DRAINAGE REPORT
INDEPENDENT SPENT FUEL STORAGE INSTALLATION
MILLSTONE POWER STATION
DOMINION NUCLEAR CONNECTICUT
WATERFORD, CONNECTICUT

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EXECUTIVE SUMMARY

GZA GeoEnvironmental, Inc. ("GZA") has conducted hydrologic and hydraulic analyses, and drainage design, for Dominion Nuclear Connecticut, Inc.'s ("DNC's") proposed construction and operation of an Independent Spent Fuel Storage Installation ("ISFSI") at the Millstone Power Station ("Millstone"), located in the Town of Waterford, New London County, Connecticut. This Drainage Report ("Report") presents the basis and results of these analyses, and recommendations for sediment and erosion control during construction. Details of the existing and proposed site features, drainage improvements and sediment and erosion controls for construction, are presented separately on the *Site Plans*[1].

The ISFSI would be located in the southerly portion of the 520-acre Millstone property (the "Millstone property"), in an area that is currently developed as an employee parking lot.

The principal elements of the ISFSI project ("ISFSI Project") include:

- Develop an approximately 2-acre area to support the ISFSI ("ISFSI Site"). The ISFSI Site will consist of a level, graded surface at a ground elevation ("GE") of approximately 21 feet above mean sea level ("AMSL")[2]. The ISFSI Site will be covered with concrete pads designed to support the Horizontal Storage Modules ("HSMs"), concrete aprons and gravel (at areas not covered with concrete). To maintain the level graded surface at the ISFSI Site, a 7 to 8 feet deep cut at the north end of the ISFSI Site and the construction of a 6-foot high retaining wall along the northeast portion of the ISFSI Site, will be required. ISFSI Site preparation work will involve site grading, and localized over-excavation and replacement of site soils to improve the soil dynamic properties, followed by site development work (e.g., installation of concrete pads).

- Improve an approximately 4-acre Equipment Laydown Area, which may be used to support the ISFSI Project construction activities. The Equipment Laydown Area abuts the ISFSI Site and also is located in the existing parking area.

- Construct a haul path (paved road).

- Abandon certain existing drainage structures and construct new drainage and other utilities.

- Remove and transport excess soil generated from the ISFSI Site grading and excavation to an approximately 5-acre Soil Placement Area, located in a central portion of Millstone property north of the Amtrak railroad line.

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[1] Site Plans, Millstone Power Station, Independent Spent Fuel Storage Installation, Dominion Nuclear Connecticut, 2003
[2] National Geodetic Vertical Datum of 1929.

- Realign the existing Security Protected Area ("PA") fence to encompass the ISFSI Site, haul path, and an approximately 4-acre Equipment Laydown Area

The ISFSI Project is planned for construction in phases; however, most of the site work, including a significant portion of the drainage improvements required for full build-out, will be performed during the initial phase. The first phase ("Phase I") of the ISFSI Project is expected to be accomplished during 2004, and will include the construction of a pad for 20 HSMs. The ISFSI Site will be designed to support a total of 135 HSMs at full build-out. However, no definitive schedule for subsequent phases has yet been established, and the HSMs will be added on an as-needed basis.

The results and recommendations presented in this Report are related to the ISFSI Site, haul path and Equipment Laydown Area. No drainage improvements are required for the Soil Placement Area.

Based on the existing site grades, drainage patterns and drainage structures, the ISFSI Site will be located within a contributory drainage area that is approximately 24 acres in size. This drainage area is currently comprised of developed upland areas, some wooded low-lying areas, a pond and the existing parking lot. The ISFSI Site will be located within the existing parking lot, which is in the southern, downgradient portion of the drainage area. Surface runoff within the contributory drainage area flows in a general northwest to southeast direction.

The existing drainage characteristics further subdivide this drainage area into four sub-areas (referenced in the Report as Sub-Areas 1 through 4). The locations of the existing drainage sub-areas are indicated on Figure 2. Sub-Area 1 is a small (approximately 3 acres) low-lying area with no defined outlet, which provides temporary ponding and storage of stormwater. Sub-Area 2 is a larger (approximately 11 acres) area consisting of wetlands and a small pond and associated upland areas. Sub-Area 2 has an outlet at its southern end (across from Building 532), which connects to an existing 30-inch diameter reinforced concrete pipe ("RCP") trunkline[3]. Sub-Area 3 consists principally of the existing parking lot and is about 8 acres in size. Stormwater within Sub-Area 3 is conveyed as sheet flow until intercepted by one of seven catch basin structures located throughout the parking lot. Once collected in these catch basins, stormwater is conveyed to the existing 30-inch diameter RCP trunkline. The 30-inch diameter trunkline discharges at the existing permitted outlet DSN 011 located east of the ISFSI Site (reference Figure 2). The outlet discharges to an existing drainage swale, which in turn discharges to an existing freshwater pond located about 200 feet east of the ISFSI Site. Sub-Area 4 is located at the southeast corner of the existing parking lot and is about 2 acres in size. Stormwater generated in Sub-Area 4, is conveyed via sheet run-off toward the southeast portion of the Millstone property. Based on the hydrologic analyses, Sub-Area 1 does not contribute any

[3] The term trunkline is used here to indicate the main drain line. Secondary drain lines (e.g., used to convey stormwater from catch basins) discharge into the trunkline.

appreciable stormwater flow to the 30-inch diameter trunkline during the design storms considered. The ISFSI Project will not significantly change existing drainage patterns. Runoff characteristics will remain nearly identical to existing conditions, in terms of infiltration potential as well as magnitude, timing, and volume of runoff.

The proposed drainage improvements separate the conveyance of stormwater into two trunklines. These are detailed on the *Site Plans*. One trunkline conveys stormwater from Sub-Area 2, which encompass approximately 11 acres and is located upgradient of the ISFSI Site. This trunkline will be constructed along the existing Access Road and discharge at the existing outlet location DSN 011. Stormwater will be collected within the ISFSI Site using a series of trench drains and catch basins, and within the Equipment Laydown Area using catch basins and drainage swales. Once collected, the stormwater will be conveyed via the second trunkline along the southern and eastern portions of the ISFSI Site and will discharge to a common manhole, and from there be conveyed to the existing outlet location.

This approach diverts stormwater emanating from the upgradient portions of the drainage area away from the ISFSI Site. It also minimizes the potential for transient flooding (i.e., surcharging), within the ISFSI Site during storm events exceeding the 25-year design storm.

Peak rates of runoff, under the design storm condition, are expected to increase approximately 5 percent or less. This increase is not appreciable, as it will not materially increase water surface profiles or flooding potential to the existing freshwater pond (which will receive the runoff).

The drainage system to be installed will incorporate structural Best Management Practices ("BMPs"), consistent with Connecticut guidelines[4], including deep catch basin sumps and hoods, a velocity dissipater (rip-rap swale) at the outlet and grassed swales. Standard erosion and sedimentation controls will be incorporated during construction.

[4] These include: 1) the "2002 Connecticut Guidelines for Soil and Erosion and Sediment Control"; and 2) the "Connecticut Stormwater Quality Manual", Draft 2003. Both these documents were prepared by the Connecticut Department of Environmental Protection.

1.0 INTRODUCTION

Dominion Nuclear Connecticut, Inc. ("DNC") proposes constructing an Independent Spent Fuel Storage Installation ("ISFSI") at the Millstone Power Station ("Millstone"). Millstone is located in the Town of Waterford, New London County, Connecticut. Figure 1 presents a Locus Plan.

GZA GeoEnvironmental, Inc. ("GZA") has conducted hydrologic and hydraulic analyses, and drainage design, for the proposed construction and operation of the ISFSI. The objectives of the drainage study were to:

1. describe and analyze existing site conditions, including drainage areas and patterns, and the runoff potential and hydraulic capacity of existing storm water collection systems; and

2. design a storm water drainage system for the proposed ISFSI project ("ISFSI Project").

This Drainage Report ("Report") presents the basis and results of these analyses, and recommendations for erosion and sediment control during construction. Section 2.0 of the Report describes the proposed project. Section 3.0 describes the existing site drainage relevant to the ISFSI Site. Section 4.0 discusses the proposed drainage improvements, including design objectives, approach and rational. Section 5.0 describes the proposed post-construction structural Best Management Practices. Section 6.0 describes proposed erosion and sediment control measures for construction. Details of the existing and proposed site features, drainage improvements and erosion and sediment controls for construction, are also presented on the *Site Plans*.

The ISFSI Site and related drainage improvements will be incorporated into Millstone's existing "*General Permit for the Discharge of Stormwater Associated with Industrial Activities*".

2.0 PROJECT DESCRIPTION

The ISFSI Site will be constructed in phases. During the Phase I (partial build-out), a concrete pad for 20 Horizontal Storage Modules ("HSMs") will be constructed. Pads for a total of 135 HSMs would be developed as necessary. The project will involve the following principal elements:

- Develop the approximately 2-acre area to support the ISFSI Site. The ISFSI Site will consist of a level, graded surface at a ground elevation ("GE") of approximately 21 feet above mean sea level ("AMSL"). The ISFSI Site will be covered with concrete pads designed to support the HSMs, concrete aprons and gravel (at areas not covered with concrete). To maintain the level graded surface at the ISFSI Site, a 7 to 8 foot deep cut at the north end of the ISFSI Site and the

construction of a 6-foot high retaining wall along the northeast portion of the ISFSI Site, will be required. ISFSI Site preparation work will involve site grading, and localized over-excavation and replacement of site soils to improve the soil dynamic properties, followed by site development work (e.g., installation of concrete pads).

- Improve an approximately 4-acre Equipment Laydown Area, which may be used to support the ISFSI Project construction activities. The Equipment Laydown Area abuts the ISFSI Site and also is located in the existing parking area.

- Construct a haul path (paved road).

- Abandon certain existing drainage structures and construct new drainage and other utilities.

- Remove and transport excess soil generated from the ISFSI Site grading and excavation to an approximately 5-acre Soil Placement Area, located in a central portion of Millstone property north of the Amtrak railroad line.

- Realign the existing Security Protected Area ("PA") fence to encompass the ISFSI Site, haul path, and an approximately 4-acre Equipment Laydown Area.

2.1 SITE DESCRIPTION

All construction components of the ISFSI Project, including the ISFSI Site, the haul path, the Equipment Laydown Area and the Soil Placement Area are located on upland portions of the Millstone property that have been previously disturbed and developed. The ISFSI Site, haul path and Equipment Laydown Area are all contiguous, whereas the Soil Placement Area is located in the central portion of the Millstone property, north of the Amtrak railroad line.

The ISFSI Site is approximately 92,000 square feet (approximately 2 acres) in size. The ISFSI Site is currently developed as a parking lot, consisting principally of asphalt and gravel surfaces. Existing grades within the storage area range from about GE 28 to GE 19, and slope to east-southeast.

The Equipment Laydown Area is about 157,350 square feet (approximately 4 acres) in size and is located immediately west of the ISFSI Site. This area, which is currently developed as an asphalt and gravel paved employee parking lot, will not be substantially changed by the proposed development, with the exception of minor grading and drainage improvements. Existing grades within the Equipment Laydown Area range from about GE 32 to about GE 22 and slope to the east-southeast.

The Soil Placement Area, currently consists of a stone, gravel, loam and grass surface. The area is abutted to the south by Amtrak train rails, to the west by the asphalt-paved Millstone access road and to the north by an existing ball field. The area proposed for excess soil placement is approximately 5-acres in size and is relatively flat.

2.2 PROPOSED CONSTRUCTION

The ISFSI Site will be developed in phases. The pad and approach apron, constructed to support the 20 Phase I HSMs, will cover an area of approximately 12,000 square feet (approximately 0.3 acre). However, most of the site work required for full build-out of the ISFSI Site will be performed during Phase I. The portion of the ISFSI Site not covered with concrete pads or aprons during Phase I will be graded and covered with gravel.

The Phase I construction will generally include the following:

- Site preparation, including stripping of existing topsoil, gravel and pavement within the ISFSI Site;
- Removal and/or abandonment of existing drainage utilities;
- Re-grading within the limits of the site;
- Over-excavation and replacement of soil beneath the concrete pads, to improve the soil dynamic properties (and resultant seismic response);
- Construction of a concrete retaining wall at the northeast corner of the ISFSI Site. The wall will be approximately 350 feet in length and range in height from about 1 foot to 6 feet;
- Construction of approximately 12,000 square feet of concrete pad and apron;
- Construction of new drainage structures;
- Construction of approximately 500 feet of asphalt-paved roadway, for the new haul path; and
- Construction of new protected area security fencing.

Earthwork for the Phase I construction will include excavation to achieve proposed grades, re-grading, over-excavation of some existing material considered unsuitable for foundation support, replacement with a stable backfill material or concrete, and import of clean structural fill. Excess or natural unsuitable material generated during construction will remain within the plant property and be placed in the designated Soil Placement Area. Topsoil, excavated soil and boulders will be relocated to the Soil Placement Area. Asphalt, concrete, etc. may be taken off-site as appropriate.

It is expected that approximately 550 cubic yards of clean structural fill and 600 cubic yards of gravel/crushed stone (for a total amount of 1,150 cubic yards) will be imported during Phase I to provide a sound base for the pad, apron and new haul path. Construction of the Phase I pads and aprons will require placement of approximately 1,500 cubic yards of reinforced, structural concrete. At this time, it is expected that ready-mix concrete will be imported to the site for use as structural concrete for the pads, aprons and retaining wall.

As noted above, earthwork will include excavation to achieve the proposed site grades, as well as over-excavation and replacement of soil beneath the pads. The soil beneath the pads will be over-excavated to bedrock and replaced with low strength, non-structural concrete or stable backfill material. A small pug mill or batch plant may be mobilized to the site for on-site mixing of concrete and/or stabilized soil.

The final design of the ISFSI Site and analysis of the existing soil will determine the extent that the existing soil can be re-used to generate the stable backfill material. If the existing

soil cannot be re-used for stable backfill material, the amount of excess and unsuitable soil placed at the Soil Placement Area during Phase I can be about 10,000 cubic yards. If the existing material can be re-used as stable backfill, the amount of excess soil placed at the Soil Placement Area during Phase I can be about 3,000 cubic yards.

Construction activities for future project phases would include:

- Additional excavation of soil for construction of additional concrete pads and aprons;
- Modification of some of the drainage structures constructed during Phase I;
- Construction of the additional concrete pads and aprons; and
- Delivery and assembly of the HSMs.

Full build-out, if required, would generate about 7,000 cubic yards of additional excess material that would be relocated to the Soil Placement Area. An additional, approximately 5,000 cubic yards of concrete would also be required to achieve full build-out.

Soil generated during construction and brought to the Soil Placement Area will be placed in controlled lifts that match the existing ground contours. The area will be hydro-seeded during Phase I and after each phase of build-out. The area is capable of taking all the excess soil from a full build-out.

2.3 PROPOSED DRAINAGE IMPROVEMENTS

The proposed drainage improvements are discussed further in Section 4.0 of the Report and are detailed on the *Site Plans.* The principal components include the following:

1. A new trunkline along the existing Access Road, which will convey stormwater from approximately 11 acres of the contributory drainage area located upgradient of the ISFSI Site.

2. Trench drains, which will be used to drain the concrete pads and aprons located within the ISFSI Site.

3. New catch basins located within the Equipment Laydown Area.

4. The trench drains and Equipment Laydown Area catch basins will discharge to a second trunkline, which will extend along the southern and eastern portions of the ISFSI Site.

5. The trunklines will join at a common manhole located east of the ISFSI Site. A new 30-inch diameter RCP will convey the water from this manhole to an outlet located at an existing permitted outlet DSN 011. The proposed drainage improvements will require lowering the outlet invert by about 2 feet, from approximately elevation 13 to elevation 11.

The existing drainage structures within the ISFSI Site will be removed. Existing drainage structures located within the Equipment Laydown Area will be abandoned in-place. No drainage structures are required for the Soil Placement Area.

3.0 EXISTING DRAINAGE CONDITIONS

3.1 SURFICIAL SOIL AND SUBSURFACE CONDITIONS

As noted above, all components of the project, including the ISFSI Site, the haul path, the Equipment Laydown Area and the Soil Placement Area, are located on upland portions of the Millstone property that have been previously disturbed and developed. According to the Soil Conservation Service map (reference National Resource Conservation Service, Soil Survey of New London County, Connecticut), surficial soils at the ISFSI Site, the Equipment Laydown Area and the Soil Placement Area consist of Urban Land ("Ub"), consistent with the developed nature of the area and the presence of the shallow fill.

The ISFSI Site and the Equipment Laydown Area are located in an area currently developed as a parking lot. The surface of the parking lot consists of asphalt and gravel. The Soil Placement Area has a stone, gravel, loam and grass surface.

The geology of the Millstone Property consists typically of glacial till overlying bedrock of the Monson Gneiss and Westerly Granite formations. At the southwestern portion of the Millstone peninsula, glacial stream deposits overlay the bedrock, and at the southern tip of the peninsula artificial fill is present. A recent geotechnical study of the ISFSI Site (reference Geotechnical Study, Dry Storage Project, Millstone Nuclear Power Plant, by Dr. Clarence Welti, dated December 2002) indicates that bedrock is encountered at elevations ranging from about Elevation 7 to Elevation 14.5, corresponding to depths of about 6.5 feet to 28 feet below existing grade. The glacial till typically consists of a well-graded, poorly sorted sand and gravel with about 10 to 30 percent fine-grained soil (silt). One to 2 feet of sand fill is present throughout the area, above the glacial till.

3.2 DRAINAGE PATTERNS

Based on the existing site grades, drainage patterns and drainage structures, the ISFSI Site is located within a contributory drainage area that is approximately 24 acres in size. This drainage area is currently comprised of developed upland areas, some wooded low-lying areas, a pond and the existing parking lot. The ISFSI Site will be located within the existing parking lot, which is at the southern, downgradient portion of the drainage area. Surface runoff within the contributory drainage area flows in a general northwest to southeast direction.

The existing drainage characteristics further subdivide this area into four sub-areas (referenced in the Report as Sub-Areas 1 through 4). The locations of the existing drainage sub-areas are indicated on Figure 2. Sub-Area 1 is a small (approximately 3 acre) low-lying area with no defined outlet, which provides temporary ponding and storage of stormwater. Sub-Area 2 is a larger (approximately 11 acre) area consisting of wetlands

and a small pond and associated upland areas. Sub-Area 2 has an outlet at its southern end (across from Building 532), which connects to an existing 30-inch diameter RCP trunkline. Sub-Area 3 consists principally of the existing parking lot and is about 8 acres in size. Stormwater within Sub-Area 3 is conveyed as sheet flow to shallow concentrated flow until intercepted by one of seven catch basin structures located throughout the parking lot. Once collected in these catch basins, stormwater is conveyed to the existing 30-inch diameter RCP trunkline. The 30-inch diameter trunkline discharges at the existing permitted outlet DSN 011 located east of the ISFSI Site. The outlet discharges to an existing drainage swale, which in turn discharges to an existing freshwater pond located about 200 feet east of the ISFSI Site. Stormwater generated at the fourth sub-area (Sub-Area 4), which is located at the southeast corner of the existing parking lot and is about 2 acres in size, is conveyed via sheet run-off toward the southeast portion of the Millstone property. Based on the hydrologic analyses, Sub-Area 1 does not contribute any appreciable stormwater flow to the 30-inch diameter trunkline, during the design storms considered.

3.3 DRAINAGE CALCULATIONS - EXISTING CONDITIONS

GZA estimated the volume and peak rates of runoff, emanating from the contributory drainage area, under various conditions, including the 24-hour, 2-, 10-, 25-, and 100-year storms. The design outlet point for the hydrologic analysis was the existing outlet DSN 011.

Inflow hydrographs for the various frequency storms were generated using the Army Corps of Engineers HEC-1 Flood Hydrograph Package computer program. Incremental rainfall input to the HEC-1 simulation model was based on the National Resource Conservation Services' ("NRCS"), Type III, 24-hour duration distribution pattern. Total rainfall depths for southeastern Connecticut were obtained from the State of Connecticut Drainage Manual, originally developed by Weiss (USGS, 1983). The storm hydrographs created within HEC-1 were based on NRCS Dimensionless Unit Hydrograph theory. Resultant flood hydrographs for each sub-area were combined to produce composite flood hydrographs for the site for the various storm frequencies previously noted. The runoff from the approximately 11-acre Sub-Area 2 to the pond was hydrologically routed to account for the natural storage characteristics of the pond, which attenuated the peak discharge by about 30 percent. As noted above, the results of these rainfall/runoff simulations indicate that runoff from the approximately 3.0-acre Sub-Area 1 drains to an isolated low lying area just west of the Millstone access road and does not contribute surface runoff to the existing 30-inch diameter RCP trunkline during the design storms considered; however, it may during larger storm events. Combined peak rates of runoff at the design point were 19, 33, 39, and 53 cubic feet per second ("cfs") for the 2-, 10-, 25-, and 100-year storms, respectively. The results for each sub-area are summarized in Table 1. HEC-1 input and output summaries for the existing condition analyses are presented in Appendix B.

The hydraulic capacity of the existing trunk line drainage system was also estimated by GZA using the StormCAD® engineering software package. The StormCAD® program

computes the hydraulic grade line profile along a specified drainage pipeline network using standard step backwater methodology. Energy (i.e., head) losses are computed based on user-specified pipe sizes, Manning friction "n" factors, pipe slopes. The program also accounts for minor (i.e., "shock") losses due to pipe size transitions, bends, and junction manhole structures. Assuming free discharge (i.e., critical depth) at the design outlet point, the full-flow capacity of the lower end of the trunk line system is approximately 50 cfs. StormCAD® results, including the layout and hydraulic profile of the existing drainage system, are presented in Appendix C.

4.0 PROPOSED CONDITIONS

4.1 DESIGN OBJECTIVES AND CRITERIA

The objective of the proposed conditions hydrologic analysis was to evaluate the rainfall/runoff characteristics of the site under the proposed conditions, including the Phase I and full build-out conditions. Based on Connecticut Department of Transportation ("ConnDOT")[5] and the Department of Environmental Protection ("DEP")[6] design and guidance documents, and local ordinances, the hydraulic design for the structural components of the proposed drainage system was based on the 25-year storm. As discussed in Section 5.0 below, the drainage system has been designed utilizing appropriate structural Best Management Practices (i.e., catch basin hoods and sumps) to improve the general storm water quality being discharged from the drainage area. This is primarily accomplished through the settling and capture of total suspended solids and other particulate matter, and by providing all water separation.

4.2 PROPOSED SITE CHARACTERISTICS AND DRAINAGE SYSTEM LAYOUT

Several alternatives for the proposed site drainage system layout were analyzed. Project goals included the following:

1. generally maintain the existing drainage patterns;
2. divert stormwater emanating from the upgradient portions of the drainage area away from the ISFSI Site, to minimize the potential for flooding during typical storm events;
3. utilize the existing design outlet point;
4. maintain a level, constant grade along the length of the ISFSI pads; and
5. efficiently drain water away from the ISFSI Site pads and prevent ponding during typical storm events.

An additional consideration in the drainage design is the proposed grading of the ISFSI Site. The existing grades in the vicinity of the ISFSI Site range from GE 28 to GE 19. The ISFSI Site grade (GE 21) will require excavation and construction of slopes along the northern and western side of the ISFSI Site and a retaining wall along its northeast side.

[5] Connecticut Department of Transportation. Drainage Manual, 2000.
[6] 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

To achieve these goals, GZA selected the following drainage approach:

- The drainage system will be divided into two trunklines, with one conveying runoff from Sub-Area 2 and a second system conveying runoff from the Equipment Laydown Area and ISFSI Site. The overall existing site drainage patterns will be maintained under the proposed conditions; runoff will continue to generally travel from the northwest to the southeast.

- The design outlet point will remain at the same location as the existing permitted outlet DSN 011. Due to the hydraulic profile required to pass the design flow without excess surcharging, the invert of the outlet will be lowered from elevation 13.0 (existing) to elevation 11.0 (proposed).

- The new trunkline conveying runoff from Sub-Area 2 will begin at an existing manhole located east of Building 532, and flow in an easterly direction adjacent to the existing Access Road. The trunkline will cross the Access Road where the road bends to the east. At this point, the trunkline will be routed along the eastern shoulder of the existing Access Road and discharge at the existing outlet DSN 011.

- Runoff from the ISFSI Site concrete pads and aprons will be conveyed by shallow, cast-in-place trench drains orientated lengthwise (north to south), within the concrete aprons. The trench drain grates have been designed to maintain the level grade required within the ISFSI Site. The top of the concrete will be at elevation 21.0. The adjacent apron areas will be sloped (1 percent grade) at right angles to the pads and the trench drain grates (rim elevation 20.8±). The trench drains will discharge to a trunkline located along the southern end of the ISFSI Site.

- Two new catch basins will be installed within the Equipment Laydown Area to take advantage of existing site grading, and to minimize potential ponding and flooding.

- Structural Best Management Practices will include hooded catch basins with sumps and a velocity dissipater at the 30-inch discharge outlet.

The proposed construction will slightly modify the individual drainage sub-areas, as indicated on Figure 3, but will have no appreciable negative impact to adjacent resource areas. Additional detail related to site grading and drainage features are presented in the *Site Plans*.

The installation of the ISFSI Site drainage structures will be phased to coincide with the expansion of the ISFSI. During Phase I, the Equipment Laydown Area drainage system will be fully constructed, along with the reconstruction of the outlet. Within the ISFSI Site, a concrete pad and concrete aprons will be constructed to store 20 HSMs. The section of trench drain collecting runoff from this pad and aprons will be installed during Phase I. The portions of the IFSFI Site not covered by concrete pads and aprons will be rough-graded to slope towards two catch basins within the ISFSI Site and surfaced with a layer of gravel or crushed stone.

During future phases of the ISFSI Project, additional trench drains will be installed in conjunction with the construction of the concrete pads and aprons. A subsurface underdrain will be utilized to drain the gravel/crushed stone area between the retaining wall and the concrete pad (northeast corner of the ISFSI Site) when the easternmost concrete pad is extended in future phases.

Construction of the haul path will require relocation of an existing catch basin and a portion of drain pipe discharging to, and from, the catch basin.

4.3 DRAINAGE CALCULATIONS – PROPOSED CONDITIONS

The overall hydrology of the proposed site condition was analyzed using the HEC-1 program, as previously described. The results are presented in Appendix D. The limits of the drainage sub-areas were modified slightly to reflect the change in grading and pipe rerouting (see Figure 3). Other input variables, including runoff potential (expressed as a Curve Number) and time of concentration, were adjusted based on minor changes to surface cover and shorter in-pipe travel times. Resultant peak rates of runoff for the various frequency storms are summarized in Table 1. The proposed conditions result in a minor (5 percent or less) increase in peak run-off. This increase is not appreciable, as it will not materially increase water surface profiles or flooding potential to the freshwater pond, into which the runoff ultimately discharges.

The detailed hydrologic and hydraulic analysis of the drainage pipe network in the access roadway and ISFSI Site was developed using StormCAD®. A significant portion of the drainage system has been designed to operate under open channel conditions (i.e., resultant 25-year design hydraulic grade line ("HGL") set below the crown of pipe). Due to site grading constraints, certain portions of the terminal sections of drain pipe downgradient from the ISFSI Site may experience pressure flow during transient peak flow conditions. The resultant HGL will, however, be well below proposed surface grades. This will not compromise the drainage system nor present an unacceptable risk to the ISFSI. The StormCAD® computations for the proposed drainage system are provided in Appendix E.

5.0 POST CONSTRUCTION STORM WATER MANAGEMENT

Post construction storm water management will include the use of Best Management Practices ("BMPs"). BMPs are defined as "structural, non-structural, and managerial techniques that prevent or reduce non-point source pollutants from entering receiving waters." Proposed structural BMPs incorporated as a part of the drainage system include deep sump catch basins with hoods and a velocity dissipation device at the reconstructed storm water outfall. These BMPs are discussed below.

As noted previously, the ISFSI Site and related drainage improvements will be incorporated into Millstone's existing "*General Permit for the Discharge of Stormwater Associated with Industrial Activities*".

5.1 CATCH BASINS

Deep sump catch basins with hoods will be used at each of the inlets to the storm water collection system. Deep sump catch basins are designed to capture trash, debris, and some sediment and oil from storm water runoff prior to discharge at the outlet. They operate as modified catch basins, with inverted discharge pipes or hoods and sumps. Storm water may only exit the catch basin through the bottom opening of the hood or pipe. A permanent pool of water remains in the sump. Oil and grease float on the water surface. During storms, the discharge pipe becomes submerged as the water level in the sump increases. The floating oil and grease are not discharged, but rather continue to float on top of the water surface. Some sediment removal is achieved by settling within the deep sump.

5.2 VELOCITY DISSIPATION

Velocity dissipation devices are typically structurally-lined aprons placed between storm water outlets and a stable downstream channel. They prevent scour and minimize the potential for downstream erosion by reducing the velocity of concentrated storm water flows. The proposed drainage system improvements include the provision of additional velocity dissipation measures at the 30-inch outfall, including a headwall and riprap outlet protection. Based on the rip-rap sizing method provided in USACE EM 1110-2-1601, the minimum diameter for 50 percent of the rip rap (D_{50}) is estimated at 9-inches, assuming a design flow of about 50 cfs from a 30-inch diameter pipe flowing full. The USDA-SCS method, another riprap sizing method, was also used to compare the required D_{50} for the riprap. This method also estimates the required length and width of the riprap. Based on this method, the required D_{50} is also about 9-inches.

Based on these analyses, the proposed riprap outlet protection will be sized to have a minimum stone diameter of 9-inches. A sand filter blanket and geotextile will be added to protect the material under the riprap from possible scouring.

6.0 EROSION AND SEDIMENT CONTROLS

The *Site Plans* include an Erosion and Sediment Control plan. The following describes the erosion and sediment control measures to be implemented during construction.

6.1 EROSION AND SEDIMENT CONTROL MEASURES

While the proposed Phase I construction will require stripping and disturbance of less than 3 acres in area, it will involve extensive earthwork. Cuts of up to about 8 feet will be required to achieve the proposed site grades. This will involve the construction of earth slopes at the north and west portions of the ISFSI Site. In addition, over-excavation to about GE 10 will be required to remove unsuitable soils beneath the concrete pads. Approximately 25,000 to 30,000 cubic yards of soil will be excavated. A portion of this soil will be placed at the Soil Placement Area. The remainder will be temporarily

stockpiled and replaced within the ISFSI Site. A small pug mill or batch plant may be mobilized to the construction site for on-site mixing of concrete and/or stabilized soil.

The principal erosion and sediment control concerns include the following:

1. Erosion of the earth slopes, the cleared ISFSI Site and soil stockpiles. Unless properly managed, sediment from this erosion would run off to areas east and southeast of the ISFSI Site.

2. Soil excavation and stockpiling, and related activities, will generate significant dust if not adequately controlled.

3. Limited excavation will occur at the existing outlet to install the new drain line and to construct the outlet structures. This work will occur within a portion of the existing drainage swale, which directly discharges to the freshwater pond.

4. Placement of soil at the Soil Placement Area. Existing grades within this area slope to the east-southeast towards a stream and wetlands area.

The principal pollution concerns include:

1. Temporary on-site storage of petroleum products and fueling of construction equipment.
2. On-site storage of cement.

The following erosion and sediment control techniques will be employed to minimize erosion and transport of sediment to resource areas, and to protect against pollution from hazardous materials during the earthwork and construction phases of the project. Adjacent or nearby resources areas include inland wetlands located northeast and east of the ISFSI Site, and the freshwater pond located east of the ISFSI Site.

6.1.1 Site Stripping and Excavation

Prior to any site stripping activities, silt fence and hay bale barriers will be placed around the perimeter of the ISFSI Site. Stripping will be limited to those areas necessary to complete the proposed work, which generally includes the limits of the ISFSI Site, localized areas of the Equipment Laydown Area and areas where utility trenching will occur. Disturbed areas will be kept to a minimum.

6.1.2 Hay Bale/ Silt Fence Barriers

Hay bale/silt fence barriers will be placed to trap sediment transported by runoff before it reaches the drainage system or leaves the construction site, in addition to areas where high runoff velocities or high sediment loads are expected. The silt fences and hay bale barrier will be replaced as determined by periodic field inspections.

6.1.3 Catch Basin Inlet Protection

Newly constructed catch basins will be protected with hay bale barriers (where appropriate) or silt sacks throughout construction.

6.1.4 Construction Site Entrance

To reduce the tracking of sediment from the construction site onto other areas of the Millstone Property and to public ways, as well as the production of airborne dust, stabilized construction egress will be established at all permanent construction staging areas, including the Soil Placement Area.

6.1.5 Slope Protection

The exposed soil slopes will be especially susceptible to erosion. Temporary sediment protection for unprotected slopes will be provided using silt fence/hay bale installations. Should the erosion become excessive, the contractor will install matting such as straw, jute, wood fiber, and/or plastic netting. The matting provides cushioning against splash erosion from raindrop impact, does not generate high velocity runoff, captures a great deal of sediment, and will provide long-term protection. Permanent slope protection will be provided by covering the slopes with a geotextile and crushed stone.

6.1.6 Temporary Sediment Basins

The contractor will be allowed to utilize temporary sediment basins, if needed. The basins will be designed either as excavations or bermed storm water detention structures (depending on grading) that will retain runoff for a sufficient period of time to allow suspended soil particles to settle out prior to discharge. These temporary basins will be located based on construction needs as determined by the contractor in consultation with DNC 's Project Manager. A perforated riser surrounded by a crushed stone filter will be typically used to control discharge from the basin. Points of discharge from sediment basins will be stabilized to minimize erosion.

6.1.7 Stockpiled Materials

Any stockpiles created during construction activities will be surrounded with hay bales and silt fence, where possible. Other alternatives utilized may include curb inlet filters or gravel filter berms laid around the perimeter of the stockpile.

6.1.8 Soil Placement Area

Soil deposited at the Soil Placement Area will be placed in controlled lifts and graded to drain. Establishment of a permanent vegetative cover will be established by hydro-seeding at the end of Phase I, and any later construction phases.

6.1.9 Winter Stabilization

If construction is temporarily discontinued during winter months, all disturbed areas will be stabilized as necessary to control erosion.

6.1.10 Outlet Protection

Permanent outlet protection, consisting of riprap channel lining, will be provided at the storm water outlet to reduce storm water velocities and enhance sedimentation prior to discharge to the adjacent pond.

6.1.11 Dust Control

Standard dust control measures, including use of water trucks, misting and placement of calcium chloride, will be used.

6.1.12 Construction Dewatering

Construction dewatering may be required for construction. Where possible, the wastewater discharge will be infiltrated into the ground in temporary sediment/infiltration basins. The existing soils may have limited infiltration capacity. Construction dewatering wastewater discharged to a surface water body will be pre-treated for sediment removal by residing in a fractionation/sedimentation tank or sediment basin prior to discharge.

6.1.13 Equipment Fueling

Equipment fueling and other activities including petroleum, oil and other potentially hazardous substances will be performed at a pre-approved, designated area with appropriate spill prevention and control measures. Portable secondary containment will be used, and sorbent materials will typically be placed around the perimeter of the fueling area, during all fueling activities. Non-liquid hazardous materials (e.g., cement) will be stored in a protected area and covered.

6.2 INSPECTION AND MAINTENANCE

Areas disturbed by the construction, including construction exits, will be inspected to ensure that the erosion and sediment controls are correctly installed and maintained. Inspections of the active work area will occur weekly and after every significant precipitation event (exceeding ½-inch precipitation). Inspection reports will be maintained.

6.3 SEQUENCE OF GRADING AND CONSTRUCTION ACTIVITIES

The following provides a summary of the proposed sequence of grading and construction activities and the installation of the erosion and sediment control measures. The reader is also directed to Section 2.2 of the Report, which provides a general sequence for Phase I

site grading and utility installation, conducted in concert with these erosion and sedimentation control activities.

1. Install stabilized construction egress.
2. Install perimeter hay bales and silt fence.
3. Install check dams in areas subject to concentrated flow.
4. Construct the drainage trunkline along the Access Road.
5. Construct new outlet structure.
6. Disconnect existing trunkline.
7. Perform stripping (removal of existing asphalt and gravel surface) of the ISFSI Site.
8. Prepare temporary sedimentation basins, as may be required.
9. Begin earthwork within the ISFSI Site.
10. Provide temporary stabilization of exposed earth slopes.
11. Provide protection of soil stockpiles.
12. During stripping and excavation, install berms and/or temporary sediment basins to collect site runoff as required.
13. In areas where water flow is concentrated, install crushed stone or hay bale check dams.
14. Upon completion of earthwork within the ISFSI Site, install remaining drainage structures.
15. Provide catch basin inlet protection at newly constructed catch basins.
16. Construct concrete pads and aprons, and gravel surface within the ISFSI Site.
17. Complete grading.
18. Remove accumulated sediment from basins and other sediment control devices.
19. Perimeter erosion control will remain in place until permanent stabilization has been achieved.
20. Hydro-seed the Soil Placement Area.

Based on the construction schedule requirements, clearing and earthwork may begin within the ISFSI Site prior to completion of the new trunkline along the Access Road and disconnection of the existing trunkline.

TABLES

Table 1
Rainfall/Runoff Modeling Results

Existing Conditions Analysis

Drainage area	Peak Flow (cfs)			
	2-year storm	10-year storm	25-year storm	100-year storm
Sub-Area 1 - Small Pool	2	4	5	6
Sub-Area 2 - Large Pool	4	12	16	24
Sub-Area 3 - Parking Areas to 30" Storm Outlet	13	22	25	32
Sub-Area 4 - Parking Area Sheet Flow to Pond	4	6	7	9
COMPOSITE HYDROGRAPH	**19**	**33**	**39**	**53**

Note: Composite hydrograph presents peak flow at the design outlet point. Individual drainage areas represent unrouted peak flows.

Proposed Conditions (Full Build-out) Analysis

Drainage area	Peak Flow (cfs)			
	2-year storm	10-year storm	25-year storm	100-year storm
Sub-Area 1 - Small Pool	2	4	5	6
Sub-Area 2 - Large Pool	4	12	16	24
Sub-Area 3 - Drains to 30" Storm Outlet	16	24	29	37
Sub-Area 4 - Sheet Flow to Pond	2	4	4	5
COMPOSITE HYDROGRAPH	**20**	**34**	**40**	**54**

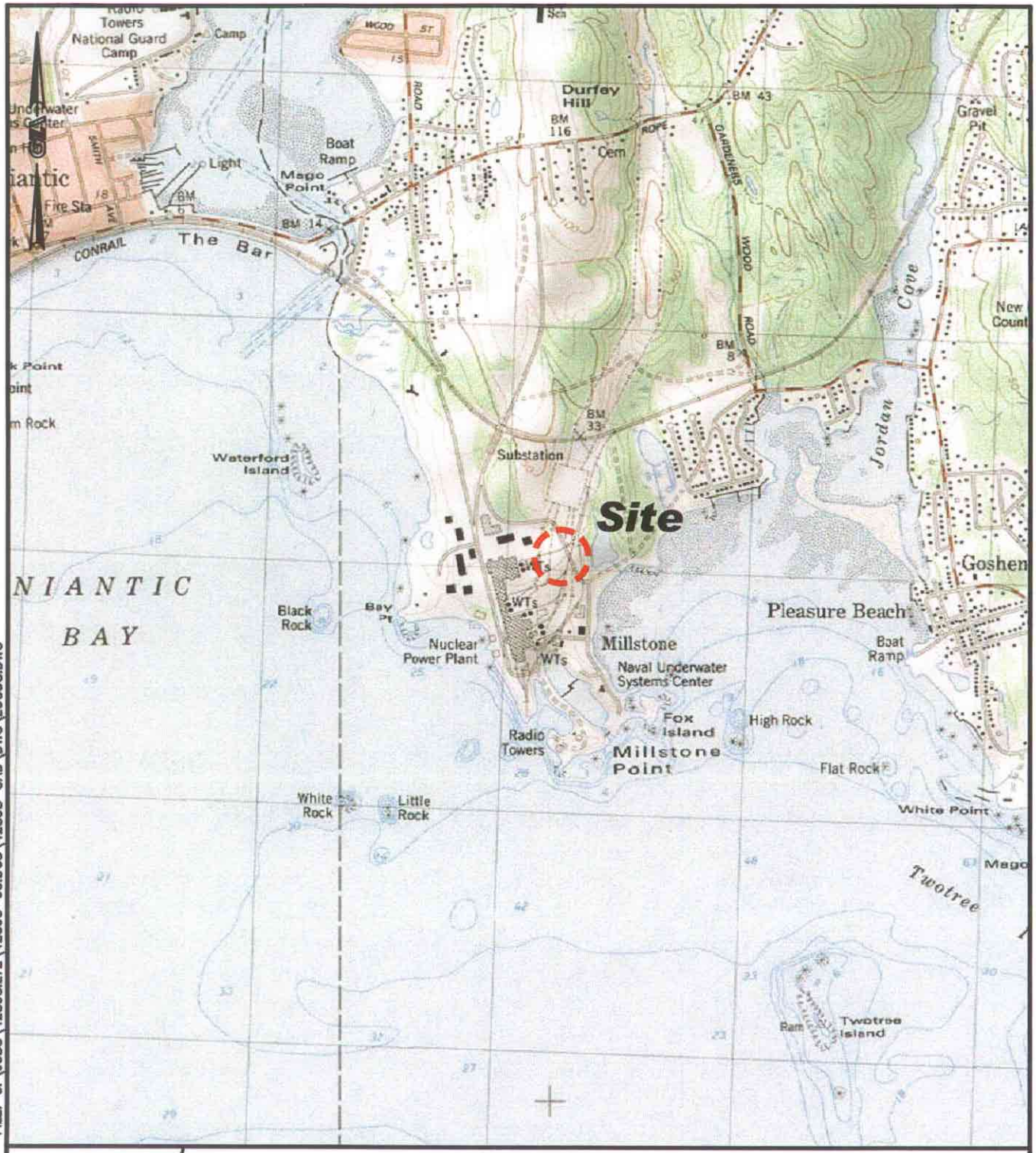
Note: Composite hydrograph presents peak flow at the design outlet point. Individual drainage areas represent unrouted peak flows.

Comparison of Existing and Proposed Conditions Results

	Peak Flow (cfs)			
	2-year storm	10-year storm	25-year storm	100-year storm
Existing Conditions	19	33	39	53
Proposed Conditions	20	34	40	54
CHANGE	**1**	**1**	**1**	**1**

Q:\NORWOOD\PHB\Millstone\Table1.xls

FIGURES



1"=2000'

0 1000' 2000' 4000'

SOURCE: U.S.G.S. NIANTIC, CT QUADRANGLE MAP (1983)

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE POWER STATION

WATERFORD, CONNECTICUT

LOCUS PLAN

2/14/03

FIGURE 1

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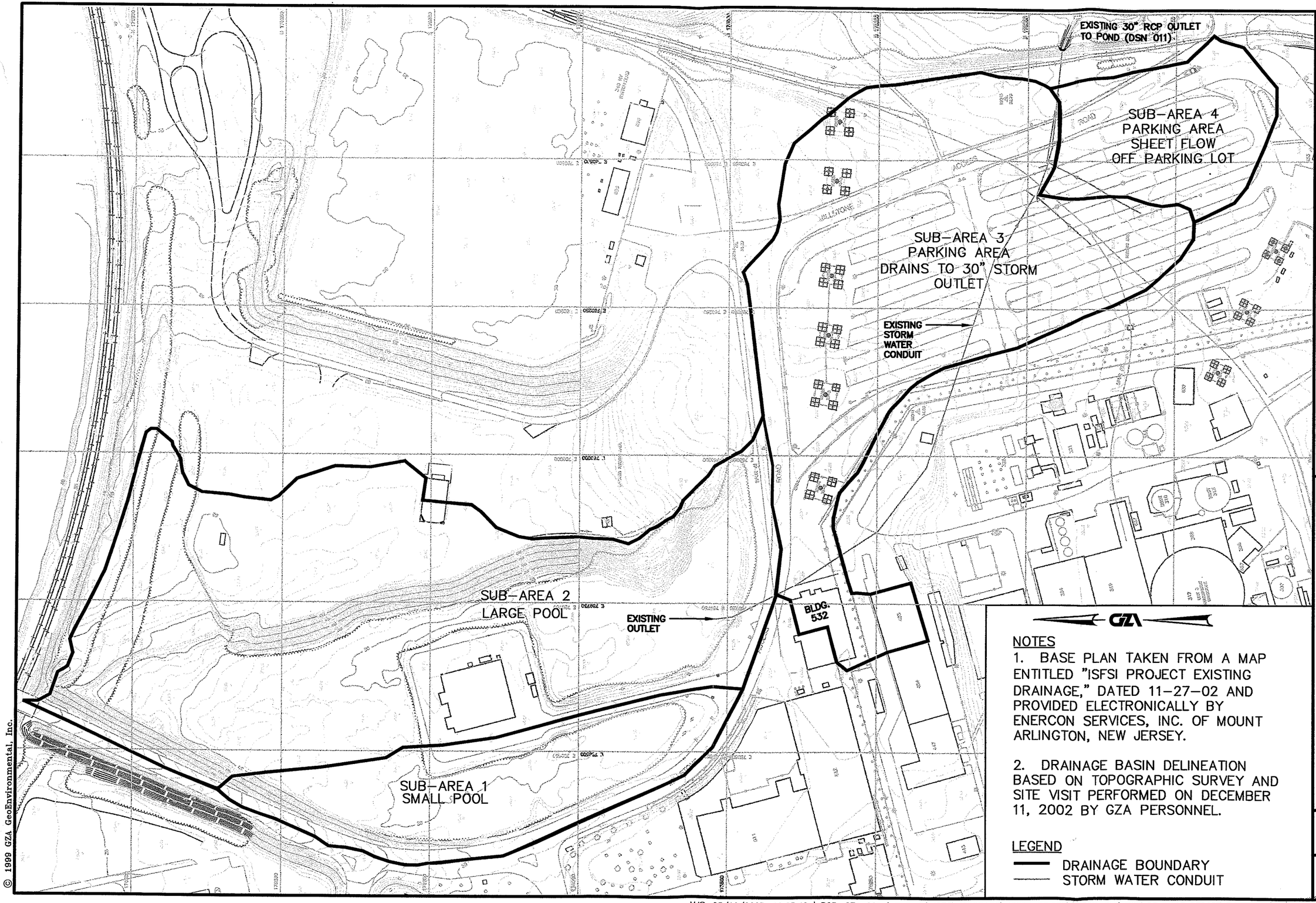


NOTES

1. BASE PLAN TAKEN FROM A MAP ENTITLED "ISFSI PROJECT EXISTING DRAINAGE," DATED 11-27-02 AND PROVIDED ELECTRONICALLY BY ENERCON SERVICES, INC. OF MOUNT ARLINGTON, NEW JERSEY.

2. DRAINAGE BASIN DELINEATION BASED ON TOPOGRAPHIC SURVEY AND SITE VISIT PERFORMED ON DECEMBER 11, 2002 BY GZA PERSONNEL.

LEGEND

DRAINAGE BOUNDARY

STORM WATER CONDUIT

PROJ MGR:
DESIGNED BY: MIS
REVIEWED BY: PHB
OPERATOR: MIS
DATE: 2/10/03

GZA GeoEnvironmental, Inc.

SCALE: 1" = 150'

0 75' 150' 300'

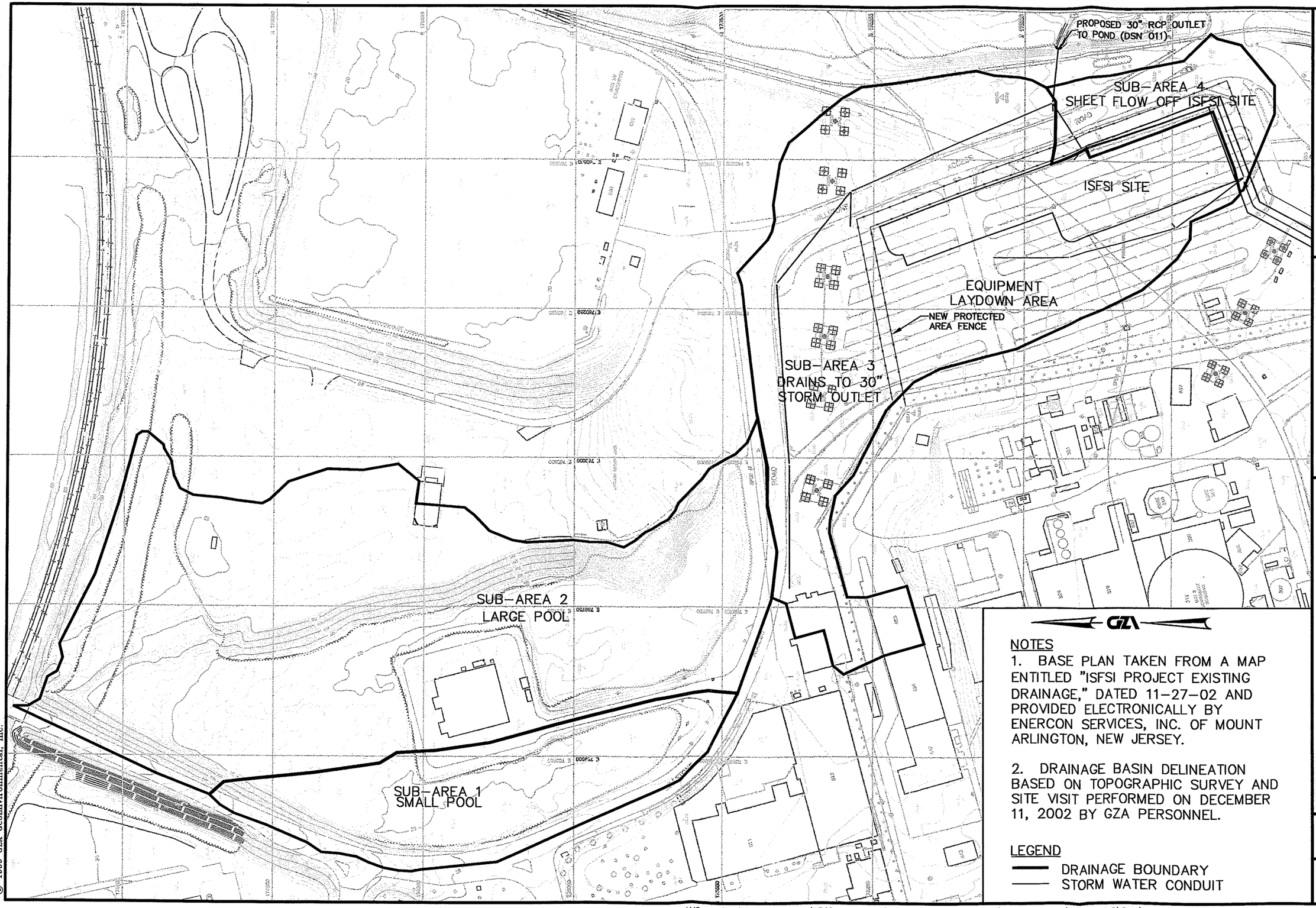
DOMINION NUCLEAR CONNECTICUT INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

EXISTING CONDITIONS DRAINAGE AREA PLAN

JOB NO. 42898.00

FIGURE NO. 2

MJS, 05/19/2003, 10:25:49 | PCP: GZA_001 | FILE: G:\JOBS\42898.L72\42898-00.DCS\42898-CAD\DWG\DRAINAGE REPORT\FIG-02-AND-03.DWG



NOTES

1. BASE PLAN TAKEN FROM A MAP ENTITLED "ISFSI PROJECT EXISTING DRAINAGE," DATED 11-27-02 AND PROVIDED ELECTRONICALLY BY ENERCON SERVICES, INC. OF MOUNT ARLINGTON, NEW JERSEY.

2. DRAINAGE BASIN DELINEATION BASED ON TOPOGRAPHIC SURVEY AND SITE VISIT PERFORMED ON DECEMBER 11, 2002 BY GZA PERSONNEL.

LEGEND

DRAINAGE BOUNDARY

STORM WATER CONDUIT

PROJ MGR:
DESIGNED BY: MIS
REVIEWED BY: PHB

OPERATOR: MIS
DATE: 4/24/03

GZA | GeoEnvironmental, Inc.

SCALE: 1" = 150'

0 75' 150' 300'

DOMINION NUCLEAR CONNECTICUT INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

PROPOSED CONDITIONS DRAINAGE AREA PLAN

JOB NO.
42898.00

FIGURE NO.
3

MJS, 05/19/2003, 10:25:50 | PCP: GZA_001 | FILE: G:\JOBS\42898.L72\42898-00.DCS\42898-CAD\DWG\DRAINAGE REPORT\FIG-02-AND-03.DWG

APPENDIX A
GZA LIMITATIONS

LIMITATIONS

1. This Drainage Report ("Report") has been prepared by GZA GeoEnvironmental, Inc. ("GZA") for the exclusive use of Dominion Nuclear Connecticut, Inc. for specific application for an Independent Spent Fuel Storage Installation ("ISFSI") at the Millstone Power Station located in Waterford, Connecticut, to the Connecticut Siting Council, in accordance with generally accepted engineering practices. No other warranty, express or implied, is made.

2. The observations described in the Report were made under the conditions stated herein. The conclusions presented in the Report were based solely upon the services described therein.

3. In preparing the Report, GZA has relied on certain information provided by Enercon Services, Inc. GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this work.

4. In the event that any changes in the nature, design, or location of the drainage structures for the ISFSI Project are planned, the conclusions and recommendations contained in the Report shall not be considered valid unless the changes are reviewed and conclusions of the Report modified or verified by GZA.

5. It is recommended that GZA be retained to provide engineering services during construction of the drainage improvements for this project. This is to observe compliance with the design concepts, specifications, and recommendations and to allow design changes in the event conditions differ from those anticipated prior to the start of construction.

6. In preparing this report, GZA has relied upon topographic survey data prepared by others and soil characteristics as reported by the National Resource Conservation Service (formerly known as the SCS). GZA did not independently verify the accuracy of that data.

7. GZA based the hydrologic analysis of existing conditions on the site plans made available to GZA as of the date of the Report. In the event that any other site changes are planned, the conclusions and recommendations contained in the Report shall not be considered valid unless the changes are reviewed and conclusions of the Report modified or verified by GZA.

8. The analysis presented is for the rainfall volumes and distributions stated herein. For storm conditions other than those analyzed, the response of the sites drainage network has not been analyzed.

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APPENDIX B
RESULTS OF EXISTING CONDITIONS HYDROLOGIC (HEC-1) ANALYSES

DOMINION NUCL. .R CONNECTICUT, INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

2-YEAR STORM PRE-DEVELOPMENT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SA1	2.	12.60	0.	0.	0.	0.00		
ROUTED TO	SPOOL	0.	0.10	0.	0.	0.	0.00	30.03	26.40
HYDROGRAPH AT	SA2	4.	12.40	1.	0.	0.	0.02		
2 COMBINED AT	COM1	4.	12.40	1.	0.	0.	0.02		
ROUTED TO	POOL1	4.	12.50	1.	0.	0.	0.02	25.95	12.50
HYDROGRAPH AT	SA3	13.	12.20	2.	1.	1.	0.01		
2 COMBINED AT	COM2	16.	12.30	3.	1.	1.	0.03		
HYDROGRAPH AT	SA4	4.	12.20	1.	0.	0.	0.00		
2 COMBINED AT	COM	19.	12.30	4.	1.	1.	0.04		

*** NORMAL END OF HEC-1 ***

DOMINION NUCL[illegible] CONNECTICUT, INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

10-YEAR STORM PRE-DEVELOPMENT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SA1	4.	12.60	1.	0.	0.	0.00		
ROUTED TO	SPOOL	0.	0.10	0.	0.	0.	0.00	30.40	26.60
HYDROGRAPH AT	SA2	12.	12.30	2.	1.	1.	0.02		
2 COMBINED AT	COM1	12.	12.30	2.	1.	1.	0.02		
ROUTED TO	POOL1	9.	12.50	2.	1.	1.	0.02	26.50	12.50
HYDROGRAPH AT	SA3	22.	12.20	4.	1.	1.	0.01		
2 COMBINED AT	COM2	28.	12.30	6.	2.	2.	0.03		
HYDROGRAPH AT	SA4	6.	12.20	1.	0.	0.	0.00		
2 COMBINED AT	COM	33.	12.20	7.	2.	2.	0.04		

*** NORMAL END OF HEC-1 ***

DOMINION NUCL[illegible] CONNECTICUT, INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

25-YEAR STORM PRE-DEVELOPMENT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SA1	5.	12.60	1.	0.	0.	0.00		
ROUTED TO	SPOOL	0.	0.10	0.	0.	0.	0.00	30.56	26.40
HYDROGRAPH AT	SA2	16.	12.30	3.	1.	1.	0.02		
2 COMBINED AT	COM1	16.	12.30	3.	1.	1.	0.02		
ROUTED TO	POOL1	12.	12.50	3.	1.	1.	0.02	26.79	12.50
HYDROGRAPH AT	SA3	25.	12.20	5.	1.	1.	0.01		
2 COMBINED AT	COM2	34.	12.30	8.	2.	2.	0.03		
HYDROGRAPH AT	SA4	7.	12.20	1.	0.	0.	0.00		
2 COMBINED AT	COM	39.	12.20	9.	3.	2.	0.04		

*** NORMAL END OF HEC-1 ***

DOMINION NUCLE[illegible] CONNECTICUT, INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

100-YEAR STORM PRE-DEVELOPMENT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SA1	6.	12.60	2.	1.	0.	0.00		
ROUTED TO	SPOOL	0.	21.90	0.	0.	0.	0.00	30.76	22.10
HYDROGRAPH AT	SA2	24.	12.30	5.	1.	1.	0.02		
2 COMBINED AT	COM1	24.	12.30	5.	1.	1.	0.02		
ROUTED TO	POOL1	19.	12.50	5.	1.	1.	0.02	27.39	12.50
HYDROGRAPH AT	SA3	32.	12.20	6.	2.	2.	0.01		
2 COMBINED AT	COM2	46.	12.30	11.	3.	3.	0.03		
HYDROGRAPH AT	SA4	9.	12.20	2.	0.	0.	0.00		
2 COMBINED AT	COM	53.	12.30	12.	4.	3.	0.04		

*** NORMAL END OF HEC-1 ***

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ID          MILLSTONE POWER PLANT                                                          ID            036
ID          WATERFORD, CT                                                                  ID            036
ID          GZA JOB #42898.00                                                              ID            036
ID          2-YEAR EXISTING CONDITION ANALYSIS                                             ID            036
ID                                                                                         ID            036
ID          □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□           ID            036
*                                                                                          *             001
IT     6 01JAN99       0          02JAN99    0400                                          IT            040
IO     0                                                                                   IO            039
IN     6 01JAN99       0                                                                   IN            038
*                                                                                          *             001
KK    SA1SUB-AREA 1 (LARGE POOL)                                                           KK            045
*  NORTHERN PORTION OF DRAINAGE AREA, DRAINS TO CULVERT                                    *             001
BA0.0046                                                                                   BA            008
*                                                                                          *             001
PB    3.4                                                                                  PB            069
PC0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900PC                       070
PC0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900PC                       070
PC0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961PC                       070
PC0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171PC                       070
PC0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531PC                       070
PC0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041PC                       070
PC0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843PC                       070
PC0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143PC                       070
PC0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206PC                       070
PC0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416PC                       070
PC0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282PC                       070
PC0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600PC                       070
PC0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224PC                       070
PC0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598PC                       070
PC0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044PC                       070
PC0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334PC                       070
PC0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738PC                       070
PC0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638PC                       070
PC0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179PC                       070
PC0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569PC                       070
PC0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824PC                       070
PC0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967PC                       070
PC0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997PC                       070
PC0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914PC                       070
PC1.0000 1.00000 1.00000 1.00000 1.00000                                           PC                    070
*                                                                                  *                     001
LS            75                                                                   LS                    056
UD   0.51                                                                          UD                    112
*  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION                                 *                     001
*                                                                                  *                     001
KK SPOOL                                                                           KK                    045
RS      1    ELEV     28.0                                                         RS                    092
SV      0    0.01     0.02     0.28     0.68     0.95     1.26                     SV                    107
SQ      0       0      0.0      0.0      0.0      0.0      4.0                     SQ                    104
SE  28.0     29.0     29.5     30.0     30.5    30.75     31.0                     SE                    099
*  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75                                    *                     001
*                                                                                  *                     001
*                                                                                  *                     001
KK    SA2SUB-AREA 2 (LARGE POOL)                                                   KK                    045
BA0.0170                                                                           BA                    008
LS            65                                                                   LS                    056
UD   0.25                                                                          UD                    112
*  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION                               *                     001
*                                                                                  *                     001
KK   COM1                                                                          KK                    045
KMCOMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1                                 KM                    046
HC      2                                                                          HC                    030
*                                                                                  *                     001
KK POOL1                                                                           KK                    045
RS      1    ELEV     24.2                                                         RS                    092
SV      0    0.01     0.02     0.04     0.15     0.25     0.47                     SV                    107
SQ      0       0      1.1      4.5      9.3     14.7     24.8                     SQ                    104
SE  24.2     25.1     25.5     26.0     26.5     27.0       28                     SE                    099
*  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)                         *                     001
*  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND           *                     001
*                                                                                  *                     001
KK    SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)                            KK                    045
BA0.0121                                                                           BA                    008
LS            90                                                                   LS                    056
UD   0.20                                                                          UD                    112
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```
*  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM                *  001
*  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK  COM2                                                                       KK  045
KMCOMBINE HYDROGRAPHS TO ESTIMATE DISCHARGE FROM 30" DRAIN TO POND             KM  046
HC     2                                                                       HC  030
*                                                                              *  001
KK   SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)                              KK  045
BA0.0030                                                                       BA  008
LS            91                                                               LS  056
UD  0.15                                                                       UD  112
*  DISCONNECTED DRAINAGE AREA DRAINING VIA SHEET FLOW TO POND                  *  001
*  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK   COM                                                                       KK  045
KMCOMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND                      KM  046
HC     2                                                                       HC  030
*                                                                              *  001
ZZ                                                                             ZZ  127
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ID          MILLSTONE POWER PLANT                                                            ID              036
ID          WATERFORD, CT                                                                    ID              036
ID          GZA JOB #42898.00                                                                ID              036
ID          10-YEAR EXISTING CONDITION ANALYSIS                                              ID              036
ID                                                                                           ID              036
ID          □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□                ID              036
*                                                                                            *               001
IT      6 01JAN99        0          02JAN99    0400                                          IT              040
IO      0                                                                                    IO              039
IN      6 01JAN99        0                                                                   IN              038
*                                                                                            *               001
KK    SA1SUB-AREA 1 (LARGE POOL)                                                             KK              045
*  NORTHERN PORTION OF DRAINAGE AREA, DRAINS TO CULVERT                                      *               001
BA0.0046                                                                                     BA              008
*                                                                                            *               001
PB    5.0                                                                                    PB              069
PC0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900PC                           070
PC0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900PC                           070
PC0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961PC                           070
PC0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171PC                           070
PC0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531PC                           070
PC0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041PC                           070
PC0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843PC                           070
PC0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143PC                           070
PC0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206PC                           070
PC0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416PC                           070
PC0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282PC                           070
PC0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600PC                           070
PC0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224PC                           070
PC0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598PC                           070
PC0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044PC                           070
PC0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334PC                           070
PC0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738PC                           070
PC0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638PC                           070
PC0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179PC                           070
PC0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569PC                           070
PC0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824PC                           070
PC0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967PC                           070
PC0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997PC                           070
PC0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914PC                           070
PC1.0000 1.00000 1.00000 1.00000 1.00000                                         PC                          070
*                                                                                *                           001
LS           75                                                                  LS                          056
UD  0.51                                                                         UD                          112
*  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION                               *                           001
*                                                                                *                           001
KK SPOOL                                                                         KK                          045
RS      1     ELEV     28.0                                                      RS                          092
SV      0     0.01     0.02     0.28     0.68     0.95     1.26                  SV                          107
SQ      0        0      0.0      0.0      0.0      0.0      4.0                  SQ                          104
SE   28.0     29.0     29.5     30.0     30.5    30.75     31.0                  SE                          099
*  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75                                  *                           001
*                                                                                *                           001
*                                                                                *                           001
KK    SA2SUB-AREA 2 (LARGE POOL)                                                 KK                          045
BA0.0170                                                                         BA                          008
LS           65                                                                  LS                          056
UD  0.25                                                                         UD                          112
*  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION                             *                           001
*                                                                                *                           001
KK  COM1                                                                         KK                          045
KMCOMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1                               KM                          046
HC      2                                                                        HC                          030
*                                                                                *                           001
KK POOL1                                                                         KK                          045
RS      1     ELEV     24.2                                                      RS                          092
SV      0     0.01     0.02     0.04     0.15     0.25     0.47                  SV                          107
SQ      0        0      1.1      4.5      9.3     14.7     24.8                  SQ                          104
SE   24.2     25.1     25.5     26.0     26.5     27.0       28                  SE                          099
*  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)                       *                           001
*  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND         *                           001
*                                                                                *                           001
KK    SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)                          KK                          045
BA0.0121                                                                         BA                          008
LS           90                                                                  LS                          056
UD  0.20                                                                         UD                          112
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*  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM                *  001
*  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK  COM2                                                                       KK  045
KMCOMBINE HYDROGRAPHS TO ESTIMATE DISCHARGE FROM 30" DRAIN TO POND             KM  046
HC     2                                                                       HC  030
*                                                                              *  001
KK   SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)                              KK  045
BA0.0030                                                                       BA  008
LS           91                                                                LS  056
UD  0.15                                                                       UD  112
*  DISCONNECTED DRAINAGE AREA DRAINING VIA SHEET FLOW TO POND                  *  001
*  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK   COM                                                                       KK  045
KMCOMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND                      KM  046
HC     2                                                                       HC  030
*                                                                              *  001
ZZ                                                                             ZZ  127
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ID          MILLSTONE POWER PLANT                                                          ID          036
ID          WATERFORD, CT                                                                  ID          036
ID          GZA JOB #42898.00                                                              ID          036
ID          25-YEAR EXISTING CONDITION ANALYSIS                                            ID          036
ID                                                                                         ID          036
ID          □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□      ID          036
*                                                                                          *           001
IT     6 01JAN99       0          02JAN99    0400                                          IT          040
IO     0                                                                                   IO          039
IN     6 01JAN99       0                                                                   IN          038
*                                                                                          *           001
KK   SA1SUB-AREA 1 (LARGE POOL)                                                            KK          045
*  NORTHERN PORTION OF DRAINAGE AREA, DRAINS TO CULVERT                                    *           001
BA0.0046                                                                                   BA          008
*                                                                                          *           001
PB   5.7                                                                                   PB          069
PC0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900PC                     070
PC0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900PC                     070
PC0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961PC                     070
PC0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171PC                     070
PC0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531PC                     070
PC0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041PC                     070
PC0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843PC                     070
PC0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143PC                     070
PC0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206PC                     070
PC0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416PC                     070
PC0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282PC                     070
PC0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600PC                     070
PC0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224PC                     070
PC0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598PC                     070
PC0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044PC                     070
PC0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334PC                     070
PC0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738PC                     070
PC0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638PC                     070
PC0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179PC                     070
PC0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569PC                     070
PC0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824PC                     070
PC0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967PC                     070
PC0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997PC                     070
PC0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914PC                     070
PC1.0000 1.00000 1.00000 1.00000 1.00000                                           PC          070
*                                                                                          *           001
LS             75                                                                          LS          056
UD  0.51                                                                                   UD          112
*  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION                                         *           001
*                                                                                          *           001
KK SPOOL                                                                                   KK          045
RS     1    ELEV    28.0                                                                   RS          092
SV     0    0.01    0.02    0.28    0.68    0.95    1.26                                   SV          107
SQ     0      0     0.0     0.0     0.0     0.0     4.0                                    SQ          104
SE  28.0    29.0    29.5    30.0    30.5   30.75    31.0                                   SE          099
*  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75                                            *           001
*                                                                                          *           001
*                                                                                          *           001
KK   SA2SUB-AREA 2 (LARGE POOL)                                                            KK          045
BA0.0170                                                                                   BA          008
LS             65                                                                          LS          056
UD  0.25                                                                                   UD          112
*  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION                                       *           001
*                                                                                          *           001
KK  COM1                                                                                   KK          045
KMCOMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1                                         KM          046
HC     2                                                                                   HC          030
*                                                                                          *           001
KK POOL1                                                                                   KK          045
RS     1    ELEV    24.2                                                                   RS          092
SV     0    0.01    0.02    0.04    0.15    0.25    0.47                                   SV          107
SQ     0      0      1.1     4.5     9.3    14.7    24.8                                   SQ          104
SE  24.2    25.1    25.5    26.0    26.5    27.0     28                                    SE          099
*  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)                                 *           001
*  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND                   *           001
*                                                                                          *           001
KK   SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)                                     KK          045
BA0.0121                                                                                   BA          008
LS             90                                                                          LS          056
UD  0.20                                                                                   UD          112
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*  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM                *  001
*  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK  COM2                                                                       KK 045
KMCOMBINE HYDROGRAPHS TO ESTIMATE DISCHARGE FROM 30" DRAIN TO POND             KM 046
HC     2                                                                       HC 030
*                                                                              *  001
KK   SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)                              KK 045
BA0.0030                                                                       BA 008
LS           91                                                                LS 056
UD  0.15                                                                       UD 112
*  DISCONNECTED DRAINAGE AREA DRAINING VIA SHEET FLOW TO POND                  *  001
*  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK   COM                                                                       KK 045
KMCOMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND                      KM 046
HC     2                                                                       HC 030
*                                                                              *  001
ZZ                                                                             ZZ 127
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ID          MILLSTONE POWER PLANT                                                       ID          036
ID          WATERFORD, CT                                                               ID          036
ID          GZA JOB #42898.00                                                           ID          036
ID          100-YEAR EXISTING CONDITION ANALYSIS                                        ID          036
ID                                                                                      ID          036
ID          □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□    ID          036
*                                                                                       *           001
IT     6 01JAN99       0          02JAN99    0400                                       IT          040
IO     0                                                                                IO          039
IN     6 01JAN99       0                                                                IN          038
*                                                                                       *           001
KK   SA1SUB-AREA 1 (LARGE POOL)                                                         KK          045
*  NORTHERN PORTION OF DRAINAGE AREA, DRAINS TO CULVERT                                 *           001
BA0.0046                                                                                BA          008
*                                                                                       *           001
PB   7.1                                                                                PB          069
PC0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900PC                  070
PC0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900PC                  070
PC0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961PC                  070
PC0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171PC                  070
PC0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531PC                  070
PC0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041PC                  070
PC0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843PC                  070
PC0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143PC                  070
PC0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206PC                  070
PC0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416PC                  070
PC0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282PC                  070
PC0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600PC                  070
PC0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224PC                  070
PC0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598PC                  070
PC0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044PC                  070
PC0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334PC                  070
PC0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738PC                  070
PC0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638PC                  070
PC0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179PC                  070
PC0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569PC                  070
PC0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824PC                  070
PC0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967PC                  070
PC0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997PC                  070
PC0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914PC                  070
PC1.0000 1.00000 1.00000 1.00000 1.00000                                                PC          070
*                                                                                       *           001
LS            75                                                                        LS          056
UD   0.51                                                                               UD          112
*  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION                                      *           001
*                                                                                       *           001
KK SPOOL                                                                                KK          045
RS      1     ELEV     28.0                                                             RS          092
SV      0     0.01     0.02     0.28     0.68     0.95     1.26                         SV          107
SQ      0        0      0.0      0.0      0.0      0.0      4.0                         SQ          104
SE  28.0     29.0     29.5     30.0     30.5    30.75     31.0                          SE          099
*  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75                                         *           001
*                                                                                       *           001
*                                                                                       *           001
KK   SA2SUB-AREA 2 (LARGE POOL)                                                         KK          045
BA0.0170                                                                                BA          008
LS            65                                                                        LS          056
UD   0.25                                                                               UD          112
*  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION                                    *           001
*                                                                                       *           001
KK  COM1                                                                                KK          045
KMCOMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1                                      KM          046
HC      2                                                                               HC          030
*                                                                                       *           001
KK POOL1                                                                                KK          045
RS      1     ELEV     24.2                                                             RS          092
SV      0     0.01     0.02     0.04     0.15     0.25     0.47                         SV          107
SQ      0        0      1.1      4.5      9.3     14.7     24.8                         SQ          104
SE  24.2     25.1     25.5     26.0     26.5     27.0       28                          SE          099
*  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)                              *           001
*  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND                *           001
*                                                                                       *           001
KK   SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)                                  KK          045
BA0.0121                                                                                BA          008
LS            90                                                                        LS          056
UD   0.20                                                                               UD          112
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*  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM                *  001
*  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK  COM2                                                                       KK 045
KMCOMBINE HYDROGRAPHS TO ESTIMATE DISCHARGE FROM 30" DRAIN TO POND             KM 046
HC     2                                                                       HC 030
*                                                                              *  001
KK   SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)                              KK 045
BA0.0030                                                                       BA 008
LS           91                                                                LS 056
UD  0.15                                                                       UD 112
*  DISCONNECTED DRAINAGE AREA DRAINING VIA SHEET FLOW TO POND                  *  001
*  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK   COM                                                                       KK 045
KMCOMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND                      KM 046
HC     2                                                                       HC 030
*                                                                              *  001
ZZ                                                                             ZZ 127
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*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  04/18/2003  TIME  09:19:28 *
*                                       *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET             *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
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X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX           XXX
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::::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::::
:::                                        :::
:::  Full Microcomputer Implementation     :::
:::                 by                     :::
:::         Haestad Methods, Inc.          :::
:::                                        :::
::::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::::
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37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

    1         ID            MILLSTONE POWER PLANT
    2         ID            WATERFORD, CT
    3         ID            GZA JOB #42898.00
    4         ID            2-YEAR EXISTING CONDITION ANALYSIS
    5         ID
    6         ID            ----------------------------------------------------------------
              *
    7         IT       6 01JAN99       0         02JAN99    0400
    8         IO       0
    9         IN       6 01JAN99       0
              *

   10         KK     SA1SUB-AREA 1 (LARGE POOL)
              *  NORTHERN PORTION OF DRAINAGE AREA, DRAINS TO CULVERT
   11         BA  0.0046
              *
   12         PB     3.4
   13         PC  0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900
   14         PC  0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900
   15         PC  0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961
   16         PC  0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171
   17         PC  0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531
   18         PC  0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041
   19         PC  0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843
   20         PC  0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143
   21         PC  0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206
   22         PC  0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416
   23         PC  0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282
   24         PC  0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600
   25         PC  0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224
   26         PC  0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598
   27         PC  0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044
   28         PC  0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334
   29         PC  0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738
   30         PC  0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638
   31         PC  0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179
   32         PC  0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569
   33         PC  0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824
   34         PC  0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967
   35         PC  0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997
   36         PC  0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914
   37         PC  1.0000 1.00000 1.00000 1.00000 1.00000
              *
   38         LS             75
   39         UD    0.51
              *  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION
              *

   40         KK   SPOOL
   41         RS       1    ELEV    28.0
   42         SV       0    0.01    0.02    0.28    0.68    0.95    1.26
   43         SQ       0       0     0.0     0.0     0.0     0.0     4.0
   44         SE    28.0    29.0    29.5    30.0    30.5   30.75    31.0
              *  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75
              *
              *
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LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  45          KK     SA2SUB-AREA 2 (LARGE POOL)                                    K
  46          BA  0.0170
  47          LS              65
  48          UD    0.25
              *  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION
              *

  49          KK    COM1
  50          KM  COMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1
  51          HC       2
              *

  52          KK   POOL1
  53          RS       1    ELEV    24.2
  54          SV       0    0.01    0.02    0.04    0.15    0.25    0.47
  55          SQ       0       0     1.1     4.5     9.3    14.7    24.8
  56          SE    24.2    25.1    25.5    26.0    26.5    27.0      28
              *  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)
              *  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND
              *

  57          KK     SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)
  58          BA  0.0121
  59          LS              90
  60          UD    0.20
              *  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM
              *  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION
              *

  61          KK    COM2
  62          KM  COMBINE HYDROGRAPHS TO ESTIMATE DISCHARGE FROM 30" DRAIN TO POND
  63          HC       2
              *

  64          KK     SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)
  65          BA  0.0030
  66          LS              91
  67          UD    0.15
              *  DISCONNECTED DRAINAGE AREA DRAINING VIA SHEET FLOW TO POND
              *  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION
              *

  68          KK     COM
  69          KM  COMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND
  70          HC       2
              *
  71          ZZ
```

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****************************************                                         **************************************
*                                      *                                         *                                    *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                         *  U.S. ARMY CORPS OF ENGINEERS      *
*             MAY  1991                *                                         *  HYDROLOGIC ENGINEERING CENTER     *
*           VERSION 4.0.1E             *                                         *       609 SECOND STREET            *
*                                      *                                         *    DAVIS, CALIFORNIA 95616         *
* RUN DATE  04/18/2003  TIME  09:19:28 *                                         *        (916) 756-1104              *
*                                      *                                         *                                    *
****************************************                                         **************************************
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```
                              MILLSTONE POWER PLANT
                              WATERFORD, CT
                              GZA JOB #42898.00
                              2-YEAR EXISTING CONDITION ANALYSIS

  8 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           0  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN           6  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1JAN99  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ         281  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      2JAN99  ENDING DATE
                     NDTIME        0400  ENDING TIME
                      ICENT          19  CENTURY MARK

                COMPUTATION INTERVAL     0.10 HOURS
                     TOTAL TIME BASE    28.00 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 10 KK      *     SA1    *    SUB-AREA 1 (LARGE POOL)
            *            *
            **************

  9 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN           6  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           0  STARTING TIME

             SUBBASIN RUNOFF DATA

 11 BA          SUBBASIN CHARACTERISTICS
                     TAREA        0.00  SUBBASIN AREA

                PRECIPITATION DATA

 12 PB               STORM        3.40  BASIN TOTAL PRECIPITATION

 13 PI            INCREMENTAL PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.03      0.03      0.04      0.08
                   0.08      0.04      0.03      0.03      0.02      0.01      0.01      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

 38 LS          SCS LOSS RATE
                     STRTL        0.67  INITIAL ABSTRACTION
                    CRVNBR       75.00  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA
```

39 UD SCS DIMENSIONLESS UNITGRAPH
TLAG 0.51 LAG

***

UNIT HYDROGRAPH
27 END-OF-PERIOD ORDINATES

0.	1.	2.	3.	4.	4.	4.	3.	2.	2.
1.	1.	1.	1.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.			

HYDROGRAPH AT STATION SA1

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0000	1	0.00	0.00	0.00	0.	1 JAN 1406	142	0.02	0.01	0.01	0.
1 JAN 0006	2	0.00	0.00	0.00	0.	1 JAN 1412	143	0.02	0.01	0.01	0.
1 JAN 0012	3	0.00	0.00	0.00	0.	1 JAN 1418	144	0.02	0.01	0.01	0.
1 JAN 0018	4	0.00	0.00	0.00	0.	1 JAN 1424	145	0.02	0.01	0.01	0.
1 JAN 0024	5	0.00	0.00	0.00	0.	1 JAN 1430	146	0.01	0.01	0.01	0.
1 JAN 0030	6	0.00	0.00	0.00	0.	1 JAN 1436	147	0.01	0.01	0.01	0.
1 JAN 0036	7	0.00	0.00	0.00	0.	1 JAN 1442	148	0.01	0.01	0.01	0.
1 JAN 0042	8	0.00	0.00	0.00	0.	1 JAN 1448	149	0.01	0.00	0.01	0.
1 JAN 0048	9	0.00	0.00	0.00	0.	1 JAN 1454	150	0.01	0.00	0.01	0.
1 JAN 0054	10	0.00	0.00	0.00	0.	1 JAN 1500	151	0.01	0.00	0.01	0.
1 JAN 0100	11	0.00	0.00	0.00	0.	1 JAN 1506	152	0.01	0.00	0.01	0.
1 JAN 0106	12	0.00	0.00	0.00	0.	1 JAN 1512	153	0.01	0.00	0.01	0.
1 JAN 0112	13	0.00	0.00	0.00	0.	1 JAN 1518	154	0.01	0.00	0.01	0.
1 JAN 0118	14	0.00	0.00	0.00	0.	1 JAN 1524	155	0.01	0.00	0.01	0.
1 JAN 0124	15	0.00	0.00	0.00	0.	1 JAN 1530	156	0.01	0.00	0.01	0.
1 JAN 0130	16	0.00	0.00	0.00	0.	1 JAN 1536	157	0.01	0.00	0.01	0.
1 JAN 0136	17	0.00	0.00	0.00	0.	1 JAN 1542	158	0.01	0.00	0.01	0.
1 JAN 0142	18	0.00	0.00	0.00	0.	1 JAN 1548	159	0.01	0.00	0.01	0.
1 JAN 0148	19	0.00	0.00	0.00	0.	1 JAN 1554	160	0.01	0.00	0.01	0.
1 JAN 0154	20	0.00	0.00	0.00	0.	1 JAN 1600	161	0.01	0.00	0.01	0.
1 JAN 0200	21	0.00	0.00	0.00	0.	1 JAN 1606	162	0.01	0.00	0.01	0.
1 JAN 0206	22	0.00	0.00	0.00	0.	1 JAN 1612	163	0.01	0.00	0.01	0.
1 JAN 0212	23	0.00	0.00	0.00	0.	1 JAN 1618	164	0.01	0.00	0.01	0.
1 JAN 0218	24	0.00	0.00	0.00	0.	1 JAN 1624	165	0.01	0.00	0.01	0.
1 JAN 0224	25	0.00	0.00	0.00	0.	1 JAN 1630	166	0.01	0.00	0.01	0.
1 JAN 0230	26	0.00	0.00	0.00	0.	1 JAN 1636	167	0.01	0.00	0.01	0.
1 JAN 0236	27	0.00	0.00	0.00	0.	1 JAN 1642	168	0.01	0.00	0.01	0.
1 JAN 0242	28	0.00	0.00	0.00	0.	1 JAN 1648	169	0.01	0.00	0.01	0.
1 JAN 0248	29	0.00	0.00	0.00	0.	1 JAN 1654	170	0.01	0.00	0.00	0.
1 JAN 0254	30	0.00	0.00	0.00	0.	1 JAN 1700	171	0.01	0.00	0.00	0.
1 JAN 0300	31	0.00	0.00	0.00	0.	1 JAN 1706	172	0.01	0.00	0.00	0.
1 JAN 0306	32	0.00	0.00	0.00	0.	1 JAN 1712	173	0.01	0.00	0.00	0.
1 JAN 0312	33	0.00	0.00	0.00	0.	1 JAN 1718	174	0.01	0.00	0.00	0.
1 JAN 0318	34	0.00	0.00	0.00	0.	1 JAN 1724	175	0.01	0.00	0.00	0.
1 JAN 0324	35	0.00	0.00	0.00	0.	1 JAN 1730	176	0.01	0.00	0.00	0.
1 JAN 0330	36	0.00	0.00	0.00	0.	1 JAN 1736	177	0.01	0.00	0.00	0.
1 JAN 0336	37	0.00	0.00	0.00	0.	1 JAN 1742	178	0.01	0.00	0.00	0.
1 JAN 0342	38	0.00	0.00	0.00	0.	1 JAN 1748	179	0.01	0.00	0.00	0.
1 JAN 0348	39	0.00	0.00	0.00	0.	1 JAN 1754	180	0.01	0.00	0.00	0.
1 JAN 0354	40	0.00	0.00	0.00	0.	1 JAN 1800	181	0.01	0.00	0.00	0.
1 JAN 0400	41	0.00	0.00	0.00	0.	1 JAN 1806	182	0.01	0.00	0.00	0.
1 JAN 0406	42	0.00	0.00	0.00	0.	1 JAN 1812	183	0.01	0.00	0.00	0.
1 JAN 0412	43	0.00	0.00	0.00	0.	1 JAN 1818	184	0.01	0.00	0.00	0.
1 JAN 0418	44	0.00	0.00	0.00	0.	1 JAN 1824	185	0.01	0.00	0.00	0.
1 JAN 0424	45	0.00	0.00	0.00	0.	1 JAN 1830	186	0.01	0.00	0.00	0.
1 JAN 0430	46	0.00	0.00	0.00	0.	1 JAN 1836	187	0.01	0.00	0.00	0.
1 JAN 0436	47	0.00	0.00	0.00	0.	1 JAN 1842	188	0.01	0.00	0.00	0.
1 JAN 0442	48	0.00	0.00	0.00	0.	1 JAN 1848	189	0.01	0.00	0.00	0.
1 JAN 0448	49	0.00	0.00	0.00	0.	1 JAN 1854	190	0.00	0.00	0.00	0.
1 JAN 0454	50	0.00	0.00	0.00	0.	1 JAN 1900	191	0.01	0.00	0.00	0.
1 JAN 0500	51	0.00	0.00	0.00	0.	1 JAN 1906	192	0.00	0.00	0.00	0.
1 JAN 0506	52	0.01	0.01	0.00	0.	1 JAN 1912	193	0.00	0.00	0.00	0.
1 JAN 0512	53	0.00	0.00	0.00	0.	1 JAN 1918	194	0.00	0.00	0.00	0.
1 JAN 0518	54	0.01	0.01	0.00	0.	1 JAN 1924	195	0.00	0.00	0.00	0.
1 JAN 0524	55	0.01	0.01	0.00	0.	1 JAN 1930	196	0.00	0.00	0.00	0.
1 JAN 0530	56	0.01	0.01	0.00	0.	1 JAN 1936	197	0.00	0.00	0.00	0.
1 JAN 0536	57	0.01	0.01	0.00	0.	1 JAN 1942	198	0.00	0.00	0.00	0.
1 JAN 0542	58	0.01	0.01	0.00	0.	1 JAN 1948	199	0.00	0.00	0.00	0.
1 JAN 0548	59	0.01	0.01	0.00	0.	1 JAN 1954	200	0.00	0.00	0.00	0.
1 JAN 0554	60	0.01	0.01	0.00	0.	1 JAN 2000	201	0.00	0.00	0.00	0.
1 JAN 0600	61	0.01	0.01	0.00	0.	1 JAN 2006	202	0.00	0.00	0.00	0.
1 JAN 0606	62	0.01	0.01	0.00	0.	1 JAN 2012	203	0.00	0.00	0.00	0.
1 JAN 0612	63	0.01	0.01	0.00	0.	1 JAN 2018	204	0.00	0.00	0.00	0.
1 JAN 0618	64	0.01	0.01	0.00	0.	1 JAN 2024	205	0.00	0.00	0.00	0.
1 JAN 0624	65	0.01	0.01	0.00	0.	1 JAN 2030	206	0.00	0.00	0.00	0.
1 JAN 0630	66	0.01	0.01	0.00	0.	1 JAN 2036	207	0.00	0.00	0.00	0.
1 JAN 0636	67	0.01	0.01	0.00	0.	1 JAN 2042	208	0.00	0.00	0.00	0.
1 JAN 0642	68	0.01	0.01	0.00	0.	1 JAN 2048	209	0.00	0.00	0.00	0.
1 JAN 0648	69	0.01	0.01	0.00	0.	1 JAN 2054	210	0.00	0.00	0.00	0.
1 JAN 0654	70	0.01	0.01	0.00	0.	1 JAN 2100	211	0.00	0.00	0.00	0.
1 JAN 0700	71	0.01	0.01	0.00	0.	1 JAN 2106	212	0.00	0.00	0.00	0.
1 JAN 0706	72	0.01	0.01	0.00	0.	1 JAN 2112	213	0.00	0.00	0.00	0.
1 JAN 0712	73	0.01	0.01	0.00	0.	1 JAN 2118	214	0.00	0.00	0.00	0.
1 JAN 0718	74	0.01	0.01	0.00	0.	1 JAN 2124	215	0.00	0.00	0.00	0.
1 JAN 0724	75	0.01	0.01	0.00	0.	1 JAN 2130	216	0.00	0.00	0.00	0.
1 JAN 0730	76	0.01	0.01	0.00	0.	1 JAN 2136	217	0.00	0.00	0.00	0.
1 JAN 0736	77	0.01	0.01	0.00	0.	1 JAN 2142	218	0.00	0.00	0.00	0.
1 JAN 0742	78	0.01	0.01	0.00	0.	1 JAN 2148	219	0.00	0.00	0.00	0.
1 JAN 0748	79	0.01	0.01	0.00	0.	1 JAN 2154	220	0.00	0.00	0.00	0.
1 JAN 0754	80	0.01	0.01	0.00	0.	1 JAN 2200	221	0.00	0.00	0.00	0.
1 JAN 0800	81	0.01	0.01	0.00	0.	1 JAN 2206	222	0.00	0.00	0.00	0.
1 JAN 0806	82	0.01	0.01	0.00	0.	1 JAN 2212	223	0.00	0.00	0.00	0.
1 JAN 0812	83	0.01	0.01	0.00	0.	1 JAN 2218	224	0.00	0.00	0.00	0.
1 JAN 0818	84	0.01	0.01	0.00	0.	1 JAN 2224	225	0.00	0.00	0.00	0.
1 JAN 0824	85	0.01	0.01	0.00	0.	1 JAN 2230	226	0.00	0.00	0.00	0.

1 JAN 0830	86	0.01	0.01	0.00	0.	*	1 JAN 2236	227	0.00	0.00	0.00	0.
1 JAN 0836	87	0.01	0.01	0.00	0.	*	1 JAN 2242	228	0.00	0.00	0.00	0.
1 JAN 0842	88	0.01	0.01	0.00	0.	*	1 JAN 2248	229	0.00	0.00	0.00	0.
1 JAN 0848	89	0.01	0.01	0.00	0.	*	1 JAN 2254	230	0.00	0.00	0.00	0.
1 JAN 0854	90	0.01	0.01	0.00	0.	*	1 JAN 2300	231	0.00	0.00	0.00	0.
1 JAN 0900	91	0.01	0.01	0.00	0.	*	1 JAN 2306	232	0.00	0.00	0.00	0.
1 JAN 0906	92	0.00	0.00	0.00	0.	*	1 JAN 2312	233	0.00	0.00	0.00	0.
1 JAN 0912	93	0.03	0.03	0.00	0.	*	1 JAN 2318	234	0.00	0.00	0.00	0.
1 JAN 0918	94	0.01	0.01	0.00	0.	*	1 JAN 2324	235	0.00	0.00	0.00	0.
1 JAN 0924	95	0.01	0.01	0.00	0.	*	1 JAN 2330	236	0.00	0.00	0.00	0.
1 JAN 0930	96	0.01	0.01	0.00	0.	*	1 JAN 2336	237	0.00	0.00	0.00	0.
1 JAN 0936	97	0.01	0.01	0.00	0.	*	1 JAN 2342	238	0.00	0.00	0.00	0.
1 JAN 0942	98	0.02	0.02	0.00	0.	*	1 JAN 2348	239	0.00	0.00	0.00	0.
1 JAN 0948	99	0.02	0.02	0.00	0.	*	1 JAN 2354	240	0.00	0.00	0.00	0.
1 JAN 0954	100	0.02	0.02	0.00	0.	*	2 JAN 0000	241	0.00	0.00	0.00	0.
1 JAN 1000	101	0.02	0.02	0.00	0.	*	2 JAN 0006	242	0.00	0.00	0.00	0.
1 JAN 1006	102	0.02	0.02	0.00	0.	*	2 JAN 0012	243	0.00	0.00	0.00	0.
1 JAN 1012	103	0.02	0.02	0.00	0.	*	2 JAN 0018	244	0.00	0.00	0.00	0.
1 JAN 1018	104	0.02	0.02	0.00	0.	*	2 JAN 0024	245	0.00	0.00	0.00	0.
1 JAN 1024	105	0.02	0.02	0.00	0.	*	2 JAN 0030	246	0.00	0.00	0.00	0.
1 JAN 1030	106	0.02	0.02	0.00	0.	*	2 JAN 0036	247	0.00	0.00	0.00	0.
1 JAN 1036	107	0.02	0.02	0.00	0.	*	2 JAN 0042	248	0.00	0.00	0.00	0.
1 JAN 1042	108	0.02	0.02	0.00	0.	*	2 JAN 0048	249	0.00	0.00	0.00	0.
1 JAN 1048	109	0.02	0.02	0.00	0.	*	2 JAN 0054	250	0.00	0.00	0.00	0.
1 JAN 1054	110	0.02	0.02	0.00	0.	*	2 JAN 0100	251	0.00	0.00	0.00	0.
1 JAN 1100	111	0.02	0.02	0.00	0.	*	2 JAN 0106	252	0.00	0.00	0.00	0.
1 JAN 1106	112	0.03	0.02	0.00	0.	*	2 JAN 0112	253	0.00	0.00	0.00	0.
1 JAN 1112	113	0.03	0.03	0.00	0.	*	2 JAN 0118	254	0.00	0.00	0.00	0.
1 JAN 1118	114	0.03	0.03	0.00	0.	*	2 JAN 0124	255	0.00	0.00	0.00	0.
1 JAN 1124	115	0.04	0.03	0.01	0.	*	2 JAN 0130	256	0.00	0.00	0.00	0.
1 JAN 1130	116	0.04	0.03	0.01	0.	*	2 JAN 0136	257	0.00	0.00	0.00	0.
1 JAN 1136	117	0.06	0.04	0.01	0.	*	2 JAN 0142	258	0.00	0.00	0.00	0.
1 JAN 1142	118	0.09	0.07	0.02	0.	*	2 JAN 0148	259	0.00	0.00	0.00	0.
1 JAN 1148	119	0.12	0.09	0.03	0.	*	2 JAN 0154	260	0.00	0.00	0.00	0.
1 JAN 1154	120	0.15	0.10	0.04	0.	*	2 JAN 0200	261	0.00	0.00	0.00	0.
1 JAN 1200	121	0.29	0.18	0.11	0.	*	2 JAN 0206	262	0.00	0.00	0.00	0.
1 JAN 1206	122	0.29	0.16	0.13	1.	*	2 JAN 0212	263	0.00	0.00	0.00	0.
1 JAN 1212	123	0.15	0.07	0.07	1.	*	2 JAN 0218	264	0.00	0.00	0.00	0.
1 JAN 1218	124	0.12	0.05	0.06	1.	*	2 JAN 0224	265	0.00	0.00	0.00	0.
1 JAN 1224	125	0.09	0.04	0.05	1.	*	2 JAN 0230	266	0.00	0.00	0.00	0.
1 JAN 1230	126	0.06	0.02	0.03	2.	*	2 JAN 0236	267	0.00	0.00	0.00	0.
1 JAN 1236	127	0.04	0.02	0.02	2.	*	2 JAN 0242	268	0.00	0.00	0.00	0.
1 JAN 1242	128	0.04	0.02	0.02	2.	*	2 JAN 0248	269	0.00	0.00	0.00	0.
1 JAN 1248	129	0.03	0.01	0.02	2.	*	2 JAN 0254	270	0.00	0.00	0.00	0.
1 JAN 1254	130	0.03	0.01	0.02	1.	*	2 JAN 0300	271	0.00	0.00	0.00	0.
1 JAN 1300	131	0.03	0.01	0.02	1.	*	2 JAN 0306	272	0.00	0.00	0.00	0.
1 JAN 1306	132	0.02	0.01	0.01	1.	*	2 JAN 0312	273	0.00	0.00	0.00	0.
1 JAN 1312	133	0.02	0.01	0.01	1.	*	2 JAN 0318	274	0.00	0.00	0.00	0.
1 JAN 1318	134	0.02	0.01	0.01	1.	*	2 JAN 0324	275	0.00	0.00	0.00	0.
1 JAN 1324	135	0.02	0.01	0.01	1.	*	2 JAN 0330	276	0.00	0.00	0.00	0.
1 JAN 1330	136	0.02	0.01	0.01	1.	*	2 JAN 0336	277	0.00	0.00	0.00	0.
1 JAN 1336	137	0.02	0.01	0.01	1.	*	2 JAN 0342	278	0.00	0.00	0.00	0.
1 JAN 1342	138	0.02	0.01	0.01	1.	*	2 JAN 0348	279	0.00	0.00	0.00	0.
1 JAN 1348	139	0.02	0.01	0.01	1.	*	2 JAN 0354	280	0.00	0.00	0.00	0.
1 JAN 1354	140	0.02	0.01	0.01	0.	*	2 JAN 0400	281	0.00	0.00	0.00	0.
1 JAN 1400	141	0.02	0.01	0.01	0.	*						
						*						

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TOTAL RAINFALL = 3.40, TOTAL LOSS = 2.17, TOTAL EXCESS = 1.23

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)
	(CFS)	2.	12.60		0.	0.	0. 0.
	(INCHES)	1.009	1.232	1.232	1.232		
	(AC-FT)	0.	0.	0.	0.		

CUMULATIVE AREA = 0.00 SQ MI

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          *           *
40 KK     *   SPOOL   *
          *           *
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HYDROGRAPH ROUTING DATA

41 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	ELEV	TYPE OF INITIAL CONDITION
RSVRIC	28.00	INITIAL CONDITION
X	0.00	WORKING R AND D COEFFICIENT

42 SV	STORAGE	0.0	0.0	0.0	0.3	0.7	0.9	1.3
43 SQ	DISCHARGE	0.	0.	0.	0.	0.	0.	4.
44 SE	ELEVATION	28.00	29.00	29.50	30.00	30.50	30.75	31.00

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HYDROGRAPH AT STATION SPOOL

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DA MON HRMN ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN ORD	OUTFLOW	STORAGE	STAGE

1 JAN 0000	1	0.	0.0	28.0	*	1 JAN 0924	95	0.	0.0	28.0	*	1 JAN 1848	189	0.	0.3	30.0
1 JAN 0006	2	0.	0.0	28.0	*	1 JAN 0930	96	0.	0.0	28.0	*	1 JAN 1854	190	0.	0.3	30.0
1 JAN 0012	3	0.	0.0	28.0	*	1 JAN 0936	97	0.	0.0	28.0	*	1 JAN 1900	191	0.	0.3	30.0
1 JAN 0018	4	0.	0.0	28.0	*	1 JAN 0942	98	0.	0.0	28.0	*	1 JAN 1906	192	0.	0.3	30.0
1 JAN 0024	5	0.	0.0	28.0	*	1 JAN 0948	99	0.	0.0	28.0	*	1 JAN 1912	193	0.	0.3	30.0
1 JAN 0030	6	0.	0.0	28.0	*	1 JAN 0954	100	0.	0.0	28.0	*	1 JAN 1918	194	0.	0.3	30.0
1 JAN 0036	7	0.	0.0	28.0	*	1 JAN 1000	101	0.	0.0	28.0	*	1 JAN 1924	195	0.	0.3	30.0
1 JAN 0042	8	0.	0.0	28.0	*	1 JAN 1006	102	0.	0.0	28.0	*	1 JAN 1930	196	0.	0.3	30.0
1 JAN 0048	9	0.	0.0	28.0	*	1 JAN 1012	103	0.	0.0	28.0	*	1 JAN 1936	197	0.	0.3	30.0
1 JAN 0054	10	0.	0.0	28.0	*	1 JAN 1018	104	0.	0.0	28.0	*	1 JAN 1942	198	0.	0.3	30.0
1 JAN 0100	11	0.	0.0	28.0	*	1 JAN 1024	105	0.	0.0	28.0	*	1 JAN 1948	199	0.	0.3	30.0
1 JAN 0106	12	0.	0.0	28.0	*	1 JAN 1030	106	0.	0.0	28.0	*	1 JAN 1954	200	0.	0.3	30.0
1 JAN 0112	13	0.	0.0	28.0	*	1 JAN 1036	107	0.	0.0	28.0	*	1 JAN 2000	201	0.	0.3	30.0
1 JAN 0118	14	0.	0.0	28.0	*	1 JAN 1042	108	0.	0.0	28.0	*	1 JAN 2006	202	0.	0.3	30.0
1 JAN 0124	15	0.	0.0	28.0	*	1 JAN 1048	109	0.	0.0	28.0	*	1 JAN 2012	203	0.	0.3	30.0
1 JAN 0130	16	0.	0.0	28.0	*	1 JAN 1054	110	0.	0.0	28.0	*	1 JAN 2018	204	0.	0.3	30.0
1 JAN 0136	17	0.	0.0	28.0	*	1 JAN 1100	111	0.	0.0	28.0	*	1 JAN 2024	205	0.	0.3	30.0
1 JAN 0142	18	0.	0.0	28.0	*	1 JAN 1106	112	0.	0.0	28.1	*	1 JAN 2030	206	0.	0.3	30.0
1 JAN 0148	19	0.	0.0	28.0	*	1 JAN 1112	113	0.	0.0	28.1	*	1 JAN 2036	207	0.	0.3	30.0
1 JAN 0154	20	0.	0.0	28.0	*	1 JAN 1118	114	0.	0.0	28.1	*	1 JAN 2042	208	0.	0.3	30.0
1 JAN 0200	21	0.	0.0	28.0	*	1 JAN 1124	115	0.	0.0	28.2	*	1 JAN 2048	209	0.	0.3	30.0
1 JAN 0206	22	0.	0.0	28.0	*	1 JAN 1130	116	0.	0.0	28.2	*	1 JAN 2054	210	0.	0.3	30.0
1 JAN 0212	23	0.	0.0	28.0	*	1 JAN 1136	117	0.	0.0	28.3	*	1 JAN 2100	211	0.	0.3	30.0
1 JAN 0218	24	0.	0.0	28.0	*	1 JAN 1142	118	0.	0.0	28.3	*	1 JAN 2106	212	0.	0.3	30.0
1 JAN 0224	25	0.	0.0	28.0	*	1 JAN 1148	119	0.	0.0	28.4	*	1 JAN 2112	213	0.	0.3	30.0
1 JAN 0230	26	0.	0.0	28.0	*	1 JAN 1154	120	0.	0.0	28.6	*	1 JAN 2118	214	0.	0.3	30.0
1 JAN 0236	27	0.	0.0	28.0	*	1 JAN 1200	121	0.	0.0	28.8	*	1 JAN 2124	215	0.	0.3	30.0
1 JAN 0242	28	0.	0.0	28.0	*	1 JAN 1206	122	0.	0.0	29.1	*	1 JAN 2130	216	0.	0.3	30.0
1 JAN 0248	29	0.	0.0	28.0	*	1 JAN 1212	123	0.	0.0	29.4	*	1 JAN 2136	217	0.	0.3	30.0
1 JAN 0254	30	0.	0.0	28.0	*	1 JAN 1218	124	0.	0.0	29.5	*	1 JAN 2142	218	0.	0.3	30.0
1 JAN 0300	31	0.	0.0	28.0	*	1 JAN 1224	125	0.	0.0	29.5	*	1 JAN 2148	219	0.	0.3	30.0
1 JAN 0306	32	0.	0.0	28.0	*	1 JAN 1230	126	0.	0.0	29.6	*	1 JAN 2154	220	0.	0.3	30.0
1 JAN 0312	33	0.	0.0	28.0	*	1 JAN 1236	127	0.	0.1	29.6	*	1 JAN 2200	221	0.	0.3	30.0
1 JAN 0318	34	0.	0.0	28.0	*	1 JAN 1242	128	0.	0.1	29.6	*	1 JAN 2206	222	0.	0.3	30.0
1 JAN 0324	35	0.	0.0	28.0	*	1 JAN 1248	129	0.	0.1	29.6	*	1 JAN 2212	223	0.	0.3	30.0
1 JAN 0330	36	0.	0.0	28.0	*	1 JAN 1254	130	0.	0.1	29.7	*	1 JAN 2218	224	0.	0.3	30.0
1 JAN 0336	37	0.	0.0	28.0	*	1 JAN 1300	131	0.	0.1	29.7	*	1 JAN 2224	225	0.	0.3	30.0
1 JAN 0342	38	0.	0.0	28.0	*	1 JAN 1306	132	0.	0.1	29.7	*	1 JAN 2230	226	0.	0.3	30.0
1 JAN 0348	39	0.	0.0	28.0	*	1 JAN 1312	133	0.	0.1	29.7	*	1 JAN 2236	227	0.	0.3	30.0
1 JAN 0354	40	0.	0.0	28.0	*	1 JAN 1318	134	0.	0.1	29.7	*	1 JAN 2242	228	0.	0.3	30.0
1 JAN 0400	41	0.	0.0	28.0	*	1 JAN 1324	135	0.	0.1	29.7	*	1 JAN 2248	229	0.	0.3	30.0
1 JAN 0406	42	0.	0.0	28.0	*	1 JAN 1330	136	0.	0.2	29.8	*	1 JAN 2254	230	0.	0.3	30.0
1 JAN 0412	43	0.	0.0	28.0	*	1 JAN 1336	137	0.	0.2	29.8	*	1 JAN 2300	231	0.	0.3	30.0
1 JAN 0418	44	0.	0.0	28.0	*	1 JAN 1342	138	0.	0.2	29.8	*	1 JAN 2306	232	0.	0.3	30.0
1 JAN 0424	45	0.	0.0	28.0	*	1 JAN 1348	139	0.	0.2	29.8	*	1 JAN 2312	233	0.	0.3	30.0
1 JAN 0430	46	0.	0.0	28.0	*	1 JAN 1354	140	0.	0.2	29.8	*	1 JAN 2318	234	0.	0.3	30.0
1 JAN 0436	47	0.	0.0	28.0	*	1 JAN 1400	141	0.	0.2	29.8	*	1 JAN 2324	235	0.	0.3	30.0
1 JAN 0442	48	0.	0.0	28.0	*	1 JAN 1406	142	0.	0.2	29.8	*	1 JAN 2330	236	0.	0.3	30.0
1 JAN 0448	49	0.	0.0	28.0	*	1 JAN 1412	143	0.	0.2	29.8	*	1 JAN 2336	237	0.	0.3	30.0
1 JAN 0454	50	0.	0.0	28.0	*	1 JAN 1418	144	0.	0.2	29.8	*	1 JAN 2342	238	0.	0.3	30.0
1 JAN 0500	51	0.	0.0	28.0	*	1 JAN 1424	145	0.	0.2	29.8	*	1 JAN 2348	239	0.	0.3	30.0
1 JAN 0506	52	0.	0.0	28.0	*	1 JAN 1430	146	0.	0.2	29.8	*	1 JAN 2354	240	0.	0.3	30.0
1 JAN 0512	53	0.	0.0	28.0	*	1 JAN 1436	147	0.	0.2	29.8	*	2 JAN 0000	241	0.	0.3	30.0
1 JAN 0518	54	0.	0.0	28.0	*	1 JAN 1442	148	0.	0.2	29.8	*	2 JAN 0006	242	0.	0.3	30.0
1 JAN 0524	55	0.	0.0	28.0	*	1 JAN 1448	149	0.	0.2	29.8	*	2 JAN 0012	243	0.	0.3	30.0
1 JAN 0530	56	0.	0.0	28.0	*	1 JAN 1454	150	0.	0.2	29.9	*	2 JAN 0018	244	0.	0.3	30.0
1 JAN 0536	57	0.	0.0	28.0	*	1 JAN 1500	151	0.	0.2	29.9	*	2 JAN 0024	245	0.	0.3	30.0
1 JAN 0542	58	0.	0.0	28.0	*	1 JAN 1506	152	0.	0.2	29.9	*	2 JAN 0030	246	0.	0.3	30.0
1 JAN 0548	59	0.	0.0	28.0	*	1 JAN 1512	153	0.	0.2	29.9	*	2 JAN 0036	247	0.	0.3	30.0
1 JAN 0554	60	0.	0.0	28.0	*	1 JAN 1518	154	0.	0.2	29.9	*	2 JAN 0042	248	0.	0.3	30.0
1 JAN 0600	61	0.	0.0	28.0	*	1 JAN 1524	155	0.	0.2	29.9	*	2 JAN 0048	249	0.	0.3	30.0
1 JAN 0606	62	0.	0.0	28.0	*	1 JAN 1530	156	0.	0.2	29.9	*	2 JAN 0054	250	0.	0.3	30.0
1 JAN 0612	63	0.	0.0	28.0	*	1 JAN 1536	157	0.	0.2	29.9	*	2 JAN 0100	251	0.	0.3	30.0
1 JAN 0618	64	0.	0.0	28.0	*	1 JAN 1542	158	0.	0.2	29.9	*	2 JAN 0106	252	0.	0.3	30.0
1 JAN 0624	65	0.	0.0	28.0	*	1 JAN 1548	159	0.	0.2	29.9	*	2 JAN 0112	253	0.	0.3	30.0
1 JAN 0630	66	0.	0.0	28.0	*	1 JAN 1554	160	0.	0.2	29.9	*	2 JAN 0118	254	0.	0.3	30.0
1 JAN 0636	67	0.	0.0	28.0	*	1 JAN 1600	161	0.	0.2	29.9	*	2 JAN 0124	255	0.	0.3	30.0
1 JAN 0642	68	0.	0.0	28.0	*	1 JAN 1606	162	0.	0.2	29.9	*	2 JAN 0130	256	0.	0.3	30.0
1 JAN 0648	69	0.	0.0	28.0	*	1 JAN 1612	163	0.	0.2	29.9	*	2 JAN 0136	257	0.	0.3	30.0
1 JAN 0654	70	0.	0.0	28.0	*	1 JAN 1618	164	0.	0.2	29.9	*	2 JAN 0142	258	0.	0.3	30.0
1 JAN 0700	71	0.	0.0	28.0	*	1 JAN 1624	165	0.	0.2	29.9	*	2 JAN 0148	259	0.	0.3	30.0
1 JAN 0706	72	0.	0.0	28.0	*	1 JAN 1630	166	0.	0.2	29.9	*	2 JAN 0154	260	0.	0.3	30.0
1 JAN 0712	73	0.	0.0	28.0	*	1 JAN 1636	167	0.	0.2	29.9	*	2 JAN 0200	261	0.	0.3	30.0
1 JAN 0718	74	0.	0.0	28.0	*	1 JAN 1642	168	0.	0.2	29.9	*	2 JAN 0206	262	0.	0.3	30.0
1 JAN 0724	75	0.	0.0	28.0	*	1 JAN 1648	169	0.	0.2	29.9	*	2 JAN 0212	263	0.	0.3	30.0
1 JAN 0730	76	0.	0.0	28.0	*	1 JAN 1654	170	0.	0.2	29.9	*	2 JAN 0218	264	0.	0.3	30.0
1 JAN 0736	77	0.	0.0	28.0	*	1 JAN 1700	171	0.	0.2	29.9	*	2 JAN 0224	265	0.	0.3	30.0
1 JAN 0742	78	0.	0.0	28.0	*	1 JAN 1706	172	0.	0.2	29.9	*	2 JAN 0230	266	0.	0.3	30.0
1 JAN 0748	79	0.	0.0	28.0	*	1 JAN 1712	173	0.	0.2	29.9	*	2 JAN 0236	267	0.	0.3	30.0
1 JAN 0754	80	0.	0.0	28.0	*	1 JAN 1718	174	0.	0.2	29.9	*	2 JAN 0242	268	0.	0.3	30.0
1 JAN 0800	81	0.	0.0	28.0	*	1 JAN 1724	175	0.	0.2	29.9	*	2 JAN 0248	269	0.	0.3	30.0
1 JAN 0806	82	0.	0.0	28.0	*	1 JAN 1730	176	0.	0.2	29.9	*	2 JAN 0254	270	0.	0.3	30.0
1 JAN 0812	83	0.	0.0	28.0	*	1 JAN 1736	177	0.	0.2	29.9	*	2 JAN 0300	271	0.	0.3	30.0
1 JAN 0818	84	0.	0.0	28.0	*	1 JAN 1742	178	0.	0.3	29.9	*	2 JAN 0306	272	0.	0.3	30.0
1 JAN 0824	85	0.	0.0	28.0	*	1 JAN 1748	179	0.	0.3	29.9	*	2 JAN 0312	273	0.	0.3	30.0
1 JAN 0830	86	0.	0.0	28.0	*	1 JAN 1754	180	0.	0.3	29.9	*	2 JAN 0318	274	0.	0.3	30.0
1 JAN 0836	87	0.	0.0	28.0	*	1 JAN 1800	181	0.	0.3	30.0	*	2 JAN 0324	275	0.	0.3	30.0
1 JAN 0842	88	0.	0.0	28.0	*	1 JAN 1806	182	0.	0.3	30.0	*	2 JAN 0330	276	0.	0.3	30.0
1 JAN 0848	89	0.	0.0	28.0	*	1 JAN 1812	183	0.	0.3	30.0	*	2 JAN 0336	277	0.	0.3	30.0
1 JAN 0854	90	0.	0.0	28.0	*	1 JAN 1818	184	0.	0.3	30.0	*	2 JAN 0342	278	0.	0.3	30.0
1 JAN 0900	91	0.	0.0	28.0	*	1 JAN 1824	185	0.	0.3	30.0	*	2 JAN 0348	279	0.	0.3	30.0
1 JAN 0906	92	0.	0.0	28.0	*	1 JAN 1830	186	0.	0.3	30.0	*	2 JAN 0354	280	0.	0.3	30.0
1 JAN 0912	93	0.	0.0	28.0	*	1 JAN 1836	187	0.	0.3	30.0	*	2 JAN 0400	281	0.	0.3	30.0
1 JAN 0918	94	0.	0.0	28.0	*	1 JAN 1842	188	0.	0.3	30.0	*					

****

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)
	(CFS)	0.	0.10		0.	0.	0.
	(INCHES)	0.000	0.000	0.000	0.000		
	(AC-FT)	0.	0.	0.	0.		

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE					
		6-HR	24-HR	72-HR	28.00-HR	(AC-FT)	(HR)

0.	24.80	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE					
		6-HR	24-HR	72-HR	28.00-HR	(FEET)	(HR)
30.03	26.40	30.02	29.30	29.11	29.11		

CUMULATIVE AREA = 0.00 SQ MI

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          **************
          *            *
45 KK     *     SA2    *   SUB-AREA 2 (LARGE POOL)                                        K
          *            *
          **************
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SUBBASIN RUNOFF DATA

46 BA SUBBASIN CHARACTERISTICS

TAREA 0.02 SUBBASIN AREA

PRECIPITATION DATA

12 PB STORM 3.40 BASIN TOTAL PRECIPITATION

13 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.08
0.08	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

47 LS SCS LOSS RATE

STRTL 1.08 INITIAL ABSTRACTION

CRVNBR 65.00 CURVE NUMBER

RTIMP 0.00 PERCENT IMPERVIOUS AREA

48 UD SCS DIMENSIONLESS UNITGRAPH

TLAG 0.25 LAG

***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH

14 END-OF-PERIOD ORDINATES

6.	21.	27.	23.	14.	8.	5.	3.	2.	1.
1.	0.	0.	0.						

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HYDROGRAPH AT STATION SA2

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0000	1	0.00	0.00	0.00	0.	*	1	JAN	1406	142	0.02	0.01	0.01	1.
1	JAN	0006	2	0.00	0.00	0.00	0.	*	1	JAN	1412	143	0.02	0.01	0.01	1.
1	JAN	0012	3	0.00	0.00	0.00	0.	*	1	JAN	1418	144	0.02	0.01	0.01	1.
1	JAN	0018	4	0.00	0.00	0.00	0.	*	1	JAN	1424	145	0.02	0.01	0.01	1.
1	JAN	0024	5	0.00	0.00	0.00	0.	*	1	JAN	1430	146	0.01	0.01	0.01	1.
1	JAN	0030	6	0.00	0.00	0.00	0.	*	1	JAN	1436	147	0.01	0.01	0.01	1.
1	JAN	0036	7	0.00	0.00	0.00	0.	*	1	JAN	1442	148	0.01	0.01	0.01	1.
1	JAN	0042	8	0.00	0.00	0.00	0.	*	1	JAN	1448	149	0.01	0.01	0.01	1.
1	JAN	0048	9	0.00	0.00	0.00	0.	*	1	JAN	1454	150	0.01	0.01	0.01	1.
1	JAN	0054	10	0.00	0.00	0.00	0.	*	1	JAN	1500	151	0.01	0.01	0.01	1.
1	JAN	0100	11	0.00	0.00	0.00	0.	*	1	JAN	1506	152	0.01	0.01	0.01	1.
1	JAN	0106	12	0.00	0.00	0.00	0.	*	1	JAN	1512	153	0.01	0.01	0.01	1.
1	JAN	0112	13	0.00	0.00	0.00	0.	*	1	JAN	1518	154	0.01	0.01	0.01	1.
1	JAN	0118	14	0.00	0.00	0.00	0.	*	1	JAN	1524	155	0.01	0.01	0.01	1.
1	JAN	0124	15	0.00	0.00	0.00	0.	*	1	JAN	1530	156	0.01	0.01	0.00	1.
1	JAN	0130	16	0.00	0.00	0.00	0.	*	1	JAN	1536	157	0.01	0.01	0.00	1.
1	JAN	0136	17	0.00	0.00	0.00	0.	*	1	JAN	1542	158	0.01	0.01	0.00	1.
1	JAN	0142	18	0.00	0.00	0.00	0.	*	1	JAN	1548	159	0.01	0.01	0.00	1.
1	JAN	0148	19	0.00	0.00	0.00	0.	*	1	JAN	1554	160	0.01	0.01	0.00	1.
1	JAN	0154	20	0.00	0.00	0.00	0.	*	1	JAN	1600	161	0.01	0.00	0.00	1.
1	JAN	0200	21	0.00	0.00	0.00	0.	*	1	JAN	1606	162	0.01	0.00	0.00	0.
1	JAN	0206	22	0.00	0.00	0.00	0.	*	1	JAN	1612	163	0.01	0.00	0.00	0.
1	JAN	0212	23	0.00	0.00	0.00	0.	*	1	JAN	1618	164	0.01	0.00	0.00	0.
1	JAN	0218	24	0.00	0.00	0.00	0.	*	1	JAN	1624	165	0.01	0.00	0.00	0.
1	JAN	0224	25	0.00	0.00	0.00	0.	*	1	JAN	1630	166	0.01	0.00	0.00	0.

1	JAN	0230	26	0.00	0.00	0.00	0.	*	1	JAN	1636	167	0.01	0.00	0.00	0.
1	JAN	0236	27	0.00	0.00	0.00	0.	*	1	JAN	1642	168	0.01	0.00	0.00	0.
1	JAN	0242	28	0.00	0.00	0.00	0.	*	1	JAN	1648	169	0.01	0.00	0.00	0.
1	JAN	0248	29	0.00	0.00	0.00	0.	*	1	JAN	1654	170	0.01	0.00	0.00	0.
1	JAN	0254	30	0.00	0.00	0.00	0.	*	1	JAN	1700	171	0.01	0.00	0.00	0.
1	JAN	0300	31	0.00	0.00	0.00	0.	*	1	JAN	1706	172	0.01	0.00	0.00	0.
1	JAN	0306	32	0.00	0.00	0.00	0.	*	1	JAN	1712	173	0.01	0.00	0.00	0.
1	JAN	0312	33	0.00	0.00	0.00	0.	*	1	JAN	1718	174	0.01	0.00	0.00	0.
1	JAN	0318	34	0.00	0.00	0.00	0.	*	1	JAN	1724	175	0.01	0.00	0.00	0.
1	JAN	0324	35	0.00	0.00	0.00	0.	*	1	JAN	1730	176	0.01	0.00	0.00	0.
1	JAN	0330	36	0.00	0.00	0.00	0.	*	1	JAN	1736	177	0.01	0.00	0.00	0.
1	JAN	0336	37	0.00	0.00	0.00	0.	*	1	JAN	1742	178	0.01	0.00	0.00	0.
1	JAN	0342	38	0.00	0.00	0.00	0.	*	1	JAN	1748	179	0.01	0.00	0.00	0.
1	JAN	0348	39	0.00	0.00	0.00	0.	*	1	JAN	1754	180	0.01	0.00	0.00	0.
1	JAN	0354	40	0.00	0.00	0.00	0.	*	1	JAN	1800	181	0.01	0.00	0.00	0.
1	JAN	0400	41	0.00	0.00	0.00	0.	*	1	JAN	1806	182	0.01	0.00	0.00	0.
1	JAN	0406	42	0.00	0.00	0.00	0.	*	1	JAN	1812	183	0.01	0.00	0.00	0.
1	JAN	0412	43	0.00	0.00	0.00	0.	*	1	JAN	1818	184	0.01	0.00	0.00	0.
1	JAN	0418	44	0.00	0.00	0.00	0.	*	1	JAN	1824	185	0.01	0.00	0.00	0.
1	JAN	0424	45	0.00	0.00	0.00	0.	*	1	JAN	1830	186	0.01	0.00	0.00	0.
1	JAN	0430	46	0.00	0.00	0.00	0.	*	1	JAN	1836	187	0.01	0.00	0.00	0.
1	JAN	0436	47	0.00	0.00	0.00	0.	*	1	JAN	1842	188	0.01	0.00	0.00	0.
1	JAN	0442	48	0.00	0.00	0.00	0.	*	1	JAN	1848	189	0.01	0.00	0.00	0.
1	JAN	0448	49	0.00	0.00	0.00	0.	*	1	JAN	1854	190	0.00	0.00	0.00	0.
1	JAN	0454	50	0.00	0.00	0.00	0.	*	1	JAN	1900	191	0.01	0.00	0.00	0.
1	JAN	0500	51	0.00	0.00	0.00	0.	*	1	JAN	1906	192	0.00	0.00	0.00	0.
1	JAN	0506	52	0.01	0.01	0.00	0.	*	1	JAN	1912	193	0.00	0.00	0.00	0.
1	JAN	0512	53	0.00	0.00	0.00	0.	*	1	JAN	1918	194	0.00	0.00	0.00	0.
1	JAN	0518	54	0.01	0.01	0.00	0.	*	1	JAN	1924	195	0.00	0.00	0.00	0.
1	JAN	0524	55	0.01	0.01	0.00	0.	*	1	JAN	1930	196	0.00	0.00	0.00	0.
1	JAN	0530	56	0.01	0.01	0.00	0.	*	1	JAN	1936	197	0.00	0.00	0.00	0.
1	JAN	0536	57	0.01	0.01	0.00	0.	*	1	JAN	1942	198	0.00	0.00	0.00	0.
1	JAN	0542	58	0.01	0.01	0.00	0.	*	1	JAN	1948	199	0.00	0.00	0.00	0.
1	JAN	0548	59	0.01	0.01	0.00	0.	*	1	JAN	1954	200	0.00	0.00	0.00	0.
1	JAN	0554	60	0.01	0.01	0.00	0.	*	1	JAN	2000	201	0.00	0.00	0.00	0.
1	JAN	0600	61	0.01	0.01	0.00	0.	*	1	JAN	2006	202	0.00	0.00	0.00	0.
1	JAN	0606	62	0.01	0.01	0.00	0.	*	1	JAN	2012	203	0.00	0.00	0.00	0.
1	JAN	0612	63	0.01	0.01	0.00	0.	*	1	JAN	2018	204	0.00	0.00	0.00	0.
1	JAN	0618	64	0.01	0.01	0.00	0.	*	1	JAN	2024	205	0.00	0.00	0.00	0.
1	JAN	0624	65	0.01	0.01	0.00	0.	*	1	JAN	2030	206	0.00	0.00	0.00	0.
1	JAN	0630	66	0.01	0.01	0.00	0.	*	1	JAN	2036	207	0.00	0.00	0.00	0.
1	JAN	0636	67	0.01	0.01	0.00	0.	*	1	JAN	2042	208	0.00	0.00	0.00	0.
1	JAN	0642	68	0.01	0.01	0.00	0.	*	1	JAN	2048	209	0.00	0.00	0.00	0.
1	JAN	0648	69	0.01	0.01	0.00	0.	*	1	JAN	2054	210	0.00	0.00	0.00	0.
1	JAN	0654	70	0.01	0.01	0.00	0.	*	1	JAN	2100	211	0.00	0.00	0.00	0.
1	JAN	0700	71	0.01	0.01	0.00	0.	*	1	JAN	2106	212	0.00	0.00	0.00	0.
1	JAN	0706	72	0.01	0.01	0.00	0.	*	1	JAN	2112	213	0.00	0.00	0.00	0.
1	JAN	0712	73	0.01	0.01	0.00	0.	*	1	JAN	2118	214	0.00	0.00	0.00	0.
1	JAN	0718	74	0.01	0.01	0.00	0.	*	1	JAN	2124	215	0.00	0.00	0.00	0.
1	JAN	0724	75	0.01	0.01	0.00	0.	*	1	JAN	2130	216	0.00	0.00	0.00	0.
1	JAN	0730	76	0.01	0.01	0.00	0.	*	1	JAN	2136	217	0.00	0.00	0.00	0.
1	JAN	0736	77	0.01	0.01	0.00	0.	*	1	JAN	2142	218	0.00	0.00	0.00	0.
1	JAN	0742	78	0.01	0.01	0.00	0.	*	1	JAN	2148	219	0.00	0.00	0.00	0.
1	JAN	0748	79	0.01	0.01	0.00	0.	*	1	JAN	2154	220	0.00	0.00	0.00	0.
1	JAN	0754	80	0.01	0.01	0.00	0.	*	1	JAN	2200	221	0.00	0.00	0.00	0.
1	JAN	0800	81	0.01	0.01	0.00	0.	*	1	JAN	2206	222	0.00	0.00	0.00	0.
1	JAN	0806	82	0.01	0.01	0.00	0.	*	1	JAN	2212	223	0.00	0.00	0.00	0.
1	JAN	0812	83	0.01	0.01	0.00	0.	*	1	JAN	2218	224	0.00	0.00	0.00	0.
1	JAN	0818	84	0.01	0.01	0.00	0.	*	1	JAN	2224	225	0.00	0.00	0.00	0.
1	JAN	0824	85	0.01	0.01	0.00	0.	*	1	JAN	2230	226	0.00	0.00	0.00	0.
1	JAN	0830	86	0.01	0.01	0.00	0.	*	1	JAN	2236	227	0.00	0.00	0.00	0.
1	JAN	0836	87	0.01	0.01	0.00	0.	*	1	JAN	2242	228	0.00	0.00	0.00	0.
1	JAN	0842	88	0.01	0.01	0.00	0.	*	1	JAN	2248	229	0.00	0.00	0.00	0.
1	JAN	0848	89	0.01	0.01	0.00	0.	*	1	JAN	2254	230	0.00	0.00	0.00	0.
1	JAN	0854	90	0.01	0.01	0.00	0.	*	1	JAN	2300	231	0.00	0.00	0.00	0.
1	JAN	0900	91	0.01	0.01	0.00	0.	*	1	JAN	2306	232	0.00	0.00	0.00	0.
1	JAN	0906	92	0.00	0.00	0.00	0.	*	1	JAN	2312	233	0.00	0.00	0.00	0.
1	JAN	0912	93	0.03	0.03	0.00	0.	*	1	JAN	2318	234	0.00	0.00	0.00	0.
1	JAN	0918	94	0.01	0.01	0.00	0.	*	1	JAN	2324	235	0.00	0.00	0.00	0.
1	JAN	0924	95	0.01	0.01	0.00	0.	*	1	JAN	2330	236	0.00	0.00	0.00	0.
1	JAN	0930	96	0.01	0.01	0.00	0.	*	1	JAN	2336	237	0.00	0.00	0.00	0.
1	JAN	0936	97	0.01	0.01	0.00	0.	*	1	JAN	2342	238	0.00	0.00	0.00	0.
1	JAN	0942	98	0.02	0.02	0.00	0.	*	1	JAN	2348	239	0.00	0.00	0.00	0.
1	JAN	0948	99	0.02	0.02	0.00	0.	*	1	JAN	2354	240	0.00	0.00	0.00	0.
1	JAN	0954	100	0.02	0.02	0.00	0.	*	2	JAN	0000	241	0.00	0.00	0.00	0.
1	JAN	1000	101	0.02	0.02	0.00	0.	*	2	JAN	0006	242	0.00	0.00	0.00	0.
1	JAN	1006	102	0.02	0.02	0.00	0.	*	2	JAN	0012	243	0.00	0.00	0.00	0.
1	JAN	1012	103	0.02	0.02	0.00	0.	*	2	JAN	0018	244	0.00	0.00	0.00	0.
1	JAN	1018	104	0.02	0.02	0.00	0.	*	2	JAN	0024	245	0.00	0.00	0.00	0.
1	JAN	1024	105	0.02	0.02	0.00	0.	*	2	JAN	0030	246	0.00	0.00	0.00	0.
1	JAN	1030	106	0.02	0.02	0.00	0.	*	2	JAN	0036	247	0.00	0.00	0.00	0.
1	JAN	1036	107	0.02	0.02	0.00	0.	*	2	JAN	0042	248	0.00	0.00	0.00	0.
1	JAN	1042	108	0.02	0.02	0.00	0.	*	2	JAN	0048	249	0.00	0.00	0.00	0.
1	JAN	1048	109	0.02	0.02	0.00	0.	*	2	JAN	0054	250	0.00	0.00	0.00	0.
1	JAN	1054	110	0.02	0.02	0.00	0.	*	2	JAN	0100	251	0.00	0.00	0.00	0.
1	JAN	1100	111	0.02	0.02	0.00	0.	*	2	JAN	0106	252	0.00	0.00	0.00	0.
1	JAN	1106	112	0.03	0.03	0.00	0.	*	2	JAN	0112	253	0.00	0.00	0.00	0.
1	JAN	1112	113	0.03	0.03	0.00	0.	*	2	JAN	0118	254	0.00	0.00	0.00	0.
1	JAN	1118	114	0.03	0.03	0.00	0.	*	2	JAN	0124	255	0.00	0.00	0.00	0.
1	JAN	1124	115	0.04	0.04	0.00	0.	*	2	JAN	0130	256	0.00	0.00	0.00	0.
1	JAN	1130	116	0.04	0.04	0.00	0.	*	2	JAN	0136	257	0.00	0.00	0.00	0.
1	JAN	1136	117	0.06	0.06	0.00	0.	*	2	JAN	0142	258	0.00	0.00	0.00	0.
1	JAN	1142	118	0.09	0.08	0.00	0.	*	2	JAN	0148	259	0.00	0.00	0.00	0.
1	JAN	1148	119	0.12	0.11	0.01	0.	*	2	JAN	0154	260	0.00	0.00	0.00	0.
1	JAN	1154	120	0.15	0.13	0.01	0.	*	2	JAN	0200	261	0.00	0.00	0.00	0.
1	JAN	1200	121	0.29	0.24	0.04	1.	*	2	JAN	0206	262	0.00	0.00	0.00	0.
1	JAN	1206	122	0.29	0.22	0.07	2.	*	2	JAN	0212	263	0.00	0.00	0.00	0.
1	JAN	1212	123	0.15	0.10	0.04	3.	*	2	JAN	0218	264	0.00	0.00	0.00	0.
1	JAN	1218	124	0.12	0.08	0.04	4.	*	2	JAN	0224	265	0.00	0.00	0.00	0.
1	JAN	1224	125	0.09	0.06	0.03	4.	*	2	JAN	0230	266	0.00	0.00	0.00	0.
1	JAN	1230	126	0.06	0.04	0.02	4.	*	2	JAN	0236	267	0.00	0.00	0.00	0.
1	JAN	1236	127	0.04	0.03	0.01	3.	*	2	JAN	0242	268	0.00	0.00	0.00	0.
1	JAN	1242	128	0.04	0.02	0.01	3.	*	2	JAN	0248	269	0.00	0.00	0.00	0.
1	JAN	1248	129	0.03	0.02	0.01	2.	*	2	JAN	0254	270	0.00	0.00	0.00	0.
1	JAN	1254	130	0.03	0.02	0.01	2.	*	2	JAN	0300	271	0.00	0.00	0.00	0.

1	JAN	1300	131	0.03	0.02	0.01	2.	*	2	JAN	0306	272	0.00	0.00	0.00	0.			
1	JAN	1306	132	0.02	0.01	0.01	1.	*	2	JAN	0312	273	0.00	0.00	0.00	0.			
1	JAN	1312	133	0.02	0.01	0.01	1.	*	2	JAN	0318	274	0.00	0.00	0.00	0.			
1	JAN	1318	134	0.02	0.01	0.01	1.	*	2	JAN	0324	275	0.00	0.00	0.00	0.			
1	JAN	1324	135	0.02	0.01	0.01	1.	*	2	JAN	0330	276	0.00	0.00	0.00	0.			
1	JAN	1330	136	0.02	0.01	0.01	1.	*	2	JAN	0336	277	0.00	0.00	0.00	0.			
1	JAN	1336	137	0.02	0.01	0.01	1.	*	2	JAN	0342	278	0.00	0.00	0.00	0.			
1	JAN	1342	138	0.02	0.01	0.01	1.	*	2	JAN	0348	279	0.00	0.00	0.00	0.			
1	JAN	1348	139	0.02	0.01	0.01	1.	*	2	JAN	0354	280	0.00	0.00	0.00	0.			
1	JAN	1354	140	0.02	0.01	0.01	1.	*	2	JAN	0400	281	0.00	0.00	0.00	0.			
1	JAN	1400	141	0.02	0.01	0.01	1.	*											

TOTAL RAINFALL = 3.40, TOTAL LOSS = 2.70, TOTAL EXCESS = 0.70

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)
	(CFS)	4.	12.40		1.	0.	0.
	(INCHES)	0.565	0.700	0.700	0.700		
	(AC-FT)	1.	1.	1.	1.		

CUMULATIVE AREA = 0.02 SQ MI

49 KK COM1

COMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1

51 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION COM1
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	JAN	0000	1	0.	1	JAN	0706	72	0.	1	JAN	1412	143	1.	1	JAN	2118	214	0.
1	JAN	0006	2	0.	1	JAN	0712	73	0.	1	JAN	1418	144	1.	1	JAN	2124	215	0.
1	JAN	0012	3	0.	1	JAN	0718	74	0.	1	JAN	1424	145	1.	1	JAN	2130	216	0.
1	JAN	0018	4	0.	1	JAN	0724	75	0.	1	JAN	1430	146	1.	1	JAN	2136	217	0.
1	JAN	0024	5	0.	1	JAN	0730	76	0.	1	JAN	1436	147	1.	1	JAN	2142	218	0.
1	JAN	0030	6	0.	1	JAN	0736	77	0.	1	JAN	1442	148	1.	1	JAN	2148	219	0.
1	JAN	0036	7	0.	1	JAN	0742	78	0.	1	JAN	1448	149	1.	1	JAN	2154	220	0.
1	JAN	0042	8	0.	1	JAN	0748	79	0.	1	JAN	1454	150	1.	1	JAN	2200	221	0.
1	JAN	0048	9	0.	1	JAN	0754	80	0.	1	JAN	1500	151	1.	1	JAN	2206	222	0.
1	JAN	0054	10	0.	1	JAN	0800	81	0.	1	JAN	1506	152	1.	1	JAN	2212	223	0.
1	JAN	0100	11	0.	1	JAN	0806	82	0.	1	JAN	1512	153	1.	1	JAN	2218	224	0.
1	JAN	0106	12	0.	1	JAN	0812	83	0.	1	JAN	1518	154	1.	1	JAN	2224	225	0.
1	JAN	0112	13	0.	1	JAN	0818	84	0.	1	JAN	1524	155	1.	1	JAN	2230	226	0.
1	JAN	0118	14	0.	1	JAN	0824	85	0.	1	JAN	1530	156	1.	1	JAN	2236	227	0.
1	JAN	0124	15	0.	1	JAN	0830	86	0.	1	JAN	1536	157	1.	1	JAN	2242	228	0.
1	JAN	0130	16	0.	1	JAN	0836	87	0.	1	JAN	1542	158	1.	1	JAN	2248	229	0.
1	JAN	0136	17	0.	1	JAN	0842	88	0.	1	JAN	1548	159	1.	1	JAN	2254	230	0.
1	JAN	0142	18	0.	1	JAN	0848	89	0.	1	JAN	1554	160	1.	1	JAN	2300	231	0.
1	JAN	0148	19	0.	1	JAN	0854	90	0.	1	JAN	1600	161	1.	1	JAN	2306	232	0.
1	JAN	0154	20	0.	1	JAN	0900	91	0.	1	JAN	1606	162	0.	1	JAN	2312	233	0.
1	JAN	0200	21	0.	1	JAN	0906	92	0.	1	JAN	1612	163	0.	1	JAN	2318	234	0.
1	JAN	0206	22	0.	1	JAN	0912	93	0.	1	JAN	1618	164	0.	1	JAN	2324	235	0.
1	JAN	0212	23	0.	1	JAN	0918	94	0.	1	JAN	1624	165	0.	1	JAN	2330	236	0.
1	JAN	0218	24	0.	1	JAN	0924	95	0.	1	JAN	1630	166	0.	1	JAN	2336	237	0.
1	JAN	0224	25	0.	1	JAN	0930	96	0.	1	JAN	1636	167	0.	1	JAN	2342	238	0.
1	JAN	0230	26	0.	1	JAN	0936	97	0.	1	JAN	1642	168	0.	1	JAN	2348	239	0.
1	JAN	0236	27	0.	1	JAN	0942	98	0.	1	JAN	1648	169	0.	1	JAN	2354	240	0.
1	JAN	0242	28	0.	1	JAN	0948	99	0.	1	JAN	1654	170	0.	2	JAN	0000	241	0.
1	JAN	0248	29	0.	1	JAN	0954	100	0.	1	JAN	1700	171	0.	2	JAN	0006	242	0.
1	JAN	0254	30	0.	1	JAN	1000	101	0.	1	JAN	1706	172	0.	2	JAN	0012	243	0.
1	JAN	0300	31	0.	1	JAN	1006	102	0.	1	JAN	1712	173	0.	2	JAN	0018	244	0.
1	JAN	0306	32	0.	1	JAN	1012	103	0.	1	JAN	1718	174	0.	2	JAN	0024	245	0.
1	JAN	0312	33	0.	1	JAN	1018	104	0.	1	JAN	1724	175	0.	2	JAN	0030	246	0.
1	JAN	0318	34	0.	1	JAN	1024	105	0.	1	JAN	1730	176	0.	2	JAN	0036	247	0.
1	JAN	0324	35	0.	1	JAN	1030	106	0.	1	JAN	1736	177	0.	2	JAN	0042	248	0.
1	JAN	0330	36	0.	1	JAN	1036	107	0.	1	JAN	1742	178	0.	2	JAN	0048	249	0.
1	JAN	0336	37	0.	1	JAN	1042	108	0.	1	JAN	1748	179	0.	2	JAN	0054	250	0.
1	JAN	0342	38	0.	1	JAN	1048	109	0.	1	JAN	1754	180	0.	2	JAN	0100	251	0.
1	JAN	0348	39	0.	1	JAN	1054	110	0.	1	JAN	1800	181	0.	2	JAN	0106	252	0.
1	JAN	0354	40	0.	1	JAN	1100	111	0.	1	JAN	1806	182	0.	2	JAN	0112	253	0.
1	JAN	0400	41	0.	1	JAN	1106	112	0.	1	JAN	1812	183	0.	2	JAN	0118	254	0.
1	JAN	0406	42	0.	1	JAN	1112	113	0.	1	JAN	1818	184	0.	2	JAN	0124	255	0.
1	JAN	0412	43	0.	1	JAN	1118	114	0.	1	JAN	1824	185	0.	2	JAN	0130	256	0.
1	JAN	0418	44	0.	1	JAN	1124	115	0.	1	JAN	1830	186	0.	2	JAN	0136	257	0.
1	JAN	0424	45	0.	1	JAN	1130	116	0.	1	JAN	1836	187	0.	2	JAN	0142	258	0.
1	JAN	0430	46	0.	1	JAN	1136	117	0.	1	JAN	1842	188	0.	2	JAN	0148	259	0.
1	JAN	0436	47	0.	1	JAN	1142	118	0.	1	JAN	1848	189	0.	2	JAN	0154	260	0.
1	JAN	0442	48	0.	1	JAN	1148	119	0.	1	JAN	1854	190	0.	2	JAN	0200	261	0.
1	JAN	0448	49	0.	1	JAN	1154	120	0.	1	JAN	1900	191	0.	2	JAN	0206	262	0.
1	JAN	0454	50	0.	1	JAN	1200	121	1.	1	JAN	1906	192	0.	2	JAN	0212	263	0.
1	JAN	0500	51	0.	1	JAN	1206	122	2.	1	JAN	1912	193	0.	2	JAN	0218	264	0.
1	JAN	0506	52	0.	1	JAN	1212	123	3.	1	JAN	1918	194	0.	2	JAN	0224	265	0.
1	JAN	0512	53	0.	1	JAN	1218	124	4.	1	JAN	1924	195	0.	2	JAN	0230	266	0.
1	JAN	0518	54	0.	1	JAN	1224	125	4.	1	JAN	1930	196	0.	2	JAN	0236	267	0.

1 JAN 0524	55	0.	*	1 JAN 1230	126	4.	*	1 JAN 1936	197	0.	*	2 JAN 0242	268	0.					
1 JAN 0530	56	0.	*	1 JAN 1236	127	3.	*	1 JAN 1942	198	0.	*	2 JAN 0248	269	0.					
1 JAN 0536	57	0.	*	1 JAN 1242	128	3.	*	1 JAN 1948	199	0.	*	2 JAN 0254	270	0.					
1 JAN 0542	58	0.	*	1 JAN 1248	129	2.	*	1 JAN 1954	200	0.	*	2 JAN 0300	271	0.					
1 JAN 0548	59	0.	*	1 JAN 1254	130	2.	*	1 JAN 2000	201	0.	*	2 JAN 0306	272	0.					
1 JAN 0554	60	0.	*	1 JAN 1300	131	2.	*	1 JAN 2006	202	0.	*	2 JAN 0312	273	0.					
1 JAN 0600	61	0.	*	1 JAN 1306	132	1.	*	1 JAN 2012	203	0.	*	2 JAN 0318	274	0.					
1 JAN 0606	62	0.	*	1 JAN 1312	133	1.	*	1 JAN 2018	204	0.	*	2 JAN 0324	275	0.					
1 JAN 0612	63	0.	*	1 JAN 1318	134	1.	*	1 JAN 2024	205	0.	*	2 JAN 0330	276	0.					
1 JAN 0618	64	0.	*	1 JAN 1324	135	1.	*	1 JAN 2030	206	0.	*	2 JAN 0336	277	0.					
1 JAN 0624	65	0.	*	1 JAN 1330	136	1.	*	1 JAN 2036	207	0.	*	2 JAN 0342	278	0.					
1 JAN 0630	66	0.	*	1 JAN 1336	137	1.	*	1 JAN 2042	208	0.	*	2 JAN 0348	279	0.					
1 JAN 0636	67	0.	*	1 JAN 1342	138	1.	*	1 JAN 2048	209	0.	*	2 JAN 0354	280	0.					
1 JAN 0642	68	0.	*	1 JAN 1348	139	1.	*	1 JAN 2054	210	0.	*	2 JAN 0400	281	0.					
1 JAN 0648	69	0.	*	1 JAN 1354	140	1.	*	1 JAN 2100	211	0.	*								
1 JAN 0654	70	0.	*	1 JAN 1400	141	1.	*	1 JAN 2106	212	0.	*								
1 JAN 0700	71	0.	*	1 JAN 1406	142	1.	*	1 JAN 2112	213	0.	*								
			*				*				*								

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PEAK FLOW TIME MAXIMUM AVERAGE FLOW

	6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)	
(CFS)	4.	12.40		1.	0.	0.	0.
(INCHES)	0.445	0.551	0.551	0.551			
(AC-FT)	1.	1.	1.	1.			

CUMULATIVE AREA = 0.02 SQ MI

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          *            *
52 KK     *    POOL1   *
          *            *
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HYDROGRAPH ROUTING DATA

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53 RS     STORAGE ROUTING
               NSTPS          1  NUMBER OF SUBREACHES
                ITYP       ELEV  TYPE OF INITIAL CONDITION
               RSVRIC     24.20  INITIAL CONDITION
                   X       0.00 WORKING R AND D COEFFICIENT

54 SV       STORAGE        0.0       0.0       0.0       0.0       0.2       0.3       0.5

55 SQ       DISCHARGE      0.        0.        1.        5.        9.       15.       25.

56 SE       ELEVATION     24.20     25.10     25.50     26.00     26.50     27.00     28.00
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HYDROGRAPH AT STATION POOL1

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	JAN	0000	1	0.	0.0	24.2	1	JAN	0924	95	0.	0.0	24.2	1	JAN	1848	189	0.	0.0	25.2
1	JAN	0006	2	0.	0.0	24.2	1	JAN	0930	96	0.	0.0	24.2	1	JAN	1854	190	0.	0.0	25.2
1	JAN	0012	3	0.	0.0	24.2	1	JAN	0936	97	0.	0.0	24.2	1	JAN	1900	191	0.	0.0	25.2
1	JAN	0018	4	0.	0.0	24.2	1	JAN	0942	98	0.	0.0	24.2	1	JAN	1906	192	0.	0.0	25.2
1	JAN	0024	5	0.	0.0	24.2	1	JAN	0948	99	0.	0.0	24.2	1	JAN	1912	193	0.	0.0	25.2
1	JAN	0030	6	0.	0.0	24.2	1	JAN	0954	100	0.	0.0	24.2	1	JAN	1918	194	0.	0.0	25.2
1	JAN	0036	7	0.	0.0	24.2	1	JAN	1000	101	0.	0.0	24.2	1	JAN	1924	195	0.	0.0	25.2
1	JAN	0042	8	0.	0.0	24.2	1	JAN	1006	102	0.	0.0	24.2	1	JAN	1930	196	0.	0.0	25.2
1	JAN	0048	9	0.	0.0	24.2	1	JAN	1012	103	0.	0.0	24.2	1	JAN	1936	197	0.	0.0	25.2
1	JAN	0054	10	0.	0.0	24.2	1	JAN	1018	104	0.	0.0	24.2	1	JAN	1942	198	0.	0.0	25.2
1	JAN	0100	11	0.	0.0	24.2	1	JAN	1024	105	0.	0.0	24.2	1	JAN	1948	199	0.	0.0	25.2
1	JAN	0106	12	0.	0.0	24.2	1	JAN	1030	106	0.	0.0	24.2	1	JAN	1954	200	0.	0.0	25.2
1	JAN	0112	13	0.	0.0	24.2	1	JAN	1036	107	0.	0.0	24.2	1	JAN	2000	201	0.	0.0	25.2
1	JAN	0118	14	0.	0.0	24.2	1	JAN	1042	108	0.	0.0	24.2	1	JAN	2006	202	0.	0.0	25.2
1	JAN	0124	15	0.	0.0	24.2	1	JAN	1048	109	0.	0.0	24.2	1	JAN	2012	203	0.	0.0	25.2
1	JAN	0130	16	0.	0.0	24.2	1	JAN	1054	110	0.	0.0	24.2	1	JAN	2018	204	0.	0.0	25.2
1	JAN	0136	17	0.	0.0	24.2	1	JAN	1100	111	0.	0.0	24.2	1	JAN	2024	205	0.	0.0	25.2
1	JAN	0142	18	0.	0.0	24.2	1	JAN	1106	112	0.	0.0	24.2	1	JAN	2030	206	0.	0.0	25.2
1	JAN	0148	19	0.	0.0	24.2	1	JAN	1112	113	0.	0.0	24.2	1	JAN	2036	207	0.	0.0	25.2
1	JAN	0154	20	0.	0.0	24.2	1	JAN	1118	114	0.	0.0	24.2	1	JAN	2042	208	0.	0.0	25.2
1	JAN	0200	21	0.	0.0	24.2	1	JAN	1124	115	0.	0.0	24.2	1	JAN	2048	209	0.	0.0	25.2
1	JAN	0206	22	0.	0.0	24.2	1	JAN	1130	116	0.	0.0	24.2	1	JAN	2054	210	0.	0.0	25.2
1	JAN	0212	23	0.	0.0	24.2	1	JAN	1136	117	0.	0.0	24.2	1	JAN	2100	211	0.	0.0	25.2
1	JAN	0218	24	0.	0.0	24.2	1	JAN	1142	118	0.	0.0	24.2	1	JAN	2106	212	0.	0.0	25.2
1	JAN	0224	25	0.	0.0	24.2	1	JAN	1148	119	0.	0.0	24.2	1	JAN	2112	213	0.	0.0	25.2
1	JAN	0230	26	0.	0.0	24.2	1	JAN	1154	120	0.	0.0	24.3	1	JAN	2118	214	0.	0.0	25.2
1	JAN	0236	27	0.	0.0	24.2	1	JAN	1200	121	0.	0.0	24.7	1	JAN	2124	215	0.	0.0	25.2
1	JAN	0242	28	0.	0.0	24.2	1	JAN	1206	122	0.	0.0	25.3	1	JAN	2130	216	0.	0.0	25.2
1	JAN	0248	29	0.	0.0	24.2	1	JAN	1212	123	2.	0.0	25.6	1	JAN	2136	217	0.	0.0	25.2
1	JAN	0254	30	0.	0.0	24.2	1	JAN	1218	124	3.	0.0	25.8	1	JAN	2142	218	0.	0.0	25.2
1	JAN	0300	31	0.	0.0	24.2	1	JAN	1224	125	4.	0.0	25.9	1	JAN	2148	219	0.	0.0	25.2
1	JAN	0306	32	0.	0.0	24.2	1	JAN	1230	126	4.	0.0	25.9	1	JAN	2154	220	0.	0.0	25.2
1	JAN	0312	33	0.	0.0	24.2	1	JAN	1236	127	4.	0.0	25.9	1	JAN	2200	221	0.	0.0	25.2
1	JAN	0318	34	0.	0.0	24.2	1	JAN	1242	128	3.	0.0	25.8	1	JAN	2206	222	0.	0.0	25.2
1	JAN	0324	35	0.	0.0	24.2	1	JAN	1248	129	3.	0.0	25.7	1	JAN	2212	223	0.	0.0	25.2
1	JAN	0330	36	0.	0.0	24.2	1	JAN	1254	130	2.	0.0	25.7	1	JAN	2218	224	0.	0.0	25.2
1	JAN	0336	37	0.	0.0	24.2	1	JAN	1300	131	2.	0.0	25.6	1	JAN	2224	225	0.	0.0	25.2
1	JAN	0342	38	0.	0.0	24.2	1	JAN	1306	132	2.	0.0	25.6	1	JAN	2230	226	0.	0.0	25.2
1	JAN	0348	39	0.	0.0	24.2	1	JAN	1312	133	1.	0.0	25.5	1	JAN	2236	227	0.	0.0	25.2
1	JAN	0354	40	0.	0.0	24.2	1	JAN	1318	134	1.	0.0	25.5	1	JAN	2242	228	0.	0.0	25.2
1	JAN	0400	41	0.	0.0	24.2	1	JAN	1324	135	1.	0.0	25.5	1	JAN	2248	229	0.	0.0	25.2

1 JAN 0406	42	0.	0.0	24.2 *	1 JAN 1330	136	1.	0.0	25.5 *	1 JAN 2254	230	0.	0.0	25.2
1 JAN 0412	43	0.	0.0	24.2 *	1 JAN 1336	137	1.	0.0	25.5 *	1 JAN 2300	231	0.	0.0	25.2
1 JAN 0418	44	0.	0.0	24.2 *	1 JAN 1342	138	1.	0.0	25.5 *	1 JAN 2306	232	0.	0.0	25.2
1 JAN 0424	45	0.	0.0	24.2 *	1 JAN 1348	139	1.	0.0	25.5 *	1 JAN 2312	233	0.	0.0	25.2
1 JAN 0430	46	0.	0.0	24.2 *	1 JAN 1354	140	1.	0.0	25.4 *	1 JAN 2318	234	0.	0.0	25.2
1 JAN 0436	47	0.	0.0	24.2 *	1 JAN 1400	141	1.	0.0	25.4 *	1 JAN 2324	235	0.	0.0	25.2
1 JAN 0442	48	0.	0.0	24.2 *	1 JAN 1406	142	1.	0.0	25.4 *	1 JAN 2330	236	0.	0.0	25.2
1 JAN 0448	49	0.	0.0	24.2 *	1 JAN 1412	143	1.	0.0	25.4 *	1 JAN 2336	237	0.	0.0	25.2
1 JAN 0454	50	0.	0.0	24.2 *	1 JAN 1418	144	1.	0.0	25.4 *	1 JAN 2342	238	0.	0.0	25.2
1 JAN 0500	51	0.	0.0	24.2 *	1 JAN 1424	145	1.	0.0	25.4 *	1 JAN 2348	239	0.	0.0	25.2
1 JAN 0506	52	0.	0.0	24.2 *	1 JAN 1430	146	1.	0.0	25.4 *	1 JAN 2354	240	0.	0.0	25.2
1 JAN 0512	53	0.	0.0	24.2 *	1 JAN 1436	147	1.	0.0	25.4 *	2 JAN 0000	241	0.	0.0	25.2
1 JAN 0518	54	0.	0.0	24.2 *	1 JAN 1442	148	1.	0.0	25.4 *	2 JAN 0006	242	0.	0.0	25.2
1 JAN 0524	55	0.	0.0	24.2 *	1 JAN 1448	149	1.	0.0	25.4 *	2 JAN 0012	243	0.	0.0	25.2
1 JAN 0530	56	0.	0.0	24.2 *	1 JAN 1454	150	1.	0.0	25.4 *	2 JAN 0018	244	0.	0.0	25.1
1 JAN 0536	57	0.	0.0	24.2 *	1 JAN 1500	151	1.	0.0	25.4 *	2 JAN 0024	245	0.	0.0	25.1
1 JAN 0542	58	0.	0.0	24.2 *	1 JAN 1506	152	1.	0.0	25.3 *	2 JAN 0030	246	0.	0.0	25.1
1 JAN 0548	59	0.	0.0	24.2 *	1 JAN 1512	153	1.	0.0	25.3 *	2 JAN 0036	247	0.	0.0	25.1
1 JAN 0554	60	0.	0.0	24.2 *	1 JAN 1518	154	1.	0.0	25.3 *	2 JAN 0042	248	0.	0.0	25.1
1 JAN 0600	61	0.	0.0	24.2 *	1 JAN 1524	155	1.	0.0	25.3 *	2 JAN 0048	249	0.	0.0	25.1
1 JAN 0606	62	0.	0.0	24.2 *	1 JAN 1530	156	1.	0.0	25.3 *	2 JAN 0054	250	0.	0.0	25.1
1 JAN 0612	63	0.	0.0	24.2 *	1 JAN 1536	157	1.	0.0	25.3 *	2 JAN 0100	251	0.	0.0	25.1
1 JAN 0618	64	0.	0.0	24.2 *	1 JAN 1542	158	1.	0.0	25.3 *	2 JAN 0106	252	0.	0.0	25.1
1 JAN 0624	65	0.	0.0	24.2 *	1 JAN 1548	159	1.	0.0	25.3 *	2 JAN 0112	253	0.	0.0	25.1
1 JAN 0630	66	0.	0.0	24.2 *	1 JAN 1554	160	1.	0.0	25.3 *	2 JAN 0118	254	0.	0.0	25.1
1 JAN 0636	67	0.	0.0	24.2 *	1 JAN 1600	161	1.	0.0	25.3 *	2 JAN 0124	255	0.	0.0	25.1
1 JAN 0642	68	0.	0.0	24.2 *	1 JAN 1606	162	1.	0.0	25.3 *	2 JAN 0130	256	0.	0.0	25.1
1 JAN 0648	69	0.	0.0	24.2 *	1 JAN 1612	163	0.	0.0	25.3 *	2 JAN 0136	257	0.	0.0	25.1
1 JAN 0654	70	0.	0.0	24.2 *	1 JAN 1618	164	0.	0.0	25.3 *	2 JAN 0142	258	0.	0.0	25.1
1 JAN 0700	71	0.	0.0	24.2 *	1 JAN 1624	165	0.	0.0	25.3 *	2 JAN 0148	259	0.	0.0	25.1
1 JAN 0706	72	0.	0.0	24.2 *	1 JAN 1630	166	0.	0.0	25.3 *	2 JAN 0154	260	0.	0.0	25.1
1 JAN 0712	73	0.	0.0	24.2 *	1 JAN 1636	167	0.	0.0	25.3 *	2 JAN 0200	261	0.	0.0	25.1
1 JAN 0718	74	0.	0.0	24.2 *	1 JAN 1642	168	0.	0.0	25.3 *	2 JAN 0206	262	0.	0.0	25.1
1 JAN 0724	75	0.	0.0	24.2 *	1 JAN 1648	169	0.	0.0	25.3 *	2 JAN 0212	263	0.	0.0	25.1
1 JAN 0730	76	0.	0.0	24.2 *	1 JAN 1654	170	0.	0.0	25.2 *	2 JAN 0218	264	0.	0.0	25.1
1 JAN 0736	77	0.	0.0	24.2 *	1 JAN 1700	171	0.	0.0	25.2 *	2 JAN 0224	265	0.	0.0	25.1
1 JAN 0742	78	0.	0.0	24.2 *	1 JAN 1706	172	0.	0.0	25.2 *	2 JAN 0230	266	0.	0.0	25.1
1 JAN 0748	79	0.	0.0	24.2 *	1 JAN 1712	173	0.	0.0	25.2 *	2 JAN 0236	267	0.	0.0	25.1
1 JAN 0754	80	0.	0.0	24.2 *	1 JAN 1718	174	0.	0.0	25.2 *	2 JAN 0242	268	0.	0.0	25.1
1 JAN 0800	81	0.	0.0	24.2 *	1 JAN 1724	175	0.	0.0	25.2 *	2 JAN 0248	269	0.	0.0	25.1
1 JAN 0806	82	0.	0.0	24.2 *	1 JAN 1730	176	0.	0.0	25.2 *	2 JAN 0254	270	0.	0.0	25.1
1 JAN 0812	83	0.	0.0	24.2 *	1 JAN 1736	177	0.	0.0	25.2 *	2 JAN 0300	271	0.	0.0	25.1
1 JAN 0818	84	0.	0.0	24.2 *	1 JAN 1742	178	0.	0.0	25.2 *	2 JAN 0306	272	0.	0.0	25.1
1 JAN 0824	85	0.	0.0	24.2 *	1 JAN 1748	179	0.	0.0	25.2 *	2 JAN 0312	273	0.	0.0	25.1
1 JAN 0830	86	0.	0.0	24.2 *	1 JAN 1754	180	0.	0.0	25.2 *	2 JAN 0318	274	0.	0.0	25.1
1 JAN 0836	87	0.	0.0	24.2 *	1 JAN 1800	181	0.	0.0	25.2 *	2 JAN 0324	275	0.	0.0	25.1
1 JAN 0842	88	0.	0.0	24.2 *	1 JAN 1806	182	0.	0.0	25.2 *	2 JAN 0330	276	0.	0.0	25.1
1 JAN 0848	89	0.	0.0	24.2 *	1 JAN 1812	183	0.	0.0	25.2 *	2 JAN 0336	277	0.	0.0	25.1
1 JAN 0854	90	0.	0.0	24.2 *	1 JAN 1818	184	0.	0.0	25.2 *	2 JAN 0342	278	0.	0.0	25.1
1 JAN 0900	91	0.	0.0	24.2 *	1 JAN 1824	185	0.	0.0	25.2 *	2 JAN 0348	279	0.	0.0	25.1
1 JAN 0906	92	0.	0.0	24.2 *	1 JAN 1830	186	0.	0.0	25.2 *	2 JAN 0354	280	0.	0.0	25.1
1 JAN 0912	93	0.	0.0	24.2 *	1 JAN 1836	187	0.	0.0	25.2 *	2 JAN 0400	281	0.	0.0	25.1
1 JAN 0918	94	0.	0.0	24.2 *	1 JAN 1842	188	0.	0.0	25.2 *					

```
PEAK FLOW      TIME                              MAXIMUM AVERAGE FLOW
                                   6-HR        24-HR       72-HR      28.00-HR   (CFS)        (HR)
                         (CFS)      4.        12.50                   1.         0.           0.            0.
                       (INCHES)    0.437        0.542        0.542       0.542
                        (AC-FT)      1.           1.           1.          1.

PEAK STORAGE   TIME                             MAXIMUM AVERAGE STORAGE
                                   6-HR        24-HR       72-HR      28.00-HR  (AC-FT)       (HR)
       0.     12.40                  0.           0.          0.          0.

PEAK STAGE     TIME                              MAXIMUM AVERAGE STAGE
                                   6-HR        24-HR       72-HR      28.00-HR   (FEET)       (HR)
    25.95     12.50                25.40        24.90       24.80       24.80

                    CUMULATIVE AREA =     0.02 SQ MI
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              **************
              *            *
57 KK         *       SA3  *     SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)
              *            *
              **************

                 SUBBASIN RUNOFF DATA

58 BA              SUBBASIN CHARACTERISTICS
                         TAREA         0.01   SUBBASIN AREA

                   PRECIPITATION DATA

12 PB                    STORM         3.40   BASIN TOTAL PRECIPITATION

13 PI                INCREMENTAL PRECIPITATION PATTERN
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.08
0.08	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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59 LS         SCS LOSS RATE
                 STRTL        0.22  INITIAL ABSTRACTION
                 CRVNBR      90.00  CURVE NUMBER
                 RTIMP        0.00  PERCENT IMPERVIOUS AREA

60 UD         SCS DIMENSIONLESS UNITGRAPH
                 TLAG         0.20  LAG
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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
12 END-OF-PERIOD ORDINATES

7.	22.	22.	13.	7.	3.	2.	1.	0.	0.
0.	0.								

****

HYDROGRAPH AT STATION SA3

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0000	1	0.00	0.00	0.00	0.	*	1 JAN 1406	142	0.02	0.00	0.01	1.
1 JAN 0006	2	0.00	0.00	0.00	0.	*	1 JAN 1412	143	0.02	0.00	0.01	1.
1 JAN 0012	3	0.00	0.00	0.00	0.	*	1 JAN 1418	144	0.02	0.00	0.01	1.
1 JAN 0018	4	0.00	0.00	0.00	0.	*	1 JAN 1424	145	0.02	0.00	0.01	1.
1 JAN 0024	5	0.00	0.00	0.00	0.	*	1 JAN 1430	146	0.01	0.00	0.01	1.
1 JAN 0030	6	0.00	0.00	0.00	0.	*	1 JAN 1436	147	0.01	0.00	0.01	1.
1 JAN 0036	7	0.00	0.00	0.00	0.	*	1 JAN 1442	148	0.01	0.00	0.01	1.
1 JAN 0042	8	0.00	0.00	0.00	0.	*	1 JAN 1448	149	0.01	0.00	0.01	1.
1 JAN 0048	9	0.00	0.00	0.00	0.	*	1 JAN 1454	150	0.01	0.00	0.01	1.
1 JAN 0054	10	0.00	0.00	0.00	0.	*	1 JAN 1500	151	0.01	0.00	0.01	1.
1 JAN 0100	11	0.00	0.00	0.00	0.	*	1 JAN 1506	152	0.01	0.00	0.01	1.
1 JAN 0106	12	0.00	0.00	0.00	0.	*	1 JAN 1512	153	0.01	0.00	0.01	1.
1 JAN 0112	13	0.00	0.00	0.00	0.	*	1 JAN 1518	154	0.01	0.00	0.01	1.
1 JAN 0118	14	0.00	0.00	0.00	0.	*	1 JAN 1524	155	0.01	0.00	0.01	1.
1 JAN 0124	15	0.00	0.00	0.00	0.	*	1 JAN 1530	156	0.01	0.00	0.01	1.
1 JAN 0130	16	0.00	0.00	0.00	0.	*	1 JAN 1536	157	0.01	0.00	0.01	1.
1 JAN 0136	17	0.00	0.00	0.00	0.	*	1 JAN 1542	158	0.01	0.00	0.01	1.
1 JAN 0142	18	0.00	0.00	0.00	0.	*	1 JAN 1548	159	0.01	0.00	0.01	1.
1 JAN 0148	19	0.00	0.00	0.00	0.	*	1 JAN 1554	160	0.01	0.00	0.01	1.
1 JAN 0154	20	0.00	0.00	0.00	0.	*	1 JAN 1600	161	0.01	0.00	0.01	1.
1 JAN 0200	21	0.00	0.00	0.00	0.	*	1 JAN 1606	162	0.01	0.00	0.01	1.
1 JAN 0206	22	0.00	0.00	0.00	0.	*	1 JAN 1612	163	0.01	0.00	0.01	1.
1 JAN 0212	23	0.00	0.00	0.00	0.	*	1 JAN 1618	164	0.01	0.00	0.01	1.
1 JAN 0218	24	0.00	0.00	0.00	0.	*	1 JAN 1624	165	0.01	0.00	0.01	1.
1 JAN 0224	25	0.00	0.00	0.00	0.	*	1 JAN 1630	166	0.01	0.00	0.01	1.
1 JAN 0230	26	0.00	0.00	0.00	0.	*	1 JAN 1636	167	0.01	0.00	0.01	1.
1 JAN 0236	27	0.00	0.00	0.00	0.	*	1 JAN 1642	168	0.01	0.00	0.01	1.
1 JAN 0242	28	0.00	0.00	0.00	0.	*	1 JAN 1648	169	0.01	0.00	0.01	1.
1 JAN 0248	29	0.00	0.00	0.00	0.	*	1 JAN 1654	170	0.01	0.00	0.01	1.
1 JAN 0254	30	0.00	0.00	0.00	0.	*	1 JAN 1700	171	0.01	0.00	0.01	1.
1 JAN 0300	31	0.00	0.00	0.00	0.	*	1 JAN 1706	172	0.01	0.00	0.01	1.
1 JAN 0306	32	0.00	0.00	0.00	0.	*	1 JAN 1712	173	0.01	0.00	0.01	1.
1 JAN 0312	33	0.00	0.00	0.00	0.	*	1 JAN 1718	174	0.01	0.00	0.01	1.
1 JAN 0318	34	0.00	0.00	0.00	0.	*	1 JAN 1724	175	0.01	0.00	0.01	0.
1 JAN 0324	35	0.00	0.00	0.00	0.	*	1 JAN 1730	176	0.01	0.00	0.01	0.
1 JAN 0330	36	0.00	0.00	0.00	0.	*	1 JAN 1736	177	0.01	0.00	0.01	0.
1 JAN 0336	37	0.00	0.00	0.00	0.	*	1 JAN 1742	178	0.01	0.00	0.01	0.
1 JAN 0342	38	0.00	0.00	0.00	0.	*	1 JAN 1748	179	0.01	0.00	0.01	0.
1 JAN 0348	39	0.00	0.00	0.00	0.	*	1 JAN 1754	180	0.01	0.00	0.01	0.
1 JAN 0354	40	0.00	0.00	0.00	0.	*	1 JAN 1800	181	0.01	0.00	0.01	0.
1 JAN 0400	41	0.00	0.00	0.00	0.	*	1 JAN 1806	182	0.01	0.00	0.00	0.
1 JAN 0406	42	0.00	0.00	0.00	0.	*	1 JAN 1812	183	0.01	0.00	0.00	0.
1 JAN 0412	43	0.00	0.00	0.00	0.	*	1 JAN 1818	184	0.01	0.00	0.00	0.
1 JAN 0418	44	0.00	0.00	0.00	0.	*	1 JAN 1824	185	0.01	0.00	0.00	0.
1 JAN 0424	45	0.00	0.00	0.00	0.	*	1 JAN 1830	186	0.01	0.00	0.00	0.
1 JAN 0430	46	0.00	0.00	0.00	0.	*	1 JAN 1836	187	0.01	0.00	0.00	0.
1 JAN 0436	47	0.00	0.00	0.00	0.	*	1 JAN 1842	188	0.01	0.00	0.00	0.
1 JAN 0442	48	0.00	0.00	0.00	0.	*	1 JAN 1848	189	0.01	0.00	0.00	0.
1 JAN 0448	49	0.00	0.00	0.00	0.	*	1 JAN 1854	190	0.00	0.00	0.00	0.
1 JAN 0454	50	0.00	0.00	0.00	0.	*	1 JAN 1900	191	0.01	0.00	0.00	0.
1 JAN 0500	51	0.00	0.00	0.00	0.	*	1 JAN 1906	192	0.00	0.00	0.00	0.
1 JAN 0506	52	0.01	0.01	0.00	0.	*	1 JAN 1912	193	0.00	0.00	0.00	0.
1 JAN 0512	53	0.00	0.00	0.00	0.	*	1 JAN 1918	194	0.00	0.00	0.00	0.
1 JAN 0518	54	0.01	0.01	0.00	0.	*	1 JAN 1924	195	0.00	0.00	0.00	0.
1 JAN 0524	55	0.01	0.01	0.00	0.	*	1 JAN 1930	196	0.00	0.00	0.00	0.
1 JAN 0530	56	0.01	0.01	0.00	0.	*	1 JAN 1936	197	0.00	0.00	0.00	0.
1 JAN 0536	57	0.01	0.01	0.00	0.	*	1 JAN 1942	198	0.00	0.00	0.00	0.
1 JAN 0542	58	0.01	0.01	0.00	0.	*	1 JAN 1948	199	0.00	0.00	0.00	0.
1 JAN 0548	59	0.01	0.01	0.00	0.	*	1 JAN 1954	200	0.00	0.00	0.00	0.
1 JAN 0554	60	0.01	0.01	0.00	0.	*	1 JAN 2000	201	0.00	0.00	0.00	0.
1 JAN 0600	61	0.01	0.01	0.00	0.	*	1 JAN 2006	202	0.00	0.00	0.00	0.
1 JAN 0606	62	0.01	0.01	0.00	0.	*	1 JAN 2012	203	0.00	0.00	0.00	0.
1 JAN 0612	63	0.01	0.01	0.00	0.	*	1 JAN 2018	204	0.00	0.00	0.00	0.
1 JAN 0618	64	0.01	0.01	0.00	0.	*	1 JAN 2024	205	0.00	0.00	0.00	0.
1 JAN 0624	65	0.01	0.01	0.00	0.	*	1 JAN 2030	206	0.00	0.00	0.00	0.
1 JAN 0630	66	0.01	0.01	0.00	0.	*	1 JAN 2036	207	0.00	0.00	0.00	0.

1 JAN 0636	67	0.01	0.01	0.00	0.	*	1 JAN 2042	208	0.00	0.00	0.00	0.
1 JAN 0642	68	0.01	0.01	0.00	0.	*	1 JAN 2048	209	0.00	0.00	0.00	0.
1 JAN 0648	69	0.01	0.01	0.00	0.	*	1 JAN 2054	210	0.00	0.00	0.00	0.
1 JAN 0654	70	0.01	0.01	0.00	0.	*	1 JAN 2100	211	0.00	0.00	0.00	0.
1 JAN 0700	71	0.01	0.01	0.00	0.	*	1 JAN 2106	212	0.00	0.00	0.00	0.
1 JAN 0706	72	0.01	0.01	0.00	0.	*	1 JAN 2112	213	0.00	0.00	0.00	0.
1 JAN 0712	73	0.01	0.01	0.00	0.	*	1 JAN 2118	214	0.00	0.00	0.00	0.
1 JAN 0718	74	0.01	0.01	0.00	0.	*	1 JAN 2124	215	0.00	0.00	0.00	0.
1 JAN 0724	75	0.01	0.01	0.00	0.	*	1 JAN 2130	216	0.00	0.00	0.00	0.
1 JAN 0730	76	0.01	0.01	0.00	0.	*	1 JAN 2136	217	0.00	0.00	0.00	0.
1 JAN 0736	77	0.01	0.01	0.00	0.	*	1 JAN 2142	218	0.00	0.00	0.00	0.
1 JAN 0742	78	0.01	0.01	0.00	0.	*	1 JAN 2148	219	0.00	0.00	0.00	0.
1 JAN 0748	79	0.01	0.01	0.00	0.	*	1 JAN 2154	220	0.00	0.00	0.00	0.
1 JAN 0754	80	0.01	0.01	0.00	0.	*	1 JAN 2200	221	0.00	0.00	0.00	0.
1 JAN 0800	81	0.01	0.01	0.00	0.	*	1 JAN 2206	222	0.00	0.00	0.00	0.
1 JAN 0806	82	0.01	0.01	0.00	0.	*	1 JAN 2212	223	0.00	0.00	0.00	0.
1 JAN 0812	83	0.01	0.01	0.00	0.	*	1 JAN 2218	224	0.00	0.00	0.00	0.
1 JAN 0818	84	0.01	0.01	0.00	0.	*	1 JAN 2224	225	0.00	0.00	0.00	0.
1 JAN 0824	85	0.01	0.01	0.00	0.	*	1 JAN 2230	226	0.00	0.00	0.00	0.
1 JAN 0830	86	0.01	0.01	0.00	0.	*	1 JAN 2236	227	0.00	0.00	0.00	0.
1 JAN 0836	87	0.01	0.01	0.00	0.	*	1 JAN 2242	228	0.00	0.00	0.00	0.
1 JAN 0842	88	0.01	0.01	0.00	0.	*	1 JAN 2248	229	0.00	0.00	0.00	0.
1 JAN 0848	89	0.01	0.01	0.00	0.	*	1 JAN 2254	230	0.00	0.00	0.00	0.
1 JAN 0854	90	0.01	0.01	0.00	0.	*	1 JAN 2300	231	0.00	0.00	0.00	0.
1 JAN 0900	91	0.01	0.01	0.00	0.	*	1 JAN 2306	232	0.00	0.00	0.00	0.
1 JAN 0906	92	0.00	0.00	0.00	0.	*	1 JAN 2312	233	0.00	0.00	0.00	0.
1 JAN 0912	93	0.03	0.02	0.01	0.	*	1 JAN 2318	234	0.00	0.00	0.00	0.
1 JAN 0918	94	0.01	0.01	0.01	0.	*	1 JAN 2324	235	0.00	0.00	0.00	0.
1 JAN 0924	95	0.01	0.01	0.01	0.	*	1 JAN 2330	236	0.00	0.00	0.00	0.
1 JAN 0930	96	0.01	0.01	0.01	0.	*	1 JAN 2336	237	0.00	0.00	0.00	0.
1 JAN 0936	97	0.01	0.01	0.01	0.	*	1 JAN 2342	238	0.00	0.00	0.00	0.
1 JAN 0942	98	0.02	0.01	0.01	0.	*	1 JAN 2348	239	0.00	0.00	0.00	0.
1 JAN 0948	99	0.02	0.01	0.01	0.	*	1 JAN 2354	240	0.00	0.00	0.00	0.
1 JAN 0954	100	0.02	0.01	0.01	1.	*	2 JAN 0000	241	0.00	0.00	0.00	0.
1 JAN 1000	101	0.02	0.01	0.01	1.	*	2 JAN 0006	242	0.00	0.00	0.00	0.
1 JAN 1006	102	0.02	0.01	0.01	1.	*	2 JAN 0012	243	0.00	0.00	0.00	0.
1 JAN 1012	103	0.02	0.01	0.01	1.	*	2 JAN 0018	244	0.00	0.00	0.00	0.
1 JAN 1018	104	0.02	0.01	0.01	1.	*	2 JAN 0024	245	0.00	0.00	0.00	0.
1 JAN 1024	105	0.02	0.01	0.01	1.	*	2 JAN 0030	246	0.00	0.00	0.00	0.
1 JAN 1030	106	0.02	0.01	0.01	1.	*	2 JAN 0036	247	0.00	0.00	0.00	0.
1 JAN 1036	107	0.02	0.01	0.01	1.	*	2 JAN 0042	248	0.00	0.00	0.00	0.
1 JAN 1042	108	0.02	0.01	0.01	1.	*	2 JAN 0048	249	0.00	0.00	0.00	0.
1 JAN 1048	109	0.02	0.01	0.01	1.	*	2 JAN 0054	250	0.00	0.00	0.00	0.
1 JAN 1054	110	0.02	0.01	0.01	1.	*	2 JAN 0100	251	0.00	0.00	0.00	0.
1 JAN 1100	111	0.02	0.01	0.01	1.	*	2 JAN 0106	252	0.00	0.00	0.00	0.
1 JAN 1106	112	0.03	0.01	0.02	1.	*	2 JAN 0112	253	0.00	0.00	0.00	0.
1 JAN 1112	113	0.03	0.01	0.02	1.	*	2 JAN 0118	254	0.00	0.00	0.00	0.
1 JAN 1118	114	0.03	0.01	0.02	1.	*	2 JAN 0124	255	0.00	0.00	0.00	0.
1 JAN 1124	115	0.04	0.01	0.02	1.	*	2 JAN 0130	256	0.00	0.00	0.00	0.
1 JAN 1130	116	0.04	0.01	0.03	2.	*	2 JAN 0136	257	0.00	0.00	0.00	0.
1 JAN 1136	117	0.06	0.02	0.04	2.	*	2 JAN 0142	258	0.00	0.00	0.00	0.
1 JAN 1142	118	0.09	0.03	0.06	2.	*	2 JAN 0148	259	0.00	0.00	0.00	0.
1 JAN 1148	119	0.12	0.03	0.08	3.	*	2 JAN 0154	260	0.00	0.00	0.00	0.
1 JAN 1154	120	0.15	0.04	0.11	5.	*	2 JAN 0200	261	0.00	0.00	0.00	0.
1 JAN 1200	121	0.29	0.06	0.23	7.	*	2 JAN 0206	262	0.00	0.00	0.00	0.
1 JAN 1206	122	0.29	0.05	0.24	11.	*	2 JAN 0212	263	0.00	0.00	0.00	0.
1 JAN 1212	123	0.15	0.02	0.12	13.	*	2 JAN 0218	264	0.00	0.00	0.00	0.
1 JAN 1218	124	0.12	0.02	0.10	13.	*	2 JAN 0224	265	0.00	0.00	0.00	0.
1 JAN 1224	125	0.09	0.01	0.07	11.	*	2 JAN 0230	266	0.00	0.00	0.00	0.
1 JAN 1230	126	0.06	0.01	0.05	9.	*	2 JAN 0236	267	0.00	0.00	0.00	0.
1 JAN 1236	127	0.04	0.00	0.03	7.	*	2 JAN 0242	268	0.00	0.00	0.00	0.
1 JAN 1242	128	0.04	0.00	0.03	5.	*	2 JAN 0248	269	0.00	0.00	0.00	0.
1 JAN 1248	129	0.03	0.00	0.03	4.	*	2 JAN 0254	270	0.00	0.00	0.00	0.
1 JAN 1254	130	0.03	0.00	0.03	3.	*	2 JAN 0300	271	0.00	0.00	0.00	0.
1 JAN 1300	131	0.03	0.00	0.02	3.	*	2 JAN 0306	272	0.00	0.00	0.00	0.
1 JAN 1306	132	0.02	0.00	0.02	2.	*	2 JAN 0312	273	0.00	0.00	0.00	0.
1 JAN 1312	133	0.02	0.00	0.02	2.	*	2 JAN 0318	274	0.00	0.00	0.00	0.
1 JAN 1318	134	0.02	0.00	0.02	2.	*	2 JAN 0324	275	0.00	0.00	0.00	0.
1 JAN 1324	135	0.02	0.00	0.02	2.	*	2 JAN 0330	276	0.00	0.00	0.00	0.
1 JAN 1330	136	0.02	0.00	0.02	2.	*	2 JAN 0336	277	0.00	0.00	0.00	0.
1 JAN 1336	137	0.02	0.00	0.02	2.	*	2 JAN 0342	278	0.00	0.00	0.00	0.
1 JAN 1342	138	0.02	0.00	0.02	2.	*	2 JAN 0348	279	0.00	0.00	0.00	0.
1 JAN 1348	139	0.02	0.00	0.02	1.	*	2 JAN 0354	280	0.00	0.00	0.00	0.
1 JAN 1354	140	0.02	0.00	0.02	1.	*	2 JAN 0400	281	0.00	0.00	0.00	0.
1 JAN 1400	141	0.02	0.00	0.02	1.	*						

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TOTAL RAINFALL = 3.40, TOTAL LOSS = 1.05, TOTAL EXCESS = 2.35

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)
	(CFS)	13.	12.20		2.	1.	1. 1.
	(INCHES)	1.879	2.355	2.355	2.355		
	(AC-FT)	1.	2.	2.	2.		

CUMULATIVE AREA = 0.01 SQ MI

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          *           *
61 KK     *    COM2   *
          *           *
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COMBINE HYDROGRAPHS TO ESTIMATE DISCHARGE FROM 30" DRAIN TO POND

63 HC HYDROGRAPH COMBINATION

ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION COM2
SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0000	1	0.	1 JAN 0706	72	0.	1 JAN 1412	143	2.	1 JAN 2118	214	1.
1 JAN 0006	2	0.	1 JAN 0712	73	0.	1 JAN 1418	144	2.	1 JAN 2124	215	1.
1 JAN 0012	3	0.	1 JAN 0718	74	0.	1 JAN 1424	145	2.	1 JAN 2130	216	1.
1 JAN 0018	4	0.	1 JAN 0724	75	0.	1 JAN 1430	146	2.	1 JAN 2136	217	1.
1 JAN 0024	5	0.	1 JAN 0730	76	0.	1 JAN 1436	147	2.	1 JAN 2142	218	0.
1 JAN 0030	6	0.	1 JAN 0736	77	0.	1 JAN 1442	148	2.	1 JAN 2148	219	0.
1 JAN 0036	7	0.	1 JAN 0742	78	0.	1 JAN 1448	149	2.	1 JAN 2154	220	0.
1 JAN 0042	8	0.	1 JAN 0748	79	0.	1 JAN 1454	150	2.	1 JAN 2200	221	0.
1 JAN 0048	9	0.	1 JAN 0754	80	0.	1 JAN 1500	151	2.	1 JAN 2206	222	0.
1 JAN 0054	10	0.	1 JAN 0800	81	0.	1 JAN 1506	152	2.	1 JAN 2212	223	0.
1 JAN 0100	11	0.	1 JAN 0806	82	0.	1 JAN 1512	153	2.	1 JAN 2218	224	0.
1 JAN 0106	12	0.	1 JAN 0812	83	0.	1 JAN 1518	154	2.	1 JAN 2224	225	0.
1 JAN 0112	13	0.	1 JAN 0818	84	0.	1 JAN 1524	155	2.	1 JAN 2230	226	0.
1 JAN 0118	14	0.	1 JAN 0824	85	0.	1 JAN 1530	156	1.	1 JAN 2236	227	0.
1 JAN 0124	15	0.	1 JAN 0830	86	0.	1 JAN 1536	157	1.	1 JAN 2242	228	0.
1 JAN 0130	16	0.	1 JAN 0836	87	0.	1 JAN 1542	158	1.	1 JAN 2248	229	0.
1 JAN 0136	17	0.	1 JAN 0842	88	0.	1 JAN 1548	159	1.	1 JAN 2254	230	0.
1 JAN 0142	18	0.	1 JAN 0848	89	0.	1 JAN 1554	160	1.	1 JAN 2300	231	0.
1 JAN 0148	19	0.	1 JAN 0854	90	0.	1 JAN 1600	161	1.	1 JAN 2306	232	0.
1 JAN 0154	20	0.	1 JAN 0900	91	0.	1 JAN 1606	162	1.	1 JAN 2312	233	0.
1 JAN 0200	21	0.	1 JAN 0906	92	0.	1 JAN 1612	163	1.	1 JAN 2318	234	0.
1 JAN 0206	22	0.	1 JAN 0912	93	0.	1 JAN 1618	164	1.	1 JAN 2324	235	0.
1 JAN 0212	23	0.	1 JAN 0918	94	0.	1 JAN 1624	165	1.	1 JAN 2330	236	0.
1 JAN 0218	24	0.	1 JAN 0924	95	0.	1 JAN 1630	166	1.	1 JAN 2336	237	0.
1 JAN 0224	25	0.	1 JAN 0930	96	0.	1 JAN 1636	167	1.	1 JAN 2342	238	0.
1 JAN 0230	26	0.	1 JAN 0936	97	0.	1 JAN 1642	168	1.	1 JAN 2348	239	0.
1 JAN 0236	27	0.	1 JAN 0942	98	0.	1 JAN 1648	169	1.	1 JAN 2354	240	0.
1 JAN 0242	28	0.	1 JAN 0948	99	0.	1 JAN 1654	170	1.	2 JAN 0000	241	0.
1 JAN 0248	29	0.	1 JAN 0954	100	1.	1 JAN 1700	171	1.	2 JAN 0006	242	0.
1 JAN 0254	30	0.	1 JAN 1000	101	1.	1 JAN 1706	172	1.	2 JAN 0012	243	0.
1 JAN 0300	31	0.	1 JAN 1006	102	1.	1 JAN 1712	173	1.	2 JAN 0018	244	0.
1 JAN 0306	32	0.	1 JAN 1012	103	1.	1 JAN 1718	174	1.	2 JAN 0024	245	0.
1 JAN 0312	33	0.	1 JAN 1018	104	1.	1 JAN 1724	175	1.	2 JAN 0030	246	0.
1 JAN 0318	34	0.	1 JAN 1024	105	1.	1 JAN 1730	176	1.	2 JAN 0036	247	0.
1 JAN 0324	35	0.	1 JAN 1030	106	1.	1 JAN 1736	177	1.	2 JAN 0042	248	0.
1 JAN 0330	36	0.	1 JAN 1036	107	1.	1 JAN 1742	178	1.	2 JAN 0048	249	0.
1 JAN 0336	37	0.	1 JAN 1042	108	1.	1 JAN 1748	179	1.	2 JAN 0054	250	0.
1 JAN 0342	38	0.	1 JAN 1048	109	1.	1 JAN 1754	180	1.	2 JAN 0100	251	0.
1 JAN 0348	39	0.	1 JAN 1054	110	1.	1 JAN 1800	181	1.	2 JAN 0106	252	0.
1 JAN 0354	40	0.	1 JAN 1100	111	1.	1 JAN 1806	182	1.	2 JAN 0112	253	0.
1 JAN 0400	41	0.	1 JAN 1106	112	1.	1 JAN 1812	183	1.	2 JAN 0118	254	0.
1 JAN 0406	42	0.	1 JAN 1112	113	1.	1 JAN 1818	184	1.	2 JAN 0124	255	0.
1 JAN 0412	43	0.	1 JAN 1118	114	1.	1 JAN 1824	185	1.	2 JAN 0130	256	0.
1 JAN 0418	44	0.	1 JAN 1124	115	1.	1 JAN 1830	186	1.	2 JAN 0136	257	0.
1 JAN 0424	45	0.	1 JAN 1130	116	2.	1 JAN 1836	187	1.	2 JAN 0142	258	0.
1 JAN 0430	46	0.	1 JAN 1136	117	2.	1 JAN 1842	188	1.	2 JAN 0148	259	0.
1 JAN 0436	47	0.	1 JAN 1142	118	2.	1 JAN 1848	189	1.	2 JAN 0154	260	0.
1 JAN 0442	48	0.	1 JAN 1148	119	3.	1 JAN 1854	190	1.	2 JAN 0200	261	0.
1 JAN 0448	49	0.	1 JAN 1154	120	5.	1 JAN 1900	191	1.	2 JAN 0206	262	0.
1 JAN 0454	50	0.	1 JAN 1200	121	7.	1 JAN 1906	192	1.	2 JAN 0212	263	0.
1 JAN 0500	51	0.	1 JAN 1206	122	11.	1 JAN 1912	193	1.	2 JAN 0218	264	0.
1 JAN 0506	52	0.	1 JAN 1212	123	15.	1 JAN 1918	194	1.	2 JAN 0224	265	0.
1 JAN 0512	53	0.	1 JAN 1218	124	16.	1 JAN 1924	195	1.	2 JAN 0230	266	0.
1 JAN 0518	54	0.	1 JAN 1224	125	15.	1 JAN 1930	196	1.	2 JAN 0236	267	0.
1 JAN 0524	55	0.	1 JAN 1230	126	13.	1 JAN 1936	197	1.	2 JAN 0242	268	0.
1 JAN 0530	56	0.	1 JAN 1236	127	10.	1 JAN 1942	198	1.	2 JAN 0248	269	0.
1 JAN 0536	57	0.	1 JAN 1242	128	8.	1 JAN 1948	199	1.	2 JAN 0254	270	0.
1 JAN 0542	58	0.	1 JAN 1248	129	6.	1 JAN 1954	200	1.	2 JAN 0300	271	0.
1 JAN 0548	59	0.	1 JAN 1254	130	5.	1 JAN 2000	201	1.	2 JAN 0306	272	0.
1 JAN 0554	60	0.	1 JAN 1300	131	4.	1 JAN 2006	202	1.	2 JAN 0312	273	0.
1 JAN 0600	61	0.	1 JAN 1306	132	4.	1 JAN 2012	203	1.	2 JAN 0318	274	0.
1 JAN 0606	62	0.	1 JAN 1312	133	3.	1 JAN 2018	204	1.	2 JAN 0324	275	0.
1 JAN 0612	63	0.	1 JAN 1318	134	3.	1 JAN 2024	205	1.	2 JAN 0330	276	0.
1 JAN 0618	64	0.	1 JAN 1324	135	3.	1 JAN 2030	206	1.	2 JAN 0336	277	0.
1 JAN 0624	65	0.	1 JAN 1330	136	3.	1 JAN 2036	207	1.	2 JAN 0342	278	0.
1 JAN 0630	66	0.	1 JAN 1336	137	3.	1 JAN 2042	208	1.	2 JAN 0348	279	0.
1 JAN 0636	67	0.	1 JAN 1342	138	3.	1 JAN 2048	209	1.	2 JAN 0354	280	0.
1 JAN 0642	68	0.	1 JAN 1348	139	2.	1 JAN 2054	210	1.	2 JAN 0400	281	0.
1 JAN 0648	69	0.	1 JAN 1354	140	2.	1 JAN 2100	211	1.			
1 JAN 0654	70	0.	1 JAN 1400	141	2.	1 JAN 2106	212	1.			
1 JAN 0700	71	0.	1 JAN 1406	142	2.	1 JAN 2112	213	1.			

PEAK FLOW TIME — MAXIMUM AVERAGE FLOW

	6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)	
(CFS)	16.	12.30		3.	1.	1.	1.
(INCHES)	0.931	1.193	1.193	1.193			
(AC-FT)	2.	2.	2.	2.			

CUMULATIVE AREA = 0.03 SQ MI

64 KK SA4 SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)

SUBBASIN RUNOFF DATA

65 BA SUBBASIN CHARACTERISTICS

TAREA 0.00 SUBBASIN AREA

PRECIPITATION DATA

12 PB STORM 3.40 BASIN TOTAL PRECIPITATION

13 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.08
0.08	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

66 LS SCS LOSS RATE

STRTL 0.20 INITIAL ABSTRACTION

CRVNBR 91.00 CURVE NUMBER

RTIMP 0.00 PERCENT IMPERVIOUS AREA

67 UD SCS DIMENSIONLESS UNITGRAPH

TLAG 0.15 LAG

***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH

10 END-OF-PERIOD ORDINATES

3.	7.	5.	2.	1.	0.	0.	0.	0.	0.

****

HYDROGRAPH AT STATION SA4

****

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0000	1	0.00	0.00	0.00	0.	*	1 JAN 1406	142	0.02	0.00	0.02	0.
1 JAN 0006	2	0.00	0.00	0.00	0.	*	1 JAN 1412	143	0.02	0.00	0.01	0.
1 JAN 0012	3	0.00	0.00	0.00	0.	*	1 JAN 1418	144	0.02	0.00	0.01	0.
1 JAN 0018	4	0.00	0.00	0.00	0.	*	1 JAN 1424	145	0.02	0.00	0.01	0.
1 JAN 0024	5	0.00	0.00	0.00	0.	*	1 JAN 1430	146	0.01	0.00	0.01	0.
1 JAN 0030	6	0.00	0.00	0.00	0.	*	1 JAN 1436	147	0.01	0.00	0.01	0.
1 JAN 0036	7	0.00	0.00	0.00	0.	*	1 JAN 1442	148	0.01	0.00	0.01	0.
1 JAN 0042	8	0.00	0.00	0.00	0.	*	1 JAN 1448	149	0.01	0.00	0.01	0.
1 JAN 0048	9	0.00	0.00	0.00	0.	*	1 JAN 1454	150	0.01	0.00	0.01	0.
1 JAN 0054	10	0.00	0.00	0.00	0.	*	1 JAN 1500	151	0.01	0.00	0.01	0.
1 JAN 0100	11	0.00	0.00	0.00	0.	*	1 JAN 1506	152	0.01	0.00	0.01	0.
1 JAN 0106	12	0.00	0.00	0.00	0.	*	1 JAN 1512	153	0.01	0.00	0.01	0.
1 JAN 0112	13	0.00	0.00	0.00	0.	*	1 JAN 1518	154	0.01	0.00	0.01	0.
1 JAN 0118	14	0.00	0.00	0.00	0.	*	1 JAN 1524	155	0.01	0.00	0.01	0.
1 JAN 0124	15	0.00	0.00	0.00	0.	*	1 JAN 1530	156	0.01	0.00	0.01	0.
1 JAN 0130	16	0.00	0.00	0.00	0.	*	1 JAN 1536	157	0.01	0.00	0.01	0.
1 JAN 0136	17	0.00	0.00	0.00	0.	*	1 JAN 1542	158	0.01	0.00	0.01	0.
1 JAN 0142	18	0.00	0.00	0.00	0.	*	1 JAN 1548	159	0.01	0.00	0.01	0.
1 JAN 0148	19	0.00	0.00	0.00	0.	*	1 JAN 1554	160	0.01	0.00	0.01	0.
1 JAN 0154	20	0.00	0.00	0.00	0.	*	1 JAN 1600	161	0.01	0.00	0.01	0.
1 JAN 0200	21	0.00	0.00	0.00	0.	*	1 JAN 1606	162	0.01	0.00	0.01	0.
1 JAN 0206	22	0.00	0.00	0.00	0.	*	1 JAN 1612	163	0.01	0.00	0.01	0.
1 JAN 0212	23	0.00	0.00	0.00	0.	*	1 JAN 1618	164	0.01	0.00	0.01	0.
1 JAN 0218	24	0.00	0.00	0.00	0.	*	1 JAN 1624	165	0.01	0.00	0.01	0.
1 JAN 0224	25	0.00	0.00	0.00	0.	*	1 JAN 1630	166	0.01	0.00	0.01	0.
1 JAN 0230	26	0.00	0.00	0.00	0.	*	1 JAN 1636	167	0.01	0.00	0.01	0.
1 JAN 0236	27	0.00	0.00	0.00	0.	*	1 JAN 1642	168	0.01	0.00	0.01	0.
1 JAN 0242	28	0.00	0.00	0.00	0.	*	1 JAN 1648	169	0.01	0.00	0.01	0.
1 JAN 0248	29	0.00	0.00	0.00	0.	*	1 JAN 1654	170	0.01	0.00	0.01	0.
1 JAN 0254	30	0.00	0.00	0.00	0.	*	1 JAN 1700	171	0.01	0.00	0.01	0.
1 JAN 0300	31	0.00	0.00	0.00	0.	*	1 JAN 1706	172	0.01	0.00	0.01	0.
1 JAN 0306	32	0.00	0.00	0.00	0.	*	1 JAN 1712	173	0.01	0.00	0.01	0.
1 JAN 0312	33	0.00	0.00	0.00	0.	*	1 JAN 1718	174	0.01	0.00	0.01	0.
1 JAN 0318	34	0.00	0.00	0.00	0.	*	1 JAN 1724	175	0.01	0.00	0.01	0.
1 JAN 0324	35	0.00	0.00	0.00	0.	*	1 JAN 1730	176	0.01	0.00	0.01	0.
1 JAN 0330	36	0.00	0.00	0.00	0.	*	1 JAN 1736	177	0.01	0.00	0.01	0.
1 JAN 0336	37	0.00	0.00	0.00	0.	*	1 JAN 1742	178	0.01	0.00	0.01	0.
1 JAN 0342	38	0.00	0.00	0.00	0.	*	1 JAN 1748	179	0.01	0.00	0.01	0.
1 JAN 0348	39	0.00	0.00	0.00	0.	*	1 JAN 1754	180	0.01	0.00	0.01	0.
1 JAN 0354	40	0.00	0.00	0.00	0.	*	1 JAN 1800	181	0.01	0.00	0.01	0.
1 JAN 0400	41	0.00	0.00	0.00	0.	*	1 JAN 1806	182	0.01	0.00	0.01	0.
1 JAN 0406	42	0.00	0.00	0.00	0.	*	1 JAN 1812	183	0.01	0.00	0.01	0.
1 JAN 0412	43	0.00	0.00	0.00	0.	*	1 JAN 1818	184	0.01	0.00	0.00	0.
1 JAN 0418	44	0.00	0.00	0.00	0.	*	1 JAN 1824	185	0.01	0.00	0.00	0.
1 JAN 0424	45	0.00	0.00	0.00	0.	*	1 JAN 1830	186	0.01	0.00	0.00	0.
1 JAN 0430	46	0.00	0.00	0.00	0.	*	1 JAN 1836	187	0.01	0.00	0.00	0.
1 JAN 0436	47	0.00	0.00	0.00	0.	*	1 JAN 1842	188	0.01	0.00	0.00	0.

1 JAN 0442	48	0.00	0.00	0.00	0.	*	1 JAN 1848	189	0.01	0.00	0.00	0.
1 JAN 0448	49	0.00	0.00	0.00	0.	*	1 JAN 1854	190	0.00	0.00	0.00	0.
1 JAN 0454	50	0.00	0.00	0.00	0.	*	1 JAN 1900	191	0.01	0.00	0.00	0.
1 JAN 0500	51	0.00	0.00	0.00	0.	*	1 JAN 1906	192	0.00	0.00	0.00	0.
1 JAN 0506	52	0.01	0.01	0.00	0.	*	1 JAN 1912	193	0.00	0.00	0.00	0.
1 JAN 0512	53	0.00	0.00	0.00	0.	*	1 JAN 1918	194	0.00	0.00	0.00	0.
1 JAN 0518	54	0.01	0.00	0.00	0.	*	1 JAN 1924	195	0.00	0.00	0.00	0.
1 JAN 0524	55	0.01	0.00	0.00	0.	*	1 JAN 1930	196	0.00	0.00	0.00	0.
1 JAN 0530	56	0.01	0.00	0.00	0.	*	1 JAN 1936	197	0.00	0.00	0.00	0.
1 JAN 0536	57	0.01	0.00	0.00	0.	*	1 JAN 1942	198	0.00	0.00	0.00	0.
1 JAN 0542	58	0.01	0.00	0.00	0.	*	1 JAN 1948	199	0.00	0.00	0.00	0.
1 JAN 0548	59	0.01	0.00	0.00	0.	*	1 JAN 1954	200	0.00	0.00	0.00	0.
1 JAN 0554	60	0.01	0.00	0.00	0.	*	1 JAN 2000	201	0.00	0.00	0.00	0.
1 JAN 0600	61	0.01	0.00	0.00	0.	*	1 JAN 2006	202	0.00	0.00	0.00	0.
1 JAN 0606	62	0.01	0.01	0.00	0.	*	1 JAN 2012	203	0.00	0.00	0.00	0.
1 JAN 0612	63	0.01	0.01	0.00	0.	*	1 JAN 2018	204	0.00	0.00	0.00	0.
1 JAN 0618	64	0.01	0.01	0.00	0.	*	1 JAN 2024	205	0.00	0.00	0.00	0.
1 JAN 0624	65	0.01	0.01	0.00	0.	*	1 JAN 2030	206	0.00	0.00	0.00	0.
1 JAN 0630	66	0.01	0.01	0.00	0.	*	1 JAN 2036	207	0.00	0.00	0.00	0.
1 JAN 0636	67	0.01	0.01	0.00	0.	*	1 JAN 2042	208	0.00	0.00	0.00	0.
1 JAN 0642	68	0.01	0.01	0.00	0.	*	1 JAN 2048	209	0.00	0.00	0.00	0.
1 JAN 0648	69	0.01	0.01	0.00	0.	*	1 JAN 2054	210	0.00	0.00	0.00	0.
1 JAN 0654	70	0.01	0.01	0.00	0.	*	1 JAN 2100	211	0.00	0.00	0.00	0.
1 JAN 0700	71	0.01	0.01	0.00	0.	*	1 JAN 2106	212	0.00	0.00	0.00	0.
1 JAN 0706	72	0.01	0.01	0.00	0.	*	1 JAN 2112	213	0.00	0.00	0.00	0.
1 JAN 0712	73	0.01	0.01	0.00	0.	*	1 JAN 2118	214	0.00	0.00	0.00	0.
1 JAN 0718	74	0.01	0.01	0.00	0.	*	1 JAN 2124	215	0.00	0.00	0.00	0.
1 JAN 0724	75	0.01	0.01	0.00	0.	*	1 JAN 2130	216	0.00	0.00	0.00	0.
1 JAN 0730	76	0.01	0.01	0.00	0.	*	1 JAN 2136	217	0.00	0.00	0.00	0.
1 JAN 0736	77	0.01	0.01	0.00	0.	*	1 JAN 2142	218	0.00	0.00	0.00	0.
1 JAN 0742	78	0.01	0.01	0.00	0.	*	1 JAN 2148	219	0.00	0.00	0.00	0.
1 JAN 0748	79	0.01	0.01	0.00	0.	*	1 JAN 2154	220	0.00	0.00	0.00	0.
1 JAN 0754	80	0.01	0.01	0.00	0.	*	1 JAN 2200	221	0.00	0.00	0.00	0.
1 JAN 0800	81	0.01	0.01	0.00	0.	*	1 JAN 2206	222	0.00	0.00	0.00	0.
1 JAN 0806	82	0.01	0.01	0.00	0.	*	1 JAN 2212	223	0.00	0.00	0.00	0.
1 JAN 0812	83	0.01	0.01	0.00	0.	*	1 JAN 2218	224	0.00	0.00	0.00	0.
1 JAN 0818	84	0.01	0.01	0.00	0.	*	1 JAN 2224	225	0.00	0.00	0.00	0.
1 JAN 0824	85	0.01	0.01	0.00	0.	*	1 JAN 2230	226	0.00	0.00	0.00	0.
1 JAN 0830	86	0.01	0.01	0.00	0.	*	1 JAN 2236	227	0.00	0.00	0.00	0.
1 JAN 0836	87	0.01	0.01	0.00	0.	*	1 JAN 2242	228	0.00	0.00	0.00	0.
1 JAN 0842	88	0.01	0.01	0.00	0.	*	1 JAN 2248	229	0.00	0.00	0.00	0.
1 JAN 0848	89	0.01	0.01	0.00	0.	*	1 JAN 2254	230	0.00	0.00	0.00	0.
1 JAN 0854	90	0.01	0.01	0.00	0.	*	1 JAN 2300	231	0.00	0.00	0.00	0.
1 JAN 0900	91	0.01	0.01	0.01	0.	*	1 JAN 2306	232	0.00	0.00	0.00	0.
1 JAN 0906	92	0.00	0.00	0.00	0.	*	1 JAN 2312	233	0.00	0.00	0.00	0.
1 JAN 0912	93	0.03	0.01	0.01	0.	*	1 JAN 2318	234	0.00	0.00	0.00	0.
1 JAN 0918	94	0.01	0.01	0.01	0.	*	1 JAN 2324	235	0.00	0.00	0.00	0.
1 JAN 0924	95	0.01	0.01	0.01	0.	*	1 JAN 2330	236	0.00	0.00	0.00	0.
1 JAN 0930	96	0.01	0.01	0.01	0.	*	1 JAN 2336	237	0.00	0.00	0.00	0.
1 JAN 0936	97	0.01	0.01	0.01	0.	*	1 JAN 2342	238	0.00	0.00	0.00	0.
1 JAN 0942	98	0.02	0.01	0.01	0.	*	1 JAN 2348	239	0.00	0.00	0.00	0.
1 JAN 0948	99	0.02	0.01	0.01	0.	*	1 JAN 2354	240	0.00	0.00	0.00	0.
1 JAN 0954	100	0.02	0.01	0.01	0.	*	2 JAN 0000	241	0.00	0.00	0.00	0.
1 JAN 1000	101	0.02	0.01	0.01	0.	*	2 JAN 0006	242	0.00	0.00	0.00	0.
1 JAN 1006	102	0.02	0.01	0.01	0.	*	2 JAN 0012	243	0.00	0.00	0.00	0.
1 JAN 1012	103	0.02	0.01	0.01	0.	*	2 JAN 0018	244	0.00	0.00	0.00	0.
1 JAN 1018	104	0.02	0.01	0.01	0.	*	2 JAN 0024	245	0.00	0.00	0.00	0.
1 JAN 1024	105	0.02	0.01	0.01	0.	*	2 JAN 0030	246	0.00	0.00	0.00	0.
1 JAN 1030	106	0.02	0.01	0.01	0.	*	2 JAN 0036	247	0.00	0.00	0.00	0.
1 JAN 1036	107	0.02	0.01	0.01	0.	*	2 JAN 0042	248	0.00	0.00	0.00	0.
1 JAN 1042	108	0.02	0.01	0.01	0.	*	2 JAN 0048	249	0.00	0.00	0.00	0.
1 JAN 1048	109	0.02	0.01	0.01	0.	*	2 JAN 0054	250	0.00	0.00	0.00	0.
1 JAN 1054	110	0.02	0.01	0.01	0.	*	2 JAN 0100	251	0.00	0.00	0.00	0.
1 JAN 1100	111	0.02	0.01	0.02	0.	*	2 JAN 0106	252	0.00	0.00	0.00	0.
1 JAN 1106	112	0.03	0.01	0.02	0.	*	2 JAN 0112	253	0.00	0.00	0.00	0.
1 JAN 1112	113	0.03	0.01	0.02	0.	*	2 JAN 0118	254	0.00	0.00	0.00	0.
1 JAN 1118	114	0.03	0.01	0.02	0.	*	2 JAN 0124	255	0.00	0.00	0.00	0.
1 JAN 1124	115	0.04	0.01	0.02	0.	*	2 JAN 0130	256	0.00	0.00	0.00	0.
1 JAN 1130	116	0.04	0.01	0.03	0.	*	2 JAN 0136	257	0.00	0.00	0.00	0.
1 JAN 1136	117	0.06	0.02	0.04	1.	*	2 JAN 0142	258	0.00	0.00	0.00	0.
1 JAN 1142	118	0.09	0.02	0.06	1.	*	2 JAN 0148	259	0.00	0.00	0.00	0.
1 JAN 1148	119	0.12	0.03	0.09	1.	*	2 JAN 0154	260	0.00	0.00	0.00	0.
1 JAN 1154	120	0.15	0.03	0.11	1.	*	2 JAN 0200	261	0.00	0.00	0.00	0.
1 JAN 1200	121	0.29	0.05	0.23	2.	*	2 JAN 0206	262	0.00	0.00	0.00	0.
1 JAN 1206	122	0.29	0.04	0.25	3.	*	2 JAN 0212	263	0.00	0.00	0.00	0.
1 JAN 1212	123	0.15	0.02	0.13	4.	*	2 JAN 0218	264	0.00	0.00	0.00	0.
1 JAN 1218	124	0.12	0.01	0.10	3.	*	2 JAN 0224	265	0.00	0.00	0.00	0.
1 JAN 1224	125	0.09	0.01	0.08	2.	*	2 JAN 0230	266	0.00	0.00	0.00	0.
1 JAN 1230	126	0.06	0.01	0.05	2.	*	2 JAN 0236	267	0.00	0.00	0.00	0.
1 JAN 1236	127	0.04	0.00	0.04	1.	*	2 JAN 0242	268	0.00	0.00	0.00	0.
1 JAN 1242	128	0.04	0.00	0.03	1.	*	2 JAN 0248	269	0.00	0.00	0.00	0.
1 JAN 1248	129	0.03	0.00	0.03	1.	*	2 JAN 0254	270	0.00	0.00	0.00	0.
1 JAN 1254	130	0.03	0.00	0.03	1.	*	2 JAN 0300	271	0.00	0.00	0.00	0.
1 JAN 1300	131	0.03	0.00	0.02	1.	*	2 JAN 0306	272	0.00	0.00	0.00	0.
1 JAN 1306	132	0.02	0.00	0.02	1.	*	2 JAN 0312	273	0.00	0.00	0.00	0.
1 JAN 1312	133	0.02	0.00	0.02	0.	*	2 JAN 0318	274	0.00	0.00	0.00	0.
1 JAN 1318	134	0.02	0.00	0.02	0.	*	2 JAN 0324	275	0.00	0.00	0.00	0.
1 JAN 1324	135	0.02	0.00	0.02	0.	*	2 JAN 0330	276	0.00	0.00	0.00	0.
1 JAN 1330	136	0.02	0.00	0.02	0.	*	2 JAN 0336	277	0.00	0.00	0.00	0.
1 JAN 1336	137	0.02	0.00	0.02	0.	*	2 JAN 0342	278	0.00	0.00	0.00	0.
1 JAN 1342	138	0.02	0.00	0.02	0.	*	2 JAN 0348	279	0.00	0.00	0.00	0.
1 JAN 1348	139	0.02	0.00	0.02	0.	*	2 JAN 0354	280	0.00	0.00	0.00	0.
1 JAN 1354	140	0.02	0.00	0.02	0.	*	2 JAN 0400	281	0.00	0.00	0.00	0.
1 JAN 1400	141	0.02	0.00	0.02	0.	*						
						*						

****

TOTAL RAINFALL = 3.40, TOTAL LOSS = 0.95, TOTAL EXCESS = 2.45

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)
	(CFS)	4.	12.20		1.	0.	0.
	(INCHES)	1.944	2.447	2.447	2.447		
	(AC-FT)	0.	0.	0.	0.		

CUMULATIVE AREA = 0.00 SQ MI

*** ***

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          **************
          *            *
68 KK     *     COM    *
          *            *
          **************
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COMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND

70 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

***

HYDROGRAPH AT STATION COM
SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0000	1	0.	1 JAN 0706	72	0.	1 JAN 1412	143	2.	1 JAN 2118	214	1.
1 JAN 0006	2	0.	1 JAN 0712	73	0.	1 JAN 1418	144	2.	1 JAN 2124	215	1.
1 JAN 0012	3	0.	1 JAN 0718	74	0.	1 JAN 1424	145	2.	1 JAN 2130	216	1.
1 JAN 0018	4	0.	1 JAN 0724	75	0.	1 JAN 1430	146	2.	1 JAN 2136	217	1.
1 JAN 0024	5	0.	1 JAN 0730	76	0.	1 JAN 1436	147	2.	1 JAN 2142	218	1.
1 JAN 0030	6	0.	1 JAN 0736	77	0.	1 JAN 1442	148	2.	1 JAN 2148	219	1.
1 JAN 0036	7	0.	1 JAN 0742	78	0.	1 JAN 1448	149	2.	1 JAN 2154	220	1.
1 JAN 0042	8	0.	1 JAN 0748	79	0.	1 JAN 1454	150	2.	1 JAN 2200	221	1.
1 JAN 0048	9	0.	1 JAN 0754	80	0.	1 JAN 1500	151	2.	1 JAN 2206	222	1.
1 JAN 0054	10	0.	1 JAN 0800	81	0.	1 JAN 1506	152	2.	1 JAN 2212	223	1.
1 JAN 0100	11	0.	1 JAN 0806	82	0.	1 JAN 1512	153	2.	1 JAN 2218	224	1.
1 JAN 0106	12	0.	1 JAN 0812	83	0.	1 JAN 1518	154	2.	1 JAN 2224	225	1.
1 JAN 0112	13	0.	1 JAN 0818	84	0.	1 JAN 1524	155	2.	1 JAN 2230	226	1.
1 JAN 0118	14	0.	1 JAN 0824	85	0.	1 JAN 1530	156	2.	1 JAN 2236	227	1.
1 JAN 0124	15	0.	1 JAN 0830	86	0.	1 JAN 1536	157	2.	1 JAN 2242	228	1.
1 JAN 0130	16	0.	1 JAN 0836	87	0.	1 JAN 1542	158	2.	1 JAN 2248	229	1.
1 JAN 0136	17	0.	1 JAN 0842	88	0.	1 JAN 1548	159	2.	1 JAN 2254	230	1.
1 JAN 0142	18	0.	1 JAN 0848	89	0.	1 JAN 1554	160	1.	1 JAN 2300	231	0.
1 JAN 0148	19	0.	1 JAN 0854	90	0.	1 JAN 1600	161	1.	1 JAN 2306	232	0.
1 JAN 0154	20	0.	1 JAN 0900	91	0.	1 JAN 1606	162	1.	1 JAN 2312	233	0.
1 JAN 0200	21	0.	1 JAN 0906	92	0.	1 JAN 1612	163	1.	1 JAN 2318	234	0.
1 JAN 0206	22	0.	1 JAN 0912	93	0.	1 JAN 1618	164	1.	1 JAN 2324	235	0.
1 JAN 0212	23	0.	1 JAN 0918	94	0.	1 JAN 1624	165	1.	1 JAN 2330	236	0.
1 JAN 0218	24	0.	1 JAN 0924	95	1.	1 JAN 1630	166	1.	1 JAN 2336	237	0.
1 JAN 0224	25	0.	1 JAN 0930	96	1.	1 JAN 1636	167	1.	1 JAN 2342	238	0.
1 JAN 0230	26	0.	1 JAN 0936	97	1.	1 JAN 1642	168	1.	1 JAN 2348	239	0.
1 JAN 0236	27	0.	1 JAN 0942	98	1.	1 JAN 1648	169	1.	1 JAN 2354	240	0.
1 JAN 0242	28	0.	1 JAN 0948	99	1.	1 JAN 1654	170	1.	2 JAN 0000	241	0.
1 JAN 0248	29	0.	1 JAN 0954	100	1.	1 JAN 1700	171	1.	2 JAN 0006	242	0.
1 JAN 0254	30	0.	1 JAN 1000	101	1.	1 JAN 1706	172	1.	2 JAN 0012	243	0.
1 JAN 0300	31	0.	1 JAN 1006	102	1.	1 JAN 1712	173	1.	2 JAN 0018	244	0.
1 JAN 0306	32	0.	1 JAN 1012	103	1.	1 JAN 1718	174	1.	2 JAN 0024	245	0.
1 JAN 0312	33	0.	1 JAN 1018	104	1.	1 JAN 1724	175	1.	2 JAN 0030	246	0.
1 JAN 0318	34	0.	1 JAN 1024	105	1.	1 JAN 1730	176	1.	2 JAN 0036	247	0.
1 JAN 0324	35	0.	1 JAN 1030	106	1.	1 JAN 1736	177	1.	2 JAN 0042	248	0.
1 JAN 0330	36	0.	1 JAN 1036	107	1.	1 JAN 1742	178	1.	2 JAN 0048	249	0.
1 JAN 0336	37	0.	1 JAN 1042	108	1.	1 JAN 1748	179	1.	2 JAN 0054	250	0.
1 JAN 0342	38	0.	1 JAN 1048	109	1.	1 JAN 1754	180	1.	2 JAN 0100	251	0.
1 JAN 0348	39	0.	1 JAN 1054	110	1.	1 JAN 1800	181	1.	2 JAN 0106	252	0.
1 JAN 0354	40	0.	1 JAN 1100	111	1.	1 JAN 1806	182	1.	2 JAN 0112	253	0.
1 JAN 0400	41	0.	1 JAN 1106	112	1.	1 JAN 1812	183	1.	2 JAN 0118	254	0.
1 JAN 0406	42	0.	1 JAN 1112	113	1.	1 JAN 1818	184	1.	2 JAN 0124	255	0.
1 JAN 0412	43	0.	1 JAN 1118	114	2.	1 JAN 1824	185	1.	2 JAN 0130	256	0.
1 JAN 0418	44	0.	1 JAN 1124	115	2.	1 JAN 1830	186	1.	2 JAN 0136	257	0.
1 JAN 0424	45	0.	1 JAN 1130	116	2.	1 JAN 1836	187	1.	2 JAN 0142	258	0.
1 JAN 0430	46	0.	1 JAN 1136	117	2.	1 JAN 1842	188	1.	2 JAN 0148	259	0.
1 JAN 0436	47	0.	1 JAN 1142	118	3.	1 JAN 1848	189	1.	2 JAN 0154	260	0.
1 JAN 0442	48	0.	1 JAN 1148	119	4.	1 JAN 1854	190	1.	2 JAN 0200	261	0.
1 JAN 0448	49	0.	1 JAN 1154	120	6.	1 JAN 1900	191	1.	2 JAN 0206	262	0.
1 JAN 0454	50	0.	1 JAN 1200	121	9.	1 JAN 1906	192	1.	2 JAN 0212	263	0.
1 JAN 0500	51	0.	1 JAN 1206	122	15.	1 JAN 1912	193	1.	2 JAN 0218	264	0.
1 JAN 0506	52	0.	1 JAN 1212	123	19.	1 JAN 1918	194	1.	2 JAN 0224	265	0.
1 JAN 0512	53	0.	1 JAN 1218	124	19.	1 JAN 1924	195	1.	2 JAN 0230	266	0.
1 JAN 0518	54	0.	1 JAN 1224	125	17.	1 JAN 1930	196	1.	2 JAN 0236	267	0.
1 JAN 0524	55	0.	1 JAN 1230	126	15.	1 JAN 1936	197	1.	2 JAN 0242	268	0.
1 JAN 0530	56	0.	1 JAN 1236	127	12.	1 JAN 1942	198	1.	2 JAN 0248	269	0.
1 JAN 0536	57	0.	1 JAN 1242	128	9.	1 JAN 1948	199	1.	2 JAN 0254	270	0.
1 JAN 0542	58	0.	1 JAN 1248	129	7.	1 JAN 1954	200	1.	2 JAN 0300	271	0.
1 JAN 0548	59	0.	1 JAN 1254	130	6.	1 JAN 2000	201	1.	2 JAN 0306	272	0.
1 JAN 0554	60	0.	1 JAN 1300	131	5.	1 JAN 2006	202	1.	2 JAN 0312	273	0.
1 JAN 0600	61	0.	1 JAN 1306	132	4.	1 JAN 2012	203	1.	2 JAN 0318	274	0.
1 JAN 0606	62	0.	1 JAN 1312	133	4.	1 JAN 2018	204	1.	2 JAN 0324	275	0.
1 JAN 0612	63	0.	1 JAN 1318	134	4.	1 JAN 2024	205	1.	2 JAN 0330	276	0.
1 JAN 0618	64	0.	1 JAN 1324	135	3.	1 JAN 2030	206	1.	2 JAN 0336	277	0.
1 JAN 0624	65	0.	1 JAN 1330	136	3.	1 JAN 2036	207	1.	2 JAN 0342	278	0.
1 JAN 0630	66	0.	1 JAN 1336	137	3.	1 JAN 2042	208	1.	2 JAN 0348	279	0.
1 JAN 0636	67	0.	1 JAN 1342	138	3.	1 JAN 2048	209	1.	2 JAN 0354	280	0.
1 JAN 0642	68	0.	1 JAN 1348	139	3.	1 JAN 2054	210	1.	2 JAN 0400	281	0.
1 JAN 0648	69	0.	1 JAN 1354	140	3.	1 JAN 2100	211	1.			
1 JAN 0654	70	0.	1 JAN 1400	141	3.	1 JAN 2106	212	1.			
1 JAN 0700	71	0.	1 JAN 1406	142	2.	1 JAN 2112	213	1.			

PEAK FLOW TIME MAXIMUM AVERAGE FLOW

6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)

(CFS)	19.	12.30		4.	1.	1.	1.
(INCHES)	1.012	1.295	1.295	1.295			
(AC-FT)	2.	3.	3.	3.			

CUMULATIVE AREA = 0.04 SQ MI

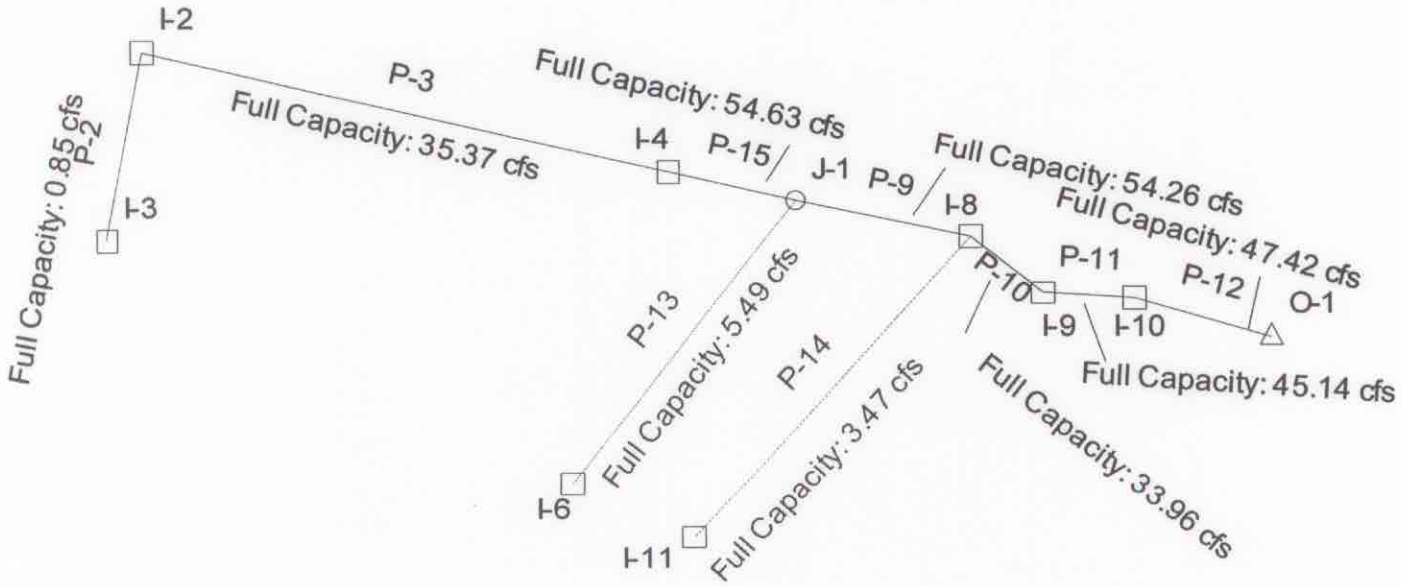
RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD				BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
		6-HOUR	24-HOUR	72-HOUR						
HYDROGRAPH AT			SA1	2.	12.60	0.		0.	0.	0.00
ROUTED TO			SPOOL	0.	0.10	0.		0.	0.	0.00
		30.03	26.40							
HYDROGRAPH AT			SA2	4.	12.40	1.		0.	0.	0.02
2 COMBINED AT			COM1	4.	12.40	1.		0.	0.	0.02
ROUTED TO			POOL1	4.	12.50	1.		0.	0.	0.02
		25.95	12.50							
HYDROGRAPH AT			SA3	13.	12.20	2.		1.	1.	0.01
2 COMBINED AT			COM2	16.	12.30	3.		1.	1.	0.03
HYDROGRAPH AT			SA4	4.	12.20	1.		0.	0.	0.00
2 COMBINED AT			COM	19.	12.30	4.		1.	1.	0.04

*** NORMAL END OF HEC-1 ***

APPENDIX C
RESULTS OF EXISTING DRAINAGE SYSTEM HYDRAULIC (STORM CAD) ANALYSES

Scenario: Base



```
================================================================
Scenario: Base


>>>> Info: Subsurface Analysis iterations: 2
>>>> Info: Convergence was achieved.


================================================================
Gravity subnetwork discharging at: O-1
----------------------------------------------------------------
>>>> Info: Loading and hydraulic computations completed
     successfully.
>>>> Warning: P-2 Pipe discharge is above full flow capacity.
>>>> Warning: P-3 Pipe fails minimum cover constraint.
>>>> Warning: P-9 Pipe fails minimum cover constraint.
>>>> Warning: P-12 Pipe fails minimum cover constraint.
>>>> Warning: P-14 Pipe fails minimum cover constraint.
>>>> Warning: P-13 Pipe fails minimum cover constraint.
>>>> Warning: P-13 Pipe discharge is above full flow capacity.
>>>> Warning: P-15 Pipe fails minimum cover constraint.
```

CALCULATION SUMMARY FOR SURFACE NETWORKS

Label	Inlet Type	Inlet	Total Intercepted Flow (cfs)	Total Bypassed Flow (cfs)	Capture Efficiency (%)	Gutter Spread (ft)	Gutter Depth (ft)
I-4	Generic Inlet	Generic Default 100%	9.01	0.00	100.0	0.00	0.00
I-3	Generic Inlet	Generic Default 100%	1.67	0.00	100.0	0.00	0.00
I-2	Generic Inlet	Generic Default 100%	2.98	0.00	100.0	0.00	0.00
I-11	Generic Inlet	Generic Default 100%	3.26	0.00	100.0	0.00	0.00
I-10	Generic Inlet	Generic Default 100%	5.44	0.00	100.0	0.00	0.00
I-9	Generic Inlet	Generic Default 100%	1.98	0.00	100.0	0.00	0.00
I-8	Generic Inlet	Generic Default 100%	0.98	0.00	100.0	0.00	0.00
I-6	Generic Inlet	Generic Default 100%	5.89	0.00	100.0	0.00	0.00

CALCULATION SUMMARY FOR SUBSURFACE NETWORK WITH ROOT: O-1

Label	Number of Sections	Section Size	Section Shape	Length (ft)	Total System Flow (cfs)	Average Velocity (ft/s)	Hydraulic Grade Upstream (ft)	Hydraulic Grade Downstream (ft)
P-12	1	30 inch	Circular	98.00	39.72	10.82	16.07	14.76
P-11	2	24 inch	Circular	56.00	34.58	7.00	17.58	16.07
P-10	2	24 inch	Circular	25.00	32.71	6.16	18.33	17.85
P-9	1	30 inch	Circular	60.00	28.98	10.06	19.10	18.33
P-14	1	12 inch	Circular	178.00	3.26	4.15	19.21	18.33
P-13	1	12 inch	Circular	135.00	5.89	7.50	21.28	19.10
P-15	1	30 inch	Circular	124.00	25.18	10.33	21.19	19.10
P-3	1	30 inch	Circular	655.00	16.62	7.09	26.08	21.21
P-2	1	8 inch	Circular	76.00	1.67	4.78	27.53	26.08

Label	Total System Flow (cfs)	Ground Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)
O-1	39.64	17.01	14.76	14.76
I-10	39.72	19.75	16.07	16.07
I-9	34.58	21.65	17.58	17.58

I-8	32.71	21.75	18.33	18.33
J-1	28.98	22.75	19.10	19.10
I-11	3.26	20.55	19.21	19.21
I-6	5.89	22.50	21.28	21.28
I-4	25.18	24.75	21.19	21.19
I-2	16.62	31.20	26.08	26.08
I-3	1.67	31.20	27.53	27.53

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Completed: 01/17/2003 08:35:36 AM

Pipe Report

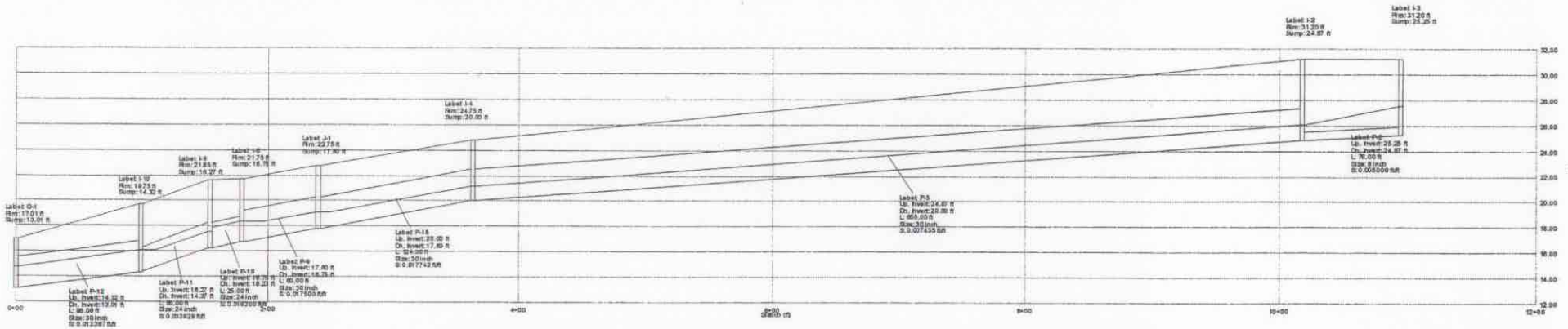
Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Profile Type	Velocity In (ft/s)	Velocity Out (ft/s)
P-2	I-3	I-2	0.37	0.95	0.35	0.35	4.71	1.67	76.00	0.005000	8 inch	0.85	25.25	24.87	31.20	31.20	5.28	5.66	27.53	26.08	approximateFull	4.78	4.78
P-3	I-2	I-4	0.66	0.95	0.63	0.98	4.69	16.62	655.00	0.007435	30 inch	35.37	24.87	20.00	31.20	24.75	3.83	2.25	26.08	21.21	approximateExc	7.09	7.09
P-9	J-1	I-8	N/A	N/A	N/A	3.72	4.53	28.98	60.00	0.017500	30 inch	54.26	17.80	16.75	22.75	21.75	2.45	2.50	19.10	18.33	approximateExc	11.24	8.88
P-10	I-8	I-9	0.19	0.74	0.14	4.55	4.52	32.71	25.00	0.019200	24 inch	33.96	16.75	16.27	21.75	21.65	3.00	3.38	18.33	17.85	approximateExc	6.16	6.16
P-11	I-9	I-10	0.51	0.82	0.42	4.96	4.51	34.58	56.00	0.033929	24 inch	45.14	16.27	14.37	21.65	19.75	3.38	3.38	17.58	16.07	approximateExc	7.92	6.07
P-12	I-10	O-1	1.57	0.73	1.15	6.11	4.50	39.72	98.00	0.013367	30 inch	47.42	14.32	13.01	19.75	17.01	2.93	1.50	16.07	14.76	approximateExc	10.82	10.82
P-13	I-6	J-1	1.06	0.80	0.84	0.84	6.92	5.89	135.00	0.014074	12 inch	5.49	19.70	17.80	22.50	22.75	1.80	3.95	21.28	19.10	approximateFull	7.50	7.50
P-14	I-11	I-8	0.83	0.83	0.69	0.69	4.71	3.26	178.00	0.005618	12 inch	3.47	17.75	16.75	20.55	21.75	1.80	4.00	19.21	18.33	approximateFull	4.15	4.15
P-15	I-4	J-1	2.43	0.78	1.90	2.87	4.55	25.18	124.00	0.017742	30 inch	54.63	20.00	17.80	24.75	22.75	2.25	2.45	21.19	19.10	approximateExc	10.90	9.76

Scenario: Base

Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Profile Type	Velocity In (ft/s)	Velocity Out (ft/s)
P-2	I-3	I-2	0.37	0.95	0.35	0.35	4.71	1.67	76.00	0.005000	8 inch	0.85	25.25	24.87	31.20	31.20	5.28	5.66	27.53	26.08	approximateFull	4.78	4.78
P-3	I-2	I-4	0.66	0.95	0.63	0.98	4.69	16.62	555.00	0.007435	30 inch	35.37	24.87	20.00	31.20	24.75	3.83	2.25	26.08	21.21	approximateExc	7.09	7.09
P-9	J-1	I-8	N/A	N/A	N/A	3.72	4.53	28.98	60.00	0.017500	30 inch	54.26	17.80	16.75	22.75	21.75	2.45	2.50	19.10	18.33	approximateExc	11.24	6.88
P-10	I-8	I-9	0.19	0.74	0.14	4.55	4.52	32.71	25.00	0.019200	24 inch	33.96	16.75	16.27	21.75	21.65	3.00	3.38	18.33	17.85	approximateExc	6.16	6.16
P-11	I-9	I-10	0.51	0.82	0.42	4.96	4.51	34.58	56.00	0.033929	24 inch	45.14	16.27	14.37	21.65	19.75	3.38	3.38	17.58	16.07	approximateExc	7.92	6.07
P-12	I-10	O-1	1.57	0.73	1.15	6.11	4.50	39.72	98.00	0.013367	30 inch	47.42	14.32	13.01	19.75	17.01	2.93	1.50	16.07	14.78	approximateExc	10.82	10.82
P-13	I-6	J-1	1.06	0.80	0.84	0.84	6.92	5.89	135.00	0.014074	12 inch	5.49	19.70	17.80	22.50	22.75	1.80	3.95	21.28	19.10	approximateFull	7.50	7.50
P-14	I-11	I-8	0.83	0.83	0.69	0.69	4.71	3.26	178.00	0.005618	12 inch	3.47	17.75	16.75	20.55	21.75	1.80	4.00	19.21	18.33	approximateFull	4.15	4.15
P-15	I-4	J-1	2.43	0.78	1.90	2.87	4.55	25.18	124.00	0.017742	30 inch	54.63	20.00	17.80	24.75	22.75	2.25	2.45	21.19	19.10	approximateExc	10.90	9.76

Profile
Scenario: Base



APPENDIX D
RESULTS OF PROPOSED CONDITIONS HYDROLOGIC (HEC-1) ANALYSES

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

2-YEAR STORM POST-DEVELOPMENT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
				6-HOUR	24-HOUR	72-HOUR			
HYDROGRAPH AT	SA1	2.	12.60	0.	0.	0.	0.00		
ROUTED TO	SPOOL	0.	0.10	0.	0.	0.	0.00	30.03	26.40
HYDROGRAPH AT	SA2	4.	12.40	1.	0.	0.	0.02		
2 COMBINED AT	COM1	4.	12.40	1.	0.	0.	0.02		
ROUTED TO	LPOOL	4.	12.50	1.	0.	0.	0.02	25.95	12.50
HYDROGRAPH AT	SA3	16.	12.20	3.	1.	1.	0.01		
HYDROGRAPH AT	SA4	2.	12.20	0.	0.	0.	0.00		
3 COMBINED AT	COM	20.	12.30	4.	1.	1.	0.04		

*** NORMAL END OF HEC-1 ***

DOMINION NUCLE . CONNECTICUT, INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

10-YEAR STORM POST-DEVELOPMENT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SA1	4.	12.60	1.	0.	0.	0.00		
ROUTED TO	SPOOL	0.	0.10	0.	0.	0.	0.00	30.40	26.60
HYDROGRAPH AT	SA2	12.	12.30	2.	1.	1.	0.02		
2 COMBINED AT	COM1	12.	12.30	2.	1.	1.	0.02		
ROUTED TO	LPOOL	9.	12.50	2.	1.	1.	0.02	26.50	12.50
HYDROGRAPH AT	SA3	25.	12.20	5.	1.	1.	0.01		
HYDROGRAPH AT	SA4	4.	12.20	1.	0.	0.	0.00		
3 COMBINED AT	COM	34.	12.20	7.	2.	2.	0.04		

*** NORMAL END OF HEC-1 ***

DOMINION NUCL[illegible] CONNECTICUT, INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

25-YEAR STORM POST-DEVELOPMENT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SA1	5.	12.60	1.	0.	0.	0.00		
ROUTED TO	SPOOL	0.	0.10	0.	0.	0.	0.00	30.56	26.40
HYDROGRAPH AT	SA2	16.	12.30	3.	1.	1.	0.02		
2 COMBINED AT	COM1	16.	12.30	3.	1.	1.	0.02		
ROUTED TO	LPOOL	12.	12.50	3.	1.	1.	0.02	26.79	12.50
HYDROGRAPH AT	SA3	29.	12.20	5.	2.	1.	0.01		
HYDROGRAPH AT	SA4	4.	12.20	1.	0.	0.	0.00		
3 COMBINED AT	COM	40.	12.20	9.	3.	2.	0.04		

*** NORMAL END OF HEC-1 ***

DOMINION NUCLE... CONNECTICUT, INC.
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

100-YEAR STORM POST-DEVELOPMENT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
				6-HOUR	24-HOUR	72-HOUR			
HYDROGRAPH AT	SA1	6.	12.60	2.	1.	0.	0.00		
ROUTED TO	SPOOL	0.	21.90	0.	0.	0.	0.00	30.76	22.10
HYDROGRAPH AT	SA2	24.	12.30	5.	1.	1.	0.02		
2 COMBINED AT	COM1	24.	12.30	5.	1.	1.	0.02		
ROUTED TO	LPOOL	19.	12.50	5.	1.	1.	0.02	27.39	12.50
HYDROGRAPH AT	SA3	37.	12.20	7.	2.	2.	0.01		
HYDROGRAPH AT	SA4	5.	12.20	1.	0.	0.	0.00		
3 COMBINED AT	COM	54.	12.30	12.	4.	3.	0.04		

*** NORMAL END OF HEC-1 ***

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ID          MILLSTONE POWER PLANT                                                   ID          036
ID          WATERFORD, CT                                                           ID          036
ID          GZA JOB #42898.00                                                       ID          036
ID          2-YEAR PROPOSED CONDITION ANALYSIS                                      ID          036
ID                                                                                  ID          036
ID          □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□        ID          036
*                                                                                   *           001
IT     6 01JAN99       0          02JAN99    0400                                   IT          040
IO     0                                                                            IO          039
IN     6 01JAN99       0                                                            IN          038
*                                                                                   *           001
KK   SA1SUB-AREA 1 (SMALL POOL)                                                     KK          045
*  SUB-AREA 1 (SMALL POOL)                                                          *           001
BA0.0046                                                                            BA          008
*                                                                                   *           001
PB   3.4                                                                            PB          069
PC0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900PC              070
PC0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900PC              070
PC0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961PC              070
PC0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171PC              070
PC0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531PC              070
PC0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041PC              070
PC0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843PC              070
PC0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143PC              070
PC0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206PC              070
PC0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416PC              070
PC0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282PC              070
PC0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600PC              070
PC0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224PC              070
PC0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598PC              070
PC0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044PC              070
PC0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334PC              070
PC0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738PC              070
PC0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638PC              070
PC0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179PC              070
PC0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569PC              070
PC0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824PC              070
PC0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967PC              070
PC0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997PC              070
PC0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914PC              070
PC1.0000 1.00000 1.00000 1.00000 1.00000                                            PC          070
*                                                                                   *           001
LS            75                                                                    LS          056
UD  0.51                                                                            UD          112
*  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION                                  *           001
*                                                                                   *           001
KK SPOOL                                                                            KK          045
RS     1     ELEV     28.0                                                          RS          092
SV     0     0.01     0.02     0.28     0.68     0.95     1.26                      SV          107
SQ     0        0      0.0      0.0      0.0      0.0      4.0                      SQ          104
SE  28.0     29.0     29.5     30.0     30.5    30.75     31.0                      SE          099
*  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75                                     *           001
*                                                                                   *           001
*                                                                                   *           001
KK   SA2SUB-AREA 2 (LARGE POOL)                                                     KK          045
BA0.0170                                                                            BA          008
LS            65                                                                    LS          056
UD  0.25                                                                            UD          112
*  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION                                *           001
*                                                                                   *           001
KK  COM1                                                                            KK          045
KMCOMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1                                  KM          046
HC     2                                                                            HC          030
*                                                                                   *           001
KK LPOOL                                                                            KK          045
RS     1     ELEV     24.2                                                          RS          092
SV     0     0.01     0.02     0.04     0.15     0.25     0.47                      SV          107
SQ     0        0      1.1      4.5      9.3     14.7     24.8                      SQ          104
SE  24.2     25.1     25.5     26.0     26.5     27.0       28                      SE          099
*  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)                          *           001
*  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND            *           001
*                                                                                   *           001
KK   SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)                              KK          045
BA0.0133                                                                            BA          008
LS            92                                                                    LS          056
UD  0.20                                                                            UD          112
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*  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM                *  001
*  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
*                                                                              *  001
KK   SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)                              KK  045
BA0.0018                                                                       BA  008
LS           92                                                                LS  056
UD  0.15                                                                       UD  112
*  INCLUDES SOUTHEASTERN PORTION OF ISFSI AND PART OF ROAD                     *  001
*  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK   COM                                                                       KK  045
KMCOMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND                      KM  046
HC     3                                                                       HC  030
*                                                                              *  001
ZZ                                                                             ZZ  127
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ID          MILLSTONE POWER PLANT                                                ID         036
ID          WATERFORD, CT                                                        ID         036
ID          GZA JOB #42898.00                                                    ID         036
ID          10-YEAR PROPOSED CONDITIONS ANALYSIS                                 ID         036
ID                                                                               ID         036
ID          □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□         ID         036
*                                                                                *          001
IT     6 01JAN99        0          02JAN99    0400                               IT         040
IO     0                                                                         IO         039
IN     6 01JAN99        0                                                        IN         038
*                                                                                *          001
KK    SA1SUB-AREA 1 (SMALL POOL)                                                 KK         045
*  SUB-AREA 1 (SMALL POOL)                                                       *          001
BA0.0046                                                                         BA         008
*                                                                                *          001
PB   5.0                                                                         PB         069
PC0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900PC          070
PC0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900PC          070
PC0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961PC          070
PC0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171PC          070
PC0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531PC          070
PC0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041PC          070
PC0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843PC          070
PC0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143PC          070
PC0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206PC          070
PC0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416PC          070
PC0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282PC          070
PC0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600PC          070
PC0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224PC          070
PC0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598PC          070
PC0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044PC          070
PC0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334PC          070
PC0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738PC          070
PC0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638PC          070
PC0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179PC          070
PC0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569PC          070
PC0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824PC          070
PC0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967PC          070
PC0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997PC          070
PC0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914PC          070
PC1.0000 1.00000 1.00000 1.00000 1.00000                                         PC         070
*                                                                                *          001
LS           75                                                                  LS         056
UD  0.51                                                                         UD         112
*  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION                               *          001
*                                                                                *          001
KK SPOOL                                                                         KK         045
RS      1    ELEV    28.0                                                        RS         092
SV      0    0.01    0.02    0.28    0.68    0.95    1.26                        SV         107
SQ      0       0     0.0     0.0     0.0     0.0     4.0                        SQ         104
SE  28.0     29.0    29.5    30.0    30.5   30.75    31.0                        SE         099
*  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75                                  *          001
*                                                                                *          001
*                                                                                *          001
KK    SA2SUB-AREA 2 (LARGE POOL)                                                 KK         045
BA0.0170                                                                         BA         008
LS           65                                                                  LS         056
UD  0.25                                                                         UD         112
*  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION                             *          001
*                                                                                *          001
KK  COM1                                                                         KK         045
KMCOMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1                               KM         046
HC      2                                                                        HC         030
*                                                                                *          001
KK LPOOL                                                                         KK         045
RS      1    ELEV    24.2                                                        RS         092
SV      0    0.01    0.02    0.04    0.15    0.25    0.47                        SV         107
SQ      0       0     1.1     4.5     9.3    14.7    24.8                        SQ         104
SE  24.2     25.1    25.5    26.0    26.5    27.0      28                        SE         099
*  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)                       *          001
*  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND         *          001
*                                                                                *          001
KK    SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)                          KK         045
BA0.0133                                                                         BA         008
LS           92                                                                  LS         056
UD  0.20                                                                         UD         112
```

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*  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM          *          001
*  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION             *          001
*                                                                        *          001
*                                                                        *          001
KK   SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)                        KK         045
BA0.0018                                                                 BA         008
LS           92                                                          LS         056
UD  0.15                                                                 UD         112
*  INCLUDES SOUTHEASTERN PORTION OF ISFSI AND PART OF ROAD               *          001
*  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION             *          001
*                                                                        *          001
KK   COM                                                                 KK         045
KMCOMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND                KM         046
HC     3                                                                 HC         030
*                                                                        *          001
ZZ                                                                       ZZ         127
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ID          MILLSTONE POWER PLANT                                                        ID          036
ID          WATERFORD, CT                                                                ID          036
ID          GZA JOB #42898.00                                                            ID          036
ID          25-YEAR PROPOSED CONDITIONS ANALYSIS                                         ID          036
ID                                                                                       ID          036
ID          □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□              ID          036
*                                                                                        *           001
IT    6 01JAN99       0         02JAN99    0400                                          IT          040
IO    0                                                                                  IO          039
IN    6 01JAN99       0                                                                  IN          038
*                                                                                        *           001
KK   SA1SUB-AREA 1 (SMALL POOL)                                                          KK          045
*  SUB-AREA 1 (SMALL POOL)                                                               *           001
BA0.0046                                                                                 BA          008
*                                                                                        *           001
PB   5.7                                                                                 PB          069
PC0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900PC                   070
PC0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900PC                   070
PC0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961PC                   070
PC0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171PC                   070
PC0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531PC                   070
PC0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041PC                   070
PC0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843PC                   070
PC0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143PC                   070
PC0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206PC                   070
PC0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416PC                   070
PC0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282PC                   070
PC0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600PC                   070
PC0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224PC                   070
PC0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598PC                   070
PC0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044PC                   070
PC0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334PC                   070
PC0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738PC                   070
PC0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638PC                   070
PC0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179PC                   070
PC0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569PC                   070
PC0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824PC                   070
PC0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967PC                   070
PC0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997PC                   070
PC0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914PC                   070
PC1.0000 1.00000 1.00000 1.00000 1.00000                                                 PC          070
*                                                                                        *           001
LS            75                                                                         LS          056
UD   0.51                                                                                UD          112
*  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION                                       *           001
*                                                                                        *           001
KK SPOOL                                                                                 KK          045
RS     1     ELEV    28.0                                                                RS          092
SV     0     0.01    0.02     0.28     0.68     0.95     1.26                            SV          107
SQ     0        0     0.0      0.0      0.0      0.0      4.0                            SQ          104
SE  28.0     29.0    29.5     30.0     30.5    30.75     31.0                            SE          099
*  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75                                          *           001
*                                                                                        *           001
*                                                                                        *           001
KK   SA2SUB-AREA 2 (LARGE POOL)                                                          KK          045
BA0.0170                                                                                 BA          008
LS            65                                                                         LS          056
UD   0.25                                                                                UD          112
*  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION                                     *           001
*                                                                                        *           001
KK   COM1                                                                                KK          045
KMCOMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1                                       KM          046
HC     2                                                                                 HC          030
*                                                                                        *           001
KK LPOOL                                                                                 KK          045
RS     1     ELEV    24.2                                                                RS          092
SV     0     0.01    0.02     0.04     0.15     0.25     0.47                            SV          107
SQ     0        0     1.1      4.5      9.3     14.7     24.8                            SQ          104
SE  24.2     25.1    25.5     26.0     26.5     27.0       28                            SE          099
*  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)                               *           001
*  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND                 *           001
*                                                                                        *           001
KK   SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)                                   KK          045
BA0.0133                                                                                 BA          008
LS            92                                                                         LS          056
UD   0.20                                                                                UD          112
```

```
*  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM                  *  001
*  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION                     *  001
*                                                                                *  001
*                                                                                *  001
KK   SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)                                KK 045
BA0.0018                                                                         BA 008
LS           92                                                                  LS 056
UD  0.15                                                                         UD 112
*  INCLUDES SOUTHEASTERN PORTION OF ISFSI AND PART OF ROAD                       *  001
*  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION                     *  001
*                                                                                *  001
KK   COM                                                                         KK 045
KMCOMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND                        KM 046
HC     3                                                                         HC 030
*                                                                                *  001
ZZ                                                                               ZZ 127
```

```
ID          MILLSTONE POWER PLANT                                                   ID          036
ID          WATERFORD, CT                                                           ID          036
ID          GZA JOB #42898.00                                                       ID          036
ID          100-YEAR PROPOSED CONDITIONS ANALYSIS                                   ID          036
ID                                                                                  ID          036
ID          □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□          ID          036
*                                                                                   *           001
IT     6 01JAN99         0           02JAN99    0400                                IT          040
IO     0                                                                            IO          039
IN     6 01JAN99         0                                                          IN          038
*                                                                                   *           001
KK    SA1SUB-AREA 1 (SMALL POOL)                                                    KK          045
*  SUB-AREA 1 (SMALL POOL)                                                          *           001
BA0.0046                                                                            BA          008
*                                                                                   *           001
PB    7.1                                                                           PB          069
PC0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900PC              070
PC0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900PC              070
PC0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961PC              070
PC0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171PC              070
PC0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531PC              070
PC0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041PC              070
PC0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843PC              070
PC0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143PC              070
PC0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206PC              070
PC0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416PC              070
PC0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282PC              070
PC0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600PC              070
PC0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224PC              070
PC0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598PC              070
PC0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044PC              070
PC0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334PC              070
PC0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738PC              070
PC0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638PC              070
PC0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179PC              070
PC0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569PC              070
PC0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824PC              070
PC0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967PC              070
PC0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997PC              070
PC0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914PC              070
PC1.0000 1.00000 1.00000 1.00000 1.00000                                        PC              070
*                                                                               *               001
LS             75                                                               LS              056
UD  0.51                                                                        UD              112
*  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION                              *               001
*                                                                               *               001
KK SPOOL                                                                        KK              045
RS     1     ELEV     28.0                                                      RS              092
SV     0     0.01     0.02     0.28     0.68     0.95     1.26                  SV              107
SQ     0        0      0.0      0.0      0.0      0.0      4.0                  SQ              104
SE  28.0     29.0     29.5     30.0     30.5    30.75     31.0                  SE              099
*  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75                                 *               001
*                                                                               *               001
*                                                                               *               001
KK   SA2SUB-AREA 2 (LARGE POOL)                                                 KK              045
BA0.0170                                                                        BA              008
LS             65                                                               LS              056
UD  0.25                                                                        UD              112
*  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION                            *               001
*                                                                               *               001
KK  COM1                                                                        KK              045
KMCOMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1                              KM              046
HC     2                                                                        HC              030
*                                                                               *               001
KK LPOOL                                                                        KK              045
RS     1     ELEV     24.2                                                      RS              092
SV     0     0.01     0.02     0.04     0.15     0.25     0.47                  SV              107
SQ     0        0      1.1      4.5      9.3     14.7     24.8                  SQ              104
SE  24.2     25.1     25.5     26.0     26.5     27.0       28                  SE              099
*  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)                      *               001
*  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND        *               001
*                                                                               *               001
KK   SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)                          KK              045
BA0.0133                                                                        BA              008
LS             92                                                               LS              056
UD  0.20                                                                        UD              112
```

```
*  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM                *  001
*  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
*                                                                              *  001
KK   SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)                              KK 045
BA0.0018                                                                       BA 008
LS           92                                                                LS 056
UD  0.15                                                                       UD 112
*  INCLUDES SOUTHEASTERN PORTION OF ISFSI AND PART OF ROAD                     *  001
*  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION                   *  001
*                                                                              *  001
KK   COM                                                                       KK 045
KMCOMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND                      KM 046
HC     3                                                                       HC 030
*                                                                              *  001
ZZ                                                                             ZZ 127
```

HEC1 S/N: 1346000028 HMVersion: 6.33 Data File: Q:\NORWOOD\PHB\Millstone\April03Revisions\H&H\2YRPOST.HC1

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*            VERSION 4.0.1E            *
*                                      *
*  RUN DATE  04/18/2003  TIME  09:12:28 *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*        DAVIS, CALIFORNIA 95616       *
*           (916) 756-1104             *
*                                      *
****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX           XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::::
:::                                        :::
:::  Full Microcomputer Implementation     :::
:::                by                      :::
:::        Haestad Methods, Inc.           :::
:::                                        :::
::::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

```
LINE      ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

    1     ID            MILLSTONE POWER PLANT
    2     ID            WATERFORD, CT
    3     ID            GZA JOB #42898.00
    4     ID            2-YEAR PROPOSED CONDITION ANALYSIS
    5     ID
    6     ID            □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
          *
    7     IT       6 01JAN99       0         02JAN99    0400
    8     IO       0
    9     IN       6 01JAN99       0
          *

   10     KK     SA1SUB-AREA 1 (SMALL POOL)
          *  SUB-AREA 1 (SMALL POOL)
   11     BA  0.0046
          *
   12     PB     3.4
   13     PC  0.0000 0.00100 0.00200 0.00300 0.00400 0.00500 0.00600 0.00700 0.00800 0.00900
   14     PC  0.0100 0.01100 0.01200 0.01300 0.01400 0.01500 0.01600 0.01700 0.01800 0.01900
   15     PC  0.0200 0.02101 0.02203 0.02307 0.02412 0.02519 0.02627 0.02737 0.02848 0.02961
   16     PC  0.0308 0.03191 0.03308 0.03427 0.03547 0.03669 0.03792 0.03917 0.04043 0.04171
   17     PC  0.0430 0.04431 0.04563 0.04697 0.04832 0.04969 0.05107 0.05247 0.05388 0.05531
   18     PC  0.0567 0.05821 0.05968 0.06117 0.06267 0.06419 0.06572 0.06727 0.06883 0.07041
   19     PC  0.0720 0.07363 0.07530 0.07703 0.07880 0.08063 0.08250 0.08443 0.08640 0.08843
   20     PC  0.0905 0.09263 0.09480 0.09703 0.09930 0.10163 0.10400 0.10643 0.10890 0.11143
   21     PC  0.1140 0.11666 0.11943 0.12232 0.12532 0.12844 0.13167 0.13502 0.13848 0.14206
   22     PC  0.1458 0.14596 0.15348 0.15752 0.16167 0.16594 0.17032 0.17482 0.17943 0.18416
   23     PC  0.1890 0.19402 0.19928 0.20478 0.21052 0.21650 0.22272 0.22918 0.23588 0.24282
   24     PC  0.2500 0.25776 0.26644 0.27604 0.28656 0.29800 0.31430 0.33940 0.37330 0.41600
   25     PC  0.5000 0.58400 0.62670 0.66060 0.68570 0.70200 0.71344 0.72396 0.73356 0.74224
   26     PC  0.7500 0.75718 0.76412 0.77082 0.77728 0.78350 0.78948 0.79522 0.80072 0.80598
   27     PC  0.8110 0.81584 0.82057 0.82518 0.82968 0.83406 0.83833 0.84248 0.84652 0.85044
   28     PC  0.8543 0.85794 0.86152 0.86498 0.86833 0.87156 0.87468 0.87768 0.88057 0.88334
   29     PC  0.8860 0.88858 0.89110 0.89358 0.89600 0.89838 0.90070 0.90298 0.90520 0.90738
   30     PC  0.9095 0.91158 0.91360 0.91558 0.91750 0.91938 0.92120 0.92298 0.92470 0.92638
   31     PC  0.9280 0.92959 0.93117 0.93273 0.93428 0.93581 0.93733 0.93883 0.94032 0.94179
   32     PC  0.9433 0.94469 0.94612 0.94753 0.94893 0.95031 0.95168 0.95303 0.95437 0.95569
   33     PC  0.9570 0.95829 0.95958 0.96085 0.96211 0.96336 0.96460 0.96582 0.96704 0.96824
   34     PC  0.9694 0.97062 0.97179 0.97295 0.97410 0.97523 0.97636 0.97747 0.97858 0.97967
   35     PC  0.9808 0.98182 0.98288 0.98392 0.98496 0.98598 0.98700 0.98800 0.98899 0.98997
   36     PC  0.9909 0.99189 0.99284 0.99377 0.99470 0.99561 0.99651 0.99740 0.99828 0.99914
   37     PC  1.0000 1.00000 1.00000 1.00000 1.00000
          *
   38     LS            75
   39     UD    0.51
          *  TIME LAG BASED ON 0.85 HR TIME OF CONCENTRATION
          *

   40     KK   SPOOL
   41     RS       1    ELEV    28.0
   42     SV       0    0.01    0.02    0.28    0.68    0.95    1.26
   43     SQ       0       0     0.0     0.0     0.0     0.0     4.0
   44     SE    28.0    29.0    29.5    30.0    30.5   30.75    31.0
          *  ASSUME 10' WIDE WEIR, C = 3.0, ELEV. = 30.75
          *
          *
```

```
LINE      ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  45      KK     SA2SUB-AREA 2 (LARGE POOL)
  46      BA  0.0170
  47      LS              65
  48      UD    0.25
          *  TIME LAG BASED ON 0.42 HOUR TIME OF CONCENTRATION
          *

  49      KK    COM1
  50      KM  COMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1
  51      HC       2
          *

  52      KK   LPOOL
  53      RS       1    ELEV    24.2
  54      SV       0    0.01    0.02    0.04    0.15    0.25    0.47
  55      SQ       0       0     1.1     4.5     9.3    14.7    24.8
  56      SE    24.2    25.1    25.5    26.0    26.5    27.0      28
          *  ESTIMATE DISCHARGE FROM POOL SYSTEM (SUB-AREAS 1 AND 2)
          *  DISCHARGE ENTERS STORM DRAIN SYSTEM AND ULTIMATELY DISCHARGES TO POND
          *

  57      KK     SA3SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)
  58      BA  0.0133
  59      LS              92
  60      UD    0.20
          *  INCLUDES AREAS DRAINING DIRECTLY INTO 30" STORM DRAIN SYSTEM
          *  TIME LAG BASED ON ASSUMED 20 MINUTE TIME OF CONCENTRATION
          *
          *

  61      KK     SA4SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)
  62      BA  0.0018
  63      LS              92
  64      UD    0.15
          *  INCLUDES SOUTHEASTERN PORTION OF ISFSI AND PART OF ROAD
          *  TIME LAG BASED ON ASSUMED 15 MINUTE TIME OF CONCENTRATION
          *

  65      KK     COM
  66      KM  COMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND
  67      HC       3
          *
  68      ZZ
```

```
****************************************
*                                      *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY  1991                *
*          VERSION 4.0.1E              *
*                                      *
* RUN DATE  04/18/2003  TIME  09:12:28 *
*                                      *
****************************************
```

```
**************************************
*                                    *
*   U.S. ARMY CORPS OF ENGINEERS     *
*   HYDROLOGIC ENGINEERING CENTER    *
*         609 SECOND STREET          *
*      DAVIS, CALIFORNIA 95616       *
*          (916) 756-1104            *
*                                    *
**************************************
```

MILLSTONE POWER PLANT
WATERFORD, CT
GZA JOB #42898.00
2-YEAR PROPOSED CONDITION ANALYSIS

```
8 IO         OUTPUT CONTROL VARIABLES
                  IPRNT          0  PRINT CONTROL
                  IPLOT          0  PLOT CONTROL
                  QSCAL         0.  HYDROGRAPH PLOT SCALE

  IT         HYDROGRAPH TIME DATA
                   NMIN          6  MINUTES IN COMPUTATION INTERVAL
                  IDATE     1JAN99  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        281  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE     2JAN99  ENDING DATE
                 NDTIME       0400  ENDING TIME
                  ICENT         19  CENTURY MARK

               COMPUTATION INTERVAL    0.10 HOURS
                    TOTAL TIME BASE   28.00 HOURS

         ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT
```

*** ***

```
             **************
             *            *
 10 KK       *     SA1    *     SUB-AREA 1 (SMALL POOL)
             *            *
             **************

  9 IN       TIME DATA FOR INPUT TIME SERIES
                  JXMIN          6  TIME INTERVAL IN MINUTES
                 JXDATE     1JAN99  STARTING DATE
                 JXTIME          0  STARTING TIME

           SUBBASIN RUNOFF DATA

 11 BA       SUBBASIN CHARACTERISTICS
                  TAREA       0.00  SUBBASIN AREA

             PRECIPITATION DATA

 12 PB            STORM       3.40  BASIN TOTAL PRECIPITATION
```

13 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.08
0.08	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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38 LS          SCS LOSS RATE
                   STRTL         0.67  INITIAL ABSTRACTION
                   CRVNBR       75.00  CURVE NUMBER
                   RTIMP         0.00  PERCENT IMPERVIOUS AREA

39 UD          SCS DIMENSIONLESS UNITGRAPH
                   TLAG          0.51  LAG
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UNIT HYDROGRAPH
27 END-OF-PERIOD ORDINATES

0.	1.	2.	3.	4.	4.	4.	3.	2.	2.
1.	1.	1.	1.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.			

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HYDROGRAPH AT STATION SA1

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0000	1	0.00	0.00	0.00	0.	*	1 JAN 1406	142	0.02	0.01	0.01	0.
1 JAN 0006	2	0.00	0.00	0.00	0.	*	1 JAN 1412	143	0.02	0.01	0.01	0.
1 JAN 0012	3	0.00	0.00	0.00	0.	*	1 JAN 1418	144	0.02	0.01	0.01	0.
1 JAN 0018	4	0.00	0.00	0.00	0.	*	1 JAN 1424	145	0.02	0.01	0.01	0.
1 JAN 0024	5	0.00	0.00	0.00	0.	*	1 JAN 1430	146	0.01	0.01	0.01	0.
1 JAN 0030	6	0.00	0.00	0.00	0.	*	1 JAN 1436	147	0.01	0.01	0.01	0.
1 JAN 0036	7	0.00	0.00	0.00	0.	*	1 JAN 1442	148	0.01	0.01	0.01	0.
1 JAN 0042	8	0.00	0.00	0.00	0.	*	1 JAN 1448	149	0.01	0.00	0.01	0.
1 JAN 0048	9	0.00	0.00	0.00	0.	*	1 JAN 1454	150	0.01	0.00	0.01	0.
1 JAN 0054	10	0.00	0.00	0.00	0.	*	1 JAN 1500	151	0.01	0.00	0.01	0.
1 JAN 0100	11	0.00	0.00	0.00	0.	*	1 JAN 1506	152	0.01	0.00	0.01	0.
1 JAN 0106	12	0.00	0.00	0.00	0.	*	1 JAN 1512	153	0.01	0.00	0.01	0.
1 JAN 0112	13	0.00	0.00	0.00	0.	*	1 JAN 1518	154	0.01	0.00	0.01	0.
1 JAN 0118	14	0.00	0.00	0.00	0.	*	1 JAN 1524	155	0.01	0.00	0.01	0.
1 JAN 0124	15	0.00	0.00	0.00	0.	*	1 JAN 1530	156	0.01	0.00	0.01	0.
1 JAN 0130	16	0.00	0.00	0.00	0.	*	1 JAN 1536	157	0.01	0.00	0.01	0.
1 JAN 0136	17	0.00	0.00	0.00	0.	*	1 JAN 1542	158	0.01	0.00	0.01	0.
1 JAN 0142	18	0.00	0.00	0.00	0.	*	1 JAN 1548	159	0.01	0.00	0.01	0.
1 JAN 0148	19	0.00	0.00	0.00	0.	*	1 JAN 1554	160	0.01	0.00	0.01	0.
1 JAN 0154	20	0.00	0.00	0.00	0.	*	1 JAN 1600	161	0.01	0.00	0.01	0.
1 JAN 0200	21	0.00	0.00	0.00	0.	*	1 JAN 1606	162	0.01	0.00	0.01	0.
1 JAN 0206	22	0.00	0.00	0.00	0.	*	1 JAN 1612	163	0.01	0.00	0.01	0.
1 JAN 0212	23	0.00	0.00	0.00	0.	*	1 JAN 1618	164	0.01	0.00	0.01	0.
1 JAN 0218	24	0.00	0.00	0.00	0.	*	1 JAN 1624	165	0.01	0.00	0.01	0.
1 JAN 0224	25	0.00	0.00	0.00	0.	*	1 JAN 1630	166	0.01	0.00	0.01	0.
1 JAN 0230	26	0.00	0.00	0.00	0.	*	1 JAN 1636	167	0.01	0.00	0.01	0.
1 JAN 0236	27	0.00	0.00	0.00	0.	*	1 JAN 1642	168	0.01	0.00	0.01	0.
1 JAN 0242	28	0.00	0.00	0.00	0.	*	1 JAN 1648	169	0.01	0.00	0.01	0.
1 JAN 0248	29	0.00	0.00	0.00	0.	*	1 JAN 1654	170	0.01	0.00	0.00	0.
1 JAN 0254	30	0.00	0.00	0.00	0.	*	1 JAN 1700	171	0.01	0.00	0.00	0.
1 JAN 0300	31	0.00	0.00	0.00	0.	*	1 JAN 1706	172	0.01	0.00	0.00	0.
1 JAN 0306	32	0.00	0.00	0.00	0.	*	1 JAN 1712	173	0.01	0.00	0.00	0.
1 JAN 0312	33	0.00	0.00	0.00	0.	*	1 JAN 1718	174	0.01	0.00	0.00	0.
1 JAN 0318	34	0.00	0.00	0.00	0.	*	1 JAN 1724	175	0.01	0.00	0.00	0.
1 JAN 0324	35	0.00	0.00	0.00	0.	*	1 JAN 1730	176	0.01	0.00	0.00	0.
1 JAN 0330	36	0.00	0.00	0.00	0.	*	1 JAN 1736	177	0.01	0.00	0.00	0.
1 JAN 0336	37	0.00	0.00	0.00	0.	*	1 JAN 1742	178	0.01	0.00	0.00	0.
1 JAN 0342	38	0.00	0.00	0.00	0.	*	1 JAN 1748	179	0.01	0.00	0.00	0.
1 JAN 0348	39	0.00	0.00	0.00	0.	*	1 JAN 1754	180	0.01	0.00	0.00	0.
1 JAN 0354	40	0.00	0.00	0.00	0.	*	1 JAN 1800	181	0.01	0.00	0.00	0.
1 JAN 0400	41	0.00	0.00	0.00	0.	*	1 JAN 1806	182	0.01	0.00	0.00	0.
1 JAN 0406	42	0.00	0.00	0.00	0.	*	1 JAN 1812	183	0.01	0.00	0.00	0.
1 JAN 0412	43	0.00	0.00	0.00	0.	*	1 JAN 1818	184	0.01	0.00	0.00	0.
1 JAN 0418	44	0.00	0.00	0.00	0.	*	1 JAN 1824	185	0.01	0.00	0.00	0.
1 JAN 0424	45	0.00	0.00	0.00	0.	*	1 JAN 1830	186	0.01	0.00	0.00	0.
1 JAN 0430	46	0.00	0.00	0.00	0.	*	1 JAN 1836	187	0.01	0.00	0.00	0.
1 JAN 0436	47	0.00	0.00	0.00	0.	*	1 JAN 1842	188	0.01	0.00	0.00	0.
1 JAN 0442	48	0.00	0.00	0.00	0.	*	1 JAN 1848	189	0.01	0.00	0.00	0.
1 JAN 0448	49	0.00	0.00	0.00	0.	*	1 JAN 1854	190	0.00	0.00	0.00	0.
1 JAN 0454	50	0.00	0.00	0.00	0.	*	1 JAN 1900	191	0.01	0.00	0.00	0.
1 JAN 0500	51	0.00	0.00	0.00	0.	*	1 JAN 1906	192	0.00	0.00	0.00	0.
1 JAN 0506	52	0.01	0.01	0.00	0.	*	1 JAN 1912	193	0.00	0.00	0.00	0.
1 JAN 0512	53	0.00	0.00	0.00	0.	*	1 JAN 1918	194	0.00	0.00	0.00	0.
1 JAN 0518	54	0.01	0.01	0.00	0.	*	1 JAN 1924	195	0.00	0.00	0.00	0.
1 JAN 0524	55	0.01	0.01	0.00	0.	*	1 JAN 1930	196	0.00	0.00	0.00	0.
1 JAN 0530	56	0.01	0.01	0.00	0.	*	1 JAN 1936	197	0.00	0.00	0.00	0.
1 JAN 0536	57	0.01	0.01	0.00	0.	*	1 JAN 1942	198	0.00	0.00	0.00	0.
1 JAN 0542	58	0.01	0.01	0.00	0.	*	1 JAN 1948	199	0.00	0.00	0.00	0.
1 JAN 0548	59	0.01	0.01	0.00	0.	*	1 JAN 1954	200	0.00	0.00	0.00	0.
1 JAN 0554	60	0.01	0.01	0.00	0.	*	1 JAN 2000	201	0.00	0.00	0.00	0.
1 JAN 0600	61	0.01	0.01	0.00	0.	*	1 JAN 2006	202	0.00	0.00	0.00	0.
1 JAN 0606	62	0.01	0.01	0.00	0.	*	1 JAN 2012	203	0.00	0.00	0.00	0.
1 JAN 0612	63	0.01	0.01	0.00	0.	*	1 JAN 2018	204	0.00	0.00	0.00	0.
1 JAN 0618	64	0.01	0.01	0.00	0.	*	1 JAN 2024	205	0.00	0.00	0.00	0.
1 JAN 0624	65	0.01	0.01	0.00	0.	*	1 JAN 2030	206	0.00	0.00	0.00	0.
1 JAN 0630	66	0.01	0.01	0.00	0.	*	1 JAN 2036	207	0.00	0.00	0.00	0.
1 JAN 0636	67	0.01	0.01	0.00	0.	*	1 JAN 2042	208	0.00	0.00	0.00	0.
1 JAN 0642	68	0.01	0.01	0.00	0.	*	1 JAN 2048	209	0.00	0.00	0.00	0.
1 JAN 0648	69	0.01	0.01	0.00	0.	*	1 JAN 2054	210	0.00	0.00	0.00	0.
1 JAN 0654	70	0.01	0.01	0.00	0.	*	1 JAN 2100	211	0.00	0.00	0.00	0.
1 JAN 0700	71	0.01	0.01	0.00	0.	*	1 JAN 2106	212	0.00	0.00	0.00	0.
1 JAN 0706	72	0.01	0.01	0.00	0.	*	1 JAN 2112	213	0.00	0.00	0.00	0.
1 JAN 0712	73	0.01	0.01	0.00	0.	*	1 JAN 2118	214	0.00	0.00	0.00	0.
1 JAN 0718	74	0.01	0.01	0.00	0.	*	1 JAN 2124	215	0.00	0.00	0.00	0.
1 JAN 0724	75	0.01	0.01	0.00	0.	*	1 JAN 2130	216	0.00	0.00	0.00	0.

1 JAN 0730	76	0.01	0.01	0.00	0.	*	1 JAN 2136	217	0.00	0.00	0.00	0.
1 JAN 0736	77	0.01	0.01	0.00	0.	*	1 JAN 2142	218	0.00	0.00	0.00	0.
1 JAN 0742	78	0.01	0.01	0.00	0.	*	1 JAN 2148	219	0.00	0.00	0.00	0.
1 JAN 0748	79	0.01	0.01	0.00	0.	*	1 JAN 2154	220	0.00	0.00	0.00	0.
1 JAN 0754	80	0.01	0.01	0.00	0.	*	1 JAN 2200	221	0.00	0.00	0.00	0.
1 JAN 0800	81	0.01	0.01	0.00	0.	*	1 JAN 2206	222	0.00	0.00	0.00	0.
1 JAN 0806	82	0.01	0.01	0.00	0.	*	1 JAN 2212	223	0.00	0.00	0.00	0.
1 JAN 0812	83	0.01	0.01	0.00	0.	*	1 JAN 2218	224	0.00	0.00	0.00	0.
1 JAN 0818	84	0.01	0.01	0.00	0.	*	1 JAN 2224	225	0.00	0.00	0.00	0.
1 JAN 0824	85	0.01	0.01	0.00	0.	*	1 JAN 2230	226	0.00	0.00	0.00	0.
1 JAN 0830	86	0.01	0.01	0.00	0.	*	1 JAN 2236	227	0.00	0.00	0.00	0.
1 JAN 0836	87	0.01	0.01	0.00	0.	*	1 JAN 2242	228	0.00	0.00	0.00	0.
1 JAN 0842	88	0.01	0.01	0.00	0.	*	1 JAN 2248	229	0.00	0.00	0.00	0.
1 JAN 0848	89	0.01	0.01	0.00	0.	*	1 JAN 2254	230	0.00	0.00	0.00	0.
1 JAN 0854	90	0.01	0.01	0.00	0.	*	1 JAN 2300	231	0.00	0.00	0.00	0.
1 JAN 0900	91	0.01	0.01	0.00	0.	*	1 JAN 2306	232	0.00	0.00	0.00	0.
1 JAN 0906	92	0.00	0.00	0.00	0.	*	1 JAN 2312	233	0.00	0.00	0.00	0.
1 JAN 0912	93	0.03	0.03	0.00	0.	*	1 JAN 2318	234	0.00	0.00	0.00	0.
1 JAN 0918	94	0.01	0.01	0.00	0.	*	1 JAN 2324	235	0.00	0.00	0.00	0.
1 JAN 0924	95	0.01	0.01	0.00	0.	*	1 JAN 2330	236	0.00	0.00	0.00	0.
1 JAN 0930	96	0.01	0.01	0.00	0.	*	1 JAN 2336	237	0.00	0.00	0.00	0.
1 JAN 0936	97	0.01	0.01	0.00	0.	*	1 JAN 2342	238	0.00	0.00	0.00	0.
1 JAN 0942	98	0.02	0.02	0.00	0.	*	1 JAN 2348	239	0.00	0.00	0.00	0.
1 JAN 0948	99	0.02	0.02	0.00	0.	*	1 JAN 2354	240	0.00	0.00	0.00	0.
1 JAN 0954	100	0.02	0.02	0.00	0.	*	2 JAN 0000	241	0.00	0.00	0.00	0.
1 JAN 1000	101	0.02	0.02	0.00	0.	*	2 JAN 0006	242	0.00	0.00	0.00	0.
1 JAN 1006	102	0.02	0.02	0.00	0.	*	2 JAN 0012	243	0.00	0.00	0.00	0.
1 JAN 1012	103	0.02	0.02	0.00	0.	*	2 JAN 0018	244	0.00	0.00	0.00	0.
1 JAN 1018	104	0.02	0.02	0.00	0.	*	2 JAN 0024	245	0.00	0.00	0.00	0.
1 JAN 1024	105	0.02	0.02	0.00	0.	*	2 JAN 0030	246	0.00	0.00	0.00	0.
1 JAN 1030	106	0.02	0.02	0.00	0.	*	2 JAN 0036	247	0.00	0.00	0.00	0.
1 JAN 1036	107	0.02	0.02	0.00	0.	*	2 JAN 0042	248	0.00	0.00	0.00	0.
1 JAN 1042	108	0.02	0.02	0.00	0.	*	2 JAN 0048	249	0.00	0.00	0.00	0.
1 JAN 1048	109	0.02	0.02	0.00	0.	*	2 JAN 0054	250	0.00	0.00	0.00	0.
1 JAN 1054	110	0.02	0.02	0.00	0.	*	2 JAN 0100	251	0.00	0.00	0.00	0.
1 JAN 1100	111	0.02	0.02	0.00	0.	*	2 JAN 0106	252	0.00	0.00	0.00	0.
1 JAN 1106	112	0.03	0.02	0.00	0.	*	2 JAN 0112	253	0.00	0.00	0.00	0.
1 JAN 1112	113	0.03	0.03	0.00	0.	*	2 JAN 0118	254	0.00	0.00	0.00	0.
1 JAN 1118	114	0.03	0.03	0.00	0.	*	2 JAN 0124	255	0.00	0.00	0.00	0.
1 JAN 1124	115	0.04	0.03	0.01	0.	*	2 JAN 0130	256	0.00	0.00	0.00	0.
1 JAN 1130	116	0.04	0.03	0.01	0.	*	2 JAN 0136	257	0.00	0.00	0.00	0.
1 JAN 1136	117	0.06	0.04	0.01	0.	*	2 JAN 0142	258	0.00	0.00	0.00	0.
1 JAN 1142	118	0.09	0.07	0.02	0.	*	2 JAN 0148	259	0.00	0.00	0.00	0.
1 JAN 1148	119	0.12	0.09	0.03	0.	*	2 JAN 0154	260	0.00	0.00	0.00	0.
1 JAN 1154	120	0.15	0.10	0.04	0.	*	2 JAN 0200	261	0.00	0.00	0.00	0.
1 JAN 1200	121	0.29	0.18	0.11	0.	*	2 JAN 0206	262	0.00	0.00	0.00	0.
1 JAN 1206	122	0.29	0.16	0.13	1.	*	2 JAN 0212	263	0.00	0.00	0.00	0.
1 JAN 1212	123	0.15	0.07	0.07	1.	*	2 JAN 0218	264	0.00	0.00	0.00	0.
1 JAN 1218	124	0.12	0.05	0.06	1.	*	2 JAN 0224	265	0.00	0.00	0.00	0.
1 JAN 1224	125	0.09	0.04	0.05	1.	*	2 JAN 0230	266	0.00	0.00	0.00	0.
1 JAN 1230	126	0.06	0.02	0.03	2.	*	2 JAN 0236	267	0.00	0.00	0.00	0.
1 JAN 1236	127	0.04	0.02	0.02	2.	*	2 JAN 0242	268	0.00	0.00	0.00	0.
1 JAN 1242	128	0.04	0.02	0.02	2.	*	2 JAN 0248	269	0.00	0.00	0.00	0.
1 JAN 1248	129	0.03	0.01	0.02	2.	*	2 JAN 0254	270	0.00	0.00	0.00	0.
1 JAN 1254	130	0.03	0.01	0.02	1.	*	2 JAN 0300	271	0.00	0.00	0.00	0.
1 JAN 1300	131	0.03	0.01	0.02	1.	*	2 JAN 0306	272	0.00	0.00	0.00	0.
1 JAN 1306	132	0.02	0.01	0.01	1.	*	2 JAN 0312	273	0.00	0.00	0.00	0.
1 JAN 1312	133	0.02	0.01	0.01	1.	*	2 JAN 0318	274	0.00	0.00	0.00	0.
1 JAN 1318	134	0.02	0.01	0.01	1.	*	2 JAN 0324	275	0.00	0.00	0.00	0.
1 JAN 1324	135	0.02	0.01	0.01	1.	*	2 JAN 0330	276	0.00	0.00	0.00	0.
1 JAN 1330	136	0.02	0.01	0.01	1.	*	2 JAN 0336	277	0.00	0.00	0.00	0.
1 JAN 1336	137	0.02	0.01	0.01	1.	*	2 JAN 0342	278	0.00	0.00	0.00	0.
1 JAN 1342	138	0.02	0.01	0.01	1.	*	2 JAN 0348	279	0.00	0.00	0.00	0.
1 JAN 1348	139	0.02	0.01	0.01	1.	*	2 JAN 0354	280	0.00	0.00	0.00	0.
1 JAN 1354	140	0.02	0.01	0.01	0.	*	2 JAN 0400	281	0.00	0.00	0.00	0.
1 JAN 1400	141	0.02	0.01	0.01	0.	*						
						*						

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TOTAL RAINFALL = 3.40, TOTAL LOSS = 2.17, TOTAL EXCESS = 1.23

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW					
			6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)
		(CFS)	2.	12.60		0.	0.	0.
		(INCHES)	1.009	1.232	1.232	1.232		
		(AC-FT)	0.	0.	0.	0.		

CUMULATIVE AREA = 0.00 SQ MI

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          **************
          *            *
40 KK     *     SPOOL  *
          *            *
          **************
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HYDROGRAPH ROUTING DATA

41 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	ELEV	TYPE OF INITIAL CONDITION
RSVRIC	28.00	INITIAL CONDITION
X	0.00	WORKING R AND D COEFFICIENT

42 SV	STORAGE	0.0	0.0	0.0	0.3	0.7	0.9	1.3

43 SQ	DISCHARGE	0.	0.	0.	0.	0.	0.	4.
44 SE	ELEVATION	28.00	29.00	29.50	30.00	30.50	30.75	31.00

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HYDROGRAPH AT STATION SPOOL

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	JAN	0000	1	0.	0.0	28.0	1	JAN	0924	95	0.	0.0	28.0	1	JAN	1848	189	0.	0.3	30.0
1	JAN	0006	2	0.	0.0	28.0	1	JAN	0930	96	0.	0.0	28.0	1	JAN	1854	190	0.	0.3	30.0
1	JAN	0012	3	0.	0.0	28.0	1	JAN	0936	97	0.	0.0	28.0	1	JAN	1900	191	0.	0.3	30.0
1	JAN	0018	4	0.	0.0	28.0	1	JAN	0942	98	0.	0.0	28.0	1	JAN	1906	192	0.	0.3	30.0
1	JAN	0024	5	0.	0.0	28.0	1	JAN	0948	99	0.	0.0	28.0	1	JAN	1912	193	0.	0.3	30.0
1	JAN	0030	6	0.	0.0	28.0	1	JAN	0954	100	0.	0.0	28.0	1	JAN	1918	194	0.	0.3	30.0
1	JAN	0036	7	0.	0.0	28.0	1	JAN	1000	101	0.	0.0	28.0	1	JAN	1924	195	0.	0.3	30.0
1	JAN	0042	8	0.	0.0	28.0	1	JAN	1006	102	0.	0.0	28.0	1	JAN	1930	196	0.	0.3	30.0
1	JAN	0048	9	0.	0.0	28.0	1	JAN	1012	103	0.	0.0	28.0	1	JAN	1936	197	0.	0.3	30.0
1	JAN	0054	10	0.	0.0	28.0	1	JAN	1018	104	0.	0.0	28.0	1	JAN	1942	198	0.	0.3	30.0
1	JAN	0100	11	0.	0.0	28.0	1	JAN	1024	105	0.	0.0	28.0	1	JAN	1948	199	0.	0.3	30.0
1	JAN	0106	12	0.	0.0	28.0	1	JAN	1030	106	0.	0.0	28.0	1	JAN	1954	200	0.	0.3	30.0
1	JAN	0112	13	0.	0.0	28.0	1	JAN	1036	107	0.	0.0	28.0	1	JAN	2000	201	0.	0.3	30.0
1	JAN	0118	14	0.	0.0	28.0	1	JAN	1042	108	0.	0.0	28.0	1	JAN	2006	202	0.	0.3	30.0
1	JAN	0124	15	0.	0.0	28.0	1	JAN	1048	109	0.	0.0	28.0	1	JAN	2012	203	0.	0.3	30.0
1	JAN	0130	16	0.	0.0	28.0	1	JAN	1054	110	0.	0.0	28.0	1	JAN	2018	204	0.	0.3	30.0
1	JAN	0136	17	0.	0.0	28.0	1	JAN	1100	111	0.	0.0	28.0	1	JAN	2024	205	0.	0.3	30.0
1	JAN	0142	18	0.	0.0	28.0	1	JAN	1106	112	0.	0.0	28.1	1	JAN	2030	206	0.	0.3	30.0
1	JAN	0148	19	0.	0.0	28.0	1	JAN	1112	113	0.	0.0	28.1	1	JAN	2036	207	0.	0.3	30.0
1	JAN	0154	20	0.	0.0	28.0	1	JAN	1118	114	0.	0.0	28.1	1	JAN	2042	208	0.	0.3	30.0
1	JAN	0200	21	0.	0.0	28.0	1	JAN	1124	115	0.	0.0	28.2	1	JAN	2048	209	0.	0.3	30.0
1	JAN	0206	22	0.	0.0	28.0	1	JAN	1130	116	0.	0.0	28.2	1	JAN	2054	210	0.	0.3	30.0
1	JAN	0212	23	0.	0.0	28.0	1	JAN	1136	117	0.	0.0	28.3	1	JAN	2100	211	0.	0.3	30.0
1	JAN	0218	24	0.	0.0	28.0	1	JAN	1142	118	0.	0.0	28.3	1	JAN	2106	212	0.	0.3	30.0
1	JAN	0224	25	0.	0.0	28.0	1	JAN	1148	119	0.	0.0	28.4	1	JAN	2112	213	0.	0.3	30.0
1	JAN	0230	26	0.	0.0	28.0	1	JAN	1154	120	0.	0.0	28.6	1	JAN	2118	214	0.	0.3	30.0
1	JAN	0236	27	0.	0.0	28.0	1	JAN	1200	121	0.	0.0	28.8	1	JAN	2124	215	0.	0.3	30.0
1	JAN	0242	28	0.	0.0	28.0	1	JAN	1206	122	0.	0.0	29.1	1	JAN	2130	216	0.	0.3	30.0
1	JAN	0248	29	0.	0.0	28.0	1	JAN	1212	123	0.	0.0	29.4	1	JAN	2136	217	0.	0.3	30.0
1	JAN	0254	30	0.	0.0	28.0	1	JAN	1218	124	0.	0.0	29.5	1	JAN	2142	218	0.	0.3	30.0
1	JAN	0300	31	0.	0.0	28.0	1	JAN	1224	125	0.	0.0	29.5	1	JAN	2148	219	0.	0.3	30.0
1	JAN	0306	32	0.	0.0	28.0	1	JAN	1230	126	0.	0.0	29.6	1	JAN	2154	220	0.	0.3	30.0
1	JAN	0312	33	0.	0.0	28.0	1	JAN	1236	127	0.	0.1	29.6	1	JAN	2200	221	0.	0.3	30.0
1	JAN	0318	34	0.	0.0	28.0	1	JAN	1242	128	0.	0.1	29.6	1	JAN	2206	222	0.	0.3	30.0
1	JAN	0324	35	0.	0.0	28.0	1	JAN	1248	129	0.	0.1	29.6	1	JAN	2212	223	0.	0.3	30.0
1	JAN	0330	36	0.	0.0	28.0	1	JAN	1254	130	0.	0.1	29.7	1	JAN	2218	224	0.	0.3	30.0
1	JAN	0336	37	0.	0.0	28.0	1	JAN	1300	131	0.	0.1	29.7	1	JAN	2224	225	0.	0.3	30.0
1	JAN	0342	38	0.	0.0	28.0	1	JAN	1306	132	0.	0.1	29.7	1	JAN	2230	226	0.	0.3	30.0
1	JAN	0348	39	0.	0.0	28.0	1	JAN	1312	133	0.	0.1	29.7	1	JAN	2236	227	0.	0.3	30.0
1	JAN	0354	40	0.	0.0	28.0	1	JAN	1318	134	0.	0.1	29.7	1	JAN	2242	228	0.	0.3	30.0
1	JAN	0400	41	0.	0.0	28.0	1	JAN	1324	135	0.	0.1	29.7	1	JAN	2248	229	0.	0.3	30.0
1	JAN	0406	42	0.	0.0	28.0	1	JAN	1330	136	0.	0.2	29.8	1	JAN	2254	230	0.	0.3	30.0
1	JAN	0412	43	0.	0.0	28.0	1	JAN	1336	137	0.	0.2	29.8	1	JAN	2300	231	0.	0.3	30.0
1	JAN	0418	44	0.	0.0	28.0	1	JAN	1342	138	0.	0.2	29.8	1	JAN	2306	232	0.	0.3	30.0
1	JAN	0424	45	0.	0.0	28.0	1	JAN	1348	139	0.	0.2	29.8	1	JAN	2312	233	0.	0.3	30.0
1	JAN	0430	46	0.	0.0	28.0	1	JAN	1354	140	0.	0.2	29.8	1	JAN	2318	234	0.	0.3	30.0
1	JAN	0436	47	0.	0.0	28.0	1	JAN	1400	141	0.	0.2	29.8	1	JAN	2324	235	0.	0.3	30.0
1	JAN	0442	48	0.	0.0	28.0	1	JAN	1406	142	0.	0.2	29.8	1	JAN	2330	236	0.	0.3	30.0
1	JAN	0448	49	0.	0.0	28.0	1	JAN	1412	143	0.	0.2	29.8	1	JAN	2336	237	0.	0.3	30.0
1	JAN	0454	50	0.	0.0	28.0	1	JAN	1418	144	0.	0.2	29.8	1	JAN	2342	238	0.	0.3	30.0
1	JAN	0500	51	0.	0.0	28.0	1	JAN	1424	145	0.	0.2	29.8	1	JAN	2348	239	0.	0.3	30.0
1	JAN	0506	52	0.	0.0	28.0	1	JAN	1430	146	0.	0.2	29.8	1	JAN	2354	240	0.	0.3	30.0
1	JAN	0512	53	0.	0.0	28.0	1	JAN	1436	147	0.	0.2	29.8	2	JAN	0000	241	0.	0.3	30.0
1	JAN	0518	54	0.	0.0	28.0	1	JAN	1442	148	0.	0.2	29.8	2	JAN	0006	242	0.	0.3	30.0
1	JAN	0524	55	0.	0.0	28.0	1	JAN	1448	149	0.	0.2	29.8	2	JAN	0012	243	0.	0.3	30.0
1	JAN	0530	56	0.	0.0	28.0	1	JAN	1454	150	0.	0.2	29.9	2	JAN	0018	244	0.	0.3	30.0
1	JAN	0536	57	0.	0.0	28.0	1	JAN	1500	151	0.	0.2	29.9	2	JAN	0024	245	0.	0.3	30.0
1	JAN	0542	58	0.	0.0	28.0	1	JAN	1506	152	0.	0.2	29.9	2	JAN	0030	246	0.	0.3	30.0
1	JAN	0548	59	0.	0.0	28.0	1	JAN	1512	153	0.	0.2	29.9	2	JAN	0036	247	0.	0.3	30.0
1	JAN	0554	60	0.	0.0	28.0	1	JAN	1518	154	0.	0.2	29.9	2	JAN	0042	248	0.	0.3	30.0
1	JAN	0600	61	0.	0.0	28.0	1	JAN	1524	155	0.	0.2	29.9	2	JAN	0048	249	0.	0.3	30.0
1	JAN	0606	62	0.	0.0	28.0	1	JAN	1530	156	0.	0.2	29.9	2	JAN	0054	250	0.	0.3	30.0
1	JAN	0612	63	0.	0.0	28.0	1	JAN	1536	157	0.	0.2	29.9	2	JAN	0100	251	0.	0.3	30.0
1	JAN	0618	64	0.	0.0	28.0	1	JAN	1542	158	0.	0.2	29.9	2	JAN	0106	252	0.	0.3	30.0
1	JAN	0624	65	0.	0.0	28.0	1	JAN	1548	159	0.	0.2	29.9	2	JAN	0112	253	0.	0.3	30.0
1	JAN	0630	66	0.	0.0	28.0	1	JAN	1554	160	0.	0.2	29.9	2	JAN	0118	254	0.	0.3	30.0
1	JAN	0636	67	0.	0.0	28.0	1	JAN	1600	161	0.	0.2	29.9	2	JAN	0124	255	0.	0.3	30.0
1	JAN	0642	68	0.	0.0	28.0	1	JAN	1606	162	0.	0.2	29.9	2	JAN	0130	256	0.	0.3	30.0
1	JAN	0648	69	0.	0.0	28.0	1	JAN	1612	163	0.	0.2	29.9	2	JAN	0136	257	0.	0.3	30.0
1	JAN	0654	70	0.	0.0	28.0	1	JAN	1618	164	0.	0.2	29.9	2	JAN	0142	258	0.	0.3	30.0
1	JAN	0700	71	0.	0.0	28.0	1	JAN	1624	165	0.	0.2	29.9	2	JAN	0148	259	0.	0.3	30.0
1	JAN	0706	72	0.	0.0	28.0	1	JAN	1630	166	0.	0.2	29.9	2	JAN	0154	260	0.	0.3	30.0
1	JAN	0712	73	0.	0.0	28.0	1	JAN	1636	167	0.	0.2	29.9	2	JAN	0200	261	0.	0.3	30.0
1	JAN	0718	74	0.	0.0	28.0	1	JAN	1642	168	0.	0.2	29.9	2	JAN	0206	262	0.	0.3	30.0
1	JAN	0724	75	0.	0.0	28.0	1	JAN	1648	169	0.	0.2	29.9	2	JAN	0212	263	0.	0.3	30.0
1	JAN	0730	76	0.	0.0	28.0	1	JAN	1654	170	0.	0.2	29.9	2	JAN	0218	264	0.	0.3	30.0
1	JAN	0736	77	0.	0.0	28.0	1	JAN	1700	171	0.	0.2	29.9	2	JAN	0224	265	0.	0.3	30.0
1	JAN	0742	78	0.	0.0	28.0	1	JAN	1706	172	0.	0.2	29.9	2	JAN	0230	266	0.	0.3	30.0
1	JAN	0748	79	0.	0.0	28.0	1	JAN	1712	173	0.	0.2	29.9	2	JAN	0236	267	0.	0.3	30.0
1	JAN	0754	80	0.	0.0	28.0	1	JAN	1718	174	0.	0.2	29.9	2	JAN	0242	268	0.	0.3	30.0
1	JAN	0800	81	0.	0.0	28.0	1	JAN	1724	175	0.	0.2	29.9	2	JAN	0248	269	0.	0.3	30.0
1	JAN	0806	82	0.	0.0	28.0	1	JAN	1730	176	0.	0.2	29.9	2	JAN	0254	270	0.	0.3	30.0
1	JAN	0812	83	0.	0.0	28.0	1	JAN	1736	177	0.	0.2	29.9	2	JAN	0300	271	0.	0.3	30.0
1	JAN	0818	84	0.	0.0	28.0	1	JAN	1742	178	0.	0.3	29.9	2	JAN	0306	272	0.	0.3	30.0
1	JAN	0824	85	0.	0.0	28.0	1	JAN	1748	179	0.	0.3	29.9	2	JAN	0312	273	0.	0.3	30.0

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 1 JAN 0830  86      0.     0.0    28.0 *  1 JAN 1754 180      0.      0.3    29.9 *  2 JAN 0318 274       0.      0.3    30.0
 1 JAN 0836  87      0.     0.0    28.0 *  1 JAN 1800 181      0.      0.3    30.0 *  2 JAN 0324 275       0.      0.3    30.0
 1 JAN 0842  88      0.     0.0    28.0 *  1 JAN 1806 182      0.      0.3    30.0 *  2 JAN 0330 276       0.      0.3    30.0
 1 JAN 0848  89      0.     0.0    28.0 *  1 JAN 1812 183      0.      0.3    30.0 *  2 JAN 0336 277       0.      0.3    30.0
 1 JAN 0854  90      0.     0.0    28.0 *  1 JAN 1818 184      0.      0.3    30.0 *  2 JAN 0342 278       0.      0.3    30.0
 1 JAN 0900  91      0.     0.0    28.0 *  1 JAN 1824 185      0.      0.3    30.0 *  2 JAN 0348 279       0.      0.3    30.0
 1 JAN 0906  92      0.     0.0    28.0 *  1 JAN 1830 186      0.      0.3    30.0 *  2 JAN 0354 280       0.      0.3    30.0
 1 JAN 0912  93      0.     0.0    28.0 *  1 JAN 1836 187      0.      0.3    30.0 *  2 JAN 0400 281       0.      0.3    30.0
 1 JAN 0918  94      0.     0.0    28.0 *  1 JAN 1842 188      0.      0.3    30.0 *
                                        *                                           *
*******************************************************************************************************************************

PEAK FLOW     TIME                              MAXIMUM AVERAGE FLOW
                                 6-HR        24-HR        72-HR       28.00-HR    (CFS)        (HR)
                       (CFS)     0.       0.10                       0.          0.           0.            0.
                     (INCHES)   0.000        0.000        0.000        0.000
                      (AC-FT)      0.          0.           0.           0.

PEAK STORAGE   TIME                             MAXIMUM AVERAGE STORAGE
                                 6-HR        24-HR        72-HR       28.00-HR  (AC-FT)       (HR)
      0.     24.80                 0.          0.           0.           0.

PEAK STAGE    TIME                              MAXIMUM AVERAGE STAGE
                                 6-HR        24-HR        72-HR       28.00-HR   (FEET)       (HR)
   30.03     26.40               30.02       29.30        29.11        29.11

                       CUMULATIVE AREA =    0.00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

               **************
               *            *
  45 KK        *      SA2   *    SUB-AREA 2 (LARGE POOL)
               *            *
               **************

                 SUBBASIN RUNOFF DATA

  46 BA           SUBBASIN CHARACTERISTICS
                        TAREA         0.02  SUBBASIN AREA

                  PRECIPITATION DATA

  12 PB                 STORM         3.40  BASIN TOTAL PRECIPITATION

  13 PI             INCREMENTAL PRECIPITATION PATTERN
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                      0.01      0.01      0.01      0.01      0.01      0.02      0.03      0.03      0.04      0.08
                      0.08      0.04      0.03      0.03      0.02      0.01      0.01      0.01      0.01      0.01
                      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

  47 LS           SCS LOSS RATE
                        STRTL         1.08  INITIAL ABSTRACTION
                       CRVNBR        65.00  CURVE NUMBER
                        RTIMP         0.00  PERCENT IMPERVIOUS AREA

  48 UD           SCS DIMENSIONLESS UNITGRAPH
                         TLAG         0.25  LAG

                                                             ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                        UNIT HYDROGRAPH
                                                  14 END-OF-PERIOD ORDINATES
                  6.        21.        27.        23.        14.         8.         5.         3.         2.         1.
                  1.         0.         0.         0.

*******************************************************************************************************************************

                                                  HYDROGRAPH AT STATION       SA2

*******************************************************************************************************************************
                                                               *
      DA MON HRMN  ORD     RAIN    LOSS  EXCESS     COMP Q     *     DA MON HRMN  ORD     RAIN    LOSS  EXCESS     COMP Q
                                                               *
```

1 JAN 0000	1	0.00	0.00	0.00	0.	*
1 JAN 0006	2	0.00	0.00	0.00	0.	*
1 JAN 0012	3	0.00	0.00	0.00	0.	*
1 JAN 0018	4	0.00	0.00	0.00	0.	*
1 JAN 0024	5	0.00	0.00	0.00	0.	*
1 JAN 0030	6	0.00	0.00	0.00	0.	*
1 JAN 0036	7	0.00	0.00	0.00	0.	*
1 JAN 0042	8	0.00	0.00	0.00	0.	*
1 JAN 0048	9	0.00	0.00	0.00	0.	*
1 JAN 0054	10	0.00	0.00	0.00	0.	*
1 JAN 0100	11	0.00	0.00	0.00	0.	*
1 JAN 0106	12	0.00	0.00	0.00	0.	*
1 JAN 0112	13	0.00	0.00	0.00	0.	*
1 JAN 0118	14	0.00	0.00	0.00	0.	*
1 JAN 0124	15	0.00	0.00	0.00	0.	*
1 JAN 0130	16	0.00	0.00	0.00	0.	*
1 JAN 0136	17	0.00	0.00	0.00	0.	*
1 JAN 0142	18	0.00	0.00	0.00	0.	*
1 JAN 0148	19	0.00	0.00	0.00	0.	*
1 JAN 0154	20	0.00	0.00	0.00	0.	*
1 JAN 0200	21	0.00	0.00	0.00	0.	*
1 JAN 0206	22	0.00	0.00	0.00	0.	*
1 JAN 0212	23	0.00	0.00	0.00	0.	*
1 JAN 0218	24	0.00	0.00	0.00	0.	*
1 JAN 0224	25	0.00	0.00	0.00	0.	*
1 JAN 0230	26	0.00	0.00	0.00	0.	*
1 JAN 0236	27	0.00	0.00	0.00	0.	*
1 JAN 0242	28	0.00	0.00	0.00	0.	*
1 JAN 0248	29	0.00	0.00	0.00	0.	*
1 JAN 0254	30	0.00	0.00	0.00	0.	*
1 JAN 0300	31	0.00	0.00	0.00	0.	*
1 JAN 0306	32	0.00	0.00	0.00	0.	*
1 JAN 0312	33	0.00	0.00	0.00	0.	*
1 JAN 0318	34	0.00	0.00	0.00	0.	*
1 JAN 0324	35	0.00	0.00	0.00	0.	*
1 JAN 0330	36	0.00	0.00	0.00	0.	*
1 JAN 0336	37	0.00	0.00	0.00	0.	*
1 JAN 0342	38	0.00	0.00	0.00	0.	*
1 JAN 0348	39	0.00	0.00	0.00	0.	*
1 JAN 0354	40	0.00	0.00	0.00	0.	*
1 JAN 0400	41	0.00	0.00	0.00	0.	*
1 JAN 0406	42	0.00	0.00	0.00	0.	*
1 JAN 0412	43	0.00	0.00	0.00	0.	*
1 JAN 0418	44	0.00	0.00	0.00	0.	*
1 JAN 0424	45	0.00	0.00	0.00	0.	*
1 JAN 0430	46	0.00	0.00	0.00	0.	*
1 JAN 0436	47	0.00	0.00	0.00	0.	*
1 JAN 0442	48	0.00	0.00	0.00	0.	*
1 JAN 0448	49	0.00	0.00	0.00	0.	*
1 JAN 0454	50	0.00	0.00	0.00	0.	*
1 JAN 0500	51	0.00	0.00	0.00	0.	*
1 JAN 0506	52	0.01	0.01	0.00	0.	*
1 JAN 0512	53	0.00	0.00	0.00	0.	*
1 JAN 0518	54	0.01	0.01	0.00	0.	*
1 JAN 0524	55	0.01	0.01	0.00	0.	*
1 JAN 0530	56	0.01	0.01	0.00	0.	*
1 JAN 0536	57	0.01	0.01	0.00	0.	*
1 JAN 0542	58	0.01	0.01	0.00	0.	*
1 JAN 0548	59	0.01	0.01	0.00	0.	*
1 JAN 0554	60	0.01	0.01	0.00	0.	*
1 JAN 0600	61	0.01	0.01	0.00	0.	*
1 JAN 0606	62	0.01	0.01	0.00	0.	*
1 JAN 0612	63	0.01	0.01	0.00	0.	*
1 JAN 0618	64	0.01	0.01	0.00	0.	*
1 JAN 0624	65	0.01	0.01	0.00	0.	*
1 JAN 0630	66	0.01	0.01	0.00	0.	*
1 JAN 0636	67	0.01	0.01	0.00	0.	*
1 JAN 0642	68	0.01	0.01	0.00	0.	*
1 JAN 0648	69	0.01	0.01	0.00	0.	*
1 JAN 0654	70	0.01	0.01	0.00	0.	*
1 JAN 0700	71	0.01	0.01	0.00	0.	*
1 JAN 0706	72	0.01	0.01	0.00	0.	*
1 JAN 0712	73	0.01	0.01	0.00	0.	*
1 JAN 0718	74	0.01	0.01	0.00	0.	*
1 JAN 0724	75	0.01	0.01	0.00	0.	*
1 JAN 0730	76	0.01	0.01	0.00	0.	*
1 JAN 0736	77	0.01	0.01	0.00	0.	*
1 JAN 0742	78	0.01	0.01	0.00	0.	*
1 JAN 0748	79	0.01	0.01	0.00	0.	*
1 JAN 0754	80	0.01	0.01	0.00	0.	*
1 JAN 0800	81	0.01	0.01	0.00	0.	*
1 JAN 0806	82	0.01	0.01	0.00	0.	*
1 JAN 0812	83	0.01	0.01	0.00	0.	*
1 JAN 0818	84	0.01	0.01	0.00	0.	*
1 JAN 0824	85	0.01	0.01	0.00	0.	*
1 JAN 0830	86	0.01	0.01	0.00	0.	*
1 JAN 0836	87	0.01	0.01	0.00	0.	*
1 JAN 0842	88	0.01	0.01	0.00	0.	*
1 JAN 0848	89	0.01	0.01	0.00	0.	*
1 JAN 0854	90	0.01	0.01	0.00	0.	*
1 JAN 0900	91	0.01	0.01	0.00	0.	*
1 JAN 0906	92	0.00	0.00	0.00	0.	*
1 JAN 0912	93	0.03	0.03	0.00	0.	*
1 JAN 0918	94	0.01	0.01	0.00	0.	*
1 JAN 0924	95	0.01	0.01	0.00	0.	*
1 JAN 0930	96	0.01	0.01	0.00	0.	*
1 JAN 0936	97	0.01	0.01	0.00	0.	*
1 JAN 0942	98	0.02	0.02	0.00	0.	*
1 JAN 0948	99	0.02	0.02	0.00	0.	*
1 JAN 0954	100	0.02	0.02	0.00	0.	*
1 JAN 1406	142	0.02	0.01	0.01	1.	
1 JAN 1412	143	0.02	0.01	0.01	1.	
1 JAN 1418	144	0.02	0.01	0.01	1.	
1 JAN 1424	145	0.02	0.01	0.01	1.	
1 JAN 1430	146	0.01	0.01	0.01	1.	
1 JAN 1436	147	0.01	0.01	0.01	1.	
1 JAN 1442	148	0.01	0.01	0.01	1.	
1 JAN 1448	149	0.01	0.01	0.01	1.	
1 JAN 1454	150	0.01	0.01	0.01	1.	
1 JAN 1500	151	0.01	0.01	0.01	1.	
1 JAN 1506	152	0.01	0.01	0.01	1.	
1 JAN 1512	153	0.01	0.01	0.01	1.	
1 JAN 1518	154	0.01	0.01	0.01	1.	
1 JAN 1524	155	0.01	0.01	0.01	1.	
1 JAN 1530	156	0.01	0.01	0.00	1.	
1 JAN 1536	157	0.01	0.01	0.00	1.	
1 JAN 1542	158	0.01	0.01	0.00	1.	
1 JAN 1548	159	0.01	0.01	0.00	1.	
1 JAN 1554	160	0.01	0.01	0.00	1.	
1 JAN 1600	161	0.01	0.00	0.00	1.	
1 JAN 1606	162	0.01	0.00	0.00	0.	
1 JAN 1612	163	0.01	0.00	0.00	0.	
1 JAN 1618	164	0.01	0.00	0.00	0.	
1 JAN 1624	165	0.01	0.00	0.00	0.	
1 JAN 1630	166	0.01	0.00	0.00	0.	
1 JAN 1636	167	0.01	0.00	0.00	0.	
1 JAN 1642	168	0.01	0.00	0.00	0.	
1 JAN 1648	169	0.01	0.00	0.00	0.	
1 JAN 1654	170	0.01	0.00	0.00	0.	
1 JAN 1700	171	0.01	0.00	0.00	0.	
1 JAN 1706	172	0.01	0.00	0.00	0.	
1 JAN 1712	173	0.01	0.00	0.00	0.	
1 JAN 1718	174	0.01	0.00	0.00	0.	
1 JAN 1724	175	0.01	0.00	0.00	0.	
1 JAN 1730	176	0.01	0.00	0.00	0.	
1 JAN 1736	177	0.01	0.00	0.00	0.	
1 JAN 1742	178	0.01	0.00	0.00	0.	
1 JAN 1748	179	0.01	0.00	0.00	0.	
1 JAN 1754	180	0.01	0.00	0.00	0.	
1 JAN 1800	181	0.01	0.00	0.00	0.	
1 JAN 1806	182	0.01	0.00	0.00	0.	
1 JAN 1812	183	0.01	0.00	0.00	0.	
1 JAN 1818	184	0.01	0.00	0.00	0.	
1 JAN 1824	185	0.01	0.00	0.00	0.	
1 JAN 1830	186	0.01	0.00	0.00	0.	
1 JAN 1836	187	0.01	0.00	0.00	0.	
1 JAN 1842	188	0.01	0.00	0.00	0.	
1 JAN 1848	189	0.01	0.00	0.00	0.	
1 JAN 1854	190	0.00	0.00	0.00	0.	
1 JAN 1900	191	0.01	0.00	0.00	0.	
1 JAN 1906	192	0.00	0.00	0.00	0.	
1 JAN 1912	193	0.00	0.00	0.00	0.	
1 JAN 1918	194	0.00	0.00	0.00	0.	
1 JAN 1924	195	0.00	0.00	0.00	0.	
1 JAN 1930	196	0.00	0.00	0.00	0.	
1 JAN 1936	197	0.00	0.00	0.00	0.	
1 JAN 1942	198	0.00	0.00	0.00	0.	
1 JAN 1948	199	0.00	0.00	0.00	0.	
1 JAN 1954	200	0.00	0.00	0.00	0.	
1 JAN 2000	201	0.00	0.00	0.00	0.	
1 JAN 2006	202	0.00	0.00	0.00	0.	
1 JAN 2012	203	0.00	0.00	0.00	0.	
1 JAN 2018	204	0.00	0.00	0.00	0.	
1 JAN 2024	205	0.00	0.00	0.00	0.	
1 JAN 2030	206	0.00	0.00	0.00	0.	
1 JAN 2036	207	0.00	0.00	0.00	0.	
1 JAN 2042	208	0.00	0.00	0.00	0.	
1 JAN 2048	209	0.00	0.00	0.00	0.	
1 JAN 2054	210	0.00	0.00	0.00	0.	
1 JAN 2100	211	0.00	0.00	0.00	0.	
1 JAN 2106	212	0.00	0.00	0.00	0.	
1 JAN 2112	213	0.00	0.00	0.00	0.	
1 JAN 2118	214	0.00	0.00	0.00	0.	
1 JAN 2124	215	0.00	0.00	0.00	0.	
1 JAN 2130	216	0.00	0.00	0.00	0.	
1 JAN 2136	217	0.00	0.00	0.00	0.	
1 JAN 2142	218	0.00	0.00	0.00	0.	
1 JAN 2148	219	0.00	0.00	0.00	0.	
1 JAN 2154	220	0.00	0.00	0.00	0.	
1 JAN 2200	221	0.00	0.00	0.00	0.	
1 JAN 2206	222	0.00	0.00	0.00	0.	
1 JAN 2212	223	0.00	0.00	0.00	0.	
1 JAN 2218	224	0.00	0.00	0.00	0.	
1 JAN 2224	225	0.00	0.00	0.00	0.	
1 JAN 2230	226	0.00	0.00	0.00	0.	
1 JAN 2236	227	0.00	0.00	0.00	0.	
1 JAN 2242	228	0.00	0.00	0.00	0.	
1 JAN 2248	229	0.00	0.00	0.00	0.	
1 JAN 2254	230	0.00	0.00	0.00	0.	
1 JAN 2300	231	0.00	0.00	0.00	0.	
1 JAN 2306	232	0.00	0.00	0.00	0.	
1 JAN 2312	233	0.00	0.00	0.00	0.	
1 JAN 2318	234	0.00	0.00	0.00	0.	
1 JAN 2324	235	0.00	0.00	0.00	0.	
1 JAN 2330	236	0.00	0.00	0.00	0.	
1 JAN 2336	237	0.00	0.00	0.00	0.	
1 JAN 2342	238	0.00	0.00	0.00	0.	
1 JAN 2348	239	0.00	0.00	0.00	0.	
1 JAN 2354	240	0.00	0.00	0.00	0.	
2 JAN 0000	241	0.00	0.00	0.00	0.	

1 JAN 1000	101	0.02	0.02	0.00	0.	*	2 JAN 0006	242	0.00	0.00	0.00	0.
1 JAN 1006	102	0.02	0.02	0.00	0.	*	2 JAN 0012	243	0.00	0.00	0.00	0.
1 JAN 1012	103	0.02	0.02	0.00	0.	*	2 JAN 0018	244	0.00	0.00	0.00	0.
1 JAN 1018	104	0.02	0.02	0.00	0.	*	2 JAN 0024	245	0.00	0.00	0.00	0.
1 JAN 1024	105	0.02	0.02	0.00	0.	*	2 JAN 0030	246	0.00	0.00	0.00	0.
1 JAN 1030	106	0.02	0.02	0.00	0.	*	2 JAN 0036	247	0.00	0.00	0.00	0.
1 JAN 1036	107	0.02	0.02	0.00	0.	*	2 JAN 0042	248	0.00	0.00	0.00	0.
1 JAN 1042	108	0.02	0.02	0.00	0.	*	2 JAN 0048	249	0.00	0.00	0.00	0.
1 JAN 1048	109	0.02	0.02	0.00	0.	*	2 JAN 0054	250	0.00	0.00	0.00	0.
1 JAN 1054	110	0.02	0.02	0.00	0.	*	2 JAN 0100	251	0.00	0.00	0.00	0.
1 JAN 1100	111	0.02	0.02	0.00	0.	*	2 JAN 0106	252	0.00	0.00	0.00	0.
1 JAN 1106	112	0.03	0.03	0.00	0.	*	2 JAN 0112	253	0.00	0.00	0.00	0.
1 JAN 1112	113	0.03	0.03	0.00	0.	*	2 JAN 0118	254	0.00	0.00	0.00	0.
1 JAN 1118	114	0.03	0.03	0.00	0.	*	2 JAN 0124	255	0.00	0.00	0.00	0.
1 JAN 1124	115	0.04	0.04	0.00	0.	*	2 JAN 0130	256	0.00	0.00	0.00	0.
1 JAN 1130	116	0.04	0.04	0.00	0.	*	2 JAN 0136	257	0.00	0.00	0.00	0.
1 JAN 1136	117	0.06	0.06	0.00	0.	*	2 JAN 0142	258	0.00	0.00	0.00	0.
1 JAN 1142	118	0.09	0.08	0.00	0.	*	2 JAN 0148	259	0.00	0.00	0.00	0.
1 JAN 1148	119	0.12	0.11	0.01	0.	*	2 JAN 0154	260	0.00	0.00	0.00	0.
1 JAN 1154	120	0.15	0.13	0.01	0.	*	2 JAN 0200	261	0.00	0.00	0.00	0.
1 JAN 1200	121	0.29	0.24	0.04	1.	*	2 JAN 0206	262	0.00	0.00	0.00	0.
1 JAN 1206	122	0.29	0.22	0.07	2.	*	2 JAN 0212	263	0.00	0.00	0.00	0.
1 JAN 1212	123	0.15	0.10	0.04	3.	*	2 JAN 0218	264	0.00	0.00	0.00	0.
1 JAN 1218	124	0.12	0.08	0.04	4.	*	2 JAN 0224	265	0.00	0.00	0.00	0.
1 JAN 1224	125	0.09	0.06	0.03	4.	*	2 JAN 0230	266	0.00	0.00	0.00	0.
1 JAN 1230	126	0.06	0.04	0.02	4.	*	2 JAN 0236	267	0.00	0.00	0.00	0.
1 JAN 1236	127	0.04	0.03	0.01	3.	*	2 JAN 0242	268	0.00	0.00	0.00	0.
1 JAN 1242	128	0.04	0.02	0.01	3.	*	2 JAN 0248	269	0.00	0.00	0.00	0.
1 JAN 1248	129	0.03	0.02	0.01	2.	*	2 JAN 0254	270	0.00	0.00	0.00	0.
1 JAN 1254	130	0.03	0.02	0.01	2.	*	2 JAN 0300	271	0.00	0.00	0.00	0.
1 JAN 1300	131	0.03	0.02	0.01	2.	*	2 JAN 0306	272	0.00	0.00	0.00	0.
1 JAN 1306	132	0.02	0.01	0.01	1.	*	2 JAN 0312	273	0.00	0.00	0.00	0.
1 JAN 1312	133	0.02	0.01	0.01	1.	*	2 JAN 0318	274	0.00	0.00	0.00	0.
1 JAN 1318	134	0.02	0.01	0.01	1.	*	2 JAN 0324	275	0.00	0.00	0.00	0.
1 JAN 1324	135	0.02	0.01	0.01	1.	*	2 JAN 0330	276	0.00	0.00	0.00	0.
1 JAN 1330	136	0.02	0.01	0.01	1.	*	2 JAN 0336	277	0.00	0.00	0.00	0.
1 JAN 1336	137	0.02	0.01	0.01	1.	*	2 JAN 0342	278	0.00	0.00	0.00	0.
1 JAN 1342	138	0.02	0.01	0.01	1.	*	2 JAN 0348	279	0.00	0.00	0.00	0.
1 JAN 1348	139	0.02	0.01	0.01	1.	*	2 JAN 0354	280	0.00	0.00	0.00	0.
1 JAN 1354	140	0.02	0.01	0.01	1.	*	2 JAN 0400	281	0.00	0.00	0.00	0.
1 JAN 1400	141	0.02	0.01	0.01	1.	*						

****

TOTAL RAINFALL = 3.40, TOTAL LOSS = 2.70, TOTAL EXCESS = 0.70

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)
	(CFS)	4.	12.40		1.	0.	0.
	(INCHES)	0.565	0.700	0.700	0.700		
	(AC-FT)	1.	1.	1.	1.		

CUMULATIVE AREA = 0.02 SQ MI

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          **************
          *            *
49 KK     *    COM1    *
          *            *
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COMBINE SUB-AREA 2 WITH OVERFLOW FROM SUB-AREA 1

51 HC HYDROGRAPH COMBINATION

ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

***

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HYDROGRAPH AT STATION COM1
SUM OF 2 HYDROGRAPHS

****

DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0000	1	0.	*	1 JAN 0706	72	0.	*	1 JAN 1412	143	1.	*	1 JAN 2118	214	0.
1 JAN 0006	2	0.	*	1 JAN 0712	73	0.	*	1 JAN 1418	144	1.	*	1 JAN 2124	215	0.
1 JAN 0012	3	0.	*	1 JAN 0718	74	0.	*	1 JAN 1424	145	1.	*	1 JAN 2130	216	0.
1 JAN 0018	4	0.	*	1 JAN 0724	75	0.	*	1 JAN 1430	146	1.	*	1 JAN 2136	217	0.
1 JAN 0024	5	0.	*	1 JAN 0730	76	0.	*	1 JAN 1436	147	1.	*	1 JAN 2142	218	0.
1 JAN 0030	6	0.	*	1 JAN 0736	77	0.	*	1 JAN 1442	148	1.	*	1 JAN 2148	219	0.
1 JAN 0036	7	0.	*	1 JAN 0742	78	0.	*	1 JAN 1448	149	1.	*	1 JAN 2154	220	0.
1 JAN 0042	8	0.	*	1 JAN 0748	79	0.	*	1 JAN 1454	150	1.	*	1 JAN 2200	221	0.
1 JAN 0048	9	0.	*	1 JAN 0754	80	0.	*	1 JAN 1500	151	1.	*	1 JAN 2206	222	0.
1 JAN 0054	10	0.	*	1 JAN 0800	81	0.	*	1 JAN 1506	152	1.	*	1 JAN 2212	223	0.
1 JAN 0100	11	0.	*	1 JAN 0806	82	0.	*	1 JAN 1512	153	1.	*	1 JAN 2218	224	0.
1 JAN 0106	12	0.	*	1 JAN 0812	83	0.	*	1 JAN 1518	154	1.	*	1 JAN 2224	225	0.
1 JAN 0112	13	0.	*	1 JAN 0818	84	0.	*	1 JAN 1524	155	1.	*	1 JAN 2230	226	0.
1 JAN 0118	14	0.	*	1 JAN 0824	85	0.	*	1 JAN 1530	156	1.	*	1 JAN 2236	227	0.
1 JAN 0124	15	0.	*	1 JAN 0830	86	0.	*	1 JAN 1536	157	1.	*	1 JAN 2242	228	0.
1 JAN 0130	16	0.	*	1 JAN 0836	87	0.	*	1 JAN 1542	158	1.	*	1 JAN 2248	229	0.
1 JAN 0136	17	0.	*	1 JAN 0842	88	0.	*	1 JAN 1548	159	1.	*	1 JAN 2254	230	0.
1 JAN 0142	18	0.	*	1 JAN 0848	89	0.	*	1 JAN 1554	160	1.	*	1 JAN 2300	231	0.
1 JAN 0148	19	0.	*	1 JAN 0854	90	0.	*	1 JAN 1600	161	1.	*	1 JAN 2306	232	0.

1 JAN 0154	20	0.	*	1 JAN 0900	91	0.	*	1 JAN 1606	162	0.	*	1 JAN 2312	233	0.
1 JAN 0200	21	0.	*	1 JAN 0906	92	0.	*	1 JAN 1612	163	0.	*	1 JAN 2318	234	0.
1 JAN 0206	22	0.	*	1 JAN 0912	93	0.	*	1 JAN 1618	164	0.	*	1 JAN 2324	235	0.
1 JAN 0212	23	0.	*	1 JAN 0918	94	0.	*	1 JAN 1624	165	0.	*	1 JAN 2330	236	0.
1 JAN 0218	24	0.	*	1 JAN 0924	95	0.	*	1 JAN 1630	166	0.	*	1 JAN 2336	237	0.
1 JAN 0224	25	0.	*	1 JAN 0930	96	0.	*	1 JAN 1636	167	0.	*	1 JAN 2342	238	0.
1 JAN 0230	26	0.	*	1 JAN 0936	97	0.	*	1 JAN 1642	168	0.	*	1 JAN 2348	239	0.
1 JAN 0236	27	0.	*	1 JAN 0942	98	0.	*	1 JAN 1648	169	0.	*	1 JAN 2354	240	0.
1 JAN 0242	28	0.	*	1 JAN 0948	99	0.	*	1 JAN 1654	170	0.	*	2 JAN 0000	241	0.
1 JAN 0248	29	0.	*	1 JAN 0954	100	0.	*	1 JAN 1700	171	0.	*	2 JAN 0006	242	0.
1 JAN 0254	30	0.	*	1 JAN 1000	101	0.	*	1 JAN 1706	172	0.	*	2 JAN 0012	243	0.
1 JAN 0300	31	0.	*	1 JAN 1006	102	0.	*	1 JAN 1712	173	0.	*	2 JAN 0018	244	0.
1 JAN 0306	32	0.	*	1 JAN 1012	103	0.	*	1 JAN 1718	174	0.	*	2 JAN 0024	245	0.
1 JAN 0312	33	0.	*	1 JAN 1018	104	0.	*	1 JAN 1724	175	0.	*	2 JAN 0030	246	0.
1 JAN 0318	34	0.	*	1 JAN 1024	105	0.	*	1 JAN 1730	176	0.	*	2 JAN 0036	247	0.
1 JAN 0324	35	0.	*	1 JAN 1030	106	0.	*	1 JAN 1736	177	0.	*	2 JAN 0042	248	0.
1 JAN 0330	36	0.	*	1 JAN 1036	107	0.	*	1 JAN 1742	178	0.	*	2 JAN 0048	249	0.
1 JAN 0336	37	0.	*	1 JAN 1042	108	0.	*	1 JAN 1748	179	0.	*	2 JAN 0054	250	0.
1 JAN 0342	38	0.	*	1 JAN 1048	109	0.	*	1 JAN 1754	180	0.	*	2 JAN 0100	251	0.
1 JAN 0348	39	0.	*	1 JAN 1054	110	0.	*	1 JAN 1800	181	0.	*	2 JAN 0106	252	0.
1 JAN 0354	40	0.	*	1 JAN 1100	111	0.	*	1 JAN 1806	182	0.	*	2 JAN 0112	253	0.
1 JAN 0400	41	0.	*	1 JAN 1106	112	0.	*	1 JAN 1812	183	0.	*	2 JAN 0118	254	0.
1 JAN 0406	42	0.	*	1 JAN 1112	113	0.	*	1 JAN 1818	184	0.	*	2 JAN 0124	255	0.
1 JAN 0412	43	0.	*	1 JAN 1118	114	0.	*	1 JAN 1824	185	0.	*	2 JAN 0130	256	0.
1 JAN 0418	44	0.	*	1 JAN 1124	115	0.	*	1 JAN 1830	186	0.	*	2 JAN 0136	257	0.
1 JAN 0424	45	0.	*	1 JAN 1130	116	0.	*	1 JAN 1836	187	0.	*	2 JAN 0142	258	0.
1 JAN 0430	46	0.	*	1 JAN 1136	117	0.	*	1 JAN 1842	188	0.	*	2 JAN 0148	259	0.
1 JAN 0436	47	0.	*	1 JAN 1142	118	0.	*	1 JAN 1848	189	0.	*	2 JAN 0154	260	0.
1 JAN 0442	48	0.	*	1 JAN 1148	119	0.	*	1 JAN 1854	190	0.	*	2 JAN 0200	261	0.
1 JAN 0448	49	0.	*	1 JAN 1154	120	0.	*	1 JAN 1900	191	0.	*	2 JAN 0206	262	0.
1 JAN 0454	50	0.	*	1 JAN 1200	121	1.	*	1 JAN 1906	192	0.	*	2 JAN 0212	263	0.
1 JAN 0500	51	0.	*	1 JAN 1206	122	2.	*	1 JAN 1912	193	0.	*	2 JAN 0218	264	0.
1 JAN 0506	52	0.	*	1 JAN 1212	123	3.	*	1 JAN 1918	194	0.	*	2 JAN 0224	265	0.
1 JAN 0512	53	0.	*	1 JAN 1218	124	4.	*	1 JAN 1924	195	0.	*	2 JAN 0230	266	0.
1 JAN 0518	54	0.	*	1 JAN 1224	125	4.	*	1 JAN 1930	196	0.	*	2 JAN 0236	267	0.
1 JAN 0524	55	0.	*	1 JAN 1230	126	4.	*	1 JAN 1936	197	0.	*	2 JAN 0242	268	0.
1 JAN 0530	56	0.	*	1 JAN 1236	127	3.	*	1 JAN 1942	198	0.	*	2 JAN 0248	269	0.
1 JAN 0536	57	0.	*	1 JAN 1242	128	3.	*	1 JAN 1948	199	0.	*	2 JAN 0254	270	0.
1 JAN 0542	58	0.	*	1 JAN 1248	129	2.	*	1 JAN 1954	200	0.	*	2 JAN 0300	271	0.
1 JAN 0548	59	0.	*	1 JAN 1254	130	2.	*	1 JAN 2000	201	0.	*	2 JAN 0306	272	0.
1 JAN 0554	60	0.	*	1 JAN 1300	131	2.	*	1 JAN 2006	202	0.	*	2 JAN 0312	273	0.
1 JAN 0600	61	0.	*	1 JAN 1306	132	1.	*	1 JAN 2012	203	0.	*	2 JAN 0318	274	0.
1 JAN 0606	62	0.	*	1 JAN 1312	133	1.	*	1 JAN 2018	204	0.	*	2 JAN 0324	275	0.
1 JAN 0612	63	0.	*	1 JAN 1318	134	1.	*	1 JAN 2024	205	0.	*	2 JAN 0330	276	0.
1 JAN 0618	64	0.	*	1 JAN 1324	135	1.	*	1 JAN 2030	206	0.	*	2 JAN 0336	277	0.
1 JAN 0624	65	0.	*	1 JAN 1330	136	1.	*	1 JAN 2036	207	0.	*	2 JAN 0342	278	0.
1 JAN 0630	66	0.	*	1 JAN 1336	137	1.	*	1 JAN 2042	208	0.	*	2 JAN 0348	279	0.
1 JAN 0636	67	0.	*	1 JAN 1342	138	1.	*	1 JAN 2048	209	0.	*	2 JAN 0354	280	0.
1 JAN 0642	68	0.	*	1 JAN 1348	139	1.	*	1 JAN 2054	210	0.	*	2 JAN 0400	281	0.
1 JAN 0648	69	0.	*	1 JAN 1354	140	1.	*	1 JAN 2100	211	0.	*			
1 JAN 0654	70	0.	*	1 JAN 1400	141	1.	*	1 JAN 2106	212	0.	*			
1 JAN 0700	71	0.	*	1 JAN 1406	142	1.	*	1 JAN 2112	213	0.	*			
			*				*				*			

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PEAK FLOW TIME MAXIMUM AVERAGE FLOW

	6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)	
(CFS)	4.	12.40		1.	0.	0.	0.
(INCHES)	0.445	0.551	0.551	0.551			
(AC-FT)	1.	1.	1.	1.			

CUMULATIVE AREA = 0.02 SQ MI

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52 KK

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*           *
*   LPOOL   *
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HYDROGRAPH ROUTING DATA

53 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	ELEV	TYPE OF INITIAL CONDITION
RSVRIC	24.20	INITIAL CONDITION
X	0.00	WORKING R AND D COEFFICIENT

54 SV	STORAGE	0.0	0.0	0.0	0.0	0.2	0.3	0.5
55 SQ	DISCHARGE	0.	0.	1.	5.	9.	15.	25.
56 SE	ELEVATION	24.20	25.10	25.50	26.00	26.50	27.00	28.00

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HYDROGRAPH AT STATION LPOOL

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	JAN	0000	1	0.	0.0	24.2	1	JAN	0924	95	0.	0.0	24.2	1	JAN	1848	189	0.	0.0	25.2

1 JAN 0006	2	0.	0.0	24.2 *	1 JAN 0930	96	0.	0.0	24.2 *	1 JAN 1854	190	0.	0.0	25.2
1 JAN 0012	3	0.	0.0	24.2 *	1 JAN 0936	97	0.	0.0	24.2 *	1 JAN 1900	191	0.	0.0	25.2
1 JAN 0018	4	0.	0.0	24.2 *	1 JAN 0942	98	0.	0.0	24.2 *	1 JAN 1906	192	0.	0.0	25.2
1 JAN 0024	5	0.	0.0	24.2 *	1 JAN 0948	99	0.	0.0	24.2 *	1 JAN 1912	193	0.	0.0	25.2
1 JAN 0030	6	0.	0.0	24.2 *	1 JAN 0954	100	0.	0.0	24.2 *	1 JAN 1918	194	0.	0.0	25.2
1 JAN 0036	7	0.	0.0	24.2 *	1 JAN 1000	101	0.	0.0	24.2 *	1 JAN 1924	195	0.	0.0	25.2
1 JAN 0042	8	0.	0.0	24.2 *	1 JAN 1006	102	0.	0.0	24.2 *	1 JAN 1930	196	0.	0.0	25.2
1 JAN 0048	9	0.	0.0	24.2 *	1 JAN 1012	103	0.	0.0	24.2 *	1 JAN 1936	197	0.	0.0	25.2
1 JAN 0054	10	0.	0.0	24.2 *	1 JAN 1018	104	0.	0.0	24.2 *	1 JAN 1942	198	0.	0.0	25.2
1 JAN 0100	11	0.	0.0	24.2 *	1 JAN 1024	105	0.	0.0	24.2 *	1 JAN 1948	199	0.	0.0	25.2
1 JAN 0106	12	0.	0.0	24.2 *	1 JAN 1030	106	0.	0.0	24.2 *	1 JAN 1954	200	0.	0.0	25.2
1 JAN 0112	13	0.	0.0	24.2 *	1 JAN 1036	107	0.	0.0	24.2 *	1 JAN 2000	201	0.	0.0	25.2
1 JAN 0118	14	0.	0.0	24.2 *	1 JAN 1042	108	0.	0.0	24.2 *	1 JAN 2006	202	0.	0.0	25.2
1 JAN 0124	15	0.	0.0	24.2 *	1 JAN 1048	109	0.	0.0	24.2 *	1 JAN 2012	203	0.	0.0	25.2
1 JAN 0130	16	0.	0.0	24.2 *	1 JAN 1054	110	0.	0.0	24.2 *	1 JAN 2018	204	0.	0.0	25.2
1 JAN 0136	17	0.	0.0	24.2 *	1 JAN 1100	111	0.	0.0	24.2 *	1 JAN 2024	205	0.	0.0	25.2
1 JAN 0142	18	0.	0.0	24.2 *	1 JAN 1106	112	0.	0.0	24.2 *	1 JAN 2030	206	0.	0.0	25.2
1 JAN 0148	19	0.	0.0	24.2 *	1 JAN 1112	113	0.	0.0	24.2 *	1 JAN 2036	207	0.	0.0	25.2
1 JAN 0154	20	0.	0.0	24.2 *	1 JAN 1118	114	0.	0.0	24.2 *	1 JAN 2042	208	0.	0.0	25.2
1 JAN 0200	21	0.	0.0	24.2 *	1 JAN 1124	115	0.	0.0	24.2 *	1 JAN 2048	209	0.	0.0	25.2
1 JAN 0206	22	0.	0.0	24.2 *	1 JAN 1130	116	0.	0.0	24.2 *	1 JAN 2054	210	0.	0.0	25.2
1 JAN 0212	23	0.	0.0	24.2 *	1 JAN 1136	117	0.	0.0	24.2 *	1 JAN 2100	211	0.	0.0	25.2
1 JAN 0218	24	0.	0.0	24.2 *	1 JAN 1142	118	0.	0.0	24.2 *	1 JAN 2106	212	0.	0.0	25.2
1 JAN 0224	25	0.	0.0	24.2 *	1 JAN 1148	119	0.	0.0	24.2 *	1 JAN 2112	213	0.	0.0	25.2
1 JAN 0230	26	0.	0.0	24.2 *	1 JAN 1154	120	0.	0.0	24.3 *	1 JAN 2118	214	0.	0.0	25.2
1 JAN 0236	27	0.	0.0	24.2 *	1 JAN 1200	121	0.	0.0	24.7 *	1 JAN 2124	215	0.	0.0	25.2
1 JAN 0242	28	0.	0.0	24.2 *	1 JAN 1206	122	0.	0.0	25.3 *	1 JAN 2130	216	0.	0.0	25.2
1 JAN 0248	29	0.	0.0	24.2 *	1 JAN 1212	123	2.	0.0	25.6 *	1 JAN 2136	217	0.	0.0	25.2
1 JAN 0254	30	0.	0.0	24.2 *	1 JAN 1218	124	3.	0.0	25.8 *	1 JAN 2142	218	0.	0.0	25.2
1 JAN 0300	31	0.	0.0	24.2 *	1 JAN 1224	125	4.	0.0	25.9 *	1 JAN 2148	219	0.	0.0	25.2
1 JAN 0306	32	0.	0.0	24.2 *	1 JAN 1230	126	4.	0.0	25.9 *	1 JAN 2154	220	0.	0.0	25.2
1 JAN 0312	33	0.	0.0	24.2 *	1 JAN 1236	127	4.	0.0	25.9 *	1 JAN 2200	221	0.	0.0	25.2
1 JAN 0318	34	0.	0.0	24.2 *	1 JAN 1242	128	3.	0.0	25.8 *	1 JAN 2206	222	0.	0.0	25.2
1 JAN 0324	35	0.	0.0	24.2 *	1 JAN 1248	129	3.	0.0	25.7 *	1 JAN 2212	223	0.	0.0	25.2
1 JAN 0330	36	0.	0.0	24.2 *	1 JAN 1254	130	2.	0.0	25.7 *	1 JAN 2218	224	0.	0.0	25.2
1 JAN 0336	37	0.	0.0	24.2 *	1 JAN 1300	131	2.	0.0	25.6 *	1 JAN 2224	225	0.	0.0	25.2
1 JAN 0342	38	0.	0.0	24.2 *	1 JAN 1306	132	2.	0.0	25.6 *	1 JAN 2230	226	0.	0.0	25.2
1 JAN 0348	39	0.	0.0	24.2 *	1 JAN 1312	133	1.	0.0	25.5 *	1 JAN 2236	227	0.	0.0	25.2
1 JAN 0354	40	0.	0.0	24.2 *	1 JAN 1318	134	1.	0.0	25.5 *	1 JAN 2242	228	0.	0.0	25.2
1 JAN 0400	41	0.	0.0	24.2 *	1 JAN 1324	135	1.	0.0	25.5 *	1 JAN 2248	229	0.	0.0	25.2
1 JAN 0406	42	0.	0.0	24.2 *	1 JAN 1330	136	1.	0.0	25.5 *	1 JAN 2254	230	0.	0.0	25.2
1 JAN 0412	43	0.	0.0	24.2 *	1 JAN 1336	137	1.	0.0	25.5 *	1 JAN 2300	231	0.	0.0	25.2
1 JAN 0418	44	0.	0.0	24.2 *	1 JAN 1342	138	1.	0.0	25.5 *	1 JAN 2306	232	0.	0.0	25.2
1 JAN 0424	45	0.	0.0	24.2 *	1 JAN 1348	139	1.	0.0	25.5 *	1 JAN 2312	233	0.	0.0	25.2
1 JAN 0430	46	0.	0.0	24.2 *	1 JAN 1354	140	1.	0.0	25.4 *	1 JAN 2318	234	0.	0.0	25.2
1 JAN 0436	47	0.	0.0	24.2 *	1 JAN 1400	141	1.	0.0	25.4 *	1 JAN 2324	235	0.	0.0	25.2
1 JAN 0442	48	0.	0.0	24.2 *	1 JAN 1406	142	1.	0.0	25.4 *	1 JAN 2330	236	0.	0.0	25.2
1 JAN 0448	49	0.	0.0	24.2 *	1 JAN 1412	143	1.	0.0	25.4 *	1 JAN 2336	237	0.	0.0	25.2
1 JAN 0454	50	0.	0.0	24.2 *	1 JAN 1418	144	1.	0.0	25.4 *	1 JAN 2342	238	0.	0.0	25.2
1 JAN 0500	51	0.	0.0	24.2 *	1 JAN 1424	145	1.	0.0	25.4 *	1 JAN 2348	239	0.	0.0	25.2
1 JAN 0506	52	0.	0.0	24.2 *	1 JAN 1430	146	1.	0.0	25.4 *	1 JAN 2354	240	0.	0.0	25.2
1 JAN 0512	53	0.	0.0	24.2 *	1 JAN 1436	147	1.	0.0	25.4 *	2 JAN 0000	241	0.	0.0	25.2
1 JAN 0518	54	0.	0.0	24.2 *	1 JAN 1442	148	1.	0.0	25.4 *	2 JAN 0006	242	0.	0.0	25.2
1 JAN 0524	55	0.	0.0	24.2 *	1 JAN 1448	149	1.	0.0	25.4 *	2 JAN 0012	243	0.	0.0	25.2
1 JAN 0530	56	0.	0.0	24.2 *	1 JAN 1454	150	1.	0.0	25.4 *	2 JAN 0018	244	0.	0.0	25.1
1 JAN 0536	57	0.	0.0	24.2 *	1 JAN 1500	151	1.	0.0	25.4 *	2 JAN 0024	245	0.	0.0	25.1
1 JAN 0542	58	0.	0.0	24.2 *	1 JAN 1506	152	1.	0.0	25.3 *	2 JAN 0030	246	0.	0.0	25.1
1 JAN 0548	59	0.	0.0	24.2 *	1 JAN 1512	153	1.	0.0	25.3 *	2 JAN 0036	247	0.	0.0	25.1
1 JAN 0554	60	0.	0.0	24.2 *	1 JAN 1518	154	1.	0.0	25.3 *	2 JAN 0042	248	0.	0.0	25.1
1 JAN 0600	61	0.	0.0	24.2 *	1 JAN 1524	155	1.	0.0	25.3 *	2 JAN 0048	249	0.	0.0	25.1
1 JAN 0606	62	0.	0.0	24.2 *	1 JAN 1530	156	1.	0.0	25.3 *	2 JAN 0054	250	0.	0.0	25.1
1 JAN 0612	63	0.	0.0	24.2 *	1 JAN 1536	157	1.	0.0	25.3 *	2 JAN 0100	251	0.	0.0	25.1
1 JAN 0618	64	0.	0.0	24.2 *	1 JAN 1542	158	1.	0.0	25.3 *	2 JAN 0106	252	0.	0.0	25.1
1 JAN 0624	65	0.	0.0	24.2 *	1 JAN 1548	159	1.	0.0	25.3 *	2 JAN 0112	253	0.	0.0	25.1
1 JAN 0630	66	0.	0.0	24.2 *	1 JAN 1554	160	1.	0.0	25.3 *	2 JAN 0118	254	0.	0.0	25.1
1 JAN 0636	67	0.	0.0	24.2 *	1 JAN 1600	161	1.	0.0	25.3 *	2 JAN 0124	255	0.	0.0	25.1
1 JAN 0642	68	0.	0.0	24.2 *	1 JAN 1606	162	1.	0.0	25.3 *	2 JAN 0130	256	0.	0.0	25.1
1 JAN 0648	69	0.	0.0	24.2 *	1 JAN 1612	163	0.	0.0	25.3 *	2 JAN 0136	257	0.	0.0	25.1
1 JAN 0654	70	0.	0.0	24.2 *	1 JAN 1618	164	0.	0.0	25.3 *	2 JAN 0142	258	0.	0.0	25.1
1 JAN 0700	71	0.	0.0	24.2 *	1 JAN 1624	165	0.	0.0	25.3 *	2 JAN 0148	259	0.	0.0	25.1
1 JAN 0706	72	0.	0.0	24.2 *	1 JAN 1630	166	0.	0.0	25.3 *	2 JAN 0154	260	0.	0.0	25.1
1 JAN 0712	73	0.	0.0	24.2 *	1 JAN 1636	167	0.	0.0	25.3 *	2 JAN 0200	261	0.	0.0	25.1
1 JAN 0718	74	0.	0.0	24.2 *	1 JAN 1642	168	0.	0.0	25.3 *	2 JAN 0206	262	0.	0.0	25.1
1 JAN 0724	75	0.	0.0	24.2 *	1 JAN 1648	169	0.	0.0	25.3 *	2 JAN 0212	263	0.	0.0	25.1
1 JAN 0730	76	0.	0.0	24.2 *	1 JAN 1654	170	0.	0.0	25.2 *	2 JAN 0218	264	0.	0.0	25.1
1 JAN 0736	77	0.	0.0	24.2 *	1 JAN 1700	171	0.	0.0	25.2 *	2 JAN 0224	265	0.	0.0	25.1
1 JAN 0742	78	0.	0.0	24.2 *	1 JAN 1706	172	0.	0.0	25.2 *	2 JAN 0230	266	0.	0.0	25.1
1 JAN 0748	79	0.	0.0	24.2 *	1 JAN 1712	173	0.	0.0	25.2 *	2 JAN 0236	267	0.	0.0	25.1
1 JAN 0754	80	0.	0.0	24.2 *	1 JAN 1718	174	0.	0.0	25.2 *	2 JAN 0242	268	0.	0.0	25.1
1 JAN 0800	81	0.	0.0	24.2 *	1 JAN 1724	175	0.	0.0	25.2 *	2 JAN 0248	269	0.	0.0	25.1
1 JAN 0806	82	0.	0.0	24.2 *	1 JAN 1730	176	0.	0.0	25.2 *	2 JAN 0254	270	0.	0.0	25.1
1 JAN 0812	83	0.	0.0	24.2 *	1 JAN 1736	177	0.	0.0	25.2 *	2 JAN 0300	271	0.	0.0	25.1
1 JAN 0818	84	0.	0.0	24.2 *	1 JAN 1742	178	0.	0.0	25.2 *	2 JAN 0306	272	0.	0.0	25.1
1 JAN 0824	85	0.	0.0	24.2 *	1 JAN 1748	179	0.	0.0	25.2 *	2 JAN 0312	273	0.	0.0	25.1
1 JAN 0830	86	0.	0.0	24.2 *	1 JAN 1754	180	0.	0.0	25.2 *	2 JAN 0318	274	0.	0.0	25.1
1 JAN 0836	87	0.	0.0	24.2 *	1 JAN 1800	181	0.	0.0	25.2 *	2 JAN 0324	275	0.	0.0	25.1
1 JAN 0842	88	0.	0.0	24.2 *	1 JAN 1806	182	0.	0.0	25.2 *	2 JAN 0330	276	0.	0.0	25.1
1 JAN 0848	89	0.	0.0	24.2 *	1 JAN 1812	183	0.	0.0	25.2 *	2 JAN 0336	277	0.	0.0	25.1
1 JAN 0854	90	0.	0.0	24.2 *	1 JAN 1818	184	0.	0.0	25.2 *	2 JAN 0342	278	0.	0.0	25.1
1 JAN 0900	91	0.	0.0	24.2 *	1 JAN 1824	185	0.	0.0	25.2 *	2 JAN 0348	279	0.	0.0	25.1
1 JAN 0906	92	0.	0.0	24.2 *	1 JAN 1830	186	0.	0.0	25.2 *	2 JAN 0354	280	0.	0.0	25.1
1 JAN 0912	93	0.	0.0	24.2 *	1 JAN 1836	187	0.	0.0	25.2 *	2 JAN 0400	281	0.	0.0	25.1
1 JAN 0918	94	0.	0.0	24.2 *	1 JAN 1842	188	0.	0.0	25.2 *					

****

PEAK FLOW TIME

MAXIMUM AVERAGE FLOW

	6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)	
(CFS)	4.	12.50		1.	0.	0.	0.
(INCHES)	0.437	0.542	0.542	0.542			

```
                    (AC-FT)        1.          1.          1.          1.

PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                  6-HR        24-HR       72-HR     28.00-HR  (AC-FT)      (HR)
     0.        12.40               0.          0.          0.          0.

PEAK STAGE     TIME                          MAXIMUM AVERAGE STAGE
                                  6-HR        24-HR       72-HR     28.00-HR   (FEET)      (HR)
   25.95       12.50              25.40       24.90       24.80       24.80

                    CUMULATIVE AREA =    0.02 SQ MI
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             **************
             *            *
57 KK        *      SA3   *    SUB-AREA 3 (AREA DRAINING TO 30" STORM OUTLET)
             *            *
             **************

              SUBBASIN RUNOFF DATA

58 BA          SUBBASIN CHARACTERISTICS
                  TAREA        0.01  SUBBASIN AREA

               PRECIPITATION DATA

12 PB             STORM        3.40  BASIN TOTAL PRECIPITATION

13 PI            INCREMENTAL PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.03      0.03      0.04      0.08
                  0.08      0.04      0.03      0.03      0.02      0.01      0.01      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

59 LS          SCS LOSS RATE
                  STRTL        0.17  INITIAL ABSTRACTION
                  CRVNBR      92.00  CURVE NUMBER
                  RTIMP        0.00  PERCENT IMPERVIOUS AREA

60 UD          SCS DIMENSIONLESS UNITGRAPH
                  TLAG         0.20  LAG

                                                    ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                               UNIT HYDROGRAPH
                                           12 END-OF-PERIOD ORDINATES
              8.        24.       24.       15.        7.        4.        2.        1.        1.        0.
              0.         0.
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HYDROGRAPH AT STATION SA3

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0000	1	0.00	0.00	0.00	0.	*	1 JAN 1406	142	0.02	0.00	0.02	1.
1 JAN 0006	2	0.00	0.00	0.00	0.	*	1 JAN 1412	143	0.02	0.00	0.02	1.
1 JAN 0012	3	0.00	0.00	0.00	0.	*	1 JAN 1418	144	0.02	0.00	0.01	1.
1 JAN 0018	4	0.00	0.00	0.00	0.	*	1 JAN 1424	145	0.02	0.00	0.01	1.
1 JAN 0024	5	0.00	0.00	0.00	0.	*	1 JAN 1430	146	0.01	0.00	0.01	1.
1 JAN 0030	6	0.00	0.00	0.00	0.	*	1 JAN 1436	147	0.01	0.00	0.01	1.
1 JAN 0036	7	0.00	0.00	0.00	0.	*	1 JAN 1442	148	0.01	0.00	0.01	1.
1 JAN 0042	8	0.00	0.00	0.00	0.	*	1 JAN 1448	149	0.01	0.00	0.01	1.
1 JAN 0048	9	0.00	0.00	0.00	0.	*	1 JAN 1454	150	0.01	0.00	0.01	1.
1 JAN 0054	10	0.00	0.00	0.00	0.	*	1 JAN 1500	151	0.01	0.00	0.01	1.
1 JAN 0100	11	0.00	0.00	0.00	0.	*	1 JAN 1506	152	0.01	0.00	0.01	1.
1 JAN 0106	12	0.00	0.00	0.00	0.	*	1 JAN 1512	153	0.01	0.00	0.01	1.
1 JAN 0112	13	0.00	0.00	0.00	0.	*	1 JAN 1518	154	0.01	0.00	0.01	1.
1 JAN 0118	14	0.00	0.00	0.00	0.	*	1 JAN 1524	155	0.01	0.00	0.01	1.
1 JAN 0124	15	0.00	0.00	0.00	0.	*	1 JAN 1530	156	0.01	0.00	0.01	1.
1 JAN 0130	16	0.00	0.00	0.00	0.	*	1 JAN 1536	157	0.01	0.00	0.01	1.

1	JAN	0136	17	0.00	0.00	0.00	0.	*	1	JAN	1542	158	0.01	0.00	0.01	1.
1	JAN	0142	18	0.00	0.00	0.00	0.	*	1	JAN	1548	159	0.01	0.00	0.01	1.
1	JAN	0148	19	0.00	0.00	0.00	0.	*	1	JAN	1554	160	0.01	0.00	0.01	1.
1	JAN	0154	20	0.00	0.00	0.00	0.	*	1	JAN	1600	161	0.01	0.00	0.01	1.
1	JAN	0200	21	0.00	0.00	0.00	0.	*	1	JAN	1606	162	0.01	0.00	0.01	1.
1	JAN	0206	22	0.00	0.00	0.00	0.	*	1	JAN	1612	163	0.01	0.00	0.01	1.
1	JAN	0212	23	0.00	0.00	0.00	0.	*	1	JAN	1618	164	0.01	0.00	0.01	1.
1	JAN	0218	24	0.00	0.00	0.00	0.	*	1	JAN	1624	165	0.01	0.00	0.01	1.
1	JAN	0224	25	0.00	0.00	0.00	0.	*	1	JAN	1630	166	0.01	0.00	0.01	1.
1	JAN	0230	26	0.00	0.00	0.00	0.	*	1	JAN	1636	167	0.01	0.00	0.01	1.
1	JAN	0236	27	0.00	0.00	0.00	0.	*	1	JAN	1642	168	0.01	0.00	0.01	1.
1	JAN	0242	28	0.00	0.00	0.00	0.	*	1	JAN	1648	169	0.01	0.00	0.01	1.
1	JAN	0248	29	0.00	0.00	0.00	0.	*	1	JAN	1654	170	0.01	0.00	0.01	1.
1	JAN	0254	30	0.00	0.00	0.00	0.	*	1	JAN	1700	171	0.01	0.00	0.01	1.
1	JAN	0300	31	0.00	0.00	0.00	0.	*	1	JAN	1706	172	0.01	0.00	0.01	1.
1	JAN	0306	32	0.00	0.00	0.00	0.	*	1	JAN	1712	173	0.01	0.00	0.01	1.
1	JAN	0312	33	0.00	0.00	0.00	0.	*	1	JAN	1718	174	0.01	0.00	0.01	1.
1	JAN	0318	34	0.00	0.00	0.00	0.	*	1	JAN	1724	175	0.01	0.00	0.01	1.
1	JAN	0324	35	0.00	0.00	0.00	0.	*	1	JAN	1730	176	0.01	0.00	0.01	1.
1	JAN	0330	36	0.00	0.00	0.00	0.	*	1	JAN	1736	177	0.01	0.00	0.01	1.
1	JAN	0336	37	0.00	0.00	0.00	0.	*	1	JAN	1742	178	0.01	0.00	0.01	1.
1	JAN	0342	38	0.00	0.00	0.00	0.	*	1	JAN	1748	179	0.01	0.00	0.01	1.
1	JAN	0348	39	0.00	0.00	0.00	0.	*	1	JAN	1754	180	0.01	0.00	0.01	0.
1	JAN	0354	40	0.00	0.00	0.00	0.	*	1	JAN	1800	181	0.01	0.00	0.01	0.
1	JAN	0400	41	0.00	0.00	0.00	0.	*	1	JAN	1806	182	0.01	0.00	0.01	0.
1	JAN	0406	42	0.00	0.00	0.00	0.	*	1	JAN	1812	183	0.01	0.00	0.01	0.
1	JAN	0412	43	0.00	0.00	0.00	0.	*	1	JAN	1818	184	0.01	0.00	0.01	0.
1	JAN	0418	44	0.00	0.00	0.00	0.	*	1	JAN	1824	185	0.01	0.00	0.01	0.
1	JAN	0424	45	0.00	0.00	0.00	0.	*	1	JAN	1830	186	0.01	0.00	0.00	0.
1	JAN	0430	46	0.00	0.00	0.00	0.	*	1	JAN	1836	187	0.01	0.00	0.00	0.
1	JAN	0436	47	0.00	0.00	0.00	0.	*	1	JAN	1842	188	0.01	0.00	0.00	0.
1	JAN	0442	48	0.00	0.00	0.00	0.	*	1	JAN	1848	189	0.01	0.00	0.00	0.
1	JAN	0448	49	0.00	0.00	0.00	0.	*	1	JAN	1854	190	0.00	0.00	0.00	0.
1	JAN	0454	50	0.00	0.00	0.00	0.	*	1	JAN	1900	191	0.01	0.00	0.00	0.
1	JAN	0500	51	0.00	0.00	0.00	0.	*	1	JAN	1906	192	0.00	0.00	0.00	0.
1	JAN	0506	52	0.01	0.00	0.00	0.	*	1	JAN	1912	193	0.00	0.00	0.00	0.
1	JAN	0512	53	0.00	0.00	0.00	0.	*	1	JAN	1918	194	0.00	0.00	0.00	0.
1	JAN	0518	54	0.01	0.00	0.00	0.	*	1	JAN	1924	195	0.00	0.00	0.00	0.
1	JAN	0524	55	0.01	0.00	0.00	0.	*	1	JAN	1930	196	0.00	0.00	0.00	0.
1	JAN	0530	56	0.01	0.00	0.00	0.	*	1	JAN	1936	197	0.00	0.00	0.00	0.
1	JAN	0536	57	0.01	0.00	0.00	0.	*	1	JAN	1942	198	0.00	0.00	0.00	0.
1	JAN	0542	58	0.01	0.00	0.00	0.	*	1	JAN	1948	199	0.00	0.00	0.00	0.
1	JAN	0548	59	0.01	0.00	0.00	0.	*	1	JAN	1954	200	0.00	0.00	0.00	0.
1	JAN	0554	60	0.01	0.00	0.00	0.	*	1	JAN	2000	201	0.00	0.00	0.00	0.
1	JAN	0600	61	0.01	0.00	0.00	0.	*	1	JAN	2006	202	0.00	0.00	0.00	0.
1	JAN	0606	62	0.01	0.00	0.00	0.	*	1	JAN	2012	203	0.00	0.00	0.00	0.
1	JAN	0612	63	0.01	0.00	0.00	0.	*	1	JAN	2018	204	0.00	0.00	0.00	0.
1	JAN	0618	64	0.01	0.00	0.00	0.	*	1	JAN	2024	205	0.00	0.00	0.00	0.
1	JAN	0624	65	0.01	0.00	0.00	0.	*	1	JAN	2030	206	0.00	0.00	0.00	0.
1	JAN	0630	66	0.01	0.01	0.00	0.	*	1	JAN	2036	207	0.00	0.00	0.00	0.
1	JAN	0636	67	0.01	0.01	0.00	0.	*	1	JAN	2042	208	0.00	0.00	0.00	0.
1	JAN	0642	68	0.01	0.01	0.00	0.	*	1	JAN	2048	209	0.00	0.00	0.00	0.
1	JAN	0648	69	0.01	0.01	0.00	0.	*	1	JAN	2054	210	0.00	0.00	0.00	0.
1	JAN	0654	70	0.01	0.01	0.00	0.	*	1	JAN	2100	211	0.00	0.00	0.00	0.
1	JAN	0700	71	0.01	0.01	0.00	0.	*	1	JAN	2106	212	0.00	0.00	0.00	0.
1	JAN	0706	72	0.01	0.01	0.00	0.	*	1	JAN	2112	213	0.00	0.00	0.00	0.
1	JAN	0712	73	0.01	0.01	0.00	0.	*	1	JAN	2118	214	0.00	0.00	0.00	0.
1	JAN	0718	74	0.01	0.01	0.00	0.	*	1	JAN	2124	215	0.00	0.00	0.00	0.
1	JAN	0724	75	0.01	0.01	0.00	0.	*	1	JAN	2130	216	0.00	0.00	0.00	0.
1	JAN	0730	76	0.01	0.01	0.00	0.	*	1	JAN	2136	217	0.00	0.00	0.00	0.
1	JAN	0736	77	0.01	0.01	0.00	0.	*	1	JAN	2142	218	0.00	0.00	0.00	0.
1	JAN	0742	78	0.01	0.01	0.00	0.	*	1	JAN	2148	219	0.00	0.00	0.00	0.
1	JAN	0748	79	0.01	0.01	0.00	0.	*	1	JAN	2154	220	0.00	0.00	0.00	0.
1	JAN	0754	80	0.01	0.01	0.00	0.	*	1	JAN	2200	221	0.00	0.00	0.00	0.
1	JAN	0800	81	0.01	0.01	0.00	0.	*	1	JAN	2206	222	0.00	0.00	0.00	0.
1	JAN	0806	82	0.01	0.01	0.00	0.	*	1	JAN	2212	223	0.00	0.00	0.00	0.
1	JAN	0812	83	0.01	0.01	0.00	0.	*	1	JAN	2218	224	0.00	0.00	0.00	0.
1	JAN	0818	84	0.01	0.01	0.00	0.	*	1	JAN	2224	225	0.00	0.00	0.00	0.
1	JAN	0824	85	0.01	0.01	0.00	0.	*	1	JAN	2230	226	0.00	0.00	0.00	0.
1	JAN	0830	86	0.01	0.01	0.00	0.	*	1	JAN	2236	227	0.00	0.00	0.00	0.
1	JAN	0836	87	0.01	0.01	0.00	0.	*	1	JAN	2242	228	0.00	0.00	0.00	0.
1	JAN	0842	88	0.01	0.01	0.00	0.	*	1	JAN	2248	229	0.00	0.00	0.00	0.
1	JAN	0848	89	0.01	0.01	0.01	0.	*	1	JAN	2254	230	0.00	0.00	0.00	0.
1	JAN	0854	90	0.01	0.01	0.01	0.	*	1	JAN	2300	231	0.00	0.00	0.00	0.
1	JAN	0900	91	0.01	0.01	0.01	0.	*	1	JAN	2306	232	0.00	0.00	0.00	0.
1	JAN	0906	92	0.00	0.00	0.00	0.	*	1	JAN	2312	233	0.00	0.00	0.00	0.
1	JAN	0912	93	0.03	0.01	0.01	0.	*	1	JAN	2318	234	0.00	0.00	0.00	0.
1	JAN	0918	94	0.01	0.01	0.01	1.	*	1	JAN	2324	235	0.00	0.00	0.00	0.
1	JAN	0924	95	0.01	0.01	0.01	1.	*	1	JAN	2330	236	0.00	0.00	0.00	0.
1	JAN	0930	96	0.01	0.01	0.01	1.	*	1	JAN	2336	237	0.00	0.00	0.00	0.
1	JAN	0936	97	0.01	0.01	0.01	1.	*	1	JAN	2342	238	0.00	0.00	0.00	0.
1	JAN	0942	98	0.02	0.01	0.01	1.	*	1	JAN	2348	239	0.00	0.00	0.00	0.
1	JAN	0948	99	0.02	0.01	0.01	1.	*	1	JAN	2354	240	0.00	0.00	0.00	0.
1	JAN	0954	100	0.02	0.01	0.01	1.	*	2	JAN	0000	241	0.00	0.00	0.00	0.
1	JAN	1000	101	0.02	0.01	0.01	1.	*	2	JAN	0006	242	0.00	0.00	0.00	0.
1	JAN	1006	102	0.02	0.01	0.01	1.	*	2	JAN	0012	243	0.00	0.00	0.00	0.
1	JAN	1012	103	0.02	0.01	0.01	1.	*	2	JAN	0018	244	0.00	0.00	0.00	0.
1	JAN	1018	104	0.02	0.01	0.01	1.	*	2	JAN	0024	245	0.00	0.00	0.00	0.
1	JAN	1024	105	0.02	0.01	0.01	1.	*	2	JAN	0030	246	0.00	0.00	0.00	0.
1	JAN	1030	106	0.02	0.01	0.01	1.	*	2	JAN	0036	247	0.00	0.00	0.00	0.
1	JAN	1036	107	0.02	0.01	0.01	1.	*	2	JAN	0042	248	0.00	0.00	0.00	0.
1	JAN	1042	108	0.02	0.01	0.01	1.	*	2	JAN	0048	249	0.00	0.00	0.00	0.
1	JAN	1048	109	0.02	0.01	0.01	1.	*	2	JAN	0054	250	0.00	0.00	0.00	0.
1	JAN	1054	110	0.02	0.01	0.02	1.	*	2	JAN	0100	251	0.00	0.00	0.00	0.
1	JAN	1100	111	0.02	0.01	0.02	1.	*	2	JAN	0106	252	0.00	0.00	0.00	0.
1	JAN	1106	112	0.03	0.01	0.02	1.	*	2	JAN	0112	253	0.00	0.00	0.00	0.
1	JAN	1112	113	0.03	0.01	0.02	1.	*	2	JAN	0118	254	0.00	0.00	0.00	0.
1	JAN	1118	114	0.03	0.01	0.02	2.	*	2	JAN	0124	255	0.00	0.00	0.00	0.
1	JAN	1124	115	0.04	0.01	0.03	2.	*	2	JAN	0130	256	0.00	0.00	0.00	0.
1	JAN	1130	116	0.04	0.01	0.03	2.	*	2	JAN	0136	257	0.00	0.00	0.00	0.

1 JAN 1136 117	0.06	0.01	0.04	2.	* 2 JAN 0142 258	0.00	0.00	0.00	0.
1 JAN 1142 118	0.09	0.02	0.07	3.	* 2 JAN 0148 259	0.00	0.00	0.00	0.
1 JAN 1148 119	0.12	0.02	0.09	4.	* 2 JAN 0154 260	0.00	0.00	0.00	0.
1 JAN 1154 120	0.15	0.03	0.12	6.	* 2 JAN 0200 261	0.00	0.00	0.00	0.
1 JAN 1200 121	0.29	0.04	0.24	8.	* 2 JAN 0206 262	0.00	0.00	0.00	0.
1 JAN 1206 122	0.29	0.03	0.25	13.	* 2 JAN 0212 263	0.00	0.00	0.00	0.
1 JAN 1212 123	0.15	0.01	0.13	16.	* 2 JAN 0218 264	0.00	0.00	0.00	0.
1 JAN 1218 124	0.12	0.01	0.10	15.	* 2 JAN 0224 265	0.00	0.00	0.00	0.
1 JAN 1224 125	0.09	0.01	0.08	12.	* 2 JAN 0230 266	0.00	0.00	0.00	0.
1 JAN 1230 126	0.06	0.00	0.05	10.	* 2 JAN 0236 267	0.00	0.00	0.00	0.
1 JAN 1236 127	0.04	0.00	0.04	8.	* 2 JAN 0242 268	0.00	0.00	0.00	0.
1 JAN 1242 128	0.04	0.00	0.03	6.	* 2 JAN 0248 269	0.00	0.00	0.00	0.
1 JAN 1248 129	0.03	0.00	0.03	4.	* 2 JAN 0254 270	0.00	0.00	0.00	0.
1 JAN 1254 130	0.03	0.00	0.03	4.	* 2 JAN 0300 271	0.00	0.00	0.00	0.
1 JAN 1300 131	0.03	0.00	0.02	3.	* 2 JAN 0306 272	0.00	0.00	0.00	0.
1 JAN 1306 132	0.02	0.00	0.02	3.	* 2 JAN 0312 273	0.00	0.00	0.00	0.
1 JAN 1312 133	0.02	0.00	0.02	2.	* 2 JAN 0318 274	0.00	0.00	0.00	0.
1 JAN 1318 134	0.02	0.00	0.02	2.	* 2 JAN 0324 275	0.00	0.00	0.00	0.
1 JAN 1324 135	0.02	0.00	0.02	2.	* 2 JAN 0330 276	0.00	0.00	0.00	0.
1 JAN 1330 136	0.02	0.00	0.02	2.	* 2 JAN 0336 277	0.00	0.00	0.00	0.
1 JAN 1336 137	0.02	0.00	0.02	2.	* 2 JAN 0342 278	0.00	0.00	0.00	0.
1 JAN 1342 138	0.02	0.00	0.02	2.	* 2 JAN 0348 279	0.00	0.00	0.00	0.
1 JAN 1348 139	0.02	0.00	0.02	2.	* 2 JAN 0354 280	0.00	0.00	0.00	0.
1 JAN 1354 140	0.02	0.00	0.02	2.	* 2 JAN 0400 281	0.00	0.00	0.00	0.
1 JAN 1400 141	0.02	0.00	0.02	2.	*				

TOTAL RAINFALL = 3.40, TOTAL LOSS = 0.86, TOTAL EXCESS = 2.54

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW					
			6-HR	24-HR	72-HR	28.00-HR		
(CFS)	(HR)	(CFS)	16.	12.20	3.	1.	1.	1.
		(INCHES)	2.009	2.541	2.541	2.541		
		(AC-FT)	1.	2.	2.	2.		

CUMULATIVE AREA = 0.01 SQ MI

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              **************
              *            *
61 KK         *     SA4    *    SUB-AREA 4 (DRAINS BY SHEET FLOW TO POND)
              *            *
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SUBBASIN RUNOFF DATA

62 BA SUBBASIN CHARACTERISTICS
TAREA 0.00 SUBBASIN AREA

PRECIPITATION DATA

12 PB STORM 3.40 BASIN TOTAL PRECIPITATION

13 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.08
0.08	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

63 LS SCS LOSS RATE
STRTL 0.17 INITIAL ABSTRACTION
CRVNBR 92.00 CURVE NUMBER
RTIMP 0.00 PERCENT IMPERVIOUS AREA

64 UD SCS DIMENSIONLESS UNITGRAPH
TLAG 0.15 LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
10 END-OF-PERIOD ORDINATES

2.	4.	3.	1.	1.	0.	0.	0.	0.	0.

HYDROGRAPH AT STATION SA4

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0000	1	0.00	0.00	0.00	0.	1 JAN 1406	142	0.02	0.00	0.02	0.
1 JAN 0006	2	0.00	0.00	0.00	0.	1 JAN 1412	143	0.02	0.00	0.02	0.
1 JAN 0012	3	0.00	0.00	0.00	0.	1 JAN 1418	144	0.02	0.00	0.01	0.
1 JAN 0018	4	0.00	0.00	0.00	0.	1 JAN 1424	145	0.02	0.00	0.01	0.
1 JAN 0024	5	0.00	0.00	0.00	0.	1 JAN 1430	146	0.01	0.00	0.01	0.
1 JAN 0030	6	0.00	0.00	0.00	0.	1 JAN 1436	147	0.01	0.00	0.01	0.
1 JAN 0036	7	0.00	0.00	0.00	0.	1 JAN 1442	148	0.01	0.00	0.01	0.
1 JAN 0042	8	0.00	0.00	0.00	0.	1 JAN 1448	149	0.01	0.00	0.01	0.
1 JAN 0048	9	0.00	0.00	0.00	0.	1 JAN 1454	150	0.01	0.00	0.01	0.
1 JAN 0054	10	0.00	0.00	0.00	0.	1 JAN 1500	151	0.01	0.00	0.01	0.
1 JAN 0100	11	0.00	0.00	0.00	0.	1 JAN 1506	152	0.01	0.00	0.01	0.
1 JAN 0106	12	0.00	0.00	0.00	0.	1 JAN 1512	153	0.01	0.00	0.01	0.
1 JAN 0112	13	0.00	0.00	0.00	0.	1 JAN 1518	154	0.01	0.00	0.01	0.
1 JAN 0118	14	0.00	0.00	0.00	0.	1 JAN 1524	155	0.01	0.00	0.01	0.
1 JAN 0124	15	0.00	0.00	0.00	0.	1 JAN 1530	156	0.01	0.00	0.01	0.
1 JAN 0130	16	0.00	0.00	0.00	0.	1 JAN 1536	157	0.01	0.00	0.01	0.
1 JAN 0136	17	0.00	0.00	0.00	0.	1 JAN 1542	158	0.01	0.00	0.01	0.
1 JAN 0142	18	0.00	0.00	0.00	0.	1 JAN 1548	159	0.01	0.00	0.01	0.
1 JAN 0148	19	0.00	0.00	0.00	0.	1 JAN 1554	160	0.01	0.00	0.01	0.
1 JAN 0154	20	0.00	0.00	0.00	0.	1 JAN 1600	161	0.01	0.00	0.01	0.
1 JAN 0200	21	0.00	0.00	0.00	0.	1 JAN 1606	162	0.01	0.00	0.01	0.
1 JAN 0206	22	0.00	0.00	0.00	0.	1 JAN 1612	163	0.01	0.00	0.01	0.
1 JAN 0212	23	0.00	0.00	0.00	0.	1 JAN 1618	164	0.01	0.00	0.01	0.
1 JAN 0218	24	0.00	0.00	0.00	0.	1 JAN 1624	165	0.01	0.00	0.01	0.
1 JAN 0224	25	0.00	0.00	0.00	0.	1 JAN 1630	166	0.01	0.00	0.01	0.
1 JAN 0230	26	0.00	0.00	0.00	0.	1 JAN 1636	167	0.01	0.00	0.01	0.
1 JAN 0236	27	0.00	0.00	0.00	0.	1 JAN 1642	168	0.01	0.00	0.01	0.
1 JAN 0242	28	0.00	0.00	0.00	0.	1 JAN 1648	169	0.01	0.00	0.01	0.
1 JAN 0248	29	0.00	0.00	0.00	0.	1 JAN 1654	170	0.01	0.00	0.01	0.
1 JAN 0254	30	0.00	0.00	0.00	0.	1 JAN 1700	171	0.01	0.00	0.01	0.
1 JAN 0300	31	0.00	0.00	0.00	0.	1 JAN 1706	172	0.01	0.00	0.01	0.
1 JAN 0306	32	0.00	0.00	0.00	0.	1 JAN 1712	173	0.01	0.00	0.01	0.
1 JAN 0312	33	0.00	0.00	0.00	0.	1 JAN 1718	174	0.01	0.00	0.01	0.
1 JAN 0318	34	0.00	0.00	0.00	0.	1 JAN 1724	175	0.01	0.00	0.01	0.
1 JAN 0324	35	0.00	0.00	0.00	0.	1 JAN 1730	176	0.01	0.00	0.01	0.
1 JAN 0330	36	0.00	0.00	0.00	0.	1 JAN 1736	177	0.01	0.00	0.01	0.
1 JAN 0336	37	0.00	0.00	0.00	0.	1 JAN 1742	178	0.01	0.00	0.01	0.
1 JAN 0342	38	0.00	0.00	0.00	0.	1 JAN 1748	179	0.01	0.00	0.01	0.
1 JAN 0348	39	0.00	0.00	0.00	0.	1 JAN 1754	180	0.01	0.00	0.01	0.
1 JAN 0354	40	0.00	0.00	0.00	0.	1 JAN 1800	181	0.01	0.00	0.01	0.
1 JAN 0400	41	0.00	0.00	0.00	0.	1 JAN 1806	182	0.01	0.00	0.01	0.
1 JAN 0406	42	0.00	0.00	0.00	0.	1 JAN 1812	183	0.01	0.00	0.01	0.
1 JAN 0412	43	0.00	0.00	0.00	0.	1 JAN 1818	184	0.01	0.00	0.01	0.
1 JAN 0418	44	0.00	0.00	0.00	0.	1 JAN 1824	185	0.01	0.00	0.01	0.
1 JAN 0424	45	0.00	0.00	0.00	0.	1 JAN 1830	186	0.01	0.00	0.00	0.
1 JAN 0430	46	0.00	0.00	0.00	0.	1 JAN 1836	187	0.01	0.00	0.00	0.
1 JAN 0436	47	0.00	0.00	0.00	0.	1 JAN 1842	188	0.01	0.00	0.00	0.
1 JAN 0442	48	0.00	0.00	0.00	0.	1 JAN 1848	189	0.01	0.00	0.00	0.
1 JAN 0448	49	0.00	0.00	0.00	0.	1 JAN 1854	190	0.00	0.00	0.00	0.
1 JAN 0454	50	0.00	0.00	0.00	0.	1 JAN 1900	191	0.01	0.00	0.00	0.
1 JAN 0500	51	0.00	0.00	0.00	0.	1 JAN 1906	192	0.00	0.00	0.00	0.
1 JAN 0506	52	0.01	0.00	0.00	0.	1 JAN 1912	193	0.00	0.00	0.00	0.
1 JAN 0512	53	0.00	0.00	0.00	0.	1 JAN 1918	194	0.00	0.00	0.00	0.
1 JAN 0518	54	0.01	0.00	0.00	0.	1 JAN 1924	195	0.00	0.00	0.00	0.
1 JAN 0524	55	0.01	0.00	0.00	0.	1 JAN 1930	196	0.00	0.00	0.00	0.
1 JAN 0530	56	0.01	0.00	0.00	0.	1 JAN 1936	197	0.00	0.00	0.00	0.
1 JAN 0536	57	0.01	0.00	0.00	0.	1 JAN 1942	198	0.00	0.00	0.00	0.
1 JAN 0542	58	0.01	0.00	0.00	0.	1 JAN 1948	199	0.00	0.00	0.00	0.
1 JAN 0548	59	0.01	0.00	0.00	0.	1 JAN 1954	200	0.00	0.00	0.00	0.
1 JAN 0554	60	0.01	0.00	0.00	0.	1 JAN 2000	201	0.00	0.00	0.00	0.
1 JAN 0600	61	0.01	0.00	0.00	0.	1 JAN 2006	202	0.00	0.00	0.00	0.
1 JAN 0606	62	0.01	0.00	0.00	0.	1 JAN 2012	203	0.00	0.00	0.00	0.
1 JAN 0612	63	0.01	0.00	0.00	0.	1 JAN 2018	204	0.00	0.00	0.00	0.
1 JAN 0618	64	0.01	0.00	0.00	0.	1 JAN 2024	205	0.00	0.00	0.00	0.
1 JAN 0624	65	0.01	0.00	0.00	0.	1 JAN 2030	206	0.00	0.00	0.00	0.
1 JAN 0630	66	0.01	0.01	0.00	0.	1 JAN 2036	207	0.00	0.00	0.00	0.
1 JAN 0636	67	0.01	0.01	0.00	0.	1 JAN 2042	208	0.00	0.00	0.00	0.
1 JAN 0642	68	0.01	0.01	0.00	0.	1 JAN 2048	209	0.00	0.00	0.00	0.
1 JAN 0648	69	0.01	0.01	0.00	0.	1 JAN 2054	210	0.00	0.00	0.00	0.
1 JAN 0654	70	0.01	0.01	0.00	0.	1 JAN 2100	211	0.00	0.00	0.00	0.
1 JAN 0700	71	0.01	0.01	0.00	0.	1 JAN 2106	212	0.00	0.00	0.00	0.
1 JAN 0706	72	0.01	0.01	0.00	0.	1 JAN 2112	213	0.00	0.00	0.00	0.
1 JAN 0712	73	0.01	0.01	0.00	0.	1 JAN 2118	214	0.00	0.00	0.00	0.
1 JAN 0718	74	0.01	0.01	0.00	0.	1 JAN 2124	215	0.00	0.00	0.00	0.
1 JAN 0724	75	0.01	0.01	0.00	0.	1 JAN 2130	216	0.00	0.00	0.00	0.
1 JAN 0730	76	0.01	0.01	0.00	0.	1 JAN 2136	217	0.00	0.00	0.00	0.
1 JAN 0736	77	0.01	0.01	0.00	0.	1 JAN 2142	218	0.00	0.00	0.00	0.
1 JAN 0742	78	0.01	0.01	0.00	0.	1 JAN 2148	219	0.00	0.00	0.00	0.
1 JAN 0748	79	0.01	0.01	0.00	0.	1 JAN 2154	220	0.00	0.00	0.00	0.
1 JAN 0754	80	0.01	0.01	0.00	0.	1 JAN 2200	221	0.00	0.00	0.00	0.
1 JAN 0800	81	0.01	0.01	0.00	0.	1 JAN 2206	222	0.00	0.00	0.00	0.
1 JAN 0806	82	0.01	0.01	0.00	0.	1 JAN 2212	223	0.00	0.00	0.00	0.
1 JAN 0812	83	0.01	0.01	0.00	0.	1 JAN 2218	224	0.00	0.00	0.00	0.
1 JAN 0818	84	0.01	0.01	0.00	0.	1 JAN 2224	225	0.00	0.00	0.00	0.
1 JAN 0824	85	0.01	0.01	0.00	0.	1 JAN 2230	226	0.00	0.00	0.00	0.
1 JAN 0830	86	0.01	0.01	0.00	0.	1 JAN 2236	227	0.00	0.00	0.00	0.
1 JAN 0836	87	0.01	0.01	0.00	0.	1 JAN 2242	228	0.00	0.00	0.00	0.
1 JAN 0842	88	0.01	0.01	0.00	0.	1 JAN 2248	229	0.00	0.00	0.00	0.
1 JAN 0848	89	0.01	0.01	0.01	0.	1 JAN 2254	230	0.00	0.00	0.00	0.
1 JAN 0854	90	0.01	0.01	0.01	0.	1 JAN 2300	231	0.00	0.00	0.00	0.
1 JAN 0900	91	0.01	0.01	0.01	0.	1 JAN 2306	232	0.00	0.00	0.00	0.

1 JAN 0906	92	0.00	0.00	0.00	0.	*	1 JAN 2312	233	0.00	0.00	0.00	0.
1 JAN 0912	93	0.03	0.01	0.01	0.	*	1 JAN 2318	234	0.00	0.00	0.00	0.
1 JAN 0918	94	0.01	0.01	0.01	0.	*	1 JAN 2324	235	0.00	0.00	0.00	0.
1 JAN 0924	95	0.01	0.01	0.01	0.	*	1 JAN 2330	236	0.00	0.00	0.00	0.
1 JAN 0930	96	0.01	0.01	0.01	0.	*	1 JAN 2336	237	0.00	0.00	0.00	0.
1 JAN 0936	97	0.01	0.01	0.01	0.	*	1 JAN 2342	238	0.00	0.00	0.00	0.
1 JAN 0942	98	0.02	0.01	0.01	0.	*	1 JAN 2348	239	0.00	0.00	0.00	0.
1 JAN 0948	99	0.02	0.01	0.01	0.	*	1 JAN 2354	240	0.00	0.00	0.00	0.
1 JAN 0954	100	0.02	0.01	0.01	0.	*	2 JAN 0000	241	0.00	0.00	0.00	0.
1 JAN 1000	101	0.02	0.01	0.01	0.	*	2 JAN 0006	242	0.00	0.00	0.00	0.
1 JAN 1006	102	0.02	0.01	0.01	0.	*	2 JAN 0012	243	0.00	0.00	0.00	0.
1 JAN 1012	103	0.02	0.01	0.01	0.	*	2 JAN 0018	244	0.00	0.00	0.00	0.
1 JAN 1018	104	0.02	0.01	0.01	0.	*	2 JAN 0024	245	0.00	0.00	0.00	0.
1 JAN 1024	105	0.02	0.01	0.01	0.	*	2 JAN 0030	246	0.00	0.00	0.00	0.
1 JAN 1030	106	0.02	0.01	0.01	0.	*	2 JAN 0036	247	0.00	0.00	0.00	0.
1 JAN 1036	107	0.02	0.01	0.01	0.	*	2 JAN 0042	248	0.00	0.00	0.00	0.
1 JAN 1042	108	0.02	0.01	0.01	0.	*	2 JAN 0048	249	0.00	0.00	0.00	0.
1 JAN 1048	109	0.02	0.01	0.01	0.	*	2 JAN 0054	250	0.00	0.00	0.00	0.
1 JAN 1054	110	0.02	0.01	0.02	0.	*	2 JAN 0100	251	0.00	0.00	0.00	0.
1 JAN 1100	111	0.02	0.01	0.02	0.	*	2 JAN 0106	252	0.00	0.00	0.00	0.
1 JAN 1106	112	0.03	0.01	0.02	0.	*	2 JAN 0112	253	0.00	0.00	0.00	0.
1 JAN 1112	113	0.03	0.01	0.02	0.	*	2 JAN 0118	254	0.00	0.00	0.00	0.
1 JAN 1118	114	0.03	0.01	0.02	0.	*	2 JAN 0124	255	0.00	0.00	0.00	0.
1 JAN 1124	115	0.04	0.01	0.03	0.	*	2 JAN 0130	256	0.00	0.00	0.00	0.
1 JAN 1130	116	0.04	0.01	0.03	0.	*	2 JAN 0136	257	0.00	0.00	0.00	0.
1 JAN 1136	117	0.06	0.01	0.04	0.	*	2 JAN 0142	258	0.00	0.00	0.00	0.
1 JAN 1142	118	0.09	0.02	0.07	0.	*	2 JAN 0148	259	0.00	0.00	0.00	0.
1 JAN 1148	119	0.12	0.02	0.09	1.	*	2 JAN 0154	260	0.00	0.00	0.00	0.
1 JAN 1154	120	0.15	0.03	0.12	1.	*	2 JAN 0200	261	0.00	0.00	0.00	0.
1 JAN 1200	121	0.29	0.04	0.24	1.	*	2 JAN 0206	262	0.00	0.00	0.00	0.
1 JAN 1206	122	0.29	0.03	0.25	2.	*	2 JAN 0212	263	0.00	0.00	0.00	0.
1 JAN 1212	123	0.15	0.01	0.13	2.	*	2 JAN 0218	264	0.00	0.00	0.00	0.
1 JAN 1218	124	0.12	0.01	0.10	2.	*	2 JAN 0224	265	0.00	0.00	0.00	0.
1 JAN 1224	125	0.09	0.01	0.08	1.	*	2 JAN 0230	266	0.00	0.00	0.00	0.
1 JAN 1230	126	0.06	0.00	0.05	1.	*	2 JAN 0236	267	0.00	0.00	0.00	0.
1 JAN 1236	127	0.04	0.00	0.04	1.	*	2 JAN 0242	268	0.00	0.00	0.00	0.
1 JAN 1242	128	0.04	0.00	0.03	1.	*	2 JAN 0248	269	0.00	0.00	0.00	0.
1 JAN 1248	129	0.03	0.00	0.03	0.	*	2 JAN 0254	270	0.00	0.00	0.00	0.
1 JAN 1254	130	0.03	0.00	0.03	0.	*	2 JAN 0300	271	0.00	0.00	0.00	0.
1 JAN 1300	131	0.03	0.00	0.02	0.	*	2 JAN 0306	272	0.00	0.00	0.00	0.
1 JAN 1306	132	0.02	0.00	0.02	0.	*	2 JAN 0312	273	0.00	0.00	0.00	0.
1 JAN 1312	133	0.02	0.00	0.02	0.	*	2 JAN 0318	274	0.00	0.00	0.00	0.
1 JAN 1318	134	0.02	0.00	0.02	0.	*	2 JAN 0324	275	0.00	0.00	0.00	0.
1 JAN 1324	135	0.02	0.00	0.02	0.	*	2 JAN 0330	276	0.00	0.00	0.00	0.
1 JAN 1330	136	0.02	0.00	0.02	0.	*	2 JAN 0336	277	0.00	0.00	0.00	0.
1 JAN 1336	137	0.02	0.00	0.02	0.	*	2 JAN 0342	278	0.00	0.00	0.00	0.
1 JAN 1342	138	0.02	0.00	0.02	0.	*	2 JAN 0348	279	0.00	0.00	0.00	0.
1 JAN 1348	139	0.02	0.00	0.02	0.	*	2 JAN 0354	280	0.00	0.00	0.00	0.
1 JAN 1354	140	0.02	0.00	0.02	0.	*	2 JAN 0400	281	0.00	0.00	0.00	0.
1 JAN 1400	141	0.02	0.00	0.02	0.	*						

****

TOTAL RAINFALL = 3.40, TOTAL LOSS = 0.86, TOTAL EXCESS = 2.54

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)
	(CFS)	2.	12.20		0.	0.	0.
	(INCHES)	2.009	2.541	2.541	2.541		
	(AC-FT)	0.	0.	0.	0.		

CUMULATIVE AREA = 0.00 SQ MI

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          **************
          *            *
65 KK     *      COM   *
          *            *
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COMBINE HYDROGRAPHS TO ESTIMATE TOTAL DISCHARGE TO POND

67 HC HYDROGRAPH COMBINATION
ICOMP 3 NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION COM
SUM OF 3 HYDROGRAPHS

****

DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0000	1	0.	*	1 JAN 0706	72	0.	*	1 JAN 1412	143	2.	*	1 JAN 2118	214	1.
1 JAN 0006	2	0.	*	1 JAN 0712	73	0.	*	1 JAN 1418	144	2.	*	1 JAN 2124	215	1.
1 JAN 0012	3	0.	*	1 JAN 0718	74	0.	*	1 JAN 1424	145	2.	*	1 JAN 2130	216	1.
1 JAN 0018	4	0.	*	1 JAN 0724	75	0.	*	1 JAN 1430	146	2.	*	1 JAN 2136	217	1.
1 JAN 0024	5	0.	*	1 JAN 0730	76	0.	*	1 JAN 1436	147	2.	*	1 JAN 2142	218	1.
1 JAN 0030	6	0.	*	1 JAN 0736	77	0.	*	1 JAN 1442	148	2.	*	1 JAN 2148	219	1.
1 JAN 0036	7	0.	*	1 JAN 0742	78	0.	*	1 JAN 1448	149	2.	*	1 JAN 2154	220	1.
1 JAN 0042	8	0.	*	1 JAN 0748	79	0.	*	1 JAN 1454	150	2.	*	1 JAN 2200	221	1.
1 JAN 0048	9	0.	*	1 JAN 0754	80	0.	*	1 JAN 1500	151	2.	*	1 JAN 2206	222	1.
1 JAN 0054	10	0.	*	1 JAN 0800	81	0.	*	1 JAN 1506	152	2.	*	1 JAN 2212	223	1.

1 JAN 0100	11	0.	*	1 JAN 0806	82	0.	*	1 JAN 1512	153	2.	*	1 JAN 2218	224	1.
1 JAN 0106	12	0.	*	1 JAN 0812	83	0.	*	1 JAN 1518	154	2.	*	1 JAN 2224	225	1.
1 JAN 0112	13	0.	*	1 JAN 0818	84	0.	*	1 JAN 1524	155	2.	*	1 JAN 2230	226	1.
1 JAN 0118	14	0.	*	1 JAN 0824	85	0.	*	1 JAN 1530	156	2.	*	1 JAN 2236	227	1.
1 JAN 0124	15	0.	*	1 JAN 0830	86	0.	*	1 JAN 1536	157	2.	*	1 JAN 2242	228	1.
1 JAN 0130	16	0.	*	1 JAN 0836	87	0.	*	1 JAN 1542	158	2.	*	1 JAN 2248	229	1.
1 JAN 0136	17	0.	*	1 JAN 0842	88	0.	*	1 JAN 1548	159	2.	*	1 JAN 2254	230	1.
1 JAN 0142	18	0.	*	1 JAN 0848	89	0.	*	1 JAN 1554	160	1.	*	1 JAN 2300	231	1.
1 JAN 0148	19	0.	*	1 JAN 0854	90	0.	*	1 JAN 1600	161	1.	*	1 JAN 2306	232	0.
1 JAN 0154	20	0.	*	1 JAN 0900	91	1.	*	1 JAN 1606	162	1.	*	1 JAN 2312	233	0.
1 JAN 0200	21	0.	*	1 JAN 0906	92	0.	*	1 JAN 1612	163	1.	*	1 JAN 2318	234	0.
1 JAN 0206	22	0.	*	1 JAN 0912	93	0.	*	1 JAN 1618	164	1.	*	1 JAN 2324	235	0.
1 JAN 0212	23	0.	*	1 JAN 0918	94	1.	*	1 JAN 1624	165	1.	*	1 JAN 2330	236	0.
1 JAN 0218	24	0.	*	1 JAN 0924	95	1.	*	1 JAN 1630	166	1.	*	1 JAN 2336	237	0.
1 JAN 0224	25	0.	*	1 JAN 0930	96	1.	*	1 JAN 1636	167	1.	*	1 JAN 2342	238	0.
1 JAN 0230	26	0.	*	1 JAN 0936	97	1.	*	1 JAN 1642	168	1.	*	1 JAN 2348	239	0.
1 JAN 0236	27	0.	*	1 JAN 0942	98	1.	*	1 JAN 1648	169	1.	*	1 JAN 2354	240	0.
1 JAN 0242	28	0.	*	1 JAN 0948	99	1.	*	1 JAN 1654	170	1.	*	2 JAN 0000	241	0.
1 JAN 0248	29	0.	*	1 JAN 0954	100	1.	*	1 JAN 1700	171	1.	*	2 JAN 0006	242	0.
1 JAN 0254	30	0.	*	1 JAN 1000	101	1.	*	1 JAN 1706	172	1.	*	2 JAN 0012	243	0.
1 JAN 0300	31	0.	*	1 JAN 1006	102	1.	*	1 JAN 1712	173	1.	*	2 JAN 0018	244	0.
1 JAN 0306	32	0.	*	1 JAN 1012	103	1.	*	1 JAN 1718	174	1.	*	2 JAN 0024	245	0.
1 JAN 0312	33	0.	*	1 JAN 1018	104	1.	*	1 JAN 1724	175	1.	*	2 JAN 0030	246	0.
1 JAN 0318	34	0.	*	1 JAN 1024	105	1.	*	1 JAN 1730	176	1.	*	2 JAN 0036	247	0.
1 JAN 0324	35	0.	*	1 JAN 1030	106	1.	*	1 JAN 1736	177	1.	*	2 JAN 0042	248	0.
1 JAN 0330	36	0.	*	1 JAN 1036	107	1.	*	1 JAN 1742	178	1.	*	2 JAN 0048	249	0.
1 JAN 0336	37	0.	*	1 JAN 1042	108	1.	*	1 JAN 1748	179	1.	*	2 JAN 0054	250	0.
1 JAN 0342	38	0.	*	1 JAN 1048	109	1.	*	1 JAN 1754	180	1.	*	2 JAN 0100	251	0.
1 JAN 0348	39	0.	*	1 JAN 1054	110	1.	*	1 JAN 1800	181	1.	*	2 JAN 0106	252	0.
1 JAN 0354	40	0.	*	1 JAN 1100	111	1.	*	1 JAN 1806	182	1.	*	2 JAN 0112	253	0.
1 JAN 0400	41	0.	*	1 JAN 1106	112	2.	*	1 JAN 1812	183	1.	*	2 JAN 0118	254	0.
1 JAN 0406	42	0.	*	1 JAN 1112	113	2.	*	1 JAN 1818	184	1.	*	2 JAN 0124	255	0.
1 JAN 0412	43	0.	*	1 JAN 1118	114	2.	*	1 JAN 1824	185	1.	*	2 JAN 0130	256	0.
1 JAN 0418	44	0.	*	1 JAN 1124	115	2.	*	1 JAN 1830	186	1.	*	2 JAN 0136	257	0.
1 JAN 0424	45	0.	*	1 JAN 1130	116	2.	*	1 JAN 1836	187	1.	*	2 JAN 0142	258	0.
1 JAN 0430	46	0.	*	1 JAN 1136	117	3.	*	1 JAN 1842	188	1.	*	2 JAN 0148	259	0.
1 JAN 0436	47	0.	*	1 JAN 1142	118	3.	*	1 JAN 1848	189	1.	*	2 JAN 0154	260	0.
1 JAN 0442	48	0.	*	1 JAN 1148	119	5.	*	1 JAN 1854	190	1.	*	2 JAN 0200	261	0.
1 JAN 0448	49	0.	*	1 JAN 1154	120	7.	*	1 JAN 1900	191	1.	*	2 JAN 0206	262	0.
1 JAN 0454	50	0.	*	1 JAN 1200	121	10.	*	1 JAN 1906	192	1.	*	2 JAN 0212	263	0.
1 JAN 0500	51	0.	*	1 JAN 1206	122	15.	*	1 JAN 1912	193	1.	*	2 JAN 0218	264	0.
1 JAN 0506	52	0.	*	1 JAN 1212	123	20.	*	1 JAN 1918	194	1.	*	2 JAN 0224	265	0.
1 JAN 0512	53	0.	*	1 JAN 1218	124	20.	*	1 JAN 1924	195	1.	*	2 JAN 0230	266	0.
1 JAN 0518	54	0.	*	1 JAN 1224	125	18.	*	1 JAN 1930	196	1.	*	2 JAN 0236	267	0.
1 JAN 0524	55	0.	*	1 JAN 1230	126	15.	*	1 JAN 1936	197	1.	*	2 JAN 0242	268	0.
1 JAN 0530	56	0.	*	1 JAN 1236	127	12.	*	1 JAN 1942	198	1.	*	2 JAN 0248	269	0.
1 JAN 0536	57	0.	*	1 JAN 1242	128	9.	*	1 JAN 1948	199	1.	*	2 JAN 0254	270	0.
1 JAN 0542	58	0.	*	1 JAN 1248	129	7.	*	1 JAN 1954	200	1.	*	2 JAN 0300	271	0.
1 JAN 0548	59	0.	*	1 JAN 1254	130	6.	*	1 JAN 2000	201	1.	*	2 JAN 0306	272	0.
1 JAN 0554	60	0.	*	1 JAN 1300	131	5.	*	1 JAN 2006	202	1.	*	2 JAN 0312	273	0.
1 JAN 0600	61	0.	*	1 JAN 1306	132	4.	*	1 JAN 2012	203	1.	*	2 JAN 0318	274	0.
1 JAN 0606	62	0.	*	1 JAN 1312	133	4.	*	1 JAN 2018	204	1.	*	2 JAN 0324	275	0.
1 JAN 0612	63	0.	*	1 JAN 1318	134	4.	*	1 JAN 2024	205	1.	*	2 JAN 0330	276	0.
1 JAN 0618	64	0.	*	1 JAN 1324	135	3.	*	1 JAN 2030	206	1.	*	2 JAN 0336	277	0.
1 JAN 0624	65	0.	*	1 JAN 1330	136	3.	*	1 JAN 2036	207	1.	*	2 JAN 0342	278	0.
1 JAN 0630	66	0.	*	1 JAN 1336	137	3.	*	1 JAN 2042	208	1.	*	2 JAN 0348	279	0.
1 JAN 0636	67	0.	*	1 JAN 1342	138	3.	*	1 JAN 2048	209	1.	*	2 JAN 0354	280	0.
1 JAN 0642	68	0.	*	1 JAN 1348	139	3.	*	1 JAN 2054	210	1.	*	2 JAN 0400	281	0.
1 JAN 0648	69	0.	*	1 JAN 1354	140	3.	*	1 JAN 2100	211	1.	*			
1 JAN 0654	70	0.	*	1 JAN 1400	141	3.	*	1 JAN 2106	212	1.	*			
1 JAN 0700	71	0.	*	1 JAN 1406	142	3.	*	1 JAN 2112	213	1.	*			
			*				*				*			

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PEAK FLOW TIME

MAXIMUM AVERAGE FLOW

	6-HR	24-HR	72-HR	28.00-HR	(CFS)	(HR)	
(CFS)	20.	12.30		4.	1.	1.	1.
(INCHES)	1.057	1.365	1.365	1.365			
(AC-FT)	2.	3.	3.	3.			

CUMULATIVE AREA = 0.04 SQ MI

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

6-HOUR	OPERATION	STATION	24-HOUR	72-HOUR	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD				BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
	HYDROGRAPH AT					SA1	2.	12.60	0.		0.	0.	0.00
30.03	ROUTED TO		26.40			SPOOL	0.	0.10	0.		0.	0.	0.00
	HYDROGRAPH AT					SA2	4.	12.40	1.		0.	0.	0.02
	2 COMBINED AT					COM1	4.	12.40	1.		0.	0.	0.02
25.95	ROUTED TO		12.50			LPOOL	4.	12.50	1.		0.	0.	0.02
	HYDROGRAPH AT					SA3	16.	12.20	3.		1.	1.	0.01
	HYDROGRAPH AT					SA4	2.	12.20	0.		0.	0.	0.00
	3 COMBINED AT					COM	20.	12.30	4.		1.	1.	0.04

*** NORMAL END OF HEC-1 ***

APPENDIX E
RESULTS OF PROPOSED DRAINAGE SYSTEM HYDRAULIC (STORM CAD) ANALYSES

STORMCAD SULTS SUMMARY

==========
Scenario: Base

>>>> Info: Subsurface Analysis iterations: 3
>>>> Info: Convergence was achieved.

==========
Gravity subnetwork discharging at: O-1

>>>> Info: Loading and hydraulic computations completed
successfully.
>>>> Info: P-23 Hydraulic jump formed.
>>>> Info: P-23 Critical depth assumed upstream.
>>>> Info: P-10 Hydraulic jump formed.
>>>> Info: P-10 Critical depth assumed upstream.
>>>> Info: P-17 Hydraulic jump formed.
>>>> Info: P-17 Critical depth assumed upstream.
>>>> Info: P-2 Hydraulic jump formed.
>>>> Info: P-2 Critical depth assumed upstream.
>>>> Info: P-27 Hydraulic jump formed.
>>>> Info: P-27 Critical depth assumed upstream.
>>>> Warning: P-29 Pipe fails minimum velocity constraint.

CALCULATION SUMMARY FOR SURFACE NETWORKS

Label	Inlet Type	Inlet	Total Intercepted Flow (cfs)	Total Bypassed Flow (cfs)	Capture Efficiency (%)	Gutter Spread (ft)	Gutter Depth (ft)
I-6	Generic Inlet	Generic Default 100%	4.31	0.00	100.0	0.00	0.00
I-3	Generic Inlet	Generic Default 100%	4.48	0.00	100.0	0.00	0.00
I-4	Generic Inlet	Generic Default 100%	4.55	0.00	100.0	0.00	0.00
I-8	Generic Inlet	Generic Default 100%	2.41	0.00	100.0	0.00	0.00
I-7	Generic Inlet	Generic Default 100%	4.38	0.00	100.0	0.00	0.00
I-5	Generic Inlet	Generic Default 100%	1.51	0.00	100.0	0.00	0.00
I-1	Generic Inlet	Generic Default 100%	5.06	0.00	100.0	0.00	0.00
I-2	Generic Inlet	Generic Default 100%	6.00	0.00	100.0	0.00	0.00
I-UNDERDRAIN	Generic Inlet	Generic Default 100%	0.99	0.00	100.0	0.00	0.00

STORMCAD RESU[illegible]S SUMMARY (CONT'D)

CALCULATION SUMMARY FOR SUBSURFACE NETWORK WITH ROOT: O-1

Label	Number of Sections	Section Size	Section Shape	Length (ft)	Total System Flow (cfs)	Average Velocity (ft/s)	Hydraulic Grade Upstream (ft)	Hydraulic Grade Downstream (ft)
P-7	1	30 inch	Circular	91.00	38.92	9.78	14.18	12.83
P-23	1	27 inch	Circular	329.00	21.73	10.01	20.53	14.78
P-24	1	27 inch	Circular	65.00	14.58	3.67	14.92	14.78
P-21	1	15 inch	Circular	15.00	4.31	4.56	16.17	16.02
P-26	1	27 inch	Circular	218.00	16.94	5.14	21.48	20.99
P-27	1	15 inch	Circular	80.00	6.00	7.99	22.99	20.99
P-25	1	12 inch	Circular	10.00	1.51	3.44	17.05	16.97
P-22	1	24 inch	Circular	40.00	13.56	4.32	15.17	15.03
P-2	1	27 inch	Circular	324.00	17.00	8.14	25.26	21.82
P-14	1	24 inch	Circular	237.00	13.12	4.19	16.17	15.40
P-29	1	12 inch	Circular	24.00	0.93	1.19	15.42	15.40
P-1	1	27 inch	Circular	209.00	17.06	5.86	26.36	25.57
P-13	1	24 inch	Circular	50.00	13.18	4.20	16.57	16.40
P-28	1	8 inch	Circular	328.00	0.99	2.85	17.32	15.43
P-12	1	21 inch	Circular	79.00	10.06	4.18	17.05	16.73
P-18	1	15 inch	Circular	9.00	4.38	4.06	16.77	16.73
P-11	1	21 inch	Circular	142.00	8.41	3.50	17.67	17.27
P-17	1	12 inch	Circular	14.00	2.41	3.96	17.41	17.27
P-10	1	15 inch	Circular	187.00	4.43	6.35	20.46	17.78
P-16	1	15 inch	Circular	11.00	4.55	3.71	17.84	17.78
P-9	1	15 inch	Circular	128.00	4.48	4.18	21.26	20.65

STORMCAD RESU S SUMMARY (CONT'D)

Label	Total System Flow (cfs)	Ground Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)
O-1	38.83	16.50	12.83	12.83
J-4	38.92	19.70	14.78	14.18
J-3	21.73	27.50	20.99	20.53
J-11	14.58	20.50	15.03	14.92
I-6	4.31	19.50	16.33	16.17
J-2	16.94	30.10	21.82	21.48
I-2	6.00	26.50	23.25	22.99
I-5	1.51	20.50	17.14	17.05
J-10	13.56	20.90	15.40	15.17
J-1	17.00	33.00	25.57	25.26
J-9	13.12	20.90	16.40	16.17
J-12	0.93	20.75	15.43	15.42
I-1	17.06	30.50	26.65	26.36
J-8	13.18	20.90	16.73	16.57
I-UNDERDRAIN	0.99	20.75	17.32	17.32
J-7	10.06	20.90	17.27	17.05
I-7	4.38	20.75	16.90	16.77
J-6	8.41	21.00	17.78	17.67
I-8	2.41	20.75	17.56	17.41
J-5	4.43	24.20	20.65	20.46
I-4	4.55	20.70	17.94	17.84
I-3	4.48	24.50	21.40	21.26

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Upstream Node	Downstream Node	Section Size	Mannings n	Full Capacity (cfs)	Total System Flow (cfs)	Average Velocity (ft/s)	Length (ft)	Constructed Slope (ft/ft)	Upstream Inlet Rational Flow (cfs)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)
I-1	J-1	27 inch	0.013	21.95	17.06	5.86	209	0.005	5.06	30.5	33	24.87	23.82	3.38	6.93
I-2	J-3	15 inch	0.013	10.21	6	7.99	80	0.025	6	26.5	27.5	22	20	3.25	6.25
I-3	J-5	15 inch	0.013	4.57	4.48	4.18	128	0.005	4.48	24.5	24.2	20.25	19.61	3	3.34
I-4	J-6	15 inch	0.013	4.57	4.55	3.71	11	0.005	4.55	20.7	21	16.45	16.39	3	3.36
I-5	J-11	12 inch	0.013	2.52	1.51	3.44	10	0.005	1.51	20.5	20.5	16.5	16.45	3	3.05
I-6	J-4	15 inch	0.013	4.57	4.31	4.56	15	0.005	4.31	19.5	19.7	15.25	15.18	3	3.27
I-7	J-8	15 inch	0.013	4.81	4.38	4.06	9	0.006	4.38	20.75	20.9	15.75	15.7	3.75	3.95
I-8	J-7	12 inch	0.013	8.6	2.41	3.96	14	0.058	2.41	20.75	20.9	16.75	15.94	3	3.96
I-UNDERDRAIN	J-12	8 inch	0.012	1	0.99	2.85	328	0.006	0.99	20.75	20.75	16.5	14.6	3.58	5.48
J-1	J-2	27 inch	0.013	33.67	17	8.14	324	0.012	N/A	33	30.1	23.82	19.99	6.93	7.86
J-2	J-3	27 inch	0.013	21.9	16.94	5.14	218	0.005	N/A	30.1	27.5	19.99	18.9	7.86	6.35
J-3	J-4	27 inch	0.013	43.8	21.73	10.01	329	0.020	N/A	27.5	19.7	18.9	12.32	6.35	5.13
J-4	O-1	30 inch	0.013	44.47	38.92	9.78	91	0.012	N/A	19.7	16.5	12.07	11	5.13	3
J-5	J-6	15 inch	0.013	8.47	4.43	6.35	187	0.017	N/A	24.2	21	19.61	16.39	3.34	3.36
J-6	J-7	21 inch	0.013	11.2	8.41	3.5	142	0.005	N/A	21	20.9	15.9	15.19	3.36	3.96
J-7	J-8	21 inch	0.013	11.2	10.06	4.18	79	0.005	N/A	20.9	20.9	15.19	14.79	3.96	4.36
J-8	J-9	24 inch	0.013	16	13.18	4.2	50	0.005	N/A	20.9	20.9	14.54	14.29	4.36	4.61
J-9	J-10	24 inch	0.013	16.03	13.12	4.19	237	0.005	N/A	20.9	20.9	14.29	13.1	4.61	5.8
J-10	J-11	24 inch	0.013	16	13.56	4.32	40	0.005	N/A	20.9	20.5	13.1	12.9	5.8	5.6
J-11	J-4	27 inch	0.013	22.07	14.58	3.67	65	0.005	N/A	20.5	19.7	12.65	12.32	5.6	5.13
J-12	J-10	12 inch	0.013	3	0.93	1.19	24	0.007	N/A	20.75	20.9	14.27	14.1	5.48	5.8

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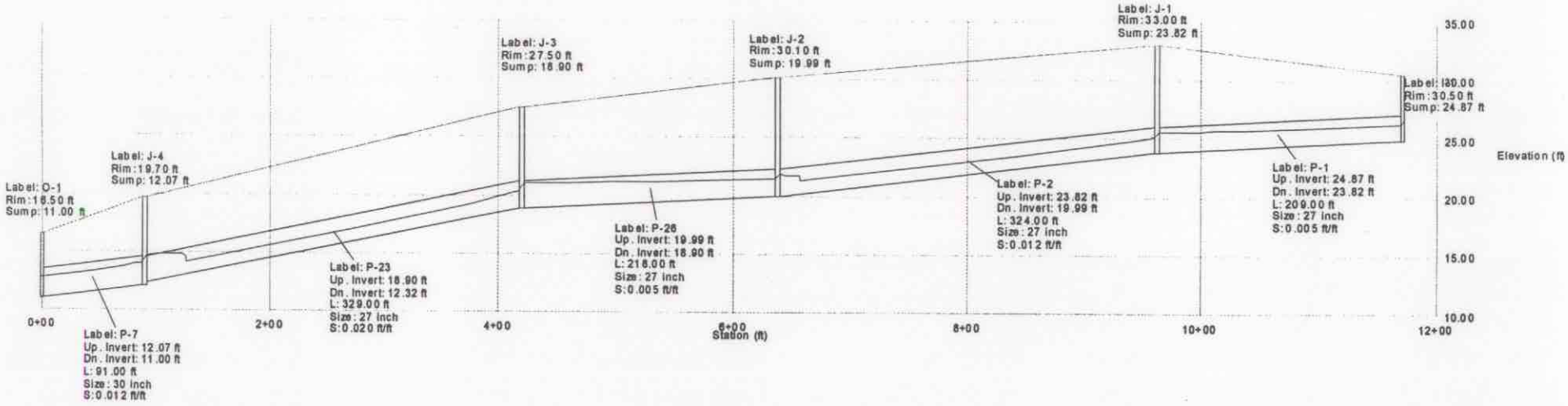

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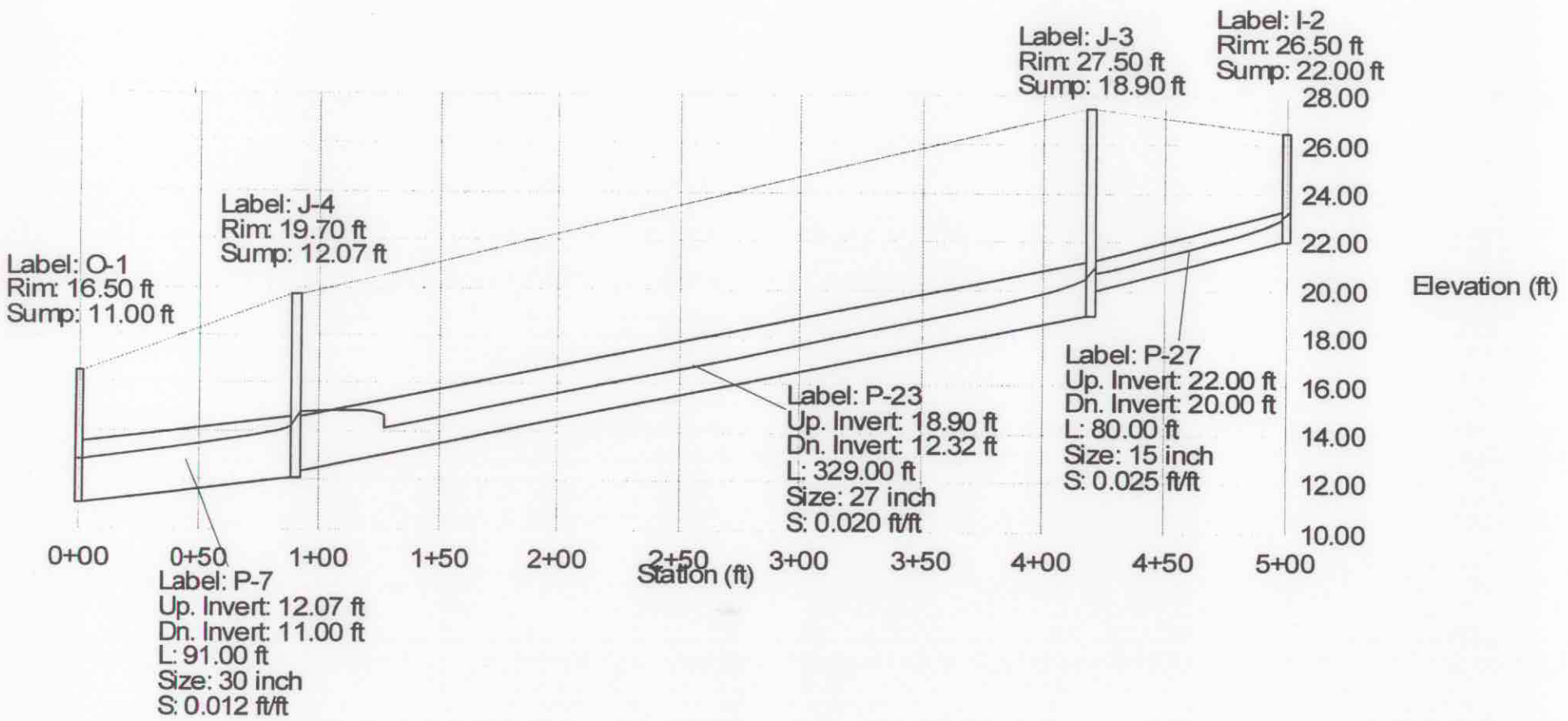

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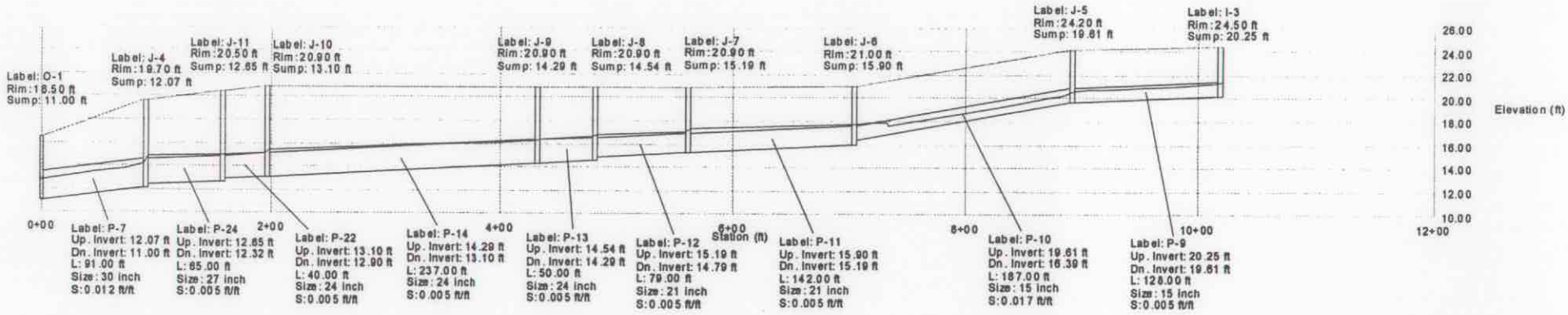

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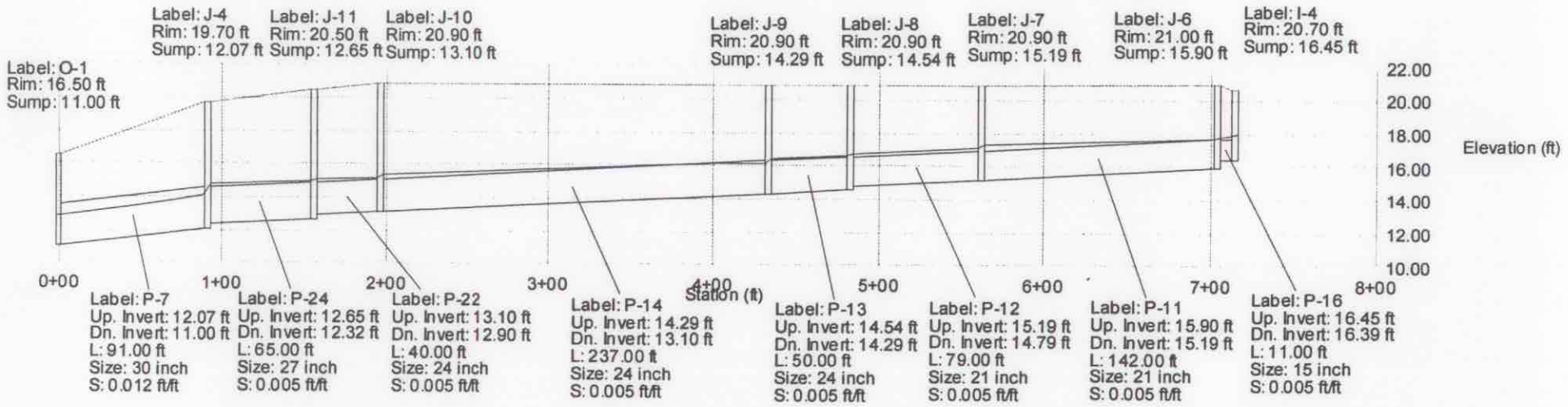

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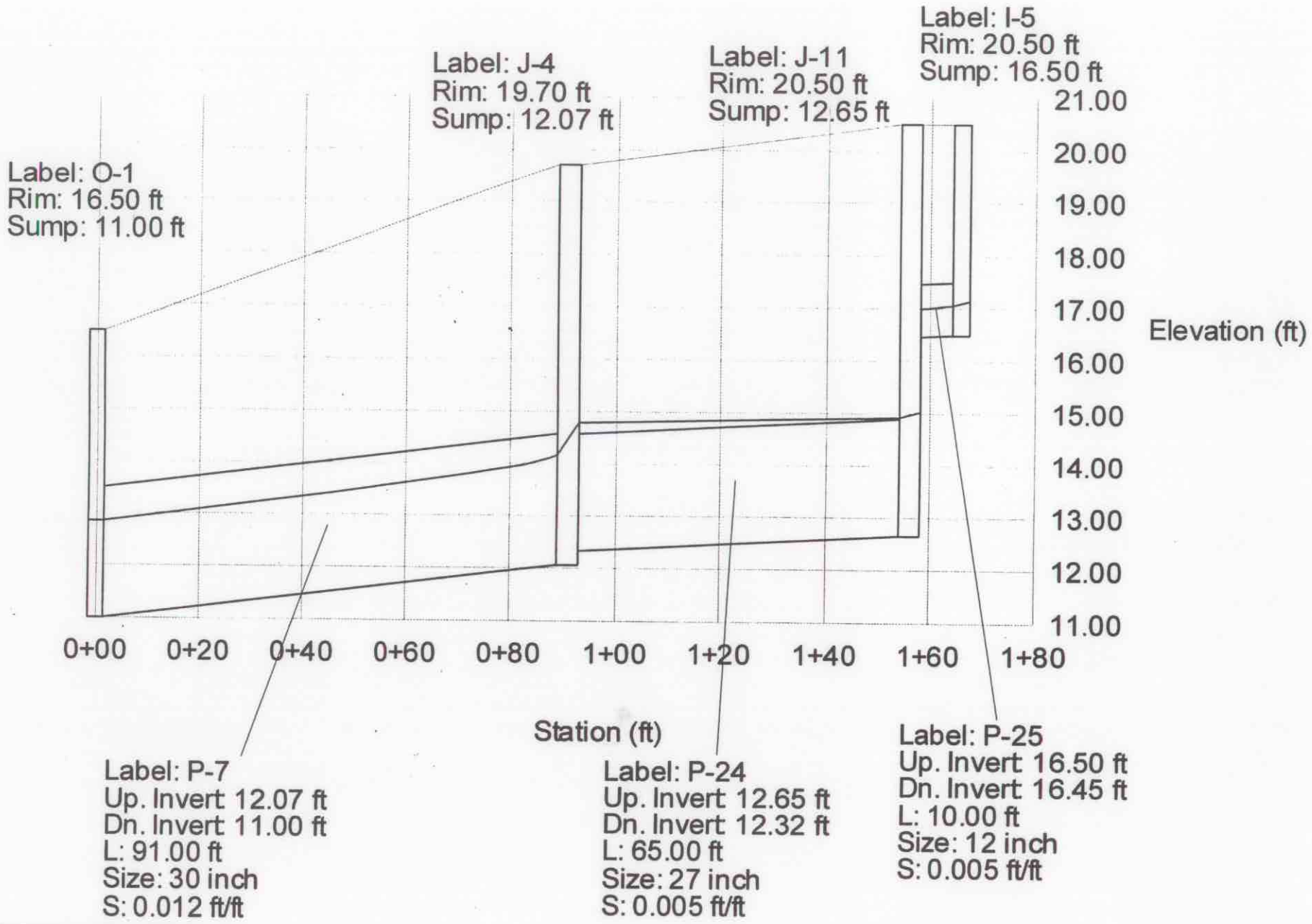

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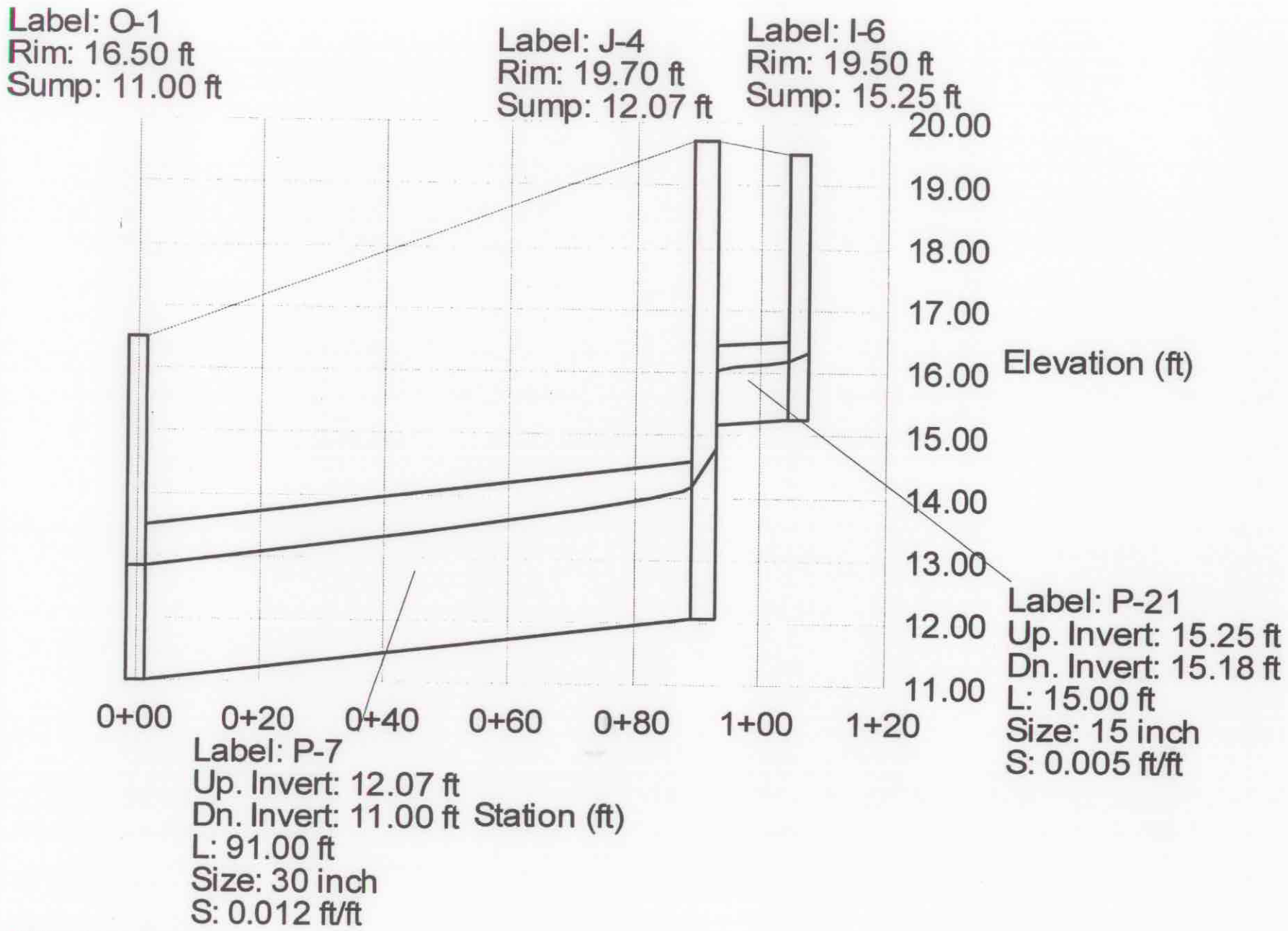

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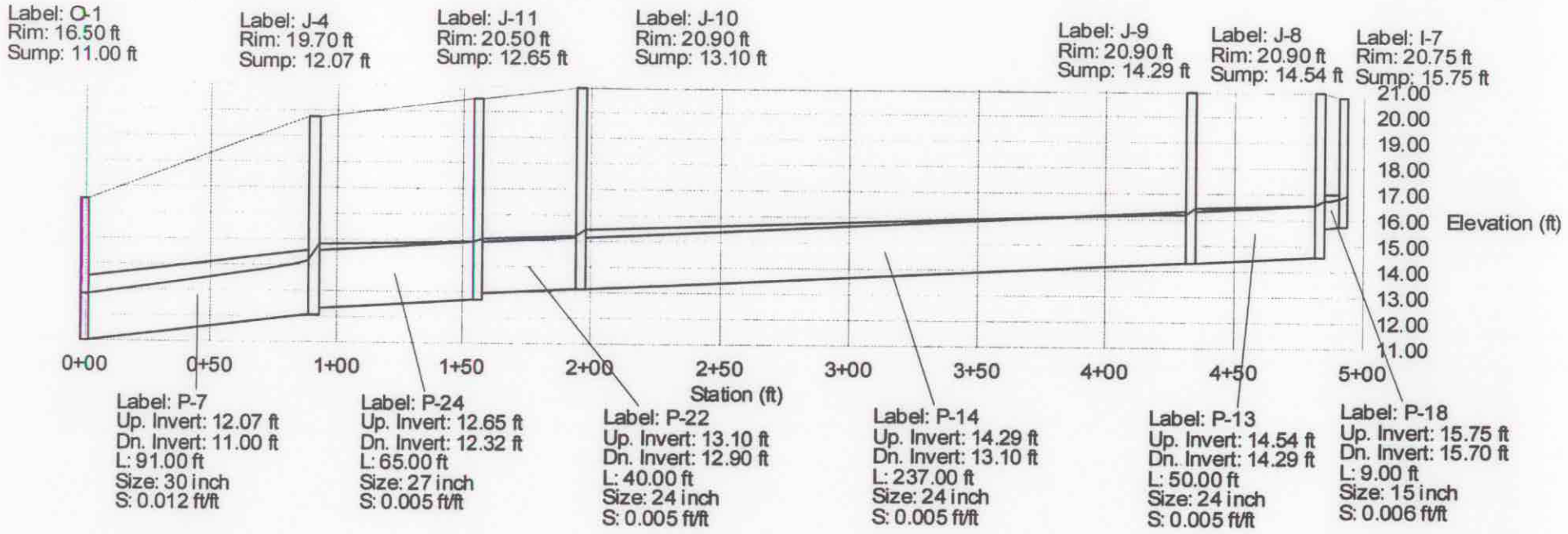

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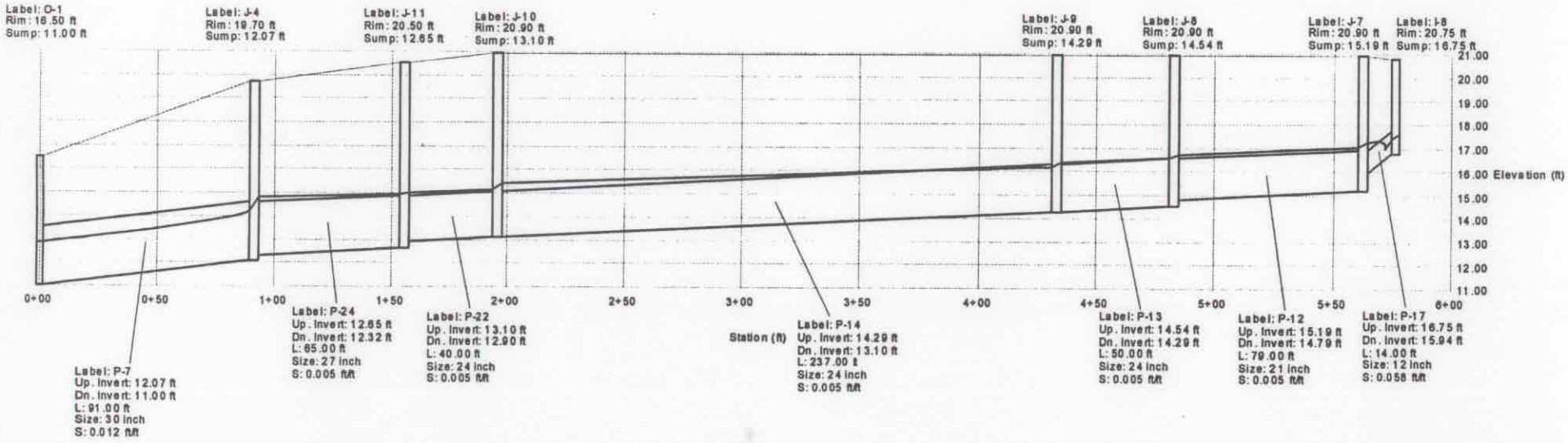

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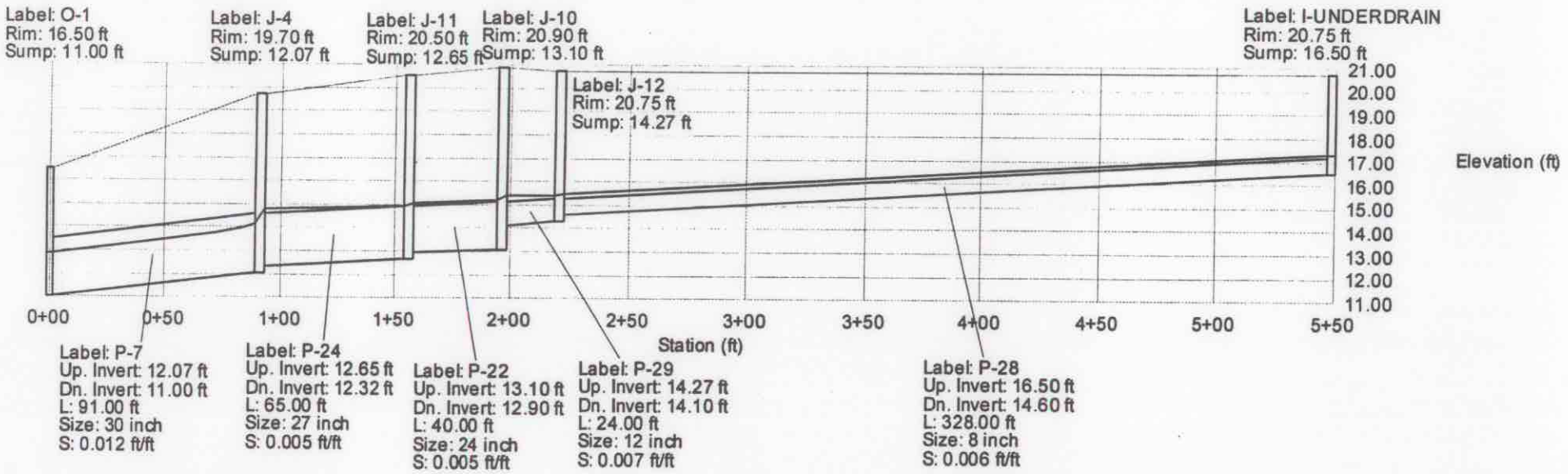

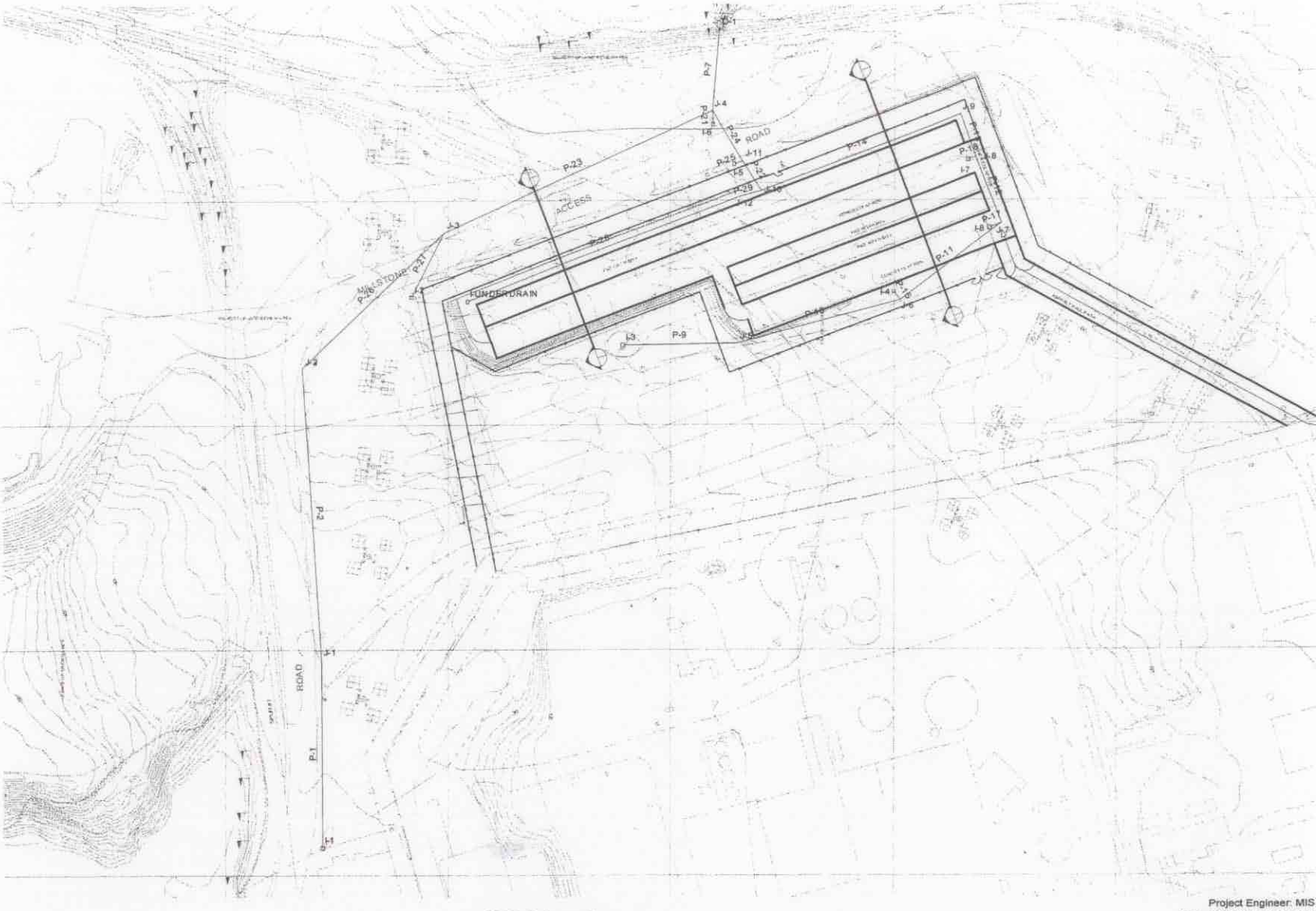

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Project Engineer: MIS
StormCAD v4.1.1 [4.2014a]
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APPENDIX F
QUALITY CONTROL STATEMENTS

QUALITY CONTROL STATEMENT

The hydrologic and hydraulic analyses for the Independent Spent Fuel Storage Installation Project presented within this Drainage Report were conducted by GZA GeoEnvironmental, Inc. ("GZA") staff engineer, Mr. Matthew Shuman. Oversight of the work and review of associated engineering calculations and drainage design were conducted by Mr. Peter H. Baril (GZA Senior Hydrologist). Mr. Daniel C. Stapleton is the Engineer-in-Charge. Mr. Baril specializes in urban hydrology and flood control analyses. He is a Registered Professional Engineer (Massachusetts and New Hampshire) as well as a Registered Hydrologist (American Institute of Hydrology). He has over 22 years of experience in the field of water resources engineering, primarily in the areas of surface water hydrology and open channel hydraulics. Mr. Stapleton is a Vice-President of GZA and is the Principal-In-Charge for this project. Mr. Stapleton has degrees in geology and civil engineering and is a Professional Engineer registered in the State of Connecticut.

The runoff analysis was carried out using the HEC-1 computer software licensed to GZA by Haestad Methods, Inc. GZA has successfully applied this software package over the past 10 years on numerous site drainage and dam engineering projects and has independently verified the numerical accuracy of this deterministic model. Likewise, GZA has conducted independent checks, in the form of hand calculations, of friction and shock losses, to verify hydraulic results from the StormCAD computer program used by GZA, also under license from Haestad Methods, Inc.

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February 13, 2003

Mr. David M. Leone
Hydrologist
GZA GeoEnvironmental Inc
One Edgewater Drive
Norwood, MA 02062-4674 USA

Re: Haestad Methods Product Validation

Dear Mr. Leone,

Please accept this letter as written validation documentation for our software QA/QC StormCAD per your request.

Haestad Methods puts its software products through extensive internal and external verification testing. We compare the results of those tests with the results obtained from other competitive programs in the industry. In addition, Haestad Methods also conducts hand calculations in order to verify program validity. StormCAD has shown to produce industry accepted results.

Please note that this letter is not to be construed to in any way waive, amend or supercede any aspect of the End User License for the aforementioned product.

If you have any additional questions, please contact me at (203) 755-1666 or via email at khod@haestad.com.

Best regards,

Keith D. Hodsden

Keith D. Hodsden, P.E.
General Manager, Sales and Technical Support
Haestad Methods, Inc.

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