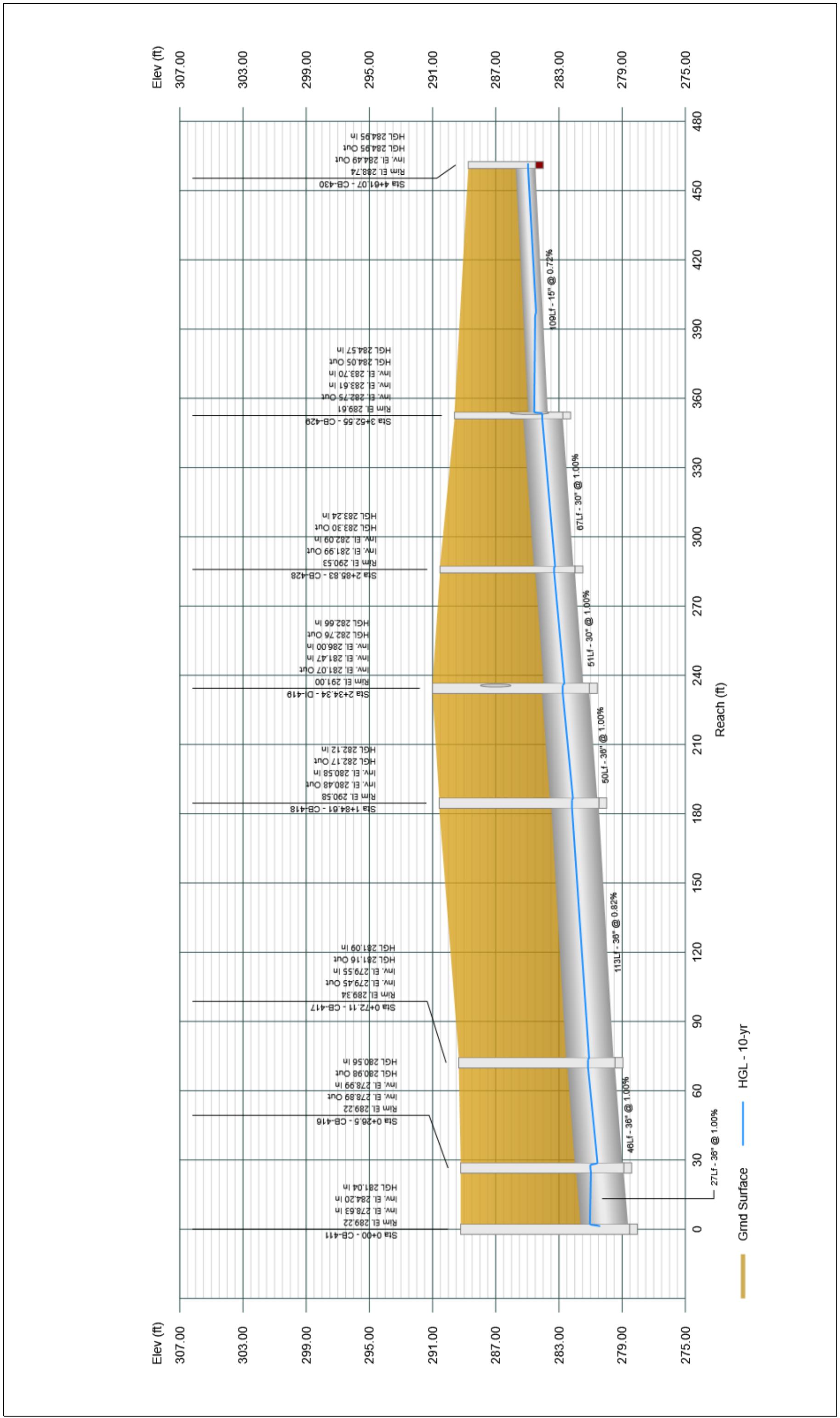


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

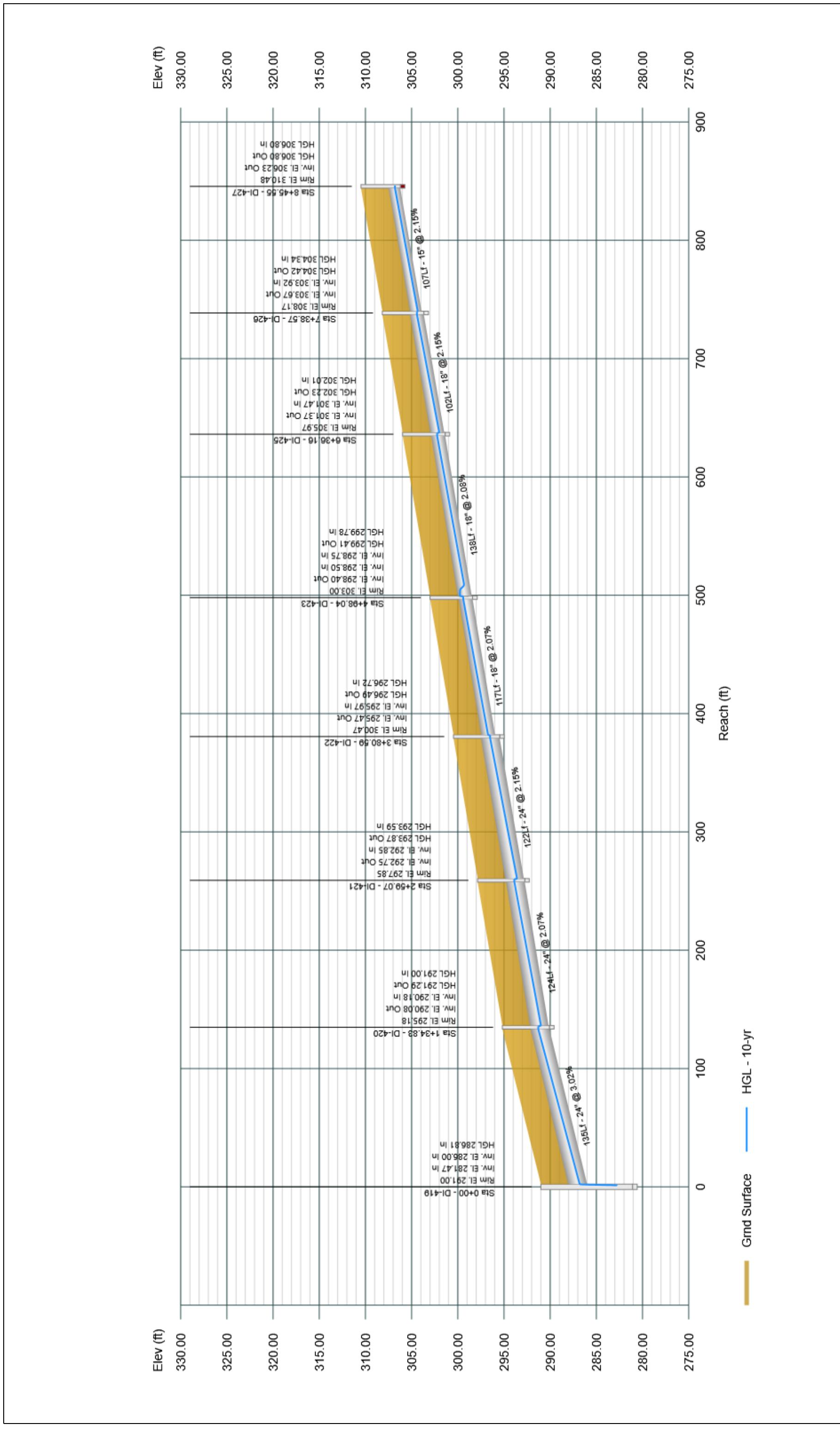


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

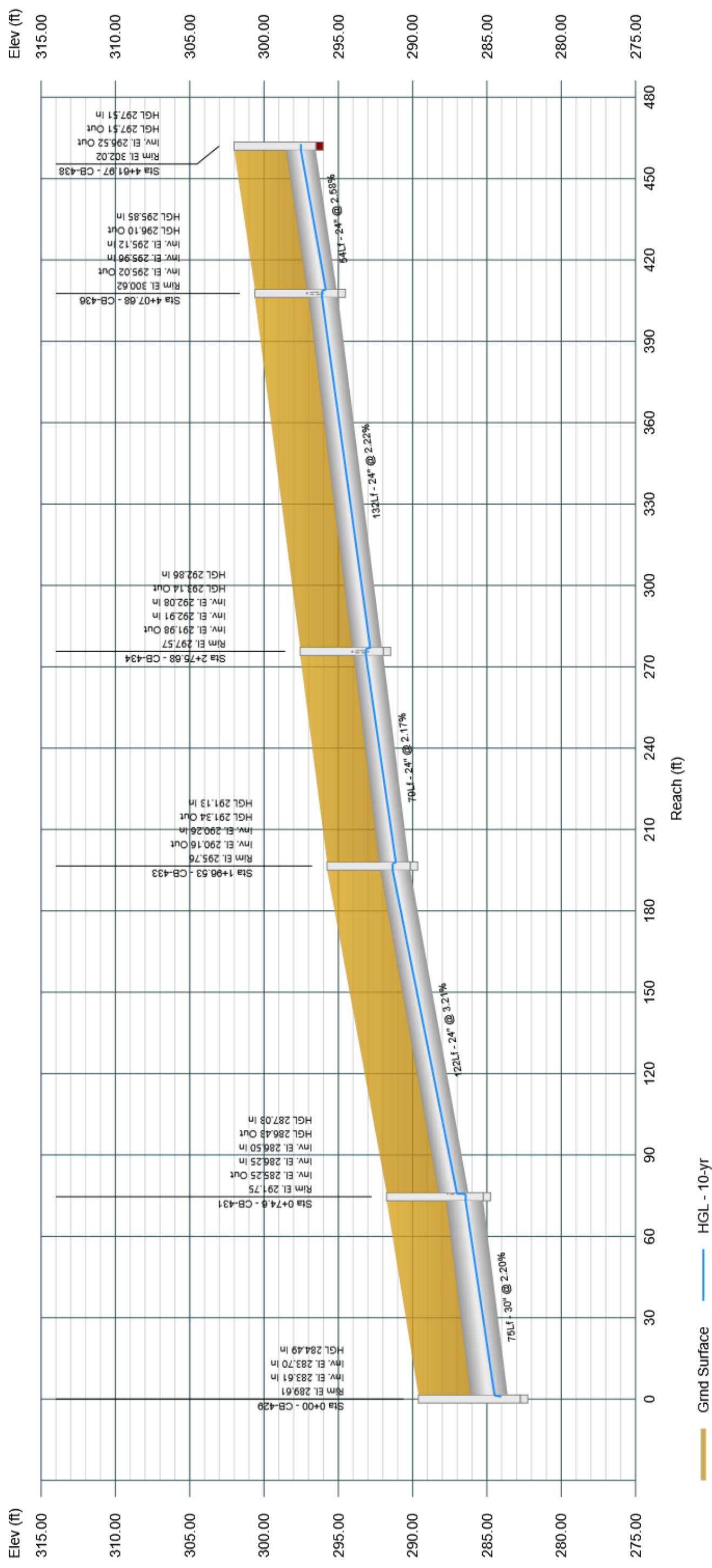


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

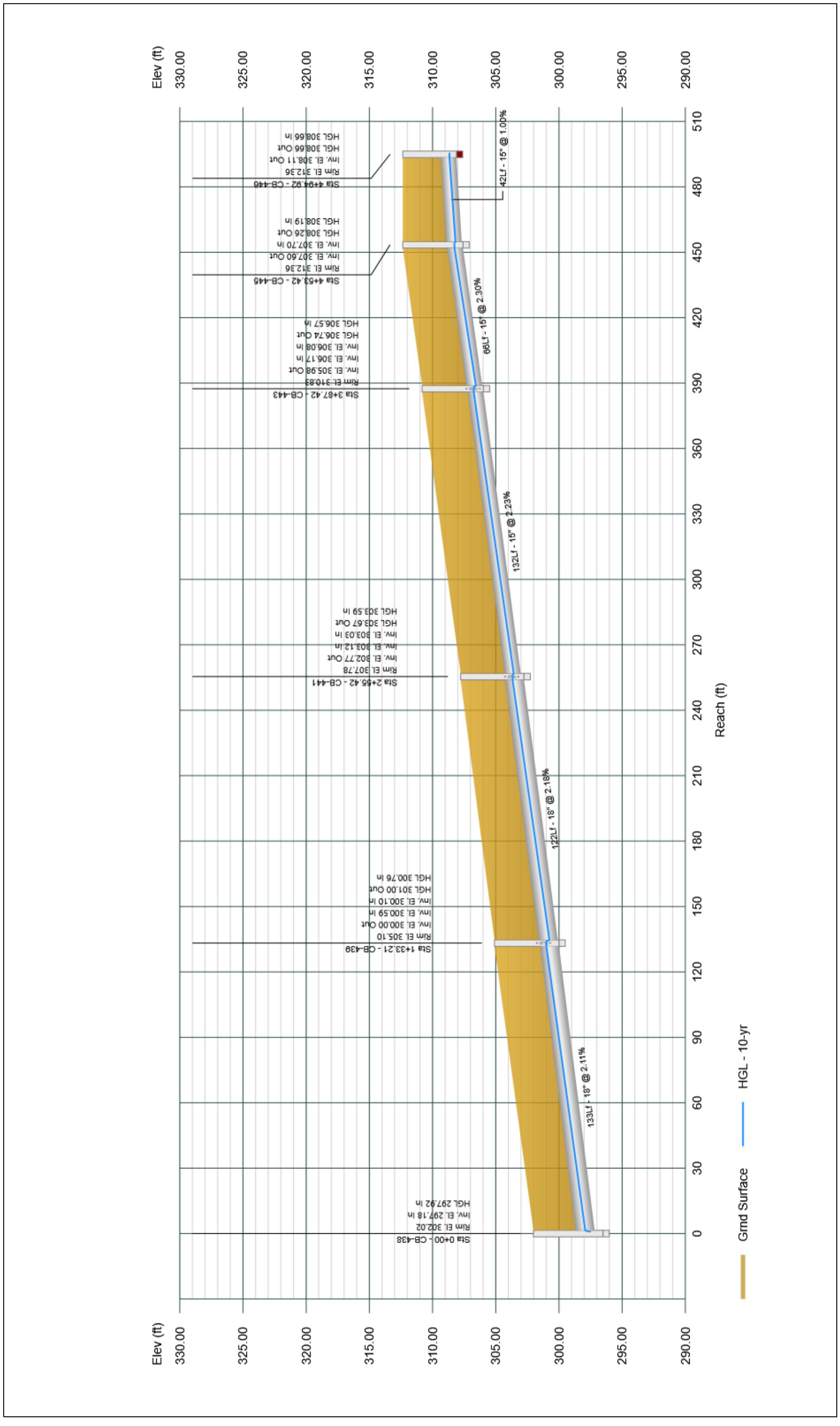


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

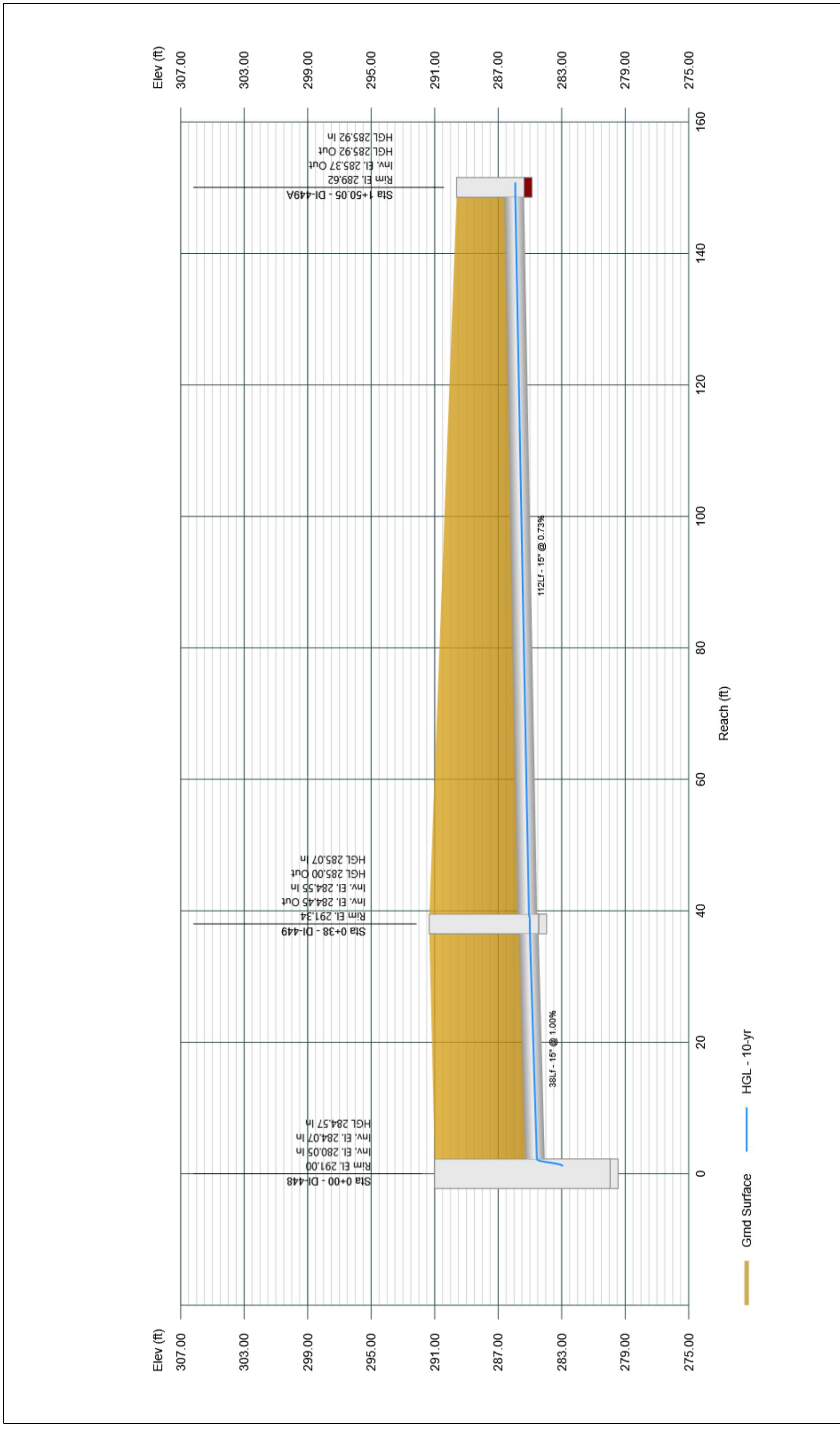


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

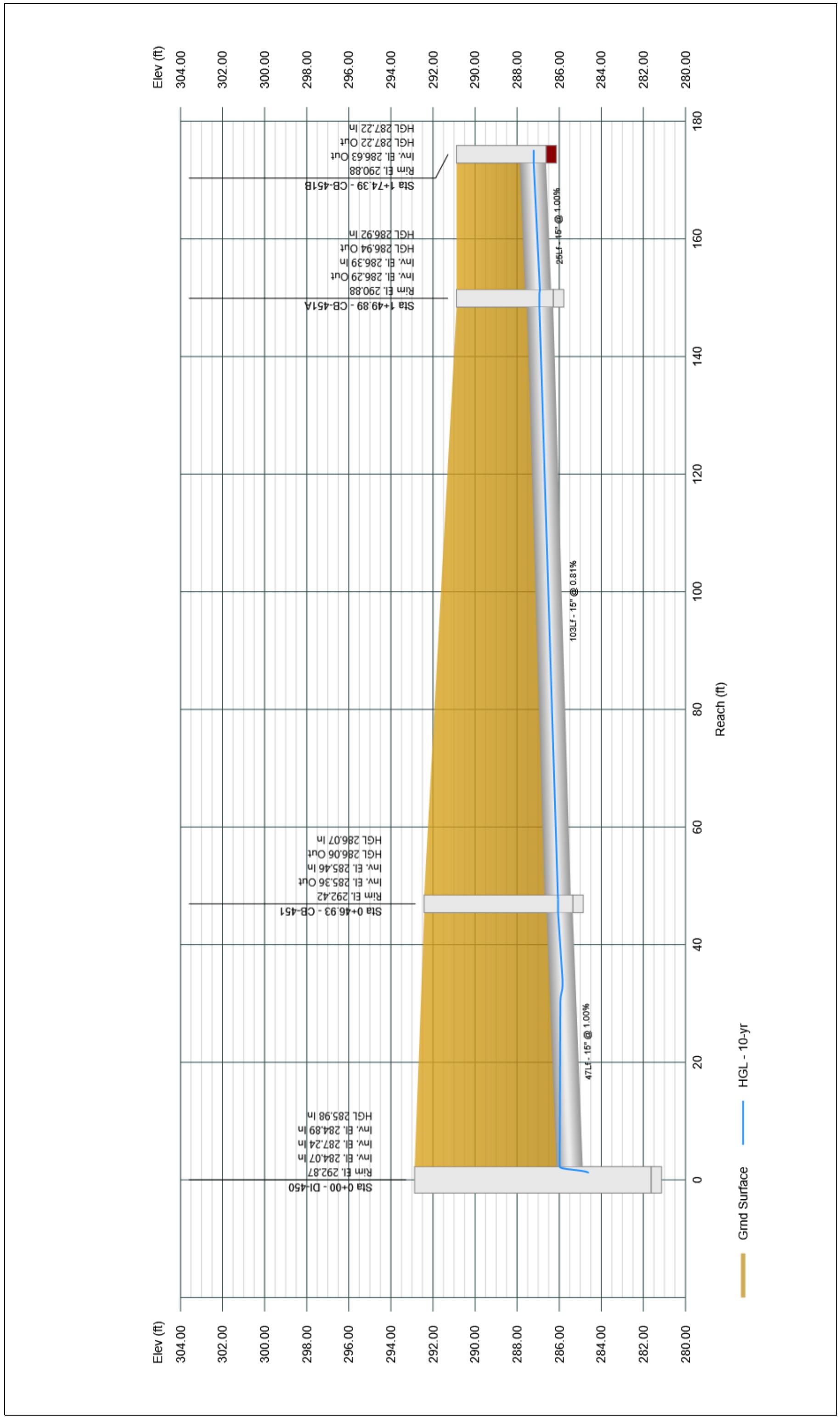


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024



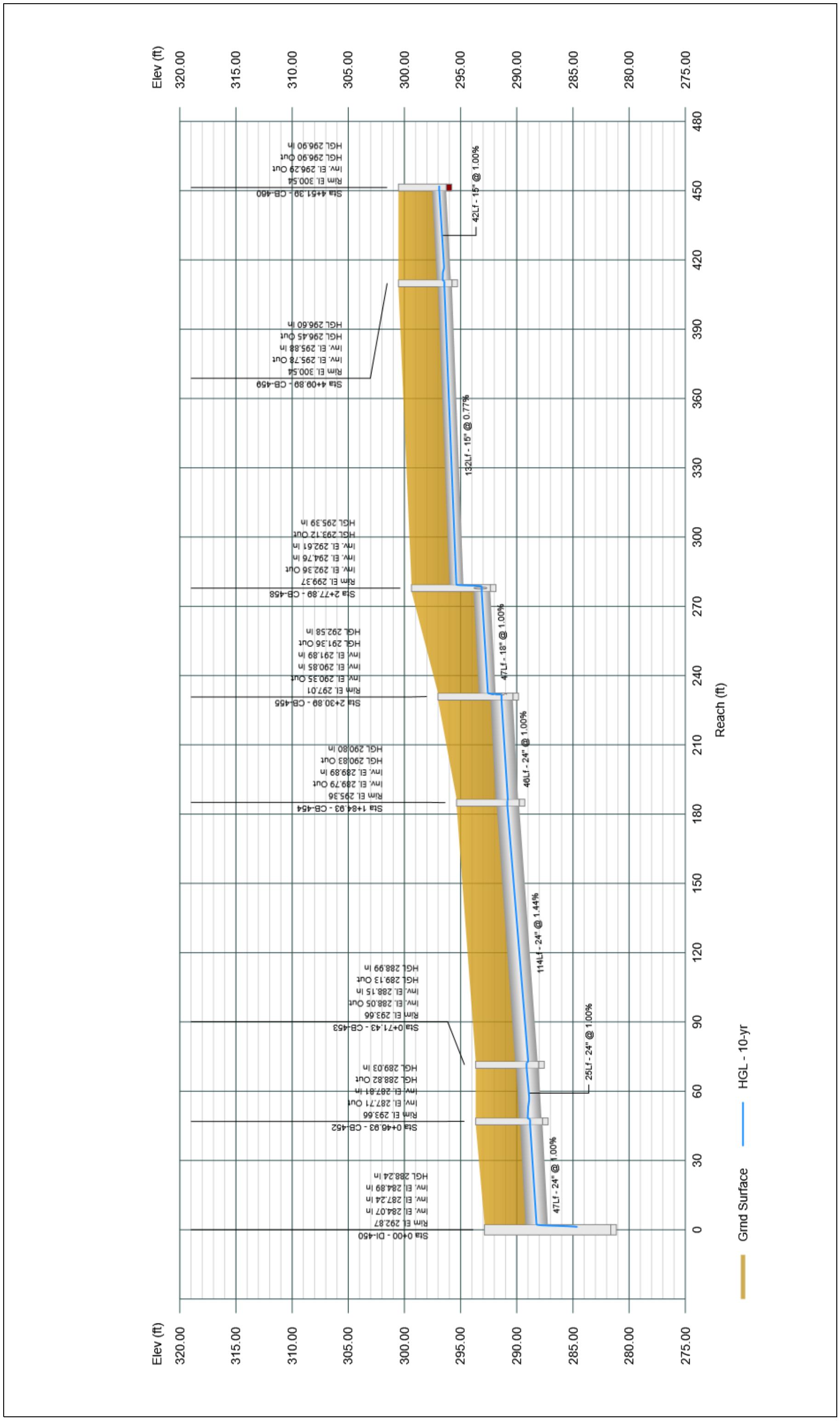
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Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

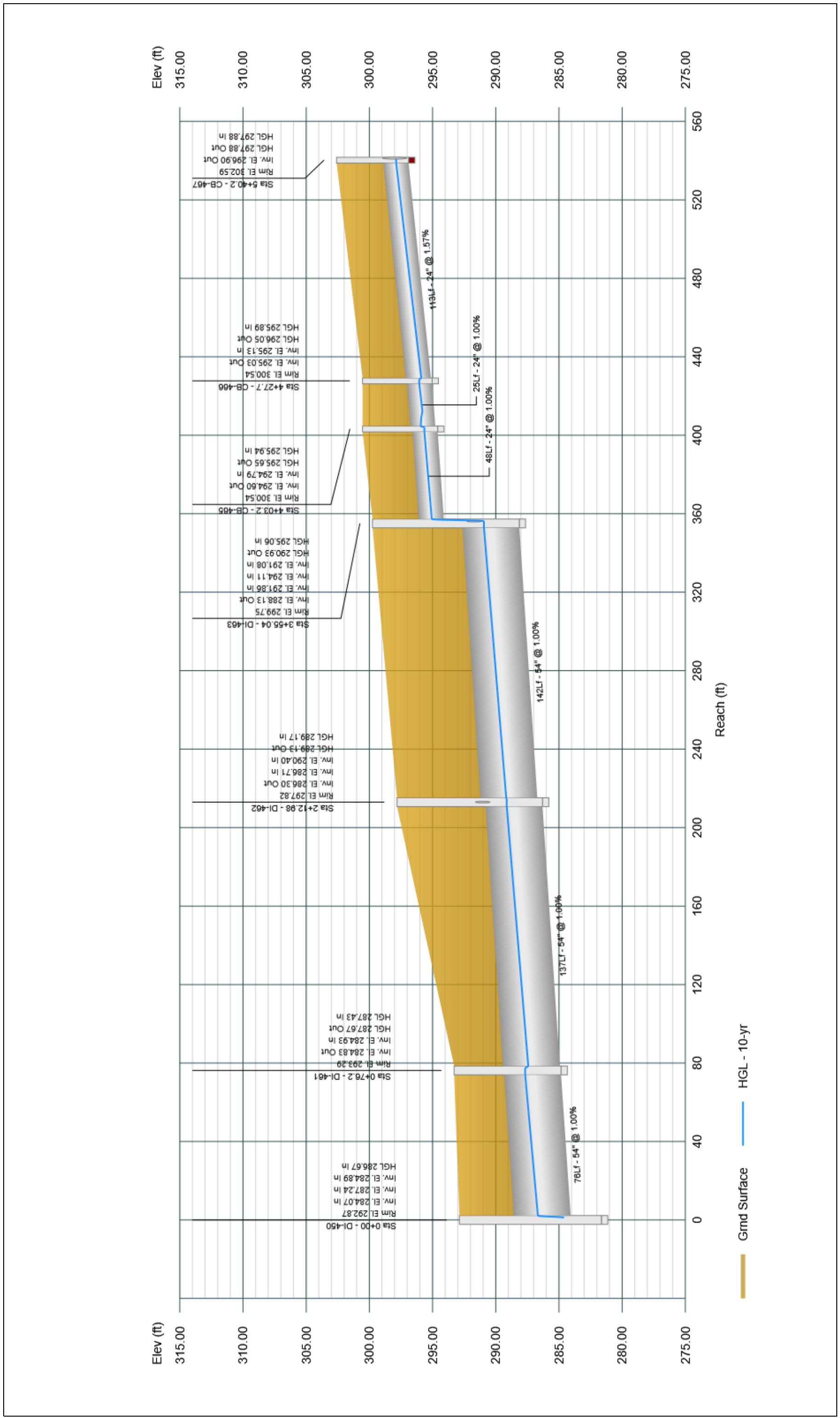


Profile View

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Project Name: Storm System 400

11-19-2024

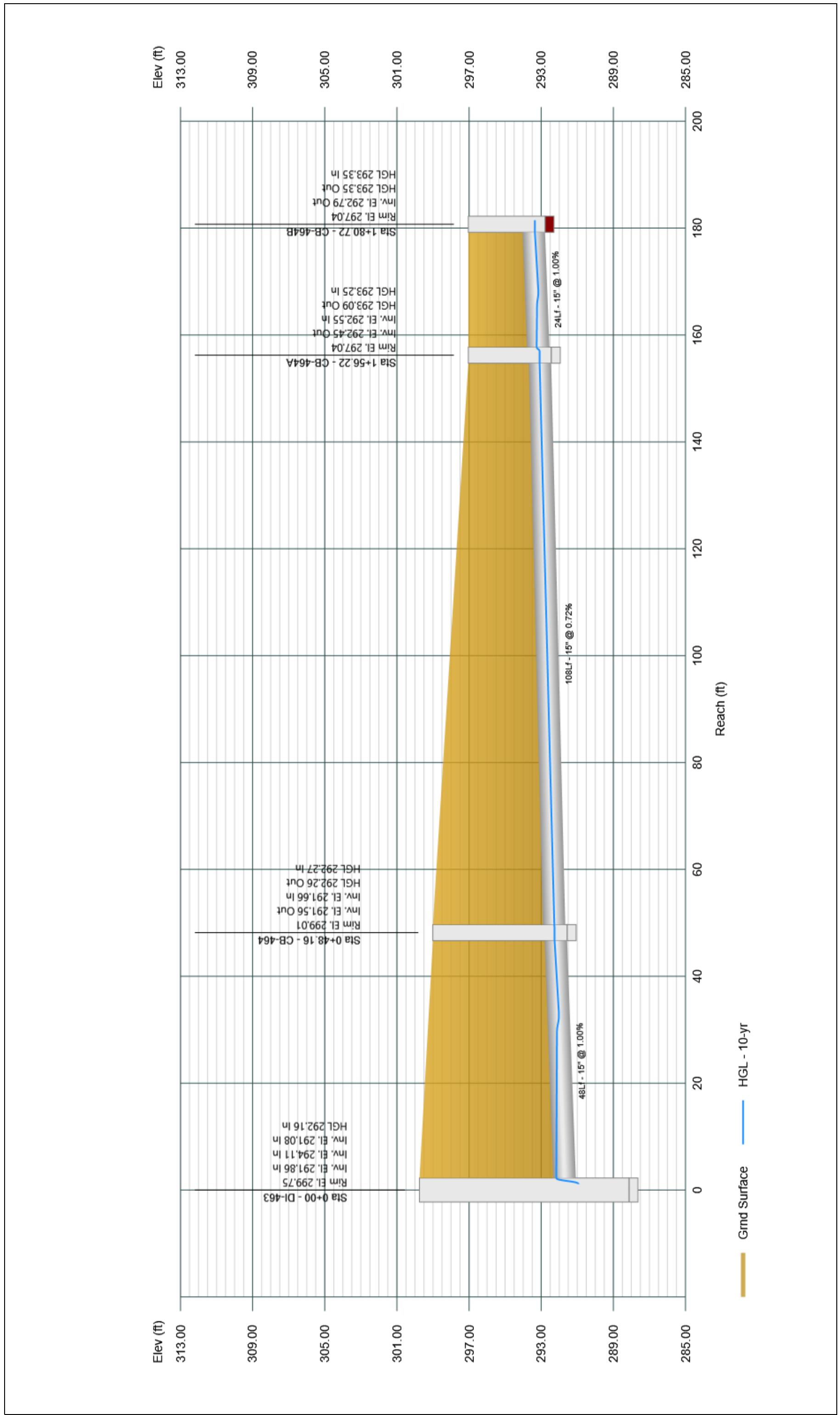


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

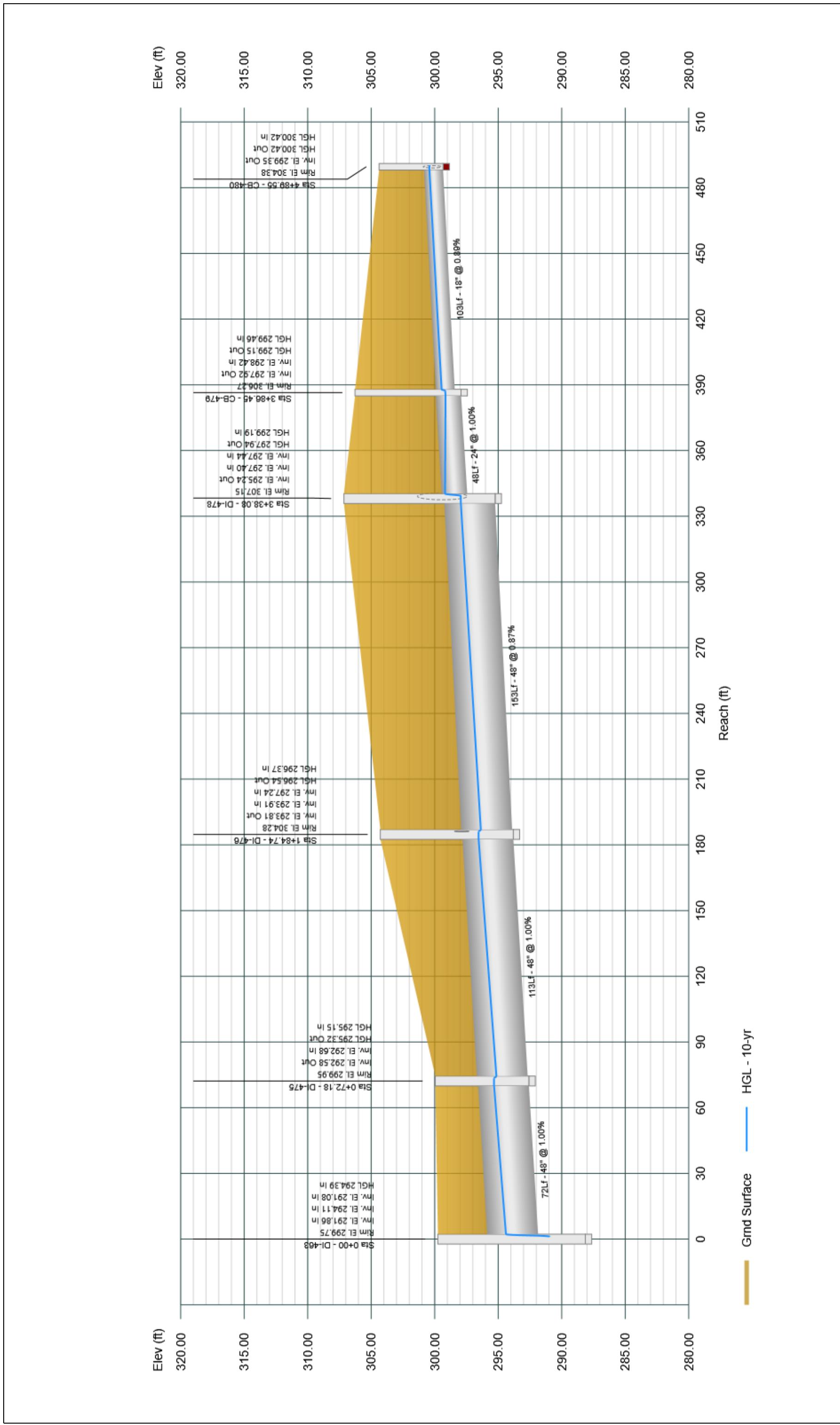


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

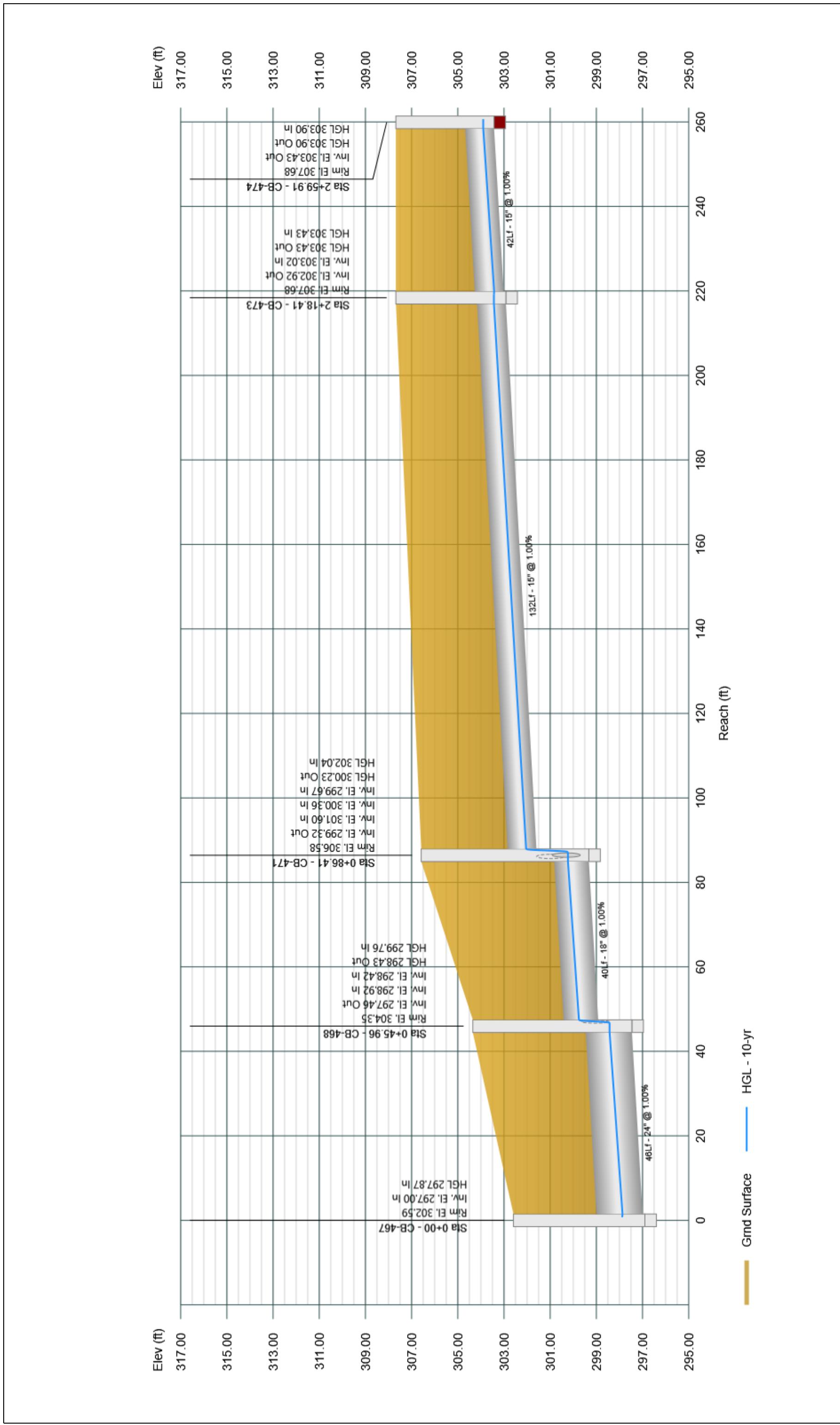


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024



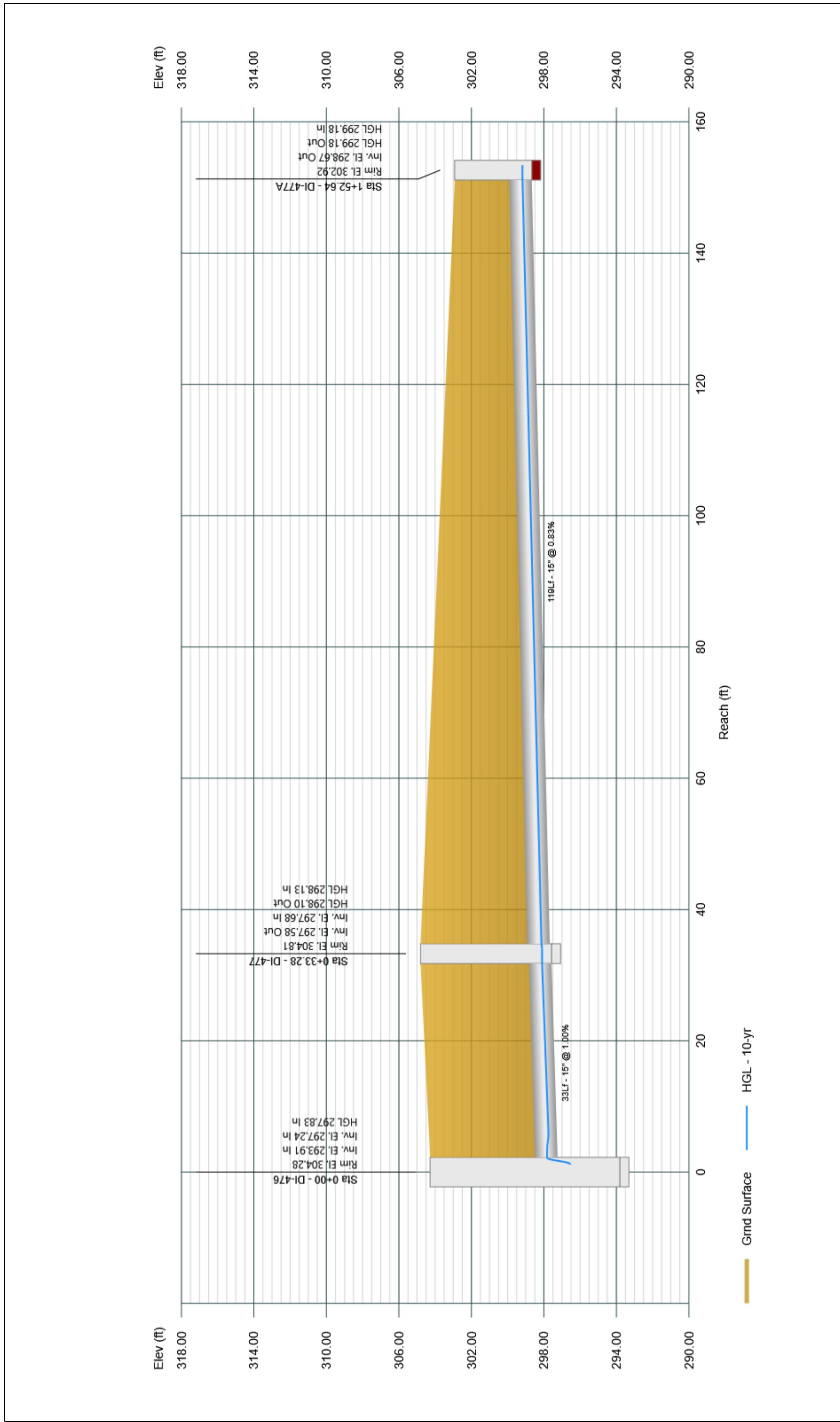
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Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

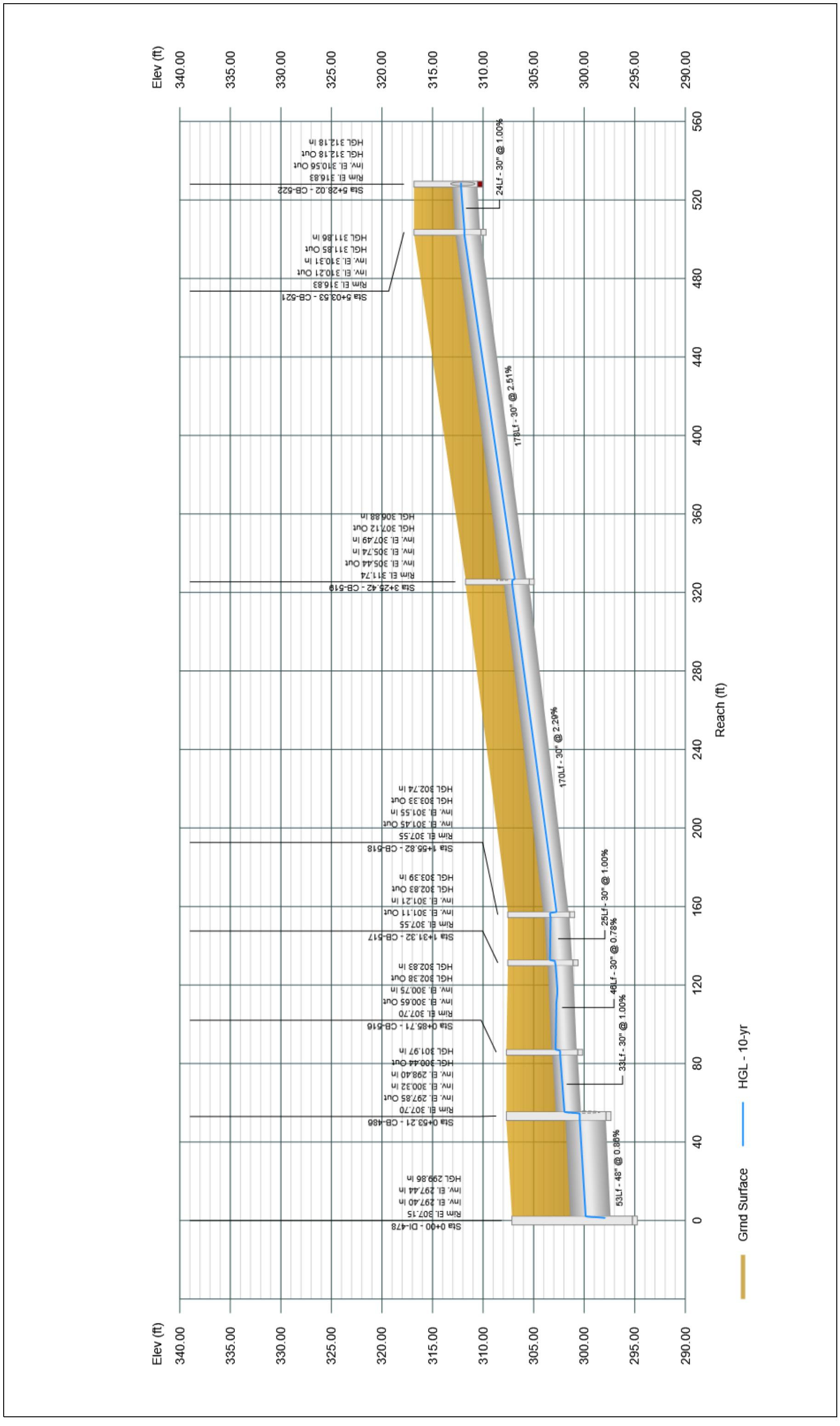


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

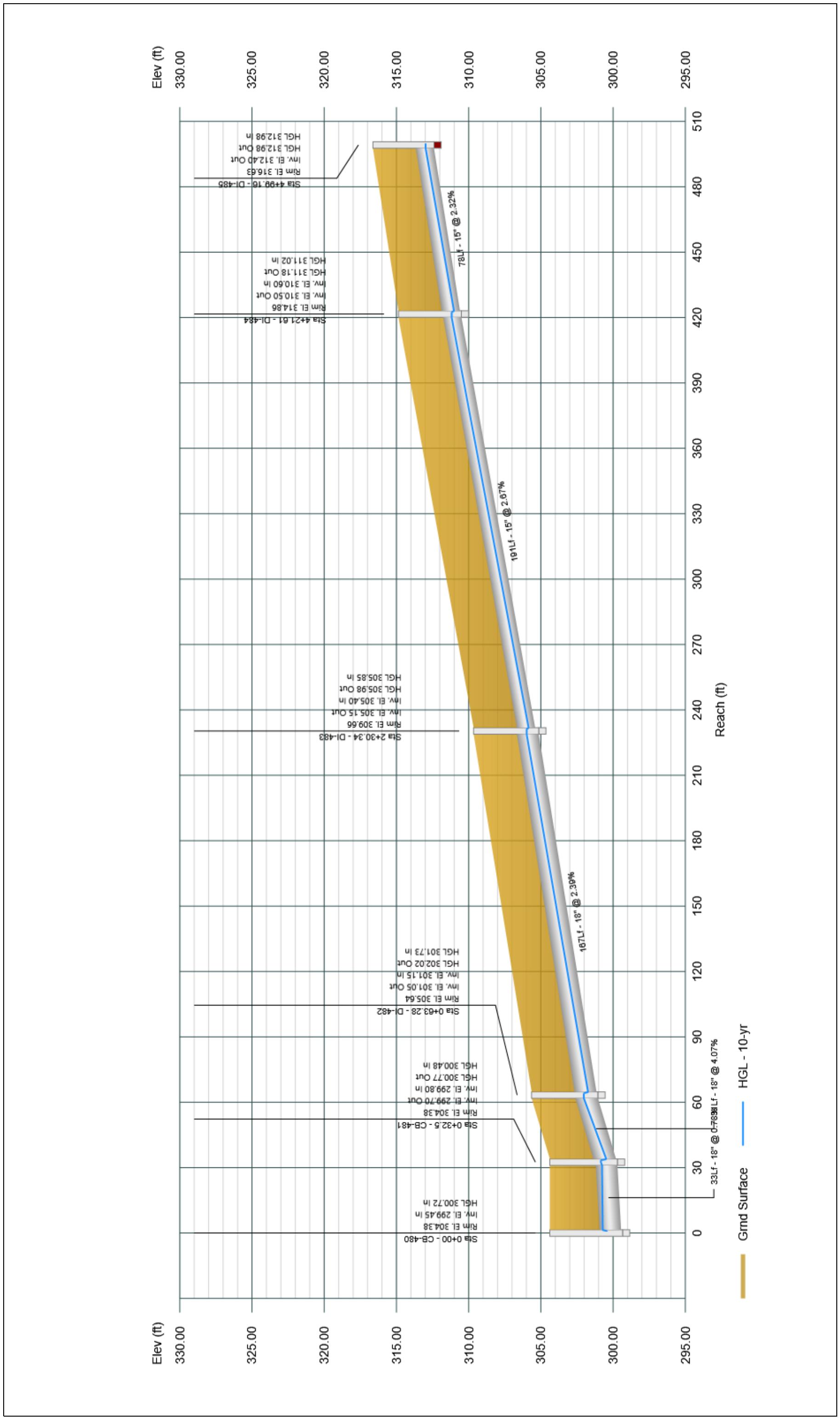


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

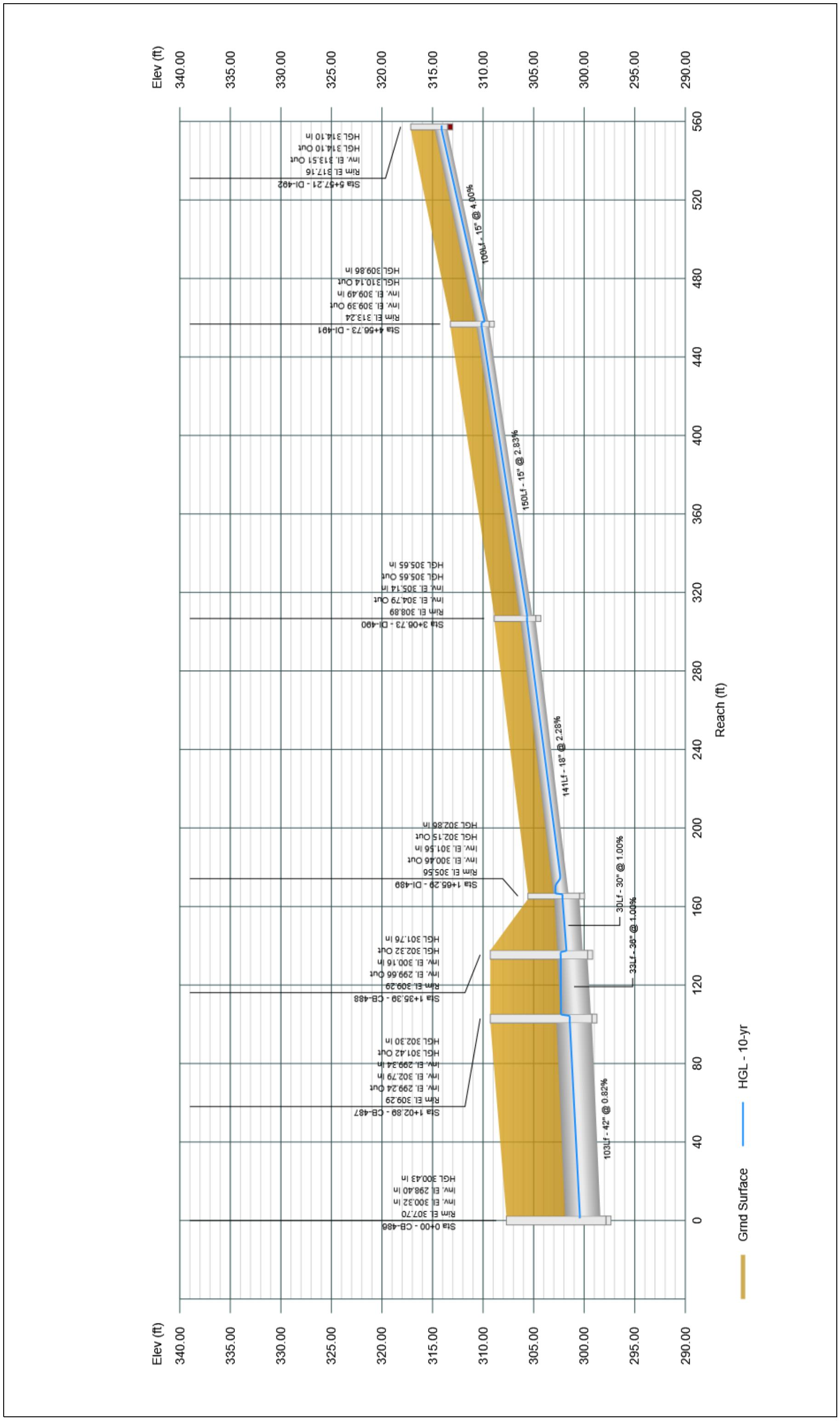


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

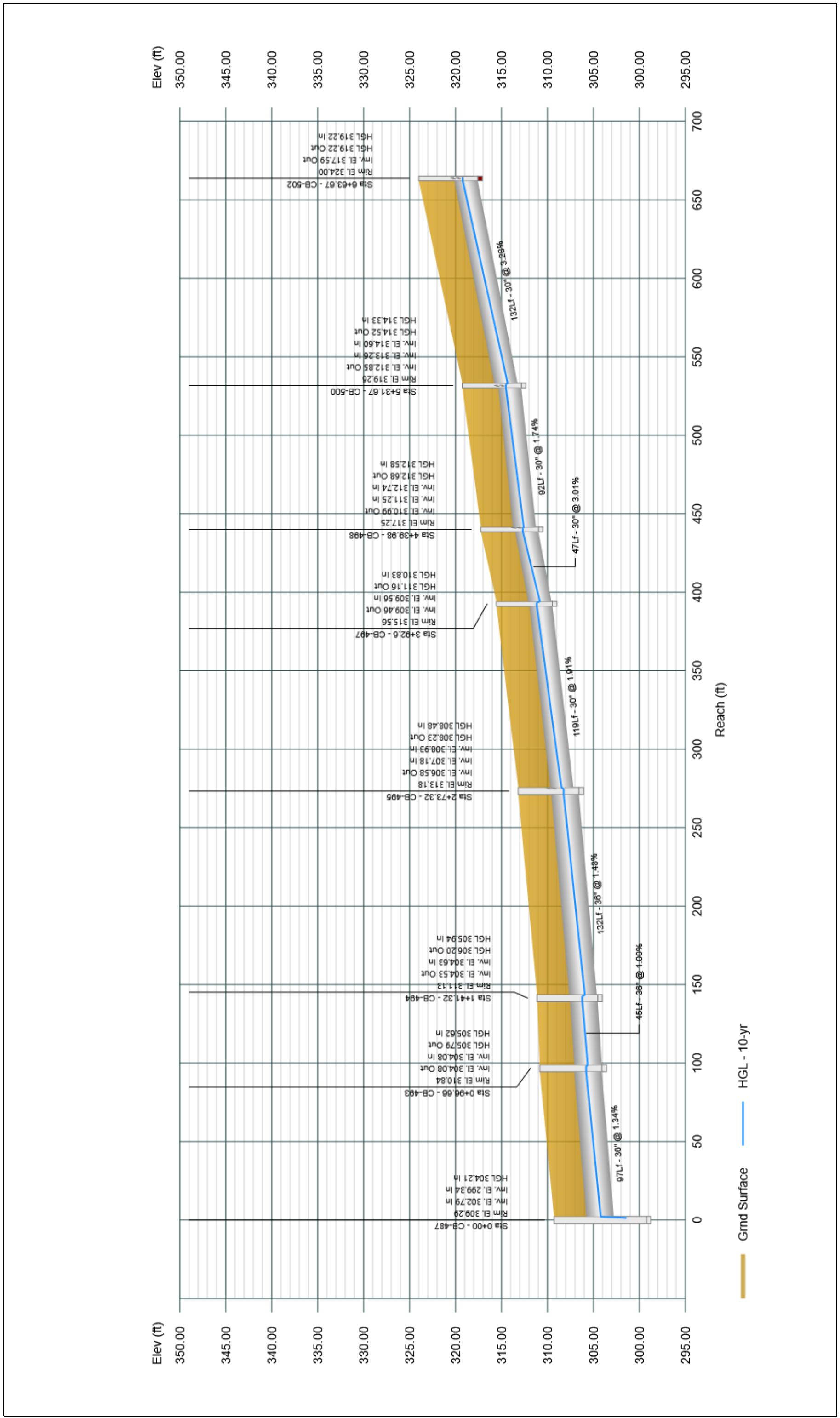


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

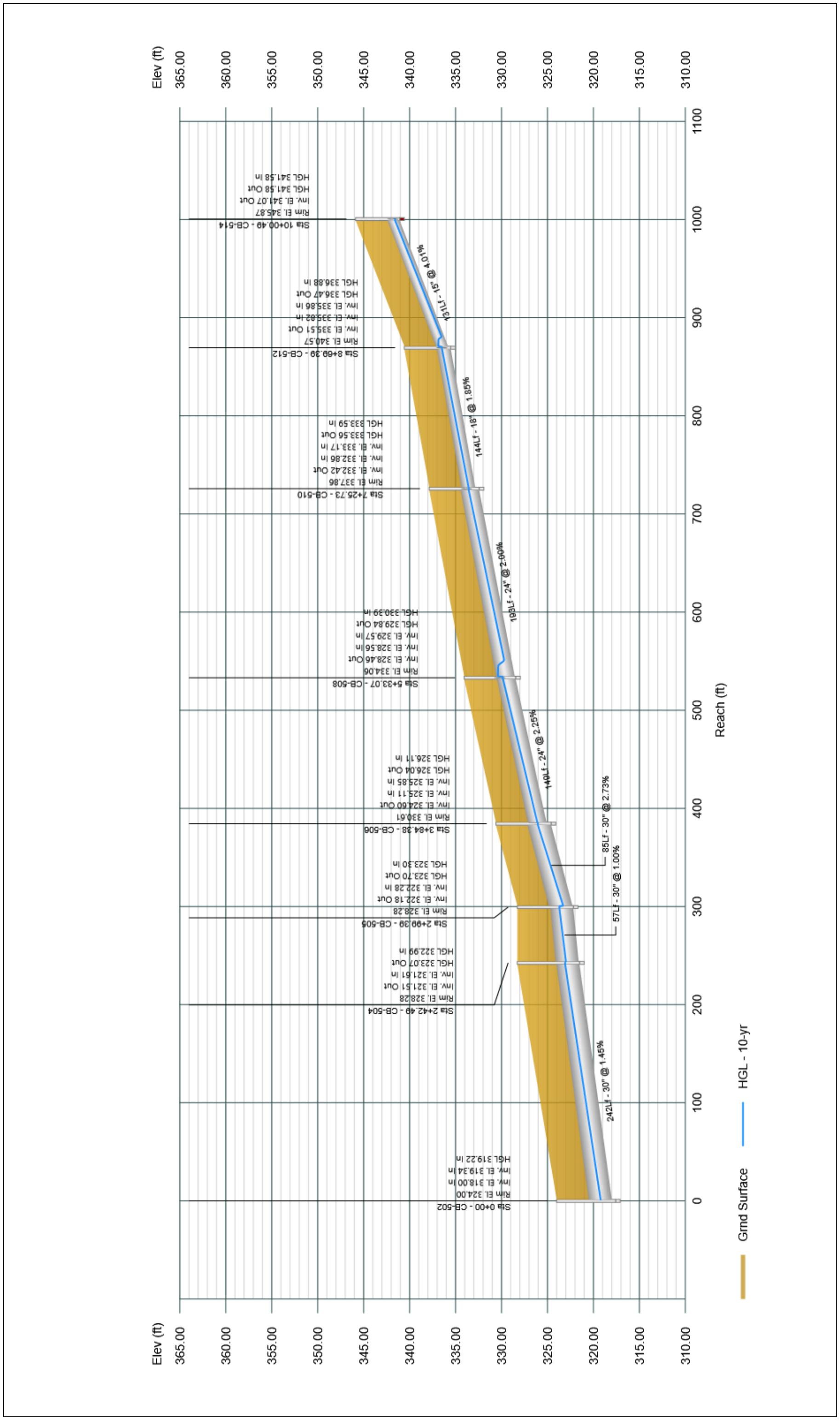


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

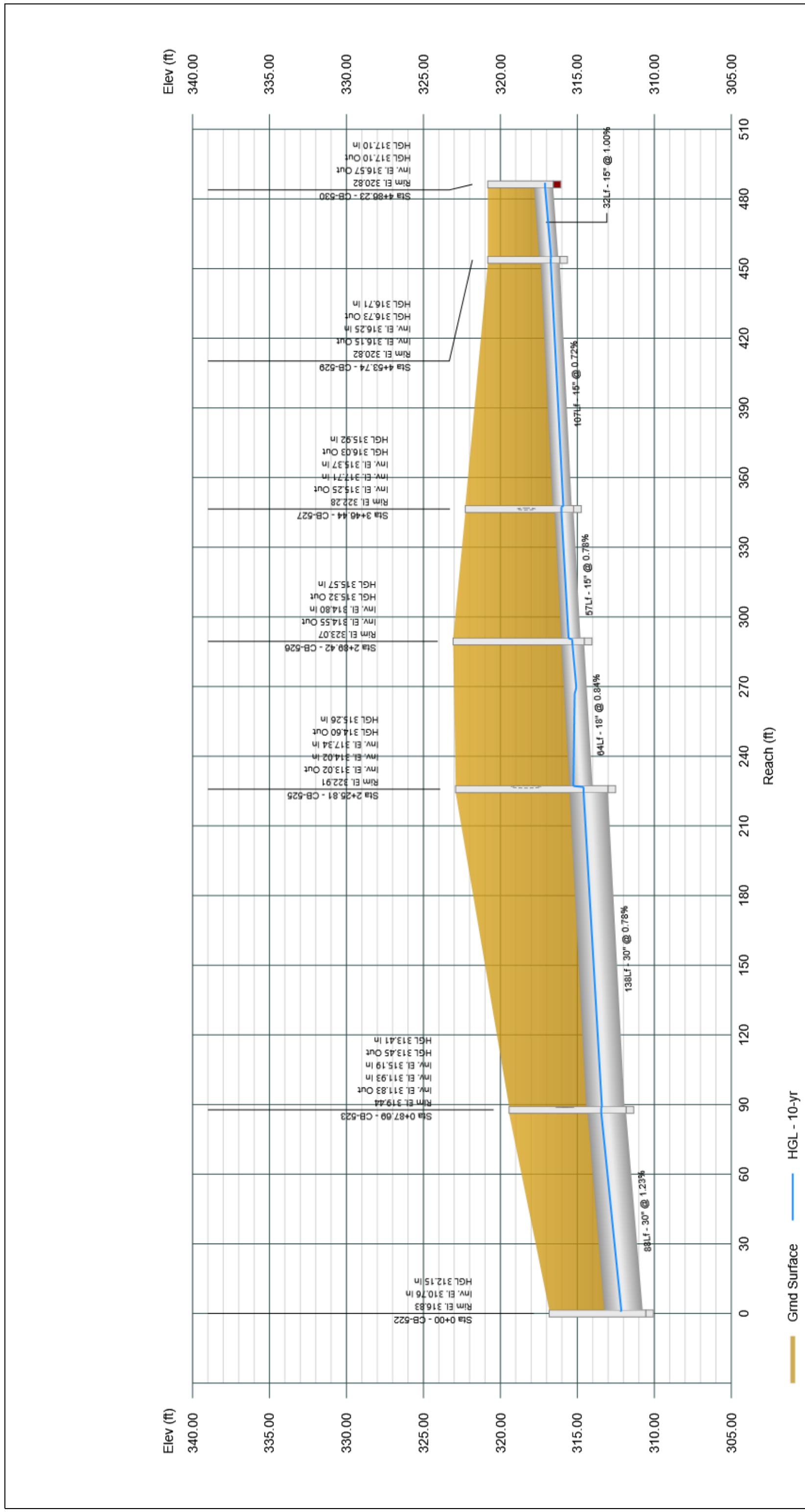


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

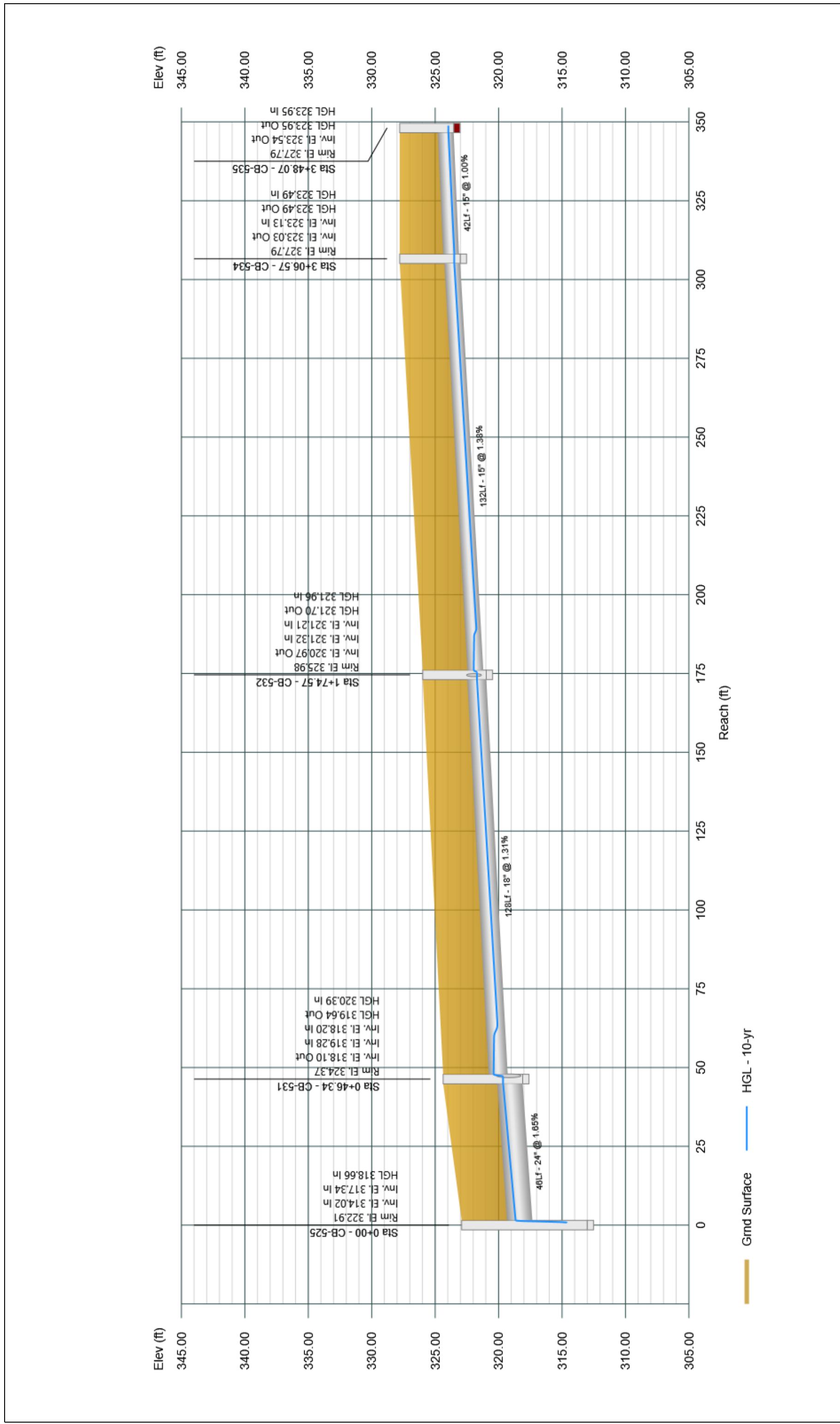


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

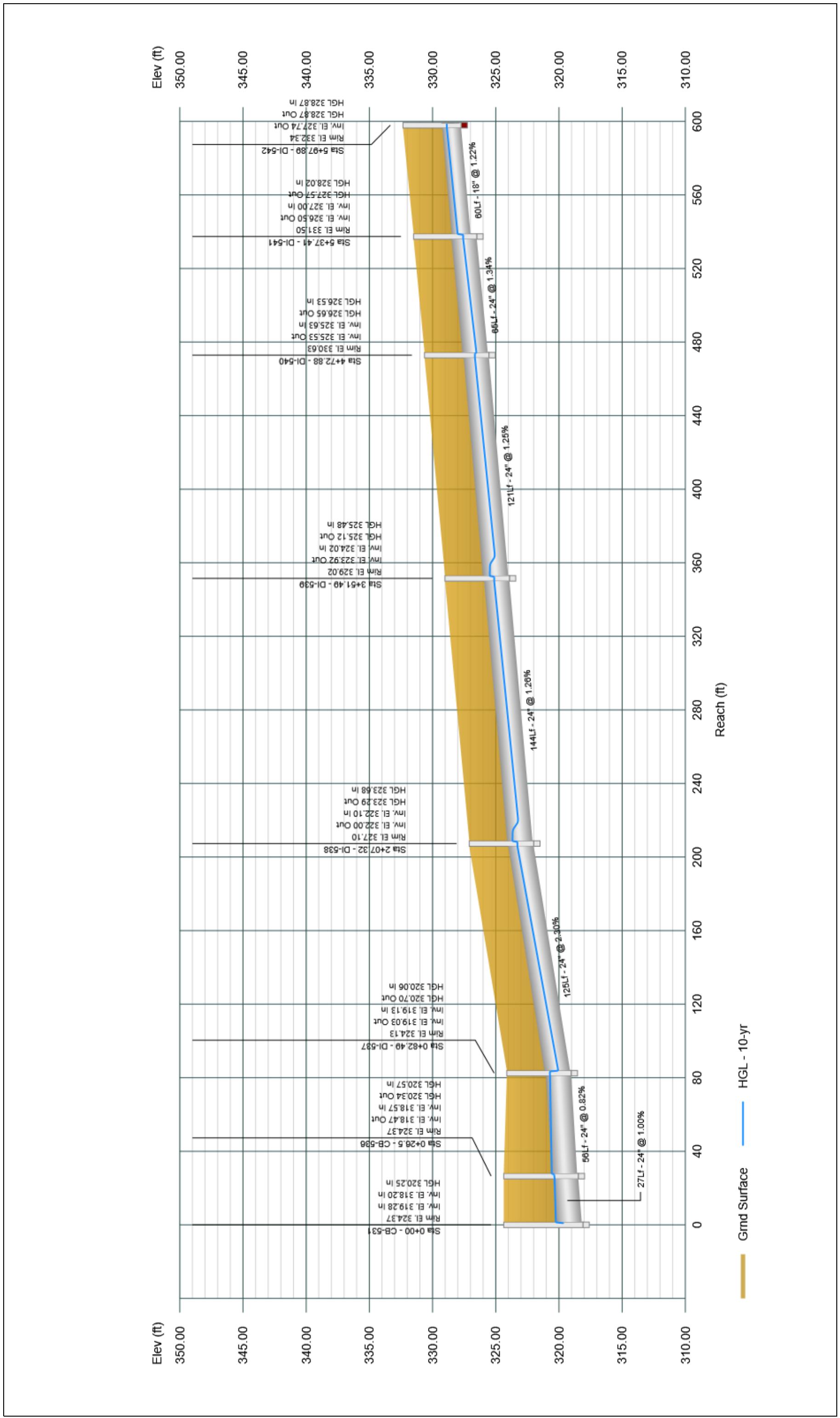


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024

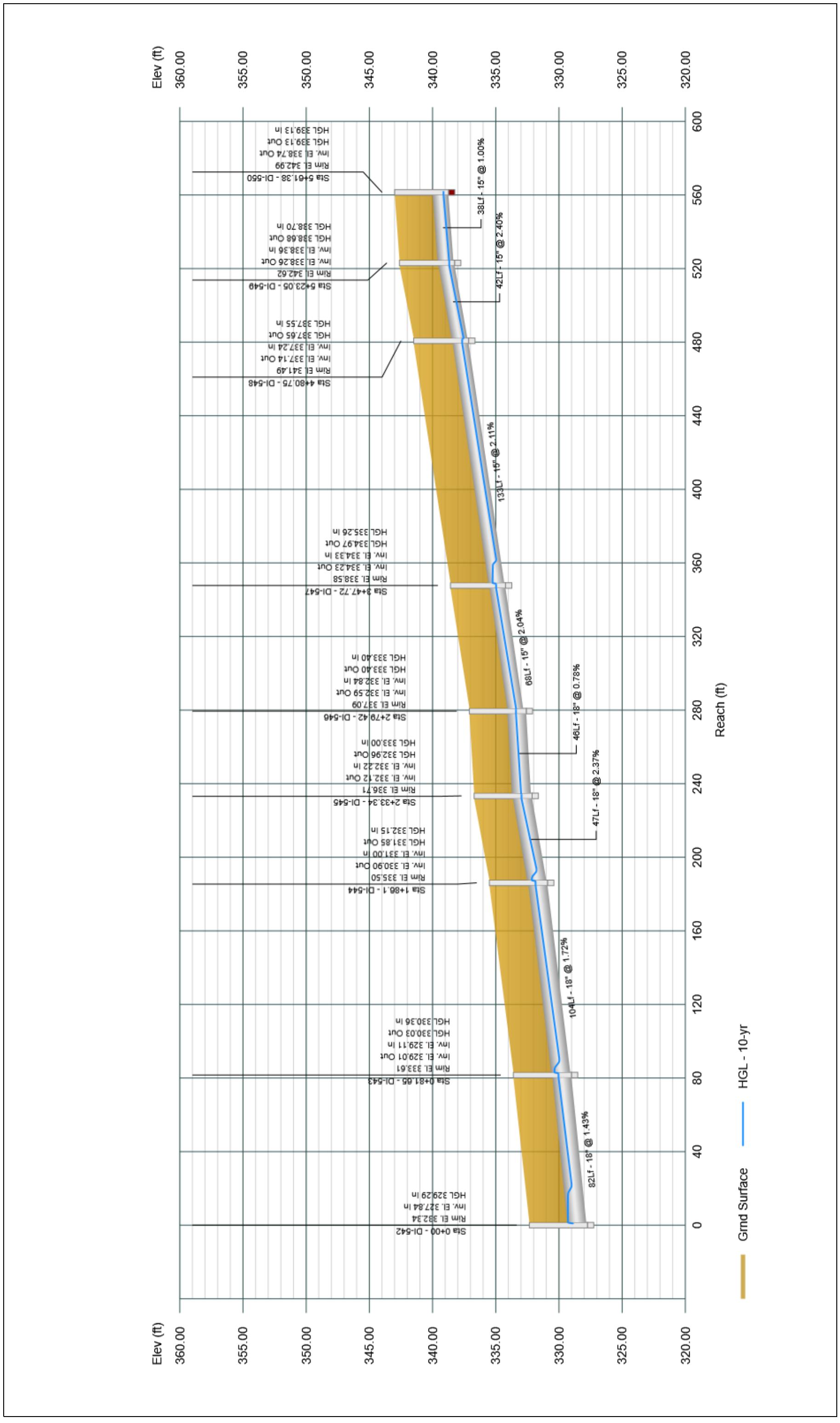


Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

11-19-2024



Project File: Storm System 400.sws

SYSTEM 600 – REPORTS AND PROFILES

Pearce Farm – CD Pkg 1
AGN23001

Plan View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-25-2024



Project File: Storm System 600.sws

Storm Sewer Tabulation

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-25-2024

Line ID	Length (ft)	Drng Area		C x A		Tc		Intensity (in/hr)	Total Q (cfs)	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev		HGL Elev		Surface Elev		Line No	
		Incr (ac)	Total (ac)	Incr (C)	Total (C)	Inlet (min)	Syst (min)					Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)		
600-601	82.35	0.000	28.850	0.00	0.00	17.31	0.0	5.12	7.15	123.74	240.05	13.07	48	2.79	280.80	278.50	284.09	281.00	311.26	300.00	1
601-602	137.05	28.850	28.850	0.60	17.31	17.31	5.0	5.00	7.19	124.40	248.46	13.77	48	2.99	285.00	280.90	288.30	283.24	311.00	311.26	2

Notes: IDF File = Pearce Farm IDF.Idf, Return Period = 10-yr.s.

Project File: Storm System 600.sws

Energy Grade Line Calculations

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-25-2024

Line No	Line Size (in)	Q (cfs)	Downstream						Upstream						n Value	EGL Elev (ft)	HGLa Elev (ft)	Energy Loss (ft)	Junction			
			Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft)	EGL Elev (ft)	Invert Elev (ft)	Depth (ft)	Area (sqft)	HGL Elev (ft)	Vel Head (ft/s)	EGL Elev (ft)								
1	48	123.74	278.50	2.50‡	8.27	281.00	14.96	3.48	283.74	82.35	280.80	3.29²	11.06	284.09	11.19	1.95	286.04	0.013	2.300	284.09	286.04	0.00
2	48	124.40	280.90	2.34‡	7.62	283.24	16.32	4.14	286.65	137.05	285.00	3.30²	11.09	288.30	11.22	1.96	290.26	0.013	3.611	290.81c	290.81	0.55

Notes: Return Period = 10-yr. ² Critical depth. ‡ Supercritical. ic Inlet Control

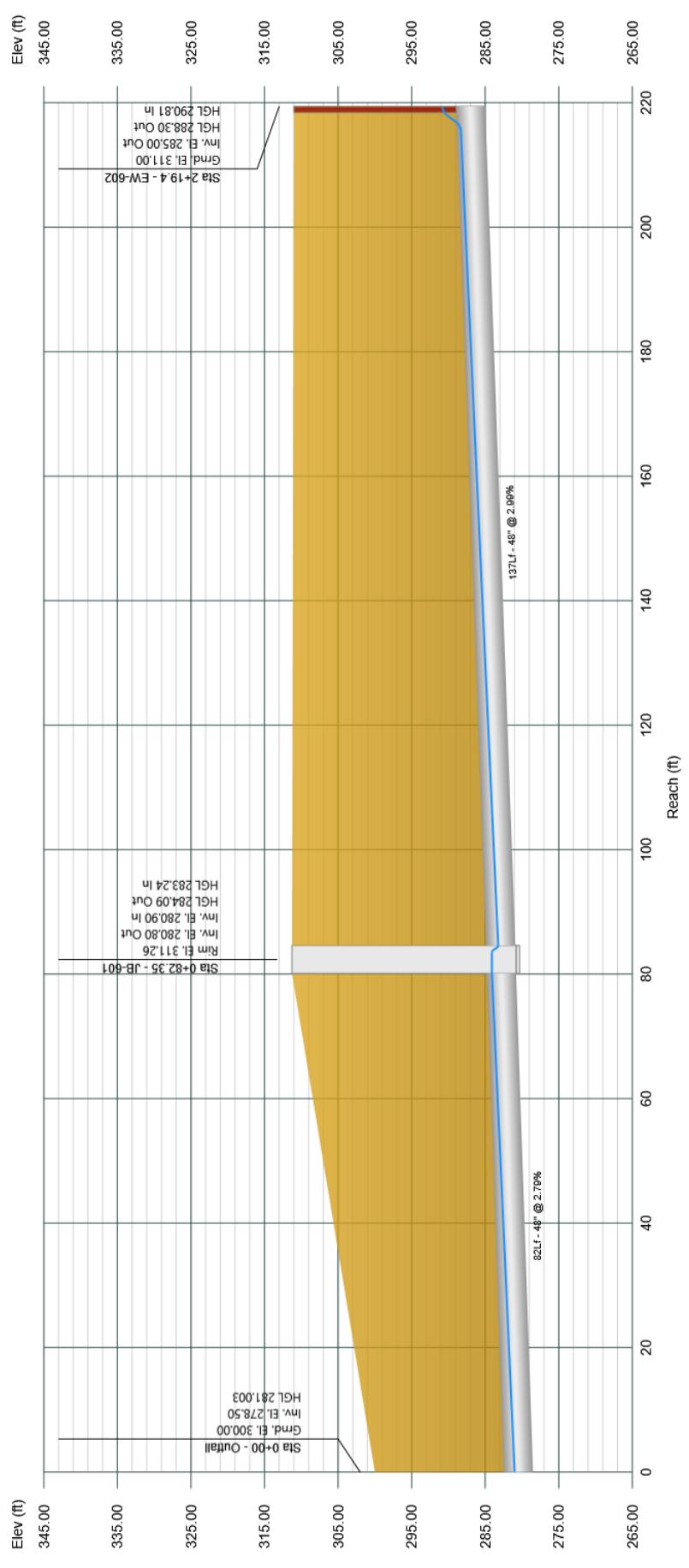
Project File: Storm System 600.sws

Profile View

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

11-25-2024



VELOCITY DISSIPATOR CALCULATIONS

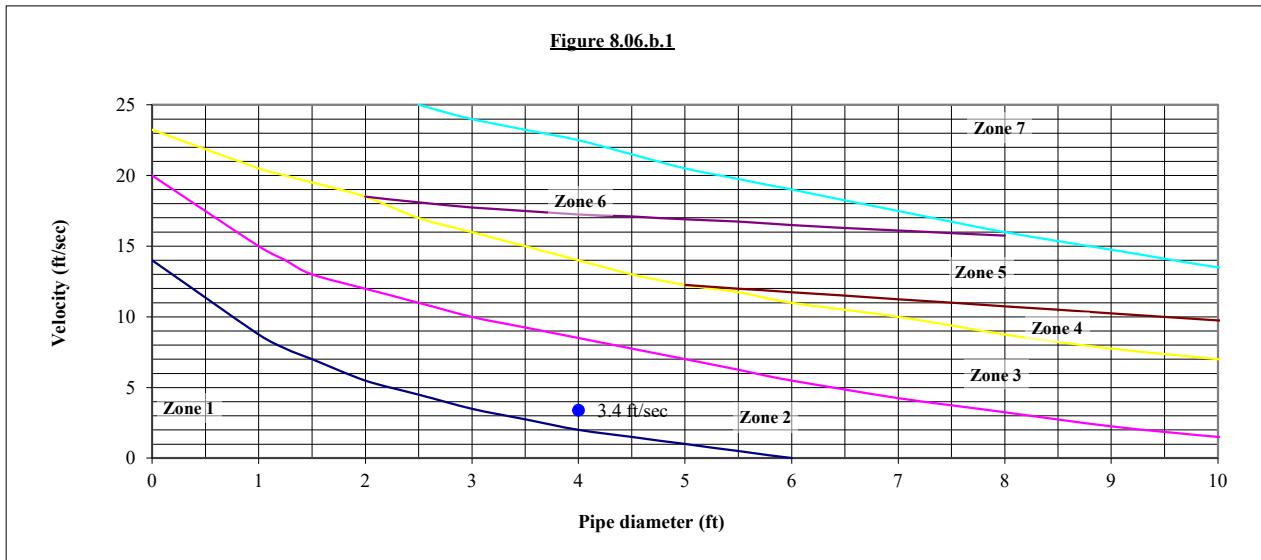


DESIGN OF RIPRAP OUTLET PROTECTION WORKSHEET

Project: Pearce Farm - CD Package 1
 Project Number: AGN-23001
 Outlet Number: EW-100

Date: 11/22/2024
 Calculated By: WTO

Outlet flowrate =	42.68	cfs
Pipe diameter =	48	inches
Number of pipes =	1	
Pipe separation =	0	feet
Outlet Velocity =	3.4	ft/sec



Zone from graph above = 2

Outlet pipe diameter	48 in.
Outlet flowrate	42.7 cfs
Outlet velocity	3.4 ft/sec
Material	Class B

Length	24.0 ft.
Width	13.6 ft.
Stone diameter	6 in.
Thickness	18 in.

Zone	Material	Diameter	Thickness	Length	Width
1	Class A	3	12	$4 \times D(o)$	$3 \times D(o)$
2	Class B	6	18	$6 \times D(o)$	$3 \times D(o)$
3	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
4	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
5	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
6	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
7	Special study required				

1. Calculations based on NY DOT method - Pages 8.06.05 through 8.06.06 in NC Erosion Control Manual

2. Outlet velocity based on full-flow velocity



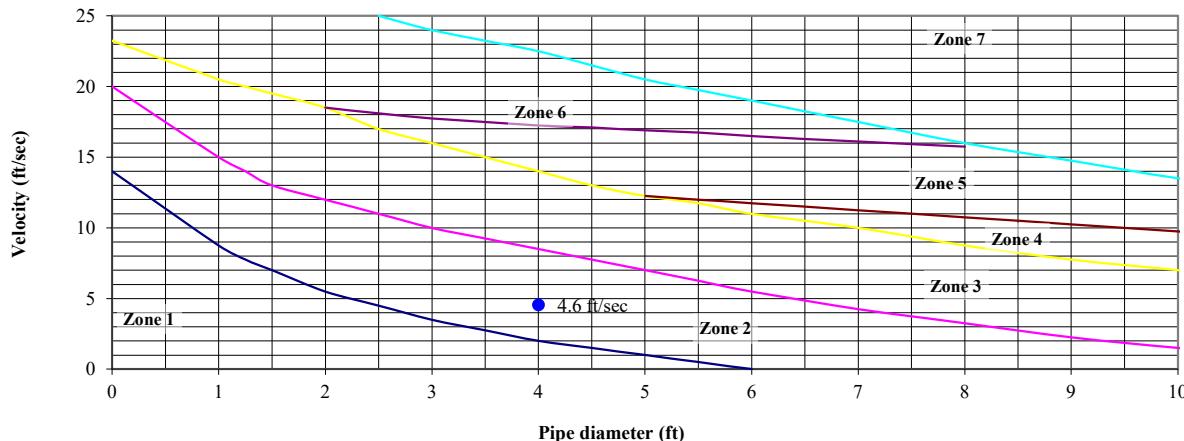
DESIGN OF RIPRAP OUTLET PROTECTION WORKSHEET

Project: Pearce Farm - CD Package 1
 Project Number: AGN-23001
 Outlet Number: EW-200

Date: 11/22/2024
 Calculated By: WTO

Outlet flowrate =	66.39	cfs
Pipe diameter =	48	inches
Number of pipes =	1	
Pipe separation =	0	feet
Outlet Velocity =	4.56	ft/sec

Figure 8.06.b.1



Zone from graph above = 2

Outlet pipe diameter	48 in.
Outlet flowrate	66.4 cfs
Outlet velocity	4.6 ft/sec
Material	Class B

Length	24.0 ft.
Width	13.6 ft.
Stone diameter	6 in.
Thickness	18 in.

Zone	Material	Diameter	Thickness	Length	Width
1	Class A	3	12	$4 \times D(o)$	$3 \times D(o)$
2	Class B	6	18	$6 \times D(o)$	$3 \times D(o)$
3	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
4	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
5	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
6	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
7	Special study required				

1. Calculations based on NY DOT method - Pages 8.06.05 through 8.06.06 in NC Erosion Control Manual

2. Outlet velocity based on full-flow velocity

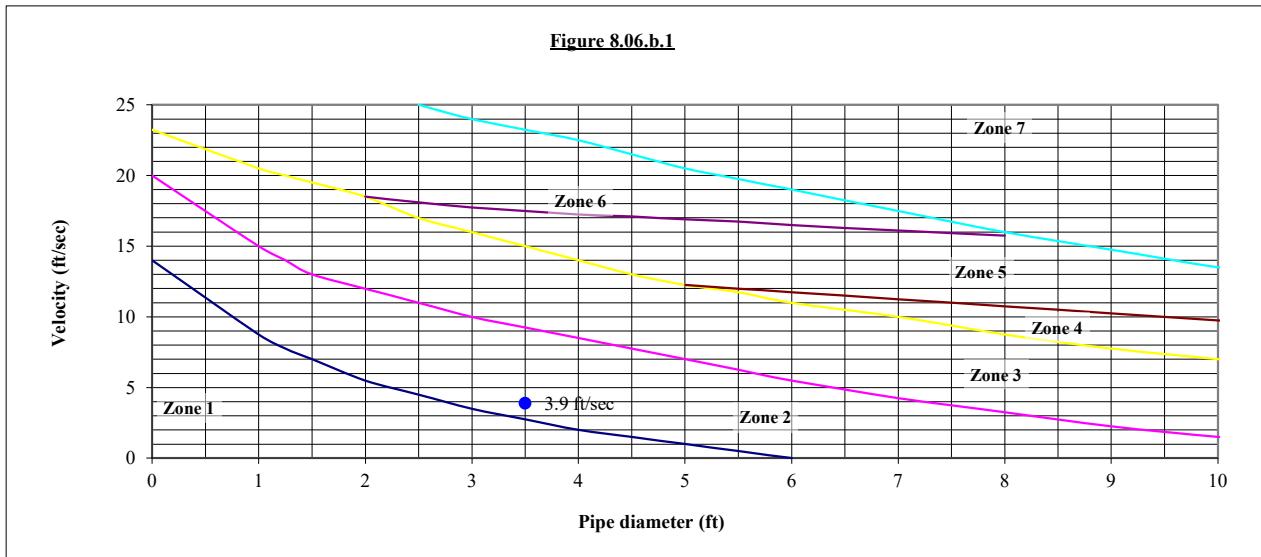


DESIGN OF RIPRAP OUTLET PROTECTION WORKSHEET

Project: Pearce Farm - CD Package 1
 Project Number: AGN-23001
 Outlet Number: EW-300

Date: 11/22/2024
 Calculated By: WTO

Outlet flowrate =	63.54	cfs
Pipe diameter =	42	inches
Number of pipes =	1	
Pipe separation =	0	feet
Outlet Velocity =	3.9	ft/sec



Outlet pipe diameter	42 in.
Outlet flowrate	63.5 cfs
Outlet velocity	3.9 ft/sec
Material =	Class B

Length =	21.0 ft.
Width =	11.9 ft.
Stone diameter =	6 in.
Thickness =	18 in.

Zone	Material	Diameter	Thickness	Length	Width
1	Class A	3	12	$4 \times D(o)$	$3 \times D(o)$
2	Class B	6	18	$6 \times D(o)$	$3 \times D(o)$
3	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
4	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
5	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
6	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
7	Special study required				

1. Calculations based on NY DOT method - Pages 8.06.05 through 8.06.06 in NC Erosion Control Manual

2. Outlet velocity based on full-flow velocity

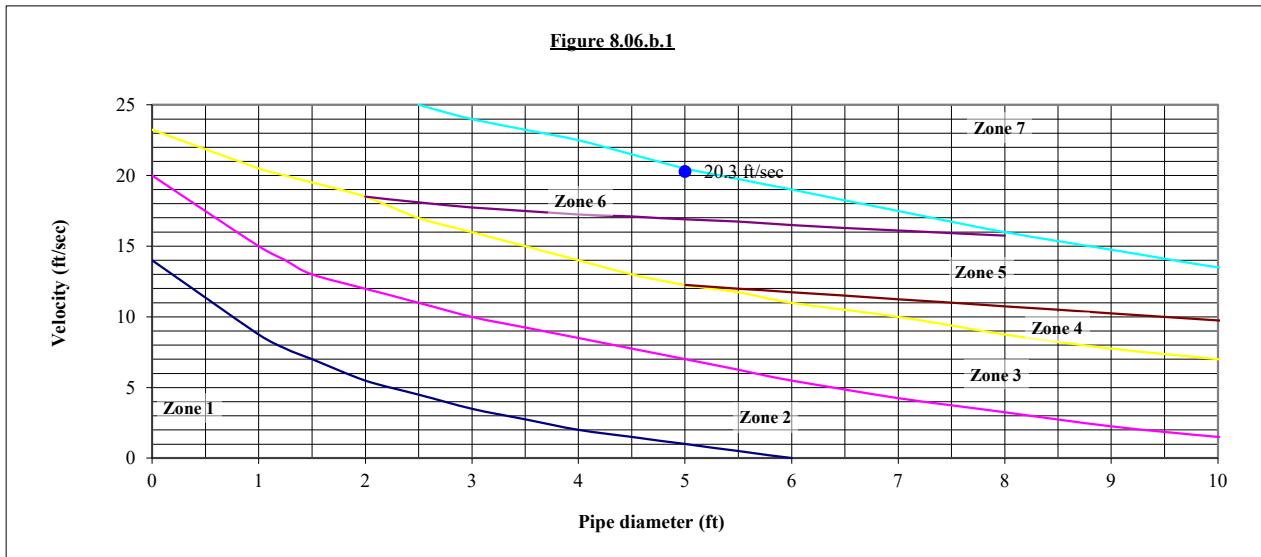


DESIGN OF RIPRAP OUTLET PROTECTION WORKSHEET

Project: Pearce Farm - CD Package 1
 Project Number: AGN-23001
 Outlet Number: EW-400

Date: 11/22/2024
 Calculated By: WTO

Outlet flowrate =	164	cfs
Pipe diameter =	60	inches
Number of pipes =	1	
Pipe separation =	0	feet
Outlet Velocity =	20.3	ft/sec



Zone from graph above = 6

Outlet pipe diameter	60 in.
Outlet flowrate	164.0 cfs
Outlet velocity	20.3 ft/sec
Material =	Class II

Length =	50.0 ft.
Width =	25.0 ft.
Stone diameter =	23 in.
Thickness =	36 in.

Zone	Material	Diameter	Thickness	Length	Width
1	Class A	3	12	$4 \times D(o)$	$3 \times D(o)$
2	Class B	6	18	$6 \times D(o)$	$3 \times D(o)$
3	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
4	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
5	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
6	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
7	Special study required				

1. Calculations based on NY DOT method - Pages 8.06.05 through 8.06.06 in NC Erosion Control Manual

2. Outlet velocity based on full-flow velocity



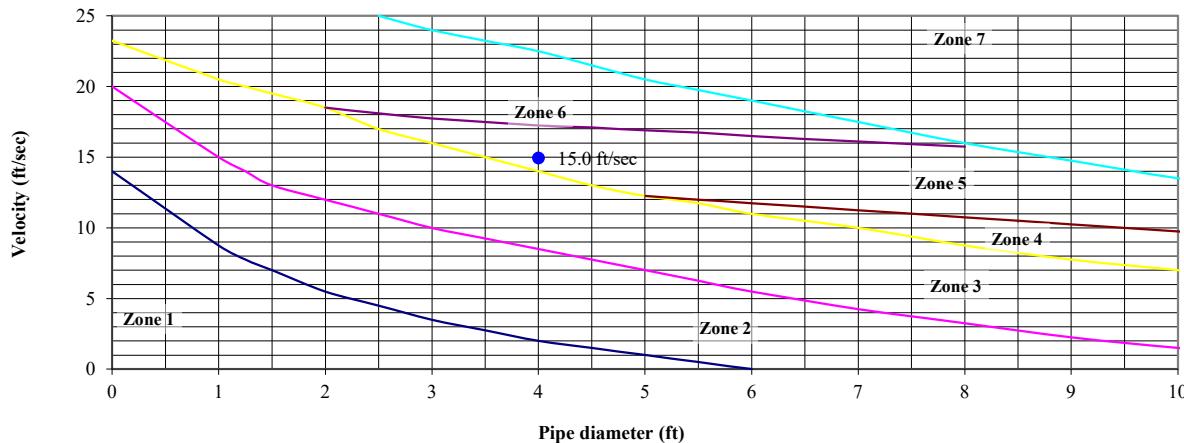
DESIGN OF RIPRAP OUTLET PROTECTION WORKSHEET

Project: Pearce Farm - CD Package 1
 Project Number: AGN-23001
 Outlet Number: EW-600

Date: 11/22/2024
 Calculated By: WTO

Outlet flowrate =	123.74	cfs
Pipe diameter =	48	inches
Number of pipes =	1	
Pipe separation =	0	feet
Outlet Velocity =	14.96	ft/sec

Figure 8.06.b.1



Zone from graph above = 5

Outlet pipe diameter	48 in.
Outlet flowrate	123.7 cfs
Outlet velocity	15.0 ft/sec
Material =	Class II

Length =	40.0 ft.
Width =	20.0 ft.
Stone diameter =	23 in.
Thickness =	36 in.

Zone	Material	Diameter	Thickness	Length	Width
1	Class A	3	12	$4 \times D(o)$	$3 \times D(o)$
2	Class B	6	18	$6 \times D(o)$	$3 \times D(o)$
3	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
4	Class I	13	24	$8 \times D(o)$	$3 \times D(o)$
5	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
6	Class II	23	36	$10 \times D(o)$	$3 \times D(o)$
7	Special study required				

1. Calculations based on NY DOT method - Pages 8.06.05 through 8.06.06 in NC Erosion Control Manual

2. Outlet velocity based on full-flow velocity

INLET/GUTTER SPREAD REPORTS

Pearce Farm – CD Pkg 1
AGN23001

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-30-2025

Line No	Inlet		Q			Curb			Grate			Gutter			Inlet			Byp Line No	
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)
1	JB-101	Manhole	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	JB-102	Manhole	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	CB-103	Combination	0.32	0.01	0.33	0.00	3.0	3.00	3.00	2.00	-	0.016	2.00	0.040	0.020	0.013	0.11	3.25	0.16
4	CB-109	Combination	0.38	0.00	0.37	0.01	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.11	3.35	0.17
5	CB-111	Combination	0.29	0.00	0.29	0.00	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.09	2.40	0.13
6	CB-120	Combination	0.19	0.00	0.19	0.00	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.08	1.90	0.12
7	CB-121	Combination	0.03	0.00	0.03	0.00	3.0	3.00	3.00	2.00	-	0.005	2.00	0.040	0.020	0.013	0.06	1.40	0.09
8	CB-122	Combination	0.26	0.04	0.30	0.00	3.0	3.00	3.00	2.00	0.55	Sag	2.00	0.040	0.020	0.013	0.04	0.90	0.20
9	CB-124	Combination	0.07	0.43	0.46	0.04	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.12	4.15	0.19
10	DI-125	Drop Grate	-0.13	-0.54	-0.34	-0.33	-	2.00	2.00	-0.015	2.00	-0.020	-0.020	-0.013	-0.08	-0.08	-10.00	-0.08	-10.00
11	CB-134	Combination	0.90	0.00	0.79	0.10	3.0	3.00	3.00	2.00	-	0.033	2.00	0.040	0.020	0.013	0.13	4.50	0.20
12	CB-135	Combination	0.35	0.00	0.35	0.00	3.0	3.00	3.00	2.00	-	0.033	2.00	0.040	0.020	0.013	0.09	2.70	0.14
13	CB-136	Combination	0.45	0.00	0.45	0.00	3.0	3.00	3.00	2.00	-	0.048	2.00	0.040	0.020	0.013	0.10	2.80	0.15
14	CB-137	Combination	0.20	0.00	0.20	0.00	3.0	3.00	3.00	2.00	-	0.048	2.00	0.040	0.020	0.013	0.07	1.80	0.11
15	CB-139	Combination	0.17	0.00	0.17	0.00	3.0	3.00	3.00	2.00	-	0.048	2.00	0.040	0.020	0.013	0.07	1.67	0.10
16	CB-141	Combination	0.14	0.00	0.14	0.00	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.07	1.77	0.11
17	CB-142	Combination	0.20	0.00	0.20	0.00	3.0	3.00	3.00	2.00	-	0.028	2.00	0.040	0.020	0.013	0.08	1.98	0.12
18	CB-151	Combination	0.26	0.00	0.26	0.00	3.0	3.00	3.00	2.00	-	0.055	2.00	0.040	0.020	0.013	0.08	1.90	0.12
19	CB-152	Combination	0.36	0.00	0.36	0.00	3.0	3.00	3.00	2.00	-	0.055	2.00	0.040	0.020	0.013	0.09	2.30	0.13
20	DI-153	Drop Grate	-0.20	-0.00	-0.20	-0.00	-	2.00	2.00	-3.22	Sag	4.00	-0.330	-0.330	-0.013	-0.05	-4.30	-0.05	-4.30
21	DI-154	Drop Grate	-1.23	-0.00	-1.23	-0.00	-	2.00	2.00	-3.22	Sag	4.00	-0.330	-0.330	-0.013	-0.17	-5.01	-0.17	-5.01
22	DI-155	Drop Grate	-0.44	-0.00	-0.44	-0.00	-	2.00	2.00	-3.22	Sag	4.00	-0.330	-0.330	-0.013	-0.08	-4.61	-0.08	-4.61

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grate in Sag = 50, Grate on Grade = 0; Grate in Sag = 50.

Project File: Storm System 100.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-30-2025

Line No	Inlet		Q				Curb			Grate			Gutter				Inlet		Byp Line No			
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)		
23	CB-138	Combination	0.38	0.00	0.38	0.00	3.0	3.00	3.00	2.00	-	0.048	2.00	0.040	0.020	0.013	0.09	2.55	0.14	1.12	2.5	11
24	CB-140	Combination	0.45	0.00	0.45	0.00	3.0	3.00	3.00	2.00	-	0.048	2.00	0.040	0.020	0.013	0.10	2.80	0.15	1.18	2.5	23
25	CB-143	Combination	0.19	0.00	0.19	0.00	3.0	3.00	3.00	2.00	-	0.028	2.00	0.040	0.020	0.013	0.08	1.95	0.12	0.95	2.5	16
26	CB-144	Combination	0.16	0.00	0.16	0.00	3.0	3.00	3.00	2.00	-	0.007	2.00	0.040	0.020	0.013	0.09	2.70	0.14	1.15	2.5	30
27	CB-145	Combination	0.06	0.00	0.06	0.00	3.0	3.00	3.00	2.00	-	0.007	2.00	0.040	0.020	0.013	0.07	1.67	0.10	0.82	2.5	28
28	CB-146	Combination	0.38	0.00	0.38	0.00	3.0	3.00	3.00	2.00	-	0.036	2.00	0.040	0.020	0.013	0.10	2.80	0.15	1.18	2.5	29
29	CB-147	Combination	0.29	0.00	0.29	0.00	3.0	3.00	3.00	2.00	-	0.025	2.00	0.040	0.020	0.013	0.09	2.60	0.14	1.14	2.5	31
30	CB-148	Combination	0.70	0.00	0.64	0.06	3.0	3.00	3.00	2.00	-	0.025	2.00	0.040	0.020	0.013	0.13	4.30	0.20	1.58	2.5	32
31	CB-149	Combination	0.86	0.00	0.86	0.00	3.0	3.00	3.00	2.00	1.05	Sag	2.00	0.040	0.020	0.013	0.11	3.29	0.27	3.29	2.5	0
32	CB-150	Combination	0.84	0.06	0.90	0.00	3.0	3.00	3.00	2.00	1.03	Sag	2.00	0.040	0.020	0.013	0.12	3.79	0.28	3.79	2.5	0
33	CB-112	Combination	0.22	0.00	0.22	0.00	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.08	2.00	0.12	0.98	2.5	5
34	CB-114	Combination	0.22	0.06	0.28	0.00	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.09	2.35	0.13	1.07	2.5	33
35	CB-117	Combination	0.26	0.26	0.51	0.01	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.11	3.45	0.17	1.34	2.5	46
36	DI-148	Drop Grate	-1.39	-0.90	-1.39	-0.90	-	-	-	2.00	1.70	Sag	-2.00	0.040	-0.020	-0.013	-0.18	20.15	-0.18	20.15	0.0	0
37	DI-149	Drop Grate	-0.94	0.00	-0.94	0.00	-	-	-	2.00	1.44	Sag	-2.00	0.040	-0.020	-0.013	-0.14	15.93	0.14	15.93	0.0	0
38	CB-123	Combination	0.74	0.00	0.74	0.00	3.0	3.00	3.00	2.00	0.90	Sag	2.00	0.040	0.020	0.013	0.10	2.79	0.26	2.79	2.5	0
39	DI-126	Drop Grate	-0.81	-0.18	-0.44	-0.54	-	-	-	2.00	2.00	-0.017	2.00	-0.020	-0.013	-0.09	-11.00	-0.09	-11.00	-0.0	-10	
40	CB-104	Combination	0.26	0.00	0.26	0.00	3.0	3.00	3.00	2.00	-	0.016	2.00	0.040	0.020	0.013	0.10	2.80	0.15	1.18	2.5	43
41	CB-105	Combination	0.38	0.05	0.41	0.02	3.0	3.00	3.00	2.00	-	0.016	2.00	0.040	0.020	0.013	0.12	3.75	0.18	1.43	2.5	42
42	CB-106	Combination	1.49	0.02	1.51	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.18	6.79	0.34	6.79	2.5	0
43	CB-107	Combination	0.77	0.00	0.77	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.10	2.79	0.26	2.79	2.5	0
44	CB-108	Combination	0.51	0.06	0.52	0.05	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.13	4.40	0.20	1.61	2.5	41

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grade in Sag = 50, Grade in Sag = 50.

Project File: Storm System 100.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 100

01-30-2025

Line No	Inlet		Q				Curb			Grate			Gutter			Inlet		Byp Line No				
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)			
45	CB-110	Combination	0.64	0.00	0.58	0.06	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.30	0.20	1.59	2.5	44
46	CB-113	Combination	0.22	0.01	0.24	0.00	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.08	2.10	0.13	1.01	2.5	38
47	CB-115	Combination	0.58	0.00	0.52	0.06	3.0	3.00	3.00	2.00	-	0.012	2.00	0.040	0.020	0.013	0.13	4.65	0.21	1.68	2.5	34
48	CB-116	Combination	1.17	0.00	0.91	0.26	3.0	3.00	3.00	2.00	-	0.012	2.00	0.040	0.020	0.013	0.17	6.40	0.27	3.13	2.5	35
49	DI-127	Drop Grate	0.78	0.62	1.22	-0.18	2.00	2.00	2.00	2.00	-	0.024	2.00	0.250	0.250	0.013	0.15	3.20	0.15	3.20	0.0	39
50	DI-128	Drop Grate	1.97	0.00	0.45	-0.62	2.00	2.00	2.00	2.00	-	0.025	2.00	0.020	0.020	0.013	0.08	10.00	0.08	10.00	0.0	49
51	DI-129	Drop Grate	1.02	0.00	1.02	0.00	2.00	2.00	3.22	2.00	-	Sag	4.00	0.330	0.330	0.013	0.15	4.89	0.15	4.89	0.0	0
52	DI-130	Drop Grate	0.96	0.00	0.96	0.00	2.00	2.00	1.17	2.00	-	Sag	4.00	0.330	0.330	0.013	0.14	4.86	0.14	4.86	0.0	0
53	DI-131	Drop Grate	0.99	0.00	0.99	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.14	4.88	0.14	4.88	0.0	0	
54	DI-132	Drop Grate	0.55	0.00	0.55	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.10	4.59	0.10	4.59	0.0	0	
55	DI-133	Drop Grate	0.42	0.00	0.42	0.00	-	2.00	2.00	0.51	Sag	4.00	0.330	0.330	0.013	0.09	4.56	0.09	4.56	0.0	0	
56	DI-147A	Drop Grate	0.79	0.00	0.79	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.12	4.76	0.12	4.76	0.0	0	
57	DI-155A	Drop Grate	1.90	0.00	1.90	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.22	5.35	0.22	5.35	0.0	0	

Notes: Return Period = 1-yr. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50,

Project File: Storm System 100.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-30-2025

Line No	Inlet		Q			Curb			Grate			Gutter			Inlet			Byp Line No	
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (ft)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (in)	
1	JB-201	Manhole																	
2	DI-202	Drop Grate	-1.25	-0.94	-0.76	-1.43	-	2.00	-	-0.020	-0.020	-0.013	-0.12	-14.00	-0.12	-14.00	-0.0	-3	
3	DI-205	Drop Grate	-0.36	-1.43	-0.66	-1.13	-	2.00	-	-0.020	-0.020	-0.013	-0.11	-13.00	-0.11	-13.00	-0.0	-4	
4	DI-206	Drop Grate	-0.34	-1.13	-0.57	-0.89	-	2.00	-	-0.020	-0.020	-0.013	-0.10	-12.00	-0.10	-12.00	-0.0	-5	
5	DI-207	Drop Grate	-0.29	-0.89	-1.18	-0.00	-	2.00	-	-0.020	-0.020	-0.013	-0.16	-18.24	-0.16	-18.24	-0.0	-0	
6	DI-208	Drop Grate	-0.02	-0.00	-0.02	-0.00	-	2.00	-	-0.015	-2.00	-0.020	-0.013	-0.02	-4.00	-0.02	-4.00	-0.0	-0
7	CB-209	Combination	0.45	0.02	0.46	0.01	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.11	3.25	0.16
8	CB-210	Combination	0.13	0.09	0.22	0.00	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.08	2.00	0.12
9	CB-216	Combination	0.36	0.39	0.66	0.09	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.65	0.21
10	CB-217	Combination	0.54	0.03	0.53	0.04	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.12	4.15	0.19
11	CB-218	Combination	0.30	0.47	0.67	0.10	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.70	0.21
12	CB-246	Combination	1.07	0.17	0.98	0.26	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.16	5.85	0.25
13	CB-247	Combination	0.38	0.09	0.45	0.02	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.11	3.70	0.18
14	CB-248	Combination	0.90	0.09	0.82	0.17	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.15	5.30	0.23
15	CB-249	Combination	0.70	0.03	0.65	0.09	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.60	0.21
16	CB-250	Combination	0.42	0.33	0.66	0.09	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.65	0.21
17	CB-251	Combination	0.48	0.00	0.46	0.02	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.11	3.70	0.18
18	CB-252	Combination	0.30	0.20	0.47	0.03	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.12	3.75	0.18
19	CB-253	Combination	1.30	0.00	1.02	0.28	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.16	6.00	0.26
20	CB-254	Combination	0.51	0.00	0.48	0.03	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.12	3.85	0.18
21	CB-255	Combination	0.27	0.85	0.92	0.20	3.0	3.00	3.00	2.00	-	0.025	2.00	0.040	0.020	0.013	0.15	5.30	0.23
22	DI-256	Drop Grate	-0.36	-1.03	-0.55	-0.85	-	2.00	-	-0.023	-2.00	-0.020	-0.020	-0.013	-0.09	-11.00	-0.09	-11.00	

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50.

Project File: Storm System 200.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-30-2025

Line No	Inlet		Q			Curb			Grate			Gutter			Inlet			Byp Line No	
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (ft)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (in)	
23	DI-257	Drop Grate	0.42	1.23	0.62	-1.03	-	2.00	2.00	-0.023	2.00	0.020	0.020	0.013	-0.10	12.00	-0.10	12.00	0.0
24	DI-258	Drop Grate	0.59	0.94	0.59	-0.94	-	2.00	2.00	-0.026	2.00	0.020	0.020	0.013	-0.10	12.00	-0.10	12.00	0.0
25	DI-259	Drop Grate	0.59	0.00	0.30	-0.29	-	2.00	2.00	-0.023	2.00	0.020	0.020	0.013	-0.07	9.00	0.07	9.00	0.0
26	DI-260	Drop Grate	0.75	0.77	0.59	-0.94	-	2.00	2.00	-0.020	2.00	0.020	0.020	0.013	-0.10	12.00	-0.10	12.00	0.0
27	DI-261	Drop Grate	0.73	0.57	0.52	-0.77	-	2.00	2.00	-0.026	2.00	0.020	0.020	0.013	-0.09	11.00	-0.09	11.00	0.0
28	DI-262	Drop Grate	1.02	0.00	0.45	-0.57	-	2.00	2.00	-0.020	2.00	0.020	0.020	0.013	-0.09	11.00	-0.09	11.00	0.0
29	CB-263	Combination	1.28	0.20	1.13	0.34	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.16	6.15	0.26
30	CB-264	Combination	0.51	0.01	0.49	0.03	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.12	3.75	0.18
31	CB-265	Combination	1.04	0.03	0.87	0.20	3.0	3.00	3.00	2.00	-	0.017	2.00	0.040	0.020	0.013	0.15	5.70	0.25
32	CB-266	Combination	0.38	0.00	0.37	0.01	3.0	3.00	3.00	2.00	-	0.017	2.00	0.040	0.020	0.013	0.11	3.45	0.17
33	CB-267	Combination	0.44	0.00	0.42	0.03	3.0	3.00	3.00	2.00	-	0.017	2.00	0.040	0.020	0.013	0.11	3.70	0.18
34	CB-268	Combination	0.29	0.00	0.29	0.00	3.0	3.00	3.00	2.00	-	0.017	2.00	0.040	0.020	0.013	0.10	2.95	0.15
35	CB-269	Combination	0.15	0.01	0.16	0.00	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.08	1.95	0.12
36	CB-270	Combination	0.32	0.00	0.31	0.01	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.10	2.95	0.15
37	CB-271	Combination	0.48	0.03	0.48	0.03	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.12	3.85	0.18
38	CB-272	Combination	0.30	0.00	0.30	0.00	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.10	2.90	0.15
39	CB-273	Combination	0.48	0.03	0.48	0.03	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.12	3.85	0.18
40	CB-274	Combination	0.30	0.00	0.30	0.00	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.10	2.85	0.15
41	CB-275	Combination	0.51	0.01	0.49	0.03	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.12	3.90	0.18
42	CB-276	Combination	0.30	0.00	0.30	0.00	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.10	2.85	0.15
43	CB-277	Combination	0.38	0.00	0.37	0.01	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.11	3.30	0.16
44	CB-219	Combination	0.30	1.48	1.31	0.47	3.0	3.00	3.00	2.00	-	0.025	2.00	0.040	0.020	0.013	0.17	6.55	0.28

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grade in Sag = 50;

Project File: Storm System 200.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-30-2025

Line No	Inlet		Q			Curb			Grate			Gutter			Inlet			Byp Line No			
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (in)			
45	DI-220	Drop Grate	-0.56	-1.43	-0.70	-1.28	-	2.00	2.00	-0.020	-0.020	-0.020	-0.013	-0.11	-13.00	-0.11	-13.00	-0.0	-44		
46	CB-226	Combination	1.07	0.00	0.87	0.20	3.0	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.15	5.55	0.24	2.5	44	
47	CB-228	Combination	1.15	0.06	0.95	0.26	3.0	3.00	3.00	-	0.017	2.00	0.040	0.020	0.013	0.16	6.00	0.26	2.48	2.5	0
48	CB-230	Combination	0.62	0.00	0.57	0.06	3.0	3.00	3.00	-	0.017	2.00	0.040	0.020	0.013	0.13	4.45	0.20	1.63	2.5	47
49	CB-231	Combination	0.35	0.00	0.35	0.01	3.0	3.00	3.00	-	0.017	2.00	0.040	0.020	0.013	0.11	3.30	0.16	1.31	2.5	77
50	CB-232	Combination	0.27	0.00	0.27	0.00	3.0	3.00	3.00	-	0.012	2.00	0.040	0.020	0.013	0.10	3.15	0.16	1.26	2.5	48
51	CB-233	Combination	0.26	0.00	0.26	0.00	3.0	3.00	3.00	-	0.021	2.00	0.040	0.020	0.013	0.09	2.55	0.14	1.13	2.5	50
52	CB-234	Combination	0.51	0.06	0.53	0.04	3.0	3.00	3.00	-	0.021	2.00	0.040	0.020	0.013	0.12	4.05	0.19	1.51	2.5	55
53	CB-235	Combination	0.30	0.00	0.30	0.00	3.0	3.00	3.00	-	0.021	2.00	0.040	0.020	0.013	0.10	2.80	0.15	1.18	2.5	51
54	CB-236	Combination	0.61	0.03	0.58	0.06	3.0	3.00	3.00	-	0.021	2.00	0.040	0.020	0.013	0.13	4.25	0.20	1.58	2.5	52
55	CB-237	Combination	0.45	0.04	0.48	0.01	3.0	3.00	3.00	-	0.045	2.00	0.040	0.020	0.013	0.10	3.00	0.15	1.23	2.5	0
56	CB-238	Combination	0.38	0.00	0.38	0.00	3.0	3.00	3.00	-	0.045	2.00	0.040	0.020	0.013	0.09	2.60	0.14	1.13	2.5	0
57	DI-239	Drop Grate	-0.70	-0.00	-0.70	-0.00	-	2.00	2.00	-3.22	-Sag	-4.00	-0.330	-0.330	-0.013	-0.11	-4.70	-0.11	-4.70	-0.0	-0
58	DI-240	Drop Grate	-0.81	-0.00	-0.81	-0.00	-	2.00	2.00	-3.22	-Sag	-4.00	-0.330	-0.330	-0.013	-0.13	-4.76	-0.13	-4.76	-0.0	-0
59	DI-241	Drop Grate	-0.94	0.00	-0.94	0.00	-	2.00	2.00	-3.22	-Sag	-4.00	-0.330	-0.330	-0.013	-0.14	-4.84	-0.14	-4.84	-0.0	-0
60	DI-242	Drop Grate	-1.04	0.00	-1.04	0.00	-	2.00	2.00	-3.22	-Sag	-4.00	-0.330	-0.330	-0.013	-0.15	-4.94	-0.15	-4.94	-0.0	-0
61	DI-243	Drop Grate	-1.10	0.00	-1.10	0.00	-	2.00	2.00	-3.22	-Sag	-4.00	-0.330	-0.330	-0.013	-0.16	-4.94	-0.16	-4.94	-0.0	-0
62	DI-244	Drop Grate	-1.94	0.00	-1.94	0.00	-	2.00	2.00	-3.22	-Sag	-4.00	-0.330	-0.330	-0.013	-0.23	-5.37	-0.23	-5.37	-0.0	-0
63	DI-245	Drop Grate	-2.28	0.00	-2.28	0.00	-	2.00	2.00	-3.22	-Sag	-4.00	-0.330	-0.330	-0.013	-0.25	-5.53	-0.25	-5.53	-0.0	-0
64	DI-203	Drop Grate	-0.96	0.56	-0.56	-0.94	-	2.00	2.00	-	-0.020	2.00	0.020	0.020	0.013	-0.10	-12.00	-0.10	-12.00	-0.0	-2
65	DI-204	Drop Grate	-0.99	0.00	-0.49	-0.56	-	2.00	2.00	-	-0.020	2.00	0.020	0.020	0.013	-0.08	-10.00	-0.08	-10.00	-0.0	-64
66	DI-241	Drop Grate	-0.68	0.00	-0.68	0.00	-	2.00	2.00	-3.22	-Sag	-4.00	-0.330	-0.330	-0.013	-0.11	-4.68	-0.11	-4.68	-0.0	-0

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grate in Sag = 50, Project File: Storm System 200.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 200

01-30-2025

Line No	Inlet		Q			Curb			Grate			Gutter			Inlet		Byp Line No				
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	S _o (ft/ft)	W (ft/ft)	S _w (ft/ft)	S _x (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (in)			
67	DI-212	Drop Grate	0.68	0.00	0.68	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.11	4.68	0.0	0		
68	DI-213	Drop Grate	0.68	0.00	0.68	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.11	4.68	0.0	0		
69	DI-214	Drop Grate	0.68	0.00	0.68	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.11	4.68	0.0	0		
70	DI-215	Drop Grate	0.52	0.00	0.52	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.09	4.57	0.0	0		
71	DI-221	Drop Grate	0.65	1.53	0.76	1.43	-	2.00	2.00	-	0.020	2.00	0.020	0.020	0.12	14.00	0.12	14.00	0.0	45	
72	DI-222	Drop Grate	0.83	1.00	0.67	1.16	-	2.00	2.00	-	0.020	2.00	0.020	0.020	0.13	13.00	0.11	13.00	0.0	71	
73	DI-223	Drop Grate	0.81	0.79	0.61	1.00	-	2.00	2.00	-	0.020	2.00	0.020	0.020	0.10	12.00	0.10	12.00	0.0	72	
74	DI-224	Drop Grate	0.75	0.58	0.54	0.79	-	2.00	2.00	-	0.020	2.00	0.020	0.020	0.10	12.00	0.10	12.00	0.0	73	
75	DI-225	Drop Grate	1.04	0.00	0.46	0.56	-	2.00	2.00	-	0.020	2.00	0.020	0.020	0.09	11.00	0.09	11.00	0.0	74	
76	CB-227	Combination	0.45	0.04	0.46	0.03	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.12	3.80	0.18	1.45	2.5	10
77	CB-229	Combination	0.51	0.01	0.48	0.04	3.0	3.00	3.00	2.00	-	0.017	2.00	0.040	0.020	0.12	4.05	0.19	1.51	2.5	76

Notes: Return Period = 1-yr. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50,

Project File: Storm System 200.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

01-31-2025

Line No	Inlet		Q			Curb			Grate			Gutter			Inlet			Byp Line No		
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	
1	JB-301	Manhole																		
2	DI-302	Drop Grate	0.73	1.04	0.66	1.14	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.14	13.00	0.14	13.00	0.0	
3	DI-303	Drop Grate	1.07	0.59	0.62	1.04	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.10	12.00	0.10	12.00	0.0	
4	DI-304	Drop Grate	0.96	0.98	0.46	0.59	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.09	11.00	0.09	11.00	0.0	
5	DI-305	Drop Grate	0.12	0.10	0.14	0.08	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.04	6.00	0.04	6.00	0.0	
6	DI-306	Drop Grate	0.27	0.00	0.17	0.10	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.05	7.00	0.05	7.00	0.0	
7	DI-307	Drop Grate	0.03	0.00	0.08	0.00	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.02	4.00	0.02	4.00	0.0	
8	CB-308	Combination	0.16	0.01	0.17	0.00	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.08	1.98	0.12	0.97
9	CB-309	Combination	1.07	0.09	0.93	0.22	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.15	5.70	0.25	1.98
10	CB-310	Combination	0.29	0.31	0.55	0.05	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.12	4.10	0.19	1.54
11	CB-315	Combination	0.30	1.12	1.11	0.31	3.0	3.00	3.00	2.00	-	0.027	2.00	0.040	0.020	0.013	0.16	5.80	0.25	2.13
12	DI-316	Drop Grate	0.39	1.02	0.56	0.85	2.00	2.00	-	0.026	2.00	0.020	0.020	0.013	0.10	12.00	0.10	12.00	0.0	
13	DI-317	Drop Grate	0.33	1.31	0.61	1.02	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.10	12.00	0.10	12.00	0.0	
14	DI-318	Drop Grate	0.83	0.53	0.62	1.04	2.00	2.00	-	0.026	2.00	0.020	0.020	0.013	0.10	12.00	0.10	12.00	0.0	
15	DI-319	Drop Grate	0.56	0.00	0.29	0.27	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.07	9.00	0.07	9.00	0.0	
16	DI-320	Drop Grate	0.73	0.65	0.55	0.83	2.00	2.00	-	0.020	2.00	0.020	0.020	0.013	0.10	12.00	0.10	12.00	0.0	
17	DI-321	Drop Grate	0.78	0.35	0.48	0.65	2.00	2.00	-	0.020	2.00	0.020	0.020	0.013	0.09	11.00	0.09	11.00	0.0	
18	DI-322	Drop Grate	0.68	0.00	0.33	0.35	2.00	2.00	-	0.020	2.00	0.020	0.020	0.013	0.07	9.00	0.07	9.00	0.0	
19	CB-323	Combination	1.04	0.19	0.97	0.26	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.16	5.90	0.25	2.28
20	CB-324	Combination	0.45	0.01	0.44	0.02	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.11	3.70	0.18	1.42
21	CB-329	Combination	0.38	0.00	0.37	0.01	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.11	3.30	0.16	1.31
22	CB-330	Combination	0.75	0.00	0.67	0.09	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.70	0.21	1.69

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50,

Project File: Storm System 300.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

01-31-2025

Line No	Inlet		Q				Curb		Grate		Gutter				Inlet		Byp Line No				
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
23	CB-331	Combination	0.30	0.04	0.34	0.00	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.10	3.10	0.16	1.26	2.5
24	CB-332	Combination	0.33	0.04	0.36	0.01	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.10	3.20	0.16	1.29	2.5
25	CB-341	Combination	0.39	0.12	0.48	0.03	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.12	3.90	0.18	1.47	2.5
26	CB-343	Combination	0.17	0.00	0.17	0.00	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.08	2.00	0.12	0.98	2.5
27	CB-345	Combination	0.16	0.00	0.16	0.00	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.08	1.90	0.12	0.94	2.5
28	CB-346	Combination	1.11	0.53	1.64	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.19	7.29	0.35	7.29	2.5
29	CB-347	Combination	1.25	0.02	1.27	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.16	5.79	0.32	5.79	2.5
30	DI-348	Drop Grate	0.75	0.00	0.75	0.00	-	-	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.12	4.73	0.42	4.73	0.0	
31	CB-349	Combination	1.50	0.46	1.43	0.53	3.0	3.00	3.00	2.00	-	0.032	2.00	0.040	0.020	0.013	0.17	6.45	0.27	3.28	2.5
32	CB-350	Combination	1.80	0.00	1.34	0.46	3.0	3.00	3.00	2.00	-	0.031	2.00	0.040	0.020	0.013	0.17	6.25	0.27	2.93	2.5
33	CB-351	Combination	0.51	0.00	0.49	0.02	3.0	3.00	3.00	2.00	-	0.031	2.00	0.040	0.020	0.013	0.11	3.40	0.17	1.34	2.5
34	CB-352	Combination	0.18	0.00	0.18	0.00	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.09	2.30	0.13	1.06	2.5
35	CB-353	Combination	2.82	0.00	2.82	0.00	3.0	6.00	6.00	2.00	6.44	Sag	2.00	0.040	0.020	0.013	0.21	8.29	0.37	8.29	2.5
36	CB-354	Combination	0.58	0.00	0.58	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.08	1.90	0.24	1.97	2.5
37	CB-333	Combination	0.51	0.01	0.49	0.04	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.12	3.90	0.18	1.48	2.5
38	CB-334	Combination	0.69	0.17	0.74	0.12	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.14	5.00	0.22	1.78	2.5
39	CB-335	Combination	0.42	0.00	0.40	0.01	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.11	3.45	0.17	1.35	2.5
40	CB-336	Combination	0.75	0.25	0.82	0.17	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.15	5.30	0.23	1.88	2.5
41	CB-337	Combination	0.15	0.00	0.15	0.00	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.07	1.87	0.12	0.93	2.5
42	CB-338	Combination	1.20	0.00	0.95	0.25	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.16	5.75	0.25	2.03	2.5
43	CB-339	Combination	0.69	0.00	0.69	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.09	2.29	0.25	2.29	2.5
44	CB-340	Combination	1.63	0.00	1.63	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.19	7.29	0.35	7.29	2.5

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grade in Sag = 0; Grade in Sag = 50.

Project File: Storm System 300.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 300

01-31-2025

Line No	Inlet		Q		Curb		Grate		Gutter		Inlet		Byp Line No							
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (in)	Byp (cfs)	Ht (ft)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)
45	DI-342	Drop Grate	10.24	0.00	10.24	0.00	-	2.00	2.00	3.22	Sag	4.00	0.030	0.030	0.013	1.40	97.43	1.40	97.43	0.0
46	CB-344	Combination	0.17	0.00	0.17	0.00	3.0	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.08	2.00	0.12	0.98	2.5
47	CB-325	Combination	0.99	0.06	0.86	0.19	3.0	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.15	5.50	0.24	1.92	2.5
48	CB-326	Combination	0.38	0.00	0.37	0.01	3.0	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.11	3.35	0.17	1.33	2.5
49	CB-327	Combination	0.60	0.00	0.54	0.06	3.0	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.12	4.20	0.19	1.56	2.5
50	CB-328	Combination	0.29	0.00	0.29	0.00	3.0	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.10	2.85	0.15	1.19	2.5
51	CB-311	Combination	0.39	0.02	0.40	0.01	3.0	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.11	3.40	0.17	1.34	2.5
52	CB-312	Combination	0.36	0.28	0.58	0.06	3.0	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.30	0.20	1.59	2.5
53	CB-313	Combination	0.50	0.06	0.52	0.05	3.0	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.12	4.05	0.19	1.52	2.5
54	CB-314	Combination	0.67	0.00	0.60	0.07	3.0	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.40	0.20	1.62	2.5

Notes: Return Period = 1-yr. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50,

Project File: Storm System 300.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

01-30-2025

Line No	Inlet		Q			Curb			Grate			Gutter			Inlet			Byp Line No	
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (ft)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (in)	
1	DI-401	Drop Grate	-0.83	0.00	-0.83	0.00	-	2.00	2.00	3.11	Sag	4.00	0.330	0.330	0.013	-0.13	-4.78	0.0	-0
2	DI-402	Drop Grate	-0.96	0.00	-0.96	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	-0.14	-4.86	0.0	-0
3	DI-403	Drop Grate	-0.68	0.00	-0.68	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	-0.11	-4.68	0.0	-0
4	CB-405	Combination	0.51	0.16	0.58	0.09	3.0	3.00	2.00	-	0.011	2.00	0.040	0.020	0.013	0.14	5.10	0.23	144
5	DI-447	Drop Grate	-1.38	0.54	-0.68	-1.24	-	2.00	2.00	-	0.035	2.00	0.020	0.020	0.013	-0.10	-12.00	0.10	-145
6	DI-448	Drop Grate	-0.96	0.00	-0.42	-0.54	-	2.00	2.00	-	0.020	2.00	0.020	0.020	0.013	-0.08	-10.00	0.08	-5
7	DI-450	Drop Grate	-0.10	0.00	-0.07	-0.02	-	2.00	2.00	-	0.020	2.00	0.020	0.020	0.013	-0.03	-5.00	0.03	-132
8	DI-461	Drop Grate	-1.09	0.49	-0.60	-0.99	-	2.00	2.00	-	0.035	2.00	0.020	0.020	0.013	-0.09	-11.00	0.09	-0
9	DI-462	Drop Grate	0.88	0.00	0.39	-0.49	-	2.00	2.00	-	0.030	2.00	0.020	0.020	0.013	-0.07	-9.00	0.07	-8
10	DI-463	Drop Grate	-0.10	0.00	-0.07	-0.02	-	2.00	2.00	-	0.012	2.00	0.020	0.020	0.013	-0.03	-5.00	0.03	-129
11	DI-475	Drop Grate	-0.91	0.67	-0.60	-0.99	-	2.00	2.00	-	0.035	2.00	0.020	0.020	0.013	-0.09	-11.00	0.09	-0
12	DI-476	Drop Grate	-1.12	0.00	-0.48	-0.64	-	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	-0.09	-11.00	0.09	-11
13	DI-478	Drop Grate	-0.07	0.00	-0.06	-0.01	-	2.00	2.00	-	0.021	2.00	0.020	0.020	0.013	-0.03	-5.00	0.03	-110
14	CB-486	Combination	0.39	0.00	0.37	0.02	3.0	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.11	3.60	0.17	110
15	CB-516	Combination	0.36	0.02	0.37	0.02	3.0	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.11	3.55	0.17	112
16	CB-517	Combination	0.61	0.02	0.57	0.06	3.0	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.13	4.40	0.20	112
17	CB-518	Combination	0.54	0.03	0.53	0.05	3.0	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.12	4.20	0.19	112
18	CB-519	Combination	0.58	0.00	0.55	0.03	3.0	3.00	2.00	-	0.029	2.00	0.040	0.020	0.013	0.12	3.75	0.18	17
19	CB-521	Combination	0.38	0.01	0.39	0.00	3.0	3.00	2.00	-	0.029	2.00	0.040	0.020	0.013	0.10	3.00	0.15	123
20	CB-522	Combination	0.29	0.01	0.30	0.00	3.0	3.00	2.00	-	0.029	2.00	0.040	0.020	0.013	0.09	2.50	0.14	48
21	CB-523	Combination	0.42	0.00	0.41	0.01	3.0	3.00	2.00	-	0.029	2.00	0.040	0.020	0.013	0.10	3.10	0.16	20
22	CB-525	Combination	0.13	0.01	0.13	0.00	3.0	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.07	1.82	0.11	21

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grate in Sag = 0; Grate on Grade = 0;

Project File: Storm System 400.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

01-30-2025

Line No	Inlet			Q			Curb			Grate			Gutter			Inlet			Byp Line No			
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)		
23	CB-526	Combination	0.07	0.00	0.07	0.00	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.06	1.50	0.09	0.73	2.5	24
24	CB-527	Combination	0.13	0.00	0.13	0.00	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.08	1.90	0.12	0.93	2.5	26
25	CB-528	Combination	0.93	0.53	1.08	0.38	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.18	6.80	0.28	3.83	2.5	27
26	CB-529	Combination	0.22	0.00	0.22	0.00	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.09	2.65	0.14	1.15	2.5	0
27	CB-530	Combination	0.96	0.38	1.01	0.33	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.17	6.55	0.28	3.43	2.5	0
28	CB-531	Combination	0.32	0.01	0.32	0.01	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.11	3.35	0.16	1.32	2.5	22
29	CB-532	Combination	0.32	0.00	0.31	0.01	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.11	3.30	0.16	1.31	2.5	28
30	CB-533	Combination	1.12	0.06	0.92	0.26	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.16	6.20	0.27	2.83	2.5	55
31	CB-534	Combination	0.16	0.00	0.16	0.00	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.08	2.10	0.13	1.01	2.5	29
32	CB-487	Combination	0.06	0.00	0.06	0.00	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.06	1.45	0.09	0.71	2.5	14
33	CB-493	Combination	0.81	0.01	0.70	0.12	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.14	5.20	0.23	1.84	2.5	108
34	CB-494	Combination	0.75	0.05	0.68	0.12	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.14	5.15	0.23	1.83	2.5	97
35	CB-495	Combination	0.56	0.00	0.51	0.05	3.0	3.00	3.00	2.00	-	0.016	2.00	0.040	0.020	0.013	0.13	4.25	0.20	1.58	2.5	34
36	CB-497	Combination	0.16	0.00	0.16	0.00	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.08	1.92	0.12	0.95	2.5	35
37	CB-498	Combination	0.14	0.00	0.14	0.00	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.07	1.77	0.11	0.88	2.5	36
38	CB-500	Combination	0.34	0.01	0.35	0.00	3.0	3.00	3.00	2.00	-	0.029	2.00	0.040	0.020	0.013	0.10	2.80	0.15	1.18	2.5	37
39	CB-502	Combination	0.58	0.00	0.57	0.01	3.0	3.00	3.00	2.00	-	0.044	2.00	0.040	0.020	0.013	0.11	3.35	0.16	1.32	2.5	38
40	CB-504	Combination	0.87	0.00	0.87	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.11	3.29	0.27	3.29	2.5	0
41	CB-505	Combination	1.40	0.71	2.11	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.24	9.79	0.40	9.79	2.5	0
42	CB-506	Combination	1.54	0.73	1.56	0.71	3.0	3.00	3.00	2.00	-	0.025	2.00	0.040	0.020	0.013	0.19	7.25	0.30	4.53	2.5	41
43	CB-508	Combination	1.74	0.52	1.53	0.73	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.19	7.50	0.31	4.93	2.5	42
44	CB-510	Combination	1.38	0.43	1.29	0.52	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.18	7.05	0.29	4.23	2.5	43

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grade in Sag = 50;

Project File: Storm System 400.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

01-30-2025

Line No	Id	Inlet		Q		Curb		Grate		Gutter				Inlet		Byp Line No						
		Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft)	n	Depth (ft)	Spread (ft)	Depth (in)				
45	CB-512	Combination	1.72	0.00	1.29	0.43	3.0	3.00	3.00	2.00	-	0.027	2.00	0.040	0.020	0.013	0.17	6.35	0.27	3.03	2.5	44
46	CB-514	Combination	0.42	0.00	0.42	0.00	3.0	3.00	3.00	2.00	-	0.049	2.00	0.040	0.020	0.013	0.09	2.65	0.14	1.15	2.5	45
47	CB-515	Combination	0.48	0.00	0.48	0.00	3.0	3.00	3.00	2.00	-	0.049	2.00	0.040	0.020	0.013	0.10	2.90	0.15	1.21	2.5	96
48	CB-520	Combination	0.51	0.00	0.49	0.02	3.0	3.00	3.00	2.00	-	0.029	2.00	0.040	0.020	0.013	0.11	3.50	0.17	1.37	2.5	16
49	CB-524	Combination	0.38	0.00	0.38	0.01	3.0	3.00	3.00	2.00	-	0.029	2.00	0.040	0.020	0.013	0.10	2.95	0.15	1.22	2.5	19
50	CB-496	Combination	0.36	0.00	0.35	0.01	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.11	3.30	0.16	1.30	2.5	33
51	CB-499	Combination	0.42	0.08	0.47	0.02	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.11	3.65	0.18	1.41	2.5	130
52	CB-501	Combination	0.63	0.14	0.69	0.08	3.0	3.00	3.00	2.00	-	0.029	2.00	0.040	0.020	0.013	0.13	4.30	0.20	1.59	2.5	51
53	CB-503	Combination	1.08	0.00	0.95	0.14	3.0	3.00	3.00	2.00	-	0.044	2.00	0.040	0.020	0.013	0.13	4.60	0.21	1.67	2.5	52
54	CB-535	Combination	0.60	0.00	0.54	0.06	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.13	4.55	0.21	1.66	2.5	30
55	CB-536	Combination	1.04	0.26	0.99	0.32	3.0	3.00	3.00	2.00	-	0.014	2.00	0.040	0.020	0.013	0.17	6.45	0.27	3.28	2.5	25
56	DI-537	Drop Grate	0.45	0.00	0.24	0.21	-	2.00	2.00	-	0.034	2.00	0.020	0.020	0.013	0.05	7.00	0.05	7.00	0.0	25	
57	DI-538	Drop Grate	1.28	1.35	0.89	1.74	-	2.00	2.00	-	0.013	2.00	0.020	0.020	0.013	0.14	16.00	0.14	16.00	0.0	0	
58	DI-539	Drop Grate	1.20	0.93	0.77	1.35	-	2.00	2.00	-	0.013	2.00	0.020	0.020	0.013	0.13	15.00	0.13	15.00	0.0	57	
59	DI-540	Drop Grate	0.49	1.04	0.61	0.93	-	2.00	2.00	-	0.013	2.00	0.020	0.020	0.013	0.11	13.00	0.11	13.00	0.0	58	
60	DI-541	Drop Grate	0.31	1.40	0.67	1.04	-	2.00	2.00	-	0.013	2.00	0.020	0.020	0.013	0.12	14.00	0.12	14.00	0.0	59	
61	DI-542	Drop Grate	1.02	1.17	0.73	1.40	-	2.00	2.00	-	0.013	2.00	0.020	0.020	0.013	0.13	15.00	0.13	15.00	0.0	60	
62	DI-543	Drop Grate	0.73	1.14	0.70	1.17	-	2.00	2.00	-	0.015	2.00	0.020	0.020	0.013	0.12	14.00	0.12	14.00	0.0	61	
63	DI-544	Drop Grate	0.81	0.99	0.66	1.14	-	2.00	2.00	-	0.021	2.00	0.020	0.020	0.013	0.11	13.00	0.11	13.00	0.0	62	
64	DI-545	Drop Grate	0.19	0.00	0.13	0.07	-	2.00	2.00	-	0.021	2.00	0.020	0.020	0.013	0.04	6.00	0.04	6.00	0.0	63	
65	DI-546	Drop Grate	0.70	0.81	0.58	0.93	-	2.00	2.00	-	0.021	2.00	0.020	0.020	0.013	0.10	12.00	0.10	12.00	0.0	63	
66	DI-547	Drop Grate	1.09	0.27	0.55	0.81	-	2.00	2.00	-	0.024	2.00	0.020	0.020	0.013	0.10	12.00	0.10	12.00	0.0	65	

Notes: Return Period = 1-yr. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grate in Sag = 50, Project File: Storm System 400.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

01-30-2025

Line No	Inlet		Q			Curb			Grate			Gutter			Inlet			Byp Line No			
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (ft)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
67	DI-548	Drop Grate	-0.31	-0.25	-0.29	-0.27	-	2.00	2.00	-0.021	2.00	-0.020	-0.020	-0.013	-0.07	9.00	-0.07	9.00	0.0	66	
68	DI-549	Drop Grate	-0.40	-0.30	-0.07	-0.02	-	2.00	2.00	-0.012	2.00	-0.020	-0.020	-0.013	-0.03	5.00	-0.03	5.00	0.0	0	
69	DI-550	Drop Grate	-0.52	-0.00	-0.27	-0.25	-	2.00	2.00	-0.021	2.00	-0.020	-0.020	-0.013	-0.06	8.00	-0.06	8.00	0.0	67	
70	CB-408	Combination	0.38	0.09	0.43	0.04	3.0	3.00	3.00	2.00	-	0.011	2.00	0.040	0.020	0.013	0.13	4.30	0.20	1.59	2.5
71	CB-409	Combination	0.45	0.20	0.57	0.09	3.0	3.00	3.00	2.00	-	0.012	2.00	0.040	0.020	0.013	0.14	4.90	0.22	1.76	2.5
72	CB-411	Combination	0.17	0.01	0.18	0.00	3.0	3.00	3.00	2.00	-	0.016	2.00	0.040	0.020	0.013	0.08	2.15	0.13	1.02	2.5
73	CB-416	Combination	0.49	0.47	0.79	0.18	3.0	3.00	3.00	2.00	-	0.016	2.00	0.040	0.020	0.013	0.15	5.50	0.24	1.93	2.5
74	CB-417	Combination	0.42	0.02	0.41	0.03	3.0	3.00	3.00	2.00	-	0.012	2.00	0.040	0.020	0.013	0.12	4.05	0.19	1.51	2.5
75	CB-418	Combination	0.33	0.00	0.31	0.02	3.0	3.00	3.00	2.00	-	0.007	2.00	0.040	0.020	0.013	0.12	4.05	0.19	1.51	2.5
76	DI-419	Drop Grate	-0.91	-2.02	-2.93	-0.00	-	2.00	2.00	-3.67	Sag	-2.00	-0.020	-0.020	-0.013	-0.30	34.79	-0.30	34.79	0.0	0
77	CB-428	Combination	0.31	0.00	0.30	0.01	3.0	3.00	3.00	2.00	-	0.010	2.00	0.040	0.020	0.013	0.11	3.55	0.17	1.38	2.5
78	CB-429	Combination	0.96	0.03	0.99	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.13	4.29	0.29	4.29	2.5
79	CB-431	Combination	0.42	0.00	0.40	0.02	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.11	3.40	0.17	1.34	2.5
80	CB-433	Combination	0.27	0.02	0.29	0.00	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.09	2.70	0.14	1.15	2.5
81	CB-434	Combination	0.48	0.00	0.46	0.02	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.11	3.60	0.17	1.39	2.5
82	CB-435	Combination	0.54	0.10	0.59	0.05	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.12	4.20	0.19	1.55	2.5
83	CB-436	Combination	0.21	0.06	0.27	0.00	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.09	2.55	0.14	1.13	2.5
84	CB-437	Combination	0.78	0.03	0.71	0.10	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.13	4.65	0.21	1.69	2.5
85	CB-438	Combination	0.66	0.02	0.62	0.06	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.13	4.30	0.20	1.59	2.5
86	CB-439	Combination	0.42	0.02	0.42	0.02	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.11	3.40	0.17	1.34	2.5
87	CB-440	Combination	0.43	0.08	0.48	0.03	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.11	3.70	0.18	1.43	2.5
88	CB-441	Combination	0.48	0.00	0.46	0.02	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.11	3.60	0.17	1.39	2.5

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50.

Project File: Storm System 400.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

01-30-2025

Line No	Id	Inlet		Q		Curb		Grate		Gutter		Inlet		Byp Line No								
		Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft/ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)		
89	CB-442	Combination	0.69	0.03	0.64	0.08	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.13	4.40	0.20	1.62	2.5	87
90	CB-443	Combination	0.21	0.03	0.24	0.00	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.09	2.35	0.13	1.07	2.5	88
91	CB-444	Combination	0.33	0.19	0.49	0.03	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.12	3.75	0.18	1.44	2.5	89
92	CB-445	Combination	0.51	0.00	0.48	0.03	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.11	3.70	0.18	1.43	2.5	90
93	CB-507	Combination	0.76	0.48	1.23	0.00	3.0	3.00	3.00	2.00	3.22	Sag	2.00	0.040	0.020	0.013	0.15	5.29	0.31	5.29	2.5	0
94	CB-509	Combination	1.44	0.31	1.28	0.48	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.18	6.75	0.28	3.73	2.5	93
95	CB-511	Combination	1.18	0.18	1.04	0.31	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.17	6.25	0.27	2.88	2.5	94
96	CB-513	Combination	1.08	0.00	0.90	0.18	3.0	3.00	3.00	2.00	-	0.028	2.00	0.040	0.020	0.013	0.14	5.10	0.23	1.82	2.5	95
97	CB-488	Combination	0.31	0.12	0.40	0.02	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.12	3.75	0.18	1.43	2.5	15
98	DI-489	Drop Grate	12.31	0.00	12.31	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	2.92	16.26	2.02	16.26	0.0	0	
99	DI-490	Drop Grate	0.94	0.00	0.94	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.14	4.84	0.14	4.84	0.0	0	
100	DI-491	Drop Grate	0.78	0.00	0.78	0.00	-	2.00	2.00	3.11	Sag	4.00	0.330	0.330	0.013	0.12	4.75	0.12	4.75	0.0	0	
101	DI-492	Drop Grate	1.22	0.00	1.22	0.00	-	2.00	2.00	3.22	Sag	4.00	0.330	0.330	0.013	0.17	5.01	0.17	5.01	0.0	0	
102	CB-465	Combination	0.31	0.00	0.31	0.00	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.10	3.00	0.15	1.23	2.5	129
103	CB-466	Combination	0.48	0.00	0.45	0.03	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.12	3.80	0.18	1.45	2.5	11
104	CB-467	Combination	0.15	0.00	0.15	0.00	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.08	1.92	0.12	0.94	2.5	103
105	CB-468	Combination	0.10	0.00	0.10	0.00	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.06	1.60	0.10	0.78	2.5	104
106	CB-471	Combination	0.34	0.00	0.34	0.00	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.10	3.05	0.15	1.24	2.5	105
107	CB-473	Combination	0.19	0.00	0.19	0.00	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.08	2.15	0.13	1.02	2.5	106
108	CB-474	Combination	0.75	0.12	0.74	0.13	3.0	3.00	3.00	2.00	-	0.019	2.00	0.040	0.020	0.013	0.14	5.05	0.22	1.80	2.5	119
109	DI-477	Drop Grate	0.07	0.00	0.06	0.01	-	2.00	2.00	0.020	0.020	0.013	0.03	5.00	0.03	5.00	0.0	0	0	0		
110	CB-479	Combination	0.32	0.03	0.34	0.01	3.0	3.00	3.00	2.00	-	0.017	2.00	0.040	0.020	0.013	0.11	3.25	0.16	1.30	2.5	111

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grade in Sag = 50, Grade in Sag = 50.

Project File: Storm System 400.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

01-30-2025

Line No	Inlet		Q				Curb			Grate			Gutter				Inlet		Byp Line No			
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)		
111	CB-480	Combination	0.35	0.01	0.36	0.01	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.10	3.20	0.16	1.29	2.5	0
112	CB-481	Combination	0.57	0.12	0.61	0.08	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.13	4.45	0.20	1.63	2.5	0
113	DI-482	Drop Grate	1.09	0.00	1.09	0.00	-	2.00	2.00	3.67	Sag	4.00	0.330	0.330	0.013	0.15	4.94	0.45	4.94	0.0	0	
114	DI-483	Drop Grate	1.22	0.00	1.22	0.00	-	2.00	2.00	3.67	Sag	4.00	0.330	0.330	0.013	0.17	5.01	0.17	5.01	0.0	0	
115	DI-484	Drop Grate	0.44	0.00	0.44	0.00	-	2.00	2.00	3.67	Sag	4.00	0.330	0.330	0.013	0.08	4.51	0.08	4.51	0.0	0	
116	DI-485	Drop Grate	1.17	0.00	1.17	0.00	-	2.00	2.00	3.67	Sag	4.00	0.330	0.330	0.013	0.16	4.98	0.16	4.98	0.0	0	
117	CB-469	Combination	0.42	0.32	0.65	0.09	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.13	4.55	0.21	1.66	2.5	128
118	DI-470	Drop Grate	0.57	0.00	0.57	0.00	-	2.00	2.00	3.67	Sag	2.00	0.020	0.020	0.013	0.10	12.03	0.10	12.03	0.0	0	
119	CB-472	Combination	1.28	0.13	1.09	0.32	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.16	6.15	0.26	2.73	2.5	117
120	CB-452	Combination	0.36	0.00	0.35	0.01	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.11	3.45	0.17	1.35	2.5	132
121	CB-453	Combination	0.36	0.01	0.36	0.01	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.11	3.50	0.17	1.36	2.5	0
122	CB-454	Combination	0.33	0.00	0.32	0.01	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.11	3.30	0.16	1.31	2.5	121
123	CB-455	Combination	0.10	0.00	0.10	0.00	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.06	1.60	0.10	0.78	2.5	122
124	CB-456	Combination	1.77	0.32	1.45	0.64	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.19	7.25	0.30	4.53	2.5	150
125	DI-457	Drop Grate	0.57	0.00	0.57	0.00	-	2.00	2.00	3.67	Sag	2.00	0.020	0.020	0.013	0.10	12.01	0.10	12.01	0.0	0	
126	CB-458	Combination	0.34	0.00	0.34	0.00	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.10	3.05	0.15	1.24	2.5	123
127	CB-459	Combination	0.29	0.00	0.29	0.00	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.10	2.75	0.15	1.17	2.5	126
128	CB-460	Combination	1.30	0.09	1.07	0.32	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.16	6.10	0.26	2.63	2.5	124
129	CB-464	Combination	0.29	0.03	0.31	0.01	3.0	3.00	3.00	2.00	-	0.012	2.00	0.040	0.020	0.013	0.11	3.40	0.17	1.34	2.5	0
130	CB-446	Combination	1.07	0.02	0.89	0.19	3.0	3.00	3.00	2.00	-	0.023	2.00	0.040	0.020	0.013	0.15	5.35	0.24	1.89	2.5	91
131	DI-449	Drop Grate	0.03	0.00	0.03	0.00	-	2.00	2.00	0.020	0.020	0.013	0.02	4.00	0.02	4.00	0.0	0	0	0		
132	CB-451	Combination	0.24	0.03	0.27	0.00	3.0	3.00	3.00	2.00	-	0.020	2.00	0.040	0.020	0.013	0.09	2.70	0.14	1.16	2.5	0

Notes: Return Period = 1-ys. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50, Grade in Sag = 50, Grade in Sag = 50.

Project File: Storm System 400.sws

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Line No	Inlet		Q		Curb		Grate		Gutter		Inlet		Byp Line No								
	Id	Type	Catch	Carry	Cap1	Byp	Ht	L	W	Area	So	W	Sw	Sx	n	Depth	Spread	Depth	Spread	Depr (in)	
		(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(sqft)	(ft/ft)	(ft)	(ft/ft)	(ft/ft)	(ft)	(ft)	(ft)	(ft)	(ft)		
133	DI-420	Drop Grate	1.15	1.79	0.92	2.02		2.00	2.00		0.022	2.00	0.020	0.020	0.013	-0.13	15.00	-0.13	15.00	0.0	
134	DI-421	Drop Grate	1.09	1.57	0.87	1.79		2.00	2.00		0.021	2.00	0.020	0.020	0.013	-0.13	15.00	-0.13	15.00	0.0	
135	DI-422	Drop Grate	0.91	1.45	0.79	1.57		2.00	2.00		0.021	2.00	0.020	0.020	0.013	-0.12	14.00	0.12	14.00	0.0	
136	DI-423	Drop Grate	1.02	1.20	0.77	1.45		2.00	2.00		0.021	2.00	0.020	0.020	0.013	-0.12	14.00	-0.12	14.00	0.0	
137	DI-425	Drop Grate	0.81	1.07	0.68	1.20		2.00	2.00		0.021	2.00	0.020	0.020	0.013	-0.11	13.00	-0.11	13.00	0.0	
138	DI-426	Drop Grate	1.04	0.66	0.63	1.07		2.00	2.00		0.021	2.00	0.020	0.020	0.013	-0.10	12.00	-0.10	12.00	0.0	
139	DI-427	Drop Grate	1.15	0.00	0.48	0.66		2.00	2.00		0.021	2.00	0.020	0.020	0.013	-0.09	11.00	-0.09	11.00	0.0	
140	CB-430	Combination	0.75	0.00	0.62	0.13	3.0	3.00	3.00	2.00	-	0.007	2.00	0.040	0.020	0.013	0.16	5.90	0.26	2.33	2.5
141	CB-432	Combination	0.57	0.05	0.57	0.05	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.12	4.20	0.19	1.56	2.5
142	DI-424	Drop Grate	0.18	0.00	0.18	0.00		2.00	2.00		3.67	Sag	2.00	0.020	0.020	0.013	-0.05	6.67	-0.05	6.67	0.0
143	DI-404	Drop Grate	1.20	0.00	1.20	0.00		2.00	2.00		3.22	Sag	4.00	0.330	0.330	0.013	-0.16	4.99	-0.16	4.99	0.0
144	CB-406	Combination	0.74	0.09	0.68	0.14	3.0	3.00	3.00	2.00	-	0.012	2.00	0.040	0.020	0.013	0.15	5.45	0.24	9.85	0.37
145	CB-407	Combination	2.08	1.28	1.95	1.40	3.0	3.00	3.00	2.00	-	0.012	2.00	0.040	0.020	0.013	0.24	9.85	0.37	8.08	2.5
146	CB-410	Combination	0.90	0.00	0.74	0.16	3.0	3.00	3.00	2.00	-	0.012	2.00	0.040	0.020	0.013	0.15	5.70	0.25	1.98	2.5
147	CB-412	Combination	0.32	0.00	0.31	0.01	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.10	3.05	0.16	1.25	2.5
148	CB-413	Combination	1.35	0.34	1.22	0.47	3.0	3.00	3.00	2.00	-	0.018	2.00	0.040	0.020	0.013	0.18	6.85	0.29	3.93	2.5
149	CB-414	Combination	0.32	0.00	0.32	0.00	3.0	3.00	3.00	2.00	-	0.021	2.00	0.040	0.020	0.013	0.10	2.95	0.15	1.22	2.5
150	CB-415	Combination	1.74	0.64	2.04	0.34	3.0	3.00	3.00	2.00	-	0.210	2.00	0.040	0.020	0.013	0.13	4.60	0.21	1.68	2.5
151	DI-458A	Drop Grate	0.40	0.00	0.40	0.00		2.00	2.00		3.67	Sag	4.00	0.330	0.330	0.013	-0.08	4.48	-0.08	4.48	0.0
152	DI-471A	Drop Grate	0.70	0.00	0.70	0.00		2.00	2.00		3.67	Sag	4.00	0.330	0.330	0.013	-0.11	4.70	-0.14	4.70	0.0
153	DI-409A	Drop Grate	0.58	0.00	0.58	0.00		2.00	2.00		3.67	Sag	4.00	0.330	0.330	0.013	-0.10	4.61	-0.10	4.61	0.0
154	DI-449A	Drop Grate	1.07	0.00	0.75	0.32		3.00	2.00		0.015	2.00	0.040	0.020	0.013	0.11	13.00	0.11	13.00	2.5	

Notes: Return Period = 1-yr. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50.

Inlet Report

Stormwater Studio 2024 v 3.0.0.35

Project Name: Storm System 400

01-30-2025

Line No	Inlet		Q				Curb			Grate			Gutter				Inlet		Byp Line No			
	Id	Type	Catch (cfs)	Carry (cfs)	Capt (cfs)	Byp (cfs)	Ht (in)	L (ft)	W (ft)	Area (sqft)	So (ft/ft)	Sw (ft/ft)	Sx (ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)				
155	CB-451A	Combination	0.32	0.00	0.32	0.00	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.11	3.25	0.16	1.30	2.5	0
156	CB-451B	Combination	1.20	0.00	0.93	0.26	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.16	6.15	0.26	2.73	2.5	0
157	DI-462A	Drop Grate	1.22	0.00	0.81	0.41	-	-	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.11	13.00	0.11	13.00	2.5	0
158	CB-464A	Combination	0.35	0.00	0.34	0.01	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.11	3.40	0.17	1.34	2.5	0
159	CB-464B	Combination	1.09	0.00	0.87	0.22	3.0	3.00	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	0.16	5.90	0.25	2.28	2.5	0
160	DI-477A	Drop Grate	-0.91	0.00	-0.65	-0.26	-	-	3.00	2.00	-	0.015	2.00	0.040	0.020	0.013	-0.10	-12.00	-0.10	-12.00	-2.5	0

Notes: Return Period = 1-yr. All curb inlets are inclined throat. Clogging Factors (%): Curb on Grade = 0; Curb in Sag = 50; Grade on Grade = 0; Grade in Sag = 50,

Project File: Storm System 400.sws

*GREENWAY CULVERT
CALCULATIONS*

Pearce Farm – CD Pkg 1
AGN23001

Culvert Report

Project filename: Greenway Culverts.cst

Culvert Studio v 2.0.0.29

01-30-2025

Greenway Culvert 1

Culvert 1

CULVERT

Shape	= Circular
Inlet Edge	= Projecting
Material	= Concrete
Manning's n	= 0.012
Rise	= 15 in
Span	= 15 in
Invert Elev. Down	= 281.00 ft
Length	= 30.0 ft
Slope	= 0.033 ft/ft
Invert Elev. Up	= 282.00 ft
No. Barrels	= 1
Plan Skew Angle	= 0 degrees

EMBANKMENT

Top Width	= 14.00 ft
Top Elevation	= 284.00 ft
Crest Length	= 40.00 ft

DISCHARGE

Method	= Rational Method
Drainage Area	= 0.18 ac
Runoff Coefficient	= 0.35
Time of Concentration	= 5 min

TAILWATER

Tailwater Elevation	= Normal Depth
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Elev (ft)

Greenway Culvert 1 - Profile

Hw Depth (ft)

287.00

5.00

286.00

4.00

285.00

3.00

284.00

2.00

283.00

1.00

282.00

0.00

281.00

-1.00

280.00

-2.00

279.00

-3.00

-4

-2

0

2

4

6

8

10

12

14

16

18

20

22

24

26

28

30

32

34

Reach (ft)

Culvert Report

Project filename: Greenway Culverts.cst

Culvert Studio v 2.0.0.30

01-31-2025

Greenway Culvert 2

Culvert 2

CULVERT		EMBANKMENT	
Shape	= Circular	Top Width	= 14.00 ft
Inlet Edge	= Projecting	Top Elevation	= 251.00 ft
Material	= Concrete	Crest Length	= 40.00 ft
Manning's n	= 0.012		
Rise	= 24 in		
Span	= 24 in		
Invert Elev. Down	= 246.00 ft	Method	= User-defined
Length	= 33.0 ft		
Slope	= 0.045 ft/ft		
Invert Elev. Up	= 247.50 ft		
No. Barrels	= 1		
Plan Skew Angle	= 0 degrees		
DISCHARGE		TAILWATER	
		Tailwater Elevation	= Normal Depth

CALCULATION SAMPLE

Discharge			Velocity		Depth		HGL @ Hw/D = 0.63		
Total (cfs)	Culvert (cfs)	Over Top (cfs)	Down (ft/s)	Up (ft/s)	Down (in)	Up (in)	Down (ft)	Up (ft)	Hw (ft)
6.76	6.76	0.00	10.06	4.73	6.4	11.2	246.53	248.43	248.75

