STORMWATER MASTER PLAN
FOR:

RIVIAN EV MANUFACTURING FACILITY

WALTON COUNTY & MORGAN COUNTY, GEORGIA

PREPARED FOR:
RIVIAN

J – 26900.0002

JULY 20, 2022

THOMAS & HUTTON

thomasandhutton.com

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SECTION 1 - SUMMARY OF RESULTS

TABLE 1
Summary of Results – Peak Runoff

Outfall	Peak Runoff (cfs)								
	2-yr			5-yr			10-yr		
	Pre-	Post-	% Reduced	Pre-	Post-	% Reduced	Pre-	Post-	% Reduced
01	353	347	2%	662	641	3%	967	828	14%
02	44	42	5%	88	80	9%	136	99	27%
03	19	7	63%	35	13	63%	52	14	73%
04	145	145	0%	280	241	14%	407	292	28%
05	55	49	11%	96	90	6%	138	117	15%
06	45	25	44%	79	36	54%	113	44	61%

Outfall	Peak Runoff (cfs)								
	25-yr			50-yr			100-yr		
	Pre-	Post-	% Reduced	Pre-	Post-	% Reduced	Pre-	Post-	% Reduced
01	1,444	1,381	4%	1,810	1,731	4%	2,040	2,029	1%
02	195	191	2%	221	220	0%	235	235	0%
03	79	28	65%	102	37	64%	128	45	65%
04	661	502	24%	940	640	32%	1,218	778	36%
05	204	181	11%	261	220	16%	320	260	19%
06	165	59	64%	208	65	69%	255	70	73%

Post development (at full build-out) flow rates do not exceed the pre-development flow rates for the available design storms.

The master plan stormwater detention ponds are designed to provide post construction stormwater management detention to flow rates significantly less than predeveloped flow rates. The additional detention further reduces pollutant loads, increases detention time, and minimizes downstream impacts.

Pollutant loads that can be further reduced due to the extended wet detention include total suspended solids (TSS), phosphorous, nitrogen, cadmium, copper, lead, zinc, and pathogens such as fecal coliform. Total suspended solids are reduced through sediment precipitation in the permanent pool, while soluble nutrients and organic matter are reduced through plant uptake and bacterial activity in the permanent pool of water and by rooted plants in the shallow zone around the perimeter of the pond. Some additional benefits of extended wet detention include high community awareness and acceptance, opportunities for wildlife habitat, and minimal maintenance. See Section 10 for additional information regarding the water quality design considerations established as part of this stormwater master plan.

TABLE 2 Summary of Results – Peak Pond Stages								
Pond	***Normal Water Elevation (ft)***	***Top Of Bank Elevation (ft)***	***2-yr***	***5-yr***	***10-yr***	***25-yr***	***50-yr***	***100-yr***
1	739	746.0	741.65	742.25	742.57	743.27	743.72	744.19
2A	739	742.5	739.67	739.85	739.99	740.23	740.40	740.57
2B	739	742.0	739.35	739.51	739.65	739.86	740.03	740.21
3	745	752.0	747.41	748.04	748.39	748.98	749.42	749.92
4A	674	682.5	677.12	677.78	678.37	679.24	679.83	680.41
4B	674	682.5	677.13	677.88	678.39	679.26	679.86	680.47
5	744	752.5	747.34	748.06	748.42	749.37	749.95	750.53
6	732	738.0	733.63	734.06	734.34	734.93	735.35	735.78

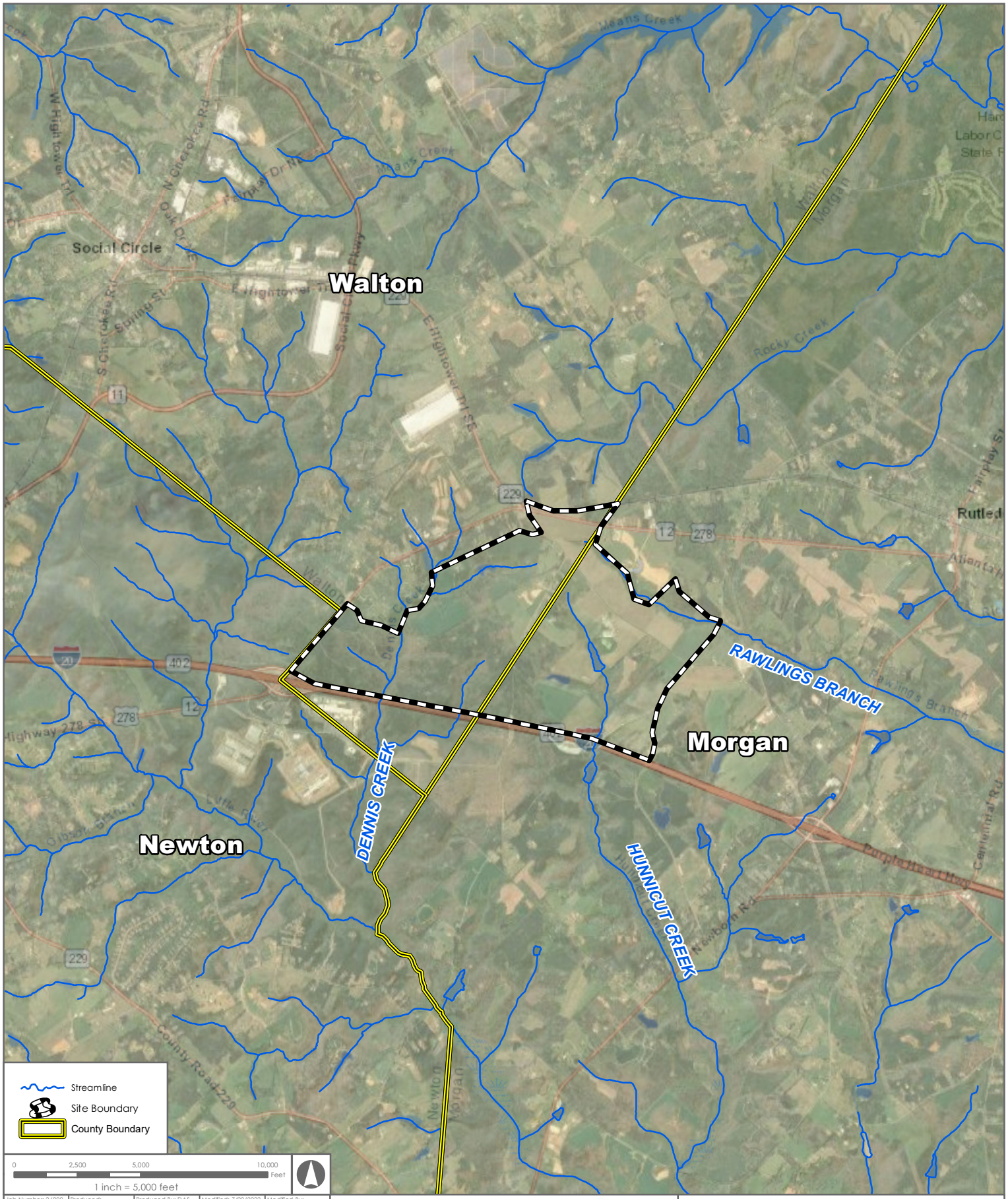
All elevations are reported to the North American Vertical Datum of 1988 (NAVD88).

SECTION 2 - PROJECT NARRATIVE

The Rivian EV Manufacturing Facility located in Walton County and Morgan County, Georgia is located on a 1,943-acre tract of land located east and south of U.S. Highway 278, west of Old Mill Road, and north of Interstate 20. See the Location Map on the following page for additional detail. The site drains to six (6) separate outfalls, including stream and tributaries of Dennis Creek, Hunnicut Creek, and Rawlings Branch. Existing streams that will receive site discharge are not included in the Georgia EPD 303D/305B list of impaired streams.

On-site pre-development ground cover consists primarily of woods, wetlands, and open space. The existing elevations on the property generally range from elevation 670 to 820 (NAVD 88). The property is located with FEMA Special Flood Hazard Area (SFHA) A and X without base flood elevations (BFEs) determined, as shown on FEMA's National Flood Hazard Layer (NFHL) Viewer. Based on GPS surveyed wetland delineations, there are wetlands located on the subject property.

Pursuant to the Georgia Geological Survey Hydrologic Atlas 18 Most Significant Ground-Water Recharge Areas of Georgia, the Rivian EV Manufacturing Facility site is located within an area identified as "probable areas of thick soils" which "may be significant recharge areas". Therefore, water quality treatment and pollution removal are of upmost importance when developing this site. For this type of project, total suspended solids, phosphorus, nitrogen, fecal coliform, hydrocarbons and metals have been identified as potential target pollutants. This report provides proposed treatment design and strategies to address water quality and potential pollutant concerns. Groundwater Recharge, Water Quality Treatment and Runoff Reduction are discussed further in Section 10 of this report.



Job Number: 26900	Produced:	Produced By: DAS	Modified: 7/20/2022	Modified By:
File: Z:\26900\26900.0002\GIS\Mxd\Exhibits\Exhibit 0 - 26900.0002 - Location Map.mxd			Vertical Datum:	

Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Site Boundary Streamlines Aerial Imagery		

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Where Thomas & Hutton is cited as the data source, the firm has created or verified the data. For all other sources cited, Thomas & Hutton used the data "as is," has made no independent investigation of the data, and makes no representation as to the accuracy or completeness of the data. Please see each source for available documentation of its respective datasets.
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Location Map

Walton County & Morgan County, GA

Rivian EV Manufacturing Facility: Stormwater Master Plan

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SECTION 3 - PURPOSE

The purposes of this report are:

- To define the existing drainage basins for the project.
- To document major drainage infrastructure such as drainage connectors, ponds and outfalls adequate for existing and proposed development within the drainage basin.
- To document compliance with regulatory requirements of the State of Georgia and Walton County summarized as follows:

Walton County:

- Post Development peak runoff rate shall be detained for the 2-, 5-, 10-, 25-, 50-year, and 100-year, 24-hour storm events.

Additional Zoning and Environmental Protections:

- Post developed stormwater best management practices will detain the 100-yr, 24-hour design storm event to pre-developed flow rates.
- Impervious surface on the site shall not exceed 50%

Georgia Stormwater Management Manual:

- *Extreme Flood Protection:* Extreme flood protection shall be provided by controlling the 100-year, 24-hour storm event without overtopping.

- *Stream Channel Protection:* Stream Channel Protection shall be provided by 24-hour extended detention storage of the 1-year, 24-hour storm event.

- *Stormwater Quality Management and Protection:*

  - Runoff Reduction Volume – **Not designed in this master plan study**. To be calculated on a specific site design basis.
  - Water Quality Treatment – Water quality treatment for the runoff volume of the 85th percentile event (1.2") shall be detained onsite and released in less than 24-hours.

Georgia EPD:

- Sediment shall be prevented from leaving the site during construction – **Not designed in this master plan study**. To be designed on a specific site design basis.

SECTION 4 - PRE-DEVELOPMENT DRAINAGE SYSTEM

The pre-development drainage system consists primarily of overland sheet flow and a series of tributaries throughout wooded and grassed areas of the property which convey on- and off-site runoff ultimately discharging into six (6) separate outfalls, including streams and tributaries of Dennis Creek, Hunnicut Creek, and Rawlings Branch. According to Natural Resources Conservation Service (NRCS) Web Soil Survey data, existing on-site soils are predominantly classified as hydrologic soil groups B. Due to the presence of wetlands and/or visible standing water on-site, existing dual hydrologic soils were assumed to be poorly drained within wetlands. Existing soils were assumed to be well-drained within the remaining areas. The associated hydrologic soil groups are depicted in exhibits at the end of this report.

Pre-development basins were delineated for the areas contributing to each outfall using recent lidar data provided by Rivian, as shown on the Pre-Development Drainage Map at the end of this report. Off-site drainage areas located northwest of the project site discharge stormwater runoff into existing on-site channels before discharging into Dennis Creek and discharging under I-20. The off-site drainage areas were assumed to be in their pre-development state.

A hydrologic model was created in Storm and Sanitary Analysis (SSA) to simulate existing conditions and obtain pre-development flows, the input parameters and results of which can be found in Appendix A.

SECTION 5 - POST-DEVELOPMENT DRAINAGE SYSTEM

The proposed stormwater drainage system for the Rivian EV Manufacturing Facility development consists of a series of interconnected wet detention ponds, interconnecting pipes, and outfall structures designed to attenuate post-development peak runoff flows to their pre-development rates for the design storm events. Proposed ponds for the majority of the site outfall into existing on-site wetlands before ultimately discharging under I-20 through four (4) of the six (6) ultimate outfalls. Two (2) proposed ponds along the north side of the property outfall directly offsite into Rawlings Branch. For all proposed discharge points, see the Post-Development Drainage Map at the end of this report.

The post-development sub-basins were delineated based on a conceptual master plan provided by Rivian to Thomas & Hutton in April of 2022. The site plan and post-development sub-basins can be found in the Post-Development Drainage Map at the end of this report. This study has been prepared without the benefit of a final site design. This analysis includes detention ponds and outfall structures required to achieve governing regulatory standards for development of this project. Secondary stormwater pipe/channel collections systems and runoff reduction best management practices will be designed at the time of final design.

A hydrologic and hydraulic model was created using SSA to route stormwater runoff through the proposed drainage system for the design storm events. The post-development model results can be found in Appendix B.

SECTION 6 - CULVERT CROSSING

Rivian is proposing an access road that will tie into US Highway 278 (Jefferson Davis Memorial Highway), just north of its intersection with Interstate 20. This roadway is proposed to cross over Dennis Creek. Post-developed flows were extracted from the proposed conditions SSA model and used to size a culvert crossing for the proposed access road, using Hydraflow Express, an extension of Autocad Civil 3D. Assuming a normal depth of flow tailwater, the culvert crossing was sized to accommodate the 100-year, 24-hour event without overtopping the roadway. The top of road elevation was assumed at elevation 702 feet (NAVD88), based on the mass grading plan dated June 30, 2022. The culvert sizing calculations can be found in Appendix D of this report.

SECTION 7 - STORMWATER QUANTITY METHODOLOGY

The existing and proposed conditions were analyzed using the Storm and Sanitary Analysis (SSA) program developed by Autodesk. The program is used to model rainfall and stormwater runoff and to perform hydraulic routing through the storm drainage system (including existing and proposed storage/detention features such as wetlands, ponds, and lakes).

SSA is an advanced and comprehensive modeling program used to analyze and design drainage systems, stormwater sewers, and sanitary sewers. The software can simultaneously model complex

hydrology, hydraulics, and water quality based on Storm Water Management Model (SWMM) methodologies. For the Rivian EV Manufacturing Facility assessment, the hydrology was simulated using the NRCS (SCS) TR-55 methodology. The hydraulics were simulated utilizing hydrodynamic routing, which accounts for backwater effects, flow reversal, surcharging, and interconnected ponds.

The SSA graphical user interface (GUI) allows for the input of hydrologic data for each drainage sub-basin. See Appendices A and B for the input variables including runoff curve number, rainfall distribution pattern, hydrograph peaking factor, and area of each drainage sub-basin. SSA calculates flow at each time step based on a unit hydrograph. Peak flows at each time step are then added together through an aggregation process to form a composite runoff hydrograph for each outfall/discharge point. The individual hydrographs are generated based on a dimensionless unit hydrograph and user- specified sub-basin properties.

The model's hydraulic input data consists of a system of nodes and links. Nodes represent locations where flows enter or exit the system, pipe or channel characteristics change, or where stage/storage/time relationships are provided. Links represent traditional types of hydraulic conveyance such as pipes, channels, control structures, weirs, etc. The sizes, inverts, lengths, and Manning "n" values for all pipes connecting the ponds are input into the model. In addition to pipe information, all pond stage-area relationships and the respective control structure parameters are input into the model.

Runoff hydrographs for each drainage area are combined with the hydraulic parameters to dynamically model the hydraulic interactions of the entire drainage system. The models are used to establish peak discharge rates to the outfall and to establish pond stages to assess compliance with regulations and design guidelines.

SECTION 8 - HYDROLOGY

The following summarizes the assumptions and methodologies utilized in the development of the pe-development and post-development hydrologic and hydraulic models:

- SCS Unit Hydrograph Method is used.
- Amount of rainfall for each storm frequency is determined based on NOAA Atlas 14 Point Precipitation Frequency Estimates, as required by the Georgia Stormwater Management Manual. The following 24-hour design storms are used in the model simulations:

TABLE 3
Rainfall Precipitation

Storm Event	Rainfall (inches)
1–year	3.22
2-year	3.69
5-year	4.48
10–year	5.16
25–year	6.12
50-year	6.88
100–year	7.67

- SCS Type II Statistical Rainfall Distribution is used.

SECTION 9 - RUNOFF CALCULATIONS

Peak flow rates for each design storm are calculated by SSA based on drainage area, hydrologic and hydraulic parameters, and the following runoff parameters:

Curve Numbers

Curve numbers are generated according to procedures set forth in SCS Technical Release 55 (TR–55). The composite curve numbers for each drainage basin are calculated using land use definitions based on recent aerial photography and soils information extracted from the USGS Web Soil Survey. Pre–Development Curve Numbers were weighted based on the existing land use and soil within each basin. Since the final proposed layout is currently unknown, a conservative approach was taken, and a Post-Development Curve Number of 90 was used for all Post-Development basins. See Table 4 below for a list of land use types with their corresponding curve number values based on hydrologic soil group definitions.

TABLE 4
Curve Number Values

Land Use	Hydrologic Soil Group (HSG)			
	A	B	C	D
2-Acre Residential	46	65	77	82
Bare Soil	77	86	91	94
Commercial	89	92	94	95
Dirt Road	72	82	87	89
Impervious	98	98	98	98
Open Space	39	61	74	80
Water	98	98	98	98
Wetland	85	85	85	85
Woods - Good	30	55	70	77
Woods - Grass Combination	32	58	72	79
2-Acre Residential	46	65	77	82
Bare Soil	77	86	91	94

Time of Concentration

Times of concentration were calculated using WinTR-55 according to procedures set forth in SCS Hydrology Technical Note No. N4, as referenced in TR–55. The travel times (T_t) for overland flow, shallow concentrated flow, and channel flow are added together for the drainage basin to get the total time of concentration (T_c). The total time of concentration path used for each basin is shown on the Pre-Development Drainage Basins Exhibit and the Post-Development Drainage Basins Exhibit.

- Overland Flow
  The equation for overland flow travel time is as follows:
  $T_t = \frac{0.007\,(nL)^{0.8}}{}$ Where: n = Manning's friction factor

$P_2^{0.5}S^{0.4}$

L = slope length (ft)
S = Slope (ft/ft)
P_2 = 24–hour precipitation (inches)

The travel time as calculated in the above equation in hours.

- Shallow Concentrated Flow
  The equation for shallow concentrated flow travel time is as follows:

  $T_t = \frac{L}{60v}$ (min) Where: L = length (ft)
  v = velocity (ft/sec)

- Channel and Pipe Flow
  The equation for channel flow travel time is as follows:

  $T_t = \frac{L}{60v}$ (min) Where: L = length of channel (ft)
  v = velocity (ft/sec)

  The velocity is determined using Manning's equation:

  $v = (1.49/n)r^{2/3}S^{1/2}$ Where: r = hydraulic radius (ft) = A/P
  A_x = cross–sectional area (sf)
  P = wetted perimeter (ft)
  S = slope (ft/ft)

For channel and pipe flow travel times, a velocity of 1-2 ft/sec was used in the pre--development calculations, depending on channel characteristics. A velocity of 2 ft/sec was used in the post-development calculations. Slopes in the post-development calculations were estimated using the mass grading plan dated June 30, 2022.

Travel times for each sub–basin were then added together to determine the time of concentration for each pre- and post–development drainage area. WinTr-55 was used to calculate the time of concentration. Time of concentration calculations are available in Appendix C.

SECTION 10 - WATER QUALITY

Total suspended solids, phosphorus, nitrogen, fecal coliform, hydrocarbons and metals have been identified as potential target pollutants. These target pollutants will be removed from post-developed stormwater runoff to the maximum extent practical. The potential BMPs will be used in series, as required, to attain estimated reduction rates of 80% for TSS, 50% for phosphorus, 25% for nitrogen, 40% for fecal coliform, 50% for metals, as well as a reduction in hydrocarbon pollutants. Wet stormwater ponds and dry detention basins, where feasible, will be the final treatment BMP prior to treated stormwater runoff discharge. The table below indicates potential BMPs to be deployed and removal efficiency of each BMP for the targeted pollutant. These BMPs will be deployed during design to achieve pollution reduction rates. If required, the BMPs will be provided in series to provide the treatment train necessary to achieve required pollutant reduction rates listed in the Georgia Stormwater Management Manual (GSMM).

BMPs	TABLE 5 Target Pollutants Precent Removal					
	Total Suspended Solid Removal	Total Phosphorus	Total Nitrogen	Fecal Coliform	Metals	Hydrocarbons
Wet Stormwater Pond	80%[1]	50%[1]	30%[1]	70%[1]	50%[1]	81%[3]
Dry Detention Basins	60%[1]	10%[1]	30%[1]	NA**	50%[1]	NA
Bioretention Basins	85%[1]	80%[1]	60%[1]	90%[1]	95%[1]	80%[2]
Downspout Disconnects	80%[1]	25%[1]	25%[1]	NA**	40%[1]	NA
Enhanced Dry Swale	80%[1]	50%[1]	50%[1]	X	40%[1]	80%[2]
Enhanced Wet Swale	80%[1]	25%[1]	40%[1]	X	20%[1]	NA
Grass Channels	50%[1]	25%[1]	20%[1]	X	30%[1]	NA
Contech Stormceptor (or similar)	>80%[4]	*	*	*	*	>90%[4]
Permeable Paver Systems	80%[1]	50%[1]	50%[1]	NA**	60%[1]	NA
Vegetative Filter Strips	60%[1]	20%[1]	20%[1]	x	40%[1]	NA

*Pollutant removal rates vary – BMPs will only be used if required to achieve standards.

**Helps restore pre-development hydrology, which implicitly reduces post-construction stormwater runoff rates, volumes, and pollutant loads.

X – BMP may contribute but is not likely t fully meet the stormwater management or treatment requirement.

Sources:

[1]Georgia Stormwater Management Manual, Volume 2, 2nd Edition, 2016, Table 4.1.3-1.

[2]https://stormwater.pca.state.mn.us/index.php?title=Median_pollutant_removal_percentages_for_BMPs (Minnesota Pollution Control Agency).

[3]National Pollutant Removal Performance Database for Stormwater Treatment Practices, 2nd Edition, September 2000

[4] https://www.conteches.com/stormwater-management/treatment/stormceptor-systems

Recommended maintenance of stormwater BMPs conforms to the Georgia Stormwater Management Manual recommendations and manufacturer recommendations for proprietary systems.

The stormwater master plan currently consists of eight (8) wet detention ponds. Final design will incorporate additional BMPs, where feasible, to address water quality. Dry detention ponds shall be considered once the final layout is established and infiltration tests are conducted to ensure their feasibility. Wet stormwater ponds provide 80% TSS removal and dry detention ponds provide 60% TSS removal (GSMM Table 4.1.3-1 BMP Selection Guide). For contributing drainage areas being treated by dry detention, pre-treatment BMPs will be deployed to provide a treatment train of BMPs required to achieve 80% TSS removal. Pre-treatment best management practices (BMPs) may include green infrastructure, low impact, structural and non-structural BMPs. Pre-treatment BMPs that may be deployed during design, construction and post-construction include bio-retention areas, downspout disconnects, enhanced dry and wet swales, mechanical TSS separator units (proprietary systems), permeable paver systems and vegetated filter strips.

Groundwater Recharge Areas

Pursuant to the Georgia Geological Survey Hydrologic Atlas 18 Most Significant Ground-Water Recharge Areas of Georgia, the Rivian EV Manufacturing Facility site is located within an area identified as "probable areas of thick soils" which "may be significant

recharge areas". The Environmental Protection Division (EPD) has established minimum criteria for Groundwater Recharge Areas to prevent groundwater contamination caused by development. In Georgia, these criteria have only been established for the most significant recharge areas. The Rivian project site is not currently located within one of these defined areas. Preliminary planning has been conducted to address concerns surrounding the site's proximity to the "probable area of thick soils". The project design team shall consider the following measures for groundwater protection, which may be utilized to the extent they are practicable for this site and the project:

- Rivian will employ spill protection control and countermeasure practices that comply with applicable federal, state, and local requirements.
- To the extent practicable, stormwater from paved surfaces will be routed over grassed or vegetated areas or a treatment train of best management practices prior to detention to provide additional filtration.
- Sand/Oil/Water separators will be employed in areas where appropriate to capture pollutants.
- Additional undisturbed buffers should be considered along existing streams that are not impacted by the project.
- Perimeter buffers should also be considered provided along adjacent properties.
- Any existing water wells on the site will be capped and closed following applicable EPA standards.

Water Quality Treatment

Pursuant to the Georgia Stormwater Management Manual (GSMM), the water quality treatment requirement can be met by providing a 24-hour drawdown of the water quality volume in a wet detention pond. The water quality volume is computed by determining the volume of runoff over the developed area for the 85th percentile storm event, which is equal to 1.2 inches. This volume is then simulated in the post-developed model to ensure the drawdown time is greater than 24 hours. The proposed pond and outfall configurations satisfy this requirement. See Appendix B for the water quality volume calculations and pond drawdown graphs.

Runoff Reduction

Pursuant to the Georgia Stormwater Management Manual (GSMM), proposed development should provide runoff reduction practices to disconnect impervious and disturbed pervious surfaces from a storm drain system to reduce post-construction stormwater runoff rates, volumes, and pollutant loads. The GSMM offers an array of approved runoff reduction practices to assist in achieving the required amount of runoff reduction. Since the final design is currently unknown, this report provides strategies for consideration at the final design phase. The project design team shall consider the following measures for runoff reduction and stormwater infiltration, which may be used to the extent they are practicable for this site and the project:

- Where soils allow, infiltration practices should be considered in the form of infiltration basins, vegetated ditches/swales, or similar measures.
- Stormwater reuse should be considered where practicable, including onsite use in the form of irrigation or offsite use in coordination with the water and sewer authority.
- Wet stormwater detention ponds should be designed to not only accommodate, but also over detain for the various design storms, including the 100-year storm

event. This reduces pollutant loads, increases infiltration time, and reduces downstream impacts. This study achieves this goal.

SECTION 11 - CONCLUSIONS

Per the requirements of Walton County and the Georgia Stormwater Management Manual, the proposed project was evaluated by Thomas & Hutton using the methods identified in this report. Based on the results of this evaluation:

- Post-development peak runoff rates are less than pre-development peak runoff rates for the 1-, 2-, 5-, 10-, 25- ,50-, and 100-year, 24-hour design storm events;
- Extreme flood protection has been achieved by limiting post-developed peak runoff rates to pre-developed peak runoff rates for the 100-year, 24–hour design storm;
- Stream channel protection compliance has been achieved;
- Post-development peak stages in proposed ponds provide 2 feet of freeboard between the maximum water surface elevation and the pond top of bank;
- Pollution Removal: Treatment strategies are provided to address Runoff Reduction and Groundwater Recharge Areas.

TABLE 6
Summary of Results – Peak Runoff

Outfall	Peak Runoff (cfs)								
	2-yr			5-yr			10-yr		
	Pre-	Post-	% Reduced	Pre-	Post-	% Reduced	Pre-	Post-	% Reduced
01	353	347	2%	662	641	3%	967	828	14%
02	44	42	5%	88	80	9%	136	99	27%
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06	165	59	64%	208	65	69%	255	70	73%

The post development (at full build-out) flow rates do not exceed the pre-development flow rates for the available design storms.

The master plan stormwater detention ponds were designed to provide post construction stormwater management detention to flow rates significantly less than predeveloped flow rates.

The additional detention further reduces pollutant loads, increases detention time, and minimizes downstream impacts.

Pollutant loads that can be further reduced due to the extended detention include total suspended solids (TSS), phosphorous, nitrogen, cadmium, copper, lead, zinc, and pathogens such as fecal coliform. Total suspended solids are reduced through sediment precipitation in the permanent pool, while soluble nutrients and organic matter are reduced through plant uptake and bacterial activity in the permanent pool of water and by rooted plants in the shallow zone around the perimeter of the pond. Some additional benefits of extended wet detention include high community awareness and acceptance, opportunities for wildlife habitat, and minimal maintenance. See Section 10 for additional information regarding the water quality design considerations established as part of this stormwater master plan.

TABLE 7
Summary of Results – Peak Pond Stages

Pond	*Normal Water Elevation (ft)*	*Top Of Bank Elevation (ft)*	*2-yr*	*5-yr*	*10-yr*	*25-yr*	*50-yr*	*100-yr*
1	739	746.0	741.65	742.25	742.57	743.27	743.72	744.19
2A	739	742.5	739.67	739.85	739.99	740.23	740.40	740.57
2B	739	742.0	739.35	739.51	739.65	739.86	740.03	740.21
3	745	752.0	747.41	748.04	748.39	748.98	749.42	749.92
4A	674	682.5	677.12	677.78	678.37	679.24	679.83	680.41
4B	674	682.5	677.13	677.88	678.39	679.26	679.86	680.47
5	744	752.5	747.34	748.06	748.42	749.37	749.95	750.53
6	732	738.0	733.63	734.06	734.34	734.93	735.35	735.78

All elevations are reported to the North American Vertical Datum of 1988 (NAVD88).

THOMAS & HUTTON

STORMWATER MASTER PLAN

RIVIAN EV MANUFACTURING FACILITY

WALTON COUNTY & MORGAN COUNTY, GEORGIA

Appendix A

SSA PRE DEVELOPMENT MODEL INPUT AND OUTPUT RESULTS

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PRE-DEVELOPED CONDITIONS
SSA MODEL INPUT

Project Description

File Name	26900.0002 - Existing Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	31
Nodes	41
Junctions	24
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	11
Links	36
Channels	29
Pipes	5
Pumps	0
Orifices	0
Weirs	2
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Hydrology

Subbasin : A

Input Data

Area (ac) 426.00
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	426.00	-	64.00
Composite Area & Weighted CN	426.00		64.00

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft²)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

User-Defined TOC override (minutes): 59.4

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.52
Peak Runoff (cfs) 822.43
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:59:24

Subbasin : AA

Input Data

Area (ac) 37.07
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	37.07	-	61.00
Composite Area & Weighted CN	37.07		61.00

Time of Concentration

User-Defined TOC override (minutes): 20.22

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.20
Peak Runoff (cfs) 128.18
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:20:13

Subbasin : B

Input Data

Area (ac) 179.81
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	179.81	-	64.00
Composite Area & Weighted CN	179.81		64.00

Time of Concentration

User-Defined TOC override (minutes): 26.22

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.52
Peak Runoff (cfs) 598.86
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:26:13

Subbasin : BB

Input Data

Area (ac) 19.61
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	19.61	-	59.00
Composite Area & Weighted CN	19.61		59.00

Time of Concentration

User-Defined TOC override (minutes): 22.32

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.98
Peak Runoff (cfs) 59.64
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:22:19

Subbasin : C

Input Data

Area (ac) 57.45
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	57.45	-	61.00
Composite Area & Weighted CN	57.45		61.00

Time of Concentration

User-Defined TOC override (minutes): 38.32

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.20
Peak Runoff (cfs) 135.21
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:38:19

Subbasin : CC

Input Data

Area (ac) 17.45
Peak Rate Factor 484.00
Weighted Curve Number 63.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	17.45	-	63.00
Composite Area & Weighted CN	17.45		63.00

Time of Concentration

User-Defined TOC override (minutes): 15.84

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.41
Peak Runoff (cfs) 72.18
Weighted Curve Number 63.00
Time of Concentration (days hh:mm:ss) 0 00:15:50

Subbasin : D

Input Data

Area (ac) 90.50
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	90.50	-	64.00
Composite Area & Weighted CN	90.50		64.00

Time of Concentration

User-Defined TOC override (minutes): 35.7

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.52
Peak Runoff (cfs) 248.72
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:35:42

Subbasin : DD

Input Data

Area (ac) 15.65
Peak Rate Factor 484.00
Weighted Curve Number 66.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	15.65	-	66.00
Composite Area & Weighted CN	15.65		66.00

Time of Concentration

User-Defined TOC override (minutes): 20.52

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.74
Peak Runoff (cfs) 63.47
Weighted Curve Number 66.00
Time of Concentration (days hh:mm:ss) 0 00:20:31

Subbasin : E

Input Data

Area (ac) 54.28
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	54.28	-	59.00
Composite Area & Weighted CN	54.28		59.00

Time of Concentration

User-Defined TOC override (minutes): 31.02

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.98
Peak Runoff (cfs) 135.49
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:31:01

Subbasin : EE

Input Data

Area (ac) 110.95
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	110.95	-	64.00
Composite Area & Weighted CN	110.95		64.00

Time of Concentration

User-Defined TOC override (minutes): 26.16

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.52
Peak Runoff (cfs) 370.28
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:26:10

Subbasin : F

Input Data

Area (ac) 40.46
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	40.46	-	61.00
Composite Area & Weighted CN	40.46		61.00

Time of Concentration

User-Defined TOC override (minutes): 35.4

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.20
Peak Runoff (cfs) 100.37
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:35:24

Subbasin : G

Input Data

Area (ac) 52.30
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	52.30	-	57.00
Composite Area & Weighted CN	52.30		57.00

Time of Concentration

User-Defined TOC override (minutes): 31.92

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.77
Peak Runoff (cfs) 117.58
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:31:55

Subbasin : H

Input Data

Area (ac) 51.81
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	51.81	-	59.00
Composite Area & Weighted CN	51.81		59.00

Time of Concentration

User-Defined TOC override (minutes): 52.14

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.98
Peak Runoff (cfs) 90.65
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:52:08

Subbasin : I

Input Data

Area (ac) 39.69
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	39.69	-	61.00
Composite Area & Weighted CN	39.69		61.00

Time of Concentration

User-Defined TOC override (minutes): 36.18

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.20
Peak Runoff (cfs) 96.87
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:36:11

Subbasin : J

Input Data

Area (ac) 120.14
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	120.14	-	57.00
Composite Area & Weighted CN	120.14		57.00

Time of Concentration

User-Defined TOC override (minutes): 54.66

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.77
Peak Runoff (cfs) 185.88
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:54:40

Subbasin : K

Input Data

Area (ac) 171.51
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	171.51	-	57.00
Composite Area & Weighted CN	171.51		57.00

Time of Concentration

User-Defined TOC override (minutes): 35.88

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.77
Peak Runoff (cfs) 356.09
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:35:53

Subbasin : L

Input Data

Area (ac) 92.78
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	92.78	-	57.00
Composite Area & Weighted CN	92.78		57.00

Time of Concentration

User-Defined TOC override (minutes): 28.68

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.77
Peak Runoff (cfs) 223.10
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:28:41

Subbasin : M

Input Data

Area (ac) 55.95
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	55.95	-	57.00
Composite Area & Weighted CN	55.95		57.00

Time of Concentration

User-Defined TOC override (minutes): 29.64

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.77
Peak Runoff (cfs) 132.05
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:29:38

Subbasin : N

Input Data

Area (ac) 43.16
Peak Rate Factor 484.00
Weighted Curve Number 58.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	43.16	-	58.00
Composite Area & Weighted CN	43.16		58.00

Time of Concentration

User-Defined TOC override (minutes): 31.5

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.88
Peak Runoff (cfs) 102.32
Weighted Curve Number 58.00
Time of Concentration (days hh:mm:ss) 0 00:31:30

Subbasin : O

Input Data

Area (ac) 76.92
Peak Rate Factor 484.00
Weighted Curve Number 58.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	76.92	-	58.00
Composite Area & Weighted CN	76.92		58.00

Time of Concentration

User-Defined TOC override (minutes): 44.58

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.88
Peak Runoff (cfs) 144.14
Weighted Curve Number 58.00
Time of Concentration (days hh:mm:ss) 0 00:44:35

Subbasin : P

Input Data

Area (ac) 72.62
Peak Rate Factor 484.00
Weighted Curve Number 60.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	72.62	-	60.00
Composite Area & Weighted CN	72.62		60.00

Time of Concentration

User-Defined TOC override (minutes): 54.18

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.09
Peak Runoff (cfs) 128.78
Weighted Curve Number 60.00
Time of Concentration (days hh:mm:ss) 0 00:54:11

Subbasin : Q

Input Data

Area (ac) 108.57
Peak Rate Factor 484.00
Weighted Curve Number 62.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	108.57	-	62.00
Composite Area & Weighted CN	108.57		62.00

Time of Concentration

User-Defined TOC override (minutes): 28.5

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.30
Peak Runoff (cfs) 320.33
Weighted Curve Number 62.00
Time of Concentration (days hh:mm:ss) 0 00:28:30

Subbasin : R

Input Data

Area (ac) 80.68
Peak Rate Factor 484.00
Weighted Curve Number 62.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	80.68	-	62.00
Composite Area & Weighted CN	80.68		62.00

Time of Concentration

User-Defined TOC override (minutes): 24.84

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.30
Peak Runoff (cfs) 258.69
Weighted Curve Number 62.00
Time of Concentration (days hh:mm:ss) 0 00:24:50

Subbasin : S

Input Data

Area (ac) 85.42
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	85.42	-	61.00
Composite Area & Weighted CN	85.42		61.00

Time of Concentration

User-Defined TOC override (minutes): 26.46

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.20
Peak Runoff (cfs) 254.10
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:26:28

Subbasin : T

Input Data

Area (ac) 69.15
Peak Rate Factor 484.00
Weighted Curve Number 62.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	69.15	-	62.00
Composite Area & Weighted CN	69.15		62.00

Time of Concentration

User-Defined TOC override (minutes): 21.84

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.30
Peak Runoff (cfs) 238.39
Weighted Curve Number 62.00
Time of Concentration (days hh:mm:ss) 0 00:21:50

Subbasin : U

Input Data

Area (ac) 65.72
Peak Rate Factor 484.00
Weighted Curve Number 69.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	65.72	-	69.00
Composite Area & Weighted CN	65.72		69.00

Time of Concentration

User-Defined TOC override (minutes): 32.94

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 4.07
Peak Runoff (cfs) 222.70
Weighted Curve Number 69.00
Time of Concentration (days hh:mm:ss) 0 00:32:56

Subbasin : V

Input Data

Area (ac) 54.60
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	54.60	-	59.00
Composite Area & Weighted CN	54.60		59.00

Time of Concentration

User-Defined TOC override (minutes): 31.80

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.98
Peak Runoff (cfs) 134.16
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:31:48

Subbasin : W

Input Data

Area (ac) 79.34
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	79.34	-	61.00
Composite Area & Weighted CN	79.34		61.00

Time of Concentration

User-Defined TOC override (minutes): 25.68

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.20
Peak Runoff (cfs) 240.64
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:25:41

Subbasin : X

Input Data

Area (ac) 22.95
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	22.95	-	59.00
Composite Area & Weighted CN	22.95		59.00

Time of Concentration

User-Defined TOC override (minutes): 13.86

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 2.98
Peak Runoff (cfs) 86.29
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:13:52

Subbasin : Y

Input Data

Area (ac) 35.31
Peak Rate Factor 484.00
Weighted Curve Number 62.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	35.31	-	62.00
Composite Area & Weighted CN	35.31		62.00

Time of Concentration

User-Defined TOC override (minutes): 20.64

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.30
Peak Runoff (cfs) 124.94
Weighted Curve Number 62.00
Time of Concentration (days hh:mm:ss) 0 00:20:38

Subbasin : Z

Input Data

Area (ac) 109.30
Peak Rate Factor 484.00
Weighted Curve Number 60.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	109.30	-	60.00
Composite Area & Weighted CN	109.30		60.00

Time of Concentration

User-Defined TOC override (minutes): 25.74

Subbasin Runoff Results

Total Rainfall (in) 7.67
Total Runoff (in) 3.09
Peak Runoff (cfs) 318.23
Weighted Curve Number 60.00
Time of Concentration (days hh:mm:ss) 0 00:25:44

Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft²)	Minimum Pipe Cover (in)
1	Jun-01	716.00	800.00	84.00	716.00	0.00	800.00	0.00	1.00	0.00
2	Jun-02	682.00	800.00	118.00	682.00	0.00	800.00	0.00	1.00	0.00
3	Jun-03	767.00	800.00	33.00	767.00	0.00	800.00	0.00	1.00	0.00
4	Jun-04	677.70	800.00	122.30	678.00	0.30	800.00	0.00	1.00	0.00
5	Jun-07	715.00	800.00	85.00	715.00	0.00	800.00	0.00	1.00	0.00
6	Jun-08	723.00	800.00	77.00	723.00	0.00	800.00	0.00	1.00	0.00
7	Jun-10	716.00	800.00	84.00	716.00	0.00	800.00	0.00	1.00	0.00
8	Jun-11	744.00	800.00	56.00	744.00	0.00	800.00	0.00	1.00	0.00
9	Jun-14	762.00	800.00	38.00	762.00	0.00	800.00	0.00	1.00	0.00
10	Jun-17	741.00	800.00	59.00	741.00	0.00	800.00	0.00	1.00	0.00
11	Jun-18	734.00	800.00	66.00	734.00	0.00	800.00	0.00	1.00	0.00
12	Jun-19	699.00	800.00	101.00	699.00	0.00	800.00	0.00	1.00	0.00
13	Jun-20	692.00	800.00	108.00	692.00	0.00	800.00	0.00	1.00	0.00
14	Jun-21	690.00	800.00	110.00	690.00	0.00	800.00	0.00	1.00	0.00
15	Jun-22	666.00	800.00	134.00	666.00	0.00	800.00	0.00	1.00	0.00
16	Jun-23	671.00	800.00	129.00	671.00	0.00	800.00	0.00	1.00	0.00
17	Jun-24	708.00	800.00	92.00	708.00	0.00	800.00	0.00	1.00	0.00
18	Jun-26	731.00	800.00	69.00	731.00	0.00	800.00	0.00	1.00	0.00
19	Jun-27	676.80	800.00	123.20	676.80	0.00	800.00	0.00	1.00	0.00
20	Jun-28	686.60	800.00	113.40	686.60	0.00	800.00	0.00	1.00	0.00
21	Jun-29	690.00	800.00	110.00	690.00	0.00	800.00	0.00	1.00	0.00
22	Jun-31	702.00	800.00	98.00	702.00	0.00	800.00	0.00	1.00	0.00
23	Jun-32	704.00	800.00	96.00	704.00	0.00	800.00	0.00	1.00	0.00
24	Jun-33	685.70	691.70	6.00	685.70	0.00	691.70	0.00	1.00	0.00

Channel Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Shape	Height (ft)	Width (ft)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow (cfs)	Flap Gate
1	Link-01	655.00	767.00	0.00	759.00	25.00	8.00	1.2200	User-Defined	40.590	604.220	0.0320	0.0000	0.0000	0.0000	0.00	No
2	Link-03	575.00	716.00	0.00	711.00	24.00	5.00	0.8700	User-Defined	20.500	511.040	0.0320	0.0000	0.0000	0.0000	0.00	No
3	Link-04	784.40	687.00	0.00	685.70	0.00	1.30	0.1700	User-Defined	41.980	1068.460	0.0320	0.0000	0.0000	0.0000	0.00	No
4	Link-05	660.00	682.00	0.00	677.70	0.00	4.30	0.6500	User-Defined	49.400	1166.130	0.0320	0.0000	0.0000	0.0000	0.00	No
5	Link-07	971.00	723.00	0.00	708.00	0.00	15.00	1.5400	User-Defined	35.280	562.960	0.0320	0.0000	0.0000	0.0000	0.00	No
6	Link-08	814.00	715.00	0.00	696.00	6.30	19.00	2.3300	User-Defined	35.190	651.230	0.0320	0.0000	0.0000	0.0000	0.00	No
7	Link-12	60.00	671.50	0.50	671.00	0.00	0.50	0.8300	User-Defined	41.880	713.740	0.0320	0.0000	0.0000	0.0000	0.00	No
8	Link-13	750.00	704.00	0.00	692.00	0.00	12.00	1.6000	User-Defined	35.520	515.460	0.0320	0.0000	0.0000	0.0000	0.00	No
9	Link-14	1021.00	716.00	0.00	690.00	0.00	26.00	2.5500	User-Defined	26.670	676.080	0.0320	0.0000	0.0000	0.0000	0.00	No
10	Link-15	840.00	744.00	0.00	734.00	0.00	10.00	1.1900	User-Defined	34.800	643.540	0.0320	0.0000	0.0000	0.0000	0.00	No
11	Link-16	888.00	762.00	0.00	741.00	0.00	21.00	2.3600	User-Defined	24.130	475.810	0.0320	0.0000	0.0000	0.0000	0.00	No
12	Link-18	100.00	702.00	0.00	699.00	0.00	3.00	3.0000	User-Defined	37.600	469.020	0.0320	0.0000	0.0000	0.0000	0.00	No
13	Link-20	1055.00	685.00	0.00	682.00	0.00	3.00	0.2800	User-Defined	59.580	1408.800	0.0320	0.0000	0.0000	0.0000	0.00	No
14	Link-22	1070.00	720.00	0.00	712.00	25.00	8.00	0.7500	User-Defined	36.040	1052.100	0.0320	0.0000	0.0000	0.0000	0.00	No
15	Link-23	1130.00	741.00	0.00	725.00	5.00	16.00	1.4200	User-Defined	29.830	747.940	0.0320	0.0000	0.0000	0.0000	0.00	No
16	Link-24	960.00	734.00	0.00	726.00	24.00	8.00	0.8300	User-Defined	37.880	716.070	0.0320	0.0000	0.0000	0.0000	0.00	No
17	Link-25	893.00	699.00	0.00	677.00	6.00	22.00	2.4600	User-Defined	37.600	469.020	0.0320	0.0000	0.0000	0.0000	0.00	No
18	Link-26	690.00	692.00	0.00	674.00	3.00	18.00	2.6100	User-Defined	52.400	492.050	0.0320	0.0000	0.0000	0.0000	0.00	No
19	Link-27	910.00	690.00	0.00	676.00	5.00	14.00	1.5400	User-Defined	40.590	604.220	0.0320	0.0000	0.0000	0.0000	0.00	No
20	Link-28	590.00	666.00	0.00	664.00	3.50	2.00	0.3400	User-Defined	52.930	738.650	0.0320	0.0000	0.0000	0.0000	0.00	No
21	Link-29	695.00	671.00	0.00	666.00	0.00	5.00	0.7200	User-Defined	50.600	813.960	0.0320	0.0000	0.0000	0.0000	0.00	No
22	Link-30	946.00	708.00	0.00	697.00	7.30	11.00	1.1600	User-Defined	41.160	844.610	0.0320	0.0000	0.0000	0.0000	0.00	No
23	Link-33	100.00	734.00	0.00	731.00	0.00	3.00	3.0000	User-Defined	34.800	906.990	0.0320	0.0000	0.0000	0.0000	0.00	No
24	Link-34	672.00	731.00	0.00	724.00	4.00	7.00	1.0400	User-Defined	34.800	906.990	0.0320	0.0000	0.0000	0.0000	0.00	No
25	Link-35	100.00	676.80	0.00	675.80	0.00	1.00	1.0000	User-Defined	35.870	461.280	0.0320	0.0000	0.0000	0.0000	0.00	No
26	Link-36	100.00	686.60	0.00	685.00	0.00	1.60	1.6000	User-Defined	29.400	598.150	0.0320	0.0000	0.0000	0.0000	0.00	No
27	Link-37	100.00	690.00	0.00	688.00	0.00	2.00	2.0000	User-Defined	36.860	434.990	0.0320	0.0000	0.0000	0.0000	0.00	No
28	Link-38	100.00	656.20	0.00	655.00	-4.00	1.20	1.2000	User-Defined	20.070	1070.560	0.0320	0.0000	0.0000	0.0000	0.00	No
29	Link-41	427.59	685.70	0.00	685.00	0.00	0.70	0.1600	User-Defined	41.980	1068.460	0.0320	0.0000	0.0000	0.0000	0.00	No

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow (cfs)	Flap Gate	No. of Barrels
1	Link-06	291.00	677.70	0.00	676.80	0.00	0.90	0.3100	Rectangular	96.000	96.000	0.0130	0.5000	0.5000	0.0000	0.00	No	2
2	Link-09	237.00	689.70	0.00	686.60	0.00	3.10	1.3100	Rectangular	48.000	48.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
3	Link-11	327.00	660.50	0.00	656.20	0.00	4.30	1.3100	Rectangular	60.000	84.000	0.0130	0.5000	1.0000	0.0000	0.00	No	3
4	Link-19	248.00	694.20	0.00	690.00	0.00	4.20	1.6900	CIRCULAR	48.000	48.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
5	Link-39	193.00	669.80	9.30	668.50	12.30	1.30	0.6700	Rectangular	72.000	48.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1

Storage Nodes

Storage Node : Jun-30

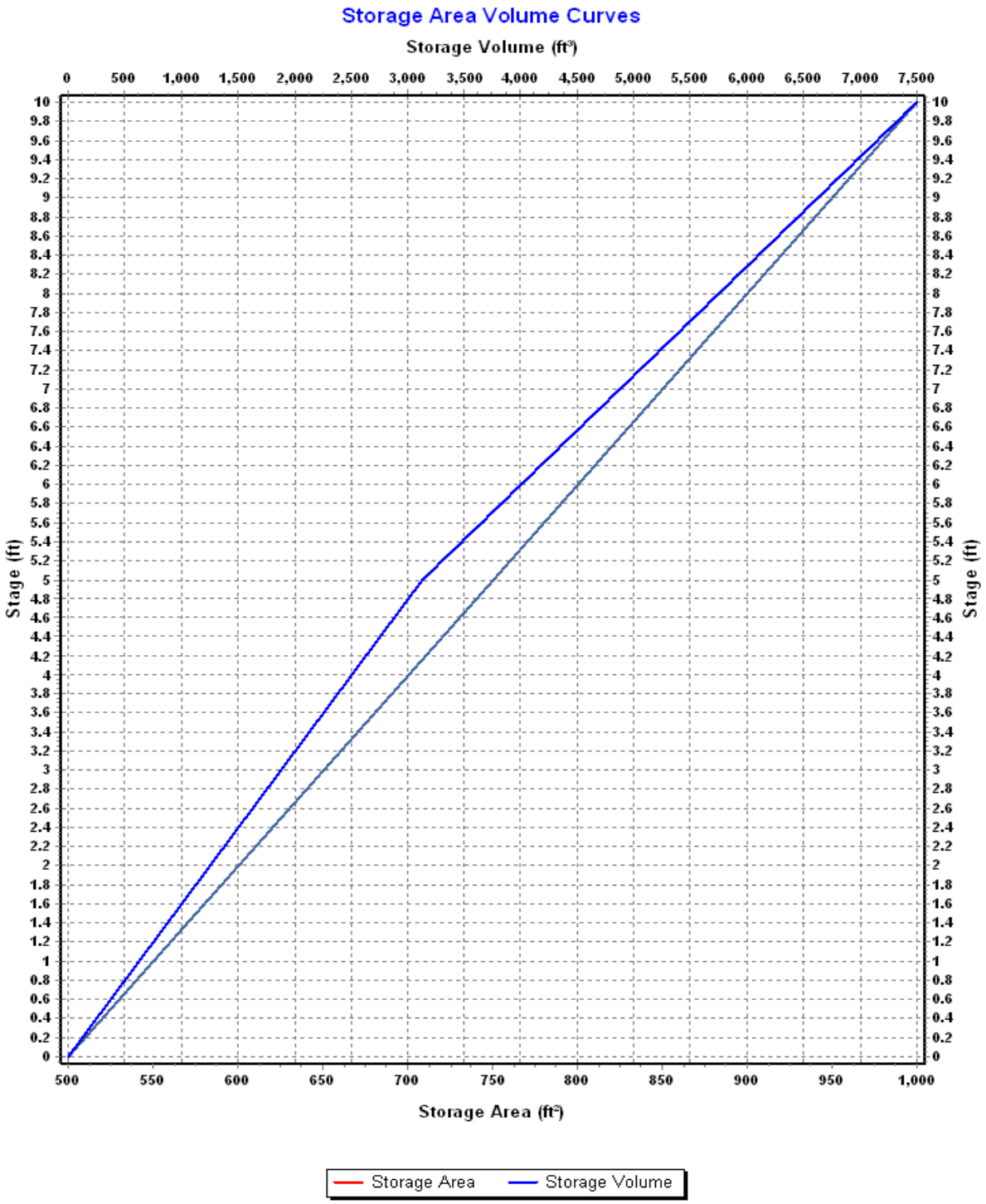
Input Data

Invert Elevation (ft) 656.20
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 143.80
Initial Water Elevation (ft) 656.20
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1000.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-P

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	500	0.000
5	750	3125.00
10	1000	7500.00


Storage Area Volume Curves
Storage Volume (ft³)
0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 5,500 6,000 6,500 7,000 7,500
Stage (ft)
10 9.8 9.6 9.4 9.2 9 8.8 8.6 8.4 8.2 8 7.8 7.6 7.4 7.2 7 6.8 6.6 6.4 6.2 6 5.8 5.6 5.4 5.2 5 4.8 4.6 4.4 4.2 4 3.8 3.6 3.4 3.2 3 2.8 2.6 2.4 2.2 2 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0
500 550 600 650 700 750 800 850 900 950 1,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Jun-30 (continued)

Storage Node : Stor-D

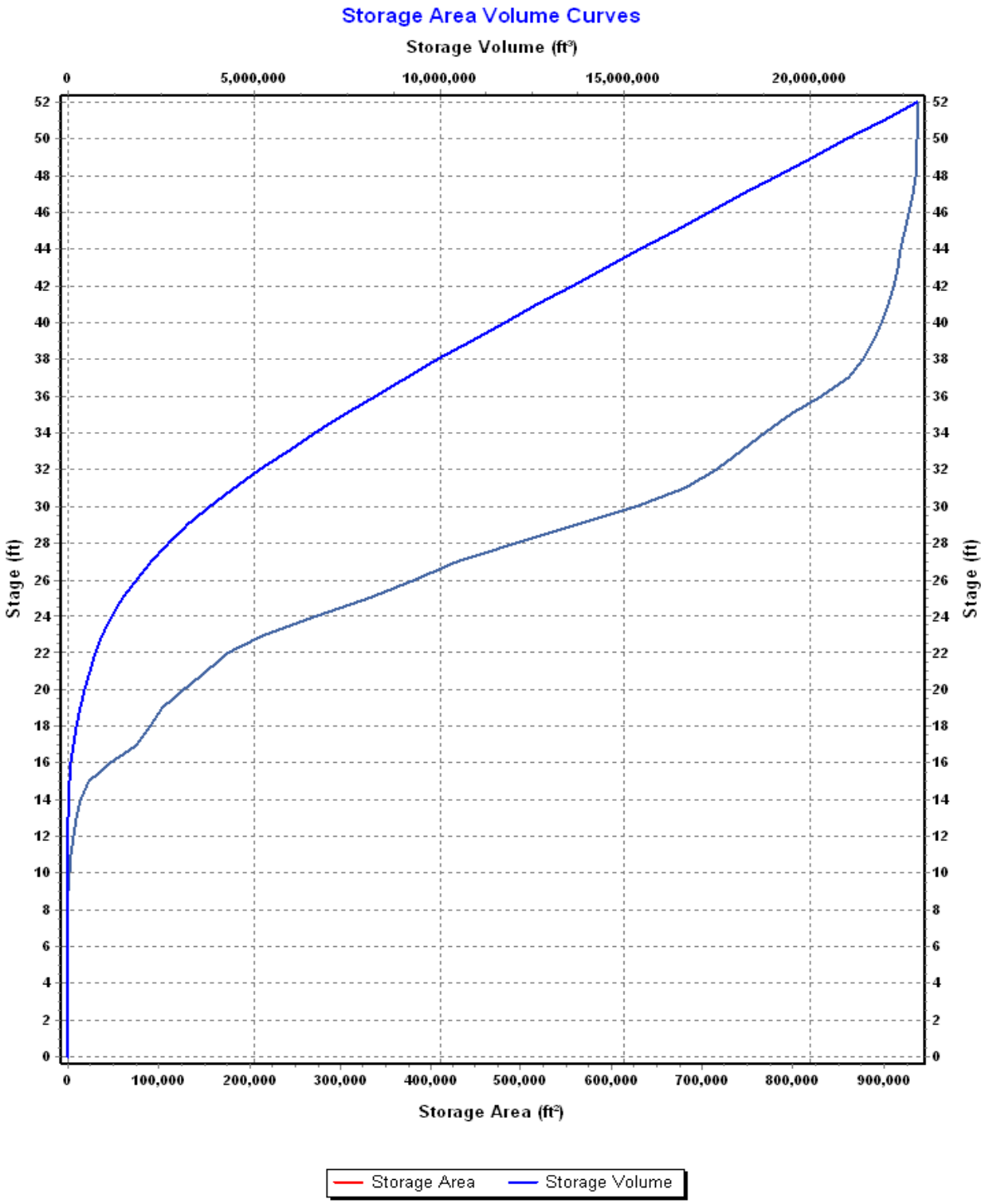
Input Data

Invert Elevation (ft) 734.00
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 66.00
Initial Water Elevation (ft) 734.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 233730.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-I

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
9	100	900.00
10	1075.932	1487.97
11	3271.356	3661.61
12	5671.512	8133.04
13	9827.136	15882.36
14	12972.168	27282.01
15	23422.212	45479.20
16	47114.496	80747.55
17	75101.796	141855.70
18	90678.852	224746.02
19	104661.612	322416.25
20	126511.308	438002.71
21	152669.088	577592.91
22	176932.008	742393.46
23	215186.4	938452.66
24	273504.528	1182798.12
25	334018.08	1486559.42
26	382034.268	1844585.59
27	430311.816	2250758.63
28	495669.24	2713749.16
29	564428.7	3243798.13
30	628235.388	3840130.17
31	681687.864	4495091.80
32	716304.996	5194088.23
33	742493.268	5923487.36
34	769618.08	6679543.03
35	797797.044	7463250.59
36	831865.32	8278081.77
37	861120.216	9124574.54
38	877307.112	9993788.20
39	887778.936	10876331.22
40	896843.772	11768642.57
41	905133.24	12669631.08
42	911279.556	13577837.48
43	915091.056	14491022.79
44	918148.968	15407642.80
45	923380.524	16328407.55
46	928429.128	17254312.38
47	931591.584	18184322.74
48	934584.156	19117410.61
49	935660.088	20052532.73
50	936282.996	20988504.27
51	936618.408	21924954.97
52	936727.308	22861627.83


Storage Area Volume Curves
Storage Volume (ft³)
0
5,000,000
10,000,000
15,000,000
20,000,000
Stage (ft)
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-D (continued)

Storage Node : Stor-EE

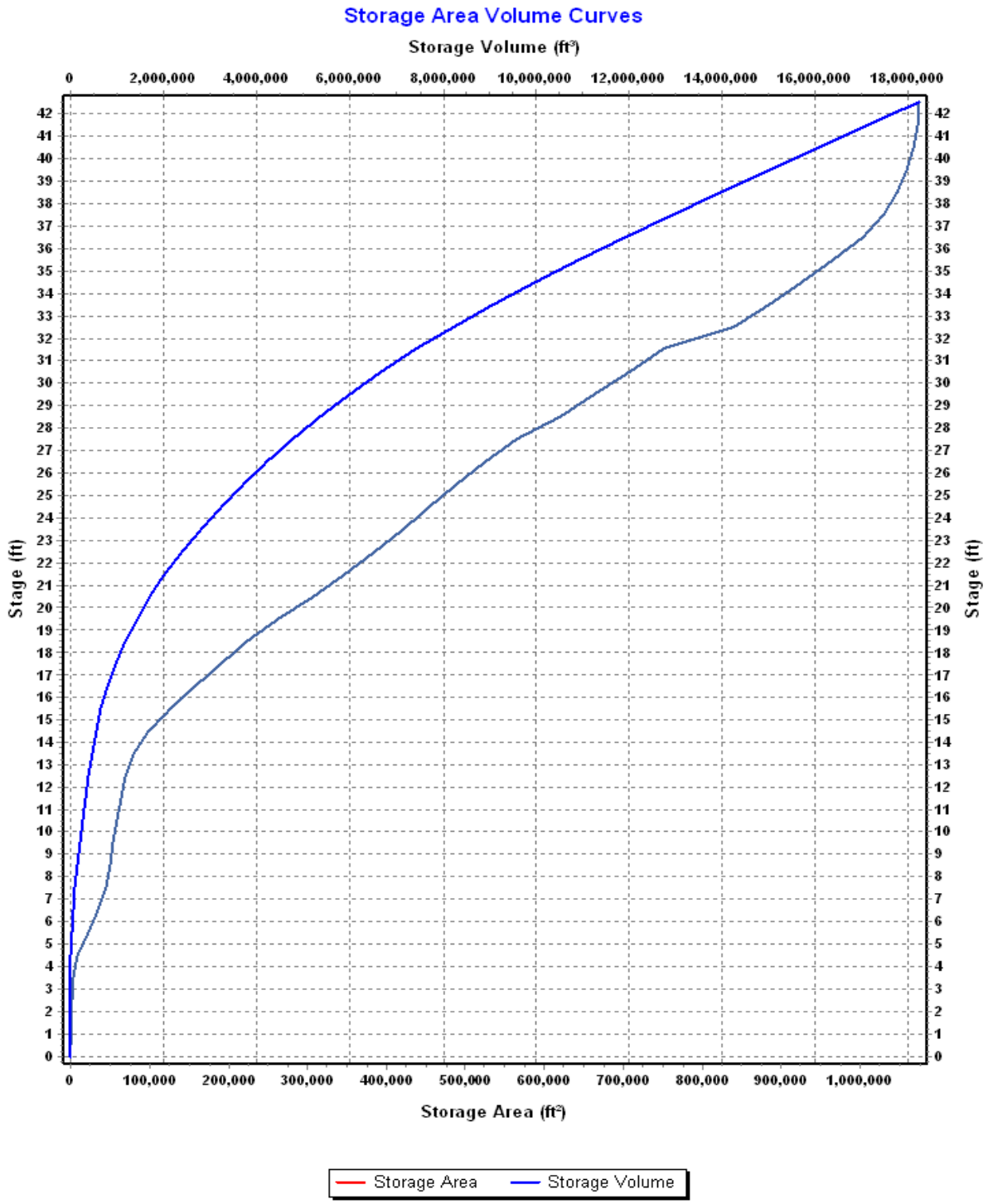
Input Data

Invert Elevation (ft) 660.50
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 139.50
Initial Water Elevation (ft) 660.50
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1073922.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-EE

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
0.5	100	50.00
1.5	1215.324	707.66
2.5	2378.376	2504.51
3.5	4177.404	5782.40
4.5	8385.3	12063.75
5.5	23108.58	27810.69
6.5	35292.312	57011.14
7.5	44614.152	96964.37
8.5	49976.388	144259.64
9.5	54227.844	196361.76
10.5	58413.96	252682.66
11.5	63571.464	313675.37
12.5	69804.9	380363.55
13.5	79771.428	455151.71
14.5	99499.752	544787.30
15.5	126990.468	658032.41
16.5	157948.56	800501.92
17.5	189520.848	974236.62
18.5	223523.784	1180758.94
19.5	262379.304	1423710.48
20.5	307241.748	1708521.01
21.5	348480	2036381.88
22.5	385893.684	2403568.72
23.5	421229.556	2807130.34
24.5	454653.144	3245071.69
25.5	490002.084	3717399.30
26.5	525155.004	4224977.84
27.5	565487.208	4770298.95
28.5	620943.444	5363514.28
29.5	664194.168	6006083.09
30.5	708625.368	6692492.86
31.5	750604.14	7422107.61
32.5	838534.356	8216676.86
33.5	883074.456	9077481.27
34.5	925719.696	9981878.35
35.5	965751.336	10927613.87
36.5	1003082.256	11912030.67
37.5	1029701.772	12928422.68
38.5	1045954.008	13966250.57
39.5	1057523.544	15017989.35
40.5	1066662.432	16080082.34
41.5	1072961.208	17149894.16
42.5	1073867.256	18223308.39


Storage Area Volume Curves
Storage Volume (ft³)
0
2,000,000
4,000,000
6,000,000
8,000,000
10,000,000
12,000,000
14,000,000
16,000,000
18,000,000
Stage (ft)
Stage (ft)
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
1,000,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-EE (continued)

Storage Node : Stor-G

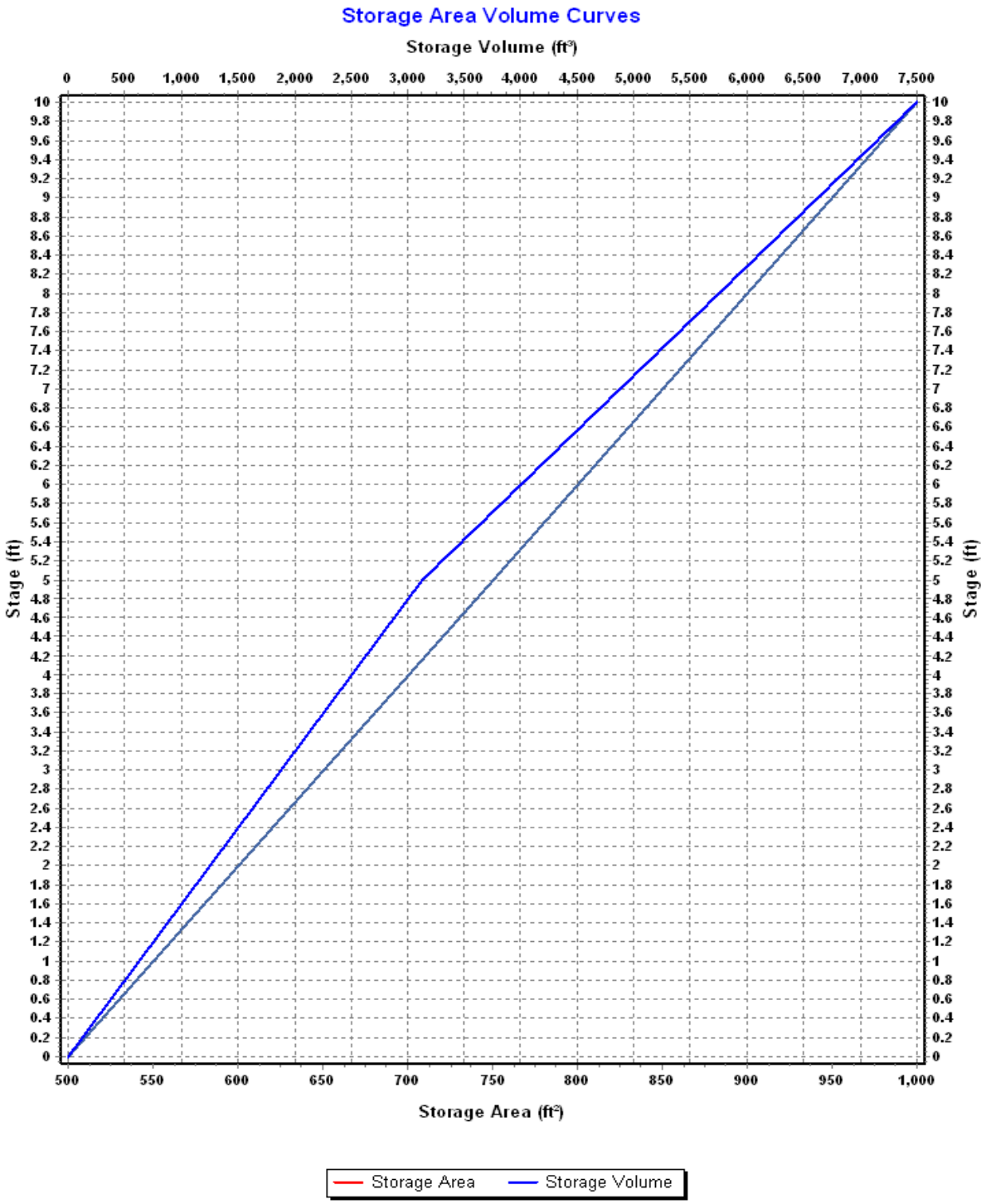
Input Data

Invert Elevation (ft) 720.00
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 80.00
Initial Water Elevation (ft) 720.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1000.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-P

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	500	0.000
5	750	3125.00
10	1000	7500.00


Storage Area Volume Curves
Storage Volume (ft³)
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
5,500
6,000
6,500
7,000
7,500
Stage (ft)
10
9.8
9.6
9.4
9.2
9
8.8
8.6
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
500
550
600
650
700
750
800
850
900
950
1,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-G (continued)

Storage Node : Stor-I

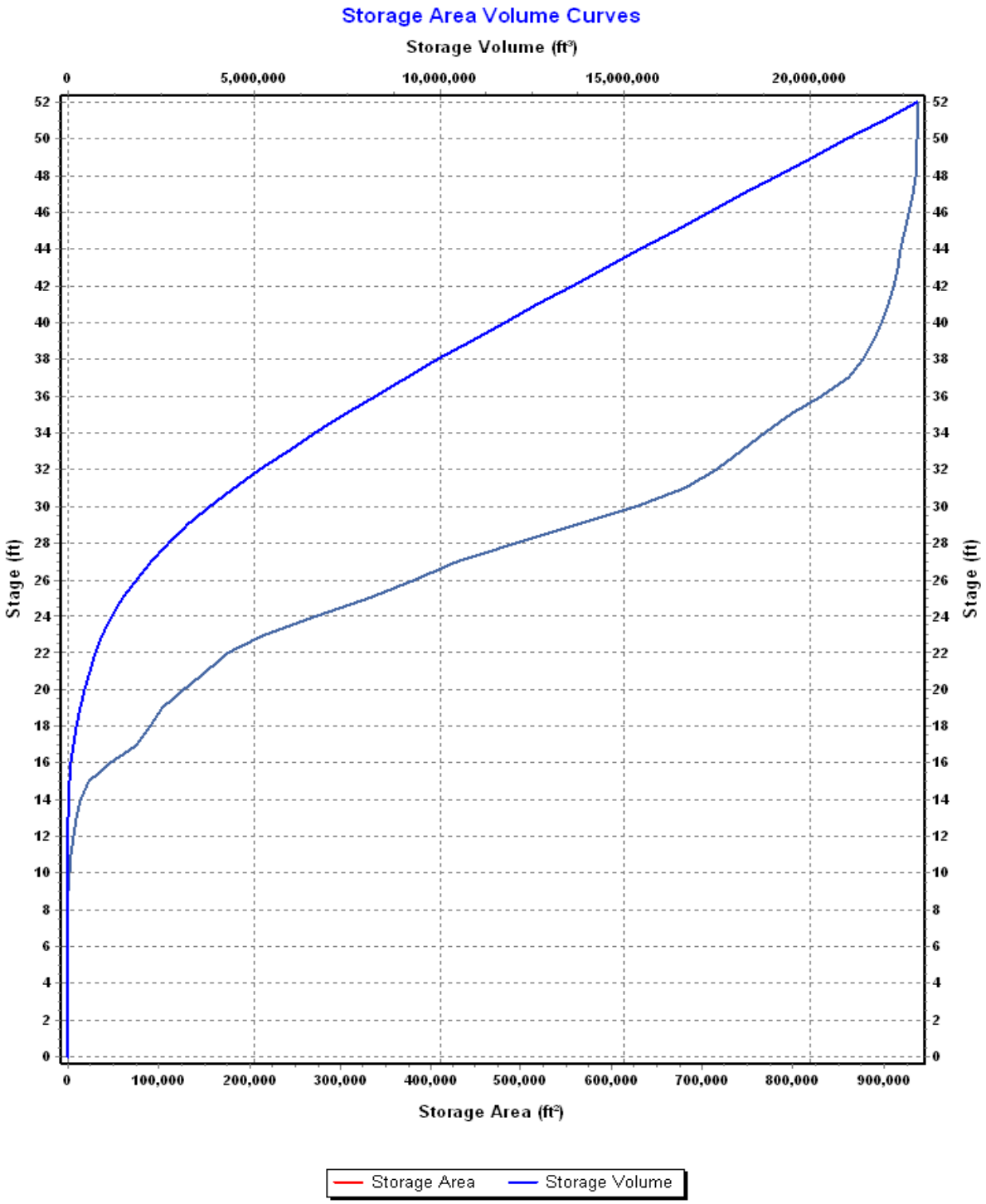
Input Data

Invert Elevation (ft) 687.00
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 113.00
Initial Water Elevation (ft) 687.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 936779.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-I

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
9	100	900.00
10	1075.932	1487.97
11	3271.356	3661.61
12	5671.512	8133.04
13	9827.136	15882.36
14	12972.168	27282.01
15	23422.212	45479.20
16	47114.496	80747.55
17	75101.796	141855.70
18	90678.852	224746.02
19	104661.612	322416.25
20	126511.308	438002.71
21	152669.088	577592.91
22	176932.008	742393.46
23	215186.4	938452.66
24	273504.528	1182798.12
25	334018.08	1486559.42
26	382034.268	1844585.59
27	430311.816	2250758.63
28	495669.24	2713749.16
29	564428.7	3243798.13
30	628235.388	3840130.17
31	681687.864	4495091.80
32	716304.996	5194088.23
33	742493.268	5923487.36
34	769618.08	6679543.03
35	797797.044	7463250.59
36	831865.32	8278081.77
37	861120.216	9124574.54
38	877307.112	9993788.20
39	887778.936	10876331.22
40	896843.772	11768642.57
41	905133.24	12669631.08
42	911279.556	13577837.48
43	915091.056	14491022.79
44	918148.968	15407642.80
45	923380.524	16328407.55
46	928429.128	17254312.38
47	931591.584	18184322.74
48	934584.156	19117410.61
49	935660.088	20052532.73
50	936282.996	20988504.27
51	936618.408	21924954.97
52	936727.308	22861627.83


Storage Area Volume Curves
Storage Volume (ft³)
0
5,000,000
10,000,000
15,000,000
20,000,000
Stage (ft)
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-I (continued)

Storage Node : Stor-J

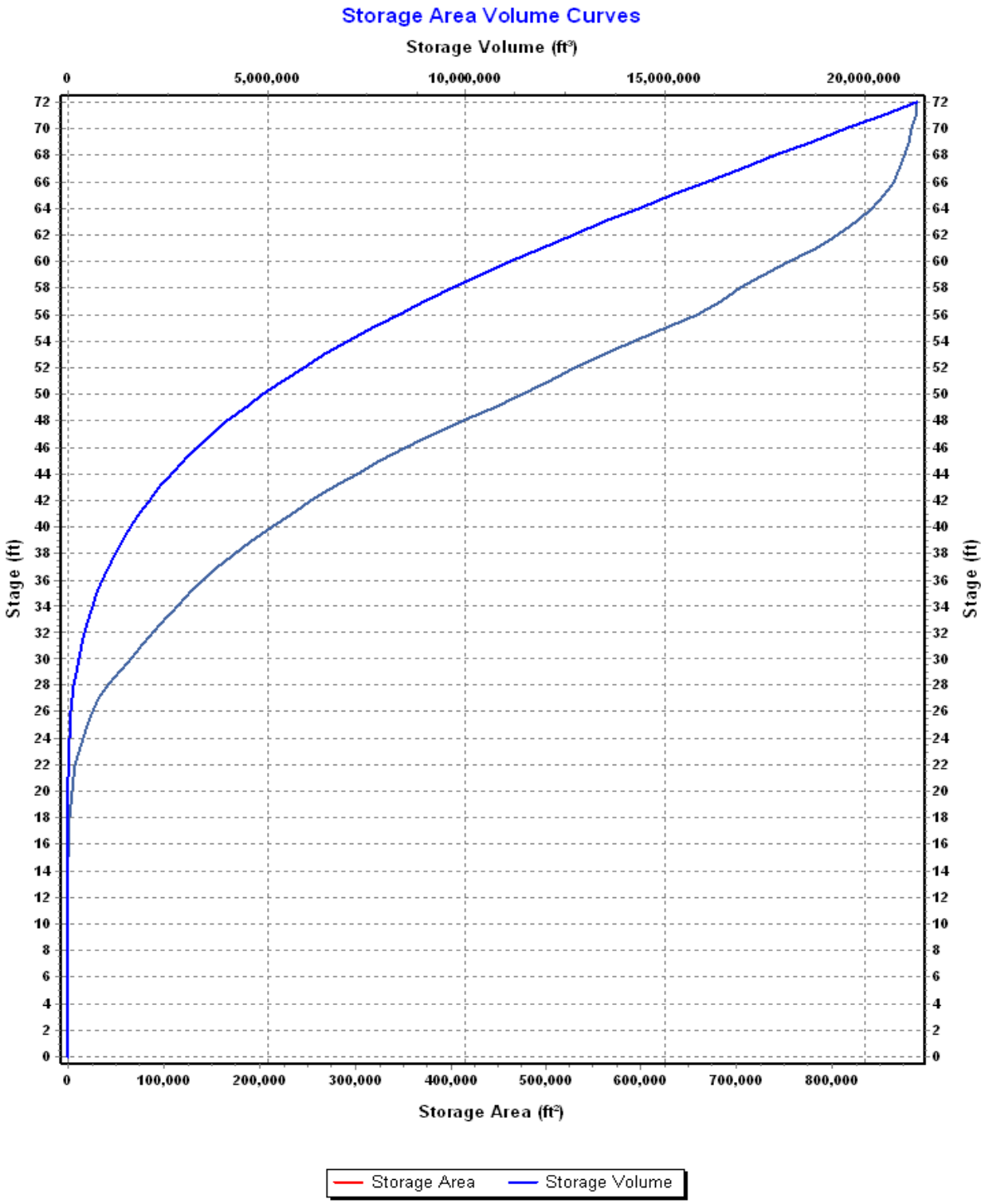
Input Data

Invert Elevation (ft) 685.00
Max (Rim) Elevation (ft) 757.00
Max (Rim) Offset (ft) 72.00
Initial Water Elevation (ft) 685.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 888299.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-J

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
9	100	900.00
10	52.272	976.14
11	117.612	1061.08
12	182.952	1211.36
13	313.632	1459.65
14	505.296	1869.11
15	601.128	2422.32
16	879.912	3162.84
17	1149.984	4177.79
18	1559.448	5532.51
19	2678.94	7651.70
20	3733.092	10857.72
21	5283.828	15366.18
22	7675.272	21845.73
23	11552.112	31459.42
24	15664.176	45067.56
25	19732.68	62765.99
26	25277.868	85271.26
27	32068.872	113944.63
28	41521.392	150739.76
29	53308.728	198154.82
30	65718.972	257668.67
31	76783.212	328919.76
32	88718.652	411670.69
33	101634.192	506847.11
34	114379.848	614854.13
35	127674.36	735881.23
36	140999.364	870218.09
37	156942.324	1019188.93
38	175477.104	1185398.64
39	193733.1	1370003.74
40	214228.08	1573984.33
41	234431.208	1798313.97
42	254978.46	2043018.80
43	278927.748	2309971.90
44	302929.308	2600900.43
45	327806.424	2916268.30
46	352714.032	3256528.53
47	383349.78	3624560.44
48	414434.196	4023452.43
49	445984.704	4453661.88
50	475788.456	4914548.46
51	503226.9	5404056.14
52	530447.544	5920893.36
53	561510.18	6466872.22
54	592638.156	7043946.39
55	626083.524	7653307.23
56	658095.768	8295396.88
57	683595.792	8966242.66
58	703733.58	9659907.35
59	728480.016	10376014.15
60	754968.852	11117738.58
61	782803.692	11886624.85
62	805925.34	12680989.37
63	825858.396	13496881.24
64	841100.04	14330360.46
65	853845.696	15177833.33
66	863746.884	16036629.62
67	869840.928	16903423.53
68	875503.728	17776095.86
69	879637.572	18653666.51
70	882996.048	19534983.32
71	887203.944	20420083.32
72	888258.096	21307814.34


Storage Area Volume Curves
Storage Volume (ft³)
0
5,000,000
10,000,000
15,000,000
20,000,000
Stage (ft)
72
70
68
66
64
62
60
58
56
54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-J (continued)

Storage Node : Stor-NO

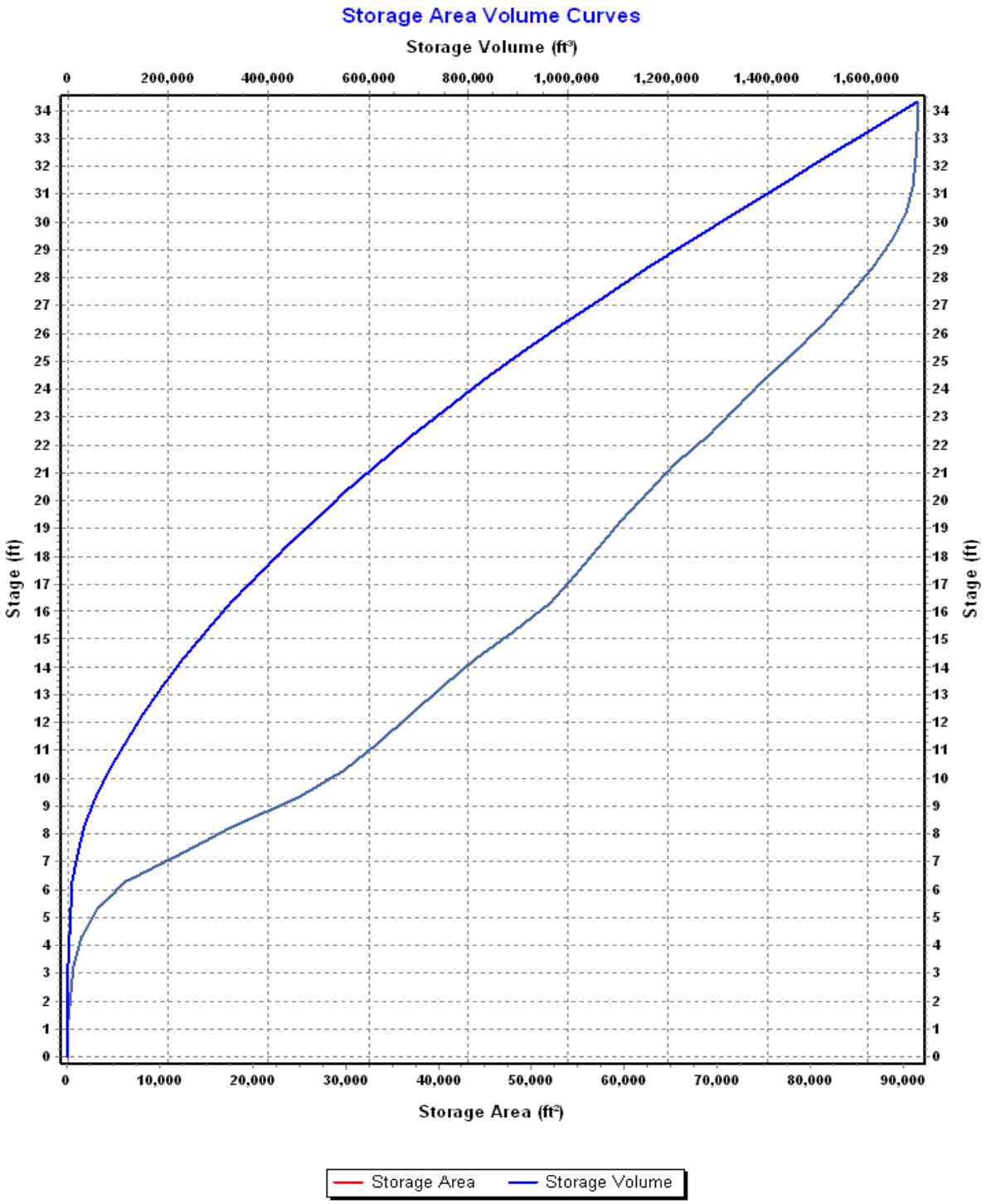
Input Data

Invert Elevation (ft) 689.70
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 110.30
Initial Water Elevation (ft) 689.70
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 91514.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-NO

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
0.3	100	30.00
1.3	117.612	138.81
2.3	365.904	380.57
3.3	753.588	940.32
4.3	1637.856	2136.04
5.3	3175.524	4542.73
6.3	6351.048	9306.02
7.3	12218.58	18590.83
8.3	18107.892	33754.07
9.3	24772.572	55194.30
10.3	29842.956	82502.06
11.3	33567.336	114207.21
12.3	36969.372	149475.56
13.3	40349.628	188135.06
14.3	44008.668	230314.21
15.3	48098.952	276368.02
16.3	52049.844	326442.42
17.3	54685.224	379809.95
18.3	57259.62	435782.37
19.3	59746.896	494285.63
20.3	62708.976	555513.57
21.3	65409.696	619572.91
22.3	68994.684	686775.10
23.3	71974.188	757259.54
24.3	75053.88	830773.57
25.3	78316.524	907458.77
26.3	81339.588	987286.83
27.3	84018.528	1069965.89
28.3	86623.416	1155286.86
29.3	88648.956	1242923.05
30.3	90251.964	1332373.51
31.3	91057.824	1423028.40
32.3	91393.236	1514253.93
33.3	91467.288	1605684.19
34.3	91489.068	1697162.37


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
Storage Area (ft²)
0
10,000
20,000
30,000
40,000
50,000
60,000
70,000
80,000
90,000
Storage Area
Storage Volume

Storage Node : Stor-NO (continued)

Storage Node : Stor-P

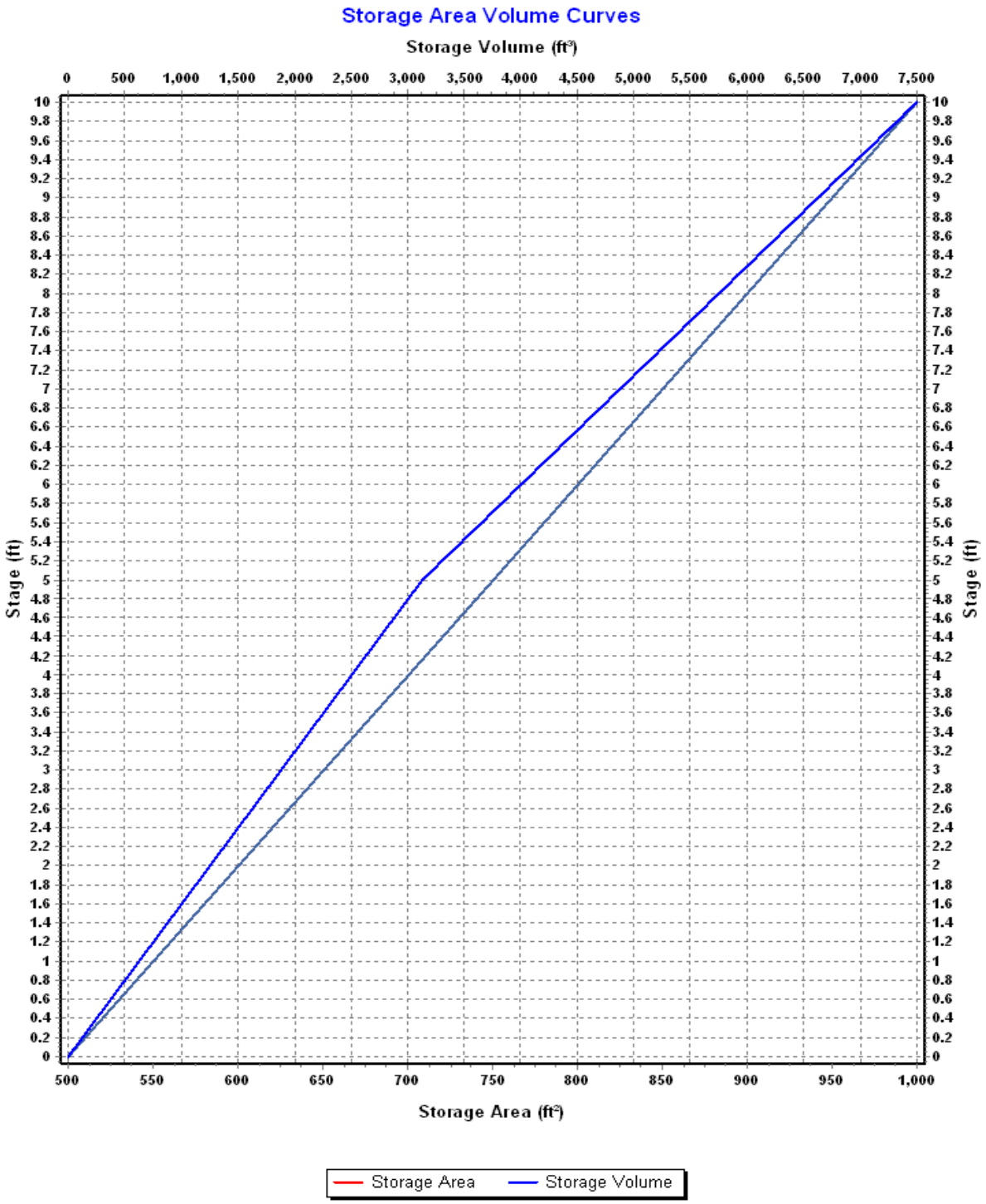
Input Data

Invert Elevation (ft) 694.20
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 105.80
Initial Water Elevation (ft) 694.20
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1000.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-P

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	500	0.000
5	750	3125.00
10	1000	7500.00


Storage Area Volume Curves
Storage Volume (ft³)
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
5,500
6,000
6,500
7,000
7,500
Stage (ft)
10
9.8
9.6
9.4
9.2
9
8.8
8.6
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
500
550
600
650
700
750
800
850
900
950
1,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-P (continued)

Storage Node : Stor-U

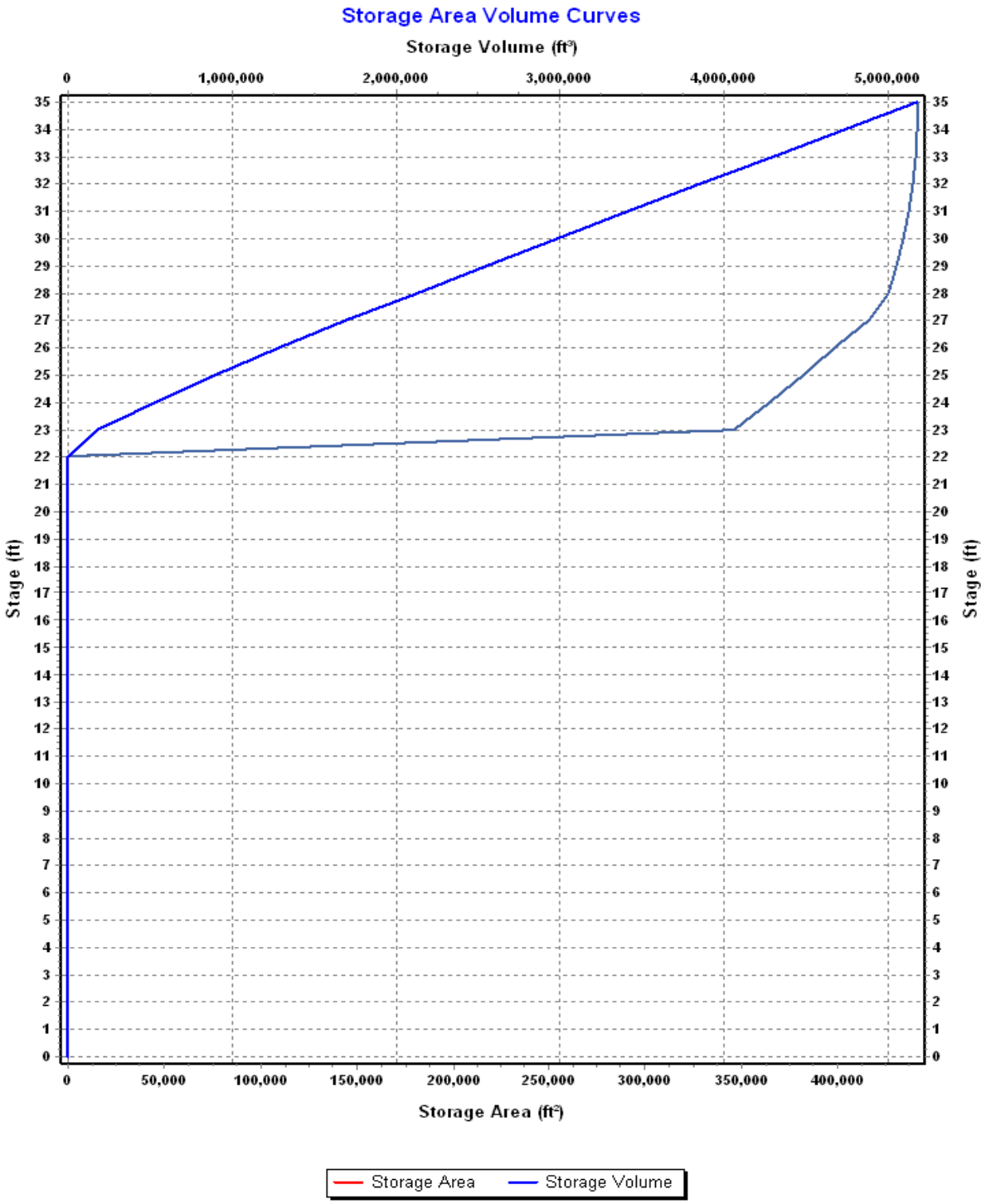
Input Data

Invert Elevation (ft) 702.00
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 98.00
Initial Water Elevation (ft) 724.00
Initial Water Depth (ft) 22.00
Ponded Area (ft²) 441052.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-U

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
22	100	2200.00
23	345596.328	175048.16
24	364553.64	530123.14
25	382356.612	903578.27
26	398665.476	1294089.31
27	416337.768	1701590.93
28	426012.444	2122766.04
29	430642.872	2551093.70
30	433665.936	2983248.10
31	436497.336	3418329.74
32	438766.812	3855961.81
33	440348.04	4295519.24
34	440905.608	4736146.06
35	440979.66	5177088.69


Storage Area Volume Curves
Storage Volume (ft³)
0
1,000,000
2,000,000
3,000,000
4,000,000
5,000,000
Stage (ft)
Storage Area (ft²)
0
50,000
100,000
150,000
200,000
250,000
300,000
350,000
400,000
Storage Area
Storage Volume

Storage Node : Stor-U (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-01	Trapezoidal	No	728.50	26.50	300.00	99.00	3.33

Storage Node : Stor-Y

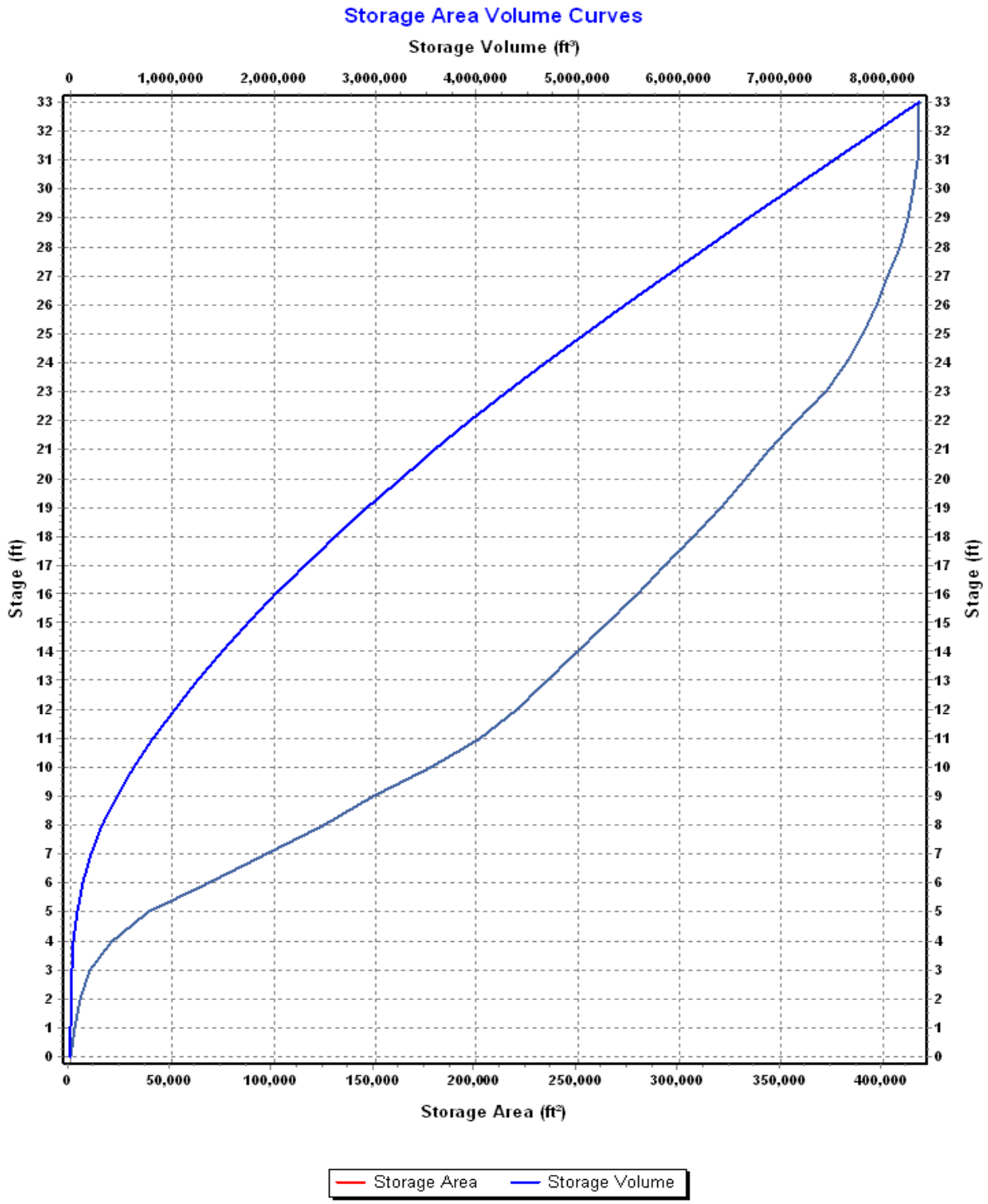
Input Data

Invert Elevation (ft) 671.00
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 129.00
Initial Water Elevation (ft) 671.50
Initial Water Depth (ft) 0.50
Ponded Area (ft²) 418671.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Y

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	1677.06	0.000
1	3537.072	2607.07
2	6581.916	7666.56
3	11168.784	16541.91
4	21814.848	33033.73
5	40144.896	64013.60
6	69186.348	118679.22
7	97766.064	202155.43
8	126010.368	314043.65
9	150325.56	452211.61
10	178321.572	616535.18
11	202262.148	806827.04
12	220679.316	1018297.77
13	236317.356	1246796.11
14	250936.092	1490422.83
15	265681.152	1748731.45
16	280029.816	2021586.93
17	293816.556	2308510.12
18	307712.196	2609274.50
19	321058.98	2923660.09
20	333447.444	3250913.30
21	345652.956	3590463.50
22	358847.28	3942713.62
23	372816.972	4308545.75
24	382988.232	4686448.35
25	391425.804	5073655.37
26	397798.632	5468267.59
27	403365.6	5868849.71
28	409037.112	6275051.07
29	413493.3	6686316.28
30	416076.408	7101101.13
31	417797.028	7518037.85
32	418315.392	7936094.06
33	418672.584	8354588.05


Storage Area Volume Curves
Storage Volume (ft³)
0
1,000,000
2,000,000
3,000,000
4,000,000
5,000,000
6,000,000
7,000,000
8,000,000
Stage (ft)
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
0
50,000
100,000
150,000
200,000
250,000
300,000
350,000
400,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-Y (continued)

Storage Node : Stor-Z

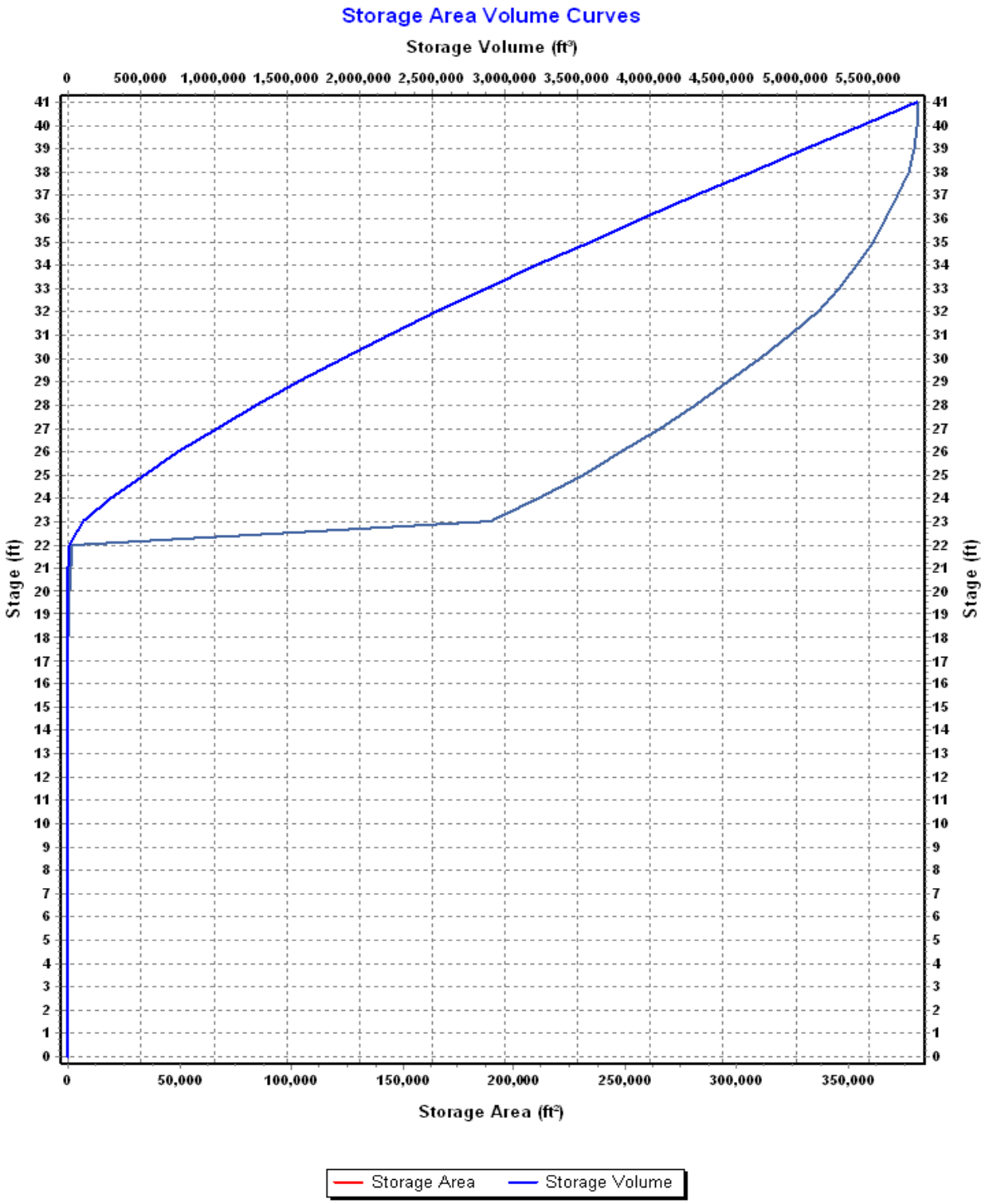
Input Data

Invert Elevation (ft) 704.00
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 96.00
Initial Water Elevation (ft) 726.00
Initial Water Depth (ft) 22.00
Ponded Area (ft²) 380783.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Z

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
16	100	1600.00
17	21.78	1660.89
18	117.612	1730.59
19	409.464	1994.13
20	827.64	2612.68
21	1280.664	3666.83
22	2025.54	5319.93
23	189228.996	100947.20
24	211662.396	301392.90
25	230928.984	522688.59
26	248483.664	762394.91
27	265524.336	1019398.91
28	281571.84	1292947.00
29	296308.188	1581887.01
30	310256.1	1885169.15
31	324012.348	2202303.37
32	336496.644	2532557.87
33	345805.416	2873708.90
34	353737.692	3223480.45
35	361186.452	3580942.52
36	366945.084	3945008.29
37	372263.76	4314612.71
38	377225.244	4689357.21
39	379529.568	5067734.62
40	380531.448	5447765.13
41	380779.74	5828420.72


Storage Area Volume Curves
Storage Volume (ft³)
0
500,000
1,000,000
1,500,000
2,000,000
2,500,000
3,000,000
3,500,000
4,000,000
4,500,000
5,000,000
5,500,000
Stage (ft)
Storage Area (ft²)
0
50,000
100,000
150,000
200,000
250,000
300,000
350,000
Storage Area
Storage Volume

Storage Node : Stor-Z (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-02	Trapezoidal	No	727.50	23.50	300.00	99.00	3.33

PRE-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
2-YEAR

Project Description

File Name	26900.0002 - Existing Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	31
Nodes	41
Junctions	24
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	11
Links	36
Channels	29
Pipes	5
Pumps	0
Orifices	0
Weirs	2
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	3.70	0.81	344.63	154.60	0 00:59:24
2	AA	37.07	484.00	61.00	3.70	0.67	24.65	21.36	0 00:20:13
3	B	179.81	484.00	64.00	3.70	0.81	145.47	116.08	0 00:26:13
4	BB	19.61	484.00	59.00	3.70	0.58	11.30	8.48	0 00:22:19
5	C	57.45	484.00	61.00	3.70	0.67	38.20	21.47	0 00:38:19
6	CC	17.45	484.00	63.00	3.70	0.76	13.24	13.85	0 00:15:50
7	D	90.50	484.00	64.00	3.70	0.81	73.21	47.34	0 00:35:42
8	DD	15.65	484.00	66.00	3.70	0.91	14.26	13.82	0 00:20:31
9	E	54.28	484.00	59.00	3.70	0.58	31.27	18.79	0 00:31:01
10	EE	110.95	484.00	64.00	3.70	0.81	89.76	71.77	0 00:26:09
11	F	40.46	484.00	61.00	3.70	0.67	26.91	15.97	0 00:35:24
12	G	52.30	484.00	57.00	3.70	0.49	25.78	13.74	0 00:31:55
13	H	51.81	484.00	59.00	3.70	0.58	29.84	12.53	0 00:52:08
14	I	39.69	484.00	61.00	3.70	0.67	26.39	15.42	0 00:36:10
15	J	120.14	484.00	57.00	3.70	0.49	59.23	22.06	0 00:54:39
16	K	171.51	484.00	57.00	3.70	0.49	84.55	41.70	0 00:35:52
17	L	92.78	484.00	57.00	3.70	0.49	45.74	26.29	0 00:28:40
18	M	55.95	484.00	57.00	3.70	0.49	27.58	15.49	0 00:29:38
19	N	43.16	484.00	58.00	3.70	0.53	23.05	13.09	0 00:31:30
20	O	76.92	484.00	58.00	3.70	0.53	41.08	18.40	0 00:44:34
21	P	72.62	484.00	60.00	3.70	0.62	45.02	19.13	0 00:54:10
22	Q	108.57	484.00	62.00	3.70	0.71	77.30	55.21	0 00:28:30
23	R	80.68	484.00	62.00	3.70	0.71	57.44	44.99	0 00:24:50
24	S	85.42	484.00	61.00	3.70	0.67	56.80	41.19	0 00:26:27
25	T	69.15	484.00	62.00	3.70	0.71	49.23	41.83	0 00:21:50
26	U	65.72	484.00	69.00	3.70	1.08	70.71	53.54	0 00:32:56
27	V	54.60	484.00	59.00	3.70	0.58	31.45	18.61	0 00:31:48
28	W	79.34	484.00	61.00	3.70	0.67	52.76	39.13	0 00:25:40
29	X	22.95	484.00	59.00	3.70	0.58	13.22	13.11	0 00:13:51
30	Y	35.31	484.00	62.00	3.70	0.71	25.14	22.19	0 00:20:38
31	Z	109.30	484.00	60.00	3.70	0.62	67.77	48.37	0 00:25:44

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	154.51	718.49	0.00	81.51	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	343.30	685.62	0.00	114.38	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	21.45	768.10	0.00	39.49	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	678.00	800.00	1.00	353.82	681.27	0.00	118.73	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	18.27	716.03	0.00	83.97	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	15.43	724.37	0.00	75.63	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	38.76	717.22	0.00	82.78	0 00:00	0.00	0.00
8	Jun-11	Junction	744.00	800.00	744.00	800.00	1.00	40.42	744.84	0.00	55.16	0 00:00	0.00	0.00
9	Jun-14	Junction	762.00	800.00	762.00	800.00	1.00	15.83	762.57	0.00	37.43	0 00:00	0.00	0.00
10	Jun-17	Junction	741.00	800.00	741.00	800.00	1.00	29.15	742.39	0.00	57.61	0 00:00	0.00	0.00
11	Jun-18	Junction	734.00	800.00	734.00	800.00	1.00	78.24	735.53	0.00	64.47	0 00:00	0.00	0.00
12	Jun-19	Junction	699.00	800.00	699.00	800.00	1.00	18.47	700.35	0.00	99.65	0 00:00	0.00	0.00
13	Jun-20	Junction	692.00	800.00	692.00	800.00	1.00	8.47	692.59	0.00	107.41	0 00:00	0.00	0.00
14	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	46.97	691.43	0.00	108.57	0 00:00	0.00	0.00
15	Jun-22	Junction	666.00	800.00	666.00	800.00	1.00	98.61	668.59	0.00	131.41	0 00:00	0.00	0.00
16	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	89.64	672.84	0.00	127.16	0 00:00	0.00	0.00
17	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	28.58	709.45	0.00	90.55	0 00:00	0.00	0.00
18	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	85.28	731.55	0.00	68.45	0 00:00	0.00	0.00
19	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	353.63	680.23	0.00	119.77	0 00:00	0.00	0.00
20	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	43.50	687.94	0.00	112.06	0 00:00	0.00	0.00
21	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	19.06	690.88	0.00	109.12	0 00:00	0.00	0.00
22	Jun-31	Junction	702.00	800.00	702.00	800.00	1.00	0.00	702.00	0.00	125.50	0 00:00	0.00	0.00
23	Jun-32	Junction	704.00	800.00	704.00	800.00	1.00	6.36	704.46	0.00	122.04	0 00:00	0.00	0.00
24	Jun-33	Junction	685.70	691.70	685.70	691.70	1.00	330.51	691.07	0.00	36.61	0 00:00	0.00	0.00
25	Out-01	Outfall	675.80					353.61	679.23					
26	Out-02	Outfall	685.00					43.50	686.38					
27	Out-03	Outfall	688.00					19.00	688.85					
28	Out-04	Outfall	659.00					145.31	659.73					
29	Out-05	Outfall	720.00					54.40	720.00					
30	Out-06	Outfall	695.00					44.79	695.00					
31	Jun-30	Storage Node	656.20	800.00	656.20		1000.00	145.69	659.75				0.00	0.00
32	Stor-D	Storage Node	734.00	800.00	734.00		233730.00	67.37	734.33				0.00	0.00
33	Stor-EE	Storage Node	660.50	800.00	660.50		1073922.00	145.73	661.24				0.00	0.00
34	Stor-G	Storage Node	720.00	800.00	720.00		1000.00	109.81	722.92				0.00	0.00
35	Stor-I	Storage Node	687.00	800.00	687.00		936779.00	326.44	692.40				0.00	0.00
36	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	332.45	689.90				0.00	0.00
37	Stor-NO	Storage Node	689.70	800.00	689.70		91514.00	43.51	692.03				0.00	0.00
38	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	19.00	695.78				0.00	0.00
39	Stor-U	Storage Node	702.00	800.00	724.00		441052.00	99.01	726.28				0.00	0.00
40	Stor-Y	Storage Node	671.00	800.00	671.50		418671.00	83.40	673.51				0.00	0.00
41	Stor-Z	Storage Node	704.00	800.00	726.00		380783.00	68.28	727.53				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	353.63	1291.66	0.27	6.32	3.50	0.44	0.00	Calculated
2	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	43.50	209.17	0.21	5.92	1.84	0.46	0.00	Calculated
3	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	145.69	1769.96	0.08	3.24	2.14	0.43	0.00	Calculated
4	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	19.06	186.93	0.10	6.30	1.23	0.31	0.00	Calculated
5	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	72.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
6	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	487.080	0.0320	21.09	251078.70	0.00	3.84	1.00	0.02	0.00	
7	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	154.02	62083.71	0.00	5.75	2.26	0.11	0.00	
8	Link-04	Channel	Stor-I	Jun-33	784.40	687.00	685.70	0.1700	503.760	0.0320	330.51	167513.15	0.00	2.96	5.34	0.13	0.00	
9	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	342.84	471728.19	0.00	5.87	3.59	0.07	0.00	
10	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	15.67	160489.81	0.00	4.96	1.39	0.04	0.00	
11	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	18.12	228402.42	0.00	4.26	1.01	0.03	0.00	
12	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	82.78	320223.33	0.00	4.86	1.92	0.05	0.00	
13	Link-13	Channel	Jun-32	Jun-20	750.00	704.00	692.00	1.6000	426.240	0.0320	6.36	164115.48	0.00	2.35	0.52	0.01	0.00	
14	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	38.13	202679.20	0.00	5.42	1.32	0.05	0.00	
15	Link-15	Channel	Jun-11	Jun-18	840.00	744.00	734.00	1.1900	417.600	0.0320	39.74	150028.81	0.00	1.62	1.16	0.03	0.00	
16	Link-16	Channel	Jun-14	Jun-17	888.00	762.00	741.00	2.3600	289.560	0.0320	15.65	149421.95	0.00	18.72	0.96	0.04	0.00	
17	Link-18	Channel	Jun-31	Jun-19	100.00	702.00	699.00	3.0000	451.200	0.0320	0.00	340966.88	0.00	0.00	0.68	0.02	0.00	
18	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	319.25	603845.15	0.00	4.30	4.26	0.07	0.00	
19	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	108.00	324200.23	0.00	5.10	2.60	0.07	0.00	
20	Link-23	Channel	Jun-17	Stor-G	1130.00	741.00	725.00	1.4200	357.960	0.0320	20.17	160979.09	0.00	3.95	1.31	0.04	0.00	
21	Link-24	Channel	Jun-18	Stor-U	960.00	734.00	726.00	0.8300	454.560	0.0320	52.05	352791.65	0.00	50.00	1.45	0.04	0.00	
22	Link-25	Channel	Jun-19	Stor-Y	893.00	699.00	677.00	2.4600	451.200	0.0320	18.01	308984.85	0.00	4.85	1.33	0.04	0.00	
23	Link-26	Channel	Jun-20	Stor-Y	690.00	692.00	674.00	2.6100	628.800	0.0320	7.09	554637.02	0.00	3.30	0.55	0.01	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	43.85	281792.12	0.00	5.04	1.37	0.03	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.00	664.00	0.3400	635.160	0.0320	89.94	287008.10	0.00	3.33	2.01	0.04	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.00	0.7200	607.200	0.0320	89.25	436979.68	0.00	3.47	2.20	0.04	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	26.57	346337.45	0.00	3.99	1.29	0.03	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	67.34	869869.15	0.00	2.63	0.44	0.01	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	82.50	512575.31	0.00	2.76	0.48	0.01	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	353.61	117717.43	0.00	4.05	3.43	0.10	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.00	1.6000	352.800	0.0320	43.50	180737.83	0.00	3.93	1.36	0.05	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	19.00	233235.72	0.00	3.80	0.86	0.02	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.00	1.2000	240.840	0.0320	145.31	294642.06	0.00	0.32	2.14	0.11	0.00	
34	Link-41	Channel	Jun-33	Stor-J	427.59	685.70	685.00	0.1600	503.760	0.0320	310.86	166487.36	0.00	7.27	5.12	0.12	0.00	
35	Weir-01	Weir	Stor-U	Jun-31		702.00	702.00				0.00							
36	Weir-02	Weir	Stor-Z	Jun-32		704.00	704.00				6.36							

Storage Nodes

Storage Node : Jun-30

Output Summary Results

Peak Inflow (cfs)	145.69
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	145.31
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	659.75
Max HGL Depth Attained (ft)	3.55
Average HGL Elevation Attained (ft)	658.39
Average HGL Depth Attained (ft)	2.19
Time of Max HGL Occurrence (days hh:mm)	0 12:23
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	67.37
Peak Lateral Inflow (cfs)	46.63
Peak Outflow (cfs)	67.34
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.33
Max HGL Depth Attained (ft)	0.33
Average HGL Elevation Attained (ft)	734.02
Average HGL Depth Attained (ft)	0.02
Time of Max HGL Occurrence (days hh:mm)	0 12:25
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	145.73
Peak Lateral Inflow (cfs)	71.42
Peak Outflow (cfs)	145.69
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	661.24
Max HGL Depth Attained (ft)	0.74
Average HGL Elevation Attained (ft)	660.56
Average HGL Depth Attained (ft)	0.06
Time of Max HGL Occurrence (days hh:mm)	0 12:22
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	109.81
Peak Lateral Inflow (cfs)	12.47
Peak Outflow (cfs)	108.00
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	722.92
Max HGL Depth Attained (ft)	2.92
Average HGL Elevation Attained (ft)	720.46
Average HGL Depth Attained (ft)	0.46
Time of Max HGL Occurrence (days hh:mm)	0 12:33
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	326.44
Peak Lateral Inflow (cfs)	127.71
Peak Outflow (cfs)	330.51
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	692.40
Max HGL Depth Attained (ft)	5.4
Average HGL Elevation Attained (ft)	687.83
Average HGL Depth Attained (ft)	0.83
Time of Max HGL Occurrence (days hh:mm)	0 12:32
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	332.45
Peak Lateral Inflow (cfs)	22.04
Peak Outflow (cfs)	319.25
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	689.90
Max HGL Depth Attained (ft)	4.9
Average HGL Elevation Attained (ft)	685.51
Average HGL Depth Attained (ft)	0.51
Time of Max HGL Occurrence (days hh:mm)	0 12:50
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	43.51
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	43.50
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	692.03
Max HGL Depth Attained (ft)	2.33
Average HGL Elevation Attained (ft)	689.88
Average HGL Depth Attained (ft)	0.18
Time of Max HGL Occurrence (days hh:mm)	0 12:29
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	19.00
Peak Lateral Inflow (cfs)	19.00
Peak Outflow (cfs)	19.06
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	695.78
Max HGL Depth Attained (ft)	1.58
Average HGL Elevation Attained (ft)	694.40
Average HGL Depth Attained (ft)	0.2
Time of Max HGL Occurrence (days hh:mm)	0 12:35
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-U

Output Summary Results

Peak Inflow (cfs)	99.01
Peak Lateral Inflow (cfs)	53.45
Peak Outflow (cfs)	3.13
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	726.28
Max HGL Depth Attained (ft)	24.28
Average HGL Elevation Attained (ft)	725.59
Average HGL Depth Attained (ft)	23.59
Time of Max HGL Occurrence (days hh:mm)	2 00:00
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	83.40
Peak Lateral Inflow (cfs)	21.46
Peak Outflow (cfs)	82.78
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	673.51
Max HGL Depth Attained (ft)	2.51
Average HGL Elevation Attained (ft)	671.79
Average HGL Depth Attained (ft)	0.79
Time of Max HGL Occurrence (days hh:mm)	0 12:21
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Z

Output Summary Results

Peak Inflow (cfs)	68.28
Peak Lateral Inflow (cfs)	68.28
Peak Outflow (cfs)	6.36
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	727.53
Max HGL Depth Attained (ft)	23.53
Average HGL Elevation Attained (ft)	727.11
Average HGL Depth Attained (ft)	23.11
Time of Max HGL Occurrence (days hh:mm)	0 15:23
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

PRE-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
5-YEAR

Project Description

File Name	26900.0002 - Existing Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	31
Nodes	41
Junctions	24
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	11
Links	36
Channels	29
Pipes	5
Pumps	0
Orifices	0
Weirs	2
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	4.48	1.25	533.78	261.90	0 00:59:24
2	AA	37.07	484.00	61.00	4.48	1.07	39.59	38.33	0 00:20:13
3	B	179.81	484.00	64.00	4.48	1.25	225.30	195.92	0 00:26:13
4	BB	19.61	484.00	59.00	4.48	0.95	18.65	16.34	0 00:22:19
5	C	57.45	484.00	61.00	4.48	1.07	61.36	39.16	0 00:38:19
6	CC	17.45	484.00	63.00	4.48	1.19	20.77	23.46	0 00:15:50
7	D	90.50	484.00	64.00	4.48	1.25	113.40	80.19	0 00:35:42
8	DD	15.65	484.00	66.00	4.48	1.38	21.66	22.24	0 00:20:31
9	E	54.28	484.00	59.00	4.48	0.95	51.62	36.42	0 00:31:01
10	EE	110.95	484.00	64.00	4.48	1.25	139.02	120.97	0 00:26:09
11	F	40.46	484.00	61.00	4.48	1.07	43.21	29.11	0 00:35:24
12	G	52.30	484.00	57.00	4.48	0.84	43.93	28.65	0 00:31:55
13	H	51.81	484.00	59.00	4.48	0.95	49.27	24.03	0 00:52:08
14	I	39.69	484.00	61.00	4.48	1.07	42.39	28.12	0 00:36:10
15	J	120.14	484.00	57.00	4.48	0.84	100.92	44.93	0 00:54:39
16	K	171.51	484.00	57.00	4.48	0.84	144.07	86.62	0 00:35:52
17	L	92.78	484.00	57.00	4.48	0.84	77.94	54.61	0 00:28:40
18	M	55.95	484.00	57.00	4.48	0.84	47.00	32.27	0 00:29:38
19	N	43.16	484.00	58.00	4.48	0.90	38.63	26.19	0 00:31:30
20	O	76.92	484.00	58.00	4.48	0.90	68.84	36.51	0 00:44:34
21	P	72.62	484.00	60.00	4.48	1.01	73.27	35.55	0 00:54:10
22	Q	108.57	484.00	62.00	4.48	1.13	122.58	97.70	0 00:28:30
23	R	80.68	484.00	62.00	4.48	1.13	91.09	79.17	0 00:24:50
24	S	85.42	484.00	61.00	4.48	1.07	91.23	74.92	0 00:26:27
25	T	69.15	484.00	62.00	4.48	1.13	78.07	73.57	0 00:21:50
26	U	65.72	484.00	69.00	4.48	1.59	104.43	82.75	0 00:32:56
27	V	54.60	484.00	59.00	4.48	0.95	51.92	36.01	0 00:31:48
28	W	79.34	484.00	61.00	4.48	1.07	84.74	70.83	0 00:25:40
29	X	22.95	484.00	59.00	4.48	0.95	21.83	24.58	0 00:13:51
30	Y	35.31	484.00	62.00	4.48	1.13	39.86	38.79	0 00:20:38
31	Z	109.30	484.00	60.00	4.48	1.01	110.28	90.26	0 00:25:44

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	260.93	719.18	0.00	80.82	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	652.20	687.02	0.00	112.98	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	38.91	768.45	0.00	39.14	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	678.00	800.00	1.00	665.48	683.14	0.00	116.86	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	36.44	716.34	0.00	83.66	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	32.09	724.76	0.00	75.24	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	70.78	717.59	0.00	82.41	0 00:00	0.00	0.00
8	Jun-11	Junction	744.00	800.00	744.00	800.00	1.00	74.37	745.04	0.00	54.96	0 00:00	0.00	0.00
9	Jun-14	Junction	762.00	800.00	762.00	800.00	1.00	28.91	762.67	0.00	37.33	0 00:00	0.00	0.00
10	Jun-17	Junction	741.00	800.00	741.00	800.00	1.00	56.23	742.85	0.00	57.15	0 00:00	0.00	0.00
11	Jun-18	Junction	734.00	800.00	734.00	800.00	1.00	141.92	735.76	0.00	64.24	0 00:00	0.00	0.00
12	Jun-19	Junction	699.00	800.00	699.00	800.00	1.00	35.92	700.70	0.00	99.30	0 00:00	0.00	0.00
13	Jun-20	Junction	692.00	800.00	692.00	800.00	1.00	34.15	693.13	0.00	106.87	0 00:00	0.00	0.00
14	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	85.71	691.91	0.00	108.09	0 00:00	0.00	0.00
15	Jun-22	Junction	666.00	800.00	666.00	800.00	1.00	190.47	669.10	0.00	130.90	0 00:00	0.00	0.00
16	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	174.30	673.42	0.00	126.58	0 00:00	0.00	0.00
17	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	57.78	709.88	0.00	90.12	0 00:00	0.00	0.00
18	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	151.59	731.78	0.00	68.22	0 00:00	0.00	0.00
19	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	663.92	681.29	0.00	118.71	0 00:00	0.00	0.00
20	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	89.15	688.36	0.00	111.64	0 00:00	0.00	0.00
21	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	37.70	691.14	0.00	108.86	0 00:00	0.00	0.00
22	Jun-31	Junction	702.00	800.00	702.00	800.00	1.00	0.00	702.00	0.00	125.50	0 00:00	0.00	0.00
23	Jun-32	Junction	704.00	800.00	704.00	800.00	1.00	30.67	705.05	0.00	121.45	0 00:00	0.00	0.00
24	Jun-33	Junction	685.70	691.70	685.70	691.70	1.00	585.14	691.76	0.00	35.92	0 00:00	0.00	0.00
25	Out-01	Outfall	675.80					663.90	680.29					
26	Out-02	Outfall	685.00					89.14	687.11					
27	Out-03	Outfall	688.00					36.02	689.09					
28	Out-04	Outfall	659.00					281.33	660.01					
29	Out-05	Outfall	720.00					95.91	720.00					
30	Out-06	Outfall	695.00					79.08	695.00					
31	Jun-30	Storage Node	656.20	800.00	656.20		1000.00	282.27	660.04				0.00	0.00
32	Stor-D	Storage Node	734.00	800.00	734.00		233730.00	116.35	734.45				0.00	0.00
33	Stor-EE	Storage Node	660.50	800.00	660.50		1073922.00	282.42	661.64				0.00	0.00
34	Stor-G	Storage Node	720.00	800.00	720.00		1000.00	208.55	723.79				0.00	0.00
35	Stor-I	Storage Node	687.00	800.00	687.00		936779.00	581.38	693.14				0.00	0.00
36	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	607.76	690.94				0.00	0.00
37	Stor-NO	Storage Node	689.70	800.00	689.70		91514.00	89.28	693.46				0.00	0.00
38	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	35.52	696.61				0.00	0.00
39	Stor-U	Storage Node	702.00	800.00	724.00		441052.00	195.97	727.20				0.00	0.00
40	Stor-Y	Storage Node	671.00	800.00	671.50		418671.00	161.73	674.14				0.00	0.00
41	Stor-Z	Storage Node	704.00	800.00	726.00		380783.00	126.10	727.60				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	663.92	1291.66	0.51	8.36	4.96	0.62	0.00	Calculated
2	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	89.15	209.17	0.43	8.08	2.75	0.69	0.00	Calculated
3	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	282.27	1769.96	0.16	5.40	2.49	0.50	0.00	Calculated
4	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	37.70	186.93	0.20	7.05	1.77	0.44	0.00	Calculated
5	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	72.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
6	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	487.080	0.0320	38.54	251078.70	0.00	4.58	1.34	0.03	0.00	
7	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	260.81	62083.71	0.00	6.71	2.92	0.14	0.00	
8	Link-04	Channel	Stor-I	Jun-33	784.40	687.00	685.70	0.1700	503.760	0.0320	585.14	167513.15	0.00	2.99	6.08	0.14	0.00	
9	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	643.31	471728.19	0.00	6.09	5.23	0.11	0.00	
10	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	31.72	160489.81	0.00	5.18	1.80	0.05	0.00	
11	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	36.12	228402.42	0.00	5.06	1.33	0.04	0.00	
12	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	160.34	320223.33	0.00	6.09	2.52	0.06	0.00	
13	Link-13	Channel	Jun-32	Jun-20	750.00	704.00	692.00	1.6000	426.240	0.0320	30.61	164115.48	0.00	4.20	1.08	0.03	0.00	
14	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	69.59	202679.20	0.00	5.47	1.73	0.07	0.00	
15	Link-15	Channel	Jun-11	Jun-18	840.00	744.00	734.00	1.1900	417.600	0.0320	72.65	150028.81	0.00	2.05	1.39	0.04	0.00	
16	Link-16	Channel	Jun-14	Jun-17	888.00	762.00	741.00	2.3600	289.560	0.0320	28.44	149421.95	0.00	45.65	1.24	0.05	0.00	
17	Link-18	Channel	Jun-31	Jun-19	100.00	702.00	699.00	3.0000	451.200	0.0320	0.00	340966.88	0.00	0.00	0.85	0.02	0.00	
18	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	598.24	603845.15	0.00	4.53	5.47	0.09	0.00	
19	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	206.08	324200.23	0.00	6.12	3.41	0.09	0.00	
20	Link-23	Channel	Jun-17	Stor-G	1130.00	741.00	725.00	1.4200	357.960	0.0320	43.62	160979.09	0.00	4.87	1.77	0.06	0.00	
21	Link-24	Channel	Jun-18	Stor-U	960.00	734.00	726.00	0.8300	454.560	0.0320	116.49	352791.65	0.00	9.83	1.65	0.04	0.00	
22	Link-25	Channel	Jun-19	Stor-Y	893.00	699.00	677.00	2.4600	451.200	0.0320	35.18	308984.85	0.00	5.50	1.71	0.05	0.00	
23	Link-26	Channel	Jun-20	Stor-Y	690.00	692.00	674.00	2.6100	628.800	0.0320	33.59	554637.02	0.00	5.02	1.12	0.02	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	82.61	281792.12	0.00	5.95	1.83	0.05	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.00	664.00	0.3400	635.160	0.0320	176.77	287008.10	0.00	3.58	2.54	0.05	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.00	0.7200	607.200	0.0320	173.41	436979.68	0.00	3.75	2.74	0.05	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	55.64	346337.45	0.00	4.78	1.75	0.04	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	116.35	869869.15	0.00	2.98	0.62	0.02	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	148.28	512575.31	0.00	3.31	0.67	0.02	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	663.90	117717.43	0.01	4.36	4.48	0.13	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.00	1.6000	352.800	0.0320	89.14	180737.83	0.00	4.42	1.92	0.07	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	36.02	233235.72	0.00	4.58	1.11	0.03	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.00	1.2000	240.840	0.0320	281.33	294642.06	0.00	0.50	2.42	0.12	0.00	
34	Link-41	Channel	Jun-33	Stor-J	427.59	685.70	685.00	0.1600	503.760	0.0320	563.10	166487.36	0.00	7.11	6.00	0.14	0.00	
35	Weir-01	Weir	Stor-U	Jun-31		702.00	702.00				0.00							
36	Weir-02	Weir	Stor-Z	Jun-32		704.00	704.00				30.67							

Storage Nodes

Storage Node : Jun-30

Output Summary Results

Peak Inflow (cfs)	282.27
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	281.33
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	660.04
Max HGL Depth Attained (ft)	3.84
Average HGL Elevation Attained (ft)	658.42
Average HGL Depth Attained (ft)	2.22
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	116.35
Peak Lateral Inflow (cfs)	79.88
Peak Outflow (cfs)	116.35
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.45
Max HGL Depth Attained (ft)	0.45
Average HGL Elevation Attained (ft)	734.03
Average HGL Depth Attained (ft)	0.03
Time of Max HGL Occurrence (days hh:mm)	0 12:23
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	282.42
Peak Lateral Inflow (cfs)	120.90
Peak Outflow (cfs)	282.27
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	661.64
Max HGL Depth Attained (ft)	1.14
Average HGL Elevation Attained (ft)	660.58
Average HGL Depth Attained (ft)	0.08
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	208.55
Peak Lateral Inflow (cfs)	23.97
Peak Outflow (cfs)	206.08
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	723.79
Max HGL Depth Attained (ft)	3.79
Average HGL Elevation Attained (ft)	720.53
Average HGL Depth Attained (ft)	0.53
Time of Max HGL Occurrence (days hh:mm)	0 12:30
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	581.38
Peak Lateral Inflow (cfs)	219.84
Peak Outflow (cfs)	585.14
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	693.14
Max HGL Depth Attained (ft)	6.14
Average HGL Elevation Attained (ft)	687.96
Average HGL Depth Attained (ft)	0.96
Time of Max HGL Occurrence (days hh:mm)	0 12:30
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	607.76
Peak Lateral Inflow (cfs)	44.69
Peak Outflow (cfs)	598.24
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	690.94
Max HGL Depth Attained (ft)	5.94
Average HGL Elevation Attained (ft)	685.62
Average HGL Depth Attained (ft)	0.62
Time of Max HGL Occurrence (days hh:mm)	0 12:41
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	89.28
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	89.15
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	693.46
Max HGL Depth Attained (ft)	3.76
Average HGL Elevation Attained (ft)	689.95
Average HGL Depth Attained (ft)	0.25
Time of Max HGL Occurrence (days hh:mm)	0 12:26
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	35.52
Peak Lateral Inflow (cfs)	35.52
Peak Outflow (cfs)	37.70
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	696.61
Max HGL Depth Attained (ft)	2.41
Average HGL Elevation Attained (ft)	694.45
Average HGL Depth Attained (ft)	0.25
Time of Max HGL Occurrence (days hh:mm)	0 12:35
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-U

Output Summary Results

Peak Inflow (cfs)	195.97
Peak Lateral Inflow (cfs)	82.18
Peak Outflow (cfs)	0.00
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	727.20
Max HGL Depth Attained (ft)	25.2
Average HGL Elevation Attained (ft)	726.24
Average HGL Depth Attained (ft)	24.24
Time of Max HGL Occurrence (days hh:mm)	2 00:00
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	161.73
Peak Lateral Inflow (cfs)	37.29
Peak Outflow (cfs)	160.34
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	674.14
Max HGL Depth Attained (ft)	3.14
Average HGL Elevation Attained (ft)	671.85
Average HGL Depth Attained (ft)	0.85
Time of Max HGL Occurrence (days hh:mm)	0 12:18
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Z

Output Summary Results

Peak Inflow (cfs)	126.10
Peak Lateral Inflow (cfs)	126.10
Peak Outflow (cfs)	30.67
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	727.60
Max HGL Depth Attained (ft)	23.6
Average HGL Elevation Attained (ft)	727.13
Average HGL Depth Attained (ft)	23.13
Time of Max HGL Occurrence (days hh:mm)	0 12:50
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

PRE-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
10-YEAR

Project Description

File Name	26900.0002 - Existing Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	31
Nodes	41
Junctions	24
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	11
Links	36
Channels	29
Pipes	5
Pumps	0
Orifices	0
Weirs	2
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	5.16	1.69	717.81	368.34	0 00:59:24
2	AA	37.07	484.00	61.00	5.16	1.47	54.34	55.25	0 00:20:13
3	B	179.81	484.00	64.00	5.16	1.69	302.98	272.62	0 00:26:13
4	BB	19.61	484.00	59.00	5.16	1.33	26.00	24.33	0 00:22:19
5	C	57.45	484.00	61.00	5.16	1.47	84.22	57.06	0 00:38:19
6	CC	17.45	484.00	63.00	5.16	1.61	28.11	32.78	0 00:15:50
7	D	90.50	484.00	64.00	5.16	1.69	152.49	112.41	0 00:35:42
8	DD	15.65	484.00	66.00	5.16	1.84	28.76	30.24	0 00:20:31
9	E	54.28	484.00	59.00	5.16	1.33	71.98	54.70	0 00:31:01
10	EE	110.95	484.00	64.00	5.16	1.69	186.95	168.39	0 00:26:09
11	F	40.46	484.00	61.00	5.16	1.47	59.31	42.42	0 00:35:24
12	G	52.30	484.00	57.00	5.16	1.19	62.29	44.57	0 00:31:55
13	H	51.81	484.00	59.00	5.16	1.33	68.70	36.10	0 00:52:08
14	I	39.69	484.00	61.00	5.16	1.47	58.19	41.02	0 00:36:10
15	J	120.14	484.00	57.00	5.16	1.19	143.09	69.76	0 00:54:39
16	K	171.51	484.00	57.00	5.16	1.19	204.27	134.73	0 00:35:52
17	L	92.78	484.00	57.00	5.16	1.19	110.50	85.01	0 00:28:40
18	M	55.95	484.00	57.00	5.16	1.19	66.64	50.12	0 00:29:38
19	N	43.16	484.00	58.00	5.16	1.26	54.30	39.99	0 00:31:30
20	O	76.92	484.00	58.00	5.16	1.26	96.77	55.88	0 00:44:34
21	P	72.62	484.00	60.00	5.16	1.40	101.30	52.71	0 00:54:10
22	Q	108.57	484.00	62.00	5.16	1.54	166.98	139.69	0 00:28:30
23	R	80.68	484.00	62.00	5.16	1.54	124.09	113.49	0 00:24:50
24	S	85.42	484.00	61.00	5.16	1.47	125.23	108.54	0 00:26:27
25	T	69.15	484.00	62.00	5.16	1.54	106.35	104.64	0 00:21:50
26	U	65.72	484.00	69.00	5.16	2.07	136.30	110.42	0 00:32:56
27	V	54.60	484.00	59.00	5.16	1.33	72.40	53.85	0 00:31:48
28	W	79.34	484.00	61.00	5.16	1.47	116.31	102.89	0 00:25:40
29	X	22.95	484.00	59.00	5.16	1.33	30.43	36.04	0 00:13:51
30	Y	35.31	484.00	62.00	5.16	1.54	54.31	55.18	0 00:20:38
31	Z	109.30	484.00	60.00	5.16	1.40	152.47	132.89	0 00:25:44

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	368.33	719.72	0.00	80.28	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	973.33	687.95	0.00	112.05	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	56.47	768.72	0.00	38.87	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	678.00	800.00	1.00	980.09	684.63	0.00	115.37	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	55.49	716.55	0.00	83.45	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	49.41	725.10	0.00	74.90	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	102.67	717.87	0.00	82.13	0 00:00	0.00	0.00
8	Jun-11	Junction	744.00	800.00	744.00	800.00	1.00	108.49	745.20	0.00	54.80	0 00:00	0.00	0.00
9	Jun-14	Junction	762.00	800.00	762.00	800.00	1.00	42.22	762.75	0.00	37.25	0 00:00	0.00	0.00
10	Jun-17	Junction	741.00	800.00	741.00	800.00	1.00	84.96	743.21	0.00	56.79	0 00:00	0.00	0.00
11	Jun-18	Junction	734.00	800.00	734.00	800.00	1.00	205.41	735.93	0.00	64.07	0 00:00	0.00	0.00
12	Jun-19	Junction	699.00	800.00	699.00	800.00	1.00	53.81	700.98	0.00	99.02	0 00:00	0.00	0.00
13	Jun-20	Junction	692.00	800.00	692.00	800.00	1.00	100.98	693.74	0.00	106.26	0 00:00	0.00	0.00
14	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	124.69	692.30	0.00	107.70	0 00:00	0.00	0.00
15	Jun-22	Junction	666.00	800.00	666.00	800.00	1.00	282.11	669.53	0.00	130.47	0 00:00	0.00	0.00
16	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	259.24	673.89	0.00	126.11	0 00:00	0.00	0.00
17	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	88.90	710.19	0.00	89.81	0 00:00	0.00	0.00
18	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	219.85	731.97	0.00	68.03	0 00:00	0.00	0.00
19	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	968.65	682.08	0.00	117.92	0 00:00	0.00	0.00
20	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	137.13	688.82	0.00	111.18	0 00:00	0.00	0.00
21	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	52.34	691.32	0.00	108.68	0 00:00	0.00	0.00
22	Jun-31	Junction	702.00	800.00	702.00	800.00	1.00	0.00	702.00	0.00	125.50	0 00:00	0.00	0.00
23	Jun-32	Junction	704.00	800.00	704.00	800.00	1.00	90.69	705.81	0.00	120.69	0 00:00	0.00	0.00
24	Jun-33	Junction	685.70	691.70	685.70	691.70	1.00	838.92	692.24	0.00	35.44	0 00:00	0.00	0.00
25	Out-01	Outfall	675.80					968.61	681.08					
26	Out-02	Outfall	685.00					137.11	687.23					
27	Out-03	Outfall	688.00					52.33	689.30					
28	Out-04	Outfall	659.00					408.18	660.23					
29	Out-05	Outfall	720.00					138.42	720.00					
30	Out-06	Outfall	695.00					112.83	695.00					
31	Jun-30	Storage Node	656.20	800.00	656.20		1000.00	409.04	660.27				0.00	0.00
32	Stor-D	Storage Node	734.00	800.00	734.00		233730.00	166.28	734.56				0.00	0.00
33	Stor-EE	Storage Node	660.50	800.00	660.50		1073922.00	409.31	662.00				0.00	0.00
34	Stor-G	Storage Node	720.00	800.00	720.00		1000.00	313.87	724.50				0.00	0.00
35	Stor-I	Storage Node	687.00	800.00	687.00		936779.00	841.53	693.59				0.00	0.00
36	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	886.57	691.49				0.00	0.00
37	Stor-NO	Storage Node	689.70	800.00	689.70		91514.00	137.51	694.87				0.00	0.00
38	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	52.53	697.31				0.00	0.00
39	Stor-U	Storage Node	702.00	800.00	724.00		441052.00	288.64	728.00				0.00	0.00
40	Stor-Y	Storage Node	671.00	800.00	671.50		418671.00	241.28	674.58				0.00	0.00
41	Stor-Z	Storage Node	704.00	800.00	726.00		380783.00	184.02	727.70				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	968.65	1291.66	0.75	9.91	6.10	0.76	0.00	Calculated
2	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	137.13	209.17	0.66	11.02	3.11	0.78	0.00	Calculated
3	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	409.04	1769.96	0.23	7.00	2.78	0.56	0.00	Calculated
4	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	52.34	186.93	0.28	7.53	2.21	0.55	0.00	Calculated
5	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	72.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
6	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	487.080	0.0320	56.28	251078.70	0.00	5.10	1.61	0.04	0.00	
7	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	367.45	62083.71	0.01	7.37	3.44	0.17	0.00	
8	Link-04	Channel	Stor-I	Jun-33	784.40	687.00	685.70	0.1700	503.760	0.0320	838.92	167513.15	0.01	2.96	6.55	0.16	0.00	
9	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	946.62	471728.19	0.00	5.99	6.44	0.13	0.00	
10	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	49.13	160489.81	0.00	5.10	2.13	0.06	0.00	
11	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	55.30	228402.42	0.00	5.48	1.57	0.04	0.00	
12	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	238.64	320223.33	0.00	6.45	2.97	0.07	0.00	
13	Link-13	Channel	Jun-32	Jun-20	750.00	704.00	692.00	1.6000	426.240	0.0320	90.76	164115.48	0.00	6.00	1.75	0.05	0.00	
14	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	101.35	202679.20	0.00	6.01	2.07	0.08	0.00	
15	Link-15	Channel	Jun-11	Jun-18	840.00	744.00	734.00	1.1900	417.600	0.0320	106.27	150028.81	0.00	2.44	1.56	0.04	0.00	
16	Link-16	Channel	Jun-14	Jun-17	888.00	762.00	741.00	2.3600	289.560	0.0320	41.44	149421.95	0.00	18.97	1.47	0.06	0.00	
17	Link-18	Channel	Jun-31	Jun-19	100.00	702.00	699.00	3.0000	451.200	0.0320	0.00	340966.88	0.00	0.00	0.99	0.03	0.00	
18	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	886.10	603845.15	0.00	4.64	6.20	0.10	0.00	
19	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	308.00	324200.23	0.00	6.71	4.07	0.11	0.00	
20	Link-23	Channel	Jun-17	Stor-G	1130.00	741.00	725.00	1.4200	357.960	0.0320	70.71	160979.09	0.00	5.48	2.12	0.07	0.00	
21	Link-24	Channel	Jun-18	Stor-U	960.00	734.00	726.00	0.8300	454.560	0.0320	179.10	352791.65	0.00	28.76	1.80	0.05	0.00	
22	Link-25	Channel	Jun-19	Stor-Y	893.00	699.00	677.00	2.4600	451.200	0.0320	52.85	308984.85	0.00	6.04	2.01	0.05	0.00	
23	Link-26	Channel	Jun-20	Stor-Y	690.00	692.00	674.00	2.6100	628.800	0.0320	99.21	554637.02	0.00	7.02	1.71	0.03	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	121.68	281792.12	0.00	6.59	2.23	0.06	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.00	664.00	0.3400	635.160	0.0320	262.10	287008.10	0.00	3.78	2.97	0.06	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.00	0.7200	607.200	0.0320	257.90	436979.68	0.00	4.15	3.19	0.06	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	84.83	346337.45	0.00	5.03	2.15	0.05	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	166.28	869869.15	0.00	3.28	0.76	0.02	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	214.50	512575.31	0.00	3.70	0.84	0.02	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	968.61	117717.43	0.01	4.85	5.28	0.15	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.00	1.6000	352.800	0.0320	137.11	180737.83	0.00	5.14	2.22	0.08	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	52.33	233235.72	0.00	4.98	1.31	0.04	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.00	1.2000	240.840	0.0320	408.18	294642.06	0.00	0.62	2.65	0.13	0.00	
34	Link-41	Channel	Jun-33	Stor-J	427.59	685.70	685.00	0.1600	503.760	0.0320	817.04	166487.36	0.00	4.17	6.51	0.16	0.00	
35	Weir-01	Weir	Stor-U	Jun-31		702.00	702.00				0.00							
36	Weir-02	Weir	Stor-Z	Jun-32		704.00	704.00				90.69							

Storage Nodes

Storage Node : Jun-30

Output Summary Results

Peak Inflow (cfs)	409.04
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	408.18
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	660.27
Max HGL Depth Attained (ft)	4.07
Average HGL Elevation Attained (ft)	658.45
Average HGL Depth Attained (ft)	2.25
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	166.28
Peak Lateral Inflow (cfs)	112.40
Peak Outflow (cfs)	166.28
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.56
Max HGL Depth Attained (ft)	0.56
Average HGL Elevation Attained (ft)	734.04
Average HGL Depth Attained (ft)	0.04
Time of Max HGL Occurrence (days hh:mm)	0 12:21
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	409.31
Peak Lateral Inflow (cfs)	168.30
Peak Outflow (cfs)	409.04
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	662.00
Max HGL Depth Attained (ft)	1.5
Average HGL Elevation Attained (ft)	660.60
Average HGL Depth Attained (ft)	0.1
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	313.87
Peak Lateral Inflow (cfs)	35.89
Peak Outflow (cfs)	308.00
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	724.50
Max HGL Depth Attained (ft)	4.5
Average HGL Elevation Attained (ft)	720.58
Average HGL Depth Attained (ft)	0.58
Time of Max HGL Occurrence (days hh:mm)	0 12:29
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	841.53
Peak Lateral Inflow (cfs)	308.55
Peak Outflow (cfs)	838.92
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	693.59
Max HGL Depth Attained (ft)	6.59
Average HGL Elevation Attained (ft)	688.06
Average HGL Depth Attained (ft)	1.06
Time of Max HGL Occurrence (days hh:mm)	0 12:29
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	886.57
Peak Lateral Inflow (cfs)	69.60
Peak Outflow (cfs)	886.10
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	691.49
Max HGL Depth Attained (ft)	6.49
Average HGL Elevation Attained (ft)	685.71
Average HGL Depth Attained (ft)	0.71
Time of Max HGL Occurrence (days hh:mm)	0 12:37
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	137.51
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	137.13
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	694.87
Max HGL Depth Attained (ft)	5.17
Average HGL Elevation Attained (ft)	690.01
Average HGL Depth Attained (ft)	0.31
Time of Max HGL Occurrence (days hh:mm)	0 12:26
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	52.53
Peak Lateral Inflow (cfs)	52.53
Peak Outflow (cfs)	52.34
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	697.31
Max HGL Depth Attained (ft)	3.11
Average HGL Elevation Attained (ft)	694.49
Average HGL Depth Attained (ft)	0.29
Time of Max HGL Occurrence (days hh:mm)	0 12:35
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-U

Output Summary Results

Peak Inflow (cfs)	288.64
Peak Lateral Inflow (cfs)	109.75
Peak Outflow (cfs)	0.00
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	728.00
Max HGL Depth Attained (ft)	26
Average HGL Elevation Attained (ft)	726.81
Average HGL Depth Attained (ft)	24.81
Time of Max HGL Occurrence (days hh:mm)	2 00:00
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	241.28
Peak Lateral Inflow (cfs)	53.69
Peak Outflow (cfs)	238.64
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	674.58
Max HGL Depth Attained (ft)	3.58
Average HGL Elevation Attained (ft)	671.89
Average HGL Depth Attained (ft)	0.89
Time of Max HGL Occurrence (days hh:mm)	0 12:17
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Z

Output Summary Results

Peak Inflow (cfs)	184.02
Peak Lateral Inflow (cfs)	184.02
Peak Outflow (cfs)	90.69
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	727.70
Max HGL Depth Attained (ft)	23.7
Average HGL Elevation Attained (ft)	727.14
Average HGL Depth Attained (ft)	23.14
Time of Max HGL Occurrence (days hh:mm)	0 12:30
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

PRE-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
25-YEAR

Project Description

File Name	26900.0002 - Existing Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	31
Nodes	41
Junctions	24
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	11
Links	36
Channels	29
Pipes	5
Pumps	0
Orifices	0
Weirs	2
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	6.12	2.35	1000.67	533.65	0 00:59:24
2	AA	37.07	484.00	61.00	6.12	2.09	77.33	81.57	0 00:20:13
3	B	179.81	484.00	64.00	6.12	2.35	422.37	392.13	0 00:26:13
4	BB	19.61	484.00	59.00	6.12	1.92	37.57	36.94	0 00:22:19
5	C	57.45	484.00	61.00	6.12	2.09	119.84	85.22	0 00:38:19
6	CC	17.45	484.00	63.00	6.12	2.26	39.45	47.06	0 00:15:50
7	D	90.50	484.00	64.00	6.12	2.35	212.58	162.06	0 00:35:42
8	DD	15.65	484.00	66.00	6.12	2.53	39.58	42.47	0 00:20:31
9	E	54.28	484.00	59.00	6.12	1.92	104.00	83.49	0 00:31:01
10	EE	110.95	484.00	64.00	6.12	2.35	260.62	242.31	0 00:26:09
11	F	40.46	484.00	61.00	6.12	2.09	84.40	63.22	0 00:35:24
12	G	52.30	484.00	57.00	6.12	1.75	91.47	70.27	0 00:31:55
13	H	51.81	484.00	59.00	6.12	1.92	99.27	55.37	0 00:52:08
14	I	39.69	484.00	61.00	6.12	2.09	82.79	61.24	0 00:36:10
15	J	120.14	484.00	57.00	6.12	1.75	210.12	110.55	0 00:54:39
16	K	171.51	484.00	57.00	6.12	1.75	299.97	213.08	0 00:35:52
17	L	92.78	484.00	57.00	6.12	1.75	162.27	133.89	0 00:28:40
18	M	55.95	484.00	57.00	6.12	1.75	97.86	79.09	0 00:29:38
19	N	43.16	484.00	58.00	6.12	1.83	79.07	62.07	0 00:31:30
20	O	76.92	484.00	58.00	6.12	1.83	140.92	87.01	0 00:44:34
21	P	72.62	484.00	60.00	6.12	2.00	145.24	79.92	0 00:54:10
22	Q	108.57	484.00	62.00	6.12	2.17	235.92	204.82	0 00:28:30
23	R	80.68	484.00	62.00	6.12	2.17	175.32	165.94	0 00:24:50
24	S	85.42	484.00	61.00	6.12	2.09	178.19	160.68	0 00:26:27
25	T	69.15	484.00	62.00	6.12	2.17	150.26	152.76	0 00:21:50
26	U	65.72	484.00	69.00	6.12	2.81	184.48	151.94	0 00:32:56
27	V	54.60	484.00	59.00	6.12	1.92	104.61	82.61	0 00:31:48
28	W	79.34	484.00	61.00	6.12	2.09	165.50	152.59	0 00:25:40
29	X	22.95	484.00	59.00	6.12	1.92	43.97	54.06	0 00:13:51
30	Y	35.31	484.00	62.00	6.12	2.17	76.73	80.37	0 00:20:38
31	Z	109.30	484.00	60.00	6.12	2.00	218.60	199.25	0 00:25:44

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	532.56	720.40	0.00	79.60	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	1447.55	688.72	0.00	111.28	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	84.16	769.07	0.00	38.52	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	678.00	800.00	1.00	1467.50	686.94	0.00	113.06	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	86.54	716.84	0.00	83.16	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	77.25	725.47	0.00	74.53	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	151.98	718.23	0.00	81.77	0 00:00	0.00	0.00
8	Jun-11	Junction	744.00	800.00	744.00	800.00	1.00	160.61	745.41	0.00	54.59	0 00:00	0.00	0.00
9	Jun-14	Junction	762.00	800.00	762.00	800.00	1.00	63.07	762.85	0.00	37.15	0 00:00	0.00	0.00
10	Jun-17	Junction	741.00	800.00	741.00	800.00	1.00	131.05	743.65	0.00	56.35	0 00:00	0.00	0.00
11	Jun-18	Junction	734.00	800.00	734.00	800.00	1.00	302.35	736.15	0.00	63.85	0 00:00	0.00	0.00
12	Jun-19	Junction	699.00	800.00	699.00	800.00	1.00	81.71	701.36	0.00	98.64	0 00:00	0.00	0.00
13	Jun-20	Junction	692.00	800.00	692.00	800.00	1.00	231.48	694.45	0.00	105.55	0 00:00	0.00	0.00
14	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	186.05	692.81	0.00	107.19	0 00:00	0.00	0.00
15	Jun-22	Junction	666.00	800.00	666.00	800.00	1.00	533.08	670.27	0.00	129.73	0 00:00	0.00	0.00
16	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	515.95	674.84	0.00	125.16	0 00:00	0.00	0.00
17	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	138.52	710.54	0.00	89.46	0 00:00	0.00	0.00
18	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	325.12	732.20	0.00	67.80	0 00:00	0.00	0.00
19	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	1444.27	683.09	0.00	116.91	0 00:00	0.00	0.00
20	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	195.20	689.11	0.00	110.89	0 00:00	0.00	0.00
21	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	79.36	691.56	0.00	108.44	0 00:00	0.00	0.00
22	Jun-31	Junction	702.00	800.00	702.00	800.00	1.00	14.65	703.20	0.00	124.30	0 00:00	0.00	0.00
23	Jun-32	Junction	704.00	800.00	704.00	800.00	1.00	207.18	706.72	0.00	119.78	0 00:00	0.00	0.00
24	Jun-33	Junction	685.70	691.70	685.70	691.70	1.00	1245.59	692.85	0.00	34.83	0 00:00	0.00	0.00
25	Out-01	Outfall	675.80					1444.24	682.11					
26	Out-02	Outfall	685.00					195.20	687.51					
27	Out-03	Outfall	688.00					79.35	689.60					
28	Out-04	Outfall	659.00					662.28	660.61					
29	Out-05	Outfall	720.00					204.36	720.00					
30	Out-06	Outfall	695.00					164.51	695.00					
31	Jun-30	Storage Node	656.20	800.00	656.20		1000.00	662.45	660.66				0.00	0.00
32	Stor-D	Storage Node	734.00	800.00	734.00		233730.00	243.26	734.70				0.00	0.00
33	Stor-EE	Storage Node	660.50	800.00	660.50		1073922.00	662.54	663.30				0.00	0.00
34	Stor-G	Storage Node	720.00	800.00	720.00		1000.00	485.29	725.09				0.00	0.00
35	Stor-I	Storage Node	687.00	800.00	687.00		936779.00	1254.74	694.21				0.00	0.00
36	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	1325.07	692.12				0.00	0.00
37	Stor-NO	Storage Node	689.70	800.00	689.70		91514.00	215.81	697.26				0.00	0.00
38	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	79.41	698.21				0.00	0.00
39	Stor-U	Storage Node	702.00	800.00	724.00		441052.00	425.58	728.56				0.00	0.00
40	Stor-Y	Storage Node	671.00	800.00	671.50		418671.00	511.53	675.57				0.00	0.00
41	Stor-Z	Storage Node	704.00	800.00	726.00		380783.00	273.43	727.85				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	1444.27	1291.66	1.12	12.64	7.14	0.89	0.00	> CAPACITY
2	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	195.20	209.17	0.93	14.98	3.26	0.81	0.00	Calculated
3	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	662.45	1769.96	0.37	8.69	3.63	0.73	0.00	Calculated
4	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	79.36	186.93	0.42	8.51	2.78	0.70	0.00	Calculated
5	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	72.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
6	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	487.080	0.0320	83.74	251078.70	0.00	5.64	1.94	0.05	0.00	
7	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	531.84	62083.71	0.01	8.15	4.12	0.20	0.00	
8	Link-04	Channel	Stor-I	Jun-33	784.40	687.00	685.70	0.1700	503.760	0.0320	1245.59	167513.15	0.01	2.90	7.16	0.17	0.00	
9	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	1413.19	471728.19	0.00	5.99	7.97	0.16	0.00	
10	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	77.07	160489.81	0.00	5.69	2.50	0.07	0.00	
11	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	85.98	228402.42	0.00	6.10	1.89	0.05	0.00	
12	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	498.69	320223.33	0.00	7.09	3.95	0.09	0.00	
13	Link-13	Channel	Jun-32	Jun-20	750.00	704.00	692.00	1.6000	426.240	0.0320	207.18	164115.48	0.00	7.80	2.56	0.07	0.00	
14	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	150.48	202679.20	0.00	6.51	2.51	0.09	0.00	
15	Link-15	Channel	Jun-11	Jun-18	840.00	744.00	734.00	1.1900	417.600	0.0320	158.18	150028.81	0.00	2.95	1.76	0.05	0.00	
16	Link-16	Channel	Jun-14	Jun-17	888.00	762.00	741.00	2.3600	289.560	0.0320	62.00	149421.95	0.00	50.00	1.74	0.07	0.00	
17	Link-18	Channel	Jun-31	Jun-19	100.00	702.00	699.00	3.0000	451.200	0.0320	14.65	340966.88	0.00	4.33	1.27	0.03	0.00	
18	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	1300.94	603845.15	0.00	4.72	6.91	0.12	0.00	
19	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	474.35	324200.23	0.00	6.87	5.07	0.14	0.00	
20	Link-23	Channel	Jun-17	Stor-G	1130.00	741.00	725.00	1.4200	357.960	0.0320	115.17	160979.09	0.00	6.23	2.57	0.09	0.00	
21	Link-24	Channel	Jun-18	Stor-U	960.00	734.00	726.00	0.8300	454.560	0.0320	276.12	352791.65	0.00	50.00	1.98	0.05	0.00	
22	Link-25	Channel	Jun-19	Stor-Y	893.00	699.00	677.00	2.4600	451.200	0.0320	80.93	308984.85	0.00	6.90	2.36	0.06	0.00	
23	Link-26	Channel	Jun-20	Stor-Y	690.00	692.00	674.00	2.6100	628.800	0.0320	227.29	554637.02	0.00	7.63	2.56	0.05	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	180.16	281792.12	0.00	6.88	2.80	0.07	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.00	664.00	0.3400	635.160	0.0320	508.15	287008.10	0.00	3.90	3.77	0.07	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.00	0.7200	607.200	0.0320	512.00	436979.68	0.00	4.95	4.03	0.08	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	137.41	346337.45	0.00	5.34	2.54	0.06	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	243.25	869869.15	0.00	3.67	0.94	0.03	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	325.77	512575.31	0.00	4.03	1.12	0.03	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	1444.24	117717.43	0.01	5.39	6.30	0.18	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.00	1.6000	352.800	0.0320	195.20	180737.83	0.00	5.33	2.51	0.09	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	79.35	233235.72	0.00	5.23	1.58	0.04	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.00	1.2000	240.840	0.0320	662.28	294642.06	0.00	0.82	3.03	0.15	0.00	
34	Link-41	Channel	Jun-33	Stor-J	427.59	685.70	685.00	0.1600	503.760	0.0320	1216.06	166487.36	0.01	4.17	7.13	0.17	0.00	
35	Weir-01	Weir	Stor-U	Jun-31		702.00	702.00				14.65							
36	Weir-02	Weir	Stor-Z	Jun-32		704.00	704.00				207.18							

Storage Nodes

Storage Node : Jun-30

Output Summary Results

Peak Inflow (cfs)	662.45
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	662.28
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	660.66
Max HGL Depth Attained (ft)	4.46
Average HGL Elevation Attained (ft)	658.50
Average HGL Depth Attained (ft)	2.3
Time of Max HGL Occurrence (days hh:mm)	0 12:26
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	243.26
Peak Lateral Inflow (cfs)	161.97
Peak Outflow (cfs)	243.25
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.70
Max HGL Depth Attained (ft)	0.7
Average HGL Elevation Attained (ft)	734.04
Average HGL Depth Attained (ft)	0.04
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	662.54
Peak Lateral Inflow (cfs)	241.81
Peak Outflow (cfs)	662.45
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	663.30
Max HGL Depth Attained (ft)	2.8
Average HGL Elevation Attained (ft)	660.64
Average HGL Depth Attained (ft)	0.14
Time of Max HGL Occurrence (days hh:mm)	0 12:25
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	485.29
Peak Lateral Inflow (cfs)	55.17
Peak Outflow (cfs)	474.35
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	725.09
Max HGL Depth Attained (ft)	5.09
Average HGL Elevation Attained (ft)	720.65
Average HGL Depth Attained (ft)	0.65
Time of Max HGL Occurrence (days hh:mm)	0 12:27
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	1254.74
Peak Lateral Inflow (cfs)	447.32
Peak Outflow (cfs)	1245.59
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	694.21
Max HGL Depth Attained (ft)	7.21
Average HGL Elevation Attained (ft)	688.19
Average HGL Depth Attained (ft)	1.19
Time of Max HGL Occurrence (days hh:mm)	0 12:28
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	1325.07
Peak Lateral Inflow (cfs)	110.19
Peak Outflow (cfs)	1300.94
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	692.12
Max HGL Depth Attained (ft)	7.12
Average HGL Elevation Attained (ft)	685.83
Average HGL Depth Attained (ft)	0.83
Time of Max HGL Occurrence (days hh:mm)	0 12:36
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	215.81
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	195.20
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	697.26
Max HGL Depth Attained (ft)	7.56
Average HGL Elevation Attained (ft)	690.10
Average HGL Depth Attained (ft)	0.4
Time of Max HGL Occurrence (days hh:mm)	0 12:30
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	79.41
Peak Lateral Inflow (cfs)	79.41
Peak Outflow (cfs)	79.36
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	698.21
Max HGL Depth Attained (ft)	4.01
Average HGL Elevation Attained (ft)	694.55
Average HGL Depth Attained (ft)	0.35
Time of Max HGL Occurrence (days hh:mm)	0 12:35
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-U

Output Summary Results

Peak Inflow (cfs)	425.58
Peak Lateral Inflow (cfs)	150.28
Peak Outflow (cfs)	14.65
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	728.56
Max HGL Depth Attained (ft)	26.56
Average HGL Elevation Attained (ft)	727.28
Average HGL Depth Attained (ft)	25.28
Time of Max HGL Occurrence (days hh:mm)	0 19:38
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	511.53
Peak Lateral Inflow (cfs)	79.07
Peak Outflow (cfs)	498.69
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	675.57
Max HGL Depth Attained (ft)	4.57
Average HGL Elevation Attained (ft)	672.01
Average HGL Depth Attained (ft)	1.01
Time of Max HGL Occurrence (days hh:mm)	0 12:24
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Z

Output Summary Results

Peak Inflow (cfs)	273.43
Peak Lateral Inflow (cfs)	273.43
Peak Outflow (cfs)	207.18
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	727.85
Max HGL Depth Attained (ft)	23.85
Average HGL Elevation Attained (ft)	727.14
Average HGL Depth Attained (ft)	23.14
Time of Max HGL Occurrence (days hh:mm)	0 12:22
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

PRE-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
50-YEAR

Project Description

File Name	26900.0002 - Existing Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	31
Nodes	41
Junctions	24
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	11
Links	36
Channels	29
Pipes	5
Pumps	0
Orifices	0
Weirs	2
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	6.88	2.91	1239.66	671.67	0 00:59:24
2	AA	37.07	484.00	61.00	6.88	2.62	96.98	103.72	0 00:20:13
3	B	179.81	484.00	64.00	6.88	2.91	523.25	491.56	0 00:26:13
4	BB	19.61	484.00	59.00	6.88	2.42	47.52	47.74	0 00:22:19
5	C	57.45	484.00	61.00	6.88	2.62	150.29	108.91	0 00:38:19
6	CC	17.45	484.00	63.00	6.88	2.81	49.05	59.18	0 00:15:50
7	D	90.50	484.00	64.00	6.88	2.91	263.36	203.80	0 00:35:42
8	DD	15.65	484.00	66.00	6.88	3.11	48.67	52.56	0 00:20:31
9	E	54.28	484.00	59.00	6.88	2.42	131.52	108.17	0 00:31:01
10	EE	110.95	484.00	64.00	6.88	2.91	322.86	303.82	0 00:26:09
11	F	40.46	484.00	61.00	6.88	2.62	105.84	80.92	0 00:35:24
12	G	52.30	484.00	57.00	6.88	2.23	116.84	92.70	0 00:31:55
13	H	51.81	484.00	59.00	6.88	2.42	125.54	72.31	0 00:52:08
14	I	39.69	484.00	61.00	6.88	2.62	103.83	78.24	0 00:36:10
15	J	120.14	484.00	57.00	6.88	2.23	268.39	146.26	0 00:54:39
16	K	171.51	484.00	57.00	6.88	2.23	383.15	281.10	0 00:35:52
17	L	92.78	484.00	57.00	6.88	2.23	207.27	176.63	0 00:28:40
18	M	55.95	484.00	57.00	6.88	2.23	124.99	104.23	0 00:29:38
19	N	43.16	484.00	58.00	6.88	2.33	100.48	81.22	0 00:31:30
20	O	76.92	484.00	58.00	6.88	2.33	179.07	114.26	0 00:44:34
21	P	72.62	484.00	60.00	6.88	2.52	182.93	103.32	0 00:54:10
22	Q	108.57	484.00	62.00	6.88	2.71	294.55	261.07	0 00:28:30
23	R	80.68	484.00	62.00	6.88	2.71	218.88	210.34	0 00:24:50
24	S	85.42	484.00	61.00	6.88	2.62	223.46	205.39	0 00:26:27
25	T	69.15	484.00	62.00	6.88	2.71	187.60	193.84	0 00:21:50
26	U	65.72	484.00	69.00	6.88	3.42	224.50	186.24	0 00:32:56
27	V	54.60	484.00	59.00	6.88	2.42	132.30	107.13	0 00:31:48
28	W	79.34	484.00	61.00	6.88	2.62	207.55	194.32	0 00:25:40
29	X	22.95	484.00	59.00	6.88	2.42	55.61	69.42	0 00:13:51
30	Y	35.31	484.00	62.00	6.88	2.71	95.80	101.88	0 00:20:38
31	Z	109.30	484.00	60.00	6.88	2.52	275.33	256.50	0 00:25:44

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	669.95	720.75	0.00	79.25	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	1895.19	689.34	0.00	110.66	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	108.03	769.32	0.00	38.27	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	678.00	800.00	1.00	1936.60	688.98	0.00	111.02	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	113.47	717.09	0.00	82.91	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	102.59	725.78	0.00	74.22	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	193.76	718.48	0.00	81.52	0 00:00	0.00	0.00
8	Jun-11	Junction	744.00	800.00	744.00	800.00	1.00	205.09	745.55	0.00	54.45	0 00:00	0.00	0.00
9	Jun-14	Junction	762.00	800.00	762.00	800.00	1.00	80.79	762.93	0.00	37.07	0 00:00	0.00	0.00
10	Jun-17	Junction	741.00	800.00	741.00	800.00	1.00	170.92	743.97	0.00	56.03	0 00:00	0.00	0.00
11	Jun-18	Junction	734.00	800.00	734.00	800.00	1.00	384.86	736.31	0.00	63.69	0 00:00	0.00	0.00
12	Jun-19	Junction	699.00	800.00	699.00	800.00	1.00	105.76	701.59	0.00	98.41	0 00:00	0.00	0.00
13	Jun-20	Junction	692.00	800.00	692.00	800.00	1.00	340.43	694.97	0.00	105.03	0 00:00	0.00	0.00
14	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	239.35	693.23	0.00	106.77	0 00:00	0.00	0.00
15	Jun-22	Junction	666.00	800.00	666.00	800.00	1.00	775.37	670.77	0.00	129.23	0 00:00	0.00	0.00
16	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	744.12	675.28	0.00	124.72	0 00:00	0.00	0.00
17	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	181.38	710.66	0.00	89.34	0 00:00	0.00	0.00
18	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	414.03	732.35	0.00	67.65	0 00:00	0.00	0.00
19	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	1810.40	683.71	0.00	116.29	0 00:00	0.00	0.00
20	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	220.69	689.20	0.00	110.80	0 00:00	0.00	0.00
21	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	102.32	691.73	0.00	108.27	0 00:00	0.00	0.00
22	Jun-31	Junction	702.00	800.00	702.00	800.00	1.00	33.02	703.61	0.00	123.89	0 00:00	0.00	0.00
23	Jun-32	Junction	704.00	800.00	704.00	800.00	1.00	302.81	707.25	0.00	119.25	0 00:00	0.00	0.00
24	Jun-33	Junction	685.70	691.70	685.70	691.70	1.00	1571.32	693.31	0.00	34.37	0 00:00	0.00	0.00
25	Out-01	Outfall	675.80					1810.36	682.71					
26	Out-02	Outfall	685.00					220.69	687.60					
27	Out-03	Outfall	688.00					102.32	689.84					
28	Out-04	Outfall	659.00					986.27	660.63					
29	Out-05	Outfall	720.00					259.63	720.00					
30	Out-06	Outfall	695.00					208.06	695.00					
31	Jun-30	Storage Node	656.20	800.00	656.20		1000.00	942.40	660.69				0.00	0.00
32	Stor-D	Storage Node	734.00	800.00	734.00		233730.00	308.21	734.81				0.00	0.00
33	Stor-EE	Storage Node	660.50	800.00	660.50		1073922.00	942.85	664.52				0.00	0.00
34	Stor-G	Storage Node	720.00	800.00	720.00		1000.00	630.54	725.36				0.00	0.00
35	Stor-I	Storage Node	687.00	800.00	687.00		936779.00	1581.15	694.64				0.00	0.00
36	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	1683.59	692.58				0.00	0.00
37	Stor-NO	Storage Node	689.70	800.00	689.70		91514.00	285.49	699.41				0.00	0.00
38	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	102.38	699.03				0.00	0.00
39	Stor-U	Storage Node	702.00	800.00	724.00		441052.00	542.15	728.60				0.00	0.00
40	Stor-Y	Storage Node	671.00	800.00	671.50		418671.00	720.97	675.96				0.00	0.00
41	Stor-Z	Storage Node	704.00	800.00	726.00		380783.00	350.10	727.95				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	1810.40	1291.66	1.40	15.18	7.45	0.93	0.00	> CAPACITY
2	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	220.69	209.17	1.06	16.72	3.30	0.82	0.00	> CAPACITY
3	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	942.40	1769.96	0.53	10.74	4.17	0.84	0.00	Calculated
4	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	102.32	186.93	0.55	10.63	2.86	0.72	0.00	Calculated
5	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	72.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
6	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	487.080	0.0320	107.30	251078.70	0.00	6.04	2.18	0.05	0.00	
7	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	668.13	62083.71	0.01	8.36	4.69	0.23	0.00	
8	Link-04	Channel	Stor-I	Jun-33	784.40	687.00	685.70	0.1700	503.760	0.0320	1571.32	167513.15	0.01	2.85	7.62	0.18	0.00	
9	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	1857.14	471728.19	0.00	5.99	9.31	0.19	0.00	
10	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	101.91	160489.81	0.00	6.35	2.71	0.08	0.00	
11	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	112.98	228402.42	0.00	6.34	2.71	0.08	0.00	
12	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	717.90	320223.33	0.00	7.42	4.37	0.10	0.00	
13	Link-13	Channel	Jun-32	Jun-20	750.00	704.00	692.00	1.6000	426.240	0.0320	303.29	164115.48	0.00	8.69	3.09	0.09	0.00	
14	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	192.04	202679.20	0.00	6.78	2.84	0.11	0.00	
15	Link-15	Channel	Jun-11	Jun-18	840.00	744.00	734.00	1.1900	417.600	0.0320	202.48	150028.81	0.00	3.35	1.92	0.06	0.00	
16	Link-16	Channel	Jun-14	Jun-17	888.00	762.00	741.00	2.3600	289.560	0.0320	79.58	149421.95	0.00	50.00	1.94	0.08	0.00	
17	Link-18	Channel	Jun-31	Jun-19	100.00	702.00	699.00	3.0000	451.200	0.0320	33.02	340966.88	0.00	5.28	1.70	0.05	0.00	
18	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	1693.23	603845.15	0.00	4.66	7.41	0.12	0.00	
19	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	594.19	324200.23	0.00	6.87	5.28	0.15	0.00	
20	Link-23	Channel	Jun-17	Stor-G	1130.00	741.00	725.00	1.4200	357.960	0.0320	153.41	160979.09	0.00	6.72	2.89	0.10	0.00	
21	Link-24	Channel	Jun-18	Stor-U	960.00	734.00	726.00	0.8300	454.560	0.0320	359.84	352791.65	0.00	50.00	2.11	0.06	0.00	
22	Link-25	Channel	Jun-19	Stor-Y	893.00	699.00	677.00	2.4600	451.200	0.0320	105.24	308984.85	0.00	7.32	2.59	0.07	0.00	
23	Link-26	Channel	Jun-20	Stor-Y	690.00	692.00	674.00	2.6100	628.800	0.0320	330.94	554637.02	0.00	7.91	3.10	0.06	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	226.91	281792.12	0.00	6.89	3.21	0.08	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.00	664.00	0.3400	635.160	0.0320	724.91	287008.10	0.00	3.90	4.16	0.08	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.00	0.7200	607.200	0.0320	742.38	436979.68	0.00	5.15	4.50	0.09	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	179.76	346337.45	0.00	5.34	2.65	0.06	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	308.20	869869.15	0.00	3.97	1.08	0.03	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	418.75	512575.31	0.00	4.20	1.31	0.04	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	1810.36	117717.43	0.02	5.79	6.91	0.19	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.00	1.6000	352.800	0.0320	220.69	180737.83	0.00	5.56	2.60	0.09	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	102.32	233235.72	0.00	5.32	1.78	0.05	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.00	1.2000	240.840	0.0320	986.27	294642.06	0.00	1.30	2.95	0.15	0.00	
34	Link-41	Channel	Jun-33	Stor-J	427.59	685.70	685.00	0.1600	503.760	0.0320	1538.75	166487.36	0.01	4.09	7.59	0.18	0.00	
35	Weir-01	Weir	Stor-U	Jun-31		702.00	702.00				33.02							
36	Weir-02	Weir	Stor-Z	Jun-32		704.00	704.00				302.81							

Storage Nodes

Storage Node : Jun-30

Output Summary Results

Peak Inflow (cfs)	942.40
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	986.27
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	660.69
Max HGL Depth Attained (ft)	4.49
Average HGL Elevation Attained (ft)	658.54
Average HGL Depth Attained (ft)	2.34
Time of Max HGL Occurrence (days hh:mm)	0 12:13
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	308.21
Peak Lateral Inflow (cfs)	203.46
Peak Outflow (cfs)	308.20
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.81
Max HGL Depth Attained (ft)	0.81
Average HGL Elevation Attained (ft)	734.05
Average HGL Depth Attained (ft)	0.05
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	942.85
Peak Lateral Inflow (cfs)	302.65
Peak Outflow (cfs)	942.40
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	664.52
Max HGL Depth Attained (ft)	4.02
Average HGL Elevation Attained (ft)	660.68
Average HGL Depth Attained (ft)	0.18
Time of Max HGL Occurrence (days hh:mm)	0 12:23
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	630.54
Peak Lateral Inflow (cfs)	71.94
Peak Outflow (cfs)	594.19
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	725.36
Max HGL Depth Attained (ft)	5.36
Average HGL Elevation Attained (ft)	720.70
Average HGL Depth Attained (ft)	0.7
Time of Max HGL Occurrence (days hh:mm)	0 12:28
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	1581.15
Peak Lateral Inflow (cfs)	562.90
Peak Outflow (cfs)	1571.32
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	694.64
Max HGL Depth Attained (ft)	7.64
Average HGL Elevation Attained (ft)	688.28
Average HGL Depth Attained (ft)	1.28
Time of Max HGL Occurrence (days hh:mm)	0 12:28
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	1683.59
Peak Lateral Inflow (cfs)	145.87
Peak Outflow (cfs)	1693.23
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	692.58
Max HGL Depth Attained (ft)	7.58
Average HGL Elevation Attained (ft)	685.92
Average HGL Depth Attained (ft)	0.92
Time of Max HGL Occurrence (days hh:mm)	0 12:33
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	285.49
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	220.69
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	699.41
Max HGL Depth Attained (ft)	9.71
Average HGL Elevation Attained (ft)	690.19
Average HGL Depth Attained (ft)	0.49
Time of Max HGL Occurrence (days hh:mm)	0 12:34
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	102.38
Peak Lateral Inflow (cfs)	102.38
Peak Outflow (cfs)	102.32
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	699.03
Max HGL Depth Attained (ft)	4.83
Average HGL Elevation Attained (ft)	694.59
Average HGL Depth Attained (ft)	0.39
Time of Max HGL Occurrence (days hh:mm)	0 12:32
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-U

Output Summary Results

Peak Inflow (cfs)	542.15
Peak Lateral Inflow (cfs)	183.76
Peak Outflow (cfs)	33.02
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	728.60
Max HGL Depth Attained (ft)	26.6
Average HGL Elevation Attained (ft)	727.36
Average HGL Depth Attained (ft)	25.36
Time of Max HGL Occurrence (days hh:mm)	0 15:26
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	720.97
Peak Lateral Inflow (cfs)	100.47
Peak Outflow (cfs)	717.90
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	675.96
Max HGL Depth Attained (ft)	4.96
Average HGL Elevation Attained (ft)	672.08
Average HGL Depth Attained (ft)	1.08
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Z

Output Summary Results

Peak Inflow (cfs)	350.10
Peak Lateral Inflow (cfs)	350.10
Peak Outflow (cfs)	302.81
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	727.95
Max HGL Depth Attained (ft)	23.95
Average HGL Elevation Attained (ft)	727.15
Average HGL Depth Attained (ft)	23.15
Time of Max HGL Occurrence (days hh:mm)	0 12:19
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

PRE-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
100-YEAR

Project Description

File Name	26900.0002 - Existing Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	31
Nodes	41
Junctions	24
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	11
Links	36
Channels	29
Pipes	5
Pumps	0
Orifices	0
Weirs	2
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	7.67	3.52	1499.52	822.43	0 00:59:24
2	AA	37.07	484.00	61.00	7.67	3.20	118.44	128.18	0 00:20:13
3	B	179.81	484.00	64.00	7.67	3.52	632.93	598.86	0 00:26:13
4	BB	19.61	484.00	59.00	7.67	2.98	58.46	59.64	0 00:22:19
5	C	57.45	484.00	61.00	7.67	3.20	183.55	135.21	0 00:38:19
6	CC	17.45	484.00	63.00	7.67	3.41	59.52	72.18	0 00:15:50
7	D	90.50	484.00	64.00	7.67	3.52	318.56	248.72	0 00:35:42
8	DD	15.65	484.00	66.00	7.67	3.74	58.52	63.47	0 00:20:31
9	E	54.28	484.00	59.00	7.67	2.98	161.81	135.49	0 00:31:01
10	EE	110.95	484.00	64.00	7.67	3.52	390.54	370.28	0 00:26:09
11	F	40.46	484.00	61.00	7.67	3.20	129.27	100.37	0 00:35:24
12	G	52.30	484.00	57.00	7.67	2.77	144.87	117.58	0 00:31:55
13	H	51.81	484.00	59.00	7.67	2.98	154.45	90.65	0 00:52:08
14	I	39.69	484.00	61.00	7.67	3.20	126.81	96.87	0 00:36:10
15	J	120.14	484.00	57.00	7.67	2.77	332.79	185.88	0 00:54:39
16	K	171.51	484.00	57.00	7.67	2.77	475.08	356.09	0 00:35:52
17	L	92.78	484.00	57.00	7.67	2.77	257.00	223.10	0 00:28:40
18	M	55.95	484.00	57.00	7.67	2.77	154.98	132.05	0 00:29:38
19	N	43.16	484.00	58.00	7.67	2.88	124.09	102.32	0 00:31:30
20	O	76.92	484.00	58.00	7.67	2.88	221.15	144.14	0 00:44:34
21	P	72.62	484.00	60.00	7.67	3.09	224.25	128.78	0 00:54:10
22	Q	108.57	484.00	62.00	7.67	3.30	358.61	320.33	0 00:28:30
23	R	80.68	484.00	62.00	7.67	3.30	266.49	258.69	0 00:24:50
24	S	85.42	484.00	61.00	7.67	3.20	272.92	254.10	0 00:26:27
25	T	69.15	484.00	62.00	7.67	3.30	228.40	238.39	0 00:21:50
26	U	65.72	484.00	69.00	7.67	4.07	267.55	222.70	0 00:32:56
27	V	54.60	484.00	59.00	7.67	2.98	162.76	134.16	0 00:31:48
28	W	79.34	484.00	61.00	7.67	3.20	253.49	240.64	0 00:25:40
29	X	22.95	484.00	59.00	7.67	2.98	68.41	86.29	0 00:13:51
30	Y	35.31	484.00	62.00	7.67	3.30	116.63	124.94	0 00:20:38
31	Z	109.30	484.00	60.00	7.67	3.09	337.52	318.23	0 00:25:44

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	821.60	721.13	0.00	78.87	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	2396.15	690.76	0.00	109.24	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	134.01	769.60	0.00	37.99	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	678.00	800.00	1.00	2246.79	690.57	0.00	109.43	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	143.56	717.29	0.00	82.71	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	130.56	726.05	0.00	73.95	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	239.03	718.73	0.00	81.27	0 00:00	0.00	0.00
8	Jun-11	Junction	744.00	800.00	744.00	800.00	1.00	253.63	745.70	0.00	54.30	0 00:00	0.00	0.00
9	Jun-14	Junction	762.00	800.00	762.00	800.00	1.00	100.26	763.00	0.00	37.00	0 00:00	0.00	0.00
10	Jun-17	Junction	741.00	800.00	741.00	800.00	1.00	214.86	744.27	0.00	55.73	0 00:00	0.00	0.00
11	Jun-18	Junction	734.00	800.00	734.00	800.00	1.00	474.01	736.44	0.00	63.56	0 00:00	0.00	0.00
12	Jun-19	Junction	699.00	800.00	699.00	800.00	1.00	132.03	701.83	0.00	98.17	0 00:00	0.00	0.00
13	Jun-20	Junction	692.00	800.00	692.00	800.00	1.00	450.95	695.33	0.00	104.67	0 00:00	0.00	0.00
14	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	297.58	693.42	0.00	106.58	0 00:00	0.00	0.00
15	Jun-22	Junction	666.00	800.00	666.00	800.00	1.00	1018.53	671.18	0.00	128.82	0 00:00	0.00	0.00
16	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	981.47	675.61	0.00	124.39	0 00:00	0.00	0.00
17	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	229.65	710.82	0.00	89.18	0 00:00	0.00	0.00
18	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	509.74	732.48	0.00	67.52	0 00:00	0.00	0.00
19	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	2041.08	684.08	0.00	115.92	0 00:00	0.00	0.00
20	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	234.74	689.24	0.00	110.76	0 00:00	0.00	0.00
21	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	127.66	691.90	0.00	108.10	0 00:00	0.00	0.00
22	Jun-31	Junction	702.00	800.00	702.00	800.00	1.00	72.62	704.18	0.00	123.32	0 00:00	0.00	0.00
23	Jun-32	Junction	704.00	800.00	704.00	800.00	1.00	400.51	707.70	0.00	118.80	0 00:00	0.00	0.00
24	Jun-33	Junction	685.70	691.70	685.70	691.70	1.00	1883.04	693.66	0.00	34.02	0 00:00	0.00	0.00
25	Out-01	Outfall	675.80					2041.07	683.08					
26	Out-02	Outfall	685.00					234.74	687.64					
27	Out-03	Outfall	688.00					127.66	690.08					
28	Out-04	Outfall	659.00					1217.47	660.63					
29	Out-05	Outfall	720.00					320.03	720.00					
30	Out-06	Outfall	695.00					255.38	695.00					
31	Jun-30	Storage Node	656.20	800.00	656.20		1000.00	1217.60	660.72				0.00	0.00
32	Stor-D	Storage Node	734.00	800.00	734.00		233730.00	377.77	734.92				0.00	0.00
33	Stor-EE	Storage Node	660.50	800.00	660.50		1073922.00	1255.64	666.20				0.00	0.00
34	Stor-G	Storage Node	720.00	800.00	720.00		1000.00	777.30	725.73				0.00	0.00
35	Stor-I	Storage Node	687.00	800.00	687.00		936779.00	1892.73	695.02				0.00	0.00
36	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	2059.73	692.85				0.00	0.00
37	Stor-NO	Storage Node	689.70	800.00	689.70		91514.00	366.06	700.67				0.00	0.00
38	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	127.83	700.20				0.00	0.00
39	Stor-U	Storage Node	702.00	800.00	724.00		441052.00	669.74	728.67				0.00	0.00
40	Stor-Y	Storage Node	671.00	800.00	671.50		418671.00	957.72	676.30				0.00	0.00
41	Stor-Z	Storage Node	704.00	800.00	726.00		380783.00	432.60	728.04				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	2041.08	1291.66	1.58	16.70	7.64	0.95	0.00	> CAPACITY
2	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	234.74	209.17	1.12	17.67	3.32	0.83	0.00	> CAPACITY
3	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	1217.60	1769.96	0.69	12.18	4.76	0.95	0.00	Calculated
4	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	127.66	186.93	0.68	12.86	2.95	0.74	0.00	Calculated
5	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	72.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
6	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	487.080	0.0320	132.67	251078.70	0.00	6.35	2.44	0.06	0.00	
7	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	818.97	62083.71	0.01	8.36	5.08	0.25	0.00	
8	Link-04	Channel	Stor-I	Jun-33	784.40	687.00	685.70	0.1700	503.760	0.0320	1883.04	167513.15	0.01	2.85	7.99	0.19	0.00	
9	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	2095.32	471728.19	0.00	5.98	10.80	0.22	0.00	
10	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	129.75	160489.81	0.00	7.02	2.92	0.08	0.00	
11	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	142.89	228402.42	0.00	6.43	3.42	0.10	0.00	
12	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	942.64	320223.33	0.00	7.43	4.70	0.11	0.00	
13	Link-13	Channel	Jun-32	Jun-20	750.00	704.00	692.00	1.6000	426.240	0.0320	400.38	164115.48	0.00	9.32	3.49	0.10	0.00	
14	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	237.32	202679.20	0.00	7.39	3.07	0.12	0.00	
15	Link-15	Channel	Jun-11	Jun-18	840.00	744.00	734.00	1.1900	417.600	0.0320	250.80	150028.81	0.00	3.75	2.06	0.06	0.00	
16	Link-16	Channel	Jun-14	Jun-17	888.00	762.00	741.00	2.3600	289.560	0.0320	99.12	149421.95	0.00	50.00	2.13	0.09	0.00	
17	Link-18	Channel	Jun-31	Jun-19	100.00	702.00	699.00	3.0000	451.200	0.0320	72.62	340966.88	0.00	6.50	2.31	0.06	0.00	
18	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	2109.48	603845.15	0.00	4.61	8.20	0.14	0.00	
19	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	697.11	324200.23	0.00	6.87	5.53	0.15	0.00	
20	Link-23	Channel	Jun-17	Stor-G	1130.00	741.00	725.00	1.4200	357.960	0.0320	196.73	160979.09	0.00	7.14	3.20	0.11	0.00	
21	Link-24	Channel	Jun-18	Stor-U	960.00	734.00	726.00	0.8300	454.560	0.0320	451.55	352791.65	0.00	50.00	2.24	0.06	0.00	
22	Link-25	Channel	Jun-19	Stor-Y	893.00	699.00	677.00	2.4600	451.200	0.0320	131.40	308984.85	0.00	7.73	2.83	0.08	0.00	
23	Link-26	Channel	Jun-20	Stor-Y	690.00	692.00	674.00	2.6100	628.800	0.0320	447.96	554637.02	0.00	8.69	3.32	0.06	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	291.96	281792.12	0.00	6.88	3.42	0.08	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.00	664.00	0.3400	635.160	0.0320	963.72	287008.10	0.00	4.18	4.48	0.08	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.00	0.7200	607.200	0.0320	974.36	436979.68	0.00	5.27	4.86	0.10	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	227.72	346337.45	0.00	5.25	3.09	0.07	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	377.73	869869.15	0.00	4.19	1.19	0.03	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	518.18	512575.31	0.00	4.38	1.53	0.04	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	2041.07	117717.43	0.02	5.99	7.27	0.20	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.00	1.6000	352.800	0.0320	234.74	180737.83	0.00	5.68	2.64	0.09	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	127.66	233235.72	0.00	5.47	1.99	0.05	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.00	1.2000	240.840	0.0320	1217.47	294642.06	0.00	1.51	3.02	0.15	0.00	
34	Link-41	Channel	Jun-33	Stor-J	427.59	685.70	685.00	0.1600	503.760	0.0320	1875.55	166487.36	0.01	3.98	7.90	0.19	0.00	
35	Weir-01	Weir	Stor-U	Jun-31		702.00	702.00				72.62							
36	Weir-02	Weir	Stor-Z	Jun-32		704.00	704.00				400.51							

Storage Nodes

Storage Node : Jun-30

Output Summary Results

Peak Inflow (cfs)	1217.60
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	1217.47
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	660.72
Max HGL Depth Attained (ft)	4.52
Average HGL Elevation Attained (ft)	658.58
Average HGL Depth Attained (ft)	2.38
Time of Max HGL Occurrence (days hh:mm)	0 12:24
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	377.77
Peak Lateral Inflow (cfs)	248.47
Peak Outflow (cfs)	377.73
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.92
Max HGL Depth Attained (ft)	0.92
Average HGL Elevation Attained (ft)	734.06
Average HGL Depth Attained (ft)	0.06
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	1255.64
Peak Lateral Inflow (cfs)	368.08
Peak Outflow (cfs)	1217.60
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	666.20
Max HGL Depth Attained (ft)	5.7
Average HGL Elevation Attained (ft)	660.72
Average HGL Depth Attained (ft)	0.22
Time of Max HGL Occurrence (days hh:mm)	0 12:24
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	777.30
Peak Lateral Inflow (cfs)	90.51
Peak Outflow (cfs)	697.11
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	725.73
Max HGL Depth Attained (ft)	5.73
Average HGL Elevation Attained (ft)	720.75
Average HGL Depth Attained (ft)	0.75
Time of Max HGL Occurrence (days hh:mm)	0 12:31
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	1892.73
Peak Lateral Inflow (cfs)	687.25
Peak Outflow (cfs)	1883.04
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	695.02
Max HGL Depth Attained (ft)	8.02
Average HGL Elevation Attained (ft)	688.38
Average HGL Depth Attained (ft)	1.38
Time of Max HGL Occurrence (days hh:mm)	0 12:28
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	2059.73
Peak Lateral Inflow (cfs)	184.79
Peak Outflow (cfs)	2109.48
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	692.85
Max HGL Depth Attained (ft)	7.85
Average HGL Elevation Attained (ft)	686.01
Average HGL Depth Attained (ft)	1.01
Time of Max HGL Occurrence (days hh:mm)	0 12:29
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	366.06
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	234.74
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	700.67
Max HGL Depth Attained (ft)	10.97
Average HGL Elevation Attained (ft)	690.29
Average HGL Depth Attained (ft)	0.59
Time of Max HGL Occurrence (days hh:mm)	0 12:38
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	127.83
Peak Lateral Inflow (cfs)	127.83
Peak Outflow (cfs)	127.66
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	700.20
Max HGL Depth Attained (ft)	6
Average HGL Elevation Attained (ft)	694.63
Average HGL Depth Attained (ft)	0.43
Time of Max HGL Occurrence (days hh:mm)	0 12:32
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-U

Output Summary Results

Peak Inflow (cfs)	669.74
Peak Lateral Inflow (cfs)	219.32
Peak Outflow (cfs)	72.62
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	728.67
Max HGL Depth Attained (ft)	26.67
Average HGL Elevation Attained (ft)	727.39
Average HGL Depth Attained (ft)	25.39
Time of Max HGL Occurrence (days hh:mm)	0 13:36
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	957.72
Peak Lateral Inflow (cfs)	123.58
Peak Outflow (cfs)	942.64
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	676.30
Max HGL Depth Attained (ft)	5.3
Average HGL Elevation Attained (ft)	672.14
Average HGL Depth Attained (ft)	1.14
Time of Max HGL Occurrence (days hh:mm)	0 12:19
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Z

Output Summary Results

Peak Inflow (cfs)	432.60
Peak Lateral Inflow (cfs)	432.60
Peak Outflow (cfs)	400.51
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	728.04
Max HGL Depth Attained (ft)	24.04
Average HGL Elevation Attained (ft)	727.16
Average HGL Depth Attained (ft)	23.16
Time of Max HGL Occurrence (days hh:mm)	0 12:17
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

THOMAS & HUTTON

STORMWATER MASTER PLAN

RIVIAN EV MANUFACTURING FACILITY

WALTON COUNTY & MORGAN COUNTY, GEORGIA

APPENDIX B

SSA POST DEVELOPMENT MODEL INPUT AND OUTPUT RESULTS

thomasandhutton.com

POST-DEVELOPED CONDITIONS
SSA MODEL INPUT

Project Description

File Name	26900.0002 - Proposed Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	27
Nodes	44
Junctions	22
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	16
Links	43
Channels	22
Pipes	13
Pumps	0
Orifices	0
Weirs	8
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Hydrology

Subbasin : A

Input Data

Area (ac) 426.00
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	426.00	-	64.00
Composite Area & Weighted CN	426.00		64.00

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft²)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

User-Defined TOC override (minutes): 59.40

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.57
Peak Runoff (cfs) 98.92
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:59:24

Subbasin : B

Input Data

Area (ac) 179.82
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	179.82	-	64.00
Composite Area & Weighted CN	179.82		64.00

Time of Concentration

User-Defined TOC override (minutes): 26.22

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.57
Peak Runoff (cfs) 73.99
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:26:13

Subbasin : C

Input Data

Area (ac) 57.45
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	57.45	-	61.00
Composite Area & Weighted CN	57.45		61.00

Time of Concentration

User-Defined TOC override (minutes): 38.32

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.45
Peak Runoff (cfs) 12.67
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:38:19

Subbasin : CC

Input Data

Area (ac) 10.65
Peak Rate Factor 484.00
Weighted Curve Number 63.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	10.65	-	63.00
Composite Area & Weighted CN	10.65		63.00

Time of Concentration

User-Defined TOC override (minutes): 15.84

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.53
Peak Runoff (cfs) 5.35
Weighted Curve Number 63.00
Time of Concentration (days hh:mm:ss) 0 00:15:50

Subbasin : D

Input Data

Area (ac) 48.20
Peak Rate Factor 484.00
Weighted Curve Number 65.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	48.20	-	65.00
Composite Area & Weighted CN	48.20		65.00

Time of Concentration

User-Defined TOC override (minutes): 35.7

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.61
Peak Runoff (cfs) 17.85
Weighted Curve Number 65.00
Time of Concentration (days hh:mm:ss) 0 00:35:42

Subbasin : DD

Input Data

Area (ac) 13.80
Peak Rate Factor 484.00
Weighted Curve Number 66.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	13.80	-	66.00
Composite Area & Weighted CN	13.80		66.00

Time of Concentration

User-Defined TOC override (minutes): 20.52

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.65
Peak Runoff (cfs) 8.16
Weighted Curve Number 66.00
Time of Concentration (days hh:mm:ss) 0 00:20:31

Subbasin : E

Input Data

Area (ac) 23.76
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	23.76	-	59.00
Composite Area & Weighted CN	23.76		59.00

Time of Concentration

User-Defined TOC override (minutes): 31.02

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.38
Peak Runoff (cfs) 4.53
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:31:01

Subbasin : EE

Input Data

Area (ac) 82.20
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	82.20	-	64.00
Composite Area & Weighted CN	82.20		64.00

Time of Concentration

User-Defined TOC override (minutes): 26.15

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.57
Peak Runoff (cfs) 33.87
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:26:09

Subbasin : H

Input Data

Area (ac) 50.44
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	50.44	-	59.00
Composite Area & Weighted CN	50.44		59.00

Time of Concentration

User-Defined TOC override (minutes): 46.44

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.38
Peak Runoff (cfs) 7.39
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:46:26

Subbasin : I

Input Data

Area (ac) 28.52
Peak Rate Factor 484.00
Weighted Curve Number 62.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	28.52	-	62.00
Composite Area & Weighted CN	28.52		62.00

Time of Concentration

User-Defined TOC override (minutes): 35.16

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.49
Peak Runoff (cfs) 7.59
Weighted Curve Number 62.00
Time of Concentration (days hh:mm:ss) 0 00:35:10

Subbasin : J

Input Data

Area (ac) 111.18
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	111.18	-	57.00
Composite Area & Weighted CN	111.18		57.00

Time of Concentration

User-Defined TOC override (minutes): 54.65

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.32
Peak Runoff (cfs) 10.68
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:54:39

Subbasin : K

Input Data

Area (ac) 171.51
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	171.51	-	57.00
Composite Area & Weighted CN	171.51		57.00

Time of Concentration

User-Defined TOC override (minutes): 35.87

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.32
Peak Runoff (cfs) 21.25
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:35:52

Subbasin : L

Input Data

Area (ac) 92.78
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	92.78	-	57.00
Composite Area & Weighted CN	92.78		57.00

Time of Concentration

User-Defined TOC override (minutes): 28.67

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.32
Peak Runoff (cfs) 13.21
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:28:40

Subbasin : M

Input Data

Area (ac) 29.43
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	29.43	-	59.00
Composite Area & Weighted CN	29.43		59.00

Time of Concentration

User-Defined TOC override (minutes): 22.32

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.38
Peak Runoff (cfs) 6.99
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:22:19

Subbasin : N

Input Data

Area (ac) 43.16
Peak Rate Factor 484.00
Weighted Curve Number 58.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	43.16	-	58.00
Composite Area & Weighted CN	43.16		58.00

Time of Concentration

User-Defined TOC override (minutes): 31.50

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.35
Peak Runoff (cfs) 6.92
Weighted Curve Number 58.00
Time of Concentration (days hh:mm:ss) 0 00:31:30

Subbasin : O

Input Data

Area (ac) 48.38
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	48.38	-	59.00
Composite Area & Weighted CN	48.38		59.00

Time of Concentration

User-Defined TOC override (minutes): 39.72

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.38
Peak Runoff (cfs) 7.84
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:39:43

Subbasin : P

Input Data

Area (ac) 14.69
Peak Rate Factor 484.00
Weighted Curve Number 60.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	14.69	-	60.00
Composite Area & Weighted CN	14.69		60.00

Time of Concentration

User-Defined TOC override (minutes): 21.42

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.42
Peak Runoff (cfs) 4.18
Weighted Curve Number 60.00
Time of Concentration (days hh:mm:ss) 0 00:21:25

Subbasin : Post-1

Input Data

Area (ac) 118.69
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	118.69	-	90.00
Composite Area & Weighted CN	118.69		90.00

Time of Concentration

User-Defined TOC override (minutes): 28.54

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 2.19
Peak Runoff (cfs) 235.07
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:28:32

Subbasin : Post-2

Input Data

Area (ac) 79.81
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	79.81	-	90.00
Composite Area & Weighted CN	79.81		90.00

Time of Concentration

User-Defined TOC override (minutes): 20.88

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 2.19
Peak Runoff (cfs) 186.30
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:20:53

Subbasin : Post-3

Input Data

Area (ac) 54.10
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	54.10	-	90.00
Composite Area & Weighted CN	54.10		90.00

Time of Concentration

User-Defined TOC override (minutes): 10.50

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 2.19
Peak Runoff (cfs) 159.55
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:10:30

Subbasin : Post-4A

Input Data

Area (ac) 461.12
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	461.12	-	90.00
Composite Area & Weighted CN	461.12		90.00

Time of Concentration

User-Defined TOC override (minutes): 72.24

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 2.19
Peak Runoff (cfs) 488.88
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 01:12:14

Subbasin : Post-4B

Input Data

Area (ac) 50.66
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	50.66	-	90.00
Composite Area & Weighted CN	50.66		90.00

Time of Concentration

User-Defined TOC override (minutes): 10.09

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 2.19
Peak Runoff (cfs) 150.70
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:10:05

Subbasin : Post-5

Input Data

Area (ac) 123.17
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	123.17	-	90.00
Composite Area & Weighted CN	123.17		90.00

Time of Concentration

User-Defined TOC override (minutes): 20

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 2.19
Peak Runoff (cfs) 293.47
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:20:00

Subbasin : Post-6

Input Data

Area (ac) 80.67
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	80.67	-	90.00
Composite Area & Weighted CN	80.67		90.00

Time of Concentration

User-Defined TOC override (minutes): 18

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 2.19
Peak Runoff (cfs) 201.02
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:18:00

Subbasin : W

Input Data

Area (ac) 79.34
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	79.34	-	61.00
Composite Area & Weighted CN	79.34		61.00

Time of Concentration

User-Defined TOC override (minutes): 25.68

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.45
Peak Runoff (cfs) 23.02
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:25:41

Subbasin : X

Input Data

Area (ac) 22.96
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	22.96	-	59.00
Composite Area & Weighted CN	22.96		59.00

Time of Concentration

User-Defined TOC override (minutes): 13.86

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.38
Peak Runoff (cfs) 7.32
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:13:52

Subbasin : Y

Input Data

Area (ac) 34.60
Peak Rate Factor 484.00
Weighted Curve Number 62.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	34.60	-	62.00
Composite Area & Weighted CN	34.60		62.00

Time of Concentration

User-Defined TOC override (minutes): 20.63

Subbasin Runoff Results

Total Rainfall (in) 3.22
Total Runoff (in) 0.49
Peak Runoff (cfs) 13.22
Weighted Curve Number 62.00
Time of Concentration (days hh:mm:ss) 0 00:20:38

Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft²)	Minimum Pipe Cover (in)
1	Jun-01	716.00	800.00	84.00	716.00	0.00	800.00	0.00	1.00	0.00
2	Jun-02	682.00	800.00	118.00	682.00	0.00	800.00	0.00	1.00	0.00
3	Jun-03	767.00	800.00	33.00	767.00	0.00	800.00	0.00	1.00	0.00
4	Jun-04	677.70	800.00	122.30	677.70	0.00	800.00	0.00	1.00	0.00
5	Jun-07	715.00	800.00	85.00	715.00	0.00	800.00	0.00	1.00	0.00
6	Jun-08	723.00	800.00	77.00	723.00	0.00	800.00	0.00	1.00	0.00
7	Jun-10	716.00	800.00	84.00	716.00	0.00	800.00	0.00	1.00	0.00
8	Jun-21	690.00	800.00	110.00	690.00	0.00	800.00	0.00	1.00	0.00
9	Jun-22	666.10	800.00	133.90	666.10	0.00	800.00	0.00	1.00	0.00
10	Jun-23	671.00	800.00	129.00	671.00	0.00	800.00	0.00	1.00	0.00
11	Jun-24	708.00	800.00	92.00	708.00	0.00	800.00	0.00	1.00	0.00
12	Jun-26	731.00	800.00	69.00	731.00	0.00	800.00	0.00	1.00	0.00
13	Jun-27	676.80	800.00	123.20	676.80	0.00	800.00	0.00	1.00	0.00
14	Jun-28	686.60	800.00	113.40	686.60	0.00	800.00	0.00	1.00	0.00
15	Jun-29	690.00	800.00	110.00	690.00	0.00	800.00	0.00	1.00	0.00
16	Jun-30	656.20	800.00	143.80	656.20	0.00	800.00	0.00	1.00	0.00
17	Jun-36	738.00	800.00	62.00	738.00	0.00	999.00	199.00	1.00	0.00
18	Jun-37	744.00	800.00	56.00	744.00	0.00	800.00	0.00	1.00	0.00
19	Jun-38	731.00	800.00	69.00	731.00	0.00	999.00	199.00	1.00	0.00
20	Jun-43	739.00	800.00	61.00	739.00	0.00	999.00	199.00	1.00	0.00
21	Jun-44	745.00	800.00	55.00	745.00	0.00	999.00	199.00	1.00	0.00
22	Jun-45	672.00	800.00	128.00	672.00	0.00	999.00	199.00	1.00	0.00

Channel Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Shape	Height (ft)	Width (ft)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow (cfs)	Flap Gate
1	Link-01	655.00	767.00	0.00	759.00	25.00	8.00	1.2200	User-Defined	20.040	508.630	0.0320	0.0000	0.0000	0.0000	0.00	No
2	Link-03	575.00	716.00	0.00	711.00	24.00	5.00	0.8700	User-Defined	20.500	511.040	0.0320	0.0000	0.0000	0.0000	0.00	No
3	Link-04	1212.00	687.00	0.00	685.00	0.00	2.00	0.1700	User-Defined	41.980	1068.460	0.0320	0.0000	0.0000	0.0000	0.00	No
4	Link-05	660.00	682.00	0.00	677.70	0.00	4.30	0.6500	User-Defined	49.400	1166.130	0.0320	0.0000	0.0000	0.0000	0.00	No
5	Link-07	971.00	723.00	0.00	708.00	0.00	15.00	1.5400	User-Defined	35.280	562.960	0.0320	0.0000	0.0000	0.0000	0.00	No
6	Link-08	814.00	715.00	0.00	696.00	6.30	19.00	2.3300	User-Defined	35.190	651.230	0.0320	0.0000	0.0000	0.0000	0.00	No
7	Link-12	60.00	671.50	0.50	671.00	0.00	0.50	0.8300	User-Defined	41.880	713.740	0.0320	0.0000	0.0000	0.0000	0.00	No
8	Link-14	1021.00	716.00	0.00	690.00	0.00	26.00	2.5500	User-Defined	26.670	676.080	0.0320	0.0000	0.0000	0.0000	0.00	No
9	Link-20	1055.00	685.00	0.00	682.00	0.00	3.00	0.2800	User-Defined	59.580	1408.800	0.0320	0.0000	0.0000	0.0000	0.00	No
10	Link-22	1070.00	720.00	0.00	712.00	25.00	8.00	0.7500	User-Defined	36.040	1052.100	0.0320	0.0000	0.0000	0.0000	0.00	No
11	Link-27	910.00	690.00	0.00	676.00	5.00	14.00	1.5400	User-Defined	40.590	604.220	0.0320	0.0000	0.0000	0.0000	0.00	No
12	Link-28	590.00	666.10	0.00	664.00	3.50	2.10	0.3600	User-Defined	52.930	738.650	0.0320	0.0000	0.0000	0.0000	0.00	No
13	Link-29	695.00	671.00	0.00	666.10	0.00	4.90	0.7100	User-Defined	50.600	813.960	0.0320	0.0000	0.0000	0.0000	0.00	No
14	Link-30	946.00	708.00	0.00	697.00	7.30	11.00	1.1600	User-Defined	41.160	844.610	0.0320	0.0000	0.0000	0.0000	0.00	No
15	Link-33	100.00	734.00	0.00	731.00	0.00	3.00	3.0000	User-Defined	34.800	906.990	0.0320	0.0000	0.0000	0.0000	0.00	No
16	Link-34	672.00	731.00	0.00	724.00	4.00	7.00	1.0400	User-Defined	34.800	906.990	0.0320	0.0000	0.0000	0.0000	0.00	No
17	Link-35	100.00	676.80	0.00	675.80	0.00	1.00	1.0000	User-Defined	35.870	461.280	0.0320	0.0000	0.0000	0.0000	0.00	No
18	Link-36	100.00	686.60	0.00	685.60	0.00	1.00	1.0000	User-Defined	29.400	598.150	0.0320	0.0000	0.0000	0.0000	0.00	No
19	Link-37	100.00	690.00	0.00	688.00	0.00	2.00	2.0000	User-Defined	36.860	434.990	0.0320	0.0000	0.0000	0.0000	0.00	No
20	Link-38	100.00	656.20	0.00	655.20	0.00	1.00	1.0000	User-Defined	20.070	1070.560	0.0320	0.0000	0.0000	0.0000	0.00	No
21	Link-64	100.00	738.00	0.00	737.50	0.00	0.50	0.5000	Rectangular	10.000	60.000	0.0350	0.0000	0.0000	0.0000	0.00	No
22	Link-67	100.00	731.00	0.00	730.00	0.00	1.00	1.0000	Rectangular	10.000	60.000	0.0350	0.0000	0.0000	0.0000	0.00	No

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow (cfs)	Flap Gate	No. of Barrels
1	Link-02	50.00	738.00	-1.00	737.00	6.00	1.00	2.0000	Rectangular	48.000	72.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
2	Link-06	291.00	677.70	0.00	676.80	0.00	0.90	0.3100	Rectangular	96.000	96.000	0.0130	0.5000	0.5000	0.0000	0.00	No	2
3	Link-09	237.00	689.70	0.00	686.60	0.00	3.10	1.3100	Rectangular	48.000	48.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
4	Link-10	50.00	733.00	-6.00	732.00	45.00	1.00	2.0000	CIRCULAR	36.000	36.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
5	Link-11	327.00	660.50	0.00	656.20	0.00	4.30	1.3100	Rectangular	60.000	84.000	0.0130	0.5000	1.0000	0.0000	0.00	No	3
6	Link-19	248.00	694.20	0.00	690.00	0.00	4.20	1.6900	CIRCULAR	48.000	48.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
7	Link-39	193.00	669.80	9.30	668.50	12.30	1.30	0.6700	Rectangular	48.000	72.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
8	Link-40	620.00	668.00	-6.00	668.00	-6.00	0.00	0.0000	CIRCULAR	60.000	60.000	0.0130	0.5000	1.0000	0.0000	0.00	No	2
9	Link-41	400.00	733.00	-6.00	733.00	-6.00	0.00	0.0000	CIRCULAR	36.000	36.000	0.0130	0.0000	0.0000	0.0000	0.00	No	1
10	Link-61	50.00	744.00	-1.00	743.00	20.00	1.00	2.0000	CIRCULAR	36.000	36.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
11	Link-66	50.00	739.00	-5.00	738.00	0.00	1.00	2.0000	Rectangular	72.000	72.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
12	Link-70	50.00	732.00	0.00	731.00	0.00	1.00	2.0000	CIRCULAR	36.000	36.000	0.0130	0.5000	1.0000	0.0000	0.00	No	2
13	Link-74	50.00	672.00	0.00	671.00	4.90	1.00	2.0000	Rectangular	72.000	96.000	0.0150	0.5000	0.5000	0.0000	0.00	No	1

Storage Nodes

Storage Node : Pond-1

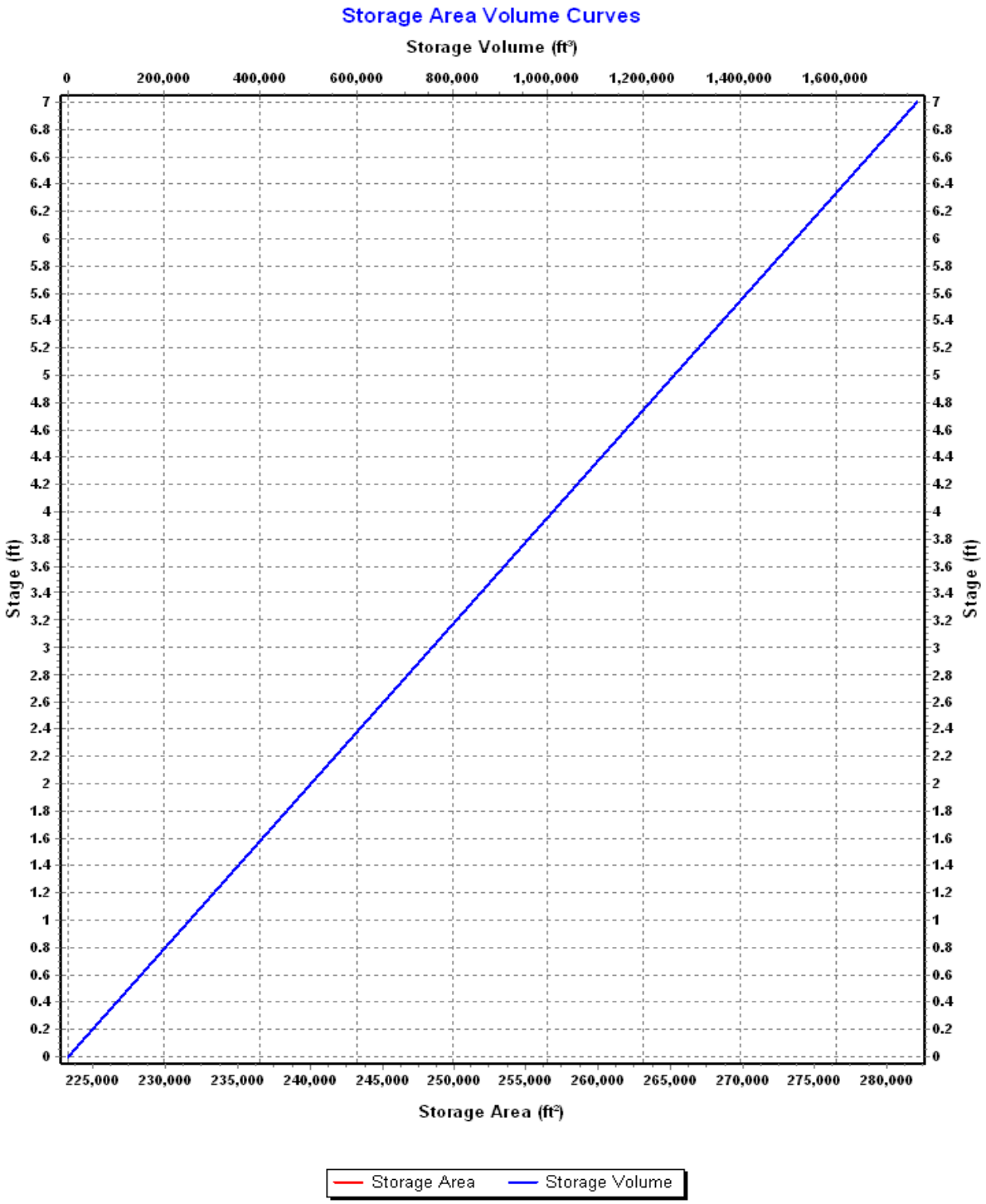
Input Data

Invert Elevation (ft) 739.00
Max (Rim) Elevation (ft) 746.00
Max (Rim) Offset (ft) 7.00
Initial Water Elevation (ft) 739.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 282063.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond1

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	223257	0.000
7	282063	1768620.00


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
225,000
230,000
235,000
240,000
245,000
250,000
255,000
260,000
265,000
270,000
275,000
280,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-1 (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-29	Rectangular	No	739.00	0.00	3.00	10.00	3.33
2	Weir-31	Rectangular	No	741.70	2.70	15.00	10.00	3.33

Storage Node : Pond-2A

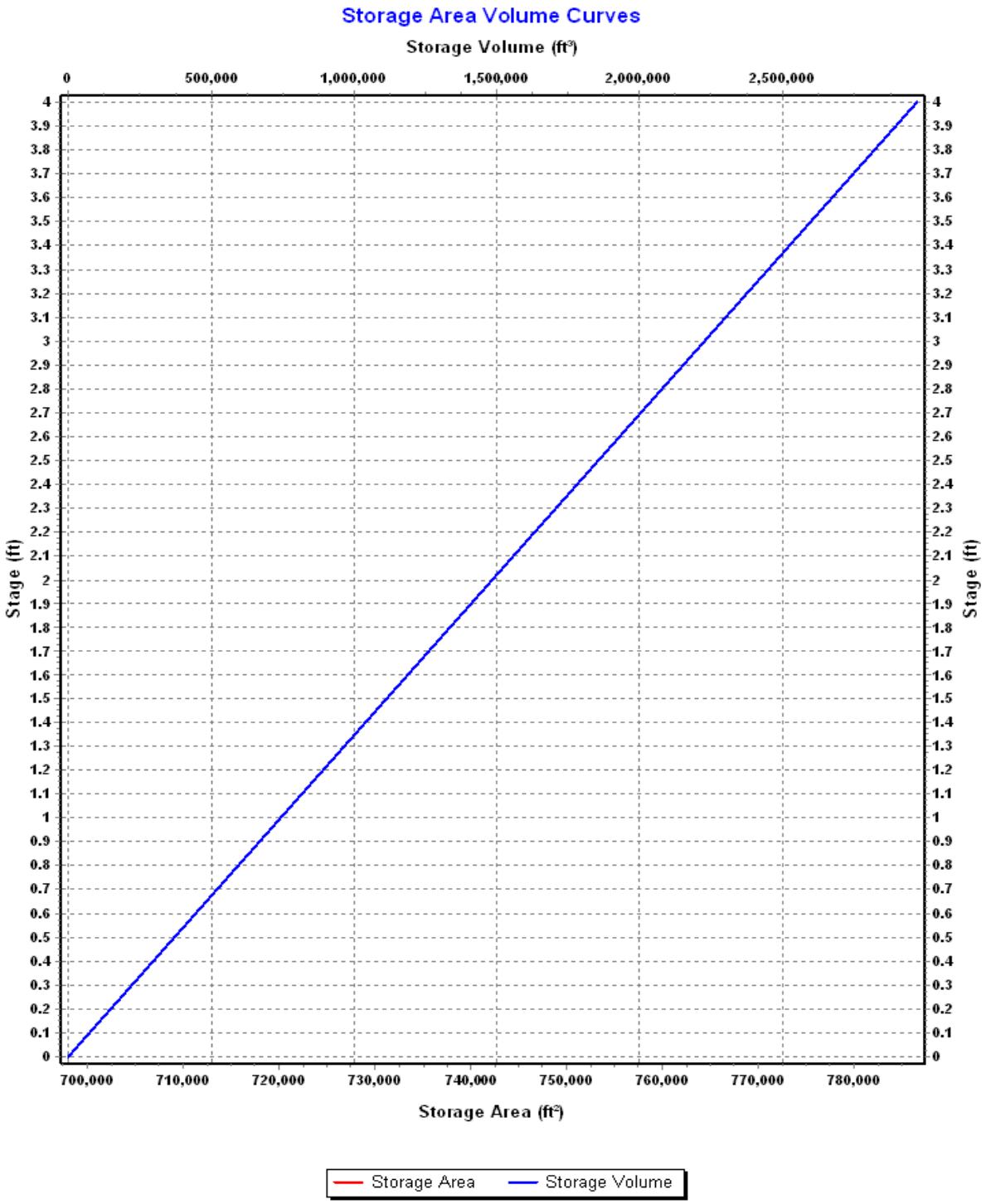
Input Data

Invert Elevation (ft) 739.00
Max (Rim) Elevation (ft) 743.00
Max (Rim) Offset (ft) 4.00
Initial Water Elevation (ft) 739.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 786496.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond2A

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	698027	0.000
4	786496	2969046.00


Storage Area Volume Curves
Storage Volume (ft³)
0
500,000
1,000,000
1,500,000
2,000,000
2,500,000
Stage (ft)
4
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
700,000
710,000
720,000
730,000
740,000
750,000
760,000
770,000
780,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-2A (continued)

Storage Node : Pond-2B

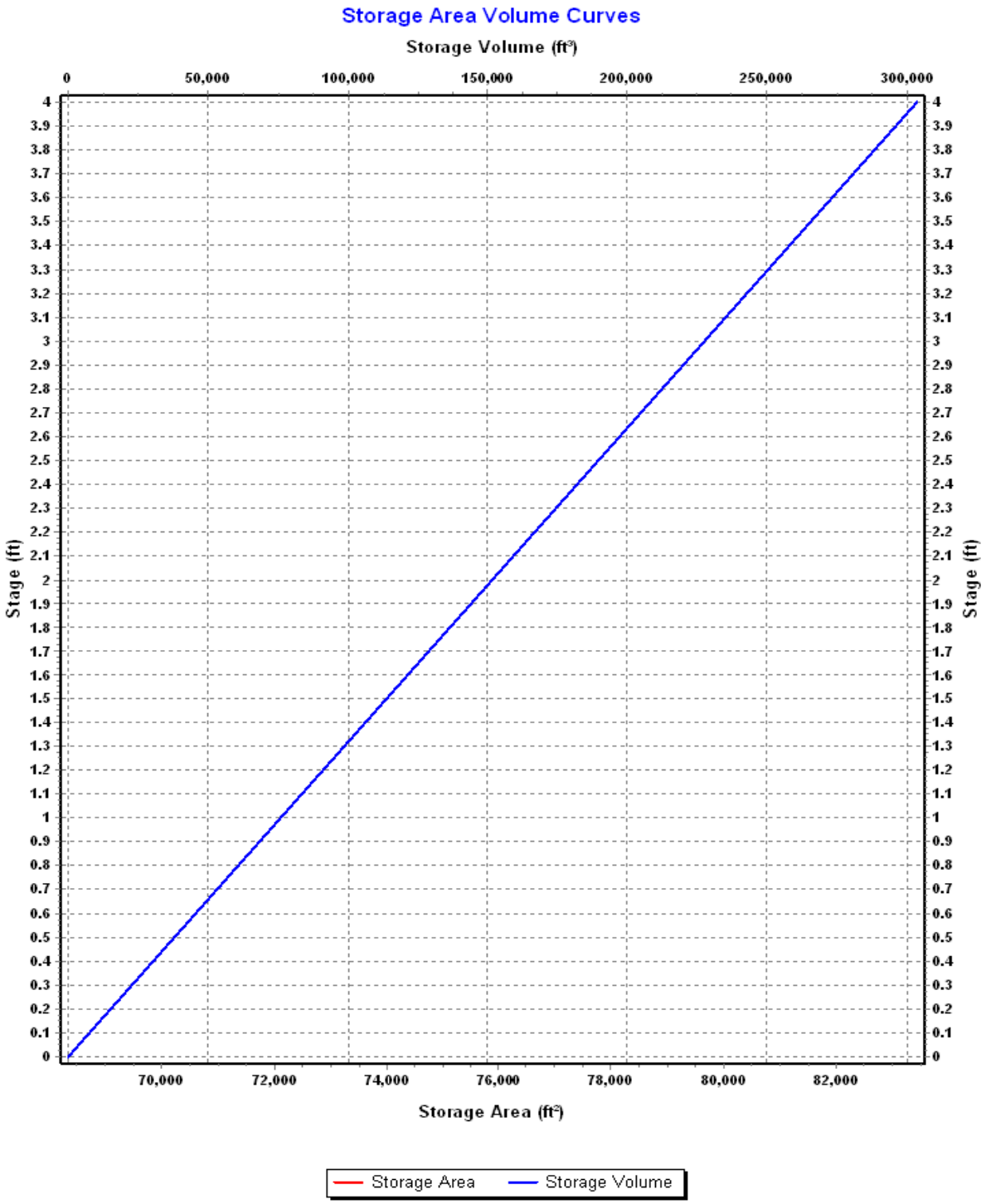
Input Data

Invert Elevation (ft) 739.00
Max (Rim) Elevation (ft) 743.00
Max (Rim) Offset (ft) 4.00
Initial Water Elevation (ft) 739.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 83441.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond2B

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	68338	0.000
4	83441	303558.00


Storage Area Volume Curves
Storage Volume (ft³)
0
50,000
100,000
150,000
200,000
250,000
300,000
Stage (ft)
4
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
70,000
72,000
74,000
76,000
78,000
80,000
82,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-2B (continued)

Storage Node : Pond-3

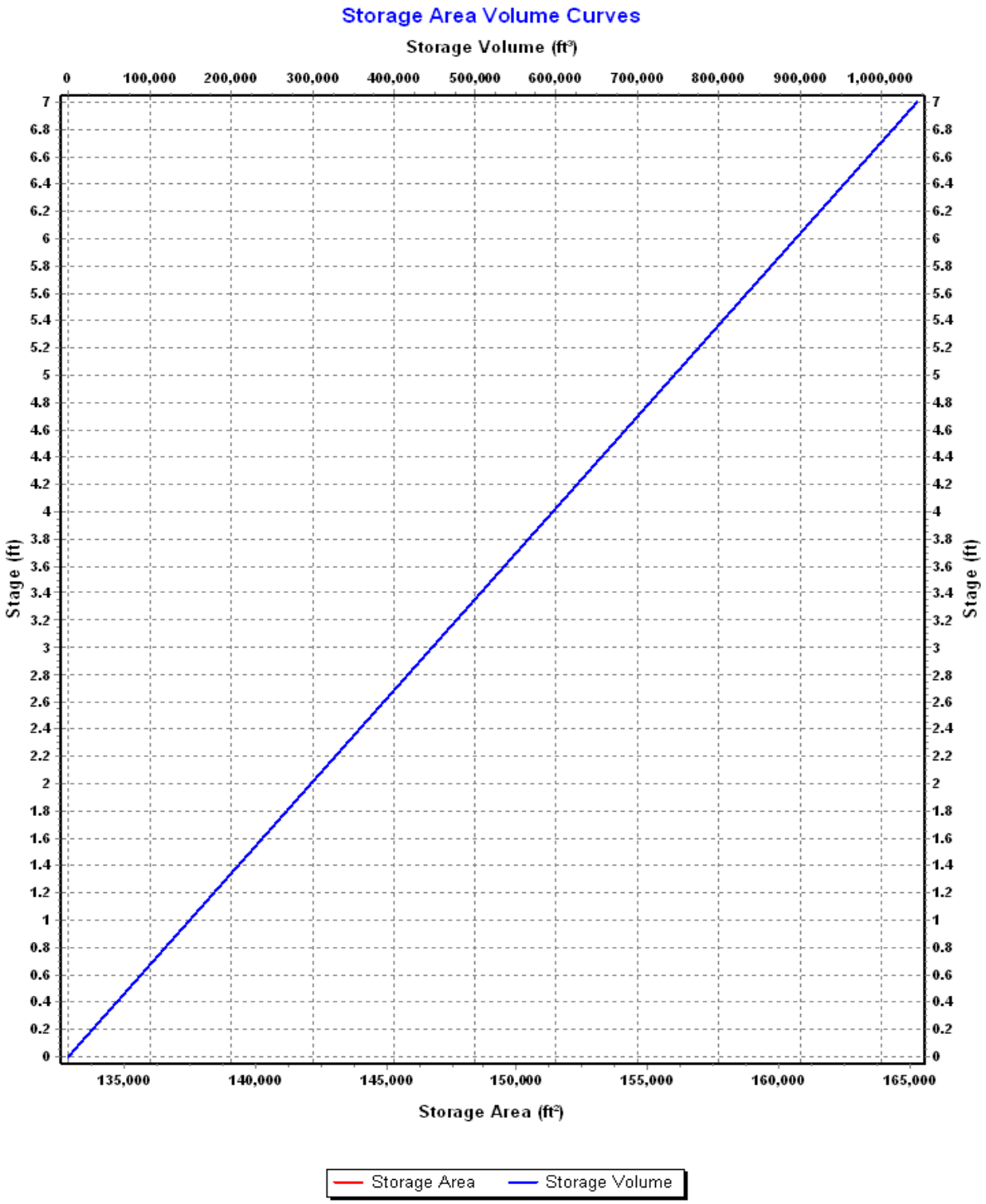
Input Data

Invert Elevation (ft) 745.00
Max (Rim) Elevation (ft) 752.00
Max (Rim) Offset (ft) 7.00
Initial Water Elevation (ft) 745.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 165275.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond3

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	132858	0.000
7	165275	1043465.50


Storage Area Volume Curves
Storage Volume (ft³)
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
1,000,000
Stage (ft)
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
135,000
140,000
145,000
150,000
155,000
160,000
165,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-3 (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-32	Rectangular	No	745.00	0.00	0.67	10.00	3.33
2	Weir-34	Rectangular	No	748.00	3.00	9.33	10.00	3.33

Storage Node : Pond-4A

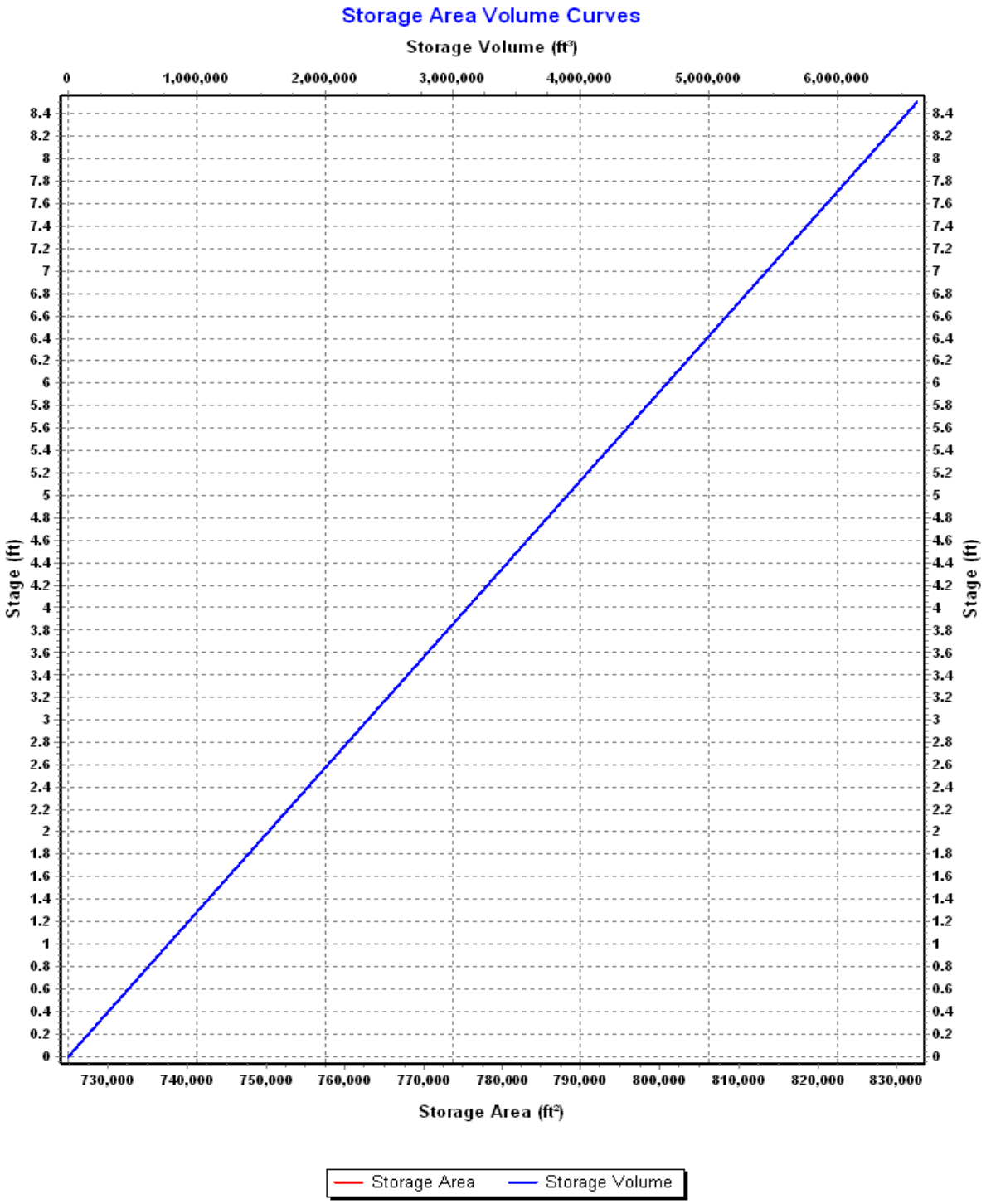
Input Data

Invert Elevation (ft) 674.00
Max (Rim) Elevation (ft) 682.50
Max (Rim) Offset (ft) 8.50
Initial Water Elevation (ft) 674.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 832543.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond4A

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	724961	0.000
8.5	832543	6619392.00


Storage Area Volume Curves
Storage Volume (ft³)
0
1,000,000
2,000,000
3,000,000
4,000,000
5,000,000
6,000,000
Stage (ft)
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
730,000
740,000
750,000
760,000
770,000
780,000
790,000
800,000
810,000
820,000
830,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-4A (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-39	Rectangular	No	674.00	0.00	7.00	999.00	3.33
2	Weir-40	Rectangular	No	677.25	3.25	13.00	999.00	3.33

Storage Node : Pond-4B

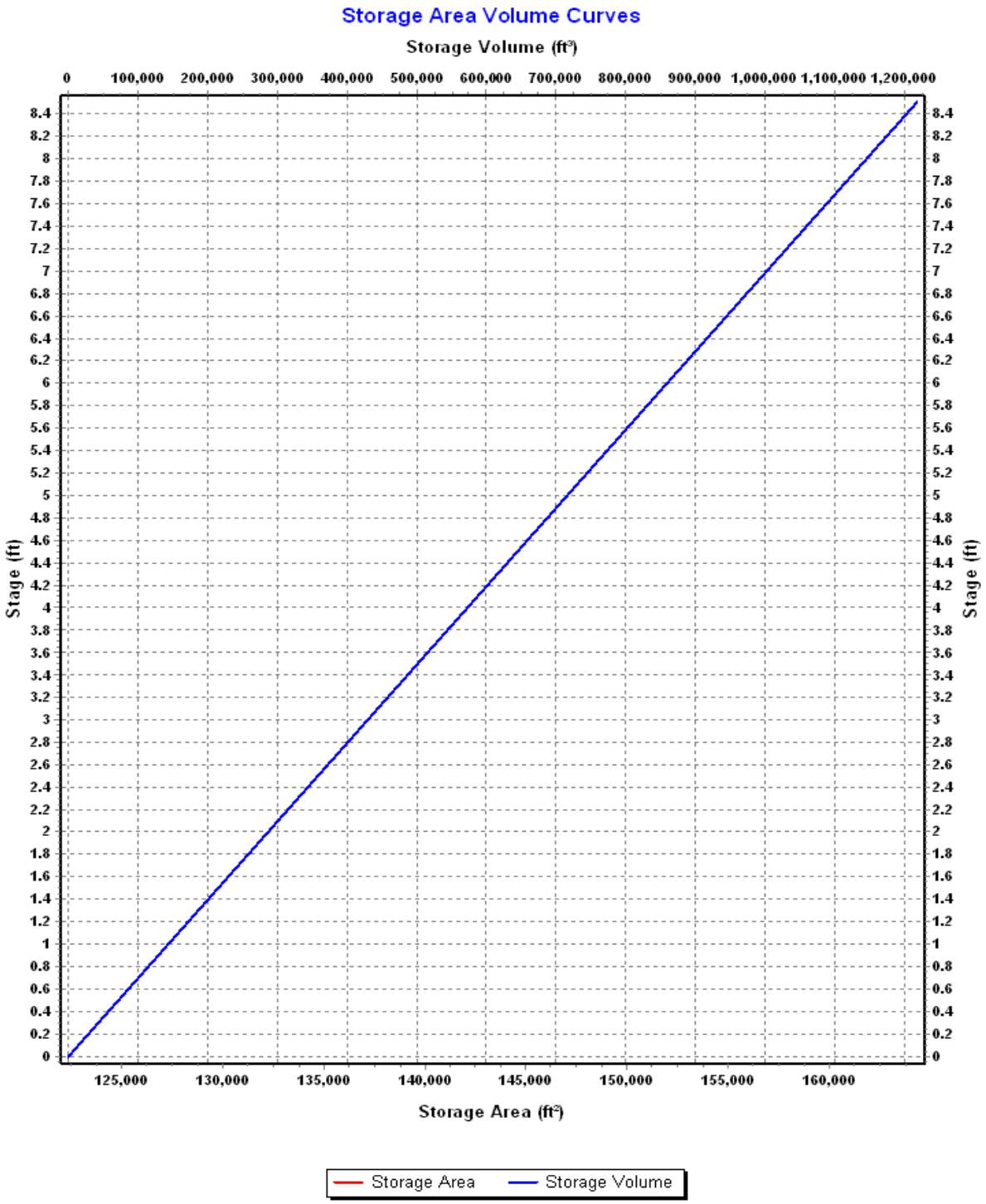
Input Data

Invert Elevation (ft) 674.00
Max (Rim) Elevation (ft) 682.50
Max (Rim) Offset (ft) 8.50
Initial Water Elevation (ft) 674.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 164301.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond4B

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	122357	0.000
8.5	164301	1218296.50


Storage Area Volume Curves
Storage Volume (ft³)
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
1,000,000
1,100,000
1,200,000
Stage (ft)
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
125,000
130,000
135,000
140,000
145,000
150,000
155,000
160,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-4B (continued)

Storage Node : Pond-5

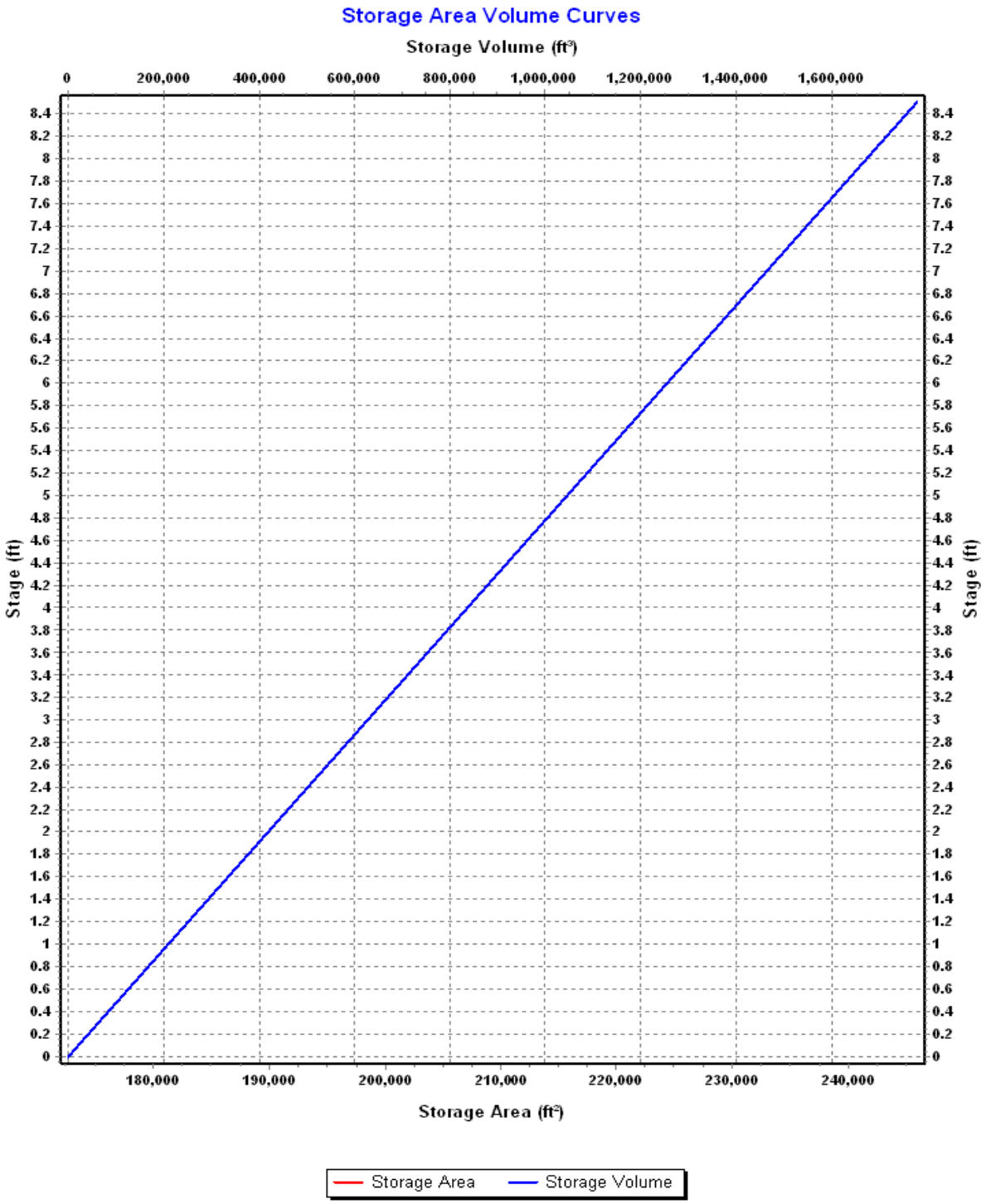
Input Data

Invert Elevation (ft) 744.00
Max (Rim) Elevation (ft) 752.50
Max (Rim) Offset (ft) 8.50
Initial Water Elevation (ft) 744.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 245841.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond5

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	172733	0.000
8.5	245841	1778939.50


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
180,000
190,000
200,000
210,000
220,000
230,000
240,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-5 (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-16	Rectangular	No	744.00	0.00	3.00	10.00	3.33
2	Weir-17	Rectangular	No	747.30	3.30	15.00	10.00	3.33

Storage Node : Pond-6

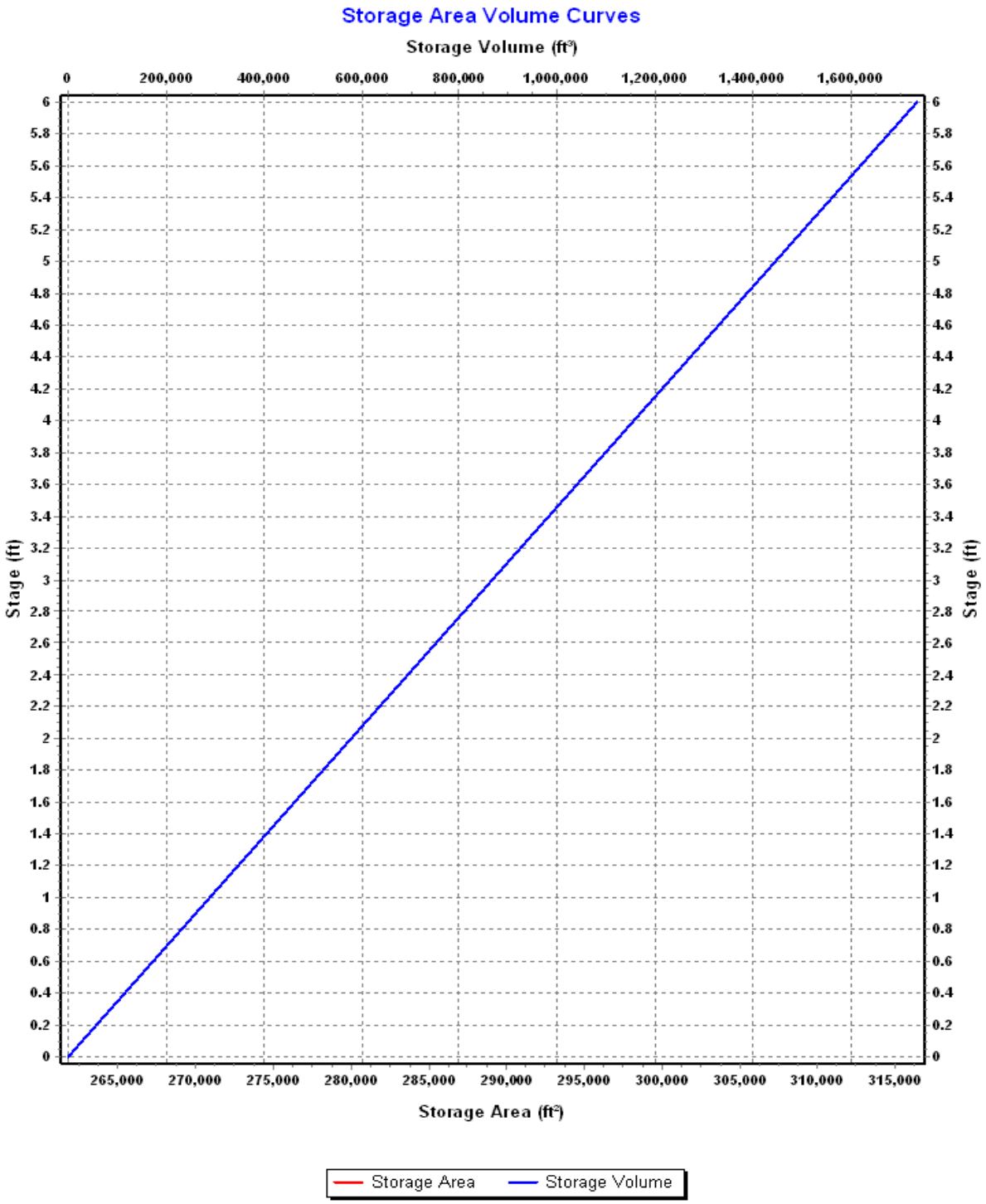
Input Data

Invert Elevation (ft) 732.00
Max (Rim) Elevation (ft) 738.00
Max (Rim) Offset (ft) 6.00
Initial Water Elevation (ft) 732.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 316369.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-PondT

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	261846	0.000
6	316369	1734645.00


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
265,000
270,000
275,000
280,000
285,000
290,000
295,000
300,000
305,000
310,000
315,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-6 (continued)

Storage Node : Stor-D

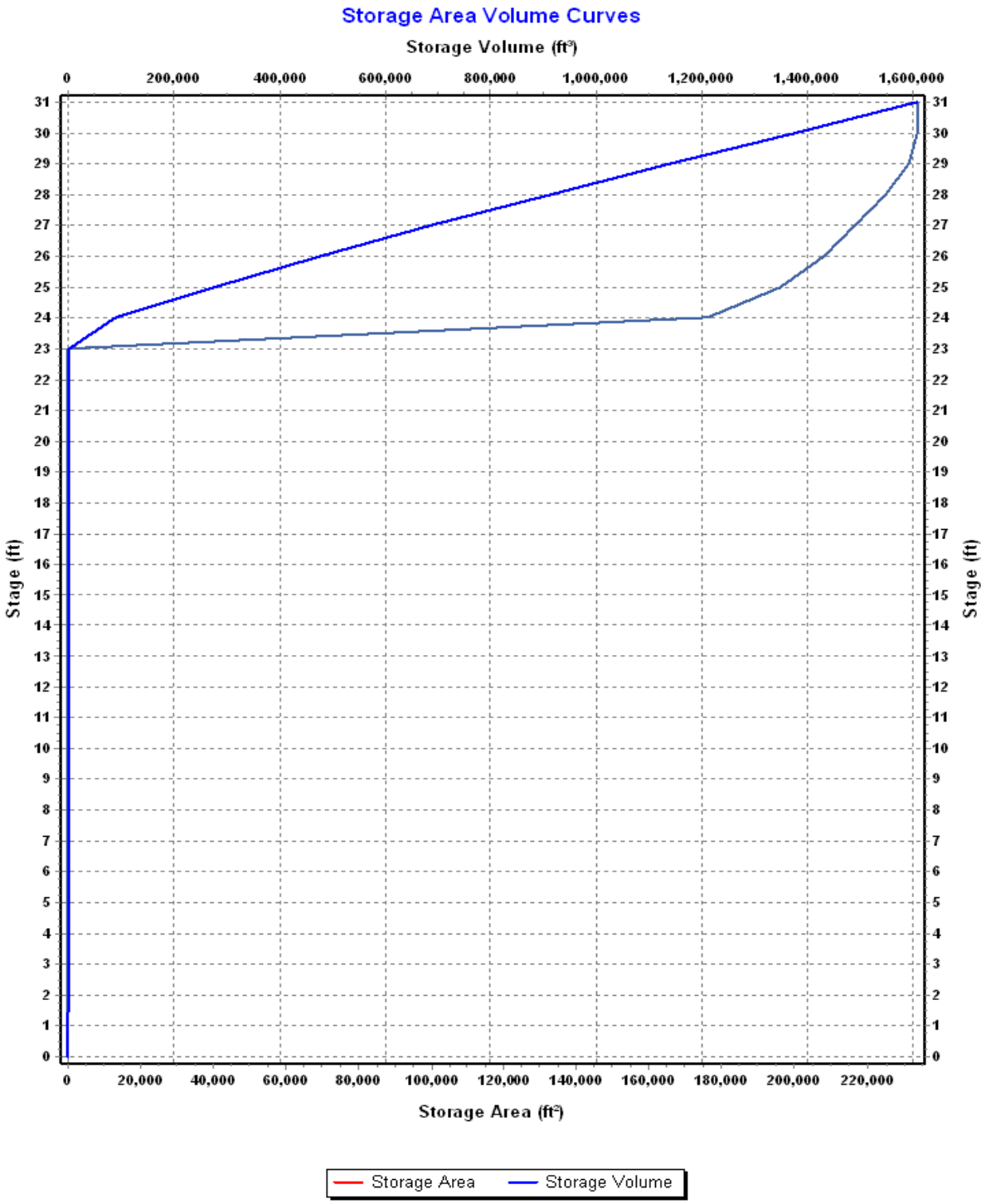
Input Data

Invert Elevation (ft) 734.00
Max (Rim) Elevation (ft) 765.00
Max (Rim) Offset (ft) 31.00
Initial Water Elevation (ft) 734.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 233730.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-D

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
23	100	2300.00
24	176086.944	90393.47
25	196141.968	276507.93
26	208134.036	478645.93
27	216915.732	691170.81
28	224965.62	912111.49
29	231551.892	1140370.25
30	233638.416	1372965.40
31	233703.756	1606636.49


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
Storage Area (ft²)
0
20,000
40,000
60,000
80,000
100,000
120,000
140,000
160,000
180,000
200,000
220,000
Storage Area
Storage Volume

Storage Node : Stor-D (continued)

Storage Node : Stor-EE

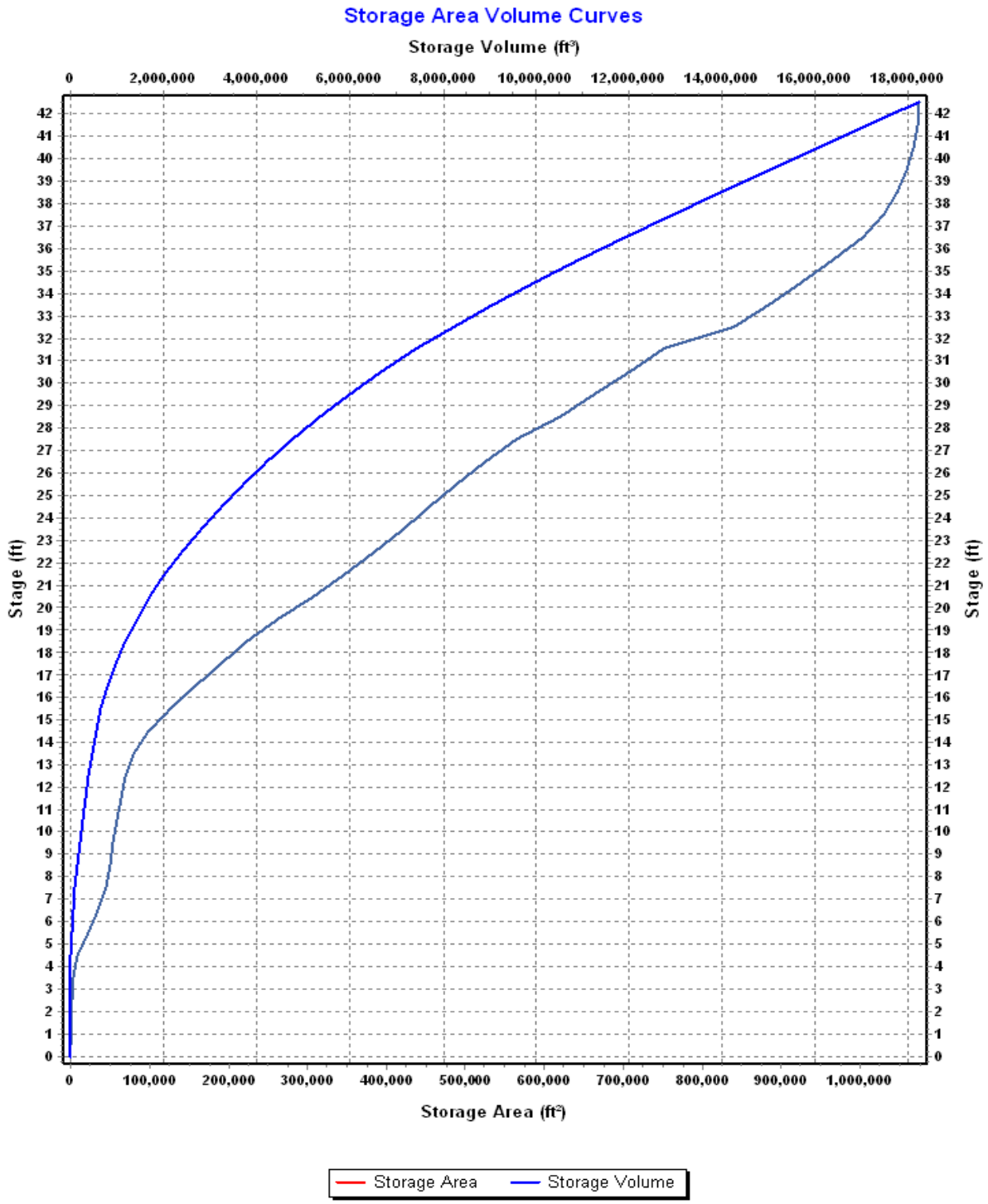
Input Data

Invert Elevation (ft) 660.50
Max (Rim) Elevation (ft) 703.00
Max (Rim) Offset (ft) 42.50
Initial Water Elevation (ft) 660.50
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1073922.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-EE

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
0.5	100	50.00
1.5	1215.324	707.66
2.5	2378.376	2504.51
3.5	4177.404	5782.40
4.5	8385.3	12063.75
5.5	23108.58	27810.69
6.5	35292.312	57011.14
7.5	44614.152	96964.37
8.5	49976.388	144259.64
9.5	54227.844	196361.76
10.5	58413.96	252682.66
11.5	63571.464	313675.37
12.5	69804.9	380363.55
13.5	79771.428	455151.71
14.5	99499.752	544787.30
15.5	126990.468	658032.41
16.5	157948.56	800501.92
17.5	189520.848	974236.62
18.5	223523.784	1180758.94
19.5	262379.304	1423710.48
20.5	307241.748	1708521.01
21.5	348480	2036381.88
22.5	385893.684	2403568.72
23.5	421229.556	2807130.34
24.5	454653.144	3245071.69
25.5	490002.084	3717399.30
26.5	525155.004	4224977.84
27.5	565487.208	4770298.95
28.5	620943.444	5363514.28
29.5	664194.168	6006083.09
30.5	708625.368	6692492.86
31.5	750604.14	7422107.61
32.5	838534.356	8216676.86
33.5	883074.456	9077481.27
34.5	925719.696	9981878.35
35.5	965751.336	10927613.87
36.5	1003082.256	11912030.67
37.5	1029701.772	12928422.68
38.5	1045954.008	13966250.57
39.5	1057523.544	15017989.35
40.5	1066662.432	16080082.34
41.5	1072961.208	17149894.16
42.5	1073867.256	18223308.39


Storage Area Volume Curves
Storage Volume (ft³)
0
2,000,000
4,000,000
6,000,000
8,000,000
10,000,000
12,000,000
14,000,000
16,000,000
18,000,000
Stage (ft)
Storage Area (ft²)
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
1,000,000
Storage Area
Storage Volume

Storage Node : Stor-EE (continued)

Storage Node : Stor-G

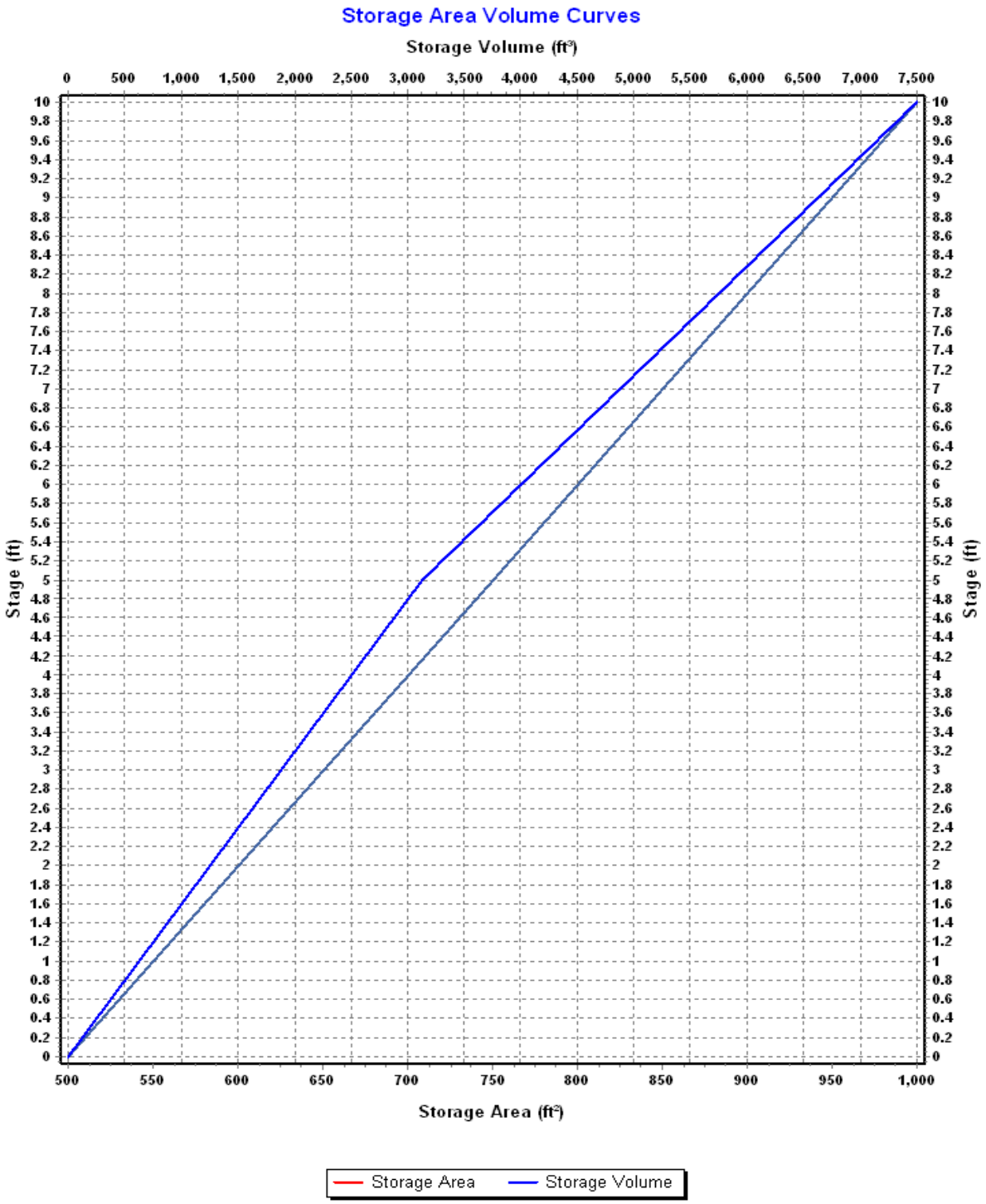
Input Data

Invert Elevation (ft) 720.00
Max (Rim) Elevation (ft) 730.00
Max (Rim) Offset (ft) 10.00
Initial Water Elevation (ft) 720.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1000.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-P

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	500	0.000
5	750	3125.00
10	1000	7500.00


Storage Area Volume Curves
Storage Volume (ft³)
0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 5,500 6,000 6,500 7,000 7,500
Stage (ft)
10 9.8 9.6 9.4 9.2 9 8.8 8.6 8.4 8.2 8 7.8 7.6 7.4 7.2 7 6.8 6.6 6.4 6.2 6 5.8 5.6 5.4 5.2 5 4.8 4.6 4.4 4.2 4 3.8 3.6 3.4 3.2 3 2.8 2.6 2.4 2.2 2 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0
500 550 600 650 700 750 800 850 900 950 1,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-G (continued)

Storage Node : Stor-I

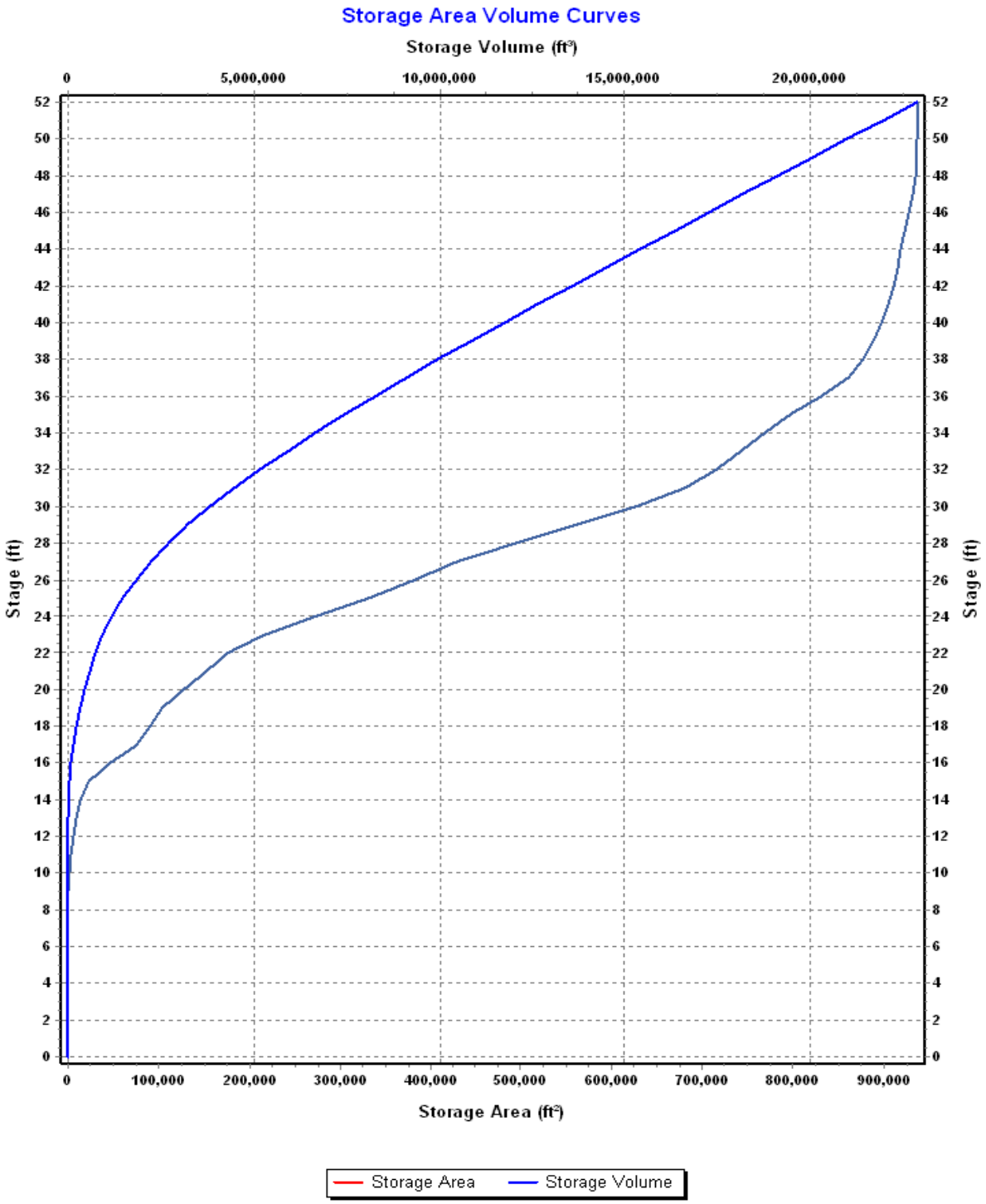
Input Data

Invert Elevation (ft) 687.00
Max (Rim) Elevation (ft) 739.00
Max (Rim) Offset (ft) 52.00
Initial Water Elevation (ft) 687.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 936779.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-I

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
9	100	900.00
10	1075.932	1487.97
11	3271.356	3661.61
12	5671.512	8133.04
13	9827.136	15882.36
14	12972.168	27282.01
15	23422.212	45479.20
16	47114.496	80747.55
17	75101.796	141855.70
18	90678.852	224746.02
19	104661.612	322416.25
20	126511.308	438002.71
21	152669.088	577592.91
22	176932.008	742393.46
23	215186.4	938452.66
24	273504.528	1182798.12
25	334018.08	1486559.42
26	382034.268	1844585.59
27	430311.816	2250758.63
28	495669.24	2713749.16
29	564428.7	3243798.13
30	628235.388	3840130.17
31	681687.864	4495091.80
32	716304.996	5194088.23
33	742493.268	5923487.36
34	769618.08	6679543.03
35	797797.044	7463250.59
36	831865.32	8278081.77
37	861120.216	9124574.54
38	877307.112	9993788.20
39	887778.936	10876331.22
40	896843.772	11768642.57
41	905133.24	12669631.08
42	911279.556	13577837.48
43	915091.056	14491022.79
44	918148.968	15407642.80
45	923380.524	16328407.55
46	928429.128	17254312.38
47	931591.584	18184322.74
48	934584.156	19117410.61
49	935660.088	20052532.73
50	936282.996	20988504.27
51	936618.408	21924954.97
52	936727.308	22861627.83


Storage Area Volume Curves
Storage Volume (ft³)
0
5,000,000
10,000,000
15,000,000
20,000,000
Stage (ft)
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-I (continued)

Storage Node : Stor-J

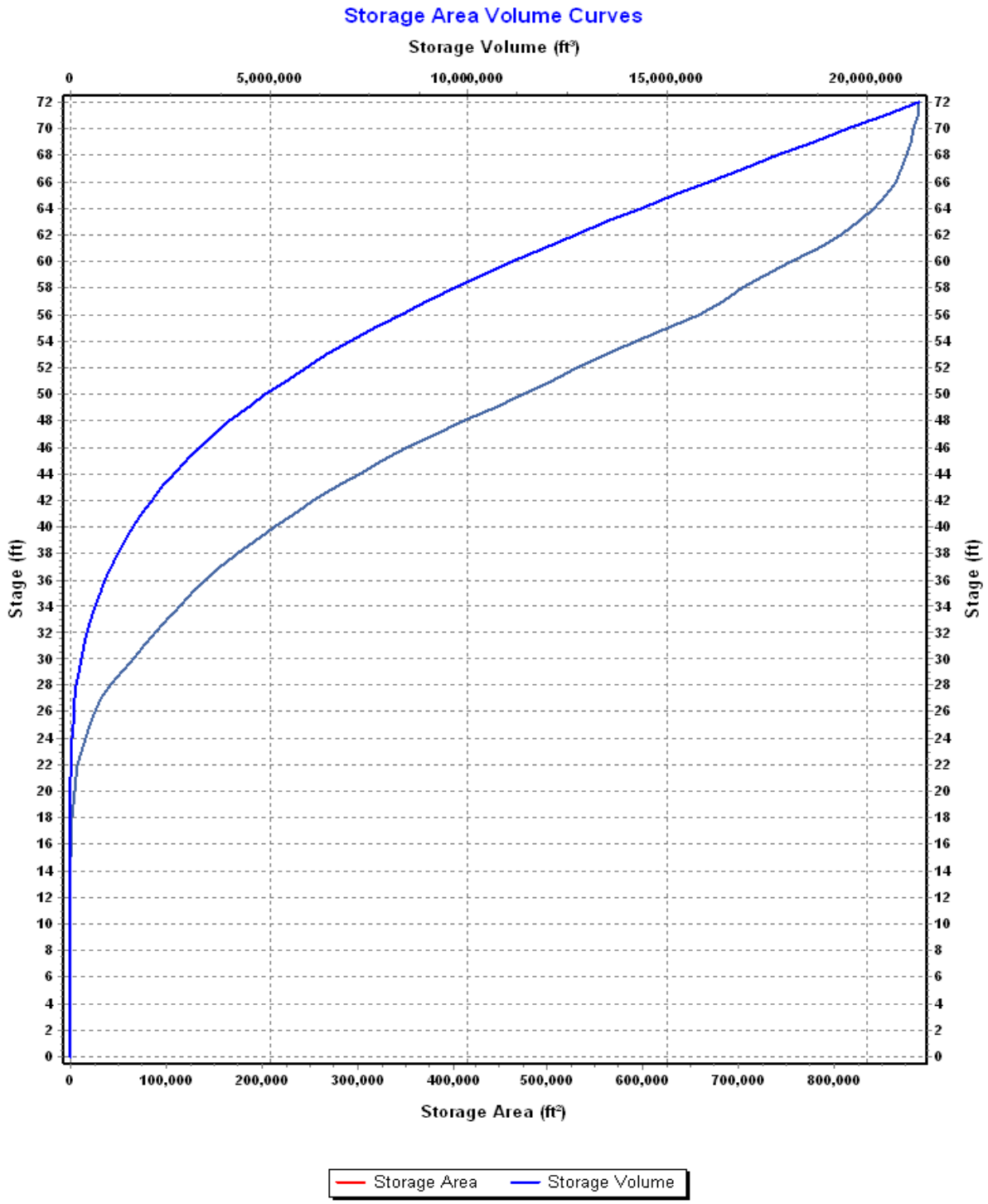
Input Data

Invert Elevation (ft) 685.00
Max (Rim) Elevation (ft) 757.00
Max (Rim) Offset (ft) 72.00
Initial Water Elevation (ft) 685.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 888299.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-J

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
10	153.8193	1269.10
11	218.4025	1455.21
12	282.9857	1705.90
13	412.1521	2053.47
14	605.9017	2562.50
15	702.7765	3216.84
16	982.6371	4059.55
17	1251.7338	5176.74
18	1639.233	6622.22
19	2780.2029	8831.94
20	3781.2426	12112.66
21	5342.0034	16674.28
22	7753.1097	23221.84
23	11585.0465	32890.92
24	15653.7884	46510.34
25	19679.4748	64176.97
26	25169.0472	86601.23
27	31971.8114	115171.66
28	41314.8483	151814.99
29	53316.5604	199130.69
30	65824.1743	258701.06
31	76964.777	330095.54
32	88988.0168	413071.94
33	101861.6022	508496.75
34	114649.0766	616752.09
35	127920.9251	738037.09
36	141354.2316	872674.67
37	157230.936	1021967.25
38	175572.566	1188369.00
39	194075.654	1373193.11
40	214290.1969	1577376.04
41	234397.1011	1801719.69
42	254880.7407	2046358.61
43	279164.0255	2313380.99
44	303092.1026	2604509.05
45	327601.4286	2919855.82
46	352293.7403	3259803.40
47	383153.748	3627527.14
48	414153.686	4026180.86
49	445616.4703	4456065.94
50	475701.4796	4916724.91
51	503278.5078	5406214.90
52	530500.3284	5923104.32
53	561661.7244	6469185.35
54	592876.9397	7046454.68
55	626632.4277	7656209.36
56	658439.6558	8298745.40
57	684197.5904	8970064.02
58	703992.3425	9664158.99
59	728770.7652	10380540.54
60	755206.8234	11122529.33
61	782913.018	11891589.25
62	806173.7354	12686132.63
63	826033.0707	13502236.03
64	841145.5405	14335825.34
65	853373.2938	15183084.76
66	863480.5653	16041511.69
67	870057.2883	16908280.62
68	875719.0825	17781168.81
69	879852.4076	18658954.56
70	883199.9703	19540480.75
71	887387.1147	20425774.29
72	888398.9182	21313667.31


Storage Area Volume Curves
Storage Volume (ft³)
0
5,000,000
10,000,000
15,000,000
20,000,000
Stage (ft)
72
70
68
66
64
62
60
58
56
54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-J (continued)

Storage Node : Stor-NO

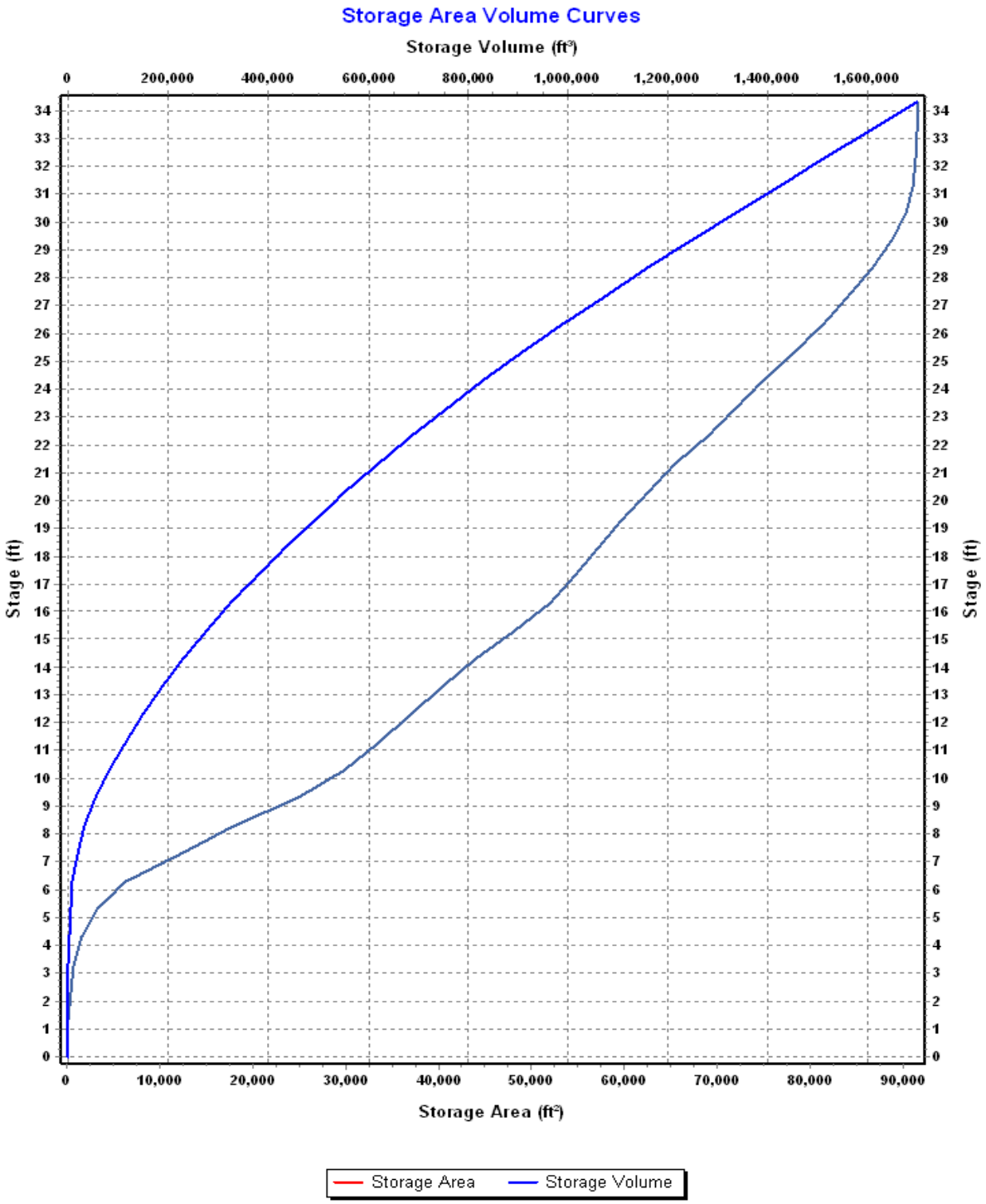
Input Data

Invert Elevation (ft) 689.70
Max (Rim) Elevation (ft) 724.00
Max (Rim) Offset (ft) 34.30
Initial Water Elevation (ft) 689.70
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 91514.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-NO

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
0.3	100	30.00
1.3	117.612	138.81
2.3	365.904	380.57
3.3	753.588	940.32
4.3	1637.856	2136.04
5.3	3175.524	4542.73
6.3	6351.048	9306.02
7.3	12218.58	18590.83
8.3	18107.892	33754.07
9.3	24772.572	55194.30
10.3	29842.956	82502.06
11.3	33567.336	114207.21
12.3	36969.372	149475.56
13.3	40349.628	188135.06
14.3	44008.668	230314.21
15.3	48098.952	276368.02
16.3	52049.844	326442.42
17.3	54685.224	379809.95
18.3	57259.62	435782.37
19.3	59746.896	494285.63
20.3	62708.976	555513.57
21.3	65409.696	619572.91
22.3	68994.684	686775.10
23.3	71974.188	757259.54
24.3	75053.88	830773.57
25.3	78316.524	907458.77
26.3	81339.588	987286.83
27.3	84018.528	1069965.89
28.3	86623.416	1155286.86
29.3	88648.956	1242923.05
30.3	90251.964	1332373.51
31.3	91057.824	1423028.40
32.3	91393.236	1514253.93
33.3	91467.288	1605684.19
34.3	91489.068	1697162.37


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
Storage Area (ft²)
0
10,000
20,000
30,000
40,000
50,000
60,000
70,000
80,000
90,000
Storage Area
Storage Volume

Storage Node : Stor-NO (continued)

Storage Node : Stor-P

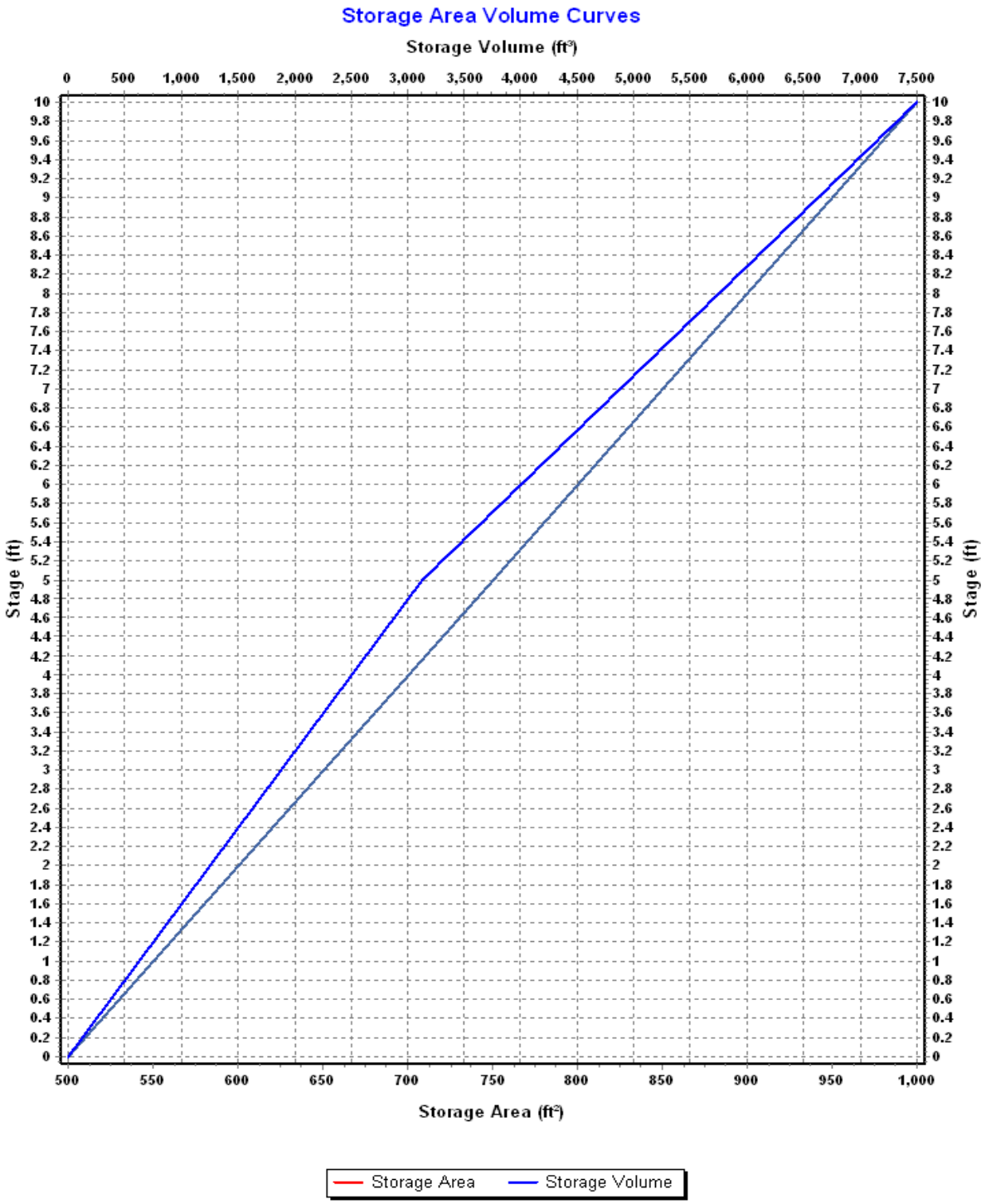
Input Data

Invert Elevation (ft) 694.20
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 105.80
Initial Water Elevation (ft) 694.20
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1000.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-P

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	500	0.000
5	750	3125.00
10	1000	7500.00


Storage Area Volume Curves
Storage Volume (ft³)
0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 5,500 6,000 6,500 7,000 7,500
Stage (ft)
10 9.8 9.6 9.4 9.2 9 8.8 8.6 8.4 8.2 8 7.8 7.6 7.4 7.2 7 6.8 6.6 6.4 6.2 6 5.8 5.6 5.4 5.2 5 4.8 4.6 4.4 4.2 4 3.8 3.6 3.4 3.2 3 2.8 2.6 2.4 2.2 2 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0
500 550 600 650 700 750 800 850 900 950 1,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-P (continued)

Storage Node : Stor-Y

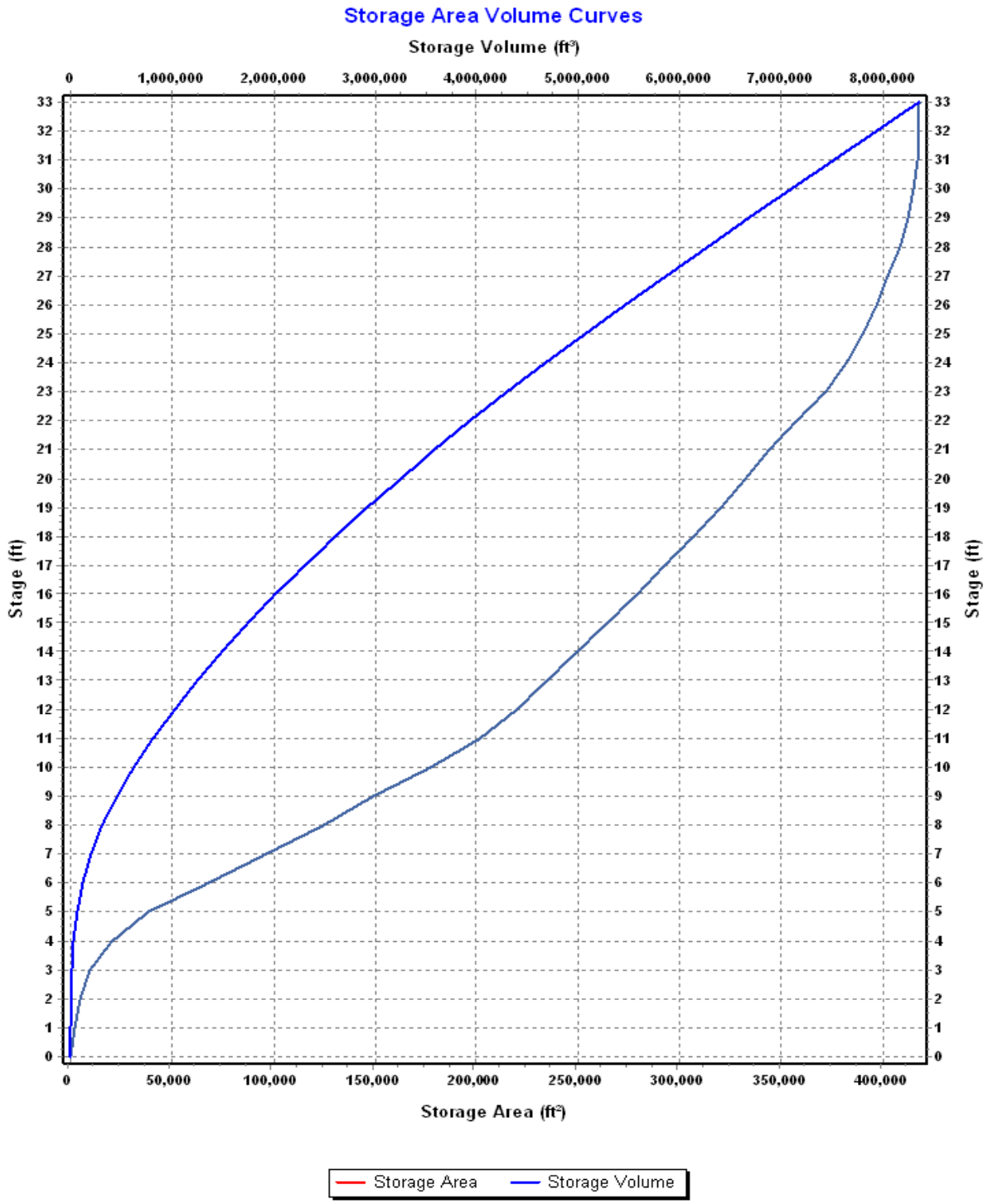
Input Data

Invert Elevation (ft) 671.00
Max (Rim) Elevation (ft) 705.50
Max (Rim) Offset (ft) 34.50
Initial Water Elevation (ft) 671.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 418671.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Y

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	1677.06	0.000
1	3537.072	2607.07
2	6581.916	7666.56
3	11168.784	16541.91
4	21814.848	33033.73
5	40144.896	64013.60
6	69186.348	118679.22
7	97766.064	202155.43
8	126010.368	314043.65
9	150325.56	452211.61
10	178321.572	616535.18
11	202262.148	806827.04
12	220679.316	1018297.77
13	236317.356	1246796.11
14	250936.092	1490422.83
15	265681.152	1748731.45
16	280029.816	2021586.93
17	293816.556	2308510.12
18	307712.196	2609274.50
19	321058.98	2923660.09
20	333447.444	3250913.30
21	345652.956	3590463.50
22	358847.28	3942713.62
23	372816.972	4308545.75
24	382988.232	4686448.35
25	391425.804	5073655.37
26	397798.632	5468267.59
27	403365.6	5868849.71
28	409037.112	6275051.07
29	413493.3	6686316.28
30	416076.408	7101101.13
31	417797.028	7518037.85
32	418315.392	7936094.06
33	418672.584	8354588.05


Storage Area Volume Curves
Storage Volume (ft³)
0
1,000,000
2,000,000
3,000,000
4,000,000
5,000,000
6,000,000
7,000,000
8,000,000
Stage (ft)
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
0
50,000
100,000
150,000
200,000
250,000
300,000
350,000
400,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-Y (continued)

POST-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
2-YEAR

Project Description

File Name	26900.0002 - Proposed Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	27
Nodes	44
Junctions	22
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	16
Links	43
Channels	22
Pipes	13
Pumps	0
Orifices	0
Weirs	8
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	3.69	0.80	342.08	153.34	0 00:59:24
2	B	179.82	484.00	64.00	3.69	0.80	144.40	115.05	0 00:26:13
3	C	57.45	484.00	61.00	3.69	0.66	37.92	21.27	0 00:38:19
4	CC	10.65	484.00	63.00	3.69	0.75	8.03	8.38	0 00:15:50
5	D	48.20	484.00	65.00	3.69	0.85	41.16	27.28	0 00:35:42
6	DD	13.80	484.00	66.00	3.69	0.91	12.50	12.11	0 00:20:31
7	E	23.76	484.00	59.00	3.69	0.57	13.59	8.14	0 00:31:01
8	EE	82.20	484.00	64.00	3.69	0.80	66.01	52.68	0 00:26:09
9	H	50.44	484.00	59.00	3.69	0.57	28.85	13.09	0 00:46:26
10	I	28.52	484.00	62.00	3.69	0.71	20.16	12.41	0 00:35:09
11	J	111.18	484.00	57.00	3.69	0.49	54.37	20.18	0 00:54:39
12	K	171.51	484.00	57.00	3.69	0.49	83.87	41.23	0 00:35:52
13	L	92.78	484.00	57.00	3.69	0.49	45.37	25.98	0 00:28:40
14	M	29.43	484.00	59.00	3.69	0.57	16.83	12.61	0 00:22:19
15	N	43.16	484.00	58.00	3.69	0.53	22.87	12.95	0 00:31:30
16	O	48.38	484.00	59.00	3.69	0.57	27.67	13.95	0 00:39:43
17	P	14.69	484.00	60.00	3.69	0.62	9.03	7.26	0 00:21:25
18	Post-1	118.69	484.00	90.00	3.69	2.63	311.68	280.92	0 00:28:32
19	Post-2	79.81	484.00	90.00	3.69	2.63	209.58	221.92	0 00:20:52
20	Post-3	54.10	484.00	90.00	3.69	2.63	142.08	190.13	0 00:10:30
21	Post-4A	461.12	484.00	90.00	3.69	2.63	1210.90	584.89	0 01:12:14
22	Post-4B	50.66	484.00	90.00	3.69	2.63	133.03	179.67	0 00:10:05
23	Post-5	123.17	484.00	90.00	3.69	2.63	323.44	350.01	0 00:20:00
24	Post-6	80.67	484.00	90.00	3.69	2.63	211.84	239.94	0 00:18:00
25	W	79.34	484.00	61.00	3.69	0.66	52.36	38.73	0 00:25:40
26	X	22.96	484.00	59.00	3.69	0.57	13.13	12.98	0 00:13:51
27	Y	34.60	484.00	62.00	3.69	0.71	24.46	21.56	0 00:20:37

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	153.20	718.34	0.00	81.66	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	337.07	685.68	0.00	114.32	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	21.25	767.54	0.00	32.46	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	677.70	800.00	1.00	346.75	680.92	0.00	119.08	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	13.80	715.92	0.00	84.08	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	18.55	724.49	0.00	75.51	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	38.33	717.21	0.00	82.79	0 00:00	0.00	0.00
8	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	46.48	691.35	0.00	108.65	0 00:00	0.00	0.00
9	Jun-22	Junction	666.10	800.00	666.10	800.00	1.00	139.28	668.93	0.00	131.07	0 00:00	0.00	0.00
10	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	65.76	672.60	0.00	127.40	0 00:00	0.00	0.00
11	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	30.99	709.50	0.00	90.50	0 00:00	0.00	0.00
12	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	81.86	731.55	0.00	68.45	0 00:00	0.00	0.00
13	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	346.67	679.36	0.00	120.64	0 00:00	0.00	0.00
14	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	41.94	688.04	0.00	111.96	0 00:00	0.00	0.00
15	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	7.66	690.59	0.00	109.41	0 00:00	0.00	0.00
16	Jun-30	Junction	656.20	800.00	656.20	800.00	1.00	145.11	657.07	0.00	142.93	0 00:00	0.00	0.00
17	Jun-36	Junction	738.00	800.00	738.00	999.00	1.00	49.34	738.46	0.00	61.54	0 00:00	0.00	0.00
18	Jun-37	Junction	744.00	800.00	744.00	800.00	1.00	49.34	745.93	0.00	54.07	0 00:00	0.00	0.00
19	Jun-38	Junction	731.00	800.00	731.00	999.00	1.00	24.90	731.25	0.00	68.75	0 00:00	0.00	0.00
20	Jun-43	Junction	739.00	800.00	739.00	999.00	1.00	39.65	739.89	0.00	60.11	0 00:00	0.00	0.00
21	Jun-44	Junction	745.00	800.00	745.00	999.00	1.00	7.86	745.66	0.00	54.34	0 00:00	0.00	0.00
22	Jun-45	Junction	672.00	800.00	672.00	999.00	1.00	128.54	673.92	0.00	1000.33	0 00:00	0.00	0.00
23	Out-01	Outfall	675.80					346.67	678.36					
24	Out-02	Outfall	685.60					41.94	687.11					
25	Out-03	Outfall	688.00					7.24	688.53					
26	Out-04	Outfall	655.20					145.11	656.14					
27	Out-05	Outfall	737.50					49.34	737.96					
28	Out-06	Outfall	730.00					24.90	730.25					
29	Pond-1	Storage Node	739.00	746.00	739.00		282063.00	279.95	741.65				0.00	0.00
30	Pond-2A	Storage Node	739.00	743.00	739.00		786496.00	221.48	739.67				0.00	0.00
31	Pond-2B	Storage Node	739.00	743.00	739.00		83441.00	0.70	739.35				0.00	0.00
32	Pond-3	Storage Node	745.00	752.00	745.00		165275.00	188.83	747.41				0.00	0.00
33	Pond-4A	Storage Node	674.00	682.50	674.00		832543.00	607.21	677.12				0.00	0.00
34	Pond-4B	Storage Node	674.00	682.50	674.00		164301.00	177.74	677.13				0.00	0.00
35	Pond-5	Storage Node	744.00	752.50	744.00		245841.00	349.43	747.34				0.00	0.00
36	Pond-6	Storage Node	732.00	738.00	732.00		316369.00	237.70	733.63				0.00	0.00
37	Stor-D	Storage Node	734.00	765.00	734.00		233730.00	43.16	734.26				0.00	0.00
38	Stor-EE	Storage Node	660.50	703.00	660.50		1073922.00	145.12	662.48				0.00	0.00
39	Stor-G	Storage Node	720.00	730.00	720.00		1000.00	93.63	722.75				0.00	0.00
40	Stor-I	Storage Node	687.00	739.00	687.00		936779.00	317.21	692.73				0.00	0.00
41	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	344.22	689.84				0.00	0.00
42	Stor-NO	Storage Node	689.70	724.00	689.70		91514.00	41.97	691.98				0.00	0.00
43	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	7.20	695.25				0.00	0.00
44	Stor-Y	Storage Node	671.00	705.50	671.00		418671.00	61.74	673.28				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-02	Pipe	Jun-43	Jun-26	50.00	738.00	737.00	2.0000	48.000	0.0130	39.65	619.59	0.06	9.48	0.70	0.17	0.00	Calculated
2	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	346.67	1291.66	0.27	7.50	2.89	0.36	0.00	Calculated
3	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	41.94	209.17	0.20	5.65	1.85	0.46	0.00	Calculated
4	Link-10	Pipe	Pond-2A	Stor-I	50.00	733.00	732.00	2.0000	36.000	0.0130	14.40	249.56	0.06	15.02	0.58	0.19	0.00	Calculated
5	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	145.11	1769.96	0.08	4.84	1.43	0.29	0.00	Calculated
6	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	7.66	186.93	0.04	4.38	0.82	0.20	0.00	Calculated
7	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	48.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
8	Link-40	Pipe	Pond-4B	Pond-4A	620.00	668.00	668.00	0.0000	60.000	0.0130	46.13	6.62	6.97	2.88	3.12	0.62	0.00	> CAPACITY
9	Link-41	Pipe	Pond-2B	Pond-2A	400.00	733.00	733.00	0.0000	36.000	0.0130	0.70	1.05	0.67	1.45	0.37	0.12	0.00	Calculated
10	Link-61	Pipe	Jun-44	Jun-08	50.00	744.00	743.00	2.0000	36.000	0.0130	7.86	133.40	0.06	8.21	0.58	0.19	0.00	Calculated
11	Link-66	Pipe	Jun-37	Jun-36	50.00	739.00	738.00	2.0000	72.000	0.0130	49.34	1867.94	0.03	6.86	1.20	0.20	0.00	Calculated
12	Link-70	Pipe	Pond-6	Jun-38	50.00	732.00	731.00	2.0000	36.000	0.0130	24.90	188.65	0.13	6.57	0.94	0.31	0.00	Calculated
13	Link-74	Pipe	Jun-45	Jun-22	50.00	672.00	671.00	2.0000	72.000	0.0150	128.54	963.25	0.13	10.27	1.56	0.26	0.00	Calculated
14	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	240.480	0.0320	18.87	164010.50	0.00	50.00	0.51	0.03	0.00	
15	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	152.76	94204.70	0.00	6.02	2.18	0.11	0.00	
16	Link-04	Channel	Stor-I	Stor-J	1212.00	687.00	685.00	0.1700	503.760	0.0320	324.50	167151.28	0.00	3.75	5.20	0.12	0.00	
17	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	336.68	471728.19	0.00	6.12	3.45	0.07	0.00	
18	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	18.71	160489.81	0.00	4.76	1.45	0.04	0.00	
19	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	13.68	228402.42	0.00	3.93	0.91	0.03	0.00	
20	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	60.85	320223.33	0.00	4.51	1.69	0.04	0.00	
21	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	37.73	202679.20	0.00	5.43	1.28	0.05	0.00	
22	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	315.18	603845.15	0.00	4.25	4.26	0.07	0.00	
23	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	92.70	324200.23	0.00	4.87	2.44	0.07	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	43.79	428321.41	0.00	5.25	1.33	0.03	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.10	664.00	0.3600	635.160	0.0320	139.19	294095.79	0.00	3.64	2.30	0.04	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.10	0.7100	607.200	0.0320	65.10	432587.81	0.00	2.39	2.06	0.04	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	29.14	346337.45	0.00	4.10	1.34	0.03	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	43.16	869869.15	0.00	1.92	0.40	0.01	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	80.65	512575.31	0.00	2.74	0.47	0.01	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	346.67	165532.51	0.00	5.74	2.56	0.07	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.60	1.0000	352.800	0.0320	41.94	142885.80	0.00	3.26	1.47	0.05	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	7.24	233235.72	0.00	2.99	0.55	0.02	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.20	1.0000	240.840	0.0320	145.11	176082.31	0.00	2.18	0.91	0.05	0.00	
34	Link-64	Channel	Jun-36	Out-05	100.00	738.00	737.50	0.5000	120.000	0.0350	49.34	6901.78	0.01	1.78	0.46	0.05	0.00	
35	Link-67	Channel	Jun-38	Out-06	100.00	731.00	730.00	1.0000	120.000	0.0350	24.90	9760.59	0.00	1.67	0.25	0.02	0.00	
36	Weir-16	Weir	Pond-5	Jun-37		744.00	744.00				48.87							
37	Weir-17	Weir	Pond-5	Jun-37		744.00	744.00				0.47							
38	Weir-29	Weir	Pond-1	Jun-43		739.00	739.00				39.65							
39	Weir-31	Weir	Pond-1	Jun-43		739.00	739.00				0.00							
40	Weir-32	Weir	Pond-3	Jun-44		745.00	745.00				7.86							
41	Weir-34	Weir	Pond-3	Jun-44		745.00	745.00				0.00							
42	Weir-39	Weir	Pond-4A	Jun-45		674.00	672.00				128.54							
43	Weir-40	Weir	Pond-4A	Jun-45		674.00	672.00				0.00							

Storage Nodes

Storage Node : Pond-1

Output Summary Results

Peak Inflow (cfs)	279.95
Peak Lateral Inflow (cfs)	279.95
Peak Outflow (cfs)	39.65
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	741.65
Max HGL Depth Attained (ft)	2.65
Average HGL Elevation Attained (ft)	739.85
Average HGL Depth Attained (ft)	0.85
Time of Max HGL Occurrence (days hh:mm)	0 13:03
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2A

Output Summary Results

Peak Inflow (cfs)	221.48
Peak Lateral Inflow (cfs)	221.48
Peak Outflow (cfs)	15.08
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	739.67
Max HGL Depth Attained (ft)	0.67
Average HGL Elevation Attained (ft)	739.31
Average HGL Depth Attained (ft)	0.31
Time of Max HGL Occurrence (days hh:mm)	0 13:33
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2B

Output Summary Results

Peak Inflow (cfs)	0.70
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	0.16
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	739.35
Max HGL Depth Attained (ft)	0.35
Average HGL Elevation Attained (ft)	739.18
Average HGL Depth Attained (ft)	0.18
Time of Max HGL Occurrence (days hh:mm)	1 01:57
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-3

Output Summary Results

Peak Inflow (cfs)	188.83
Peak Lateral Inflow (cfs)	188.83
Peak Outflow (cfs)	7.86
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	747.41
Max HGL Depth Attained (ft)	2.41
Average HGL Elevation Attained (ft)	746.24
Average HGL Depth Attained (ft)	1.24
Time of Max HGL Occurrence (days hh:mm)	0 13:56
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4A

Output Summary Results

Peak Inflow (cfs)	607.21
Peak Lateral Inflow (cfs)	584.79
Peak Outflow (cfs)	158.66
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	677.12
Max HGL Depth Attained (ft)	3.12
Average HGL Elevation Attained (ft)	675.21
Average HGL Depth Attained (ft)	1.21
Time of Max HGL Occurrence (days hh:mm)	0 14:08
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4B

Output Summary Results

Peak Inflow (cfs)	177.74
Peak Lateral Inflow (cfs)	177.74
Peak Outflow (cfs)	30.06
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	677.13
Max HGL Depth Attained (ft)	3.13
Average HGL Elevation Attained (ft)	675.24
Average HGL Depth Attained (ft)	1.24
Time of Max HGL Occurrence (days hh:mm)	0 14:14
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-5

Output Summary Results

Peak Inflow (cfs)	349.43
Peak Lateral Inflow (cfs)	349.43
Peak Outflow (cfs)	49.34
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	747.34
Max HGL Depth Attained (ft)	3.34
Average HGL Elevation Attained (ft)	744.97
Average HGL Depth Attained (ft)	0.97
Time of Max HGL Occurrence (days hh:mm)	0 12:46
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-6

Output Summary Results

Peak Inflow (cfs)	237.70
Peak Lateral Inflow (cfs)	237.70
Peak Outflow (cfs)	24.90
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	733.63
Max HGL Depth Attained (ft)	1.63
Average HGL Elevation Attained (ft)	732.59
Average HGL Depth Attained (ft)	0.59
Time of Max HGL Occurrence (days hh:mm)	0 12:52
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	43.16
Peak Lateral Inflow (cfs)	26.93
Peak Outflow (cfs)	43.16
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.26
Max HGL Depth Attained (ft)	0.26
Average HGL Elevation Attained (ft)	734.03
Average HGL Depth Attained (ft)	0.03
Time of Max HGL Occurrence (days hh:mm)	0 12:25
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	145.12
Peak Lateral Inflow (cfs)	52.34
Peak Outflow (cfs)	145.11
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	662.48
Max HGL Depth Attained (ft)	1.98
Average HGL Elevation Attained (ft)	661.25
Average HGL Depth Attained (ft)	0.75
Time of Max HGL Occurrence (days hh:mm)	0 14:02
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	93.63
Peak Lateral Inflow (cfs)	12.98
Peak Outflow (cfs)	92.70
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	722.75
Max HGL Depth Attained (ft)	2.75
Average HGL Elevation Attained (ft)	721.01
Average HGL Depth Attained (ft)	1.01
Time of Max HGL Occurrence (days hh:mm)	0 12:37
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	317.21
Peak Lateral Inflow (cfs)	124.54
Peak Outflow (cfs)	324.50
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	692.73
Max HGL Depth Attained (ft)	5.73
Average HGL Elevation Attained (ft)	689.13
Average HGL Depth Attained (ft)	2.13
Time of Max HGL Occurrence (days hh:mm)	0 12:39
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	344.22
Peak Lateral Inflow (cfs)	20.17
Peak Outflow (cfs)	315.18
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	689.84
Max HGL Depth Attained (ft)	4.84
Average HGL Elevation Attained (ft)	686.10
Average HGL Depth Attained (ft)	1.1
Time of Max HGL Occurrence (days hh:mm)	0 12:53
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	41.97
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	41.94
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	691.98
Max HGL Depth Attained (ft)	2.28
Average HGL Elevation Attained (ft)	690.21
Average HGL Depth Attained (ft)	0.51
Time of Max HGL Occurrence (days hh:mm)	0 12:26
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	7.20
Peak Lateral Inflow (cfs)	7.20
Peak Outflow (cfs)	7.66
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	695.25
Max HGL Depth Attained (ft)	1.05
Average HGL Elevation Attained (ft)	694.33
Average HGL Depth Attained (ft)	0.13
Time of Max HGL Occurrence (days hh:mm)	0 12:14
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	61.74
Peak Lateral Inflow (cfs)	20.87
Peak Outflow (cfs)	60.85
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	673.28
Max HGL Depth Attained (ft)	2.28
Average HGL Elevation Attained (ft)	671.71
Average HGL Depth Attained (ft)	0.71
Time of Max HGL Occurrence (days hh:mm)	0 12:19
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

POST-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
5-YEAR

Project Description

File Name	26900.0002 - Proposed Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	27
Nodes	44
Junctions	22
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	16
Links	43
Channels	22
Pipes	13
Pumps	0
Orifices	0
Weirs	8
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	4.48	1.25	533.78	261.90	0 00:59:24
2	B	179.82	484.00	64.00	4.48	1.25	225.31	195.94	0 00:26:13
3	C	57.45	484.00	61.00	4.48	1.07	61.36	39.16	0 00:38:19
4	CC	10.65	484.00	63.00	4.48	1.19	12.67	14.31	0 00:15:50
5	D	48.20	484.00	65.00	4.48	1.32	63.53	45.66	0 00:35:42
6	DD	13.80	484.00	66.00	4.48	1.38	19.10	19.61	0 00:20:31
7	E	23.76	484.00	59.00	4.48	0.95	22.60	15.94	0 00:31:01
8	EE	82.20	484.00	64.00	4.48	1.25	103.00	89.63	0 00:26:09
9	H	50.44	484.00	59.00	4.48	0.95	47.97	25.39	0 00:46:26
10	I	28.52	484.00	62.00	4.48	1.13	32.20	22.26	0 00:35:09
11	J	111.18	484.00	57.00	4.48	0.84	93.39	41.59	0 00:54:39
12	K	171.51	484.00	57.00	4.48	0.84	144.07	86.64	0 00:35:52
13	L	92.78	484.00	57.00	4.48	0.84	77.94	54.62	0 00:28:40
14	M	29.43	484.00	59.00	4.48	0.95	27.99	24.53	0 00:22:19
15	N	43.16	484.00	58.00	4.48	0.90	38.63	26.19	0 00:31:30
16	O	48.38	484.00	59.00	4.48	0.95	46.01	27.20	0 00:39:43
17	P	14.69	484.00	60.00	4.48	1.01	14.82	13.59	0 00:21:25
18	Post-1	118.69	484.00	90.00	4.48	3.38	400.82	357.41	0 00:28:32
19	Post-2	79.81	484.00	90.00	4.48	3.38	269.52	282.89	0 00:20:52
20	Post-3	54.10	484.00	90.00	4.48	3.38	182.71	241.58	0 00:10:30
21	Post-4A	461.12	484.00	90.00	4.48	3.38	1557.20	747.39	0 01:12:14
22	Post-4B	50.66	484.00	90.00	4.48	3.38	171.08	228.44	0 00:10:05
23	Post-5	123.17	484.00	90.00	4.48	3.38	415.95	444.29	0 00:20:00
24	Post-6	80.67	484.00	90.00	4.48	3.38	272.42	304.72	0 00:18:00
25	W	79.34	484.00	61.00	4.48	1.07	84.74	70.83	0 00:25:40
26	X	22.96	484.00	59.00	4.48	0.95	21.83	24.60	0 00:13:51
27	Y	34.60	484.00	62.00	4.48	1.13	39.06	38.02	0 00:20:37

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	260.94	719.00	0.00	81.00	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	630.29	686.98	0.00	113.02	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	38.91	767.65	0.00	32.35	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	677.70	800.00	1.00	642.16	682.52	0.00	117.48	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	27.19	716.19	0.00	83.81	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	33.04	724.78	0.00	75.22	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	70.76	717.59	0.00	82.41	0 00:00	0.00	0.00
8	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	85.71	691.82	0.00	108.18	0 00:00	0.00	0.00
9	Jun-22	Junction	666.10	800.00	666.10	800.00	1.00	211.25	669.36	0.00	130.64	0 00:00	0.00	0.00
10	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	125.18	673.12	0.00	126.88	0 00:00	0.00	0.00
11	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	57.25	709.87	0.00	90.13	0 00:00	0.00	0.00
12	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	139.09	731.74	0.00	68.26	0 00:00	0.00	0.00
13	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	641.89	680.19	0.00	119.81	0 00:00	0.00	0.00
14	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	80.28	688.47	0.00	111.53	0 00:00	0.00	0.00
15	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	13.16	690.75	0.00	109.25	0 00:00	0.00	0.00
16	Jun-30	Junction	656.20	800.00	656.20	800.00	1.00	242.43	657.23	0.00	142.77	0 00:00	0.00	0.00
17	Jun-36	Junction	738.00	800.00	738.00	999.00	1.00	90.41	738.67	0.00	61.33	0 00:00	0.00	0.00
18	Jun-37	Junction	744.00	800.00	744.00	800.00	1.00	90.41	746.90	0.00	53.10	0 00:00	0.00	0.00
19	Jun-38	Junction	731.00	800.00	731.00	999.00	1.00	36.40	731.31	0.00	68.69	0 00:00	0.00	0.00
20	Jun-43	Junction	739.00	800.00	739.00	999.00	1.00	70.86	740.50	0.00	59.50	0 00:00	0.00	0.00
21	Jun-44	Junction	745.00	800.00	745.00	999.00	1.00	11.37	745.84	0.00	54.16	0 00:00	0.00	0.00
22	Jun-45	Junction	672.00	800.00	672.00	999.00	1.00	194.16	674.63	0.00	999.62	0 00:00	0.00	0.00
23	Out-01	Outfall	675.80					641.89	679.19					
24	Out-02	Outfall	685.60					80.27	687.71					
25	Out-03	Outfall	688.00					13.15	688.76					
26	Out-04	Outfall	655.20					242.31	656.43					
27	Out-05	Outfall	737.50					90.40	738.17					
28	Out-06	Outfall	730.00					36.40	730.31					
29	Pond-1	Storage Node	739.00	746.00	739.00		282063.00	357.00	742.25				0.00	0.00
30	Pond-2A	Storage Node	739.00	743.00	739.00		786496.00	281.96	739.85				0.00	0.00
31	Pond-2B	Storage Node	739.00	743.00	739.00		83441.00	1.33	739.51				0.00	0.00
32	Pond-3	Storage Node	745.00	752.00	745.00		165275.00	239.61	748.04				0.00	0.00
33	Pond-4A	Storage Node	674.00	682.50	674.00		832543.00	769.37	677.87				0.00	0.00
34	Pond-4B	Storage Node	674.00	682.50	674.00		164301.00	225.26	677.88				0.00	0.00
35	Pond-5	Storage Node	744.00	752.50	744.00		245841.00	444.06	748.06				0.00	0.00
36	Pond-6	Storage Node	732.00	738.00	732.00		316369.00	301.64	734.06				0.00	0.00
37	Stor-D	Storage Node	734.00	765.00	734.00		233730.00	76.06	734.36				0.00	0.00
38	Stor-EE	Storage Node	660.50	703.00	660.50		1073922.00	243.10	663.15				0.00	0.00
39	Stor-G	Storage Node	720.00	730.00	720.00		1000.00	162.60	723.43				0.00	0.00
40	Stor-I	Storage Node	687.00	739.00	687.00		936779.00	543.37	693.29				0.00	0.00
41	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	616.71	690.89				0.00	0.00
42	Stor-NO	Storage Node	689.70	724.00	689.70		91514.00	80.37	693.21				0.00	0.00
43	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	13.24	695.41				0.00	0.00
44	Stor-Y	Storage Node	671.00	705.50	671.00		418671.00	116.93	673.81				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-02	Pipe	Jun-43	Jun-26	50.00	738.00	737.00	2.0000	48.000	0.0130	70.86	619.59	0.11	10.57	1.12	0.28	0.00	Calculated
2	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	641.89	1291.66	0.50	9.77	4.10	0.51	0.00	Calculated
3	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	80.28	209.17	0.38	7.46	2.69	0.67	0.00	Calculated
4	Link-10	Pipe	Pond-2A	Stor-I	50.00	733.00	732.00	2.0000	36.000	0.0130	20.56	249.56	0.08	15.85	0.72	0.24	0.00	Calculated
5	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	242.43	1769.96	0.14	6.27	1.84	0.37	0.00	Calculated
6	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	13.16	186.93	0.07	5.86	0.98	0.24	0.00	Calculated
7	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	48.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
8	Link-40	Pipe	Pond-4B	Pond-4A	620.00	668.00	668.00	0.0000	60.000	0.0130	66.86	6.62	10.11	3.46	3.88	0.78	0.00	> CAPACITY
9	Link-41	Pipe	Pond-2B	Pond-2A	400.00	733.00	733.00	0.0000	36.000	0.0130	1.33	1.05	1.26	1.87	0.52	0.17	0.00	> CAPACITY
10	Link-61	Pipe	Jun-44	Jun-08	50.00	744.00	743.00	2.0000	36.000	0.0130	11.37	133.40	0.09	8.77	0.72	0.24	0.00	Calculated
11	Link-66	Pipe	Jun-37	Jun-36	50.00	739.00	738.00	2.0000	72.000	0.0130	90.41	1867.94	0.05	8.45	1.78	0.30	0.00	Calculated
12	Link-70	Pipe	Pond-6	Jun-38	50.00	732.00	731.00	2.0000	36.000	0.0130	36.40	188.65	0.19	7.00	1.19	0.40	0.00	Calculated
13	Link-74	Pipe	Jun-45	Jun-22	50.00	672.00	671.00	2.0000	72.000	0.0150	194.16	963.25	0.20	11.49	2.11	0.35	0.00	Calculated
14	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	240.480	0.0320	34.94	164010.50	0.00	50.00	0.59	0.03	0.00	
15	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	260.82	94204.70	0.00	7.02	2.83	0.14	0.00	
16	Link-04	Channel	Stor-I	Stor-J	1212.00	687.00	685.00	0.1700	503.760	0.0320	575.43	167151.28	0.00	4.40	6.00	0.14	0.00	
17	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	621.73	471728.19	0.00	6.55	4.89	0.10	0.00	
18	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	32.80	160489.81	0.00	4.87	1.80	0.05	0.00	
19	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	26.75	228402.42	0.00	4.72	1.17	0.03	0.00	
20	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	115.53	320223.33	0.00	5.40	2.19	0.05	0.00	
21	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	69.58	202679.20	0.00	5.71	1.69	0.06	0.00	
22	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	579.91	603845.15	0.00	4.47	5.42	0.09	0.00	
23	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	161.67	324200.23	0.00	5.74	3.07	0.09	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	83.12	428321.41	0.00	6.21	1.79	0.04	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.10	664.00	0.3600	635.160	0.0320	210.92	294095.79	0.00	3.66	2.73	0.05	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.10	0.7100	607.200	0.0320	124.41	432587.81	0.00	2.92	2.53	0.05	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	55.58	346337.45	0.00	4.78	1.75	0.04	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	76.03	869869.15	0.00	2.31	0.54	0.02	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	137.88	512575.31	0.00	3.24	0.65	0.02	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	641.89	165532.51	0.00	6.72	3.39	0.09	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.60	1.0000	352.800	0.0320	80.27	142885.80	0.00	4.07	1.93	0.07	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	13.15	233235.72	0.00	3.31	0.75	0.02	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.20	1.0000	240.840	0.0320	242.31	176082.31	0.00	2.18	1.13	0.06	0.00	
34	Link-64	Channel	Jun-36	Out-05	100.00	738.00	737.50	0.5000	120.000	0.0350	90.40	6901.78	0.01	2.26	0.67	0.07	0.00	
35	Link-67	Channel	Jun-38	Out-06	100.00	731.00	730.00	1.0000	120.000	0.0350	36.40	9760.59	0.00	1.94	0.31	0.03	0.00	
36	Weir-16	Weir	Pond-5	Jun-37		744.00	744.00				57.28							
37	Weir-17	Weir	Pond-5	Jun-37		744.00	744.00				33.12							
38	Weir-29	Weir	Pond-1	Jun-43		739.00	739.00				50.59							
39	Weir-31	Weir	Pond-1	Jun-43		739.00	739.00				20.28							
40	Weir-32	Weir	Pond-3	Jun-44		745.00	745.00				11.13							
41	Weir-34	Weir	Pond-3	Jun-44		745.00	745.00				0.24							
42	Weir-39	Weir	Pond-4A	Jun-45		674.00	672.00				172.95							
43	Weir-40	Weir	Pond-4A	Jun-45		674.00	672.00				21.21							

Storage Nodes

Storage Node : Pond-1

Output Summary Results

Peak Inflow (cfs)	357.00
Peak Lateral Inflow (cfs)	357.00
Peak Outflow (cfs)	70.86
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	742.25
Max HGL Depth Attained (ft)	3.25
Average HGL Elevation Attained (ft)	740.03
Average HGL Depth Attained (ft)	1.03
Time of Max HGL Occurrence (days hh:mm)	0 12:51
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2A

Output Summary Results

Peak Inflow (cfs)	281.96
Peak Lateral Inflow (cfs)	281.96
Peak Outflow (cfs)	21.84
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	739.85
Max HGL Depth Attained (ft)	0.85
Average HGL Elevation Attained (ft)	739.39
Average HGL Depth Attained (ft)	0.39
Time of Max HGL Occurrence (days hh:mm)	0 13:18
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2B

Output Summary Results

Peak Inflow (cfs)	1.33
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	0.34
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	739.51
Max HGL Depth Attained (ft)	0.51
Average HGL Elevation Attained (ft)	739.26
Average HGL Depth Attained (ft)	0.26
Time of Max HGL Occurrence (days hh:mm)	0 22:18
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-3

Output Summary Results

Peak Inflow (cfs)	239.61
Peak Lateral Inflow (cfs)	239.61
Peak Outflow (cfs)	11.37
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	748.04
Max HGL Depth Attained (ft)	3.04
Average HGL Elevation Attained (ft)	746.55
Average HGL Depth Attained (ft)	1.55
Time of Max HGL Occurrence (days hh:mm)	0 13:37
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4A

Output Summary Results

Peak Inflow (cfs)	769.37
Peak Lateral Inflow (cfs)	746.15
Peak Outflow (cfs)	227.53
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	677.87
Max HGL Depth Attained (ft)	3.87
Average HGL Elevation Attained (ft)	675.48
Average HGL Depth Attained (ft)	1.48
Time of Max HGL Occurrence (days hh:mm)	0 13:56
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4B

Output Summary Results

Peak Inflow (cfs)	225.26
Peak Lateral Inflow (cfs)	225.26
Peak Outflow (cfs)	47.14
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	677.88
Max HGL Depth Attained (ft)	3.88
Average HGL Elevation Attained (ft)	675.52
Average HGL Depth Attained (ft)	1.52
Time of Max HGL Occurrence (days hh:mm)	0 14:01
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-5

Output Summary Results

Peak Inflow (cfs)	444.06
Peak Lateral Inflow (cfs)	444.06
Peak Outflow (cfs)	90.41
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	748.06
Max HGL Depth Attained (ft)	4.06
Average HGL Elevation Attained (ft)	745.16
Average HGL Depth Attained (ft)	1.16
Time of Max HGL Occurrence (days hh:mm)	0 12:37
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-6

Output Summary Results

Peak Inflow (cfs)	301.64
Peak Lateral Inflow (cfs)	301.64
Peak Outflow (cfs)	36.40
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.06
Max HGL Depth Attained (ft)	2.06
Average HGL Elevation Attained (ft)	732.72
Average HGL Depth Attained (ft)	0.72
Time of Max HGL Occurrence (days hh:mm)	0 12:46
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	76.06
Peak Lateral Inflow (cfs)	45.37
Peak Outflow (cfs)	76.03
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.36
Max HGL Depth Attained (ft)	0.36
Average HGL Elevation Attained (ft)	734.04
Average HGL Depth Attained (ft)	0.04
Time of Max HGL Occurrence (days hh:mm)	0 12:25
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	243.10
Peak Lateral Inflow (cfs)	89.56
Peak Outflow (cfs)	242.43
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	663.15
Max HGL Depth Attained (ft)	2.65
Average HGL Elevation Attained (ft)	661.45
Average HGL Depth Attained (ft)	0.95
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	162.60
Peak Lateral Inflow (cfs)	25.38
Peak Outflow (cfs)	161.67
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	723.43
Max HGL Depth Attained (ft)	3.43
Average HGL Elevation Attained (ft)	721.17
Average HGL Depth Attained (ft)	1.17
Time of Max HGL Occurrence (days hh:mm)	0 12:36
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	543.37
Peak Lateral Inflow (cfs)	215.43
Peak Outflow (cfs)	575.43
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	693.29
Max HGL Depth Attained (ft)	6.29
Average HGL Elevation Attained (ft)	689.44
Average HGL Depth Attained (ft)	2.44
Time of Max HGL Occurrence (days hh:mm)	0 12:29
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	616.71
Peak Lateral Inflow (cfs)	41.36
Peak Outflow (cfs)	579.91
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	690.89
Max HGL Depth Attained (ft)	5.89
Average HGL Elevation Attained (ft)	686.39
Average HGL Depth Attained (ft)	1.39
Time of Max HGL Occurrence (days hh:mm)	0 12:43
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	80.37
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	80.28
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	693.21
Max HGL Depth Attained (ft)	3.51
Average HGL Elevation Attained (ft)	690.38
Average HGL Depth Attained (ft)	0.68
Time of Max HGL Occurrence (days hh:mm)	0 12:23
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	13.24
Peak Lateral Inflow (cfs)	13.24
Peak Outflow (cfs)	13.16
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	695.41
Max HGL Depth Attained (ft)	1.21
Average HGL Elevation Attained (ft)	694.38
Average HGL Depth Attained (ft)	0.18
Time of Max HGL Occurrence (days hh:mm)	0 12:15
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	116.93
Peak Lateral Inflow (cfs)	36.53
Peak Outflow (cfs)	115.53
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	673.81
Max HGL Depth Attained (ft)	2.81
Average HGL Elevation Attained (ft)	671.81
Average HGL Depth Attained (ft)	0.81
Time of Max HGL Occurrence (days hh:mm)	0 12:17
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

POST-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
10-YEAR

Project Description

File Name	26900.0002 - Proposed Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	27
Nodes	44
Junctions	22
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	16
Links	43
Channels	22
Pipes	13
Pumps	0
Orifices	0
Weirs	8
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	5.16	1.69	717.81	323.96	0 00:59:24
2	B	179.82	484.00	64.00	5.16	1.69	303.00	204.41	0 00:26:13
3	C	57.45	484.00	61.00	5.16	1.47	84.22	46.78	0 00:38:19
4	CC	10.65	484.00	63.00	5.16	1.61	17.16	13.80	0 00:15:50
5	D	48.20	484.00	65.00	5.16	1.76	84.88	50.48	0 00:35:42
6	DD	13.80	484.00	66.00	5.16	1.84	25.36	19.09	0 00:20:31
7	E	23.76	484.00	59.00	5.16	1.33	31.51	18.72	0 00:31:01
8	EE	82.20	484.00	64.00	5.16	1.69	138.51	93.62	0 00:26:09
9	H	50.44	484.00	59.00	5.16	1.33	66.88	32.77	0 00:46:26
10	I	28.52	484.00	62.00	5.16	1.54	43.86	25.64	0 00:35:09
11	J	111.18	484.00	57.00	5.16	1.19	132.42	57.19	0 00:54:39
12	K	171.51	484.00	57.00	5.16	1.19	204.27	110.05	0 00:35:52
13	L	92.78	484.00	57.00	5.16	1.19	110.50	65.62	0 00:28:40
14	M	29.43	484.00	59.00	5.16	1.33	39.02	26.45	0 00:22:19
15	N	43.16	484.00	58.00	5.16	1.26	54.30	31.59	0 00:31:30
16	O	48.38	484.00	59.00	5.16	1.33	64.15	34.10	0 00:39:43
17	P	14.69	484.00	60.00	5.16	1.40	20.49	14.31	0 00:21:25
18	Post-1	118.69	484.00	90.00	5.16	4.03	478.44	318.69	0 00:28:32
19	Post-2	79.81	484.00	90.00	5.16	4.03	321.71	242.24	0 00:20:52
20	Post-3	54.10	484.00	90.00	5.16	4.03	218.09	198.53	0 00:10:30
21	Post-4A	461.12	484.00	90.00	5.16	4.03	1858.77	772.31	0 01:12:14
22	Post-4B	50.66	484.00	90.00	5.16	4.03	204.21	187.39	0 00:10:05
23	Post-5	123.17	484.00	90.00	5.16	4.03	496.50	379.58	0 00:20:00
24	Post-6	80.67	484.00	90.00	5.16	4.03	325.18	257.82	0 00:18:00
25	W	79.34	484.00	61.00	5.16	1.47	116.31	76.74	0 00:25:40
26	X	22.96	484.00	59.00	5.16	1.33	30.44	24.37	0 00:13:51
27	Y	34.60	484.00	62.00	5.16	1.54	53.21	38.59	0 00:20:37

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	322.89	719.32	0.00	80.68	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	809.23	687.52	0.00	112.48	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	46.76	767.69	0.00	32.31	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	677.70	800.00	1.00	830.19	683.33	0.00	116.67	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	33.87	716.30	0.00	83.70	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	36.61	724.85	0.00	75.15	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	76.61	717.65	0.00	82.35	0 00:00	0.00	0.00
8	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	95.09	691.92	0.00	108.08	0 00:00	0.00	0.00
9	Jun-22	Junction	666.10	800.00	666.10	800.00	1.00	278.72	669.66	0.00	130.34	0 00:00	0.00	0.00
10	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	139.27	673.21	0.00	126.79	0 00:00	0.00	0.00
11	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	67.39	709.99	0.00	90.01	0 00:00	0.00	0.00
12	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	183.49	731.88	0.00	68.12	0 00:00	0.00	0.00
13	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	829.67	680.60	0.00	119.40	0 00:00	0.00	0.00
14	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	99.51	688.71	0.00	111.29	0 00:00	0.00	0.00
15	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	14.04	690.77	0.00	109.23	0 00:00	0.00	0.00
16	Jun-30	Junction	656.20	800.00	656.20	800.00	1.00	292.47	657.30	0.00	142.70	0 00:00	0.00	0.00
17	Jun-36	Junction	738.00	800.00	738.00	999.00	1.00	117.57	738.78	0.00	61.22	0 00:00	0.00	0.00
18	Jun-37	Junction	744.00	800.00	744.00	800.00	1.00	117.57	747.45	0.00	52.55	0 00:00	0.00	0.00
19	Jun-38	Junction	731.00	800.00	731.00	999.00	1.00	44.13	731.35	0.00	68.65	0 00:00	0.00	0.00
20	Jun-43	Junction	739.00	800.00	739.00	999.00	1.00	95.94	740.96	0.00	59.04	0 00:00	0.00	0.00
21	Jun-44	Junction	745.00	800.00	745.00	999.00	1.00	20.34	746.24	0.00	53.76	0 00:00	0.00	0.00
22	Jun-45	Junction	672.00	800.00	672.00	999.00	1.00	252.20	675.21	0.00	999.04	0 00:00	0.00	0.00
23	Out-01	Outfall	675.80					829.68	679.61					
24	Out-02	Outfall	685.60					99.49	687.72					
25	Out-03	Outfall	688.00					14.04	688.77					
26	Out-04	Outfall	655.20					292.47	656.56					
27	Out-05	Outfall	737.50					117.57	738.28					
28	Out-06	Outfall	730.00					44.13	730.35					
29	Pond-1	Storage Node	739.00	746.00	739.00		282063.00	317.88	742.57				0.00	0.00
30	Pond-2A	Storage Node	739.00	743.00	739.00		786496.00	241.32	739.99				0.00	0.00
31	Pond-2B	Storage Node	739.00	743.00	739.00		83441.00	2.07	739.65				0.00	0.00
32	Pond-3	Storage Node	745.00	752.00	745.00		165275.00	192.53	748.39				0.00	0.00
33	Pond-4A	Storage Node	674.00	682.50	674.00		832543.00	781.70	678.37				0.00	0.00
34	Pond-4B	Storage Node	674.00	682.50	674.00		164301.00	181.18	678.39				0.00	0.00
35	Pond-5	Storage Node	744.00	752.50	744.00		245841.00	375.82	748.42				0.00	0.00
36	Pond-6	Storage Node	732.00	738.00	732.00		316369.00	250.57	734.34				0.00	0.00
37	Stor-D	Storage Node	734.00	765.00	734.00		233730.00	90.61	734.39				0.00	0.00
38	Stor-EE	Storage Node	660.50	703.00	660.50		1073922.00	292.48	663.52				0.00	0.00
39	Stor-G	Storage Node	720.00	730.00	720.00		1000.00	213.62	723.84				0.00	0.00
40	Stor-I	Storage Node	687.00	739.00	687.00		936779.00	693.78	693.50				0.00	0.00
41	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	769.97	691.25				0.00	0.00
42	Stor-NO	Storage Node	689.70	724.00	689.70		91514.00	99.65	693.79				0.00	0.00
43	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	14.04	695.45				0.00	0.00
44	Stor-Y	Storage Node	671.00	705.50	671.00		418671.00	129.20	673.91				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-02	Pipe	Jun-43	Jun-26	50.00	738.00	737.00	2.0000	48.000	0.0130	95.94	619.59	0.15	11.21	1.43	0.36	0.00	Calculated
2	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	829.67	1291.66	0.64	11.00	4.71	0.59	0.00	Calculated
3	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	99.51	209.17	0.48	8.14	3.05	0.76	0.00	Calculated
4	Link-10	Pipe	Pond-2A	Stor-I	50.00	733.00	732.00	2.0000	36.000	0.0130	25.35	249.56	0.10	16.28	0.82	0.27	0.00	Calculated
5	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	292.47	1769.96	0.17	6.76	2.06	0.41	0.00	Calculated
6	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	14.04	186.93	0.08	5.86	1.01	0.25	0.00	Calculated
7	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	48.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
8	Link-40	Pipe	Pond-4B	Pond-4A	620.00	668.00	668.00	0.0000	60.000	0.0130	71.80	6.62	10.85	3.25	4.38	0.88	0.00	> CAPACITY
9	Link-41	Pipe	Pond-2B	Pond-2A	400.00	733.00	733.00	0.0000	36.000	0.0130	2.07	1.05	1.96	2.19	0.66	0.22	0.00	> CAPACITY
10	Link-61	Pipe	Jun-44	Jun-08	50.00	744.00	743.00	2.0000	36.000	0.0130	20.34	133.40	0.15	9.64	1.02	0.34	0.00	Calculated
11	Link-66	Pipe	Jun-37	Jun-36	50.00	739.00	738.00	2.0000	72.000	0.0130	117.57	1867.94	0.06	9.25	2.11	0.35	0.00	Calculated
12	Link-70	Pipe	Pond-6	Jun-38	50.00	732.00	731.00	2.0000	36.000	0.0130	44.13	188.65	0.23	7.20	1.34	0.45	0.00	Calculated
13	Link-74	Pipe	Jun-45	Jun-22	50.00	672.00	671.00	2.0000	72.000	0.0150	252.20	963.25	0.26	12.35	2.55	0.43	0.00	Calculated
14	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	240.480	0.0320	43.62	164010.50	0.00	50.00	0.63	0.03	0.00	
15	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	322.45	94204.70	0.00	7.43	3.15	0.15	0.00	
16	Link-04	Channel	Stor-I	Stor-J	1212.00	687.00	685.00	0.1700	503.760	0.0320	713.58	167151.28	0.00	4.10	6.30	0.15	0.00	
17	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	798.63	471728.19	0.00	6.54	5.57	0.11	0.00	
18	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	36.32	160489.81	0.00	4.61	1.92	0.05	0.00	
19	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	33.61	228402.42	0.00	4.98	1.29	0.04	0.00	
20	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	128.51	320223.33	0.00	5.61	2.30	0.06	0.00	
21	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	76.03	202679.20	0.00	5.76	1.78	0.07	0.00	
22	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	733.00	603845.15	0.00	4.45	5.88	0.10	0.00	
23	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	212.59	324200.23	0.00	6.17	3.45	0.10	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	93.51	428321.41	0.00	6.40	1.91	0.05	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.10	664.00	0.3600	635.160	0.0320	278.29	294095.79	0.00	3.87	3.05	0.06	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.10	0.7100	607.200	0.0320	138.88	432587.81	0.00	2.93	2.70	0.05	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	66.40	346337.45	0.00	4.89	1.91	0.05	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	90.60	869869.15	0.00	2.39	0.63	0.02	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	182.24	512575.31	0.00	3.53	0.76	0.02	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	829.68	165532.51	0.01	7.17	3.80	0.11	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.60	1.0000	352.800	0.0320	99.49	142885.80	0.00	4.07	2.10	0.07	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	14.04	233235.72	0.00	3.40	0.77	0.02	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.20	1.0000	240.840	0.0320	292.47	176082.31	0.00	2.18	1.23	0.06	0.00	
34	Link-64	Channel	Jun-36	Out-05	100.00	738.00	737.50	0.5000	120.000	0.0350	117.57	6901.78	0.02	2.51	0.78	0.08	0.00	
35	Link-67	Channel	Jun-38	Out-06	100.00	731.00	730.00	1.0000	120.000	0.0350	44.13	9760.59	0.00	2.10	0.35	0.04	0.00	
36	Weir-16	Weir	Pond-5	Jun-37		744.00	744.00				59.24							
37	Weir-17	Weir	Pond-5	Jun-37		744.00	744.00				58.33							
38	Weir-29	Weir	Pond-1	Jun-43		739.00	739.00				55.22							
39	Weir-31	Weir	Pond-1	Jun-43		739.00	739.00				40.72							
40	Weir-32	Weir	Pond-3	Jun-44		745.00	745.00				12.67							
41	Weir-34	Weir	Pond-3	Jun-44		745.00	745.00				7.67							
42	Weir-39	Weir	Pond-4A	Jun-45		674.00	672.00				200.70							
43	Weir-40	Weir	Pond-4A	Jun-45		674.00	672.00				51.50							

Storage Nodes

Storage Node : Pond-1

Output Summary Results

Peak Inflow (cfs)	317.88
Peak Lateral Inflow (cfs)	317.88
Peak Outflow (cfs)	95.94
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	742.57
Max HGL Depth Attained (ft)	3.57
Average HGL Elevation Attained (ft)	740.15
Average HGL Depth Attained (ft)	1.15
Time of Max HGL Occurrence (days hh:mm)	0 12:59
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2A

Output Summary Results

Peak Inflow (cfs)	241.32
Peak Lateral Inflow (cfs)	241.32
Peak Outflow (cfs)	27.27
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	739.99
Max HGL Depth Attained (ft)	0.99
Average HGL Elevation Attained (ft)	739.45
Average HGL Depth Attained (ft)	0.45
Time of Max HGL Occurrence (days hh:mm)	0 13:33
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2B

Output Summary Results

Peak Inflow (cfs)	2.07
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	0.51
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	739.65
Max HGL Depth Attained (ft)	0.65
Average HGL Elevation Attained (ft)	739.33
Average HGL Depth Attained (ft)	0.33
Time of Max HGL Occurrence (days hh:mm)	0 20:15
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-3

Output Summary Results

Peak Inflow (cfs)	192.53
Peak Lateral Inflow (cfs)	192.53
Peak Outflow (cfs)	20.34
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	748.39
Max HGL Depth Attained (ft)	3.39
Average HGL Elevation Attained (ft)	746.71
Average HGL Depth Attained (ft)	1.71
Time of Max HGL Occurrence (days hh:mm)	0 13:12
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4A

Output Summary Results

Peak Inflow (cfs)	781.70
Peak Lateral Inflow (cfs)	772.30
Peak Outflow (cfs)	275.38
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	678.37
Max HGL Depth Attained (ft)	4.37
Average HGL Elevation Attained (ft)	675.69
Average HGL Depth Attained (ft)	1.69
Time of Max HGL Occurrence (days hh:mm)	0 14:03
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4B

Output Summary Results

Peak Inflow (cfs)	181.18
Peak Lateral Inflow (cfs)	181.18
Peak Outflow (cfs)	55.29
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	678.39
Max HGL Depth Attained (ft)	4.39
Average HGL Elevation Attained (ft)	675.72
Average HGL Depth Attained (ft)	1.72
Time of Max HGL Occurrence (days hh:mm)	0 14:06
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-5

Output Summary Results

Peak Inflow (cfs)	375.82
Peak Lateral Inflow (cfs)	375.82
Peak Outflow (cfs)	117.57
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	748.42
Max HGL Depth Attained (ft)	4.42
Average HGL Elevation Attained (ft)	745.29
Average HGL Depth Attained (ft)	1.29
Time of Max HGL Occurrence (days hh:mm)	0 12:47
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-6

Output Summary Results

Peak Inflow (cfs)	250.57
Peak Lateral Inflow (cfs)	250.57
Peak Outflow (cfs)	44.13
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.34
Max HGL Depth Attained (ft)	2.34
Average HGL Elevation Attained (ft)	732.82
Average HGL Depth Attained (ft)	0.82
Time of Max HGL Occurrence (days hh:mm)	0 12:59
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	90.61
Peak Lateral Inflow (cfs)	50.04
Peak Outflow (cfs)	90.60
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.39
Max HGL Depth Attained (ft)	0.39
Average HGL Elevation Attained (ft)	734.05
Average HGL Depth Attained (ft)	0.05
Time of Max HGL Occurrence (days hh:mm)	0 12:36
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	292.48
Peak Lateral Inflow (cfs)	93.48
Peak Outflow (cfs)	292.47
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	663.52
Max HGL Depth Attained (ft)	3.02
Average HGL Elevation Attained (ft)	661.61
Average HGL Depth Attained (ft)	1.11
Time of Max HGL Occurrence (days hh:mm)	0 14:02
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	213.62
Peak Lateral Inflow (cfs)	32.61
Peak Outflow (cfs)	212.59
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	723.84
Max HGL Depth Attained (ft)	3.84
Average HGL Elevation Attained (ft)	721.29
Average HGL Depth Attained (ft)	1.29
Time of Max HGL Occurrence (days hh:mm)	0 12:49
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	693.78
Peak Lateral Inflow (cfs)	227.34
Peak Outflow (cfs)	713.58
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	693.50
Max HGL Depth Attained (ft)	6.5
Average HGL Elevation Attained (ft)	689.65
Average HGL Depth Attained (ft)	2.65
Time of Max HGL Occurrence (days hh:mm)	0 12:36
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	769.97
Peak Lateral Inflow (cfs)	56.88
Peak Outflow (cfs)	733.00
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	691.25
Max HGL Depth Attained (ft)	6.25
Average HGL Elevation Attained (ft)	686.61
Average HGL Depth Attained (ft)	1.61
Time of Max HGL Occurrence (days hh:mm)	0 12:54
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	99.65
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	99.51
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	693.79
Max HGL Depth Attained (ft)	4.09
Average HGL Elevation Attained (ft)	690.53
Average HGL Depth Attained (ft)	0.83
Time of Max HGL Occurrence (days hh:mm)	0 12:37
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	14.04
Peak Lateral Inflow (cfs)	14.04
Peak Outflow (cfs)	14.04
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	695.45
Max HGL Depth Attained (ft)	1.25
Average HGL Elevation Attained (ft)	694.42
Average HGL Depth Attained (ft)	0.22
Time of Max HGL Occurrence (days hh:mm)	0 12:25
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	129.20
Peak Lateral Inflow (cfs)	38.30
Peak Outflow (cfs)	128.51
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	673.91
Max HGL Depth Attained (ft)	2.91
Average HGL Elevation Attained (ft)	671.87
Average HGL Depth Attained (ft)	0.87
Time of Max HGL Occurrence (days hh:mm)	0 12:27
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

POST-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
25-YEAR

Project Description

File Name	26900.0002 - Proposed Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	27
Nodes	44
Junctions	22
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	16
Links	43
Channels	22
Pipes	13
Pumps	0
Orifices	0
Weirs	8
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	6.12	2.35	1000.67	533.65	0 00:59:24
2	B	179.82	484.00	64.00	6.12	2.35	422.40	392.16	0 00:26:13
3	C	57.45	484.00	61.00	6.12	2.09	119.84	85.22	0 00:38:19
4	CC	10.65	484.00	63.00	6.12	2.26	24.08	28.72	0 00:15:50
5	D	48.20	484.00	65.00	6.12	2.44	117.56	90.01	0 00:35:42
6	DD	13.80	484.00	66.00	6.12	2.53	34.90	37.45	0 00:20:31
7	E	23.76	484.00	59.00	6.12	1.92	45.52	36.55	0 00:31:01
8	EE	82.20	484.00	64.00	6.12	2.35	193.09	179.55	0 00:26:09
9	H	50.44	484.00	59.00	6.12	1.92	96.64	58.64	0 00:46:26
10	I	28.52	484.00	62.00	6.12	2.17	61.97	46.99	0 00:35:09
11	J	111.18	484.00	57.00	6.12	1.75	194.45	102.32	0 00:54:39
12	K	171.51	484.00	57.00	6.12	1.75	299.97	213.13	0 00:35:52
13	L	92.78	484.00	57.00	6.12	1.75	162.27	133.93	0 00:28:40
14	M	29.43	484.00	59.00	6.12	1.92	56.39	55.45	0 00:22:19
15	N	43.16	484.00	58.00	6.12	1.83	79.07	62.07	0 00:31:30
16	O	48.38	484.00	59.00	6.12	1.92	92.70	62.93	0 00:39:43
17	P	14.69	484.00	60.00	6.12	2.00	29.38	29.84	0 00:21:25
18	Post-1	118.69	484.00	90.00	6.12	4.96	589.06	517.72	0 00:28:32
19	Post-2	79.81	484.00	90.00	6.12	4.96	396.10	408.07	0 00:20:52
20	Post-3	54.10	484.00	90.00	6.12	4.96	268.52	347.91	0 00:10:30
21	Post-4A	461.12	484.00	90.00	6.12	4.96	2288.54	1084.21	0 01:12:14
22	Post-4B	50.66	484.00	90.00	6.12	4.96	251.43	328.79	0 00:10:05
23	Post-5	123.17	484.00	90.00	6.12	4.96	611.29	642.10	0 00:20:00
24	Post-6	80.67	484.00	90.00	6.12	4.96	400.37	439.73	0 00:18:00
25	W	79.34	484.00	61.00	6.12	2.09	165.50	152.59	0 00:25:40
26	X	22.96	484.00	59.00	6.12	1.92	43.99	54.09	0 00:13:51
27	Y	34.60	484.00	62.00	6.12	2.17	75.19	78.74	0 00:20:37

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	532.56	720.19	0.00	79.81	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	1359.62	688.58	0.00	111.42	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	84.16	767.81	0.00	32.19	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	677.70	800.00	1.00	1388.42	685.18	0.00	114.82	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	62.47	716.62	0.00	83.38	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	89.79	725.63	0.00	74.37	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	151.97	718.23	0.00	81.77	0 00:00	0.00	0.00
8	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	186.05	692.68	0.00	107.32	0 00:00	0.00	0.00
9	Jun-22	Junction	666.10	800.00	666.10	800.00	1.00	401.88	670.05	0.00	129.95	0 00:00	0.00	0.00
10	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	270.92	673.96	0.00	126.04	0 00:00	0.00	0.00
11	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	149.41	710.57	0.00	89.43	0 00:00	0.00	0.00
12	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	325.95	732.21	0.00	67.79	0 00:00	0.00	0.00
13	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	1381.93	681.47	0.00	118.53	0 00:00	0.00	0.00
14	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	191.58	689.27	0.00	110.73	0 00:00	0.00	0.00
15	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	30.78	691.04	0.00	108.96	0 00:00	0.00	0.00
16	Jun-30	Junction	656.20	800.00	656.20	800.00	1.00	502.58	657.53	0.00	142.47	0 00:00	0.00	0.00
17	Jun-36	Junction	738.00	800.00	738.00	999.00	1.00	181.21	739.02	0.00	60.98	0 00:00	0.00	0.00
18	Jun-37	Junction	744.00	800.00	744.00	800.00	1.00	181.21	748.61	0.00	51.39	0 00:00	0.00	0.00
19	Jun-38	Junction	731.00	800.00	731.00	999.00	1.00	59.14	731.42	0.00	68.58	0 00:00	0.00	0.00
20	Jun-43	Junction	739.00	800.00	739.00	999.00	1.00	158.09	741.99	0.00	58.01	0 00:00	0.00	0.00
21	Jun-44	Junction	745.00	800.00	745.00	999.00	1.00	44.60	747.20	0.00	52.80	0 00:00	0.00	0.00
22	Jun-45	Junction	672.00	800.00	672.00	999.00	1.00	368.61	676.25	0.00	998.00	0 00:00	0.00	0.00
23	Out-01	Outfall	675.80					1381.94	680.47					
24	Out-02	Outfall	685.60					191.58	688.27					
25	Out-03	Outfall	688.00					28.70	689.00					
26	Out-04	Outfall	655.20					502.49	656.84					
27	Out-05	Outfall	737.50					181.21	738.52					
28	Out-06	Outfall	730.00					59.14	730.42					
29	Pond-1	Storage Node	739.00	746.00	739.00		282063.00	515.10	743.27				0.00	0.00
30	Pond-2A	Storage Node	739.00	743.00	739.00		786496.00	407.90	740.23				0.00	0.00
31	Pond-2B	Storage Node	739.00	743.00	739.00		83441.00	3.55	739.86				0.00	0.00
32	Pond-3	Storage Node	745.00	752.00	745.00		165275.00	344.00	748.98				0.00	0.00
33	Pond-4A	Storage Node	674.00	682.50	674.00		832543.00	1100.80	679.24				0.00	0.00
34	Pond-4B	Storage Node	674.00	682.50	674.00		164301.00	323.64	679.26				0.00	0.00
35	Pond-5	Storage Node	744.00	752.50	744.00		245841.00	641.85	749.37				0.00	0.00
36	Pond-6	Storage Node	732.00	738.00	732.00		316369.00	435.00	734.94				0.00	0.00
37	Stor-D	Storage Node	734.00	765.00	734.00		233730.00	163.76	734.55				0.00	0.00
38	Stor-EE	Storage Node	660.50	703.00	660.50		1073922.00	504.17	664.88				0.00	0.00
39	Stor-G	Storage Node	720.00	730.00	720.00		1000.00	380.64	724.85				0.00	0.00
40	Stor-I	Storage Node	687.00	739.00	687.00		936779.00	1151.65	694.15				0.00	0.00
41	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	1256.08	691.98				0.00	0.00
42	Stor-NO	Storage Node	689.70	724.00	689.70		91514.00	207.02	696.84				0.00	0.00
43	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	28.76	696.26				0.00	0.00
44	Stor-Y	Storage Node	671.00	705.50	671.00		418671.00	253.72	674.65				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-02	Pipe	Jun-43	Jun-26	50.00	738.00	737.00	2.0000	48.000	0.0130	158.09	619.59	0.26	12.44	2.12	0.53	0.00	Calculated
2	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	1381.93	1291.66	1.07	14.22	6.07	0.76	0.00	> CAPACITY
3	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	191.58	209.17	0.92	14.37	3.33	0.83	0.00	Calculated
4	Link-10	Pipe	Pond-2A	Stor-I	50.00	733.00	732.00	2.0000	36.000	0.0130	34.22	249.56	0.14	16.84	0.99	0.33	0.00	Calculated
5	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	502.58	1769.96	0.28	8.38	2.85	0.57	0.00	Calculated
6	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	30.78	186.93	0.16	6.92	1.54	0.39	0.00	Calculated
7	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	48.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
8	Link-40	Pipe	Pond-4B	Pond-4A	620.00	668.00	668.00	0.0000	60.000	0.0130	101.73	6.62	15.38	4.29	5.00	1.00	65.00	SURCHARGED
9	Link-41	Pipe	Pond-2B	Pond-2A	400.00	733.00	733.00	0.0000	36.000	0.0130	3.55	1.05	3.37	2.78	0.86	0.29	0.00	> CAPACITY
10	Link-61	Pipe	Jun-44	Jun-08	50.00	744.00	743.00	2.0000	36.000	0.0130	44.60	133.40	0.33	10.82	1.70	0.57	0.00	Calculated
11	Link-66	Pipe	Jun-37	Jun-36	50.00	739.00	738.00	2.0000	72.000	0.0130	181.21	1867.94	0.10	10.74	2.81	0.47	0.00	Calculated
12	Link-70	Pipe	Pond-6	Jun-38	50.00	732.00	731.00	2.0000	36.000	0.0130	59.14	188.65	0.31	7.33	1.68	0.56	0.00	Calculated
13	Link-74	Pipe	Jun-45	Jun-22	50.00	672.00	671.00	2.0000	72.000	0.0150	368.61	963.25	0.38	13.70	3.36	0.56	0.00	Calculated
14	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	240.480	0.0320	79.91	164010.50	0.00	50.00	0.74	0.04	0.00	
15	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	531.40	94204.70	0.01	8.49	4.01	0.20	0.00	
16	Link-04	Channel	Stor-I	Stor-J	1212.00	687.00	685.00	0.1700	503.760	0.0320	1154.98	167151.28	0.01	4.40	7.03	0.17	0.00	
17	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	1335.88	471728.19	0.00	6.53	7.02	0.14	0.00	
18	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	89.21	160489.81	0.00	6.05	2.57	0.07	0.00	
19	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	62.03	228402.42	0.00	5.64	1.65	0.05	0.00	
20	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	250.63	320223.33	0.00	6.26	3.05	0.07	0.00	
21	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	150.43	202679.20	0.00	6.77	2.45	0.09	0.00	
22	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	1222.53	603845.15	0.00	4.60	6.77	0.11	0.00	
23	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	376.43	324200.23	0.00	6.85	4.44	0.12	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	181.50	428321.41	0.00	7.38	2.67	0.07	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.10	664.00	0.3600	635.160	0.0320	415.13	294095.79	0.00	3.96	3.55	0.07	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.10	0.7100	607.200	0.0320	269.29	432587.81	0.00	3.86	3.36	0.07	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	148.04	346337.45	0.00	5.33	2.57	0.06	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	163.71	869869.15	0.00	2.88	0.87	0.03	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	322.84	512575.31	0.00	4.08	1.08	0.03	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	1381.94	165532.51	0.01	8.49	4.67	0.13	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.60	1.0000	352.800	0.0320	191.58	142885.80	0.00	4.54	2.66	0.09	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	28.70	233235.72	0.00	4.31	1.01	0.03	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.20	1.0000	240.840	0.0320	502.49	176082.31	0.00	2.92	1.44	0.07	0.00	
34	Link-64	Channel	Jun-36	Out-05	100.00	738.00	737.50	0.5000	120.000	0.0350	181.21	6901.78	0.03	2.97	1.02	0.10	0.00	
35	Link-67	Channel	Jun-38	Out-06	100.00	731.00	730.00	1.0000	120.000	0.0350	59.14	9760.59	0.01	2.35	0.42	0.04	0.00	
36	Weir-16	Weir	Pond-5	Jun-37		744.00	744.00				67.54							
37	Weir-17	Weir	Pond-5	Jun-37		744.00	744.00				113.68							
38	Weir-29	Weir	Pond-1	Jun-43		739.00	739.00				62.84							
39	Weir-31	Weir	Pond-1	Jun-43		739.00	739.00				95.24							
40	Weir-32	Weir	Pond-3	Jun-44		745.00	745.00				14.45							
41	Weir-34	Weir	Pond-3	Jun-44		745.00	745.00				30.15							
42	Weir-39	Weir	Pond-4A	Jun-45		674.00	672.00				246.66							
43	Weir-40	Weir	Pond-4A	Jun-45		674.00	672.00				121.95							

Storage Nodes

Storage Node : Pond-1

Output Summary Results

Peak Inflow (cfs)	515.10
Peak Lateral Inflow (cfs)	515.10
Peak Outflow (cfs)	158.09
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	743.27
Max HGL Depth Attained (ft)	4.27
Average HGL Elevation Attained (ft)	740.28
Average HGL Depth Attained (ft)	1.28
Time of Max HGL Occurrence (days hh:mm)	0 12:41
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2A

Output Summary Results

Peak Inflow (cfs)	407.90
Peak Lateral Inflow (cfs)	407.90
Peak Outflow (cfs)	37.57
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	740.23
Max HGL Depth Attained (ft)	1.23
Average HGL Elevation Attained (ft)	739.54
Average HGL Depth Attained (ft)	0.54
Time of Max HGL Occurrence (days hh:mm)	0 13:03
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2B

Output Summary Results

Peak Inflow (cfs)	3.55
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	0.86
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	739.86
Max HGL Depth Attained (ft)	0.86
Average HGL Elevation Attained (ft)	739.42
Average HGL Depth Attained (ft)	0.42
Time of Max HGL Occurrence (days hh:mm)	0 18:11
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-3

Output Summary Results

Peak Inflow (cfs)	344.00
Peak Lateral Inflow (cfs)	344.00
Peak Outflow (cfs)	44.60
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	748.98
Max HGL Depth Attained (ft)	3.98
Average HGL Elevation Attained (ft)	746.87
Average HGL Depth Attained (ft)	1.87
Time of Max HGL Occurrence (days hh:mm)	0 12:30
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4A

Output Summary Results

Peak Inflow (cfs)	1100.80
Peak Lateral Inflow (cfs)	1083.33
Peak Outflow (cfs)	409.28
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	679.24
Max HGL Depth Attained (ft)	5.24
Average HGL Elevation Attained (ft)	675.94
Average HGL Depth Attained (ft)	1.94
Time of Max HGL Occurrence (days hh:mm)	0 13:41
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4B

Output Summary Results

Peak Inflow (cfs)	323.64
Peak Lateral Inflow (cfs)	323.64
Peak Outflow (cfs)	90.76
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	679.26
Max HGL Depth Attained (ft)	5.26
Average HGL Elevation Attained (ft)	675.98
Average HGL Depth Attained (ft)	1.98
Time of Max HGL Occurrence (days hh:mm)	0 13:34
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-5

Output Summary Results

Peak Inflow (cfs)	641.85
Peak Lateral Inflow (cfs)	641.85
Peak Outflow (cfs)	181.21
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	749.37
Max HGL Depth Attained (ft)	5.37
Average HGL Elevation Attained (ft)	745.45
Average HGL Depth Attained (ft)	1.45
Time of Max HGL Occurrence (days hh:mm)	0 12:30
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-6

Output Summary Results

Peak Inflow (cfs)	435.00
Peak Lateral Inflow (cfs)	435.00
Peak Outflow (cfs)	59.14
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.94
Max HGL Depth Attained (ft)	2.94
Average HGL Elevation Attained (ft)	732.97
Average HGL Depth Attained (ft)	0.97
Time of Max HGL Occurrence (days hh:mm)	0 12:42
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	163.76
Peak Lateral Inflow (cfs)	89.94
Peak Outflow (cfs)	163.71
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.55
Max HGL Depth Attained (ft)	0.55
Average HGL Elevation Attained (ft)	734.07
Average HGL Depth Attained (ft)	0.07
Time of Max HGL Occurrence (days hh:mm)	0 12:25
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	504.17
Peak Lateral Inflow (cfs)	179.09
Peak Outflow (cfs)	502.58
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	664.88
Max HGL Depth Attained (ft)	4.38
Average HGL Elevation Attained (ft)	661.83
Average HGL Depth Attained (ft)	1.33
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	380.64
Peak Lateral Inflow (cfs)	58.28
Peak Outflow (cfs)	376.43
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	724.85
Max HGL Depth Attained (ft)	4.85
Average HGL Elevation Attained (ft)	721.43
Average HGL Depth Attained (ft)	1.43
Time of Max HGL Occurrence (days hh:mm)	0 12:33
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	1151.65
Peak Lateral Inflow (cfs)	435.47
Peak Outflow (cfs)	1154.98
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	694.15
Max HGL Depth Attained (ft)	7.15
Average HGL Elevation Attained (ft)	689.91
Average HGL Depth Attained (ft)	2.91
Time of Max HGL Occurrence (days hh:mm)	0 12:22
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	1256.08
Peak Lateral Inflow (cfs)	101.99
Peak Outflow (cfs)	1222.53
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	691.98
Max HGL Depth Attained (ft)	6.98
Average HGL Elevation Attained (ft)	686.86
Average HGL Depth Attained (ft)	1.86
Time of Max HGL Occurrence (days hh:mm)	0 12:38
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	207.02
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	191.58
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	696.84
Max HGL Depth Attained (ft)	7.14
Average HGL Elevation Attained (ft)	690.72
Average HGL Depth Attained (ft)	1.02
Time of Max HGL Occurrence (days hh:mm)	0 12:27
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	28.76
Peak Lateral Inflow (cfs)	28.76
Peak Outflow (cfs)	30.78
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	696.26
Max HGL Depth Attained (ft)	2.06
Average HGL Elevation Attained (ft)	694.47
Average HGL Depth Attained (ft)	0.27
Time of Max HGL Occurrence (days hh:mm)	0 12:15
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	253.72
Peak Lateral Inflow (cfs)	77.49
Peak Outflow (cfs)	250.63
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	674.65
Max HGL Depth Attained (ft)	3.65
Average HGL Elevation Attained (ft)	671.96
Average HGL Depth Attained (ft)	0.96
Time of Max HGL Occurrence (days hh:mm)	0 12:16
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

POST-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
50-YEAR

Project Description

File Name	26900.0002 - Proposed Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	27
Nodes	44
Junctions	22
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	16
Links	43
Channels	22
Pipes	13
Pumps	0
Orifices	0
Weirs	8
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	6.88	2.91	1239.66	671.67	0 00:59:24
2	B	179.82	484.00	64.00	6.88	2.91	523.28	491.59	0 00:26:13
3	C	57.45	484.00	61.00	6.88	2.62	150.29	108.91	0 00:38:19
4	CC	10.65	484.00	63.00	6.88	2.81	29.94	36.11	0 00:15:50
5	D	48.20	484.00	65.00	6.88	3.01	145.08	112.51	0 00:35:42
6	DD	13.80	484.00	66.00	6.88	3.11	42.92	46.35	0 00:20:31
7	E	23.76	484.00	59.00	6.88	2.42	57.57	47.35	0 00:31:01
8	EE	82.20	484.00	64.00	6.88	2.91	239.20	225.15	0 00:26:09
9	H	50.44	484.00	59.00	6.88	2.42	122.22	76.38	0 00:46:26
10	I	28.52	484.00	62.00	6.88	2.71	77.37	59.85	0 00:35:09
11	J	111.18	484.00	57.00	6.88	2.23	248.38	135.38	0 00:54:39
12	K	171.51	484.00	57.00	6.88	2.23	383.15	281.20	0 00:35:52
13	L	92.78	484.00	57.00	6.88	2.23	207.27	176.68	0 00:28:40
14	M	29.43	484.00	59.00	6.88	2.42	71.31	71.66	0 00:22:19
15	N	43.16	484.00	58.00	6.88	2.33	100.48	81.22	0 00:31:30
16	O	48.38	484.00	59.00	6.88	2.42	117.22	81.86	0 00:39:43
17	P	14.69	484.00	60.00	6.88	2.52	37.00	38.23	0 00:21:25
18	Post-1	118.69	484.00	90.00	6.88	5.71	677.25	589.58	0 00:28:32
19	Post-2	79.81	484.00	90.00	6.88	5.71	455.40	465.57	0 00:20:52
20	Post-3	54.10	484.00	90.00	6.88	5.71	308.72	396.74	0 00:10:30
21	Post-4A	461.12	484.00	90.00	6.88	5.71	2631.15	1239.28	0 01:12:14
22	Post-4B	50.66	484.00	90.00	6.88	5.71	289.07	375.06	0 00:10:05
23	Post-5	123.17	484.00	90.00	6.88	5.71	702.81	731.75	0 00:20:00
24	Post-6	80.67	484.00	90.00	6.88	5.71	460.30	501.86	0 00:18:00
25	W	79.34	484.00	61.00	6.88	2.62	207.55	194.32	0 00:25:40
26	X	22.96	484.00	59.00	6.88	2.42	55.63	69.45	0 00:13:51
27	Y	34.60	484.00	62.00	6.88	2.71	93.87	99.81	0 00:20:37

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	669.93	720.58	0.00	79.42	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	1752.96	689.12	0.00	110.88	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	108.03	767.86	0.00	32.14	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	677.70	800.00	1.00	1796.45	687.53	0.00	112.47	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	81.08	716.81	0.00	83.19	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	128.64	726.05	0.00	73.95	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	193.76	718.48	0.00	81.52	0 00:00	0.00	0.00
8	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	239.32	693.08	0.00	106.92	0 00:00	0.00	0.00
9	Jun-22	Junction	666.10	800.00	666.10	800.00	1.00	496.67	670.30	0.00	129.70	0 00:00	0.00	0.00
10	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	342.49	674.25	0.00	125.75	0 00:00	0.00	0.00
11	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	206.65	710.74	0.00	89.26	0 00:00	0.00	0.00
12	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	418.98	732.38	0.00	67.62	0 00:00	0.00	0.00
13	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	1731.42	681.91	0.00	118.09	0 00:00	0.00	0.00
14	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	220.64	689.38	0.00	110.62	0 00:00	0.00	0.00
15	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	37.71	691.15	0.00	108.85	0 00:00	0.00	0.00
16	Jun-30	Junction	656.20	800.00	656.20	800.00	1.00	640.39	657.65	0.00	142.35	0 00:00	0.00	0.00
17	Jun-36	Junction	738.00	800.00	738.00	999.00	1.00	220.27	739.15	0.00	60.85	0 00:00	0.00	0.00
18	Jun-37	Junction	744.00	800.00	744.00	800.00	1.00	220.27	749.25	0.00	50.75	0 00:00	0.00	0.00
19	Jun-38	Junction	731.00	800.00	731.00	999.00	1.00	64.74	731.44	0.00	68.56	0 00:00	0.00	0.00
20	Jun-43	Junction	739.00	800.00	739.00	999.00	1.00	195.33	742.55	0.00	57.45	0 00:00	0.00	0.00
21	Jun-44	Junction	745.00	800.00	745.00	999.00	1.00	64.09	748.31	0.00	51.69	0 00:00	0.00	0.00
22	Jun-45	Junction	672.00	800.00	672.00	999.00	1.00	455.12	676.96	0.00	997.29	0 00:00	0.00	0.00
23	Out-01	Outfall	675.80					1731.44	680.91					
24	Out-02	Outfall	685.60					220.64	688.38					
25	Out-03	Outfall	688.00					37.17	689.11					
26	Out-04	Outfall	655.20					640.31	656.84					
27	Out-05	Outfall	737.50					220.27	738.65					
28	Out-06	Outfall	730.00					64.74	730.44					
29	Pond-1	Storage Node	739.00	746.00	739.00		282063.00	587.92	743.72				0.00	0.00
30	Pond-2A	Storage Node	739.00	743.00	739.00		786496.00	465.38	740.40				0.00	0.00
31	Pond-2B	Storage Node	739.00	743.00	739.00		83441.00	5.07	740.03				0.00	0.00
32	Pond-3	Storage Node	745.00	752.00	745.00		165275.00	392.17	749.42				0.00	0.00
33	Pond-4A	Storage Node	674.00	682.50	674.00		832543.00	1239.06	679.83				0.00	0.00
34	Pond-4B	Storage Node	674.00	682.50	674.00		164301.00	368.69	679.87				0.00	0.00
35	Pond-5	Storage Node	744.00	752.50	744.00		245841.00	730.56	749.95				0.00	0.00
36	Pond-6	Storage Node	732.00	738.00	732.00		316369.00	495.46	735.35				0.00	0.00
37	Stor-D	Storage Node	734.00	765.00	734.00		233730.00	210.78	734.64				0.00	0.00
38	Stor-EE	Storage Node	660.50	703.00	660.50		1073922.00	644.69	665.66				0.00	0.00
39	Stor-G	Storage Node	720.00	730.00	720.00		1000.00	490.39	725.11				0.00	0.00
40	Stor-I	Storage Node	687.00	739.00	687.00		936779.00	1469.95	694.55				0.00	0.00
41	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	1602.20	692.48				0.00	0.00
42	Stor-NO	Storage Node	689.70	724.00	689.70		91514.00	280.18	699.18				0.00	0.00
43	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	37.19	696.62				0.00	0.00
44	Stor-Y	Storage Node	671.00	705.50	671.00		418671.00	319.97	674.95				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-02	Pipe	Jun-43	Jun-26	50.00	738.00	737.00	2.0000	48.000	0.0130	195.33	619.59	0.32	13.04	2.50	0.62	0.00	Calculated
2	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	1731.42	1291.66	1.34	16.51	6.55	0.82	0.00	> CAPACITY
3	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	220.64	209.17	1.05	16.28	3.39	0.85	0.00	> CAPACITY
4	Link-10	Pipe	Pond-2A	Stor-I	50.00	733.00	732.00	2.0000	36.000	0.0130	40.64	249.56	0.16	17.10	1.11	0.37	0.00	Calculated
5	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	640.39	1769.96	0.36	9.45	3.23	0.65	0.00	Calculated
6	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	37.71	186.93	0.20	7.06	1.78	0.45	0.00	Calculated
7	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	48.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
8	Link-40	Pipe	Pond-4B	Pond-4A	620.00	668.00	668.00	0.0000	60.000	0.0130	112.93	6.62	17.07	4.56	5.00	1.00	119.00	SURCHARGED
9	Link-41	Pipe	Pond-2B	Pond-2A	400.00	733.00	733.00	0.0000	36.000	0.0130	5.07	1.05	4.81	3.23	1.03	0.34	0.00	> CAPACITY
10	Link-61	Pipe	Jun-44	Jun-08	50.00	744.00	743.00	2.0000	36.000	0.0130	64.08	133.40	0.48	11.36	2.23	0.74	0.00	Calculated
11	Link-66	Pipe	Jun-37	Jun-36	50.00	739.00	738.00	2.0000	72.000	0.0130	220.27	1867.94	0.12	11.48	3.20	0.53	0.00	Calculated
12	Link-70	Pipe	Pond-6	Jun-38	50.00	732.00	731.00	2.0000	36.000	0.0130	64.74	188.65	0.34	7.72	1.72	0.57	0.00	Calculated
13	Link-74	Pipe	Jun-45	Jun-22	50.00	672.00	671.00	2.0000	72.000	0.0150	455.12	963.25	0.47	14.52	3.92	0.65	0.00	Calculated
14	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	240.480	0.0320	104.63	164010.50	0.00	50.00	0.80	0.04	0.00	
15	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	668.61	94204.70	0.01	8.72	4.59	0.22	0.00	
16	Link-04	Channel	Stor-I	Stor-J	1212.00	687.00	685.00	0.1700	503.760	0.0320	1468.79	167151.28	0.01	4.19	7.49	0.18	0.00	
17	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	1724.96	471728.19	0.00	6.53	8.45	0.17	0.00	
18	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	127.82	160489.81	0.00	7.12	2.87	0.08	0.00	
19	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	80.88	228402.42	0.00	5.85	2.45	0.07	0.00	
20	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	317.08	320223.33	0.00	6.63	3.35	0.08	0.00	
21	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	191.97	202679.20	0.00	7.08	2.77	0.10	0.00	
22	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	1570.75	603845.15	0.00	4.55	7.29	0.12	0.00	
23	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	484.28	324200.23	0.00	6.85	5.09	0.14	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	229.69	428321.41	0.00	7.44	3.06	0.08	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.10	664.00	0.3600	635.160	0.0320	496.18	294095.79	0.00	3.96	3.74	0.07	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.10	0.7100	607.200	0.0320	340.98	432587.81	0.00	4.04	3.62	0.07	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	201.65	346337.45	0.00	5.33	2.71	0.07	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	210.77	869869.15	0.00	3.09	1.00	0.03	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	414.76	512575.31	0.00	4.31	1.24	0.04	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	1731.44	165532.51	0.01	9.19	5.10	0.14	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.60	1.0000	352.800	0.0320	220.64	142885.80	0.00	4.77	2.78	0.09	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	37.17	233235.72	0.00	4.62	1.13	0.03	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.20	1.0000	240.840	0.0320	640.31	176082.31	0.00	3.07	1.45	0.07	0.00	
34	Link-64	Channel	Jun-36	Out-05	100.00	738.00	737.50	0.5000	120.000	0.0350	220.27	6901.78	0.03	3.21	1.15	0.11	0.00	
35	Link-67	Channel	Jun-38	Out-06	100.00	731.00	730.00	1.0000	120.000	0.0350	64.74	9760.59	0.01	2.44	0.44	0.04	0.00	
36	Weir-16	Weir	Pond-5	Jun-37		744.00	744.00				73.51							
37	Weir-17	Weir	Pond-5	Jun-37		744.00	744.00				146.77							
38	Weir-29	Weir	Pond-1	Jun-43		739.00	739.00				68.30							
39	Weir-31	Weir	Pond-1	Jun-43		739.00	739.00				127.02							
40	Weir-32	Weir	Pond-3	Jun-44		745.00	745.00				14.71							
41	Weir-34	Weir	Pond-3	Jun-44		745.00	745.00				50.25							
42	Weir-39	Weir	Pond-4A	Jun-45		674.00	672.00				275.94							
43	Weir-40	Weir	Pond-4A	Jun-45		674.00	672.00				179.18							

Storage Nodes

Storage Node : Pond-1

Output Summary Results

Peak Inflow (cfs)	587.92
Peak Lateral Inflow (cfs)	587.92
Peak Outflow (cfs)	195.33
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	743.72
Max HGL Depth Attained (ft)	4.72
Average HGL Elevation Attained (ft)	740.38
Average HGL Depth Attained (ft)	1.38
Time of Max HGL Occurrence (days hh:mm)	0 12:39
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2A

Output Summary Results

Peak Inflow (cfs)	465.38
Peak Lateral Inflow (cfs)	465.38
Peak Outflow (cfs)	45.44
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	740.40
Max HGL Depth Attained (ft)	1.4
Average HGL Elevation Attained (ft)	739.61
Average HGL Depth Attained (ft)	0.61
Time of Max HGL Occurrence (days hh:mm)	0 12:59
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2B

Output Summary Results

Peak Inflow (cfs)	5.07
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	1.20
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	740.03
Max HGL Depth Attained (ft)	1.03
Average HGL Elevation Attained (ft)	739.49
Average HGL Depth Attained (ft)	0.49
Time of Max HGL Occurrence (days hh:mm)	0 17:11
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-3

Output Summary Results

Peak Inflow (cfs)	392.17
Peak Lateral Inflow (cfs)	392.17
Peak Outflow (cfs)	64.09
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	749.42
Max HGL Depth Attained (ft)	4.42
Average HGL Elevation Attained (ft)	746.97
Average HGL Depth Attained (ft)	1.97
Time of Max HGL Occurrence (days hh:mm)	0 12:24
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4A

Output Summary Results

Peak Inflow (cfs)	1239.06
Peak Lateral Inflow (cfs)	1238.36
Peak Outflow (cfs)	499.32
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	679.83
Max HGL Depth Attained (ft)	5.83
Average HGL Elevation Attained (ft)	676.12
Average HGL Depth Attained (ft)	2.12
Time of Max HGL Occurrence (days hh:mm)	0 13:38
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4B

Output Summary Results

Peak Inflow (cfs)	368.69
Peak Lateral Inflow (cfs)	368.69
Peak Outflow (cfs)	112.93
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	679.87
Max HGL Depth Attained (ft)	5.87
Average HGL Elevation Attained (ft)	676.17
Average HGL Depth Attained (ft)	2.17
Time of Max HGL Occurrence (days hh:mm)	0 13:32
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-5

Output Summary Results

Peak Inflow (cfs)	730.56
Peak Lateral Inflow (cfs)	730.56
Peak Outflow (cfs)	220.27
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	749.95
Max HGL Depth Attained (ft)	5.95
Average HGL Elevation Attained (ft)	745.57
Average HGL Depth Attained (ft)	1.57
Time of Max HGL Occurrence (days hh:mm)	0 12:29
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-6

Output Summary Results

Peak Inflow (cfs)	495.46
Peak Lateral Inflow (cfs)	495.46
Peak Outflow (cfs)	64.74
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	735.35
Max HGL Depth Attained (ft)	3.35
Average HGL Elevation Attained (ft)	733.09
Average HGL Depth Attained (ft)	1.09
Time of Max HGL Occurrence (days hh:mm)	0 12:43
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	210.78
Peak Lateral Inflow (cfs)	112.50
Peak Outflow (cfs)	210.77
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.64
Max HGL Depth Attained (ft)	0.64
Average HGL Elevation Attained (ft)	734.08
Average HGL Depth Attained (ft)	0.08
Time of Max HGL Occurrence (days hh:mm)	0 12:23
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	644.69
Peak Lateral Inflow (cfs)	224.22
Peak Outflow (cfs)	640.39
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	665.66
Max HGL Depth Attained (ft)	5.16
Average HGL Elevation Attained (ft)	662.00
Average HGL Depth Attained (ft)	1.5
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	490.39
Peak Lateral Inflow (cfs)	75.67
Peak Outflow (cfs)	484.28
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	725.11
Max HGL Depth Attained (ft)	5.11
Average HGL Elevation Attained (ft)	721.53
Average HGL Depth Attained (ft)	1.53
Time of Max HGL Occurrence (days hh:mm)	0 12:31
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	1469.95
Peak Lateral Inflow (cfs)	547.08
Peak Outflow (cfs)	1468.79
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	694.55
Max HGL Depth Attained (ft)	7.55
Average HGL Elevation Attained (ft)	690.09
Average HGL Depth Attained (ft)	3.09
Time of Max HGL Occurrence (days hh:mm)	0 12:28
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	1602.20
Peak Lateral Inflow (cfs)	135.02
Peak Outflow (cfs)	1570.75
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	692.48
Max HGL Depth Attained (ft)	7.48
Average HGL Elevation Attained (ft)	687.05
Average HGL Depth Attained (ft)	2.05
Time of Max HGL Occurrence (days hh:mm)	0 12:36
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	280.18
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	220.64
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	699.18
Max HGL Depth Attained (ft)	9.48
Average HGL Elevation Attained (ft)	690.91
Average HGL Depth Attained (ft)	1.21
Time of Max HGL Occurrence (days hh:mm)	0 12:32
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	37.19
Peak Lateral Inflow (cfs)	37.19
Peak Outflow (cfs)	37.71
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	696.62
Max HGL Depth Attained (ft)	2.42
Average HGL Elevation Attained (ft)	694.51
Average HGL Depth Attained (ft)	0.31
Time of Max HGL Occurrence (days hh:mm)	0 12:10
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	319.97
Peak Lateral Inflow (cfs)	98.41
Peak Outflow (cfs)	317.08
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	674.95
Max HGL Depth Attained (ft)	3.95
Average HGL Elevation Attained (ft)	672.02
Average HGL Depth Attained (ft)	1.02
Time of Max HGL Occurrence (days hh:mm)	0 12:15
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

POST-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
100-YEAR

Project Description

File Name	26900.0002 - Proposed Conditions.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	27
Nodes	44
Junctions	22
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	16
Links	43
Channels	22
Pipes	13
Pumps	0
Orifices	0
Weirs	8
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	426.00	484.00	64.00	7.67	3.52	1499.52	822.43	0 00:59:24
2	B	179.82	484.00	64.00	7.67	3.52	632.97	598.90	0 00:26:13
3	C	57.45	484.00	61.00	7.67	3.20	183.55	135.21	0 00:38:19
4	CC	10.65	484.00	63.00	7.67	3.41	36.33	44.04	0 00:15:50
5	D	48.20	484.00	65.00	7.67	3.63	174.92	137.10	0 00:35:42
6	DD	13.80	484.00	66.00	7.67	3.74	51.60	55.97	0 00:20:31
7	E	23.76	484.00	59.00	7.67	2.98	70.83	59.31	0 00:31:01
8	EE	82.20	484.00	64.00	7.67	3.52	289.34	274.38	0 00:26:09
9	H	50.44	484.00	59.00	7.67	2.98	150.36	95.78	0 00:46:26
10	I	28.52	484.00	62.00	7.67	3.30	94.20	73.78	0 00:35:09
11	J	111.18	484.00	57.00	7.67	2.77	307.97	172.05	0 00:54:39
12	K	171.51	484.00	57.00	7.67	2.77	475.08	356.13	0 00:35:52
13	L	92.78	484.00	57.00	7.67	2.77	257.00	223.21	0 00:28:40
14	M	29.43	484.00	59.00	7.67	2.98	87.73	89.52	0 00:22:19
15	N	43.16	484.00	58.00	7.67	2.88	124.09	102.32	0 00:31:30
16	O	48.38	484.00	59.00	7.67	2.98	144.22	102.52	0 00:39:43
17	P	14.69	484.00	60.00	7.67	3.09	45.36	47.53	0 00:21:25
18	Post-1	118.69	484.00	90.00	7.67	6.48	769.23	667.24	0 00:28:32
19	Post-2	79.81	484.00	90.00	7.67	6.48	517.25	525.49	0 00:20:52
20	Post-3	54.10	484.00	90.00	7.67	6.48	350.65	447.13	0 00:10:30
21	Post-4A	461.12	484.00	90.00	7.67	6.48	2988.52	1403.04	0 01:12:14
22	Post-4B	50.66	484.00	90.00	7.67	6.48	328.33	422.92	0 00:10:05
23	Post-5	123.17	484.00	90.00	7.67	6.48	798.26	826.47	0 00:20:00
24	Post-6	80.67	484.00	90.00	7.67	6.48	522.82	565.95	0 00:18:00
25	W	79.34	484.00	61.00	7.67	3.20	253.49	240.64	0 00:25:40
26	X	22.96	484.00	59.00	7.67	2.98	68.44	86.34	0 00:13:51
27	Y	34.60	484.00	62.00	7.67	3.30	114.28	122.40	0 00:20:37

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	716.00	800.00	716.00	800.00	1.00	821.58	720.94	0.00	79.06	0 00:00	0.00	0.00
2	Jun-02	Junction	682.00	800.00	682.00	800.00	1.00	2221.87	690.00	0.00	110.00	0 00:00	0.00	0.00
3	Jun-03	Junction	767.00	800.00	767.00	800.00	1.00	134.01	767.90	0.00	32.10	0 00:00	0.00	0.00
4	Jun-04	Junction	677.70	800.00	677.70	800.00	1.00	2255.29	689.70	0.00	110.30	0 00:00	0.00	0.00
5	Jun-07	Junction	715.00	800.00	715.00	800.00	1.00	101.31	716.99	0.00	83.01	0 00:00	0.00	0.00
6	Jun-08	Junction	723.00	800.00	723.00	800.00	1.00	156.81	726.30	0.00	73.70	0 00:00	0.00	0.00
7	Jun-10	Junction	716.00	800.00	716.00	800.00	1.00	239.05	718.73	0.00	81.27	0 00:00	0.00	0.00
8	Jun-21	Junction	690.00	800.00	690.00	800.00	1.00	297.52	693.34	0.00	106.66	0 00:00	0.00	0.00
9	Jun-22	Junction	666.10	800.00	666.10	800.00	1.00	595.32	670.54	0.00	129.46	0 00:00	0.00	0.00
10	Jun-23	Junction	671.00	800.00	671.00	800.00	1.00	431.51	674.57	0.00	125.43	0 00:00	0.00	0.00
11	Jun-24	Junction	708.00	800.00	708.00	800.00	1.00	256.42	710.91	0.00	89.09	0 00:00	0.00	0.00
12	Jun-26	Junction	731.00	800.00	731.00	800.00	1.00	516.19	732.53	0.00	67.47	0 00:00	0.00	0.00
13	Jun-27	Junction	676.80	800.00	676.80	800.00	1.00	2029.09	682.23	0.00	117.77	0 00:00	0.00	0.00
14	Jun-28	Junction	686.60	800.00	686.60	800.00	1.00	235.26	689.43	0.00	110.57	0 00:00	0.00	0.00
15	Jun-29	Junction	690.00	800.00	690.00	800.00	1.00	45.87	691.26	0.00	108.74	0 00:00	0.00	0.00
16	Jun-30	Junction	656.20	800.00	656.20	800.00	1.00	781.06	657.77	0.00	142.23	0 00:00	0.00	0.00
17	Jun-36	Junction	738.00	800.00	738.00	999.00	1.00	260.79	739.27	0.00	60.73	0 00:00	0.00	0.00
18	Jun-37	Junction	744.00	800.00	744.00	800.00	1.00	260.79	749.86	0.00	50.14	0 00:00	0.00	0.00
19	Jun-38	Junction	731.00	800.00	731.00	999.00	1.00	70.34	731.46	0.00	68.54	0 00:00	0.00	0.00
20	Jun-43	Junction	739.00	800.00	739.00	999.00	1.00	227.82	743.17	0.00	56.83	0 00:00	0.00	0.00
21	Jun-44	Junction	745.00	800.00	745.00	999.00	1.00	73.48	749.29	0.00	50.71	0 00:00	0.00	0.00
22	Jun-45	Junction	672.00	800.00	672.00	999.00	1.00	544.01	677.65	0.00	996.60	0 00:00	0.00	0.00
23	Out-01	Outfall	675.80					2029.09	681.23					
24	Out-02	Outfall	685.60					235.26	688.43					
25	Out-03	Outfall	688.00					45.86	689.22					
26	Out-04	Outfall	655.20					780.97	656.84					
27	Out-05	Outfall	737.50					260.79	738.77					
28	Out-06	Outfall	730.00					70.34	730.46					
29	Pond-1	Storage Node	739.00	746.00	739.00		282063.00	663.80	744.19				0.00	0.00
30	Pond-2A	Storage Node	739.00	743.00	739.00		786496.00	525.32	740.57				0.00	0.00
31	Pond-2B	Storage Node	739.00	743.00	739.00		83441.00	6.97	740.21				0.00	0.00
32	Pond-3	Storage Node	745.00	752.00	745.00		165275.00	441.71	749.92				0.00	0.00
33	Pond-4A	Storage Node	674.00	682.50	674.00		832543.00	1400.36	680.41				0.00	0.00
34	Pond-4B	Storage Node	674.00	682.50	674.00		164301.00	415.19	680.47				0.00	0.00
35	Pond-5	Storage Node	744.00	752.50	744.00		245841.00	825.82	750.53				0.00	0.00
36	Pond-6	Storage Node	732.00	738.00	732.00		316369.00	558.42	735.78				0.00	0.00
37	Stor-D	Storage Node	734.00	765.00	734.00		233730.00	261.93	734.73				0.00	0.00
38	Stor-EE	Storage Node	660.50	703.00	660.50		1073922.00	793.78	666.43				0.00	0.00
39	Stor-G	Storage Node	720.00	730.00	720.00		1000.00	611.29	725.34				0.00	0.00
40	Stor-I	Storage Node	687.00	739.00	687.00		936779.00	1789.33	694.94				0.00	0.00
41	Stor-J	Storage Node	685.00	757.00	685.00		888299.00	1952.77	692.77				0.00	0.00
42	Stor-NO	Storage Node	689.70	724.00	689.70		91514.00	346.85	700.45				0.00	0.00
43	Stor-P	Storage Node	694.20	800.00	694.20		1000.00	46.42	697.07				0.00	0.00
44	Stor-Y	Storage Node	671.00	705.50	671.00		418671.00	406.50	675.26				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-02	Pipe	Jun-43	Jun-26	50.00	738.00	737.00	2.0000	48.000	0.0130	227.82	619.59	0.37	13.54	2.80	0.70	0.00	Calculated
2	Link-06	Pipe	Jun-04	Jun-27	291.00	677.70	676.80	0.3100	96.000	0.0130	2029.09	1291.66	1.57	18.89	6.71	0.84	0.00	> CAPACITY
3	Link-09	Pipe	Stor-NO	Jun-28	237.00	689.70	686.60	1.3100	48.000	0.0130	235.26	209.17	1.12	17.22	3.42	0.85	0.00	> CAPACITY
4	Link-10	Pipe	Pond-2A	Stor-I	50.00	733.00	732.00	2.0000	36.000	0.0130	47.20	249.56	0.19	17.31	1.23	0.41	0.00	Calculated
5	Link-11	Pipe	Stor-EE	Jun-30	327.00	660.50	656.20	1.3100	60.000	0.0130	781.06	1769.96	0.44	11.33	3.28	0.66	0.00	Calculated
6	Link-19	Pipe	Stor-P	Jun-29	248.00	694.20	690.00	1.6900	48.000	0.0130	45.87	186.93	0.25	7.67	2.04	0.52	0.00	Calculated
7	Link-39	Pipe	Stor-EE	Jun-30	193.00	669.80	668.50	0.6700	48.000	0.0130	0.00	254.25	0.00	0.00	0.00	0.00	0.00	Calculated
8	Link-40	Pipe	Pond-4B	Pond-4A	620.00	668.00	668.00	0.0000	60.000	0.0130	136.05	6.62	20.57	4.80	5.00	1.00	157.00	SURCHARGED
9	Link-41	Pipe	Pond-2B	Pond-2A	400.00	733.00	733.00	0.0000	36.000	0.0130	6.97	1.05	6.61	3.75	1.21	0.40	0.00	> CAPACITY
10	Link-61	Pipe	Jun-44	Jun-08	50.00	744.00	743.00	2.0000	36.000	0.0130	73.48	133.40	0.55	12.67	2.29	0.76	0.00	Calculated
11	Link-66	Pipe	Jun-37	Jun-36	50.00	739.00	738.00	2.0000	72.000	0.0130	260.79	1867.94	0.14	12.19	3.56	0.59	0.00	Calculated
12	Link-70	Pipe	Pond-6	Jun-38	50.00	732.00	731.00	2.0000	36.000	0.0130	70.34	188.65	0.37	8.32	1.73	0.58	0.00	Calculated
13	Link-74	Pipe	Jun-45	Jun-22	50.00	672.00	671.00	2.0000	72.000	0.0150	544.01	963.25	0.56	15.24	4.46	0.74	0.00	Calculated
14	Link-01	Channel	Jun-03	Stor-D	655.00	767.00	759.00	1.2200	240.480	0.0320	130.94	164010.50	0.00	50.00	0.84	0.04	0.00	
15	Link-03	Channel	Jun-01	Stor-I	575.00	716.00	711.00	0.8700	246.000	0.0320	818.48	94204.70	0.01	8.72	4.96	0.24	0.00	
16	Link-04	Channel	Stor-I	Stor-J	1212.00	687.00	685.00	0.1700	503.760	0.0320	1783.75	167151.28	0.01	3.93	7.84	0.19	0.00	
17	Link-05	Channel	Jun-02	Jun-04	660.00	682.00	677.70	0.6500	592.800	0.0320	2138.83	471728.19	0.00	6.53	10.00	0.20	0.00	
18	Link-07	Channel	Jun-08	Jun-24	971.00	723.00	708.00	1.5400	423.360	0.0320	156.80	160489.81	0.00	7.66	3.08	0.09	0.00	
19	Link-08	Channel	Jun-07	Stor-NO	814.00	715.00	696.00	2.3300	422.280	0.0320	101.15	228402.42	0.00	5.92	3.13	0.09	0.00	
20	Link-12	Channel	Stor-Y	Jun-23	60.00	671.50	671.00	0.8300	502.560	0.0320	400.09	320223.33	0.00	6.71	3.66	0.09	0.00	
21	Link-14	Channel	Jun-10	Jun-21	1021.00	716.00	690.00	2.5500	320.040	0.0320	237.23	202679.20	0.00	7.53	3.04	0.11	0.00	
22	Link-20	Channel	Stor-J	Jun-02	1055.00	685.00	682.00	0.2800	714.960	0.0320	1991.32	603845.15	0.00	4.50	7.79	0.13	0.00	
23	Link-22	Channel	Stor-G	Stor-I	1070.00	720.00	712.00	0.7500	432.480	0.0320	586.26	324200.23	0.00	6.85	5.26	0.15	0.00	
24	Link-27	Channel	Jun-21	Stor-Y	910.00	690.00	676.00	1.5400	487.080	0.0320	292.52	428321.41	0.00	7.50	3.34	0.08	0.00	
25	Link-28	Channel	Jun-22	Stor-EE	590.00	666.10	664.00	0.3600	635.160	0.0320	594.77	294095.79	0.00	3.96	3.92	0.07	0.00	
26	Link-29	Channel	Jun-23	Jun-22	695.00	671.00	666.10	0.7100	607.200	0.0320	428.60	432587.81	0.00	4.38	3.90	0.08	0.00	
27	Link-30	Channel	Jun-24	Stor-NO	946.00	708.00	697.00	1.1600	493.920	0.0320	246.02	346337.45	0.00	5.26	3.03	0.07	0.00	
28	Link-33	Channel	Stor-D	Jun-26	100.00	734.00	731.00	3.0000	417.600	0.0320	261.92	869869.15	0.00	3.29	1.12	0.03	0.00	
29	Link-34	Channel	Jun-26	Stor-G	672.00	731.00	724.00	1.0400	417.600	0.0320	516.54	512575.31	0.00	4.51	1.41	0.04	0.00	
30	Link-35	Channel	Jun-27	Out-01	100.00	676.80	675.80	1.0000	430.440	0.0320	2029.09	165532.51	0.01	9.70	5.43	0.15	0.00	
31	Link-36	Channel	Jun-28	Out-02	100.00	686.60	685.60	1.0000	352.800	0.0320	235.26	142885.80	0.00	4.88	2.83	0.10	0.00	
32	Link-37	Channel	Jun-29	Out-03	100.00	690.00	688.00	2.0000	442.320	0.0320	45.86	233235.72	0.00	4.85	1.23	0.03	0.00	
33	Link-38	Channel	Jun-30	Out-04	100.00	656.20	655.20	1.0000	240.840	0.0320	780.97	176082.31	0.00	3.21	1.57	0.08	0.00	
34	Link-64	Channel	Jun-36	Out-05	100.00	738.00	737.50	0.5000	120.000	0.0350	260.79	6901.78	0.04	3.42	1.27	0.13	0.00	
35	Link-67	Channel	Jun-38	Out-06	100.00	731.00	730.00	1.0000	120.000	0.0350	70.34	9760.59	0.01	2.52	0.46	0.05	0.00	
36	Weir-16	Weir	Pond-5	Jun-37		744.00	744.00				80.10							
37	Weir-17	Weir	Pond-5	Jun-37		744.00	744.00				180.69							
38	Weir-29	Weir	Pond-1	Jun-43		739.00	739.00				72.32							
39	Weir-31	Weir	Pond-1	Jun-43		739.00	739.00				155.50							
40	Weir-32	Weir	Pond-3	Jun-44		745.00	745.00				14.74							
41	Weir-34	Weir	Pond-3	Jun-44		745.00	745.00				60.74							
42	Weir-39	Weir	Pond-4A	Jun-45		674.00	672.00				304.97							
43	Weir-40	Weir	Pond-4A	Jun-45		674.00	672.00				239.04							

Storage Nodes

Storage Node : Pond-1

Output Summary Results

Peak Inflow (cfs)	663.80
Peak Lateral Inflow (cfs)	663.80
Peak Outflow (cfs)	227.82
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	744.19
Max HGL Depth Attained (ft)	5.19
Average HGL Elevation Attained (ft)	740.49
Average HGL Depth Attained (ft)	1.49
Time of Max HGL Occurrence (days hh:mm)	0 12:38
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2A

Output Summary Results

Peak Inflow (cfs)	525.32
Peak Lateral Inflow (cfs)	525.32
Peak Outflow (cfs)	53.90
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	740.57
Max HGL Depth Attained (ft)	1.57
Average HGL Elevation Attained (ft)	739.68
Average HGL Depth Attained (ft)	0.68
Time of Max HGL Occurrence (days hh:mm)	0 12:57
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-2B

Output Summary Results

Peak Inflow (cfs)	6.97
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	1.66
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	740.21
Max HGL Depth Attained (ft)	1.21
Average HGL Elevation Attained (ft)	739.56
Average HGL Depth Attained (ft)	0.56
Time of Max HGL Occurrence (days hh:mm)	0 16:27
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-3

Output Summary Results

Peak Inflow (cfs)	441.71
Peak Lateral Inflow (cfs)	441.71
Peak Outflow (cfs)	73.48
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	749.92
Max HGL Depth Attained (ft)	4.92
Average HGL Elevation Attained (ft)	747.08
Average HGL Depth Attained (ft)	2.08
Time of Max HGL Occurrence (days hh:mm)	0 12:24
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4A

Output Summary Results

Peak Inflow (cfs)	1400.36
Peak Lateral Inflow (cfs)	1400.36
Peak Outflow (cfs)	599.72
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	680.41
Max HGL Depth Attained (ft)	6.41
Average HGL Elevation Attained (ft)	676.30
Average HGL Depth Attained (ft)	2.3
Time of Max HGL Occurrence (days hh:mm)	0 13:34
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-4B

Output Summary Results

Peak Inflow (cfs)	415.19
Peak Lateral Inflow (cfs)	415.19
Peak Outflow (cfs)	136.05
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	680.47
Max HGL Depth Attained (ft)	6.47
Average HGL Elevation Attained (ft)	676.35
Average HGL Depth Attained (ft)	2.35
Time of Max HGL Occurrence (days hh:mm)	0 13:31
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-5

Output Summary Results

Peak Inflow (cfs)	825.82
Peak Lateral Inflow (cfs)	825.82
Peak Outflow (cfs)	260.79
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	750.53
Max HGL Depth Attained (ft)	6.53
Average HGL Elevation Attained (ft)	745.69
Average HGL Depth Attained (ft)	1.69
Time of Max HGL Occurrence (days hh:mm)	0 12:28
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Pond-6

Output Summary Results

Peak Inflow (cfs)	558.42
Peak Lateral Inflow (cfs)	558.42
Peak Outflow (cfs)	70.34
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	735.78
Max HGL Depth Attained (ft)	3.78
Average HGL Elevation Attained (ft)	733.22
Average HGL Depth Attained (ft)	1.22
Time of Max HGL Occurrence (days hh:mm)	0 12:44
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-D

Output Summary Results

Peak Inflow (cfs)	261.93
Peak Lateral Inflow (cfs)	136.91
Peak Outflow (cfs)	261.92
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	734.73
Max HGL Depth Attained (ft)	0.73
Average HGL Elevation Attained (ft)	734.09
Average HGL Depth Attained (ft)	0.09
Time of Max HGL Occurrence (days hh:mm)	0 12:22
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-EE

Output Summary Results

Peak Inflow (cfs)	793.78
Peak Lateral Inflow (cfs)	272.76
Peak Outflow (cfs)	781.06
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	666.43
Max HGL Depth Attained (ft)	5.93
Average HGL Elevation Attained (ft)	662.17
Average HGL Depth Attained (ft)	1.67
Time of Max HGL Occurrence (days hh:mm)	0 12:20
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-G

Output Summary Results

Peak Inflow (cfs)	611.29
Peak Lateral Inflow (cfs)	94.94
Peak Outflow (cfs)	586.26
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	725.34
Max HGL Depth Attained (ft)	5.34
Average HGL Elevation Attained (ft)	721.63
Average HGL Depth Attained (ft)	1.63
Time of Max HGL Occurrence (days hh:mm)	0 12:32
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-I

Output Summary Results

Peak Inflow (cfs)	1789.33
Peak Lateral Inflow (cfs)	666.91
Peak Outflow (cfs)	1783.75
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	694.94
Max HGL Depth Attained (ft)	7.94
Average HGL Elevation Attained (ft)	690.26
Average HGL Depth Attained (ft)	3.26
Time of Max HGL Occurrence (days hh:mm)	0 12:28
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-J

Output Summary Results

Peak Inflow (cfs)	1952.77
Peak Lateral Inflow (cfs)	171.05
Peak Outflow (cfs)	1991.32
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	692.77
Max HGL Depth Attained (ft)	7.77
Average HGL Elevation Attained (ft)	687.23
Average HGL Depth Attained (ft)	2.23
Time of Max HGL Occurrence (days hh:mm)	0 12:33
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-NO

Output Summary Results

Peak Inflow (cfs)	346.85
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	235.26
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	700.45
Max HGL Depth Attained (ft)	10.75
Average HGL Elevation Attained (ft)	691.14
Average HGL Depth Attained (ft)	1.44
Time of Max HGL Occurrence (days hh:mm)	0 12:37
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : Stor-P

Output Summary Results

Peak Inflow (cfs)	46.42
Peak Lateral Inflow (cfs)	46.42
Peak Outflow (cfs)	45.87
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	697.07
Max HGL Depth Attained (ft)	2.87
Average HGL Elevation Attained (ft)	694.54
Average HGL Depth Attained (ft)	0.34
Time of Max HGL Occurrence (days hh:mm)	0 12:11
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

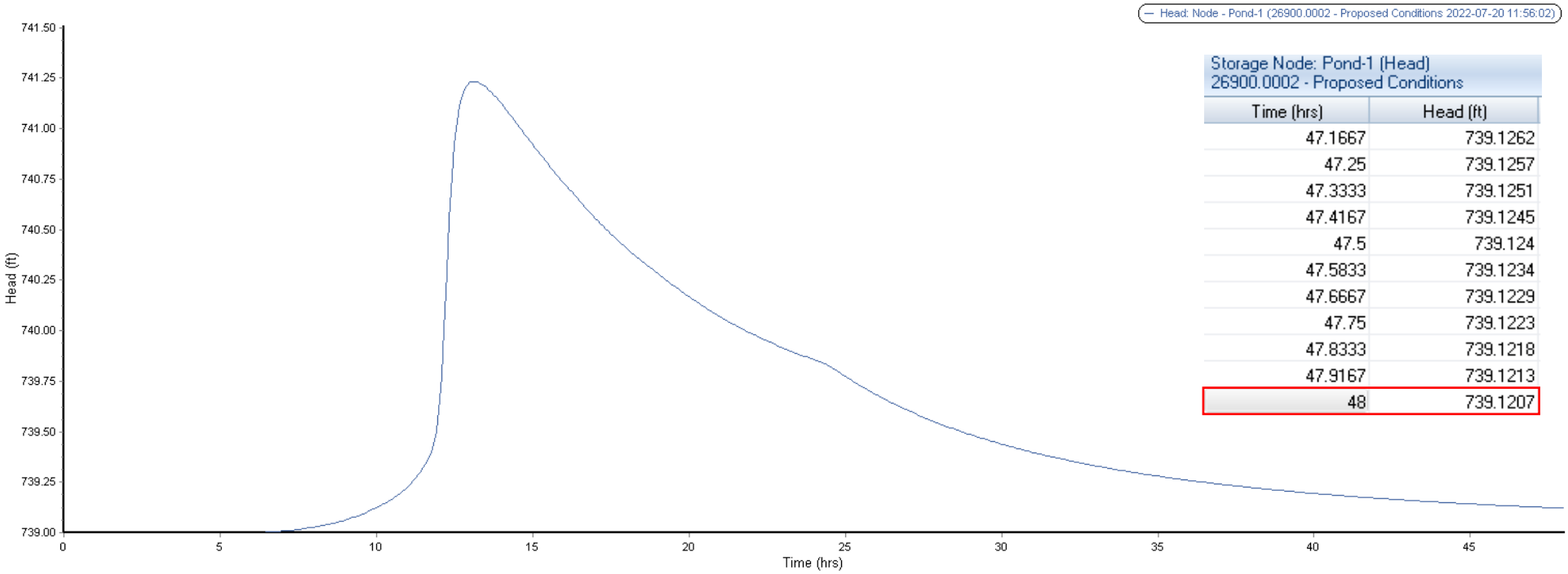
Storage Node : Stor-Y

Output Summary Results

Peak Inflow (cfs)	406.50
Peak Lateral Inflow (cfs)	121.23
Peak Outflow (cfs)	400.09
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	675.26
Max HGL Depth Attained (ft)	4.26
Average HGL Elevation Attained (ft)	672.08
Average HGL Depth Attained (ft)	1.08
Time of Max HGL Occurrence (days hh:mm)	0 12:15
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

POST-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
1-YEAR EXTENDED DETENTION

Rivian EV Manufacturing Facility
Pond 1
Stream Channel Protection
1-Year Extended Detention



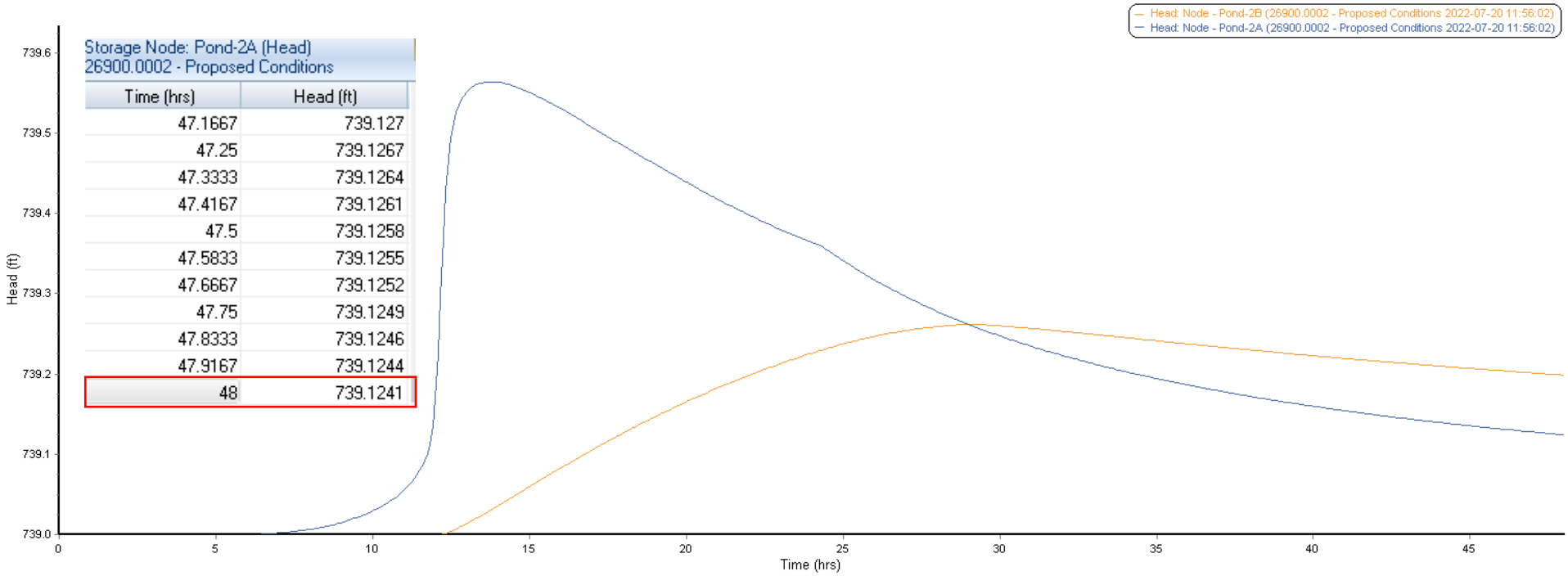
Storage Node: Pond-1 (Head)
26900.0002 - Proposed Conditions

Time (hrs)	Head (ft)
47.1667	739.1262
47.25	739.1257
47.3333	739.1251
47.4167	739.1245
47.5	739.124
47.5833	739.1234
47.6667	739.1229
47.75	739.1223
47.8333	739.1218
47.9167	739.1213
48	739.1207

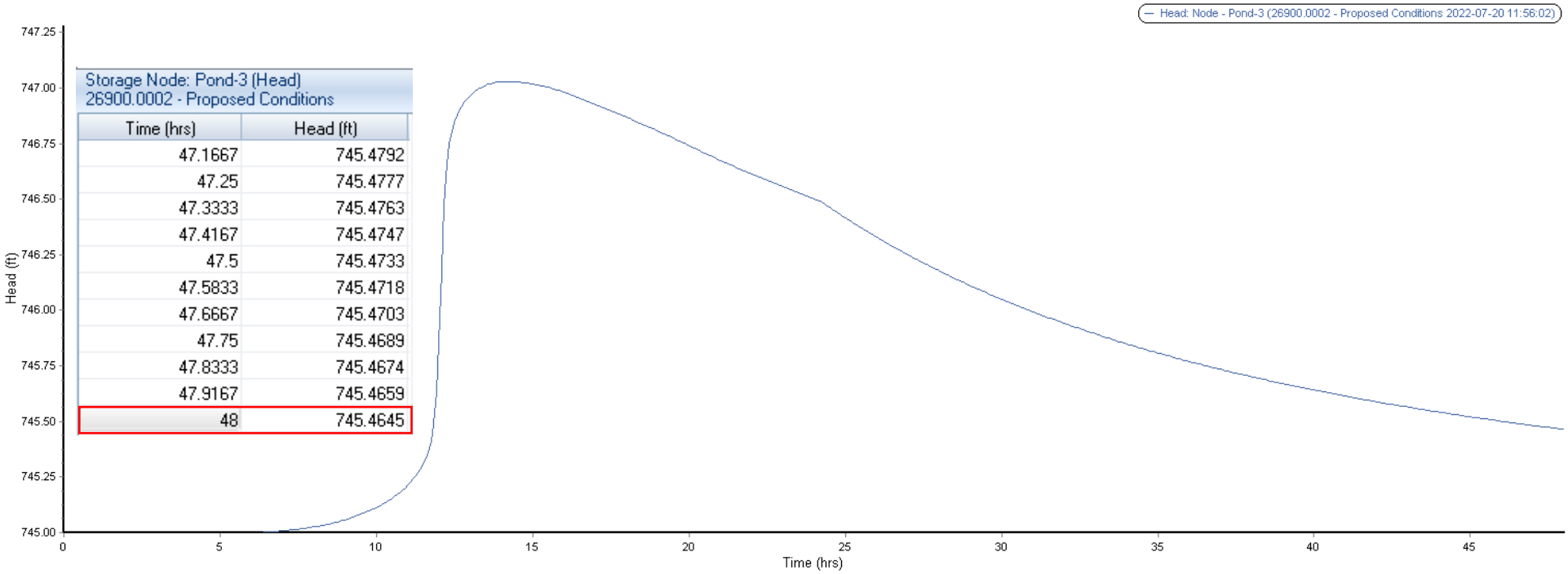
Rivian EV Manufacturing Facility
Pond 2A & 2B
Stream Channel Protection
1-Year Extended Detention

Storage Node: Pond-2A (Head)
26900.0002 - Proposed Conditions

Time (hrs)	Head (ft)
47.1667	739.127
47.25	739.1267
47.3333	739.1264
47.4167	739.1261
47.5	739.1258
47.5833	739.1255
47.6667	739.1252
47.75	739.1249
47.8333	739.1246
47.9167	739.1244
48	739.1241



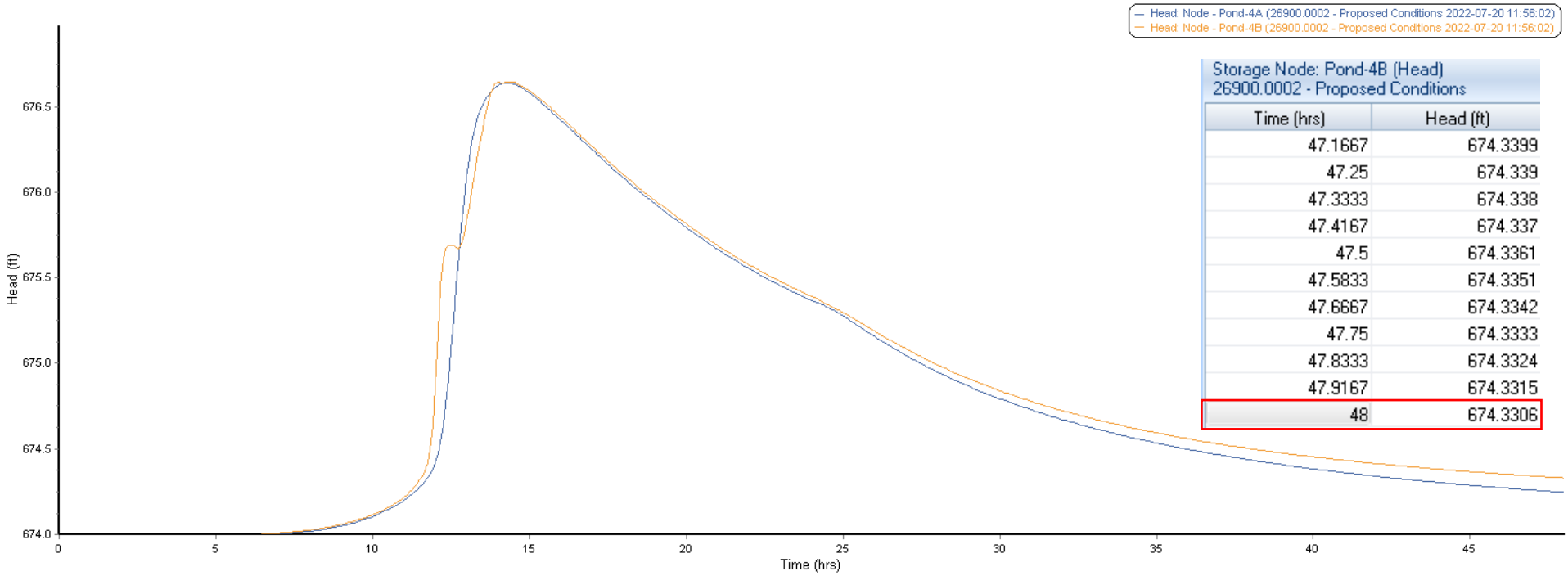
Rivian EV Manufacturing Facility
Pond 3
Stream Channel Protection
1-Year Extended Detention



Storage Node: Pond-3 (Head)
26900.0002 - Proposed Conditions

Time (hrs)	Head (ft)
47.1667	745.4792
47.25	745.4777
47.3333	745.4763
47.4167	745.4747
47.5	745.4733
47.5833	745.4718
47.6667	745.4703
47.75	745.4689
47.8333	745.4674
47.9167	745.4659
48	745.4645

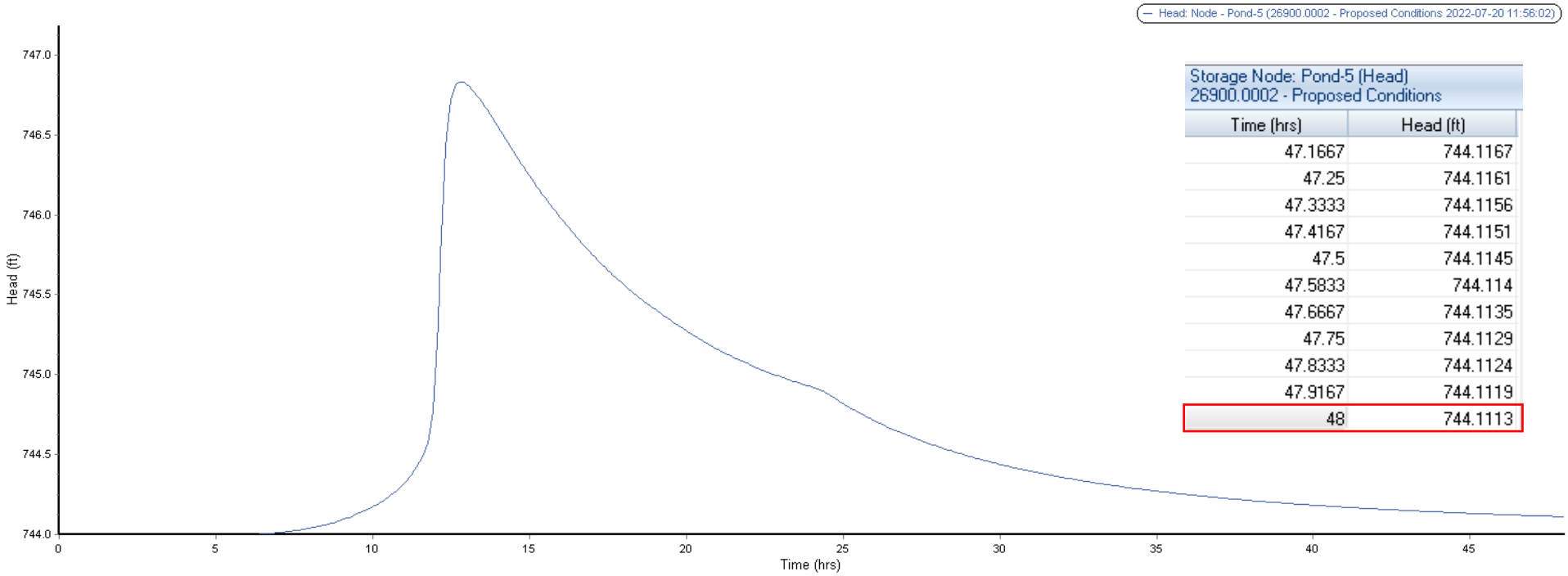
Rivian EV Manufacturing Facility
Ponds 4A & 4B
Stream Channel Protection
1-Year Extended Detention



Storage Node: Pond-4B (Head)
26900.0002 - Proposed Conditions

Time (hrs)	Head (ft)
47.1667	674.3399
47.25	674.339
47.3333	674.338
47.4167	674.337
47.5	674.3361
47.5833	674.3351
47.6667	674.3342
47.75	674.3333
47.8333	674.3324
47.9167	674.3315
48	674.3306

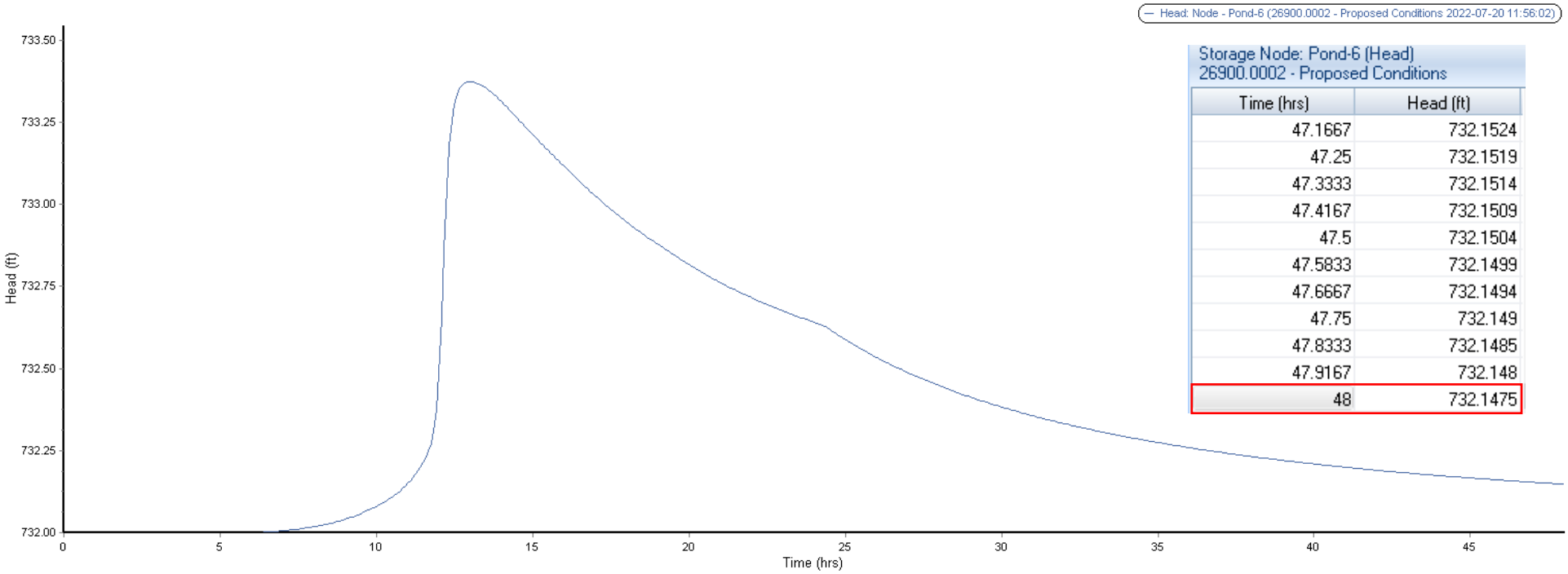
Rivian EV Manufacturing Facility
Pond 5
Stream Channel Protection
1-Year Extended Detention



Storage Node: Pond-5 (Head)
26900.0002 - Proposed Conditions

Time (hrs)	Head (ft)
47.1667	744.1167
47.25	744.1161
47.3333	744.1156
47.4167	744.1151
47.5	744.1145
47.5833	744.114
47.6667	744.1135
47.75	744.1129
47.8333	744.1124
47.9167	744.1119
48	744.1113

Rivian EV Manufacturing Facility
Pond 6
Stream Channel Protection
1-Year Extended Detention



Storage Node: Pond-6 (Head)
26900.0002 - Proposed Conditions

Time (hrs)	Head (ft)
47.1667	732.1524
47.25	732.1519
47.3333	732.1514
47.4167	732.1509
47.5	732.1504
47.5833	732.1499
47.6667	732.1494
47.75	732.149
47.8333	732.1485
47.9167	732.148
48	732.1475

POST-DEVELOPED CONDITIONS
WATER QUALITY
SSA MODEL INPUT

Project Description

File Name	26900.0002 - Proposed Conditions_WQ.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jul 08, 2022	00:00:00
End Analysis On	Jul 10, 2022	00:00:00
Start Reporting On	Jul 08, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	5	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	27
Nodes	44
Junctions	22
Outfalls	6
Flow Diversions	0
Inlets	0
Storage Nodes	16
Links	43
Channels	22
Pipes	13
Pumps	0
Orifices	0
Weirs	8
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Hydrology

Subbasin : A

Input Data

Area (ac) 426.00
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	426.00	-	64.00
Composite Area & Weighted CN	426.00		64.00

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft²)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

User-Defined TOC override (minutes): 59.40

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:59:24

Subbasin : B

Input Data

Area (ac) 179.82
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	179.82	-	64.00
Composite Area & Weighted CN	179.82		64.00

Time of Concentration

User-Defined TOC override (minutes): 26.22

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:26:13

Subbasin : C

Input Data

Area (ac) 57.45
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	57.45	-	61.00
Composite Area & Weighted CN	57.45		61.00

Time of Concentration

User-Defined TOC override (minutes): 38.32

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:38:19

Subbasin : CC

Input Data

Area (ac) 10.65
Peak Rate Factor 484.00
Weighted Curve Number 63.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	10.65	-	63.00
Composite Area & Weighted CN	10.65		63.00

Time of Concentration

User-Defined TOC override (minutes): 15.84

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 63.00
Time of Concentration (days hh:mm:ss) 0 00:15:50

Subbasin : D

Input Data

Area (ac) 48.20
Peak Rate Factor 484.00
Weighted Curve Number 65.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	48.20	-	65.00
Composite Area & Weighted CN	48.20		65.00

Time of Concentration

User-Defined TOC override (minutes): 35.7

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 65.00
Time of Concentration (days hh:mm:ss) 0 00:35:42

Subbasin : DD

Input Data

Area (ac) 13.80
Peak Rate Factor 484.00
Weighted Curve Number 66.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	13.80	-	66.00
Composite Area & Weighted CN	13.80		66.00

Time of Concentration

User-Defined TOC override (minutes): 20.52

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 66.00
Time of Concentration (days hh:mm:ss) 0 00:20:31

Subbasin : E

Input Data

Area (ac) 23.76
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	23.76	-	59.00
Composite Area & Weighted CN	23.76		59.00

Time of Concentration

User-Defined TOC override (minutes): 31.02

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:31:01

Subbasin : EE

Input Data

Area (ac) 82.20
Peak Rate Factor 484.00
Weighted Curve Number 64.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	82.20	-	64.00
Composite Area & Weighted CN	82.20		64.00

Time of Concentration

User-Defined TOC override (minutes): 26.15

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 64.00
Time of Concentration (days hh:mm:ss) 0 00:26:09

Subbasin : H

Input Data

Area (ac) 50.44
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	50.44	-	59.00
Composite Area & Weighted CN	50.44		59.00

Time of Concentration

User-Defined TOC override (minutes): 46.44

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:46:26

Subbasin : I

Input Data

Area (ac) 28.52
Peak Rate Factor 484.00
Weighted Curve Number 62.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	28.52	-	62.00
Composite Area & Weighted CN	28.52		62.00

Time of Concentration

User-Defined TOC override (minutes): 35.16

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 62.00
Time of Concentration (days hh:mm:ss) 0 00:35:10

Subbasin : J

Input Data

Area (ac) 111.18
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	111.18	-	57.00
Composite Area & Weighted CN	111.18		57.00

Time of Concentration

User-Defined TOC override (minutes): 54.65

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:54:39

Subbasin : K

Input Data

Area (ac) 171.51
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	171.51	-	57.00
Composite Area & Weighted CN	171.51		57.00

Time of Concentration

User-Defined TOC override (minutes): 35.87

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:35:52

Subbasin : L

Input Data

Area (ac) 92.78
Peak Rate Factor 484.00
Weighted Curve Number 57.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	92.78	-	57.00
Composite Area & Weighted CN	92.78		57.00

Time of Concentration

User-Defined TOC override (minutes): 28.67

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 57.00
Time of Concentration (days hh:mm:ss) 0 00:28:40

Subbasin : M

Input Data

Area (ac) 29.43
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	29.43	-	59.00
Composite Area & Weighted CN	29.43		59.00

Time of Concentration

User-Defined TOC override (minutes): 22.32

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:22:19

Subbasin : N

Input Data

Area (ac) 43.16
Peak Rate Factor 484.00
Weighted Curve Number 58.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	43.16	-	58.00
Composite Area & Weighted CN	43.16		58.00

Time of Concentration

User-Defined TOC override (minutes): 31.50

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 58.00
Time of Concentration (days hh:mm:ss) 0 00:31:30

Subbasin : O

Input Data

Area (ac) 48.38
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	48.38	-	59.00
Composite Area & Weighted CN	48.38		59.00

Time of Concentration

User-Defined TOC override (minutes): 39.72

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:39:43

Subbasin : P

Input Data

Area (ac) 14.69
Peak Rate Factor 484.00
Weighted Curve Number 60.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	14.69	-	60.00
Composite Area & Weighted CN	14.69		60.00

Time of Concentration

User-Defined TOC override (minutes): 21.42

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 60.00
Time of Concentration (days hh:mm:ss) 0 00:21:25

Subbasin : Post-1

Input Data

Area (ac) 118.69
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	118.69	-	90.00
Composite Area & Weighted CN	118.69		90.00

Time of Concentration

User-Defined TOC override (minutes): 28.54

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:28:32

Subbasin : Post-2

Input Data

Area (ac) 79.81
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	79.81	-	90.00
Composite Area & Weighted CN	79.81		90.00

Time of Concentration

User-Defined TOC override (minutes): 20.88

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:20:53

Subbasin : Post-3

Input Data

Area (ac) 54.10
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	54.10	-	90.00
Composite Area & Weighted CN	54.10		90.00

Time of Concentration

User-Defined TOC override (minutes): 10.50

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:10:30

Subbasin : Post-4A

Input Data

Area (ac) 461.12
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	461.12	-	90.00
Composite Area & Weighted CN	461.12		90.00

Time of Concentration

User-Defined TOC override (minutes): 72.24

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 01:12:14

Subbasin : Post-4B

Input Data

Area (ac) 50.66
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	50.66	-	90.00
Composite Area & Weighted CN	50.66		90.00

Time of Concentration

User-Defined TOC override (minutes): 10.09

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:10:05

Subbasin : Post-5

Input Data

Area (ac) 123.17
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	123.17	-	90.00
Composite Area & Weighted CN	123.17		90.00

Time of Concentration

User-Defined TOC override (minutes): 20

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:20:00

Subbasin : Post-6

Input Data

Area (ac) 80.67
Peak Rate Factor 484.00
Weighted Curve Number 90.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	80.67	-	90.00
Composite Area & Weighted CN	80.67		90.00

Time of Concentration

User-Defined TOC override (minutes): 18

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 90.00
Time of Concentration (days hh:mm:ss) 0 00:18:00

Subbasin : W

Input Data

Area (ac) 79.34
Peak Rate Factor 484.00
Weighted Curve Number 61.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	79.34	-	61.00
Composite Area & Weighted CN	79.34		61.00

Time of Concentration

User-Defined TOC override (minutes): 25.68

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 61.00
Time of Concentration (days hh:mm:ss) 0 00:25:41

Subbasin : X

Input Data

Area (ac) 22.96
Peak Rate Factor 484.00
Weighted Curve Number 59.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	22.96	-	59.00
Composite Area & Weighted CN	22.96		59.00

Time of Concentration

User-Defined TOC override (minutes): 13.86

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 59.00
Time of Concentration (days hh:mm:ss) 0 00:13:52

Subbasin : Y

Input Data

Area (ac) 34.60
Peak Rate Factor 484.00
Weighted Curve Number 62.00
Rain Gage ID ..... *

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
-	34.60	-	62.00
Composite Area & Weighted CN	34.60		62.00

Time of Concentration

User-Defined TOC override (minutes): 20.63

Subbasin Runoff Results

Total Rainfall (in) 0.01
Total Runoff (in) 0.00
Peak Runoff (cfs) 0.00
Weighted Curve Number 62.00
Time of Concentration (days hh:mm:ss) 0 00:20:38

Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft²)	Minimum Pipe Cover (in)
1	Jun-01	716.00	800.00	84.00	716.00	0.00	800.00	0.00	1.00	0.00
2	Jun-02	682.00	800.00	118.00	682.00	0.00	800.00	0.00	1.00	0.00
3	Jun-03	767.00	800.00	33.00	767.00	0.00	800.00	0.00	1.00	0.00
4	Jun-04	677.70	800.00	122.30	677.70	0.00	800.00	0.00	1.00	0.00
5	Jun-07	715.00	800.00	85.00	715.00	0.00	800.00	0.00	1.00	0.00
6	Jun-08	723.00	800.00	77.00	723.00	0.00	800.00	0.00	1.00	0.00
7	Jun-10	716.00	800.00	84.00	716.00	0.00	800.00	0.00	1.00	0.00
8	Jun-21	690.00	800.00	110.00	690.00	0.00	800.00	0.00	1.00	0.00
9	Jun-22	666.10	800.00	133.90	666.10	0.00	800.00	0.00	1.00	0.00
10	Jun-23	671.00	800.00	129.00	671.00	0.00	800.00	0.00	1.00	0.00
11	Jun-24	708.00	800.00	92.00	708.00	0.00	800.00	0.00	1.00	0.00
12	Jun-26	731.00	800.00	69.00	731.00	0.00	800.00	0.00	1.00	0.00
13	Jun-27	676.80	800.00	123.20	676.80	0.00	800.00	0.00	1.00	0.00
14	Jun-28	686.60	800.00	113.40	686.60	0.00	800.00	0.00	1.00	0.00
15	Jun-29	690.00	800.00	110.00	690.00	0.00	800.00	0.00	1.00	0.00
16	Jun-30	656.20	800.00	143.80	656.20	0.00	800.00	0.00	1.00	0.00
17	Jun-36	738.00	800.00	62.00	738.00	0.00	999.00	199.00	1.00	0.00
18	Jun-37	744.00	800.00	56.00	744.00	0.00	800.00	0.00	1.00	0.00
19	Jun-38	731.00	800.00	69.00	731.00	0.00	999.00	199.00	1.00	0.00
20	Jun-43	739.00	800.00	61.00	739.00	0.00	999.00	199.00	1.00	0.00
21	Jun-44	745.00	800.00	55.00	745.00	0.00	999.00	199.00	1.00	0.00
22	Jun-45	672.00	800.00	128.00	672.00	0.00	999.00	199.00	1.00	0.00

Channel Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Shape	Height (ft)	Width (ft)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow (cfs)	Flap Gate
1	Link-01	655.00	767.00	0.00	759.00	25.00	8.00	1.2200	User-Defined	20.040	508.630	0.0320	0.0000	0.0000	0.0000	0.00	No
2	Link-03	575.00	716.00	0.00	711.00	24.00	5.00	0.8700	User-Defined	20.500	511.040	0.0320	0.0000	0.0000	0.0000	0.00	No
3	Link-04	1212.00	687.00	0.00	685.00	0.00	2.00	0.1700	User-Defined	41.980	1068.460	0.0320	0.0000	0.0000	0.0000	0.00	No
4	Link-05	660.00	682.00	0.00	677.70	0.00	4.30	0.6500	User-Defined	49.400	1166.130	0.0320	0.0000	0.0000	0.0000	0.00	No
5	Link-07	971.00	723.00	0.00	708.00	0.00	15.00	1.5400	User-Defined	35.280	562.960	0.0320	0.0000	0.0000	0.0000	0.00	No
6	Link-08	814.00	715.00	0.00	696.00	6.30	19.00	2.3300	User-Defined	35.190	651.230	0.0320	0.0000	0.0000	0.0000	0.00	No
7	Link-12	60.00	671.50	0.50	671.00	0.00	0.50	0.8300	User-Defined	41.880	713.740	0.0320	0.0000	0.0000	0.0000	0.00	No
8	Link-14	1021.00	716.00	0.00	690.00	0.00	26.00	2.5500	User-Defined	26.670	676.080	0.0320	0.0000	0.0000	0.0000	0.00	No
9	Link-20	1055.00	685.00	0.00	682.00	0.00	3.00	0.2800	User-Defined	59.580	1408.800	0.0320	0.0000	0.0000	0.0000	0.00	No
10	Link-22	1070.00	720.00	0.00	712.00	25.00	8.00	0.7500	User-Defined	36.040	1052.100	0.0320	0.0000	0.0000	0.0000	0.00	No
11	Link-27	910.00	690.00	0.00	676.00	5.00	14.00	1.5400	User-Defined	40.590	604.220	0.0320	0.0000	0.0000	0.0000	0.00	No
12	Link-28	590.00	666.10	0.00	664.00	3.50	2.10	0.3600	User-Defined	52.930	738.650	0.0320	0.0000	0.0000	0.0000	0.00	No
13	Link-29	695.00	671.00	0.00	666.10	0.00	4.90	0.7100	User-Defined	50.600	813.960	0.0320	0.0000	0.0000	0.0000	0.00	No
14	Link-30	946.00	708.00	0.00	697.00	7.30	11.00	1.1600	User-Defined	41.160	844.610	0.0320	0.0000	0.0000	0.0000	0.00	No
15	Link-33	100.00	734.00	0.00	731.00	0.00	3.00	3.0000	User-Defined	34.800	906.990	0.0320	0.0000	0.0000	0.0000	0.00	No
16	Link-34	672.00	731.00	0.00	724.00	4.00	7.00	1.0400	User-Defined	34.800	906.990	0.0320	0.0000	0.0000	0.0000	0.00	No
17	Link-35	100.00	676.80	0.00	675.80	0.00	1.00	1.0000	User-Defined	35.870	461.280	0.0320	0.0000	0.0000	0.0000	0.00	No
18	Link-36	100.00	686.60	0.00	685.60	0.00	1.00	1.0000	User-Defined	29.400	598.150	0.0320	0.0000	0.0000	0.0000	0.00	No
19	Link-37	100.00	690.00	0.00	688.00	0.00	2.00	2.0000	User-Defined	36.860	434.990	0.0320	0.0000	0.0000	0.0000	0.00	No
20	Link-38	100.00	656.20	0.00	655.20	0.00	1.00	1.0000	User-Defined	20.070	1070.560	0.0320	0.0000	0.0000	0.0000	0.00	No
21	Link-64	100.00	738.00	0.00	737.50	0.00	0.50	0.5000	Rectangular	10.000	60.000	0.0350	0.0000	0.0000	0.0000	0.00	No
22	Link-67	100.00	731.00	0.00	730.00	0.00	1.00	1.0000	Rectangular	10.000	60.000	0.0350	0.0000	0.0000	0.0000	0.00	No

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow (cfs)	Flap Gate	No. of Barrels
1	Link-02	50.00	738.00	-1.00	737.00	6.00	1.00	2.0000	Rectangular	48.000	72.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
2	Link-06	291.00	677.70	0.00	676.80	0.00	0.90	0.3100	Rectangular	96.000	96.000	0.0130	0.5000	0.5000	0.0000	0.00	No	2
3	Link-09	237.00	689.70	0.00	686.60	0.00	3.10	1.3100	Rectangular	48.000	48.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
4	Link-10	50.00	733.00	-6.00	732.00	45.00	1.00	2.0000	CIRCULAR	36.000	36.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
5	Link-11	327.00	660.50	0.00	656.20	0.00	4.30	1.3100	Rectangular	60.000	84.000	0.0130	0.5000	1.0000	0.0000	0.00	No	3
6	Link-19	248.00	694.20	0.00	690.00	0.00	4.20	1.6900	CIRCULAR	48.000	48.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
7	Link-39	193.00	669.80	9.30	668.50	12.30	1.30	0.6700	Rectangular	48.000	72.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
8	Link-40	620.00	668.00	-6.00	668.00	-6.00	0.00	0.0000	CIRCULAR	60.000	60.000	0.0130	0.5000	1.0000	0.0000	0.00	No	2
9	Link-41	400.00	733.00	-6.00	733.00	-6.00	0.00	0.0000	CIRCULAR	36.000	36.000	0.0130	0.0000	0.0000	0.0000	0.00	No	1
10	Link-61	50.00	744.00	-1.00	743.00	20.00	1.00	2.0000	CIRCULAR	36.000	36.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
11	Link-66	50.00	739.00	-5.00	738.00	0.00	1.00	2.0000	Rectangular	72.000	72.000	0.0130	0.5000	1.0000	0.0000	0.00	No	1
12	Link-70	50.00	732.00	0.00	731.00	0.00	1.00	2.0000	CIRCULAR	36.000	36.000	0.0130	0.5000	1.0000	0.0000	0.00	No	2
13	Link-74	50.00	672.00	0.00	671.00	4.90	1.00	2.0000	Rectangular	72.000	96.000	0.0150	0.5000	0.5000	0.0000	0.00	No	1

Storage Nodes

Storage Node : Pond-1

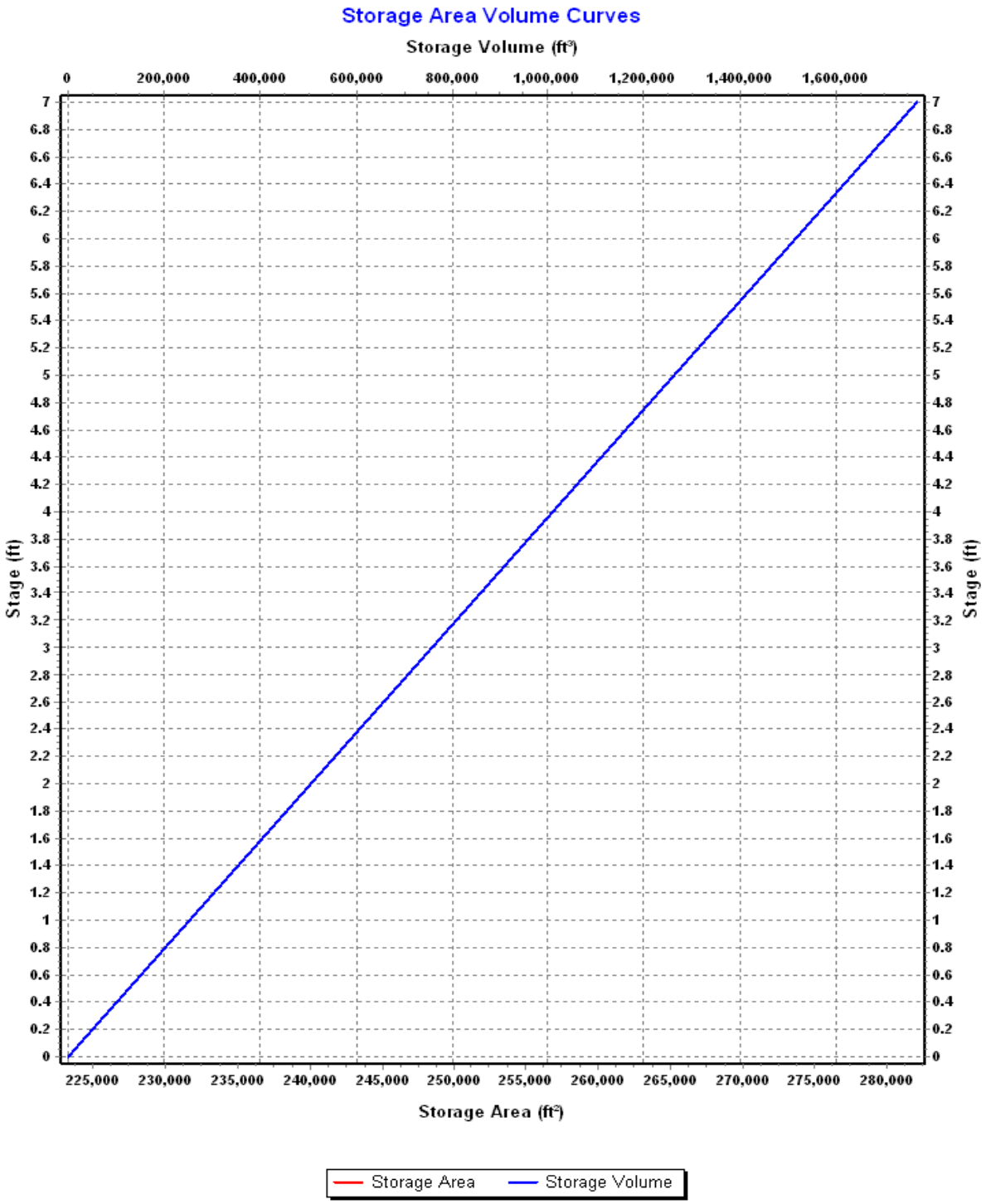
Input Data

Invert Elevation (ft) 739.00
Max (Rim) Elevation (ft) 746.00
Max (Rim) Offset (ft) 7.00
Initial Water Elevation (ft) 741.08
Initial Water Depth (ft) 2.08
Ponded Area (ft²) 282063.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond1

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	223257	0.000
7	282063	1768620.00


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
225,000
230,000
235,000
240,000
245,000
250,000
255,000
260,000
265,000
270,000
275,000
280,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-1 (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-29	Rectangular	No	739.00	0.00	3.00	10.00	3.33
2	Weir-31	Rectangular	No	741.70	2.70	15.00	10.00	3.33

Storage Node : Pond-2A

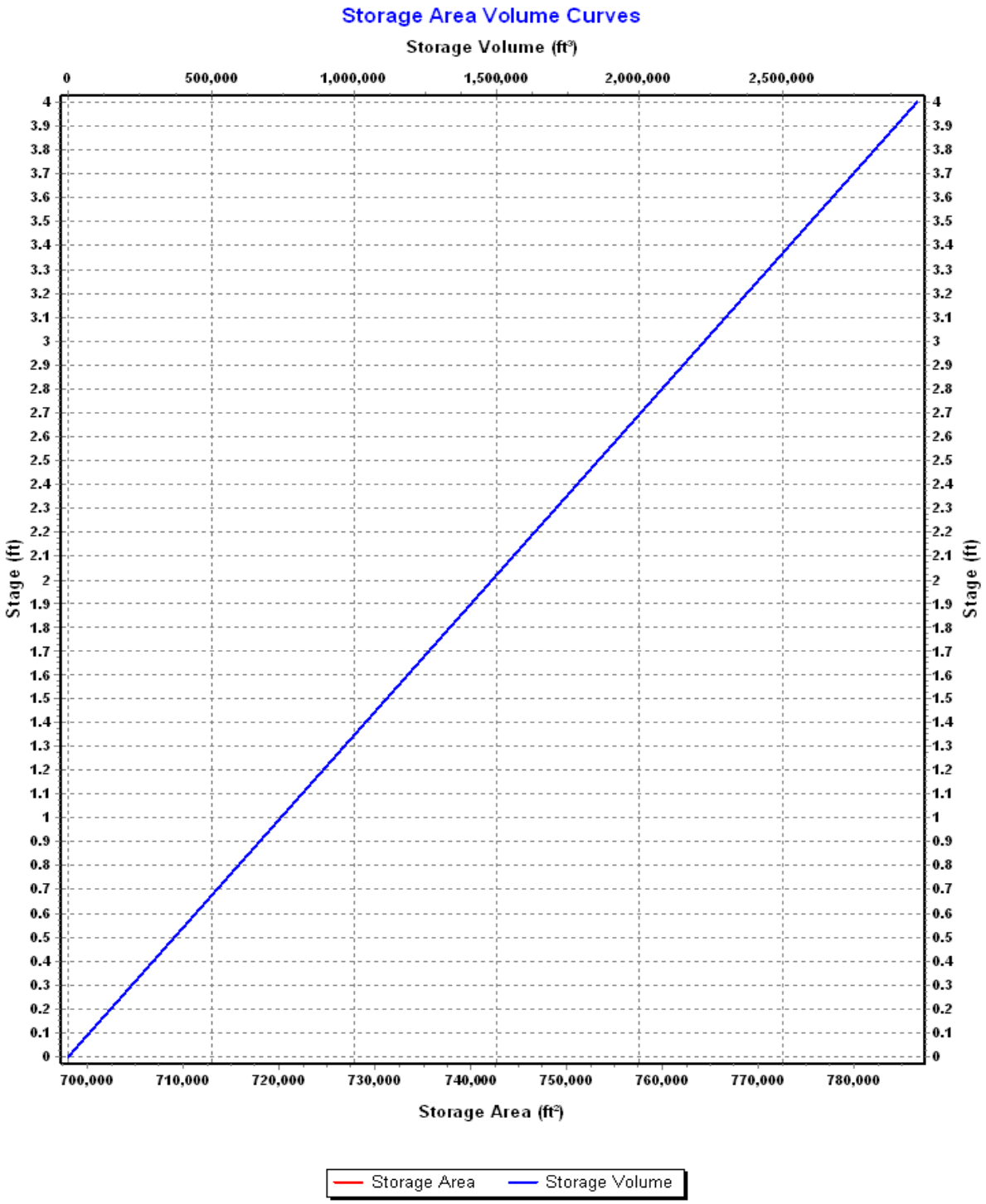
Input Data

Invert Elevation (ft) 739.00
Max (Rim) Elevation (ft) 743.00
Max (Rim) Offset (ft) 4.00
Initial Water Elevation (ft) 739.41
Initial Water Depth (ft) 0.41
Ponded Area (ft²) 786496.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond2A

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	698027	0.000
4	786496	2969046.00


Storage Area Volume Curves
Storage Volume (ft³)
0
500,000
1,000,000
1,500,000
2,000,000
2,500,000
Stage (ft)
4
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
700,000
710,000
720,000
730,000
740,000
750,000
760,000
770,000
780,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-2A (continued)

Storage Node : Pond-2B

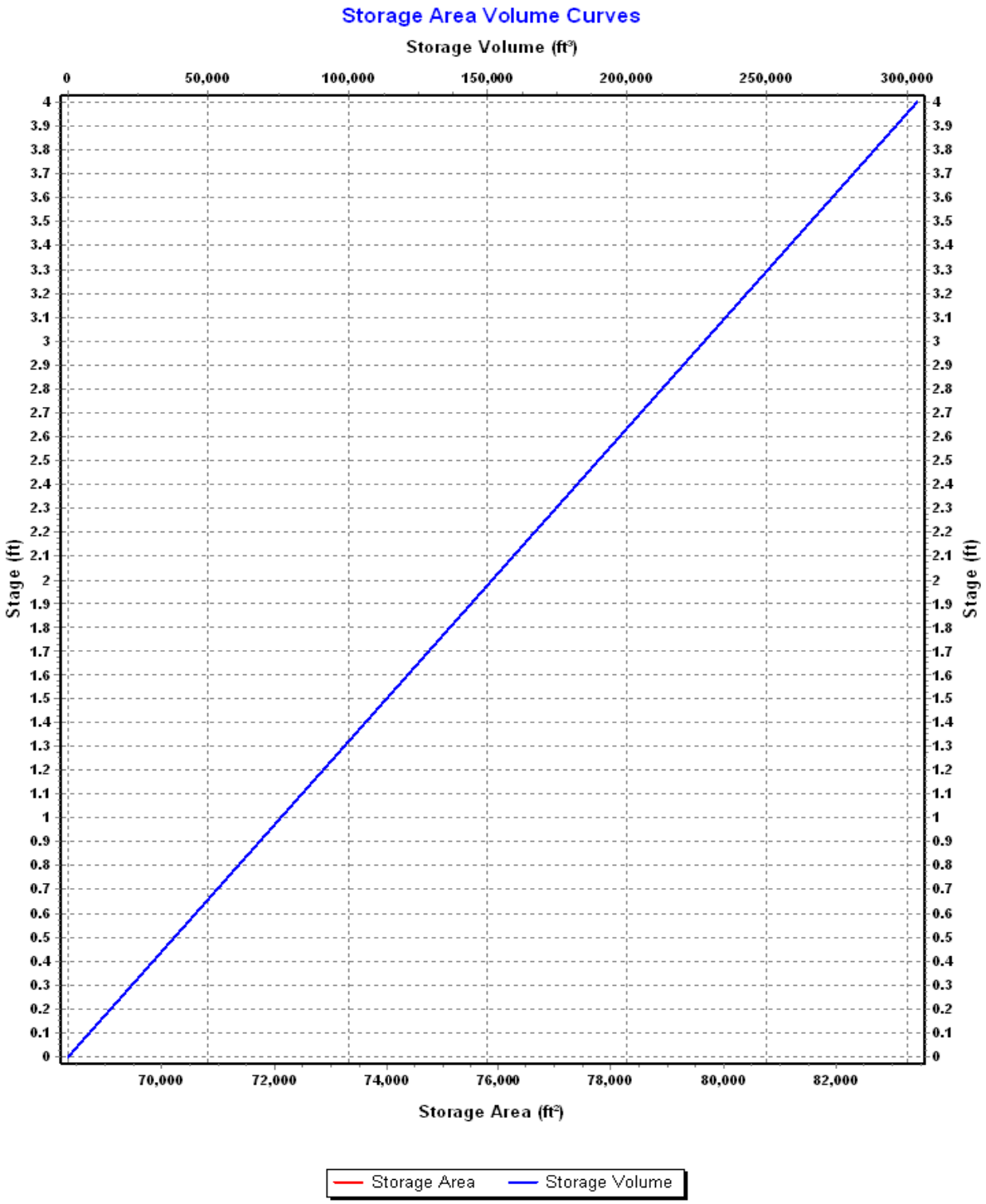
Input Data

Invert Elevation (ft) 739.00
Max (Rim) Elevation (ft) 743.00
Max (Rim) Offset (ft) 4.00
Initial Water Elevation (ft) 739.41
Initial Water Depth (ft) 0.41
Ponded Area (ft²) 83441.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond2B

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	68338	0.000
4	83441	303558.00


Storage Area Volume Curves
Storage Volume (ft³)
0
50,000
100,000
150,000
200,000
250,000
300,000
Stage (ft)
4
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
70,000
72,000
74,000
76,000
78,000
80,000
82,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-2B (continued)

Storage Node : Pond-3

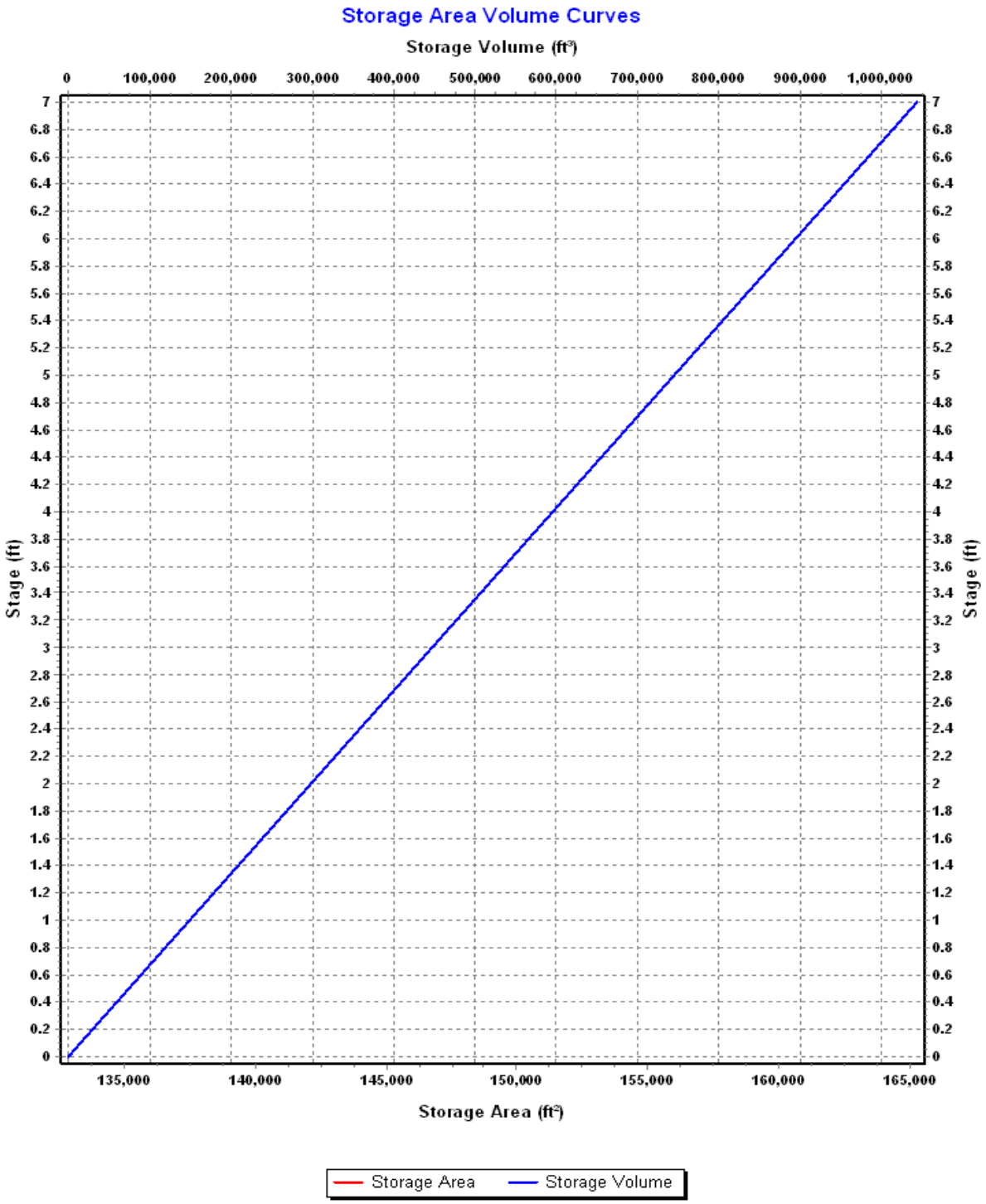
Input Data

Invert Elevation (ft) 745.00
Max (Rim) Elevation (ft) 752.00
Max (Rim) Offset (ft) 7.00
Initial Water Elevation (ft) 746.60
Initial Water Depth (ft) 1.60
Ponded Area (ft²) 165275.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond3

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	132858	0.000
7	165275	1043465.50


Storage Area Volume Curves
Storage Volume (ft³)
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
1,000,000
Stage (ft)
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
135,000
140,000
145,000
150,000
155,000
160,000
165,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-3 (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-32	Rectangular	No	745.00	0.00	0.67	10.00	3.33
2	Weir-34	Rectangular	No	748.00	3.00	9.33	10.00	3.33

Storage Node : Pond-4A

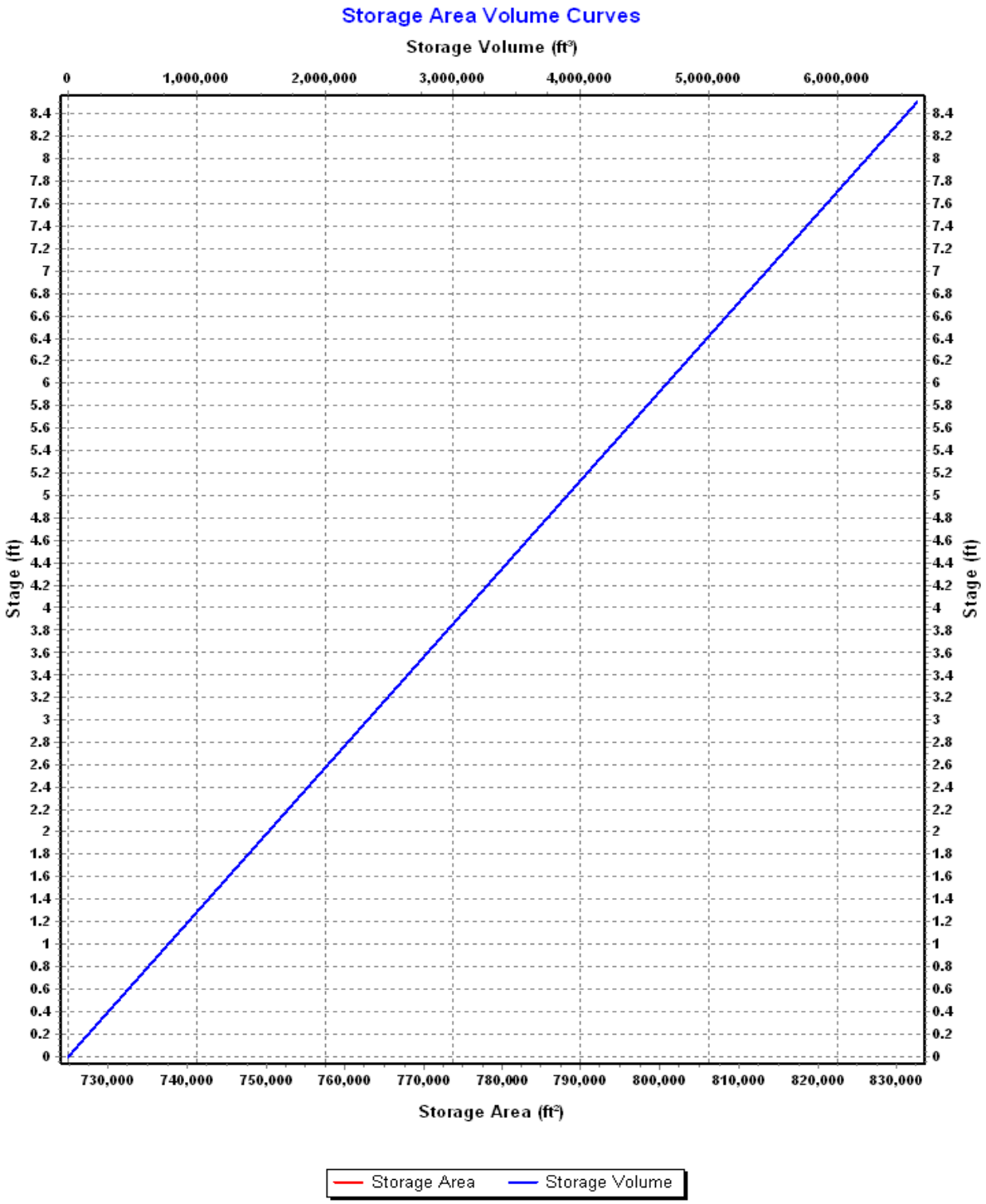
Input Data

Invert Elevation (ft) 674.00
Max (Rim) Elevation (ft) 682.50
Max (Rim) Offset (ft) 8.50
Initial Water Elevation (ft) 676.37
Initial Water Depth (ft) 2.37
Ponded Area (ft²) 832543.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond4A

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	724961	0.000
8.5	832543	6619392.00


Storage Area Volume Curves
Storage Volume (ft³)
0
1,000,000
2,000,000
3,000,000
4,000,000
5,000,000
6,000,000
Stage (ft)
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
730,000
740,000
750,000
760,000
770,000
780,000
790,000
800,000
810,000
820,000
830,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-4A (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-39	Rectangular	No	674.00	0.00	7.00	999.00	3.33
2	Weir-40	Rectangular	No	677.25	3.25	13.00	999.00	3.33

Storage Node : Pond-4B

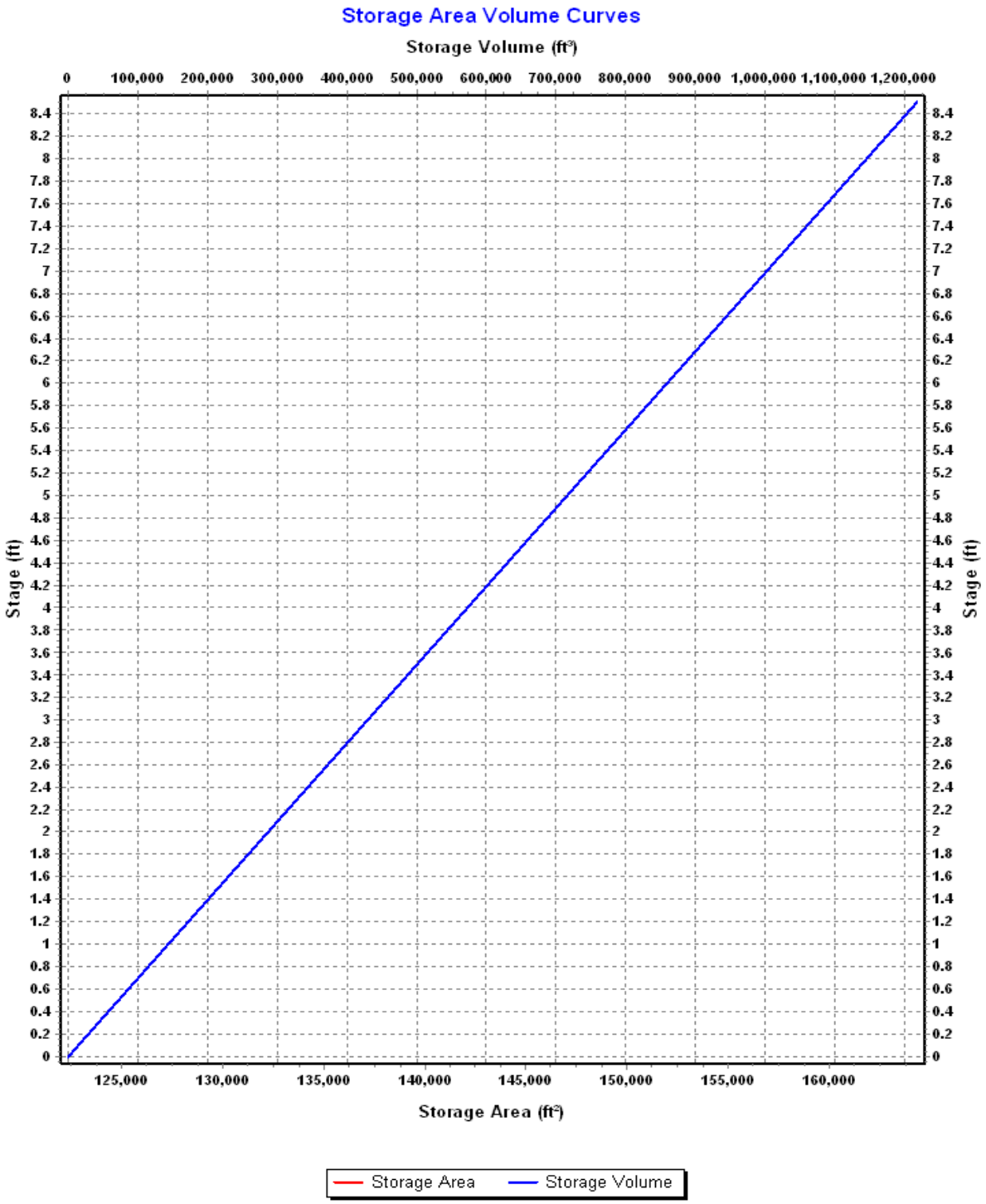
Input Data

Invert Elevation (ft) 674.00
Max (Rim) Elevation (ft) 682.50
Max (Rim) Offset (ft) 8.50
Initial Water Elevation (ft) 676.37
Initial Water Depth (ft) 2.37
Ponded Area (ft²) 164301.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond4B

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	122357	0.000
8.5	164301	1218296.50


Storage Area Volume Curves
Storage Volume (ft³)
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
1,000,000
1,100,000
1,200,000
Stage (ft)
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
125,000
130,000
135,000
140,000
145,000
150,000
155,000
160,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-4B (continued)

Storage Node : Pond-5

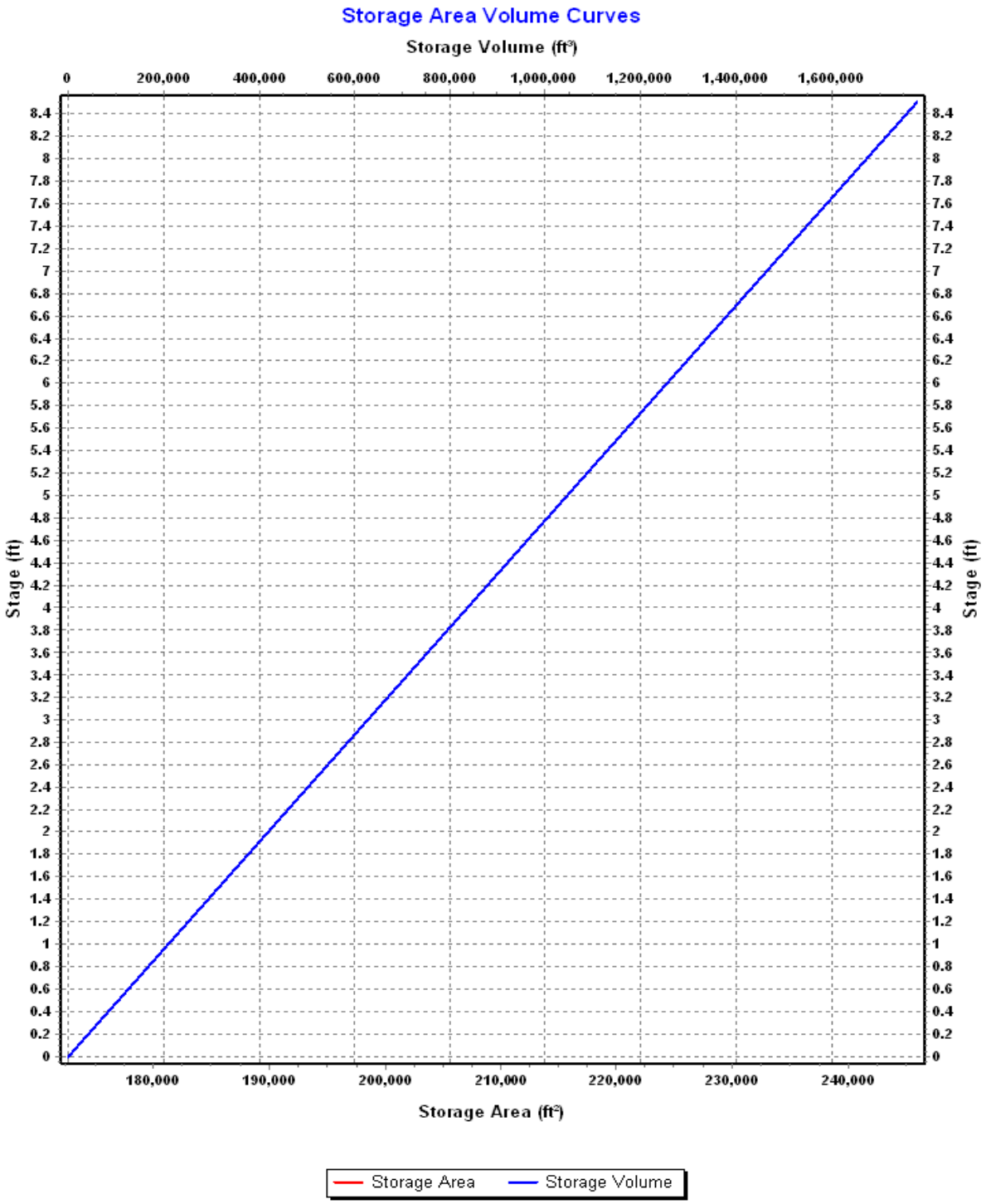
Input Data

Invert Elevation (ft) 744.00
Max (Rim) Elevation (ft) 752.50
Max (Rim) Offset (ft) 8.50
Initial Water Elevation (ft) 746.80
Initial Water Depth (ft) 2.80
Ponded Area (ft²) 245841.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Pond5

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	172733	0.000
8.5	245841	1778939.50


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
180,000
190,000
200,000
210,000
220,000
230,000
240,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-5 (continued)

Outflow Weirs

SN	Element ID	Weir Type	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient
1	Weir-16	Rectangular	No	744.00	0.00	3.00	10.00	3.33
2	Weir-17	Rectangular	No	747.30	3.30	15.00	10.00	3.33

Storage Node : Pond-6

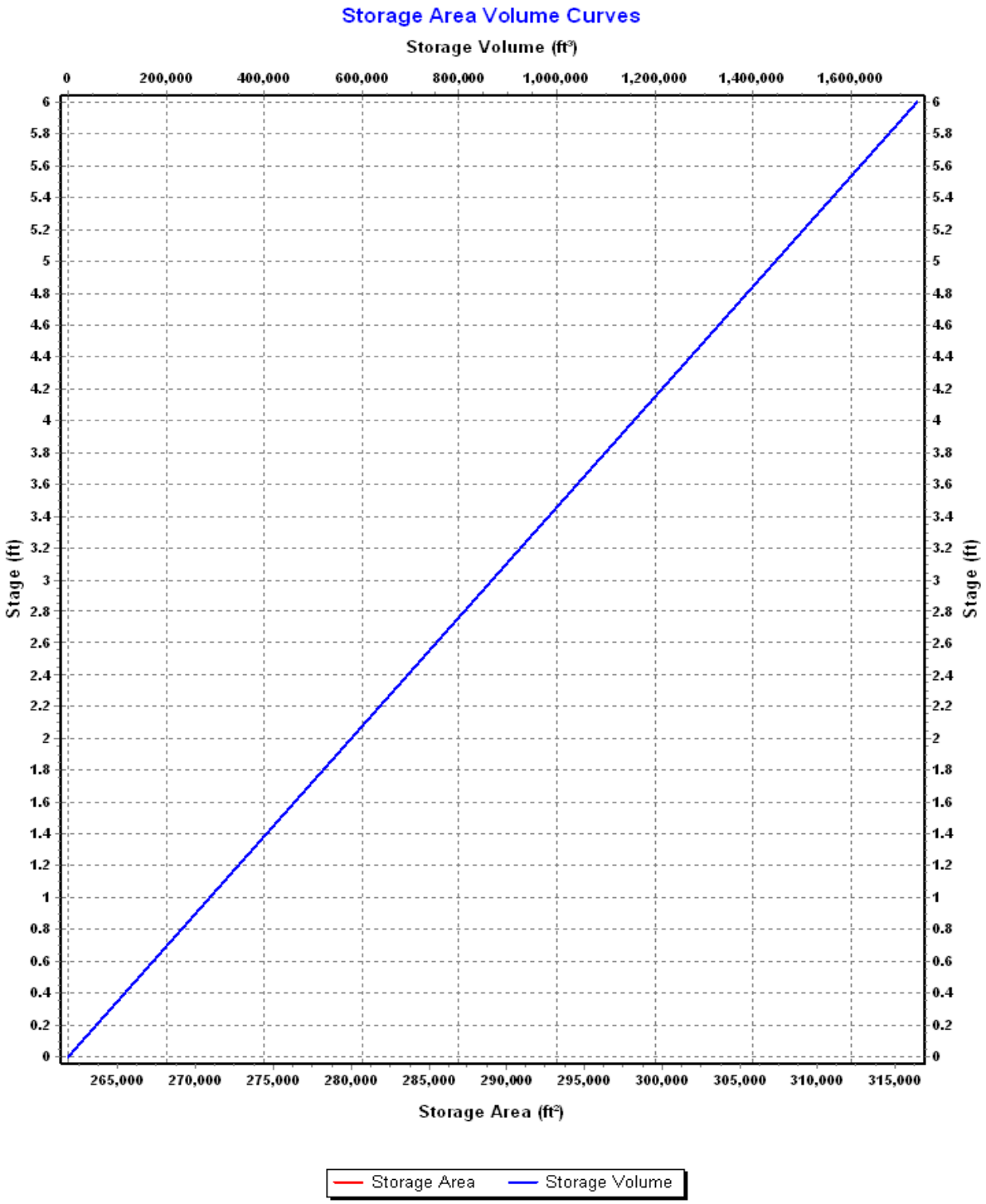
Input Data

Invert Elevation (ft) 732.00
Max (Rim) Elevation (ft) 738.00
Max (Rim) Offset (ft) 6.00
Initial Water Elevation (ft) 733.21
Initial Water Depth (ft) 1.21
Ponded Area (ft²) 316369.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-PondT

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	261846	0.000
6	316369	1734645.00


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
265,000
270,000
275,000
280,000
285,000
290,000
295,000
300,000
305,000
310,000
315,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Pond-6 (continued)

Storage Node : Stor-D

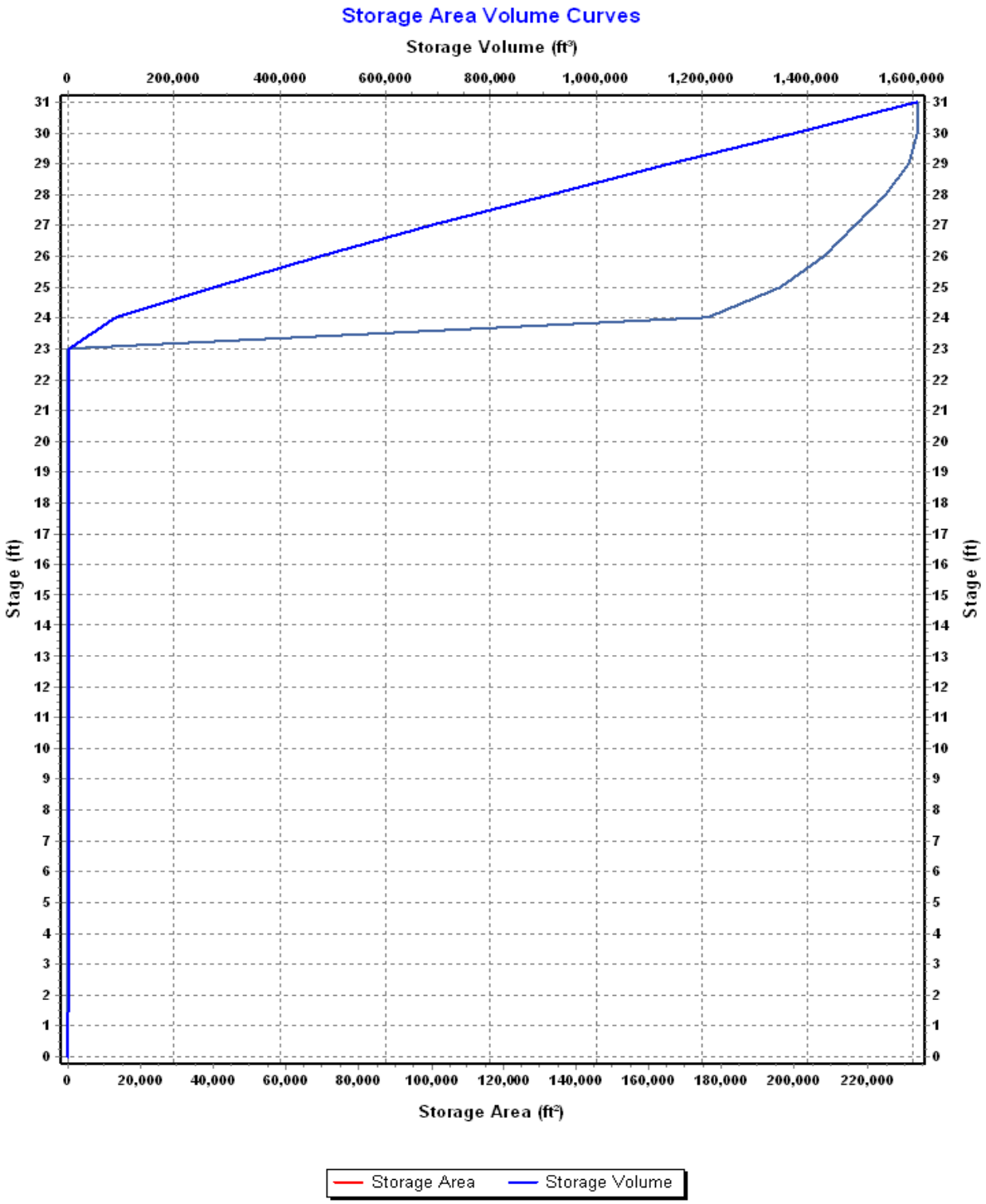
Input Data

Invert Elevation (ft) 734.00
Max (Rim) Elevation (ft) 765.00
Max (Rim) Offset (ft) 31.00
Initial Water Elevation (ft) 734.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 233730.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-D

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
23	100	2300.00
24	176086.944	90393.47
25	196141.968	276507.93
26	208134.036	478645.93
27	216915.732	691170.81
28	224965.62	912111.49
29	231551.892	1140370.25
30	233638.416	1372965.40
31	233703.756	1606636.49


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
Storage Area (ft²)
0
20,000
40,000
60,000
80,000
100,000
120,000
140,000
160,000
180,000
200,000
220,000
Storage Area
Storage Volume

Storage Node : Stor-D (continued)

Storage Node : Stor-EE

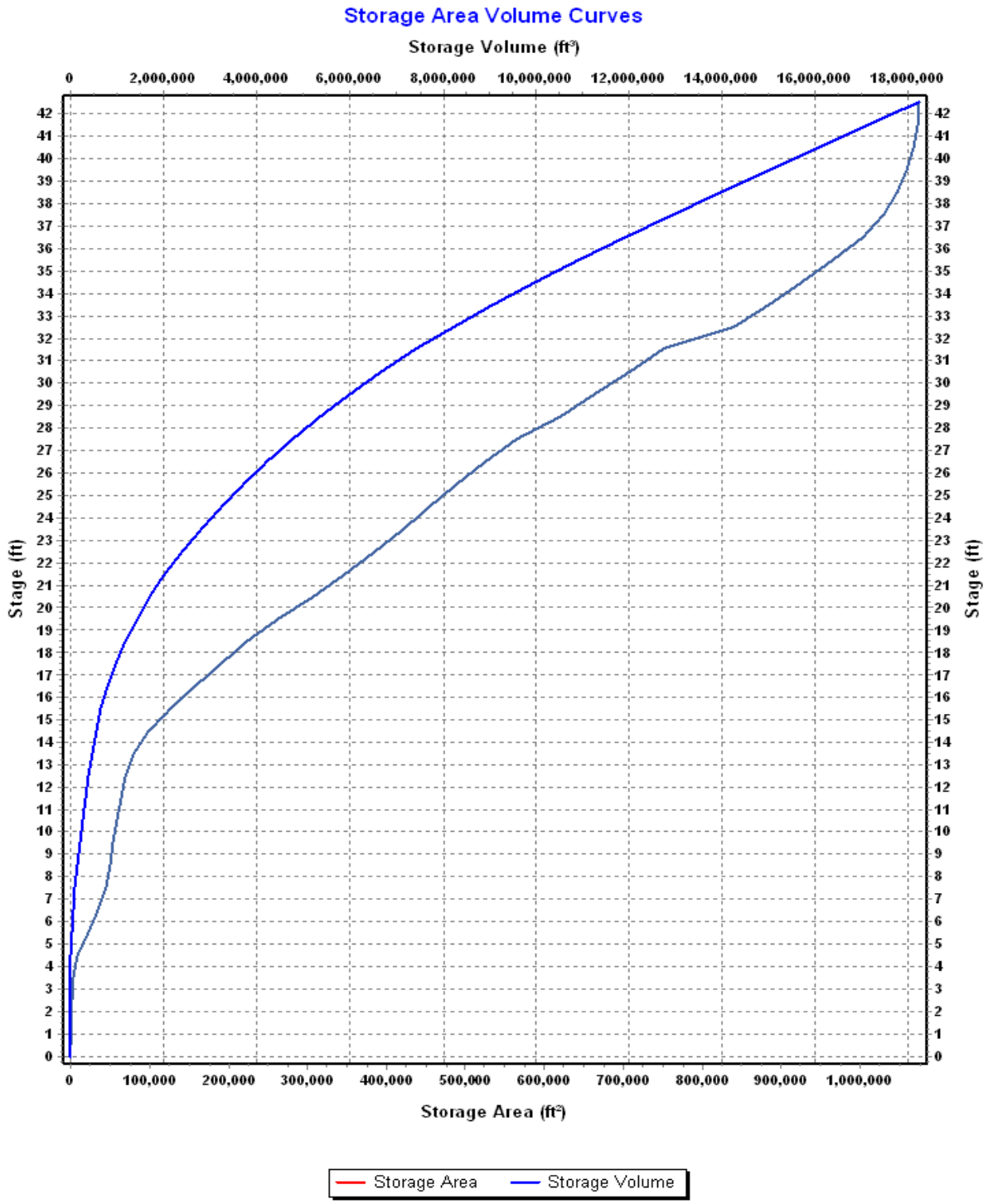
Input Data

Invert Elevation (ft) 660.50
Max (Rim) Elevation (ft) 703.00
Max (Rim) Offset (ft) 42.50
Initial Water Elevation (ft) 660.50
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1073922.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-EE

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
0.5	100	50.00
1.5	1215.324	707.66
2.5	2378.376	2504.51
3.5	4177.404	5782.40
4.5	8385.3	12063.75
5.5	23108.58	27810.69
6.5	35292.312	57011.14
7.5	44614.152	96964.37
8.5	49976.388	144259.64
9.5	54227.844	196361.76
10.5	58413.96	252682.66
11.5	63571.464	313675.37
12.5	69804.9	380363.55
13.5	79771.428	455151.71
14.5	99499.752	544787.30
15.5	126990.468	658032.41
16.5	157948.56	800501.92
17.5	189520.848	974236.62
18.5	223523.784	1180758.94
19.5	262379.304	1423710.48
20.5	307241.748	1708521.01
21.5	348480	2036381.88
22.5	385893.684	2403568.72
23.5	421229.556	2807130.34
24.5	454653.144	3245071.69
25.5	490002.084	3717399.30
26.5	525155.004	4224977.84
27.5	565487.208	4770298.95
28.5	620943.444	5363514.28
29.5	664194.168	6006083.09
30.5	708625.368	6692492.86
31.5	750604.14	7422107.61
32.5	838534.356	8216676.86
33.5	883074.456	9077481.27
34.5	925719.696	9981878.35
35.5	965751.336	10927613.87
36.5	1003082.256	11912030.67
37.5	1029701.772	12928422.68
38.5	1045954.008	13966250.57
39.5	1057523.544	15017989.35
40.5	1066662.432	16080082.34
41.5	1072961.208	17149894.16
42.5	1073867.256	18223308.39


Storage Area Volume Curves
Storage Volume (ft³)
0
2,000,000
4,000,000
6,000,000
8,000,000
10,000,000
12,000,000
14,000,000
16,000,000
18,000,000
Stage (ft)
Storage Area (ft²)
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
1,000,000
Storage Area
Storage Volume

Storage Node : Stor-EE (continued)

Storage Node : Stor-G

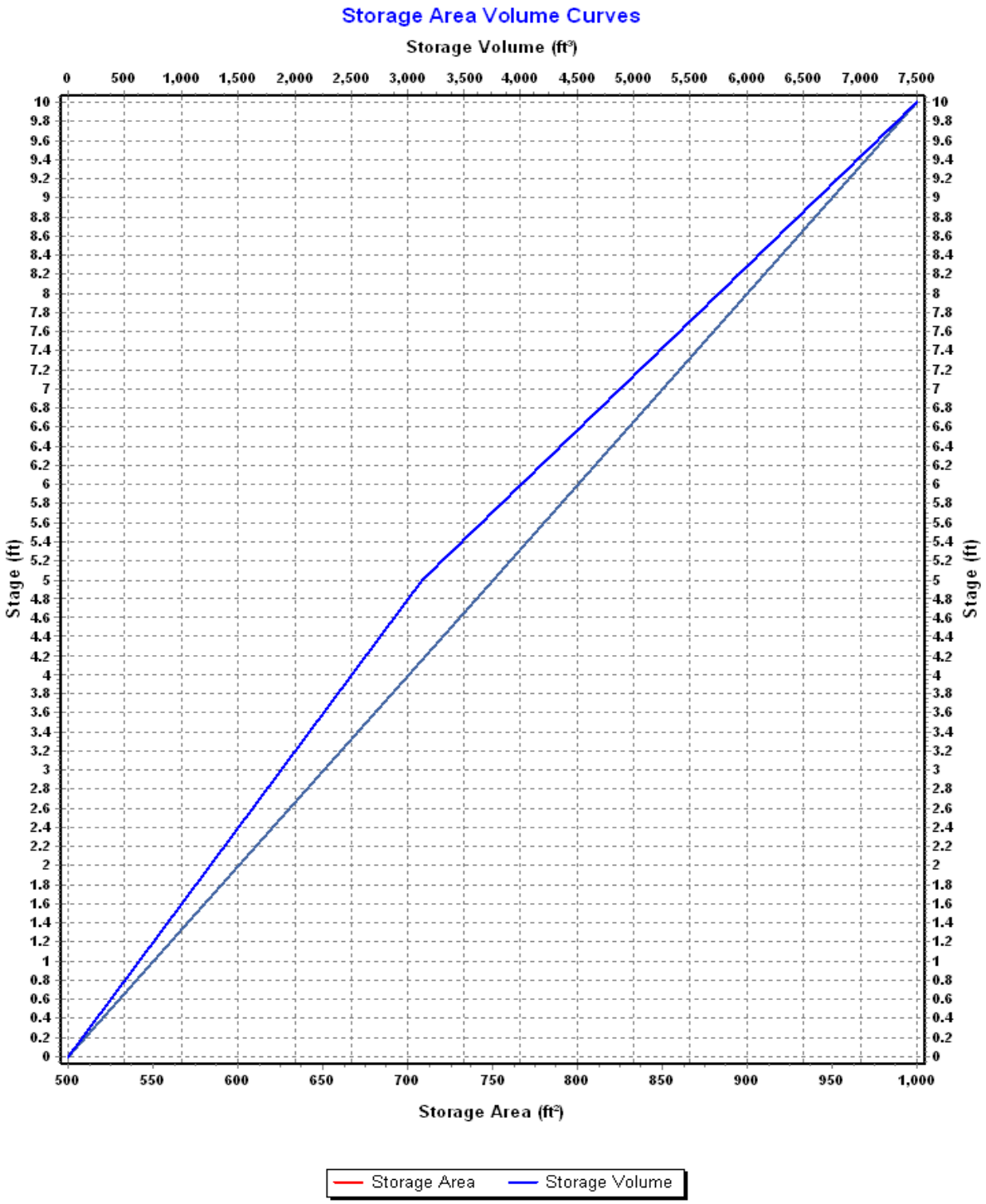
Input Data

Invert Elevation (ft) 720.00
Max (Rim) Elevation (ft) 730.00
Max (Rim) Offset (ft) 10.00
Initial Water Elevation (ft) 720.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1000.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-P

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	500	0.000
5	750	3125.00
10	1000	7500.00


Storage Area Volume Curves
Storage Volume (ft³)
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
5,500
6,000
6,500
7,000
7,500
Stage (ft)
10
9.8
9.6
9.4
9.2
9
8.8
8.6
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
500
550
600
650
700
750
800
850
900
950
1,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-G (continued)

Storage Node : Stor-I

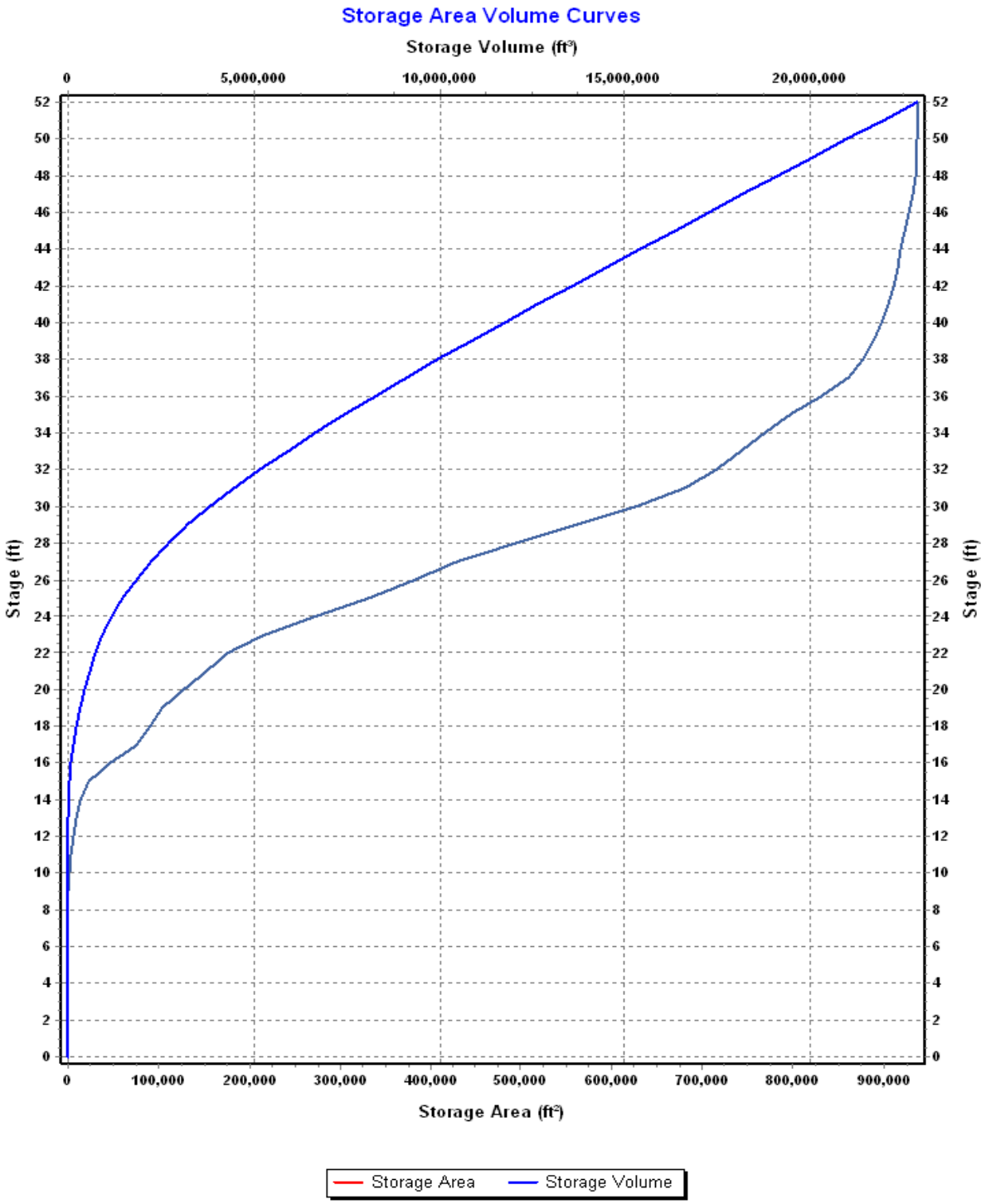
Input Data

Invert Elevation (ft) 687.00
Max (Rim) Elevation (ft) 739.00
Max (Rim) Offset (ft) 52.00
Initial Water Elevation (ft) 687.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 936779.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-I

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
9	100	900.00
10	1075.932	1487.97
11	3271.356	3661.61
12	5671.512	8133.04
13	9827.136	15882.36
14	12972.168	27282.01
15	23422.212	45479.20
16	47114.496	80747.55
17	75101.796	141855.70
18	90678.852	224746.02
19	104661.612	322416.25
20	126511.308	438002.71
21	152669.088	577592.91
22	176932.008	742393.46
23	215186.4	938452.66
24	273504.528	1182798.12
25	334018.08	1486559.42
26	382034.268	1844585.59
27	430311.816	2250758.63
28	495669.24	2713749.16
29	564428.7	3243798.13
30	628235.388	3840130.17
31	681687.864	4495091.80
32	716304.996	5194088.23
33	742493.268	5923487.36
34	769618.08	6679543.03
35	797797.044	7463250.59
36	831865.32	8278081.77
37	861120.216	9124574.54
38	877307.112	9993788.20
39	887778.936	10876331.22
40	896843.772	11768642.57
41	905133.24	12669631.08
42	911279.556	13577837.48
43	915091.056	14491022.79
44	918148.968	15407642.80
45	923380.524	16328407.55
46	928429.128	17254312.38
47	931591.584	18184322.74
48	934584.156	19117410.61
49	935660.088	20052532.73
50	936282.996	20988504.27
51	936618.408	21924954.97
52	936727.308	22861627.83


Storage Area Volume Curves
Storage Volume (ft³)
0
5,000,000
10,000,000
15,000,000
20,000,000
Stage (ft)
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-I (continued)

Storage Node : Stor-J

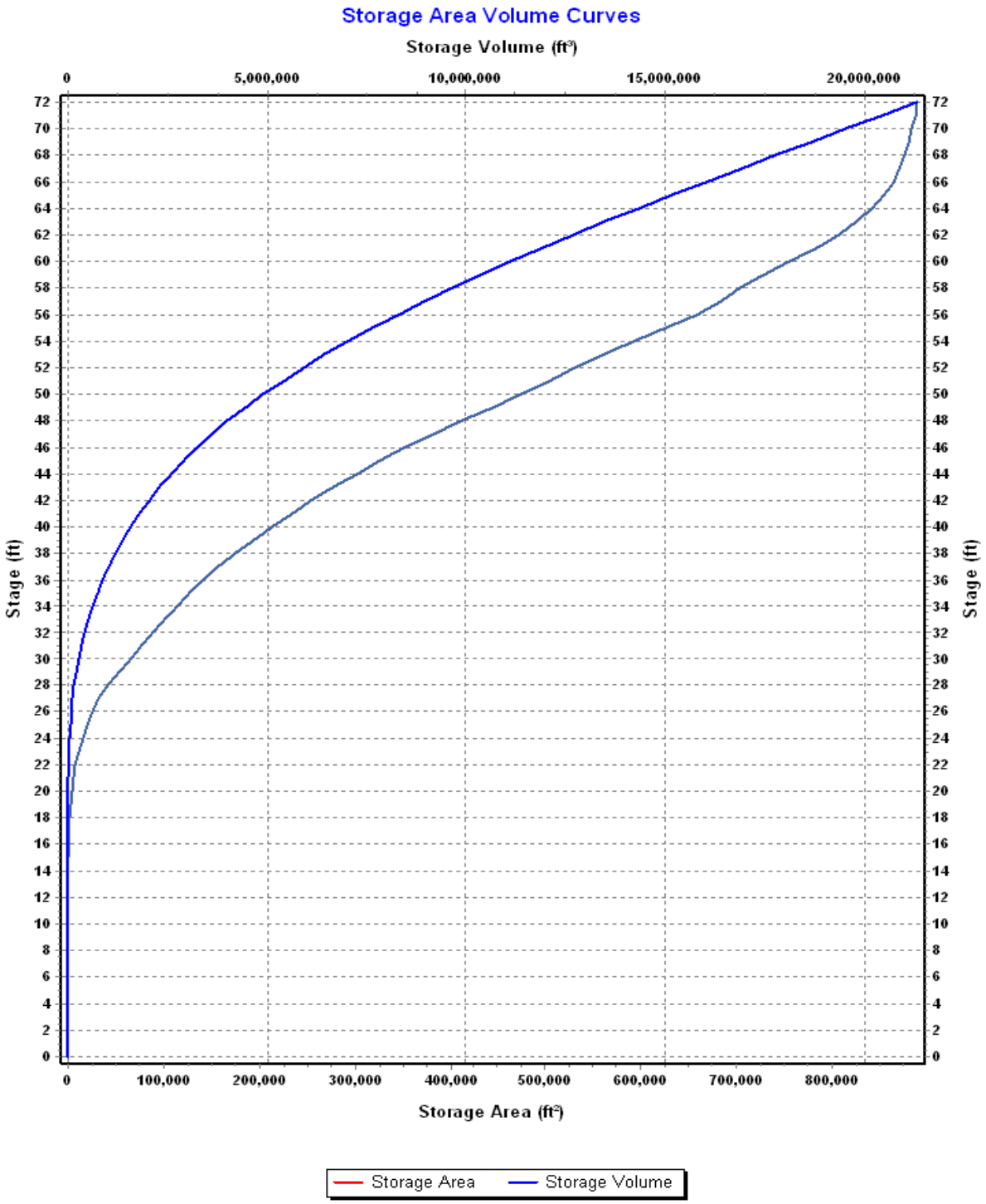
Input Data

Invert Elevation (ft) 685.00
Max (Rim) Elevation (ft) 757.00
Max (Rim) Offset (ft) 72.00
Initial Water Elevation (ft) 685.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 888299.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-J

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
10	153.8193	1269.10
11	218.4025	1455.21
12	282.9857	1705.90
13	412.1521	2053.47
14	605.9017	2562.50
15	702.7765	3216.84
16	982.6371	4059.55
17	1251.7338	5176.74
18	1639.233	6622.22
19	2780.2029	8831.94
20	3781.2426	12112.66
21	5342.0034	16674.28
22	7753.1097	23221.84
23	11585.0465	32890.92
24	15653.7884	46510.34
25	19679.4748	64176.97
26	25169.0472	86601.23
27	31971.8114	115171.66
28	41314.8483	151814.99
29	53316.5604	199130.69
30	65824.1743	258701.06
31	76964.777	330095.54
32	88988.0168	413071.94
33	101861.6022	508496.75
34	114649.0766	616752.09
35	127920.9251	738037.09
36	141354.2316	872674.67
37	157230.936	1021967.25
38	175572.566	1188369.00
39	194075.654	1373193.11
40	214290.1969	1577376.04
41	234397.1011	1801719.69
42	254880.7407	2046358.61
43	279164.0255	2313380.99
44	303092.1026	2604509.05
45	327601.4286	2919855.82
46	352293.7403	3259803.40
47	383153.748	3627527.14
48	414153.686	4026180.86
49	445616.4703	4456065.94
50	475701.4796	4916724.91
51	503278.5078	5406214.90
52	530500.3284	5923104.32
53	561661.7244	6469185.35
54	592876.9397	7046454.68
55	626632.4277	7656209.36
56	658439.6558	8298745.40
57	684197.5904	8970064.02
58	703992.3425	9664158.99
59	728770.7652	10380540.54
60	755206.8234	11122529.33
61	782913.018	11891589.25
62	806173.7354	12686132.63
63	826033.0707	13502236.03
64	841145.5405	14335825.34
65	853373.2938	15183084.76
66	863480.5653	16041511.69
67	870057.2883	16908280.62
68	875719.0825	17781168.81
69	879852.4076	18658954.56
70	883199.9703	19540480.75
71	887387.1147	20425774.29
72	888398.9182	21313667.31


Storage Area Volume Curves
Storage Volume (ft³)
0
5,000,000
10,000,000
15,000,000
20,000,000
Stage (ft)
Storage Area (ft²)
0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
Storage Area
Storage Volume

Storage Node : Stor-J (continued)

Storage Node : Stor-NO

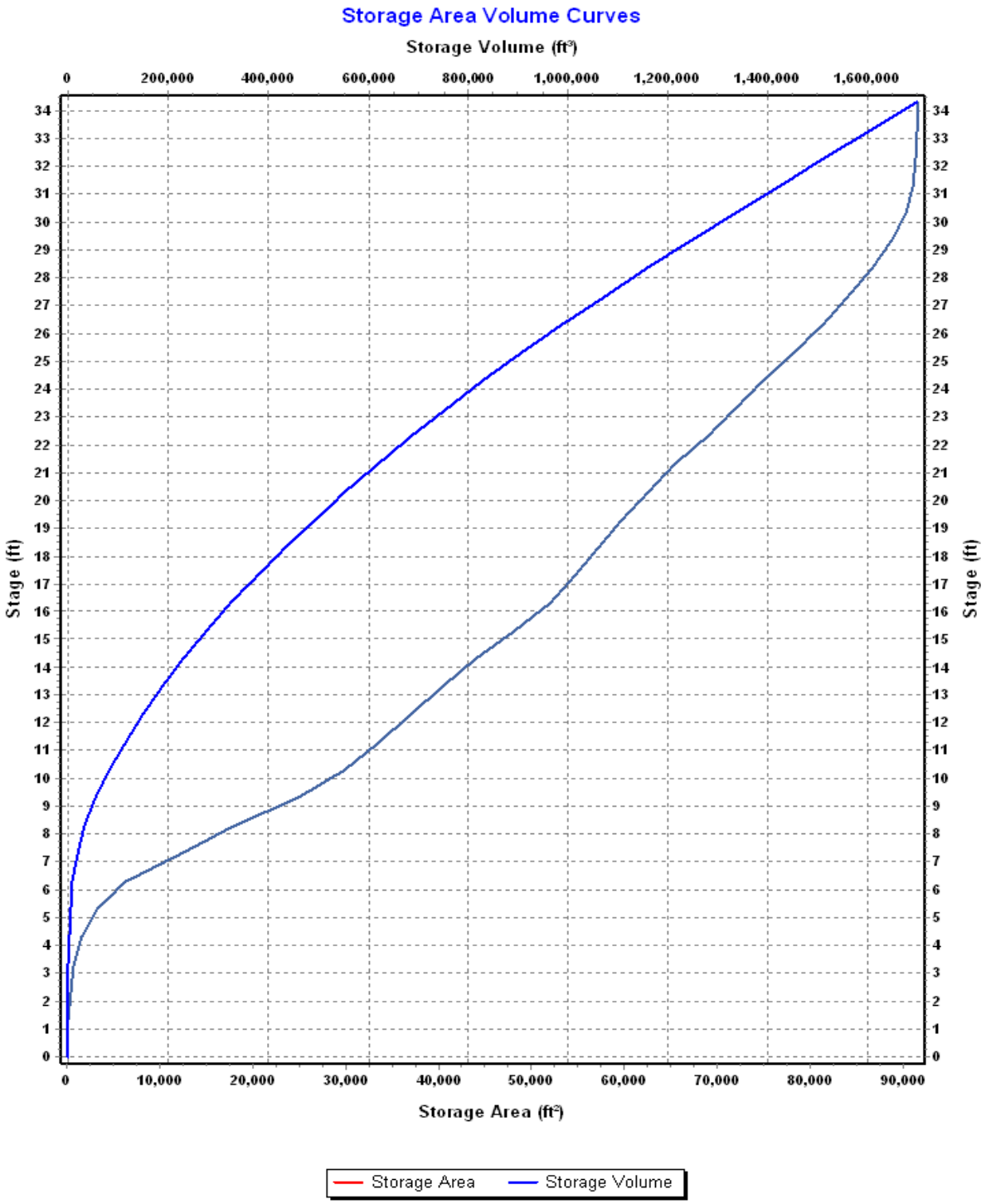
Input Data

Invert Elevation (ft) 689.70
Max (Rim) Elevation (ft) 724.00
Max (Rim) Offset (ft) 34.30
Initial Water Elevation (ft) 689.70
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 91514.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-NO

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	100	0.000
0.3	100	30.00
1.3	117.612	138.81
2.3	365.904	380.57
3.3	753.588	940.32
4.3	1637.856	2136.04
5.3	3175.524	4542.73
6.3	6351.048	9306.02
7.3	12218.58	18590.83
8.3	18107.892	33754.07
9.3	24772.572	55194.30
10.3	29842.956	82502.06
11.3	33567.336	114207.21
12.3	36969.372	149475.56
13.3	40349.628	188135.06
14.3	44008.668	230314.21
15.3	48098.952	276368.02
16.3	52049.844	326442.42
17.3	54685.224	379809.95
18.3	57259.62	435782.37
19.3	59746.896	494285.63
20.3	62708.976	555513.57
21.3	65409.696	619572.91
22.3	68994.684	686775.10
23.3	71974.188	757259.54
24.3	75053.88	830773.57
25.3	78316.524	907458.77
26.3	81339.588	987286.83
27.3	84018.528	1069965.89
28.3	86623.416	1155286.86
29.3	88648.956	1242923.05
30.3	90251.964	1332373.51
31.3	91057.824	1423028.40
32.3	91393.236	1514253.93
33.3	91467.288	1605684.19
34.3	91489.068	1697162.37


Storage Area Volume Curves
Storage Volume (ft³)
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
1,600,000
Stage (ft)
Storage Area (ft²)
0
10,000
20,000
30,000
40,000
50,000
60,000
70,000
80,000
90,000
Storage Area
Storage Volume

Storage Node : Stor-NO (continued)

Storage Node : Stor-P

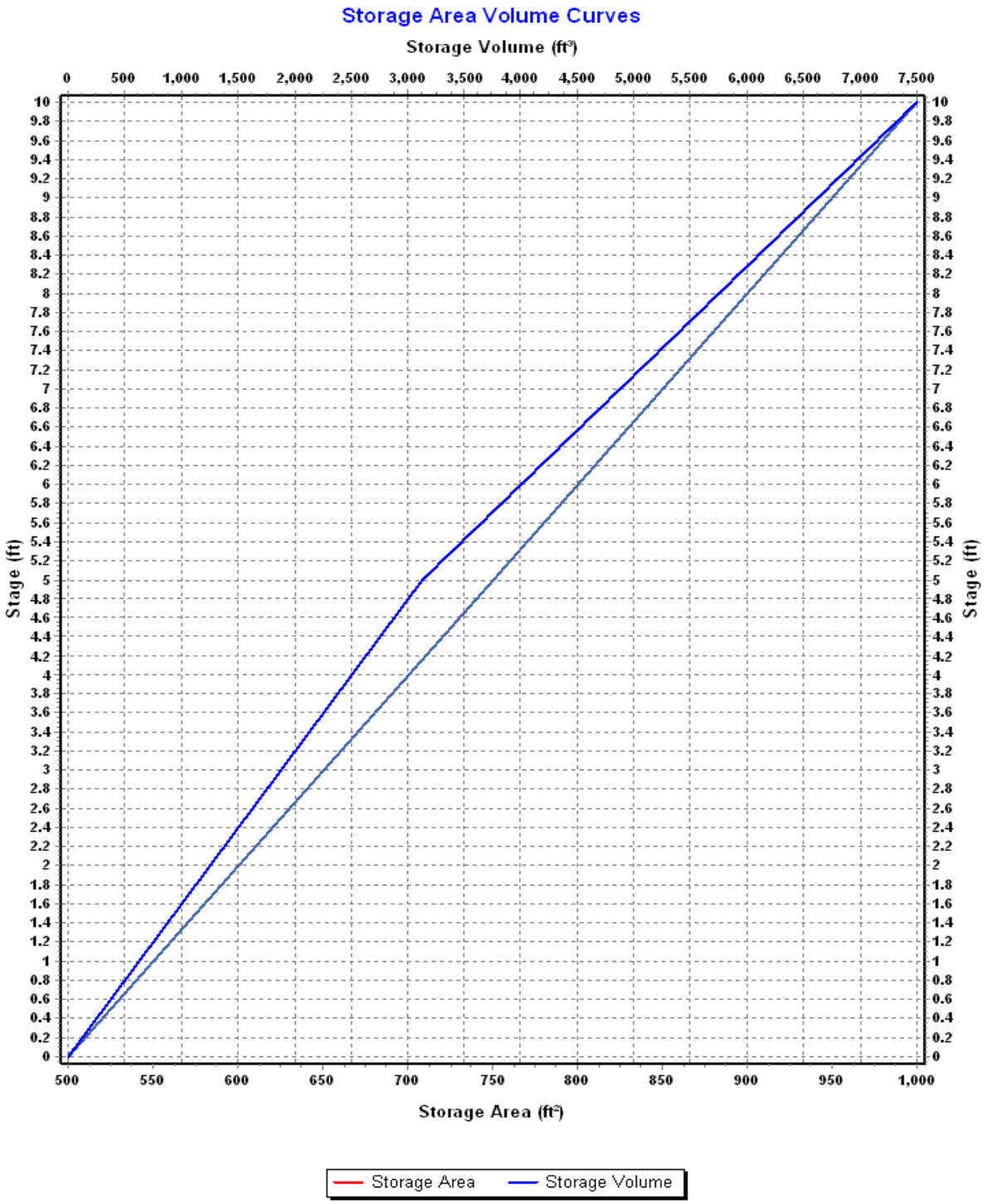
Input Data

Invert Elevation (ft) 694.20
Max (Rim) Elevation (ft) 800.00
Max (Rim) Offset (ft) 105.80
Initial Water Elevation (ft) 694.20
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 1000.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-P

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	500	0.000
5	750	3125.00
10	1000	7500.00


Storage Area Volume Curves
Storage Volume (ft³)
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
5,500
6,000
6,500
7,000
7,500
Stage (ft)
Storage Area (ft²)
500
550
600
650
700
750
800
850
900
950
1,000
Storage Area
Storage Volume

Storage Node : Stor-P (continued)

Storage Node : Stor-Y

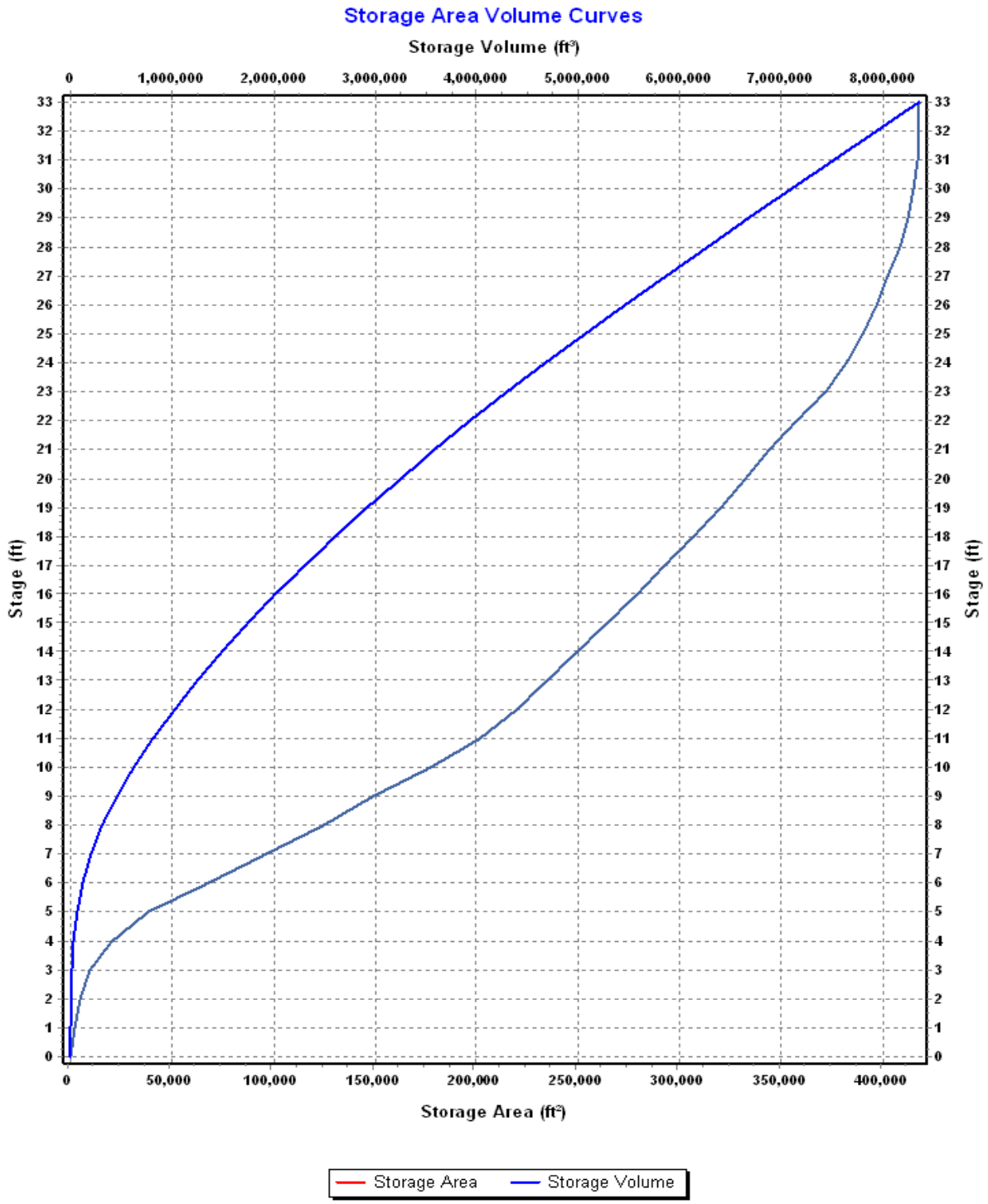
Input Data

Invert Elevation (ft) 671.00
Max (Rim) Elevation (ft) 705.50
Max (Rim) Offset (ft) 34.50
Initial Water Elevation (ft) 671.00
Initial Water Depth (ft) 0.00
Ponded Area (ft²) 418671.00
Evaporation Loss 0.00

Storage Area Volume Curves

Storage Curve : Storage-Y

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	1677.06	0.000
1	3537.072	2607.07
2	6581.916	7666.56
3	11168.784	16541.91
4	21814.848	33033.73
5	40144.896	64013.60
6	69186.348	118679.22
7	97766.064	202155.43
8	126010.368	314043.65
9	150325.56	452211.61
10	178321.572	616535.18
11	202262.148	806827.04
12	220679.316	1018297.77
13	236317.356	1246796.11
14	250936.092	1490422.83
15	265681.152	1748731.45
16	280029.816	2021586.93
17	293816.556	2308510.12
18	307712.196	2609274.50
19	321058.98	2923660.09
20	333447.444	3250913.30
21	345652.956	3590463.50
22	358847.28	3942713.62
23	372816.972	4308545.75
24	382988.232	4686448.35
25	391425.804	5073655.37
26	397798.632	5468267.59
27	403365.6	5868849.71
28	409037.112	6275051.07
29	413493.3	6686316.28
30	416076.408	7101101.13
31	417797.028	7518037.85
32	418315.392	7936094.06
33	418672.584	8354588.05


Storage Area Volume Curves
Storage Volume (ft³)
0
1,000,000
2,000,000
3,000,000
4,000,000
5,000,000
6,000,000
7,000,000
8,000,000
Stage (ft)
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
0
50,000
100,000
150,000
200,000
250,000
300,000
350,000
400,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Stor-Y (continued)

POST-DEVELOPED CONDITIONS
SSA MODEL OUTPUT
WATER QUALITY

RIVIAN EV MANUFACTURING FACILITY
MORGAN COUNTY & WALTON COUNTY, GA
THOMAS & HUTTON

JOB : 26900.0002
BY : JAR
DATE : 20-Jul-2022
LAST REVISED:

WATER QUALITY STORAGE CALCULATIONS - POND 01

The proposed stormwater detention ponds are required to store and release the water quality volume (1.2" over the developed area) in no less than 24 hours. The water quality volume is calculated for each pond and its associated drainage basin. This volume is then converted to a depth of water, which is then added to the associated pond's normal water level in the post-development SSA model. The SSA model is then executed withouth hydrology (rainfall) to show the drawdown of the water quality volume within each pond and verify that it is released from the drainage system in no less than 24 hours. Below are the water quality volume calculations as well as the computed depth of water to be modeled for drawdown

REQUIRED QUALITY STORAGE

POND 01

Total Drainage Area	118.7	acres
Total Developed Area (assumed 90%)	106.8	acres
Total Developed Area =	**4,653,123**	**sf**

4,653,123 sf X 1.2 inch = 465,312 cf

AVAILABLE WATER QUALITY STORAGE

Lagoon area at Normal Water Elevation=	**223,257**	**sf**

We must calculate the depth of water that must be stored and released in a 24hr period:

Required Quality Storage=	465,312	cf
Lagoon acreage at Normal Water Elevation=	223,257	sf
Depth of Water to be stored and released over 24hrs=	**2.08**	**ft**

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MORGAN COUNTY & WALTON COUNTY, GA
THOMAS & HUTTON

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WATER QUALITY STORAGE CALCULATIONS - PONDS 02A & 02B

The proposed stormwater detention ponds are required to store and release the water quality volume (1.2" over the developed area) in no less than 24 hours. The water quality volume is calculated for each pond and its associated drainage basin. This volume is then converted to a depth of water, which is then added to the associated pond's normal water level in the post-development SSA model. The SSA model is then executed withouth hydrology (rainfall) to show the drawdown of the water quality volume within each pond and verify that it is released from the drainage system in no less than 24 hours. Below are the water quality volume calculations as well as the computed depth of water to be modeled for drawdown

REQUIRED QUALITY STORAGE

PONDS 02A and 02B

Total Drainage Area	79.8	acres
Total Developed Area (assumed 90%)	71.8	acres
Total Developed Area =	**3,128,871**	**sf**

3,128,871 sf X 1.2 inch = 312,887 cf

AVAILABLE WATER QUALITY STORAGE

Lagoon area at Normal Water Elevation=	**766,365**	**sf**

We must calculate the depth of water that must be stored and released in a 24hr period:

Required Quality Storage=	312,887	cf
Lagoon acreage at Normal Water Elevation=	766,365	sf
Depth of Water to be stored and released over 24hrs=	**0.41**	**ft**

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THOMAS & HUTTON

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WATER QUALITY STORAGE CALCULATIONS - POND 03

The proposed stormwater detention ponds are required to store and release the water quality volume (1.2" over the developed area) in no less than 24 hours. The water quality volume is calculated for each pond and its associated drainage basin. This volume is then converted to a depth of water, which is then added to the associated pond's normal water level in the post-development SSA model. The SSA model is then executed withouth hydrology (rainfall) to show the drawdown of the water quality volume within each pond and verify that it is released from the drainage system in no less than 24 hours. Below are the water quality volume calculations as well as the computed depth of water to be modeled for drawdown

REQUIRED QUALITY STORAGE

POND 03

Total Drainage Area	54.1	acres
Total Developed Area (assumed 90%)	48.7	acres
Total Developed Area =	**2,120,936**	**sf**

2,120,936 sf X 1.2 inch = 212,094 cf

AVAILABLE WATER QUALITY STORAGE

Lagoon area at Normal Water Elevation=	**132,858**	**sf**

We must calculate the depth of water that must be stored and released in a 24hr period:

Required Quality Storage=	212,094	cf
Lagoon acreage at Normal Water Elevation=	132,858	sf
Depth of Water to be stored and released over 24hrs=	**1.60**	**ft**

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MORGAN COUNTY & WALTON COUNTY, GA
THOMAS & HUTTON

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WATER QUALITY STORAGE CALCULATIONS - PONDS 04A & 04B

The proposed stormwater detention ponds are required to store and release the water quality volume (1.2" over the developed area) in no less than 24 hours. The water quality volume is calculated for each pond and its associated drainage basin. This volume is then converted to a depth of water, which is then added to the associated pond's normal water level in the post-development SSA model. The SSA model is then executed withouth hydrology (rainfall) to show the drawdown of the water quality volume within each pond and verify that it is released from the drainage system in no less than 24 hours. Below are the water quality volume calculations as well as the computed depth of water to be modeled for drawdown

REQUIRED QUALITY STORAGE

PONDS 04A and 04B

Total Drainage Area	511.8	acres
Total Developed Area (assumed 90%)	460.6	acres
Total Developed Area =	**20,063,823**	**sf**

20,063,823 sf X 1.2 inch = 2,006,382 cf

AVAILABLE WATER QUALITY STORAGE

Lagoon area at Normal Water Elevation=	**847,318**	**sf**

We must calculate the depth of water that must be stored and released in a 24hr period:

Required Quality Storage=	2,006,382	cf
Lagoon acreage at Normal Water Elevation=	847,318	sf
Depth of Water to be stored and released over 24hrs=	**2.37**	**ft**

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WATER QUALITY STORAGE CALCULATIONS - POND 05

The proposed stormwater detention ponds are required to store and release the water quality volume (1.2" over the developed area) in no less than 24 hours. The water quality volume is calculated for each pond and its associated drainage basin. This volume is then converted to a depth of water, which is then added to the associated pond's normal water level in the post-development SSA model. The SSA model is then executed withouth hydrology (rainfall) to show the drawdown of the water quality volume within each pond and verify that it is released from the drainage system in no less than 24 hours. Below are the water quality volume calculations as well as the computed depth of water to be modeled for drawdown

REQUIRED QUALITY STORAGE

POND 05

Total Drainage Area	123.2	acres
Total Developed Area (assumed 90%)	110.9	acres
Total Developed Area =	**4,828,757**	**sf**

4,828,757 sf X 1.2 inch = 482,876 cf

AVAILABLE WATER QUALITY STORAGE

Lagoon area at Normal Water Elevation=	**172,733**	**sf**

We must calculate the depth of water that must be stored and released in a 24hr period:

Required Quality Storage=	482,876	cf
Lagoon acreage at Normal Water Elevation=	172,733	sf
Depth of Water to be stored and released over 24hrs=	**2.80**	**ft**

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MORGAN COUNTY & WALTON COUNTY, GA
THOMAS & HUTTON

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WATER QUALITY STORAGE CALCULATIONS - POND 06

The proposed stormwater detention ponds are required to store and release the water quality volume (1.2" over the developed area) in no less than 24 hours. The water quality volume is calculated for each pond and its associated drainage basin. This volume is then converted to a depth of water, which is then added to the associated pond's normal water level in the post-development SSA model. The SSA model is then executed withouth hydrology (rainfall) to show the drawdown of the water quality volume within each pond and verify that it is released from the drainage system in no less than 24 hours. Below are the water quality volume calculations as well as the computed depth of water to be modeled for drawdown

REQUIRED QUALITY STORAGE

POND 06

Total Drainage Area	80.7	acres
Total Developed Area (assumed 90%)	72.6	acres
Total Developed Area =	**3,162,587**	**sf**

3,162,587 sf X 1.2 inch = 316,259 cf

AVAILABLE WATER QUALITY STORAGE

Lagoon area at Normal Water Elevation=	**261,846**	**sf**

We must calculate the depth of water that must be stored and released in a 24hr period:

Required Quality Storage=	316,259	cf
Lagoon acreage at Normal Water Elevation=	261,846	sf
Depth of Water to be stored and released over 24hrs=	**1.21**	**ft**

RIVIAN EV MANUFACTURING FACILITY
MORGAN COUNTY & WALTON COUNTY, GA
THOMAS & HUTTON

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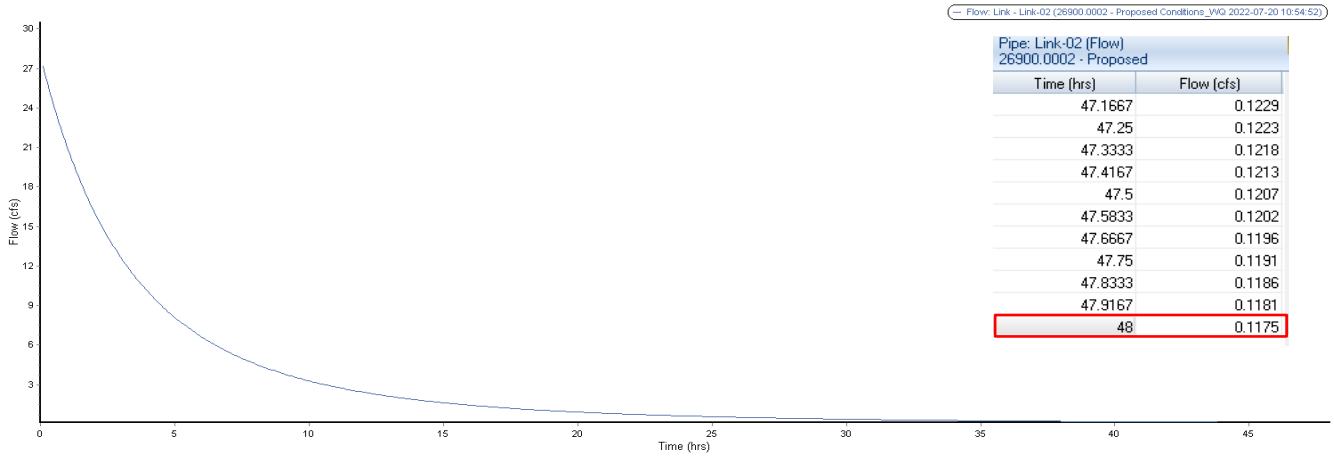
WATER QUALITY STORAGE GRAPHS

We are required to store and release 1.2" over the developed area. This equates to the water depth shown in the calculations on the previous pages. This water depth was added to the initial stage of each pond within the system and the hydraulic simulated with no rainfall. The following curves represent the Time vs. Flow conditions for the outfall structures of each pond during this simulation. It is conclusive that the water quality treatment requirement has been satisfied since the outfall ponds are still releasing stormwater at hour 24.

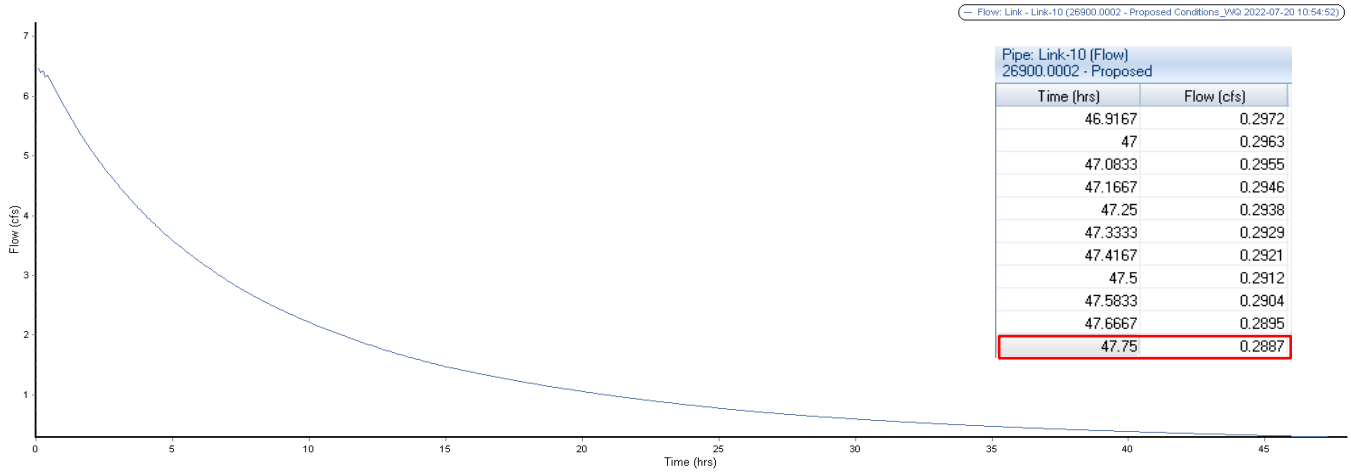
POND 01



Pipe: Link-02 (Flow)
26900.0002 - Proposed

Time (hrs)	Flow (cfs)
47.1667	0.1229
47.25	0.1223
47.3333	0.1218
47.4167	0.1213
47.5	0.1207
47.5833	0.1202
47.6667	0.1196
47.75	0.1191
47.8333	0.1186
47.9167	0.1181
48	0.1175

PONDS 02A & 02B



Pipe: Link-10 (Flow)
26900.0002 - Proposed

Time (hrs)	Flow (cfs)
46.9167	0.2972
47	0.2963
47.0833	0.2955
47.1667	0.2946
47.25	0.2938
47.3333	0.2929
47.4167	0.2921
47.5	0.2912
47.5833	0.2904
47.6667	0.2895
47.75	0.2887

RIVIAN EV MANUFACTURING FACILITY
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THOMAS & HUTTON

JOB : 26900.0002
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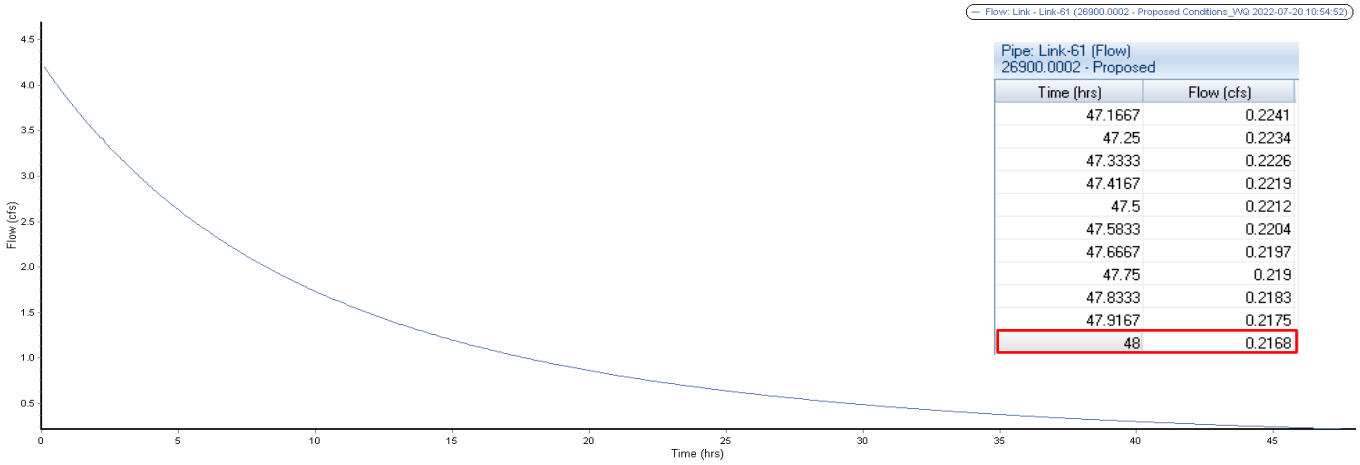
LAST REVISED:

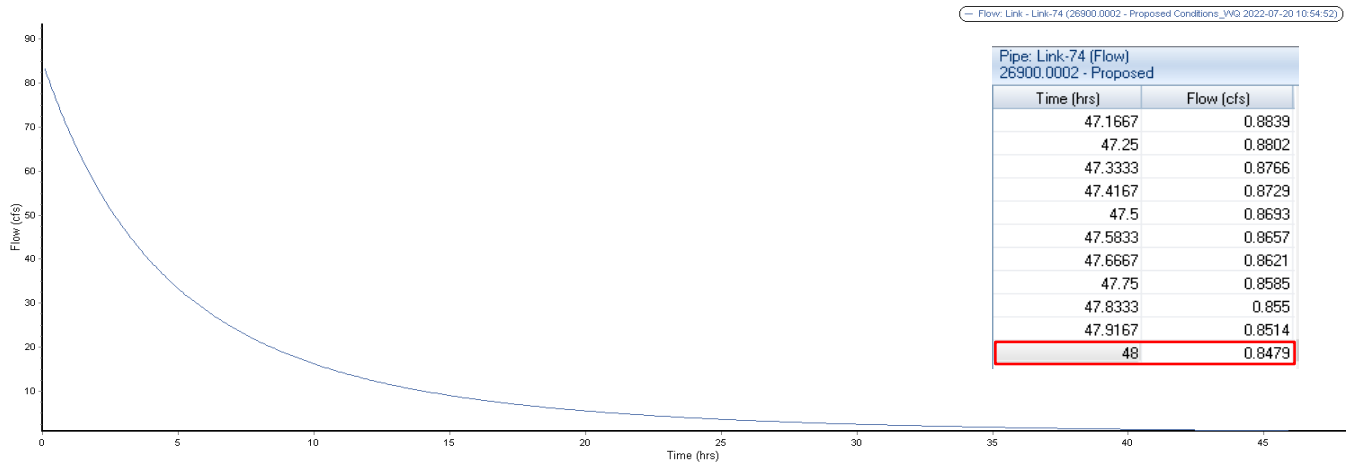
POND 03



Pipe: Link-61 (Flow)
26900.0002 - Proposed

Time (hrs)	Flow (cfs)
47.1667	0.2241
47.25	0.2234
47.3333	0.2226
47.4167	0.2219
47.5	0.2212
47.5833	0.2204
47.6667	0.2197
47.75	0.219
47.8333	0.2183
47.9167	0.2175
48	0.2168

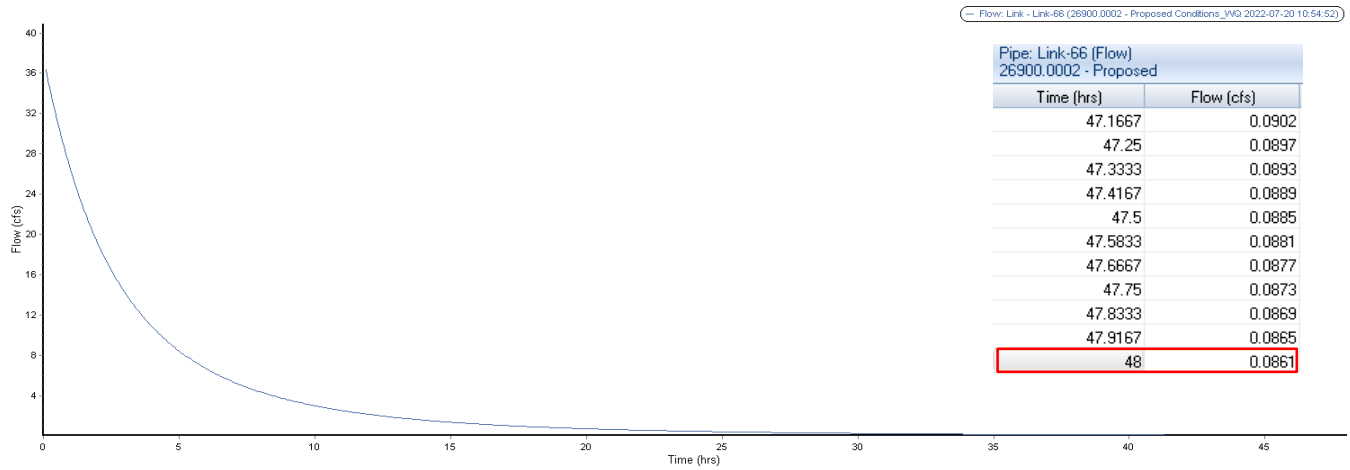
PONDS 04A & 04B



Pipe: Link-74 (Flow)
26900.0002 - Proposed

Time (hrs)	Flow (cfs)
47.1667	0.8839
47.25	0.8802
47.3333	0.8766
47.4167	0.8729
47.5	0.8693
47.5833	0.8657
47.6667	0.8621
47.75	0.8585
47.8333	0.855
47.9167	0.8514
48	0.8479

POND 05



Pipe: Link-66 (Flow)
26900.0002 - Proposed

Time (hrs)	Flow (cfs)
47.1667	0.0902
47.25	0.0897
47.3333	0.0893
47.4167	0.0889
47.5	0.0885
47.5833	0.0881
47.6667	0.0877
47.75	0.0873
47.8333	0.0869
47.9167	0.0865
48	0.0861

RIVIAN EV MANUFACTURING FACILITY
MORGAN COUNTY & WALTON COUNTY, GA
THOMAS & HUTTON

JOB : 26900.0002
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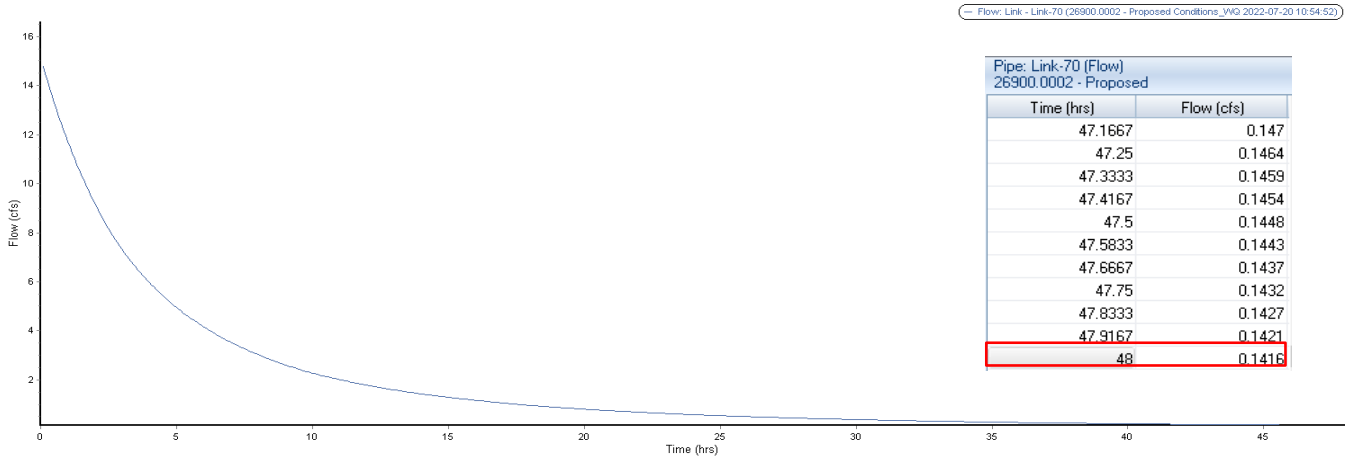
POND 06



Pipe: Link-70 (Flow)
26900.0002 - Proposed

Time (hrs)	Flow (cfs)
47.1667	0.147
47.25	0.1464
47.3333	0.1459
47.4167	0.1454
47.5	0.1448
47.5833	0.1443
47.6667	0.1437
47.75	0.1432
47.8333	0.1427
47.9167	0.1421
48	0.1416

THOMAS & HUTTON

STORMWATER MASTER PLAN

RIVIAN EV MANUFACTURING FACILITY

WALTON COUNTY & MORGAN COUNTY, GEORGIA

APPENDIX C

TIME OF CONCENTRATION CALCULATIONS

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PRE-DEVELOPED CONDITIONS
TIME OF CONCENTRATION CALCULATIONS

Morgan County, Georgia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
A							
SHEET	100	0.0200	0.400				0.333
SHALLOW	2611	0.0180	0.050				0.335
CHANNEL	2319					2.000	0.322
					Time of Concentration		0.990
B							
SHEET	100	0.0500	0.400				0.231
SHALLOW	2213	0.0360	0.050				0.201
SHALLOW	75	0.0360	0.025				0.005
					Time of Concentration		0.437
D							
SHEET	100	0.0600	0.240				0.143
SHALLOW	1463	0.0600	0.050				0.103
CHANNEL	418					2.000	0.058
CHANNEL	752					1.000	0.209
					Time of Concentration		0.513
C							
SHEET	100	0.0100	0.400				0.440
SHALLOW	1496	0.0200	0.050				0.182
CHANNEL	178					2.000	0.025
					Time of Concentration		0.647
E							
SHEET	100	0.0600	0.400				0.215
SHALLOW	2214	0.0350	0.050				0.204
CHANNEL	100					2.000	0.014
					Time of Concentration		0.433
F							
SHEET	100	0.0100	0.400				0.440
SHALLOW	967	0.0400	0.050				0.083
CHANNEL	480					2.000	0.067
					Time of Concentration		0.590
G							
SHEET	100	0.0400	0.400				0.253
SHALLOW	1709	0.0330	0.050				0.162
CHANNEL	840					2.000	0.117
					Time of Concentration		0.532
I							
SHEET	100	0.0100	0.400				0.440
SHALLOW	1743	0.0340	0.050				0.163
CHANNEL	912					1.000	0.263
CHANNEL	737					2.000	0.102
					Time of Concentration		0.869

Morgan County, Georgia

Sub-Area Time of Concentration Details (continued)

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
H							
SHEET	100	0.0100	0.400				0.440
SHALLOW	1769	0.0350	0.050				0.163
CHANNEL	218					1.000	0.061
					Time of Concentration		0.664
J							
SHEET	100	0.0050	0.400				0.580
SHALLOW	2946	0.0310	0.050				0.288
CHANNEL	310					2.000	0.043
					Time of Concentration		0.911

Morgan County, Georgia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
K							
SHEET	100	0.0200	0.400				0.333
SHALLOW	2191	0.0380	0.050				0.194
CHANNEL	511					2.000	0.071
					Time of Concentration		0.598
L							
SHEET	100	0.0200	0.400				0.333
SHALLOW	1731	0.0420	0.050				0.145
CHANNEL	291						
					Time of Concentration		0.478
M							
SHEET	100	0.0250	0.400				0.305
SHALLOW	1257	0.0440	0.050				0.103
CHANNEL	616					2.000	0.086
					Time of Concentration		0.494
N							
SHEET	100	0.0200	0.400				0.333
SHALLOW	987	0.0540	0.050				0.073
CHANNEL	854					2.000	0.119
					Time of Concentration		0.525
O							
SHEET	100	0.0200	0.400				0.333
SHALLOW	2486	0.0300	0.050				0.247
CHANNEL	1175					2.000	0.163
					Time of Concentration		0.743
P							
SHEET	100	0.0050	0.400				0.580
SHALLOW	1623	0.0360	0.050				0.147
CHANNEL	1265					2.000	0.176
					Time of Concentration		0.903
Q							
SHEET	100	0.0120	0.240				0.272
SHALLOW	1772	0.0225	0.050				0.203
					Time of Concentration		0.475

Morgan County, Georgia

Sub-Area Time of Concentration Details (continued)

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
R							
SHEET	100	0.0150	0.240				0.248
SHALLOW	1775	0.0340	0.050				0.166
					Time of Concentration		0.414
S							
SHEET	100	0.0350	0.400				0.266
SHALLOW	814	0.0500	0.050				0.063
CHANNEL	805					2.000	0.112
					Time of Concentration		0.441
T							
SHEET	100	0.0800	0.400				0.191
SHALLOW	819	0.0510	0.050				0.062
CHANNEL	800					2.000	0.111
					Time of Concentration		0.364

Morgan County, Georgia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
U							
SHEET	100	0.0300	0.240				0.188
SHALLOW	717	0.0600	0.050				0.050
CHANNEL	1120					1.000	0.311
					Time of Concentration		0.549
V							
SHEET	100	0.0300	0.400				0.283
SHALLOW	1703	0.0405	0.050				0.146
CHANNEL	728					2.000	0.101
					Time of Concentration		0.530
W							
SHEET	100	0.0400	0.400				0.253
SHALLOW	1926	0.0360	0.050				0.175
					Time of Concentration		0.428
X							
SHEET	100	0.0700	0.400				0.202
SHALLOW	476	0.0800	0.050				0.029
CHANNEL	800						
					Time of Concentration		0.231
Y							
SHEET	100	0.0400	0.240				0.168
SHALLOW	1913	0.0350	0.050				0.176
					Time of Concentration		0.344
Z							
SHEET	100	0.0350	0.400				0.266
SHALLOW	1767	0.0350	0.050				0.163
					Time of Concentration		0.429
AA							
SHEET	100	0.0200	0.240				0.221
SHALLOW	1392	0.0500	0.050				0.107
CHANNEL	142					2.000	0.020
					Time of Concentration		0.348
BB							
SHEET	100	0.0500	0.400				0.231
SHALLOW	579	0.0050	0.050				0.141
					Time of Concentration		0.372

Morgan County, Georgia

Sub-Area Time of Concentration Details (continued)

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
CC							
SHEET	100	0.0400	0.240				0.168
SHALLOW	912	0.0600	0.050				0.064
CHANNEL	229					2.000	0.032
					Time of Concentration		0.264
DD							
SHEET	100	0.0200	0.240				0.221
SHALLOW	1050	0.0500	0.050				0.081
SHALLOW	20	0.0500	0.025				0.001
CHANNEL	280					2.000	0.039
					Time of Concentration		0.342

Morgan County, Georgia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
EE							
SHEET	100	0.0150	0.240				0.248
SHALLOW	2068	0.0480	0.050				0.163
CHANNEL	177					2.000	0.025
					Time of Concentration		0.436

POST-DEVELOPED CONDITIONS
TIME OF CONCENTRATION CALCULATIONS

Morgan County, Georgia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Post-4A							
SHEET	100	0.0200	0.150				0.152
SHALLOW	666	0.0200	0.050				0.081
CHANNEL	6992					2.000	0.971
					Time of Concentration		1.204
Post-5							
SHEET	100	0.0200	0.011				0.019
SHALLOW	112	0.0200	0.025				0.011
CHANNEL	2184					2.000	0.303
					Time of Concentration		0.333
Post-3							
SHEET	100	0.0200	0.011				0.019
CHANNEL	1126					2.000	0.156
					Time of Concentration		0.175
M							
SHEET	100	0.0200	0.150				0.152
SHALLOW	616	0.0200	0.050				0.075
SHALLOW	60	0.0200	0.025				0.006
CHANNEL	1002					2.000	0.139
					Time of Concentration		0.372
O							
SHEET	100	0.0100	0.400				0.440
SHALLOW	890	0.0200	0.050				0.108
CHANNEL	821					2.000	0.114
					Time of Concentration		.662
N							
SHEET	100	0.0200	0.150				0.152
SHALLOW	698	0.0200	0.025				0.067
CHANNEL	2203					2.000	0.306
					Time of Concentration		0.525
Post-6							
SHEET	100	0.0200	0.150				0.152
SHALLOW	500	0.0200	0.050				0.061
CHANNEL	628					2.000	0.087
					Time of Concentration		0.300

Morgan County, Georgia

Sub-Area Time of Concentration Details (continued)

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
I							
SHEET	100	0.0200	0.240				0.221
SHALLOW	1174	0.0200	0.050				0.143
CHANNEL	800					1.000	0.222
					Time of Concentration		0.586
Post-2							
SHEET	100	0.0200	0.150				0.152
SHALLOW	100	0.0200	0.025				0.010
CHANNEL	1340					2.000	0.186
					Time of Concentration		0.348
Post-1							
SHEET	100	0.0200	0.150				0.152
SHALLOW	100	0.0200	0.025				0.010
CHANNEL	2256					2.000	0.313
					Time of Concentration		0.475

Morgan County, Georgia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
E							
SHEET	100	0.0200	0.400				0.333
SHALLOW	942	0.0200	0.050				0.115
CHANNEL	500					2.000	0.069
					Time of Concentration		0.517
H							
SHEET	100	0.0200	0.400				0.333
SHALLOW	439	0.0200	0.050				0.053
CHANNEL	1398					1.000	0.388
					Time of Concentration		.774
P							
SHEET	100	0.0500	0.400				0.231
SHALLOW	200	0.0530	0.050				0.015
CHANNEL	800					2.000	0.111
					Time of Concentration		0.357
Post-4B							
SHEET	100	0.0200	0.011				0.019
SHALLOW	210	0.0200	0.025				0.020
CHANNEL	929					2.000	0.129
					Time of Concentration		0.168

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STORMWATER MASTER PLAN

RIVIAN EV MANUFACTURING FACILITY

WALTON COUNTY & MORGAN COUNTY, GEORGIA

APPENDIX D

CULVERT SIZING CALCULATIONS

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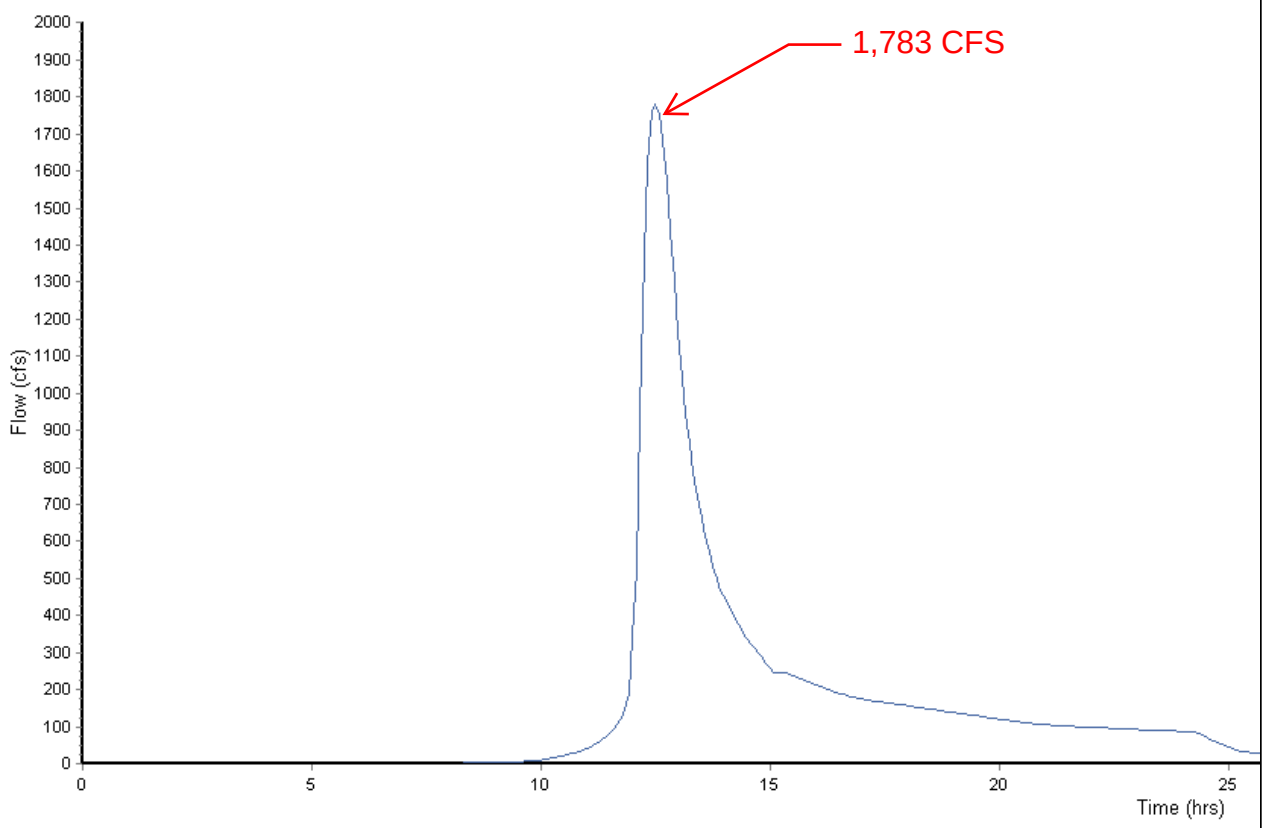
POST-DEVELOPED CONDITIONS
100-YEAR STORM
LINK-04
TIME VS FLOW RESULTS



Flow Summary Table

Time period

From:	07/08/2022, 12:00:00 AM
To:	07/10/2022, 12:00:00 AM

Thresholds

Exceedance:	0
Deficit:	0

Detention storage

Max flow:	0

Element ID	Link-04
Maximum Flow (cfs)	1782.68
Minimum Flow (cfs)	0.00
Event Mean Flow (cfs)	85.31
Duration of Exceedances (hrs)	N/A
Duration of Deficits (hrs)	N/A
Number of Exceedances	N/A
Number of Deficits	N/A
Volume of Exceedance (ft³)	N/A
Volume of Deficit (ft³)	N/A
Total Flow (ft³)	14715930.9
Detention Storage (ft³)	N/A

Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 20 2022

Box Culvert

Invert Elev Dn (ft)	=	681.00
Pipe Length (ft)	=	200.00
Slope (%)	=	2.00
Invert Elev Up (ft)	=	685.00
Rise (in)	=	96.0
Shape	=	Box
Span (in)	=	120.0
No. Barrels	=	2
n-Value	=	0.013
Culvert Type	=	Flared Wingwalls
Culvert Entrance	=	30D to 75D wingwall flares
Coeff. K,M,c,Y,k	=	0.026, 1, 0.0347, 0.81, 0.4

Embankment

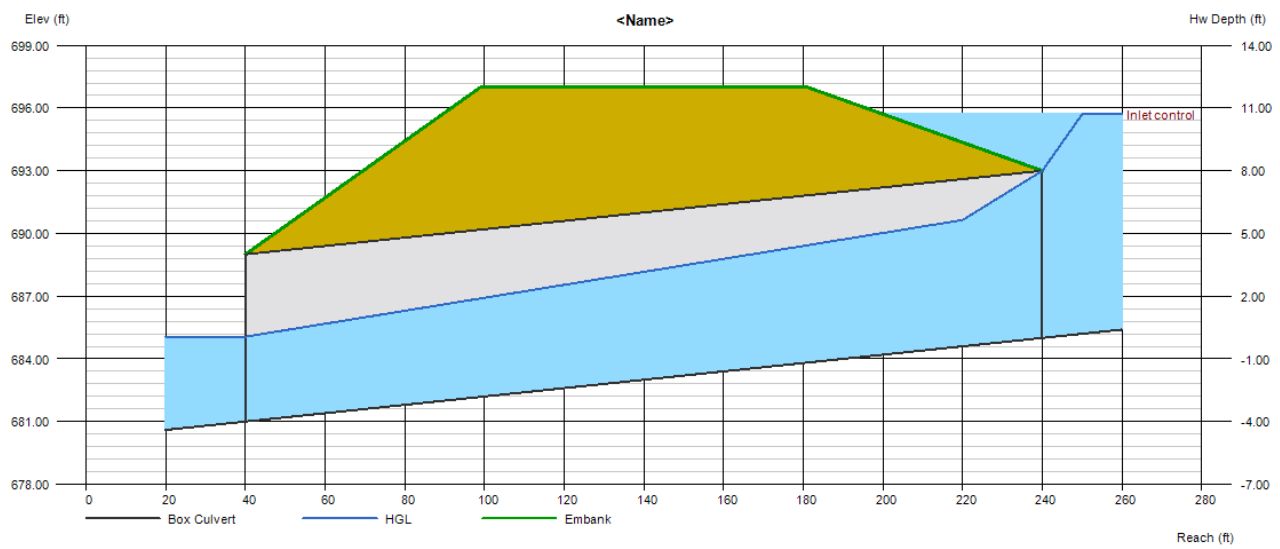
Top Elevation (ft)	=	697.00
Top Width (ft)	=	82.00
Crest Width (ft)	=	60.00

Calculations

Qmin (cfs)	=	1783.00
Qmax (cfs)	=	1783.00
Tailwater Elev (ft)	=	Normal

Highlighted

Qtotal (cfs)	=	1783.00
Qpipe (cfs)	=	1783.00
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	21.96
Veloc Up (ft/s)	=	14.23
HGL Dn (ft)	=	685.06
HGL Up (ft)	=	691.26
Hw Elev (ft)	=	695.71
Hw/D (ft)	=	1.34
Flow Regime	=	Inlet Control



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STORMWATER MASTER PLAN

RIVIAN EV MANUFACTURING FACILITY

WALTON COUNTY & MORGAN COUNTY, GEORGIA

APPENDIX E

EXHIBITS

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Rivian Stormwater Master Plan : Soils Map

LITTLE RIVER

DENNIS CREEK

HUNNICUT CREEK

RAWLINGS BRANCH

Streamline

Site Boundary

Hydrologic Soil Group

- A
- B
- C
- D
- Water

0 325 650 1,300 1,950 2,600 3,250 Feet

1 inch = 650 feet

Job Number: 26900.0002	Produced: 07/19/2022	Produced By: DAS	Modified: 7/20/2022	Modified By:
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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Soil Data	USDA-NRCS	2022
Site Boundary	Thomas & Hutton	2022
Aerial Imagery	NAIP	2017

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Exhibit A: Soils Map

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Rivian EV Manufacturing Facility: Stormwater Master Plan

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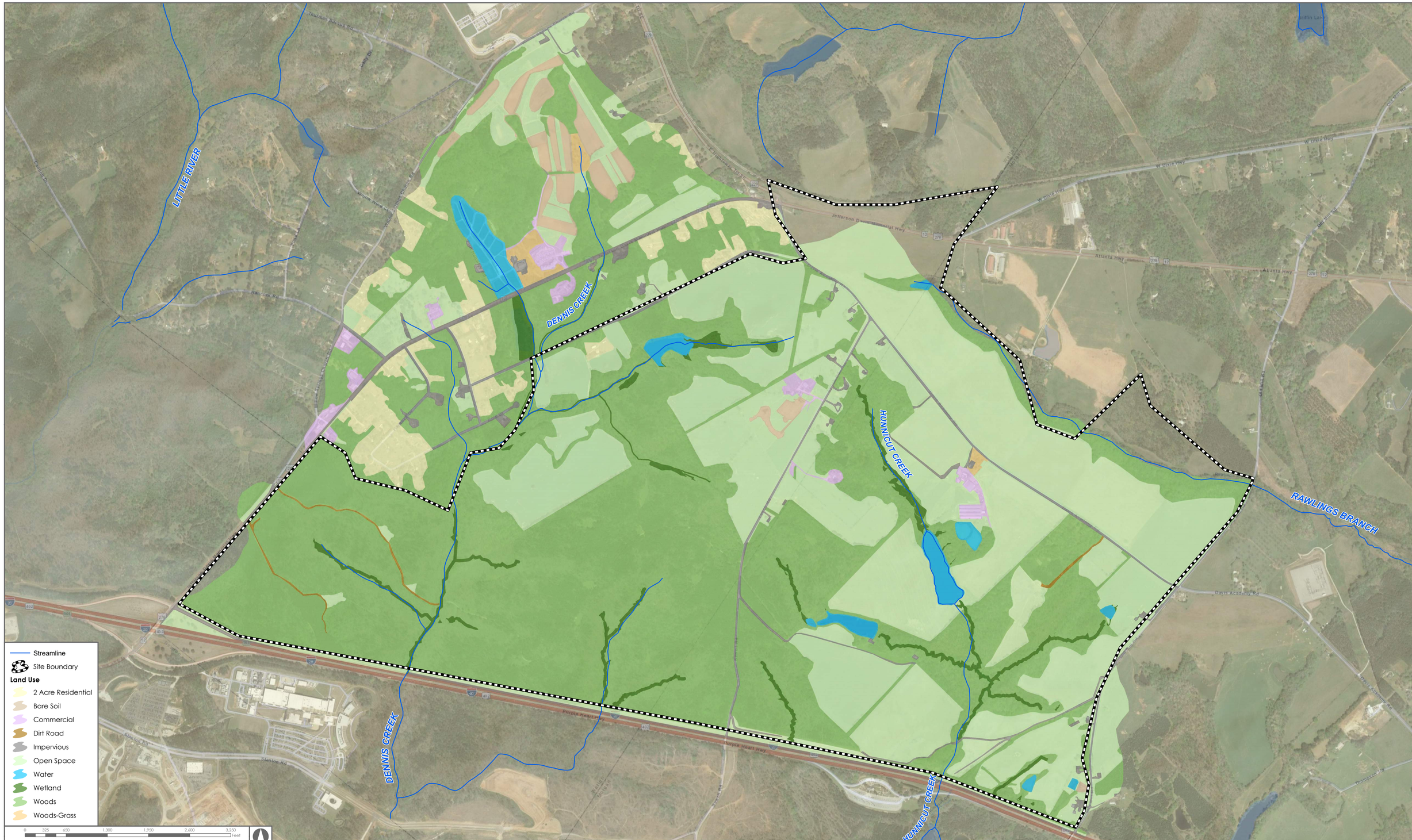

Pre-Development Land Use Map : Rivian Stormwater Master Plan

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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Land Use Data	Thomas & Hutton	2022
Site Boundary	Thomas & Hutton	2022
Aerial Imagery	NAIP	2017

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Exhibit B: Pre-Development Land Use Map

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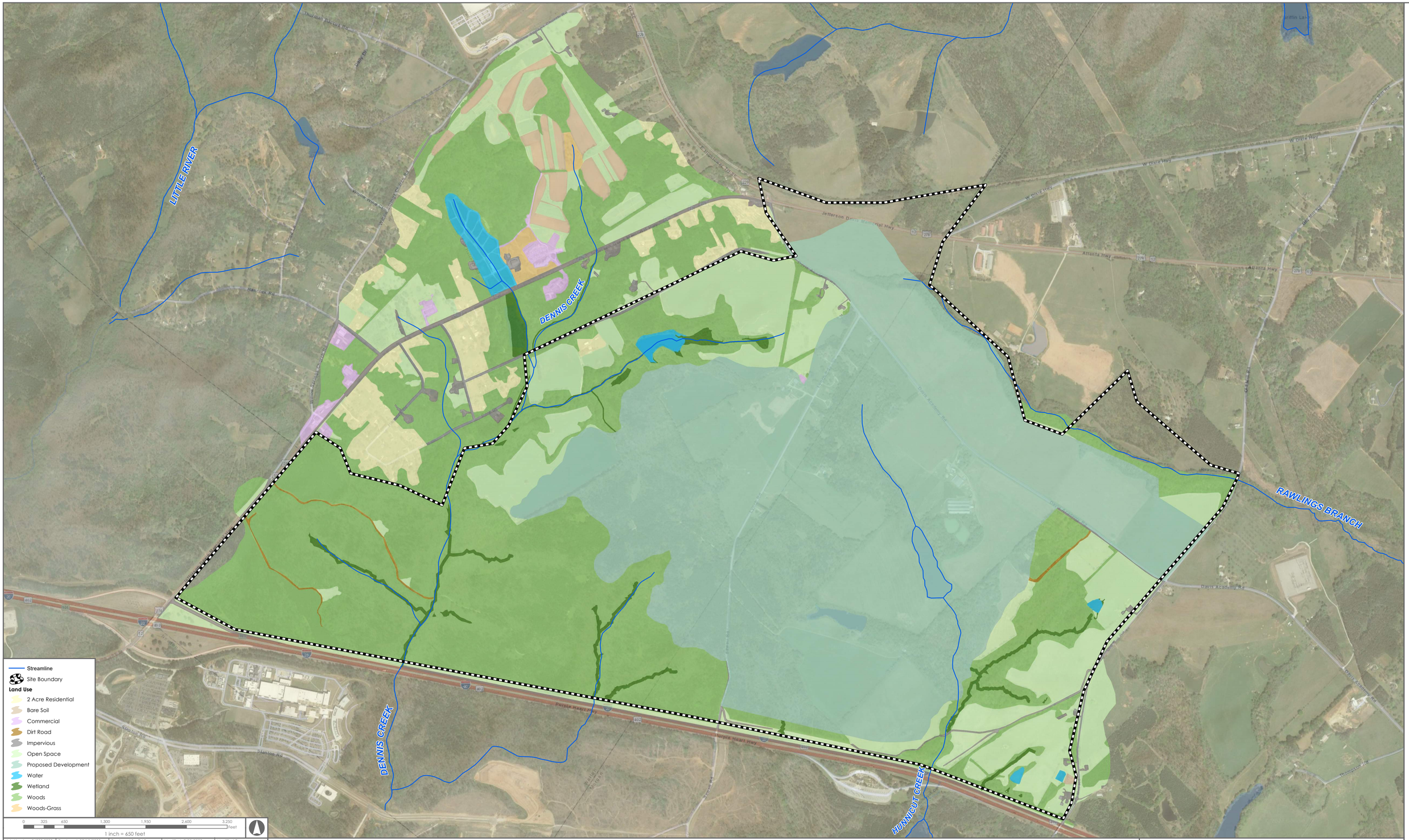

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Land Use Data	Thomas & Hutton	2022
Site Boundary	Thomas & Hutton	2022
Aerial Imagery	NAIP	2017

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Exhibit C: Post-Development Land Use Map

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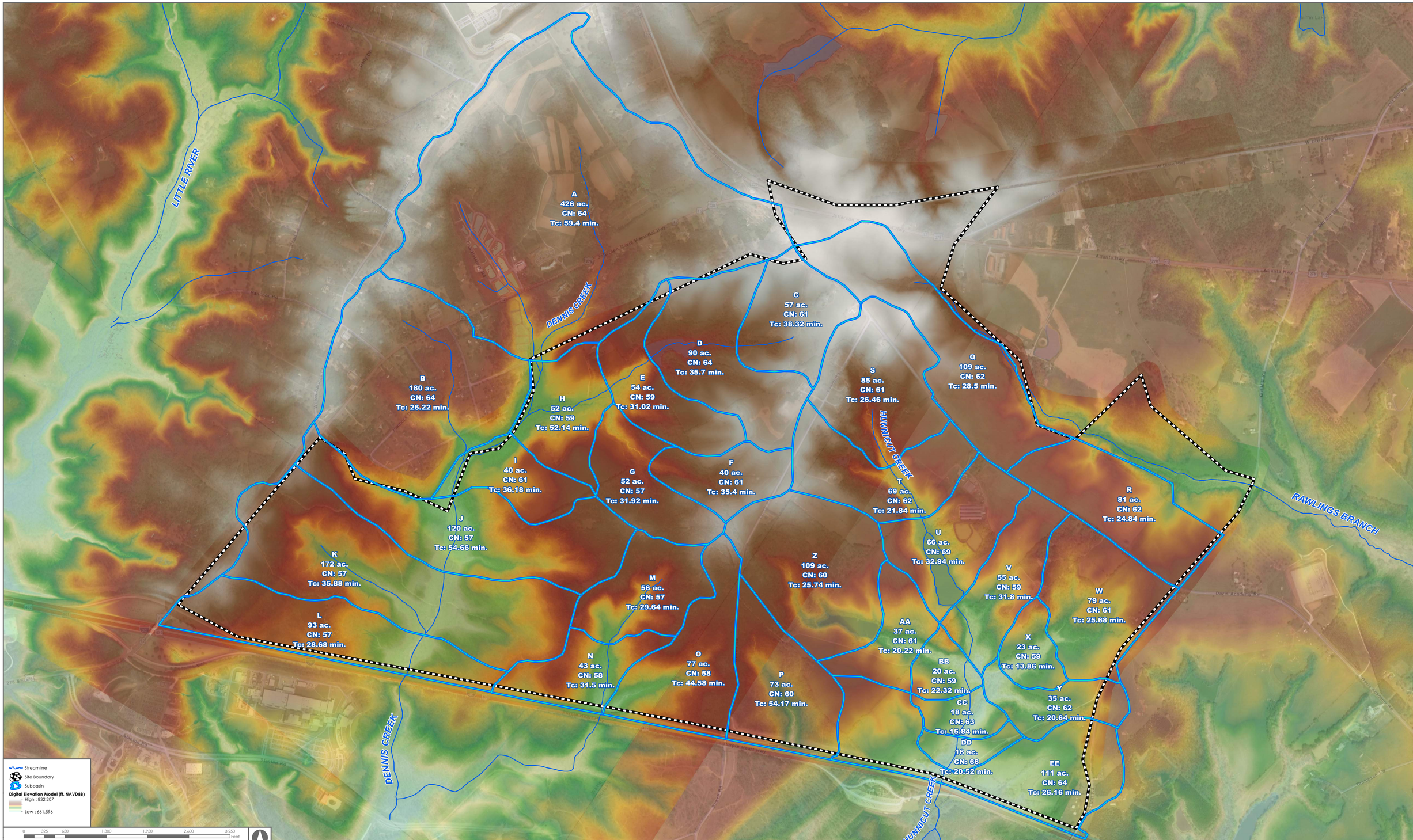
Map : Rivian Stormwater Master Plan

Post-Development Land Use



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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Subbasins	Thomas & Hutton	2022
Streamlines	FEMA	2007
Site Boundary	Thomas & Hutton	2022
Aerial Imagery	NAIP	2017
Digital Elevation Model		

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Exhibit D: Pre-Development Drainage Map

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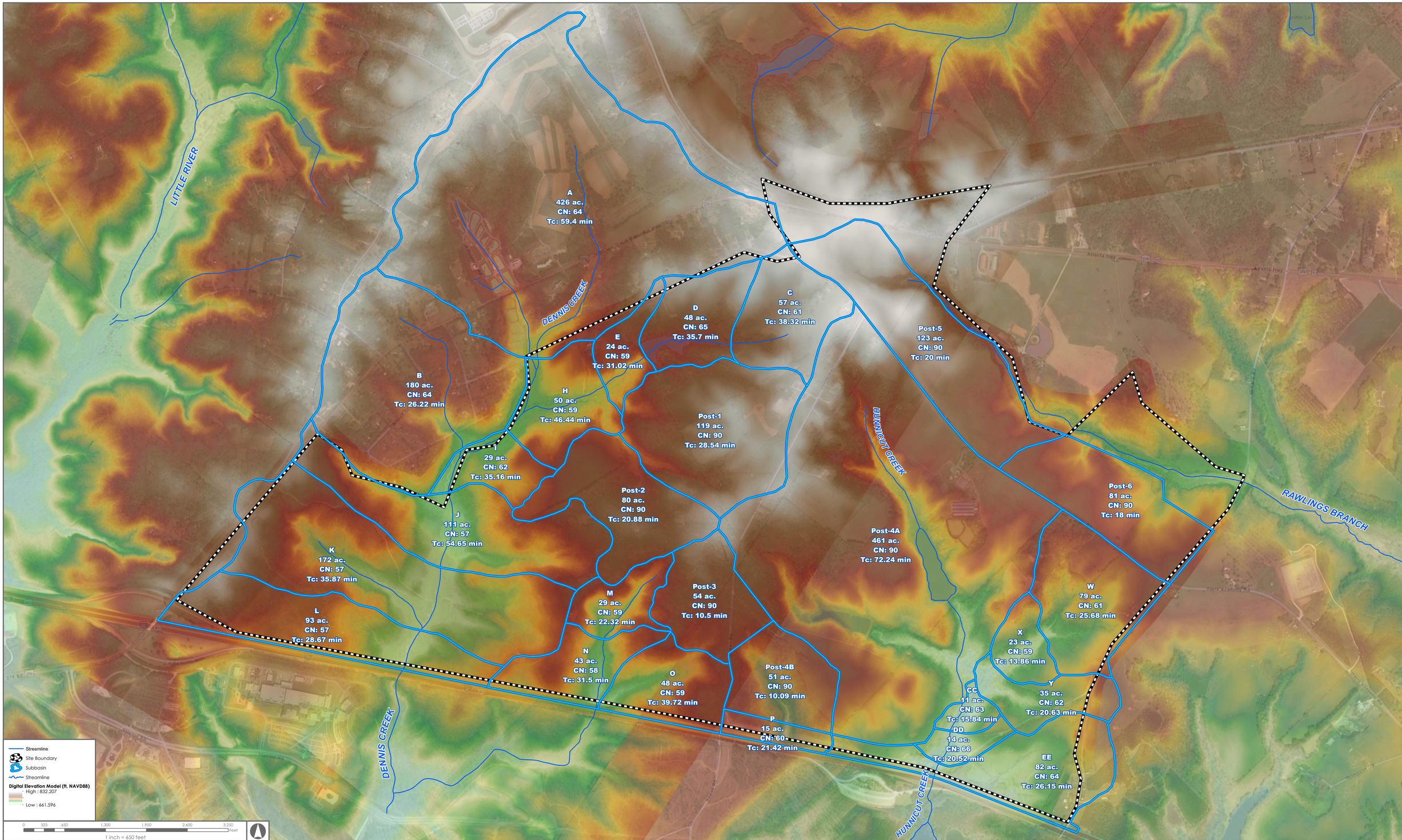
Pre-Development Drainage Map : Rivian Stormwater Master Plan



Post-Development Drainage Map : Rivian Stormwater Master Plan

Job Number: 26900.0002	Produced: 07/19/2022	Produced By: DAS	Modified: 7/20/2022	Modified By:
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Site Boundary	Thomas & Hutton	2022
Aerial Imagery	NAIP	2017

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Exhibit E: Post-Development Drainage Map

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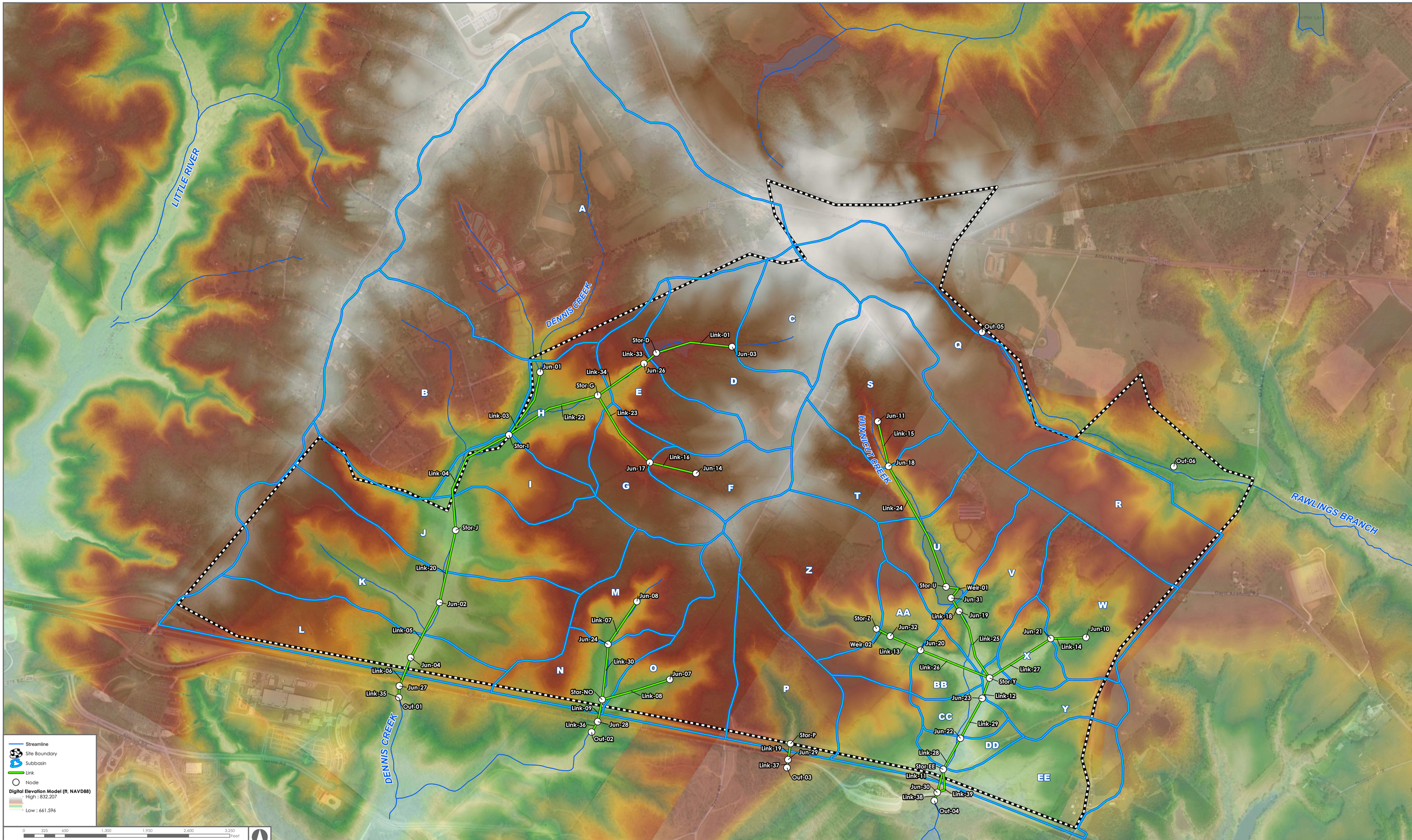

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Site Boundary	Thomas & Hutton	2022
Aerical Imagery	NAIP	2017
Stormwater Infrastructure	Thomas & Hutton	2022
Digital Elevation Model		

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Exhibit F: Pre-Development Link-Node Map

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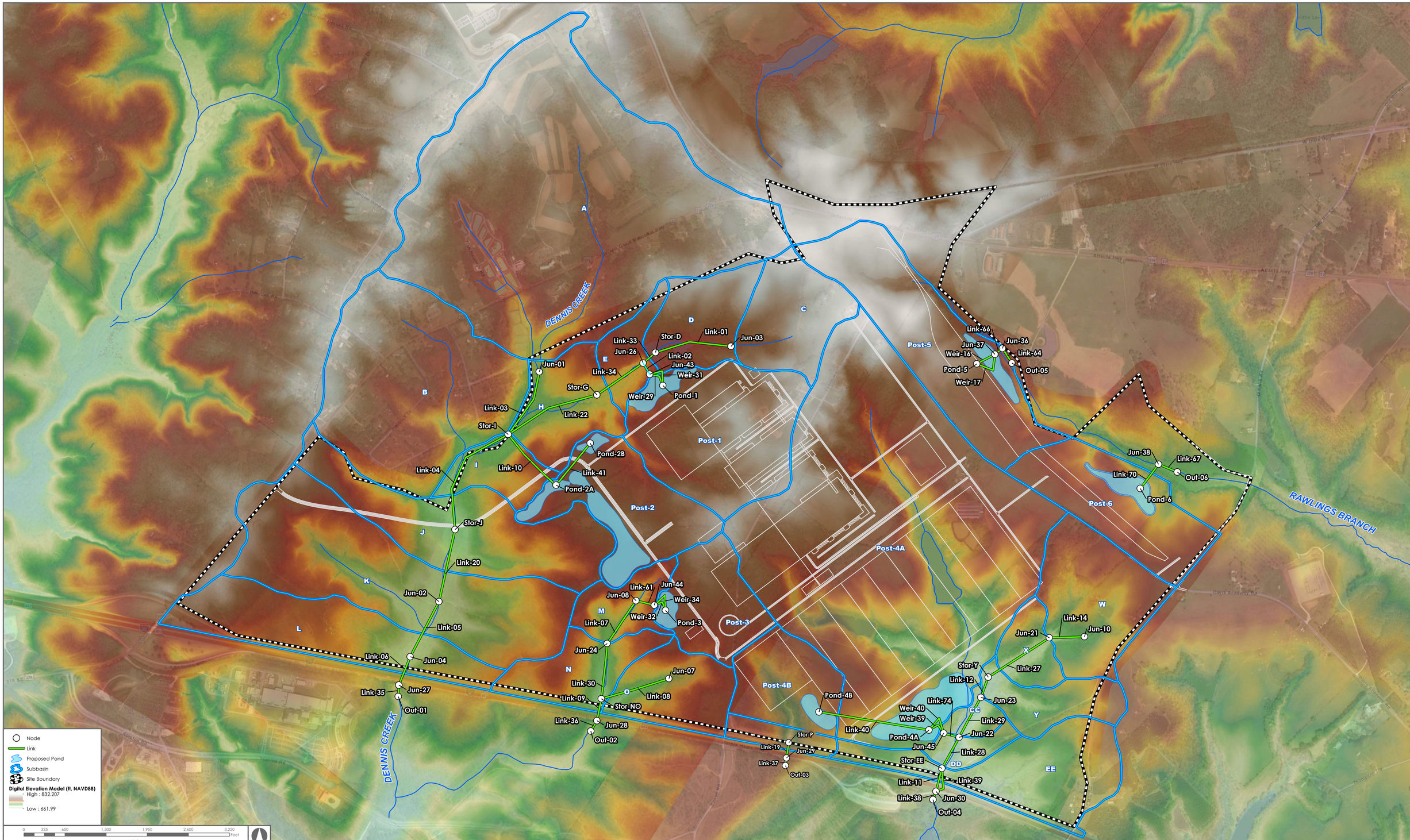
Pre-Development Link-Node Map : Rivian Stormwater Master Plan



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Site Boundary	Thomas & Hutton	2022
Aerial Imagery	NAIP	2017
Stormwater Infrastructure	Thomas & Hutton	2022
Digital Elevation Model		

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Exhibit G: Post-Development Link-Node Map

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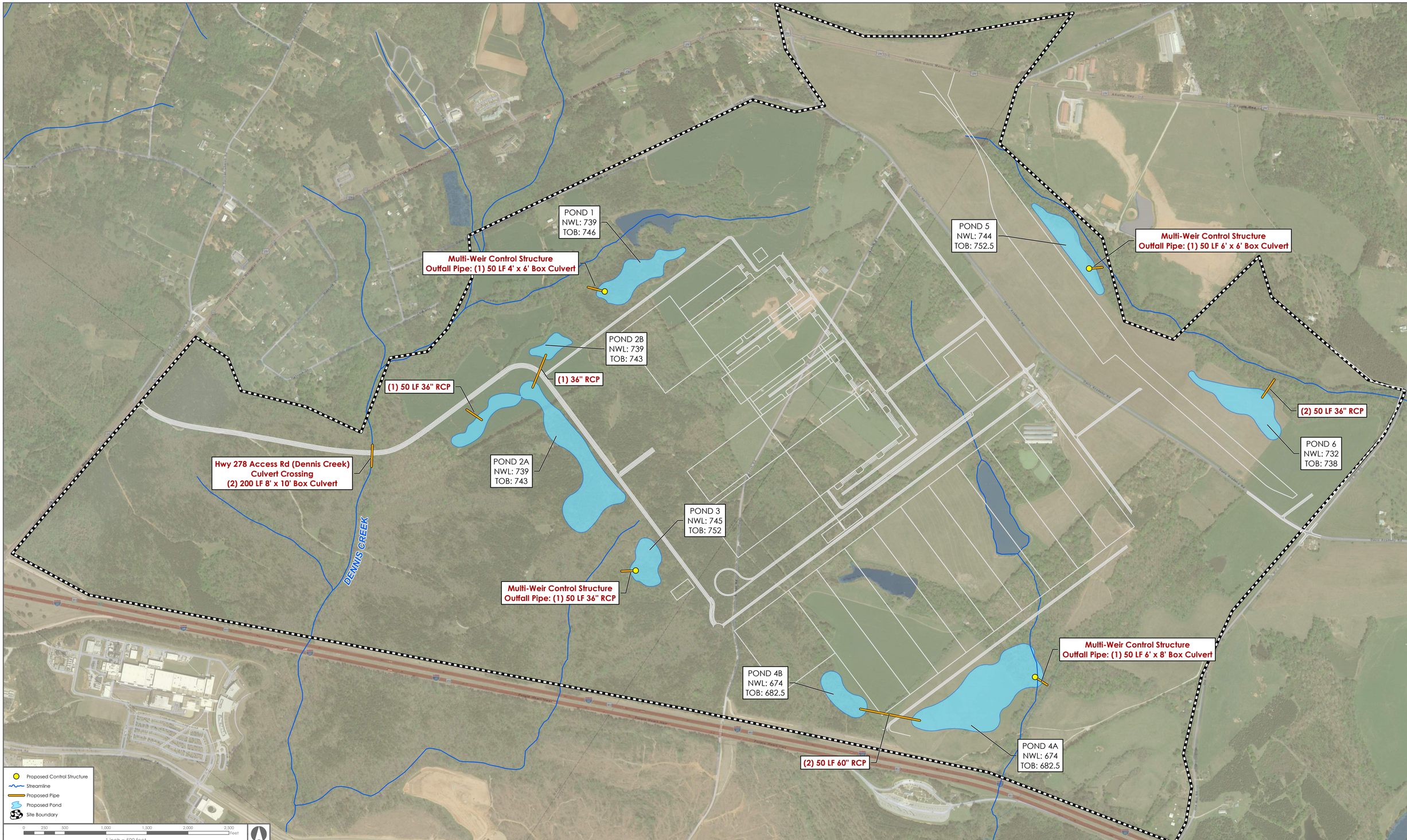

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Streamlines	FEMA	2007
Site Boundary	Thomas & Hutton	2022
Aerial Imagery	NAIP	2017
Stormwater Infrastructure	Thomas & Hutton	2022

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Exhibit H: Proposed Stormwater Infrastructure Map

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Proposed Stormwater Infrastructure Map : Rivian Stormwater Master Plan