

## Appendix G

### Preliminary Hydrology Report



# PRELIMINARY HYDROLOGY REPORT

**JD Fields Hemet**  
APN: 456-140-008

**August 2022**

**PREPARED FOR:**

**Foxgate Capital**  
55 Waugh Ste. 1250  
Houston, TX 77007

**PREPARED BY:**

**Kimley»»Horn**

3880 Lemon Street, Suite 420  
Riverside, CA 92501  
(951) 543-9868

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KHA Project # 195335001

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I certify under penalty of law that this document and all attachments were prepared under my jurisdiction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathered the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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John Pollock, PE

Date

# Contents

100.0	Introduction .....	3
100.1	Project Description.....	3
100.2	Location.....	3
100.3	Methodology.....	4
100.4	Drainage Characteristics.....	5
100.4.1	Pre-Development Condition .....	5
100.4.2	Post-Development Condition.....	5
100.5	Stormwater Mitigation .....	6
100.6	Hydraulic Analysis.....	6
100.7	Conclusion.....	6

## Appendices

- Appendix A – Location Map
- Appendix B – FIRM MAP
- Appendix C – Construction Plans
- Appendix D – Hydrology Manual Reference Material
- Appendix E – Drainage Maps
- Appendix F – Rational Method Calculations
- Appendix G – Unit Hydrograph Analysis
- Appendix H – Bentley PondPack Basin Routing Analysis
- Appendix I – Soils Information

## References

*Hydrology Manual.* Riverside County Flood Control and Water Conservation District, April 1978.

## 100.0 Introduction

Kimley-Horn and Associates has been retained to prepare a Preliminary Hydrology Report for the proposed JD Field Project in the City of Hemet, California for the proposed manufacturing warehouse. The purpose of this report is to demonstrate preliminary analysis of the hydrologic and hydraulic conditions associated with the development of the project site. To do so, the following is the scope of this report:

- Discuss the pre-development discharge patterns and points
- Discuss the post-development discharge patterns and points
- Determine the pre-development flow rates for the 2, 5, 10 and 100-year events
- Determine the post-development un-mitigated flow rates for the 2, 5, 10 and 100-year events
- Analyze the required post-development mitigation up to the 100-year event
- Demonstrate satisfactory post-development final flow rates

Even though this report discusses stormwater, this report is not a Stormwater Pollution Prevention Plan (SWPPP), a Groundwater Study, a Geotechnical Report, nor a Water Quality Management Plan (WQMP). Each of these separate reports discusses separate aspects of stormwater. Portions of the Geotechnical Report are utilized and referenced for the purpose of this report. Similarly, the requirements of the WQMP are considered for the stormwater mitigation and sizing of outlet structures for this project.

## 100.1 Project Description

The existing vacant lot will be developed into the proposed manufacturing warehouse. The proposed development will include a proposed 25,000 square foot building with an office. **Table 1** below shows a breakdown of the building square footage based on building use.

*Table 1: Building Use*

Building Use	Area (Square Footage)
Warehouse	22,000
Office	3,000

Site improvements will include landscaping, concrete hardscape, asphalt paving, and compacted soil storage areas, and unpaved compacted soil drive aisles. The associated improvements include, but are not limited to onsite grading, domestic water service, sanitary sewer service, storm drain infrastructure, concrete and asphalt pavement, landscaping, and irrigation. The project site is approximately 9.52-acres and is located in the City of Hemet, within Riverside County. The APN for the project site area: 456-140-008. **Appendix A** contains an aerial photograph that depicts the project location.

## 100.2 Location

The site is located south of the intersection of West Acacia Avenue and South Gilmore Street, on the east side of the cul-de-sac located on South Gilmore Street in the City of Hemet, within Riverside County. The project site is bordered South Gilmore Street on the west, general manufacturing developments to the north and east, and railroad tracks to the south. For reference see **Appendix A**, Location Map and Vicinity Map.

### 100.3 Methodology

The hydrologic and hydraulic analyses were completed following the methods outlined in the RCFC & WCD Hydrology Manual. The rational method was used to estimate time of concentrations and peak flow rates generated from the existing 2, 5, 10 and 100-year, 1hr storm events and the proposed 2, 5, 10 and 100-year, 1hr storm events. The unit hydrograph method was used to determine the proposed hydrographs for the 1-hour, 3-hour, 6-hour and 24-hour durations of the 2 and 100-year storm events for the areas that required basin routing. The Advanced Engineering Software (AES) HydroWIN v. 2011 was used to complete the rational method analysis. CivilDesign Software was used to complete the unit hydrograph analysis. The results of the analyses are included in **Appendix F and G**. Bentley's PondPack V8i was used to complete the basin routing using the Modified Pul's Method. The results of the analyses are included in **Appendix H**.

The rainfall data used for the analyses is important for the flow and runoff results. For the rational method analysis, the rainfall data from the Riverside County Flood Control and Water Conservation District Hydrology Manual (based on NOAA Atlas 2) was used. The rainfall data for the Hemet area was utilized due to the location of the project site (See **Appendix D**). For the unit hydrograph analysis, point precipitation data based upon NOAA Atlas 14 for Menifee, CA was used (See **Appendix D**).

The type of soil and soil conditions are major factors affecting infiltration/detention and resultant storm water runoff. The Natural Resources Conservation Service (NRCS) has classified soil into one general hydrologic soil group for comparing infiltration and runoff rates. The group is based on properties that influence runoff, such as water infiltration rate, texture, natural discharge, and moisture condition. The runoff potential is based on the amount of runoff at the end of a long duration storm that occurs after wetting and swelling of the soil not protected by vegetation. Using the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey online tool and the Stormwater Facility Mapping online tool for Riverside County, it was determined the predominant hydrologic soil group classification is A. Soil group A is defined as soils having high infiltration rates (low runoff potential). The Geotechnical Report from Partner Engineering and Science, Inc. dated July 2, 2021 (Partner Project Number: 21-324820.1) measured an average infiltration rate of 5.17 in/hr for the site (without a factor of safety applied). See **Appendix I** for the soil information.

In addition, antecedent moisture condition (AMC) I was used for the 2 and 5-year peak flow calculations, AMC II was used for the 10-year and AMC III for the 100-year based on the hydrology manual. The land use for the proposed drainage subareas was selected based on the percent impervious that characterizes the drainage that drains into the proposed basin. See **Appendix D** Plate D-5.6 for the impervious percentages that correspond to each land use. Since the proposed drainage areas that drain to the proposed basin BMP-1 will be approximately 50% impervious, a single family residential (7,200-10,000 sf lots) land use was used for all drainage area tributary to BMP-1 which assumes 50% impervious. The combination of the soil and coverage type is used as the basis for selecting the appropriate curve numbers used to calculate the soil loss rates. See **Appendix D** for reference.

## 100.4 Drainage Characteristics

The site is mainly located in Zone X-shaded per the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM) panel 06065C2105G, dated August 28, 2008. Flood Zone X-shaded is defined by FEMA to represent one of the two situations below:

- 0.2% annual chance of flood hazard
- 1% annual chance of flood with average depth less than 1 foot or having a drainage area less than 1 square mile

No portion of the site is located within the special flood hazard area inundated by the 100-year flood. For reference, see **Appendix B**, FIRM Map.

### **100.4.1 Pre-development Condition**

The existing site is undeveloped. The site land cover consists of mostly light weeds and brush. The existing site comprises one drainage area. The drainage area was delineated based on the existing topography and existing discharge point. Drainage from DA-1 drains in the southwest direction ultimately discharging onto South Gilmore Street.

**Table 2** shows a summary of the existing hydrologic flows from the 2, 5, 10 and 100-year storm events.

*Table 2: Existing Hydrologic Flows*

Area Description	Area (acres)	Q <sub>2</sub> (cfs)	Q <sub>5</sub> (cfs)	Q <sub>10</sub> (cfs)	Q <sub>100</sub> (cfs)
DA-1	9.52	1.56	2.79	3.70	7.47

See **Appendix E** for Existing Drainage Map. See **Appendix F** for Existing Rational Calculations.

### **100.4.2 Post-development Condition**

The proposed development includes the construction of the proposed manufacturing warehouse. The 9.52-acre site will not be phased. The proposed site will encompass one (1) new building approximately 25,000 square feet with and office space. Site improvements will include landscaping, concrete hardscape, asphalt paving, and compacted soil storage areas, and unpaved compacted soil drive aisles. See **Appendix C**, Construction Plans, which includes the project Preliminary Grading Plan.

Storm water in the proposed condition will be routed into one (1) basin (BMP-1) for storm water treatment and mitigation. The proposed basin is located near the southwest corner of the site. See **Appendix E** for Proposed Drainage Exhibit. The grading for the proposed site will maintain the natural flow pattern of the existing site, draining in the southwest direction, to the maximum extent possible.

The post-development drainage area is comprised of three (3) drainage areas that drain to BMP-1. Drainage from DA-1 and DA-2 will sheet flow making its way to two separate inlets located at a low points. Drainage collected by the inlets will be routed via a storm drainpipe into a forebay settling basins for pre-treatment before infiltrating. Drainage from DA-3 will sheet flow through

the site making its way into a 24” concrete curb cut with concrete spillway located near the proposed infiltration basin (BMP-1).

**Table 3** shows a summary of the proposed unmitigated hydrologic flows from the 2, 5, 10 and 100-year storm events. See **Appendix E** for Proposed Drainage Exhibit and **Appendix F** for calculations.

*Table 3: Proposed Hydrologic Flows (unmitigated)*

Area Description	Area (acres)	Q <sub>2</sub> (cfs)	Q <sub>5</sub> (cfs)	Q <sub>10</sub> (cfs)	Q <sub>100</sub> (cfs)
Area tributary to BMP-1	9.52	5.03	7.37	8.95	14.81

## 100.5 Stormwater Mitigation

The proposed development is proposing an infiltration basin (BMP-1) for dual purposes: stormwater quality treatment and mitigation. The proposed infiltration basin was sized to treat the design capture the volume (DCV), as outlined in the WQMP, and to retain the storm water volume required to not create any adverse impacts downstream. The required DCV for the proposed project site is approximately 12,000 cubic feet. The proposed basin has a total capacity of 80,599 cubic feet which satisfies the requirement for water quality.

The volume of storage provided in the infiltration basin along with the size of the emergency overflow under sidewalk drain are intended to restrict peak flows in the proposed condition to levels equal to or less than the existing flows. Based on the basin routing for the 3-hr, 6-hr and 24-hr durations of the 2 and 100-year storm events, it was determined that the proposed infiltration basin can treat and mitigate up to the 100-year storm events. The proposed site will be a zero-discharge project in which all drainage will be treated and infiltrated back into the soil. See **Appendix H** for Basin Routing Calculations.

## 100.6 Hydraulic Analysis

Peak flows from the rational method analyses will be used to adequately size proposed inlets, outlets, and storm drain systems. The proposed storm drain system identified on the Proposed Drainage Map will be conveying the 100-year storm flows. The proposed inlets and outlets will also be capturing the 100-year storm flows. The storm drain systems will be sized based on the anticipated 100-year flows.

The calculated peak flows from the analyses discusses above will be used to size the onsite flow drainage devices. All drainage devices will be sized in the Final Hydrology Report.

The proposed bioretention basin has a total depth of 5.3 feet when the 100 year storm is mitigated. Therefore the drawdown time for the basin is 37 hours. See Appendix H for draw down calculations.

## 100.7 Conclusion

In conclusion, the following was covered in this report:

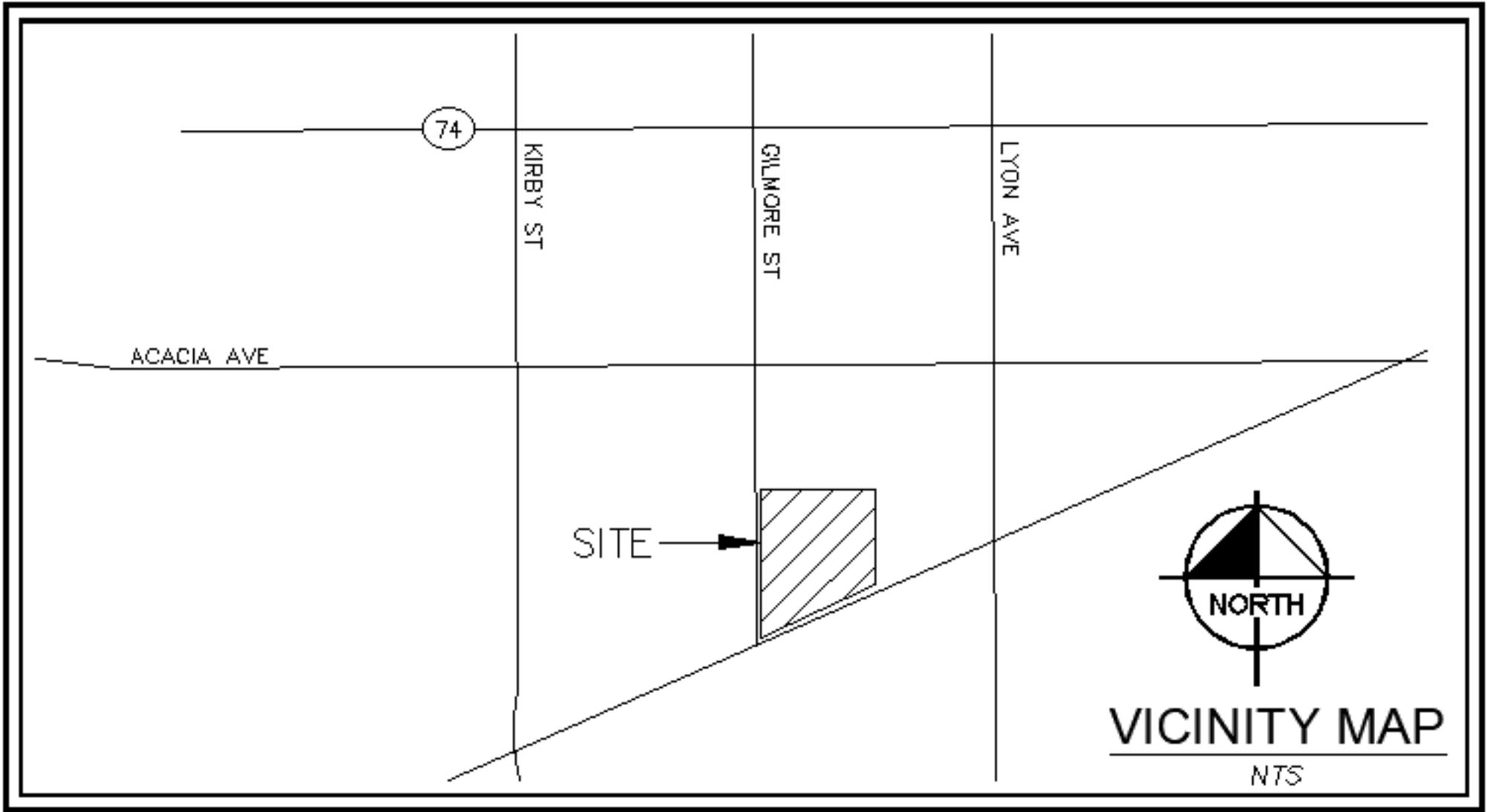
- Pre-development discharge patterns and points were analyzed
- Post-development discharge patterns and points were analyzed

- Pre-development flow rates for the 2, 5, 10 and 100-year storm events were calculated to compare to post-development flow rates
- Post-development un-mitigated flow rates for the 2, 5, 10 and 100-year events were calculated to determine the need of mitigation in each drainage area, to size drainage devices, and to check flood protection
- Post-development mitigation was analyzed for two required drainage areas (DMA-A and DMA-C) based on the 2, 5, 10 and 100-year events
- Post-development final flow rates were proven to be less than the existing flows for the tributary areas

As discussed in the contents of this report, the development of the existing vacant site into the proposed manufacturing warehouse is not expected to cause a significant impact to downstream properties for storms up to the 100-year condition. The mitigated development discharges less stormwater flows than the existing site conditions by proposing a zero-discharge site.

## **Appendix A**

### **Location Map**



74

KIRBY ST

GILMORE ST

LYON AVE

ACACIA AVE

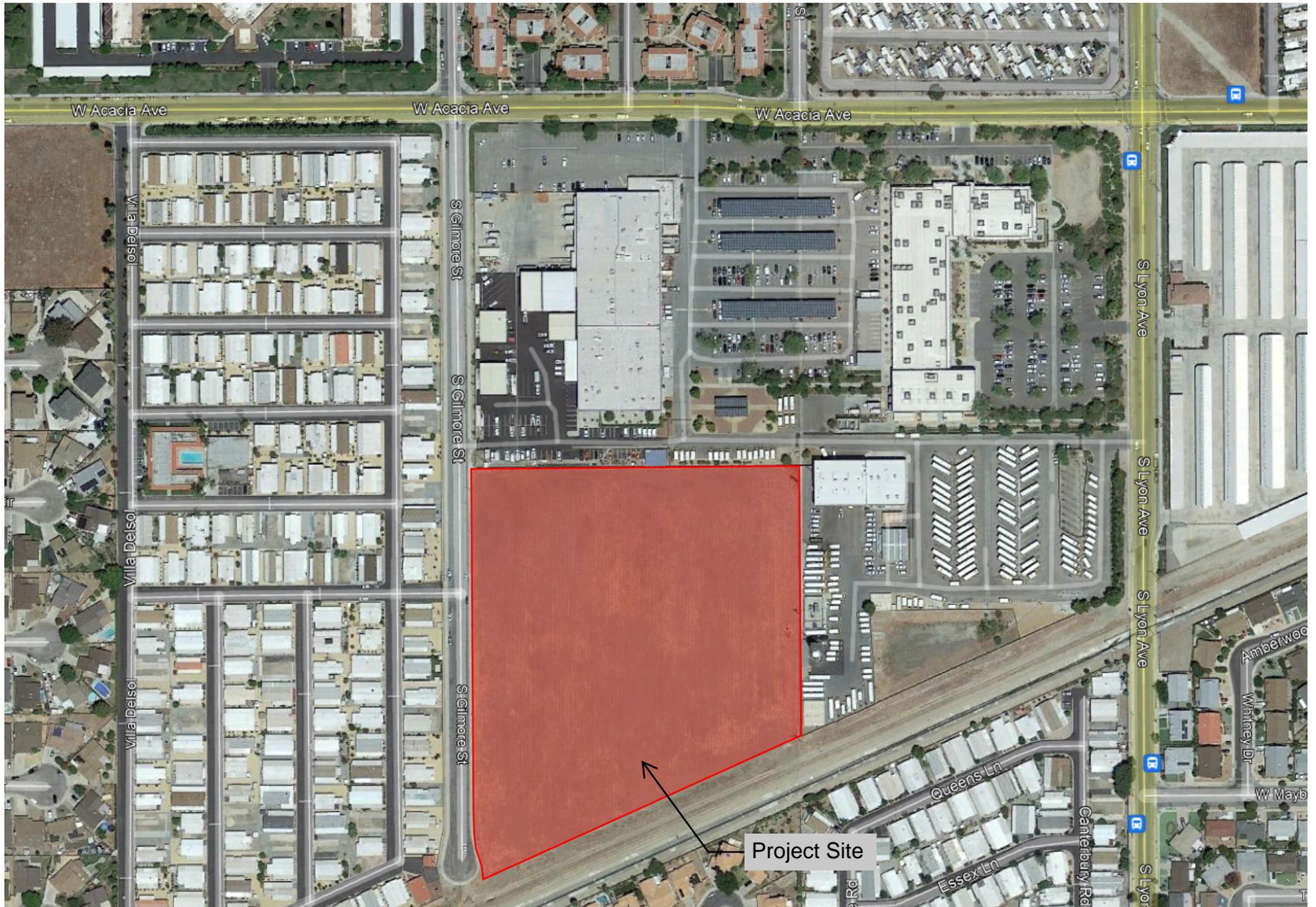
SITE

NORTH

VICINITY MAP

NTS

# Location Map





**Assessor - County Clerk - Recorder**  
Riverside County, CA

**Property Detail**

<b>Assessment No.</b>	456140008
<b>APN</b>	456140008
<b>Property Type</b>	Vacant Commercial Land
<b>Neighborhood</b>	Land - Hemet, San Jacinto and adjacent County areas
<b>Acreage</b>	9.20

**Legal Description**

9.20 ACRES IN POR NW 1/4 OF SEC 16 T5S R1W FOR TOTAL DESCRIPTION SEE ASSESSORS MAPS TownshipN 5 Acres 009.20 Section 16 Portion 1/4 Range 01 PortionDirection N RangeDirection W

**Value History (Part 1)**

Year	Reason Date	Market Value				Factored Base Year Value			
		Land	Improvement	Living Improvement	Total	Land	Improvement	Living Improvement	Total
2017	Other 01/01/2017					\$1,766,240			\$1,766,240
2018	Other 01/01/2018					\$1,801,564			\$1,801,564
2019	01/01/2019					\$1,837,595			\$1,837,595
2020	01/01/2020					\$1,874,346			\$1,874,346
2021	01/01/2021					\$1,893,764			\$1,893,764

**Value History (Part 2)**

Year	Restricted Value				Assessed Value				Penalty	Exemption	Net Taxable Value
	Land	Improvement	Living Improvement	Total	Land	Improvement	Living Improvement	Total			
2017					\$1,766,240			\$1,766,240			\$1,766,240
2018					\$1,801,564			\$1,801,564			\$1,801,564
2019					\$1,837,595			\$1,837,595			\$1,837,595
2020					\$1,874,346			\$1,874,346			\$1,874,346
2021					\$1,893,764			\$1,893,764			\$1,893,764

**Transfer History**

Doc #	Sales Price	Date	Vacant Land
2016-9034408-UC	\$0	4/3/2016	True
2006-0324641	\$1,500,000	5/4/2006	True
2005-0919106	\$0	11/4/2005	True
2005-0635011	\$680,000	8/5/2005	True
2005-5635011	\$0	8/5/2005	True
2002-0154966	\$0	3/27/2002	True
1998-0544060	\$0	12/15/1998	True
1995-9926126-UC	\$0	6/1/1995	True
1992-0498583	\$0	12/31/1992	True
1975-0160668	\$80,000	12/24/1975	True
1973-0151427-NO	\$0	11/1/1973	True
1972-0075831	\$0	6/1/1972	True

**Features**

**Land Details**

Primary Use	Land Type	Acres	Eff. Frontage	Eff. Depth
Commercial	LandLine 01 / 456140008 / Commercial	9.20	0.00	0.00

Riverside County is not liable for erroneous or incomplete data.  
California Revenue and Taxation Code Sec. 408.3 (d)

Date Printed: 10/12/2021

## **Appendix B**

### **FIRM Map**

# National Flood Hazard Layer FIRMette



116°59'56"W 33°44'50"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- |                                    |  |  |
|------------------------------------|--|--|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  |  | Without Base Flood Elevation (BFE)<br><i>Zone A, V, A99</i>  |
|                                    |  | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>   |
|                                    |  | Regulatory Floodway  |
| <b>OTHER AREAS OF FLOOD HAZARD</b> |  | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
|                                    |  | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>  |
|                                    |  | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>  |
|                                    |  | Area with Flood Risk due to Levee <i>Zone D</i>  |
| <b>OTHER AREAS</b>                 |  | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>   |
|                                    |  | Effective LOMRs  |
| <b>GENERAL STRUCTURES</b>          |  | Area of Undetermined Flood Hazard <i>Zone D</i>  |
|                                    |  | Channel, Culvert, or Storm Sewer   |
|                                    |  | Levee, Dike, or Floodwall  |
| <b>OTHER FEATURES</b>              |  | 20.2 Cross Sections with 1% Annual Chance  |
|                                    |  | 17.5 Water Surface Elevation   |
|                                    |  | Coastal Transect   |
|                                    |  | Base Flood Elevation Line (BFE)  |
|                                    |  | Limit of Study   |
| <b>MAP PANELS</b>                  |  | Jurisdiction Boundary  |
|                                    |  | Coastal Transect Baseline  |
|                                    |  | Profile Baseline   |
|                                    |  | Hydrographic Feature   |
|                                    |  | Digital Data Available   |
|                                    |  | No Digital Data Available  |
|                                    |  | Unmapped   |
|                                    |  | The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.                                     |

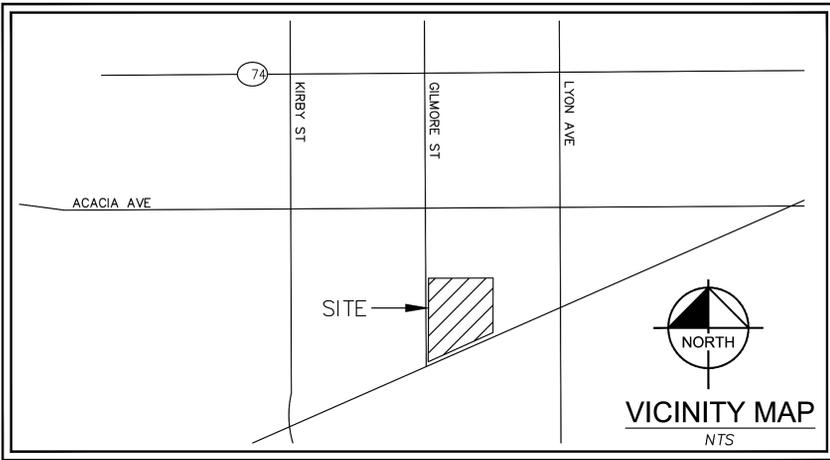


This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/12/2021 at 2:25 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

**Appendix C**  
**Construction Plans**



N.A.P.  
 APN: 456-140-006  
 M-2 ZONE  
 GENERAL MANUFACTURING

**LEGEND**

- PROPERTY LINE
- CIVIL LIMITS OF WORK
- BUILDING SETBACK
- EASEMENT
- FLOW LINE
- GRADEBREAK
- (1545.10 TC)  
(1544.60 FS) EXISTING SPOT ELEVATION
- (1545.10 TC)  
(1544.60 FS) PROPOSED SPOT ELEVATION
- 1.5% PROPOSED FLOW (DIRECTION AND SLOPE)
- (XXXX) EXISTING CONTOUR
- (XXXX) EXISTING MINOR CONTOUR
- XXXX PROPOSED CONTOUR
- XXXX PROPOSED MINOR CONTOUR
- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- LIGHT DUTY CONCRETE WALK
- LANDSCAPE/PLANTER AREA
- HEAVY DUTY CONCRETE

**KEY NOTES:**

- 1 PROPOSED 4" RIBBON GUTTER
- 2 PROPOSED INFILTRATION BASIN
- 3 PROPOSED SAND FOREBAY
- 4 PROPOSED GRATED INLET WITH FILTER INSERT
- 5 PROPOSED UNDER SIDEWALK OVERFLOW DRAIN WITH FILTER INSERT
- 6 PROPOSED 2 FOOT CURB CUT
- 7 PROPOSED STORM DRAIN PIPE
- 8 PROPOSED TRASH ENCLOSURE PER CITY STANDARDS R-500B (DOUBLE)NET
- 9 PROPOSED CURB RAMP WITH DETECTABLE WARNINGS
- 10 PROPOSED VARYING HEIGHT GRAVITY CURB (MAX 3')
- 11 PROPOSED CURB
- 12 PROPOSED CURB AND GUTTER

**ESTIMATED EARTHWORK QUANTITIES**

CUT:	15,375 CY
FILL:	1,473 CY
NET:	13,902 CY CUT

NOTE: THE ABOVE QUANTITIES ARE APPROXIMATE IN PLACE VOLUMES CALCULATED FROM THE EXISTING GROUND TO THE PROPOSED FINISHED GRADE. EXISTING GROUND IS DEFINED BY THE CONTOURS AND SPOT GRADES ON THE BASE SURVEY. PROPOSED FINISHED GRADE IS DEFINED AS THE FINAL GRADE AS INDICATED ON THE GRADING PLAN(S).

THE EARTHWORK QUANTITIES ABOVE ARE FOR PERMIT PURPOSES ONLY. THEY HAVE NOT BEEN FACTORED TO ACCOUNT FOR CHANGES IN VOLUME DUE TO BULKING, CLEARING AND GRUBBING, SHRINKAGE, OVER-EXCAVATION AND RE-COMPACTON, AND CONSTRUCTION METHODS. NOR DO THEY ACCOUNT FOR THE THICKNESS OF PAVEMENT SECTIONS, FOOTINGS, SLABS, REUSE OF PULVERIZED MATERIALS THAT WILL UNDERLIE NEW PAVEMENTS, ETC. THE CONTRACTOR SHALL RELY ON THEIR OWN EARTHWORK ESTIMATES FOR BIDDING PURPOSES.

**SITE DATA:**

PARCEL SIZE: 414,481± S.F. (9.52± AC)  
 LIMITS OF DISTURBANCE: 414,481± S.F. (9.52± AC)  
 PROPOSED IMPERVIOUS AREA: 203,486± S.F. (4.67± AC)  
 PROPOSED PERVIOUS AREA: 210,995± S.F. (4.85± AC)  
 APN: 456-140-008  
 EXISTING USE: VACANT  
 PROPOSED USE: MANUFACTURING WAREHOUSE (M-2)  
 GENERAL PLAN: INDUSTRIAL GENERAL PLAN (I)  
 PARKING REQUIREMENTS: 1 STALL/500 SQUARE FEET =

**LANDSCAPE NOTE:**

FINISH GRADE OF LANDSCAPE AREAS IS TO BE DEPRESSED 1-2 INCHES (MIN.) BELOW TOP OF CURB, SIDEWALK OR PAVEMENT.

SEE SHEET 2

**GENERAL NOTES**

- PROPOSED TRASH ENCLOSURE MUST BE INSTALLED IN ACCORDANCE WITH CITY OF HEMET STANDARDS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

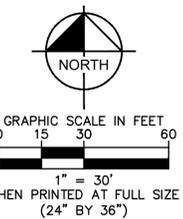
N.A.P.  
 APN: 456-140-001  
 R-2 ZONE  
 RESIDENTIAL AREA

S GILMORE STREET

N.A.P.  
 APN: 456-140-009  
 M-2 ZONE  
 GENERAL MANUFACTURING

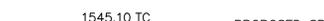
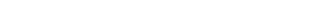


12/15/2021



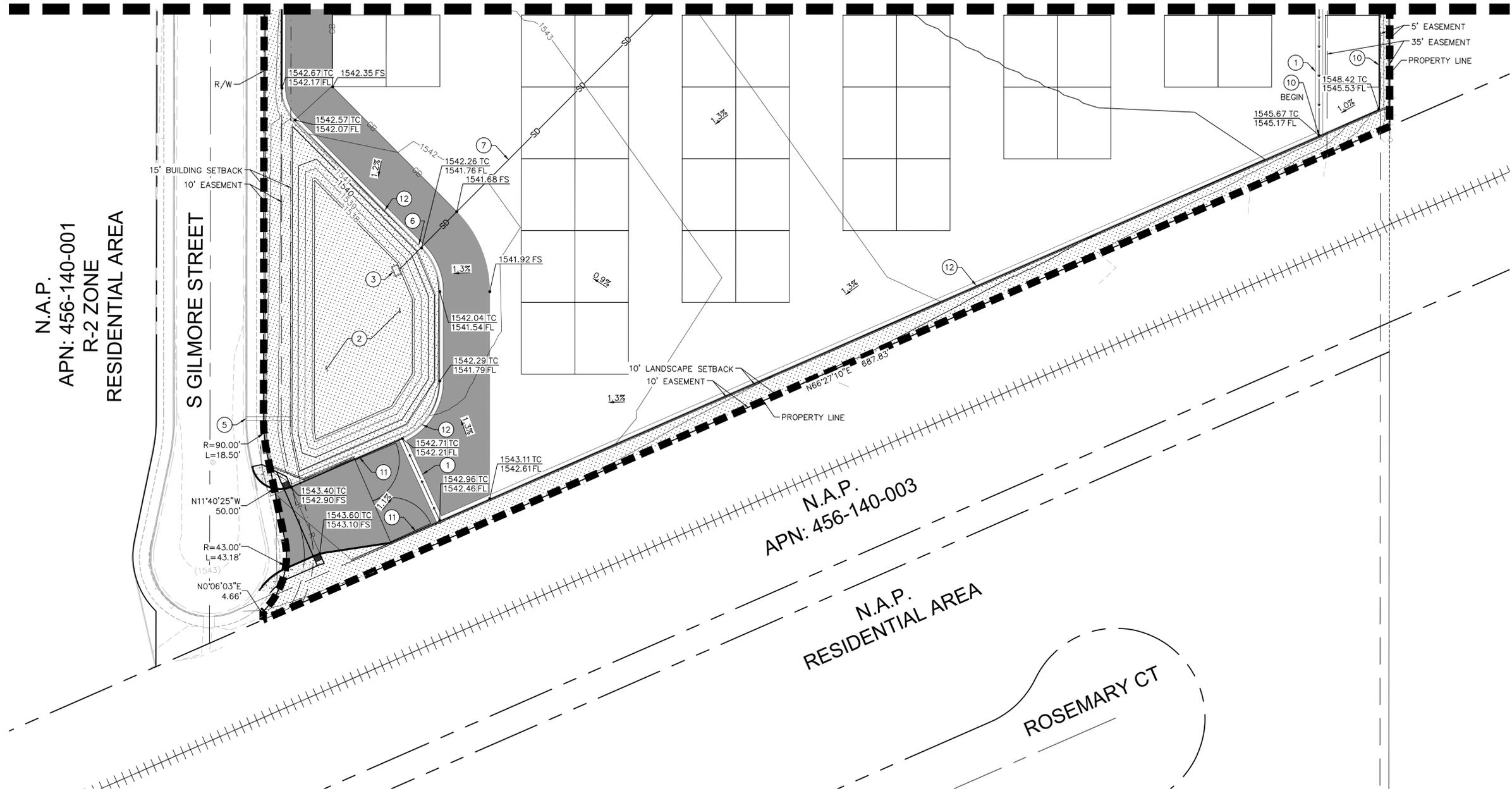
SEE SHEET 1

### LEGEND

-  PROPERTY LINE
-  CIVIL LIMITS OF WORK
-  BUILDING SETBACK
-  EASEMENT
-  FLOW LINE
-  GRADEBREAK
-  EXISTING SPOT ELEVATION  
(1545.10 TC)  
(1544.60 FS)
-  PROPOSED SPOT ELEVATION  
1545.10 TC  
1544.60 FS
-  PROPOSED FLOW  
(DIRECTION AND SLOPE)  
1.5%
-  EXISTING CONTOUR  
(XXXX)
-  EXISTING MINOR CONTOUR  
(XXXX)
-  PROPOSED CONTOUR  
XXXX
-  PROPOSED MINOR CONTOUR  
XXXX
-  STANDARD DUTY ASPHALT PAVEMENT
-  HEAVY DUTY ASPHALT PAVEMENT
-  LIGHT DUTY CONCRETE WALK
-  LANDSCAPE/PLANTER AREA
-  HEAVY DUTY CONCRETE

### KEY NOTES:

- ① PROPOSED 4" RIBBON GUTTER
- ② PROPOSED INFILTRATION BASIN
- ③ PROPOSED SAND FOREBAY
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- ⑪ PROPOSED CURB
- ⑫ PROPOSED CURB AND GUTTER



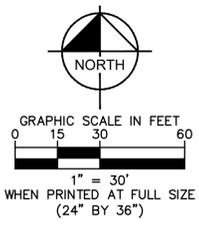
N.A.P.  
APN: 456-140-001  
R-2 ZONE  
RESIDENTIAL AREA

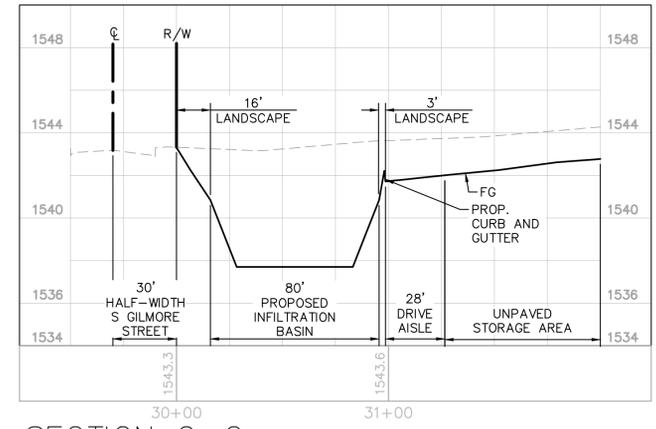
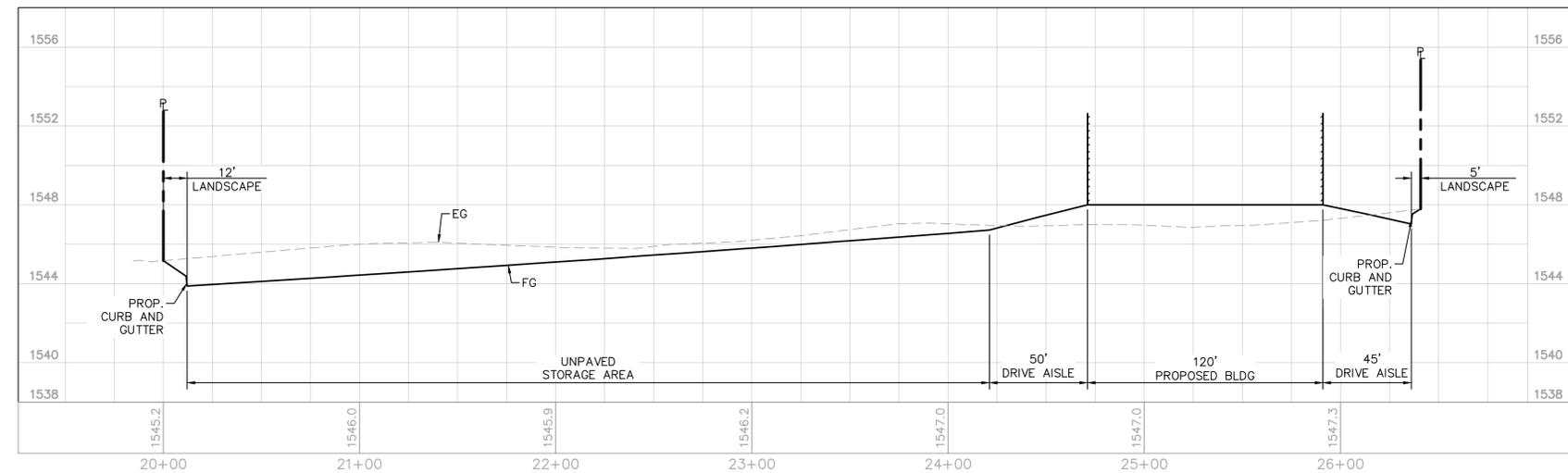
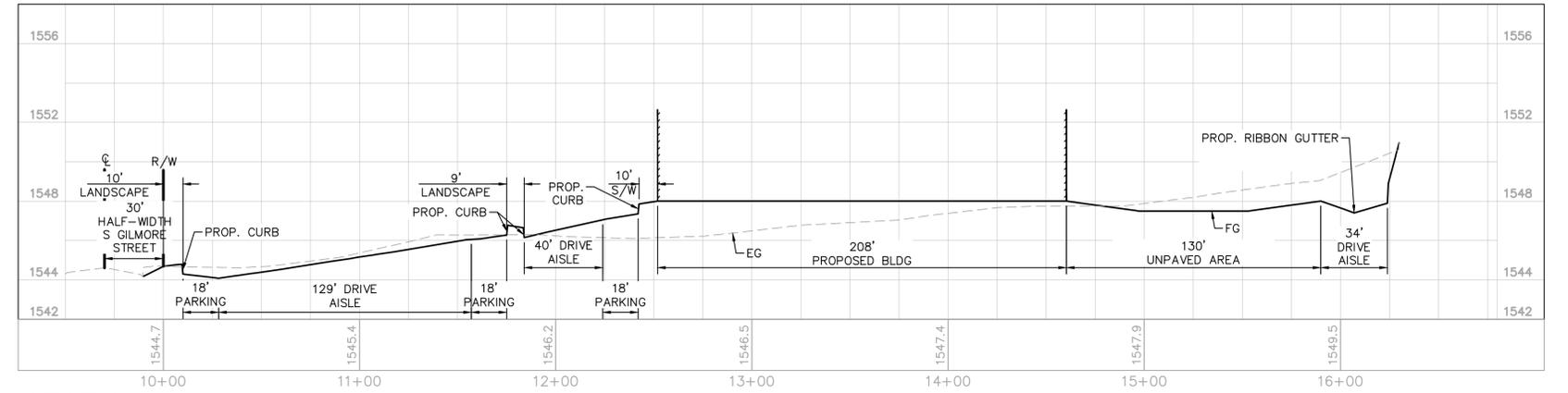
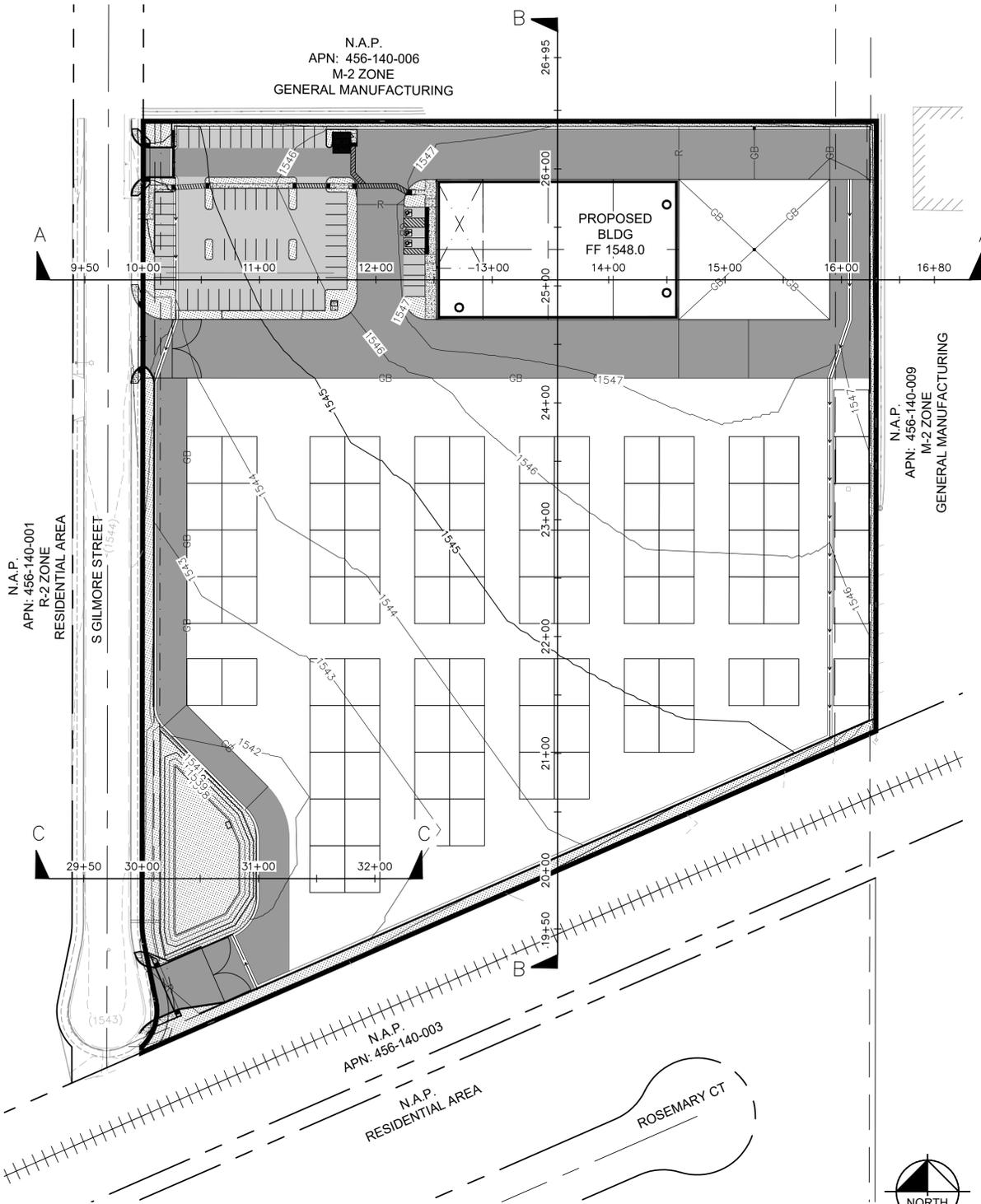
S GILMORE STREET

N.A.P.  
APN: 456-140-003

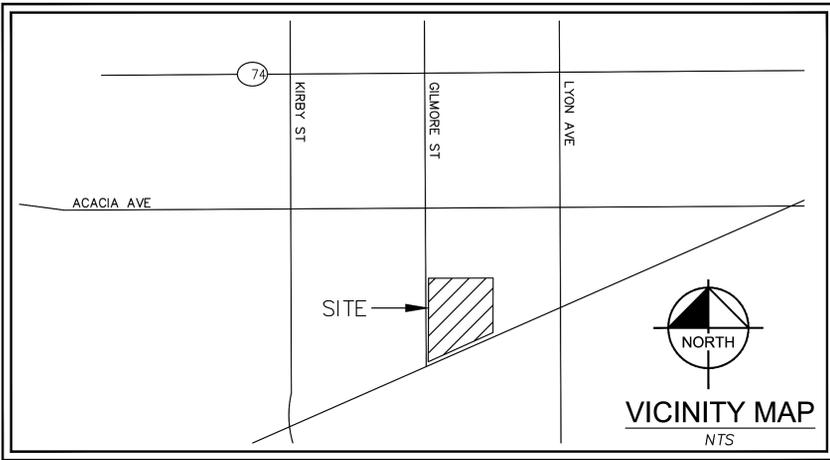
N.A.P.  
RESIDENTIAL AREA

ROSEMARY CT

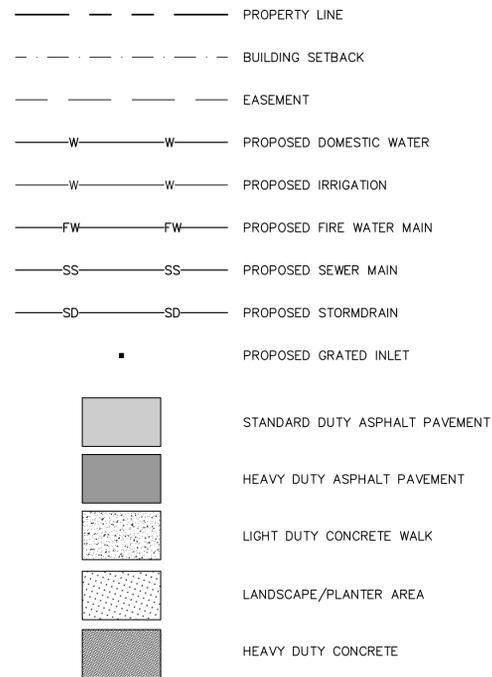




12/15/2021



**LEGEND**



**UTILITY PURVEYORS**

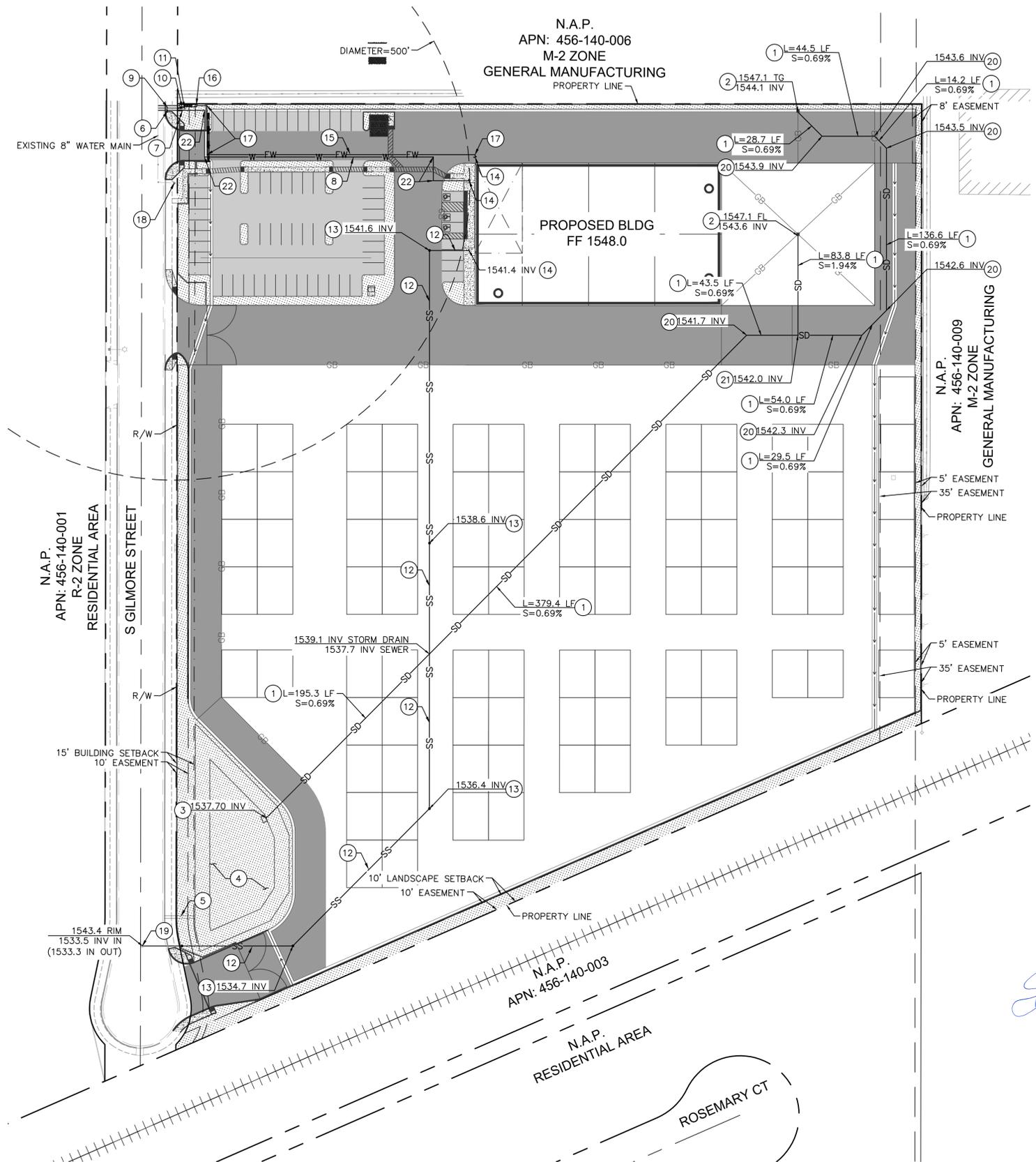
- WATER AND SEWER  
445 E FLORIDA AVENUE  
CITY HALL  
HEMET, CA 92543  
(951) 765-2350
- SPECTRUM  
(855)427-0191
- FRONTIER FIOS  
(877) 349-9182
- DIRECT TV  
(855) 463-7359
- SOUTHERN CALIFORNIA TELEPHONE  
(800) 840-6673
- SOUTHERN CALIFORNIA EDISON  
(800) 655-4555
- WESTERN COMMUNITY ENERGY  
(951) 405-6760
- SOUTHERN CALIFORNIA GAS COMPANY  
(800)427-2200
- CR&R  
(800) 826-9677
- WASTE MANAGEMENT  
(800) 423-9986
- RIVERSIDE COUNTY WASTE MANAGEMENT  
(951)486-3200

**KEY NOTES:**

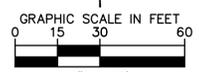
- 1 PROPOSED STORM DRAIN PIPE
- 2 PROPOSED GRATED INLET WITH FILTER INSERT
- 3 PROPOSED SAND FOREBAY
- 4 PROPOSED INFILTRATION BASIN
- 5 PROPOSED UNDER SIDEWALK OVERFLOW DRAIN WITH FILTER INSERT
- 6 PROPOSED DOMESTIC WATER METER
- 7 PROPOSED DOMESTIC WATER BACKFLOW PREVENTOR PER CITY OF HEMET PUBLIC WORKS STANDARD NO W-713.
- 8 PROPOSED 1" DOMESTIC WATER SERVICE LINE
- 9 PROPOSED IRRIGATION WATER METER
- 10 PROPOSED IRRIGATION WATER BACKFLOW PREVENTOR PER CITY OF HEMET PUBLIC WORKS STANDARD NO W-713.
- 11 PROPOSED 1" IRRIGATION WATER SERVICE LINE
- 12 PROPOSED SEWER MAIN (SLOPE= 1.00%)
- 13 PROPOSED SEWER CLEANOUT
- 14 PROPOSED BUILDING POINT OF CONNECTIONS
- 15 PROPOSED 6" FIRE WATER MAIN
- 16 PROPOSED 6" REDUCE PRESSURE PRINCIPLE BACKFLOW PREVENTOR ASSEMBLY
- 17 PROPOSED 6" 90° FIRE WATER BEND
- 18 EXISTING FIRE HYDRANT
- 19 CONNECT PROPOSED SEWER LATERAL INTO EXISTING SEWER MANHOLE
- 20 PROPOSED STORM DRAIN 45° BEND
- 21 PROPOSED STORM DRAIN TEE BEND
- 22 PROPOSED 90° DOMESTIC WATER BEND

**GENERAL NOTES**

1. REDUCE PRESSURE PRINCIPLE BACKFLOW PREVENTOR ASSEMBLY TO BE PER CITY OF HEMET ORDINANCE TITLE 13, CHAPTER 4 AND CURRENT POLICIES OF THE PUBLIC UTILITY DEPARTMENT TO INCLUDE CERTIFICATION THAT THE ASSEMBLY MEETS CURRENT STANDARDS BY A CITY APPROVED CERTIFIED TESTER.
2. PROPOSED BACKFLOW PREVENTOR TO BE INSTALLED PER CITY OF HEMET PUBLIC WORKS STANDARD NO W-713.
3. FIRE FLOW IS TO BE DETERMINED BY 2019 CA FIRE CODE APPENDIX B.
4. FIRE SPRINKLERS AND MONITORING ALARM TO BE COMPLAINT WITH THE 2016 NFPA 13 AND NFPA 72.



12/15/2021



1" = 30'  
WHEN PRINTED AT FULL SIZE  
(24" BY 36")

## **Appendix D**

### **Hydrology Manual Reference Material**



NOAA Atlas 14, Volume 6, Version 2  
 Location name: Hemet, California, USA\*  
 Latitude: 33.741°, Longitude: -116.9923°  
 Elevation: 1546.67 ft\*\*  
 \* source: ESRI Maps  
 \*\* source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

PF tabular

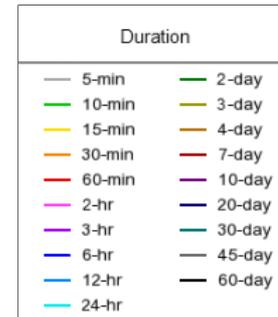
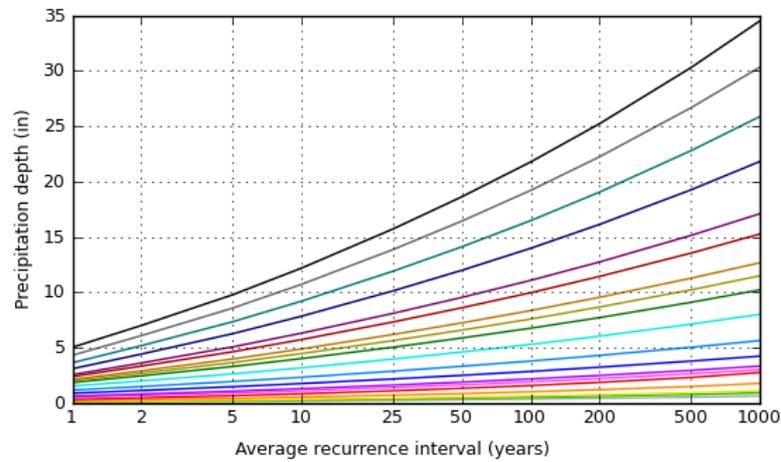
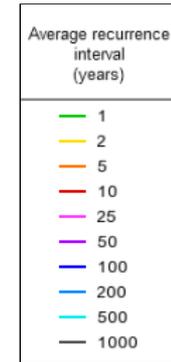
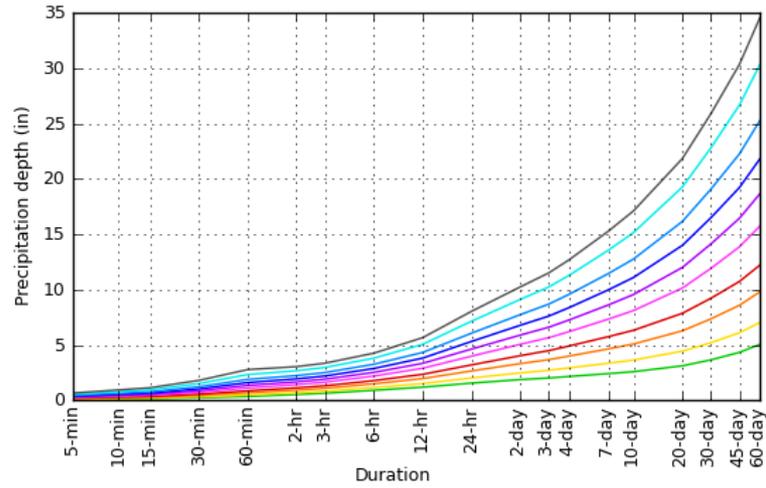
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) <sup>1</sup>										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.083 (0.069-0.100)	0.115 (0.096-0.139)	0.161 (0.134-0.195)	0.202 (0.167-0.248)	0.265 (0.211-0.335)	0.318 (0.248-0.412)	0.378 (0.287-0.502)	0.446 (0.329-0.610)	0.549 (0.388-0.784)	0.654 (0.447-0.969)
10-min	0.118 (0.099-0.143)	0.164 (0.137-0.199)	0.231 (0.192-0.280)	0.290 (0.240-0.355)	0.380 (0.303-0.481)	0.456 (0.356-0.591)	0.542 (0.412-0.719)	0.639 (0.472-0.874)	0.787 (0.557-1.12)	0.938 (0.640-1.39)
15-min	0.143 (0.120-0.173)	0.199 (0.166-0.240)	0.279 (0.233-0.338)	0.351 (0.290-0.429)	0.459 (0.366-0.581)	0.552 (0.430-0.714)	0.655 (0.498-0.870)	0.773 (0.571-1.06)	0.952 (0.673-1.36)	1.13 (0.774-1.68)
30-min	0.227 (0.190-0.274)	0.315 (0.263-0.381)	0.442 (0.368-0.536)	0.556 (0.459-0.680)	0.727 (0.580-0.921)	0.874 (0.682-1.13)	1.04 (0.789-1.38)	1.22 (0.904-1.67)	1.51 (1.07-2.15)	1.80 (1.23-2.66)
60-min	0.350 (0.293-0.423)	0.486 (0.406-0.588)	0.683 (0.568-0.828)	0.858 (0.708-1.05)	1.12 (0.895-1.42)	1.35 (1.05-1.75)	1.60 (1.22-2.13)	1.89 (1.40-2.58)	2.33 (1.65-3.32)	2.77 (1.89-4.11)
2-hr	0.523 (0.438-0.632)	0.689 (0.576-0.833)	0.922 (0.768-1.12)	1.12 (0.928-1.38)	1.42 (1.13-1.80)	1.67 (1.30-2.16)	1.93 (1.47-2.57)	2.23 (1.65-3.05)	2.67 (1.89-3.81)	3.04 (2.07-4.50)
3-hr	0.642 (0.537-0.775)	0.830 (0.694-1.00)	1.09 (0.909-1.32)	1.32 (1.09-1.61)	1.64 (1.31-2.08)	1.91 (1.49-2.47)	2.19 (1.67-2.91)	2.51 (1.85-3.43)	2.97 (2.10-4.24)	3.35 (2.29-4.96)
6-hr	0.905 (0.757-1.09)	1.15 (0.963-1.39)	1.49 (1.24-1.81)	1.78 (1.47-2.17)	2.19 (1.75-2.77)	2.52 (1.97-3.26)	2.87 (2.19-3.82)	3.26 (2.40-4.45)	3.80 (2.69-5.43)	4.25 (2.90-6.30)
12-hr	1.19 (0.991-1.43)	1.51 (1.26-1.83)	1.96 (1.63-2.38)	2.35 (1.94-2.87)	2.89 (2.31-3.66)	3.34 (2.60-4.32)	3.81 (2.90-5.06)	4.32 (3.19-5.91)	5.05 (3.57-7.22)	5.66 (3.86-8.37)
24-hr	1.55 (1.37-1.79)	2.01 (1.78-2.33)	2.65 (2.34-3.07)	3.20 (2.79-3.73)	3.98 (3.37-4.80)	4.63 (3.84-5.69)	5.31 (4.31-6.69)	6.06 (4.78-7.84)	7.14 (5.41-9.61)	8.03 (5.89-11.2)
2-day	1.87 (1.65-2.16)	2.48 (2.19-2.86)	3.31 (2.92-3.84)	4.03 (3.52-4.70)	5.06 (4.28-6.09)	5.89 (4.89-7.24)	6.77 (5.49-8.53)	7.73 (6.10-10.0)	9.11 (6.90-12.3)	10.2 (7.50-14.3)
3-day	2.02 (1.78-2.33)	2.71 (2.40-3.13)	3.67 (3.23-4.25)	4.49 (3.92-5.24)	5.65 (4.79-6.82)	6.60 (5.48-8.12)	7.60 (6.16-9.57)	8.69 (6.85-11.2)	10.2 (7.76-13.8)	11.5 (8.43-16.0)
4-day	2.15 (1.91-2.48)	2.93 (2.59-3.38)	3.99 (3.52-4.63)	4.90 (4.29-5.72)	6.20 (5.25-7.47)	7.25 (6.02-8.92)	8.37 (6.78-10.5)	9.57 (7.55-12.4)	11.3 (8.55-15.2)	12.7 (9.30-17.7)
7-day	2.41 (2.13-2.78)	3.35 (2.96-3.87)	4.64 (4.09-5.38)	5.75 (5.03-6.71)	7.33 (6.21-8.84)	8.62 (7.15-10.6)	9.98 (8.09-12.6)	11.5 (9.03-14.8)	13.6 (10.3-18.3)	15.3 (11.2-21.3)
10-day	2.58 (2.29-2.98)	3.63 (3.21-4.20)	5.08 (4.48-5.89)	6.33 (5.53-7.38)	8.11 (6.86-9.77)	9.55 (7.93-11.7)	11.1 (8.99-14.0)	12.8 (10.1-16.5)	15.1 (11.5-20.4)	17.1 (12.5-23.8)
20-day	3.12 (2.76-3.59)	4.44 (3.92-5.13)	6.28 (5.53-7.27)	7.86 (6.87-9.17)	10.1 (8.58-12.2)	12.0 (9.96-14.8)	14.0 (11.3-17.6)	16.1 (12.7-20.9)	19.3 (14.6-25.9)	21.8 (16.0-30.4)
30-day	3.65 (3.23-4.21)	5.20 (4.59-6.00)	7.36 (6.48-8.52)	9.22 (8.06-10.8)	11.9 (10.1-14.4)	14.1 (11.7-17.4)	16.5 (13.4-20.8)	19.1 (15.0-24.7)	22.8 (17.3-30.7)	25.9 (19.0-36.0)
45-day	4.33 (3.83-5.00)	6.10 (5.39-7.05)	8.58 (7.56-9.94)	10.7 (9.38-12.5)	13.9 (11.7-16.7)	16.4 (13.6-20.2)	19.2 (15.6-24.2)	22.3 (17.6-28.8)	26.7 (20.2-35.9)	30.3 (22.2-42.2)
60-day	5.05 (4.47-5.82)	7.02 (6.20-8.11)	9.79 (8.63-11.3)	12.2 (10.7-14.2)	15.7 (13.3-18.9)	18.6 (15.5-22.9)	21.8 (17.7-27.4)	25.2 (19.9-32.7)	30.3 (23.0-40.8)	34.5 (25.3-48.1)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.  
 Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

## PF graphical

PDS-based depth-duration-frequency (DDF) curves  
 Latitude: 33.7410°, Longitude: -116.9923°



## Maps & aerials

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



[Back to Top](#)

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[US Department of Commerce](#)  
[National Oceanic and Atmospheric Administration](#)  
[National Weather Service](#)  
[National Water Center](#)  
1325 East West Highway  
Silver Spring, MD 20910  
Questions?: [HDSC.Questions@noaa.gov](mailto:HDSC.Questions@noaa.gov)

[Disclaimer](#)

# RAINFALL INTENSITY—INCHES PER HOUR

**RCFC & WCD**  
 HYDROLOGY MANUAL

STANDARD  
 INTENSITY — DURATION  
 CURVES DATA

HEMET			HIGHGROVE			HOMELAND — WINCHESTER			IDYLLWILD			LAKEVIEW		
DURATION MINUTES	FREQUENCY		DURATION MINUTES	FREQUENCY		DURATION MINUTES	FREQUENCY		DURATION MINUTES	FREQUENCY		DURATION MINUTES	FREQUENCY	
	10 YEAR	100 YEAR		10 YEAR	100 YEAR		10 YEAR	100 YEAR		10 YEAR	100 YEAR		10 YEAR	100 YEAR
5	2.84	4.40	5	3.02	4.37	5	2.91	4.37	5	4.91	7.28	5	2.77	4.16
6	2.58	4.00	6	2.75	3.97	6	2.65	3.97	6	4.47	6.62	6	2.53	3.79
7	2.37	3.68	7	2.54	3.67	7	2.44	3.67	7	4.13	6.11	7	2.34	3.51
8	2.21	3.43	8	2.37	3.42	8	2.28	3.42	8	3.85	5.70	8	2.19	3.29
9	2.08	3.23	9	2.23	3.22	9	2.15	3.22	9	3.62	5.36	9	2.07	3.10
10	1.96	3.05	10	2.11	3.05	10	2.03	3.05	10	3.43	5.08	10	1.96	2.94
11	1.87	2.90	11	2.01	2.90	11	1.93	2.90	11	3.26	4.83	11	1.87	2.80
12	1.78	2.77	12	1.92	2.77	12	1.85	2.77	12	3.12	4.62	12	1.79	2.68
13	1.71	2.65	13	1.84	2.66	13	1.77	2.66	13	2.99	4.43	13	1.72	2.58
14	1.64	2.55	14	1.77	2.56	14	1.71	2.56	14	2.88	4.26	14	1.66	2.48
15	1.58	2.46	15	1.71	2.47	15	1.64	2.47	15	2.78	4.11	15	1.60	2.40
16	1.53	2.38	16	1.65	2.39	16	1.59	2.39	16	2.68	3.98	16	1.55	2.32
17	1.48	2.30	17	1.60	2.31	17	1.54	2.31	17	2.60	3.85	17	1.50	2.25
18	1.44	2.23	18	1.55	2.24	18	1.50	2.24	18	2.52	3.74	18	1.46	2.19
19	1.40	2.17	19	1.51	2.18	19	1.45	2.18	19	2.45	3.64	19	1.42	2.13
20	1.36	2.11	20	1.47	2.12	20	1.42	2.12	20	2.39	3.54	20	1.39	2.08
22	1.29	2.01	22	1.40	2.02	22	1.35	2.02	22	2.27	3.37	22	1.32	1.98
24	1.24	1.92	24	1.34	1.93	24	1.29	1.93	24	2.17	3.22	24	1.26	1.90
26	1.18	1.84	26	1.28	1.85	26	1.24	1.85	26	2.09	3.09	26	1.22	1.82
28	1.14	1.77	28	1.23	1.78	28	1.19	1.78	28	2.01	2.97	28	1.17	1.76
30	1.10	1.70	30	1.19	1.72	30	1.15	1.72	30	1.94	2.87	30	1.13	1.70
32	1.06	1.65	32	1.15	1.66	32	1.11	1.66	32	1.87	2.77	32	1.10	1.64
34	1.03	1.59	34	1.12	1.61	34	1.07	1.61	34	1.81	2.69	34	1.06	1.59
36	1.00	1.55	36	1.08	1.57	36	1.04	1.57	36	1.76	2.61	36	1.03	1.55
38	.97	1.50	38	1.05	1.52	38	1.01	1.52	38	1.71	2.54	38	1.01	1.51
40	.94	1.46	40	1.02	1.48	40	.99	1.48	40	1.67	2.47	40	.98	1.47
45	.89	1.37	45	.96	1.39	45	.93	1.39	45	1.57	2.32	45	.92	1.39
50	.84	1.30	50	.91	1.32	50	.88	1.32	50	1.48	2.20	50	.88	1.31
55	.80	1.24	55	.87	1.26	55	.84	1.26	55	1.41	2.09	55	.84	1.25
60	.76	1.18	60	.83	1.20	60	.80	1.20	60	1.35	2.00	60	.80	1.20
65	.73	1.13	65	.80	1.15	65	.77	1.15	65	1.29	1.92	65	.77	1.15
70	.70	1.09	70	.77	1.11	70	.74	1.11	70	1.25	1.85	70	.74	1.11
75	.68	1.05	75	.74	1.07	75	.71	1.07	75	1.20	1.78	75	.72	1.07
80	.65	1.01	80	.71	1.03	80	.69	1.03	80	1.16	1.72	80	.69	1.04
85	.63	.98	85	.69	1.00	85	.67	1.00	85	1.13	1.67	85	.67	1.01
SLOPE = .530			SLOPE = .520			SLOPE = .520			SLOPE = .520			SLOPE = .500		

ACTUAL IMPERVIOUS COVER

Land Use (1)	Range-Percent	Recommended Value For Average Conditions-Percent (2)
Natural or Agriculture	0 - 10	0
Single Family Residential: (3)		
40,000 S. F. (1 Acre) Lots	10 - 25	20
20,000 S. F. (½ Acre) Lots	30 - 45	40
7,200 - 10,000 S. F. Lots	45 - 55	50
Multiple Family Residential:		
Condominiums	45 - 70	65
Apartments	65 - 90	80
Mobile Home Park	60 - 85	75
Commercial, Downtown Business or Industrial	80 -100	90

Notes:

1. Land use should be based on ultimate development of the watershed. Long range master plans for the County and incorporated cities should be reviewed to insure reasonable land use assumptions.
2. Recommended values are based on average conditions which may not apply to a particular study area. The percentage impervious may vary greatly even on comparable sized lots due to differences in dwelling size, improvements, etc. Landscape practices should also be considered as it is common in some areas to use ornamental gravels underlain by impervious plastic materials in place of lawns and shrubs. A field investigation of a study area should always be made, and a review of aerial photos, where available may assist in estimating the percentage of impervious cover in developed areas.
3. For typical horse ranch subdivisions increase impervious area 5 percent over the values recommended in the table above.

**RCFC & WCD**  
HYDROLOGY MANUAL

**IMPERVIOUS COVER  
FOR  
DEVELOPED AREAS**

## RUNOFF COEFFICIENT CURVE DATA

The data in the following tables may be used to develop runoff coefficient (C) curves for any combination of runoff index (RI) number and antecedent moisture condition (AMC). For an RI number with an AMC of II (from Plate D-5.5) enter the tables on the following pages and plot the "C" curve data directly on Plate D-5.8. "C" curve data is given for even RI numbers only, but values may easily be interpolated for odd RI numbers.

For an AMC of I or III enter the tabulation on this page with the RI for AMC II, and read the appropriate RI for AMC I or III. Use this revised RI to enter the tables on the following pages to determine "C". For example if RI = 40 for AMC II, then RI = 22 for AMC I and RI = 60 for AMC III.

### AMC ADJUSTMENT RELATIONSHIPS

RI FOR AMC II	RI FOR OTHER AMC CONDITIONS:		RI FOR AMC II	RI FOR OTHER AMC CONDITIONS:	
	AMC I	AMC III		AMC I	AMC III
10	--	22	55	35	74
11	--	24	56	36	75
12	--	25	57	37	75
13	--	27	58	38	76
14	--	28	59	39	77
15	--	30	60	40	78
16	--	31	61	41	78
17	--	33	62	42	79
18	--	34	63	43	80
19	--	36	64	44	81
20	--	37	65	45	82
21	10	38	66	46	82
22	10	39	67	47	83
23	11	41	68	48	84
24	11	42	69	50	84
25	12	43	70	51	85
26	12	44	71	52	86
27	13	46	72	53	86
28	14	47	73	54	87
29	14	49	74	55	88
30	15	50	75	57	88
31	16	51	76	58	89
32	16	52	77	59	89
33	17	53	78	60	90
34	18	54	79	62	91
35	18	55	80	63	91
36	19	56	81	64	92
37	20	57	82	66	92
38	21	58	83	67	93
39	21	59	84	68	93
40	22	60	85	70	94
41	23	61	86	72	94
42	24	62	87	73	95
43	25	63	88	75	95
44	25	64	89	76	96
45	26	65	90	78	96
46	27	66	91	80	97
47	28	67	92	81	97
48	29	68	93	83	98
49	30	69	94	85	98
50	31	70	95	87	98
51	31	70	96	89	99
52	32	71	97	91	99
53	33	72	98	94	99
54	34	73	99	97	--

**RCFC & WCD**  
HYDROLOGY MANUAL

RUNOFF COEFFICIENT  
CURVE DATA

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group			
		A	B	C	D
<u>NATURAL COVERS -</u>					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparrel, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparrel, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	72	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	28	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
<u>URBAN COVERS -</u>					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
<u>AGRICULTURAL COVERS -</u>					
Fallow (Land plowed but not tilled or seeded)		76	85	90	92

**RCFC & WCD**  
HYDROLOGY MANUAL

**RUNOFF INDEX NUMBERS  
FOR  
PERVIOUS AREAS**

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group			
		A	B	C	D
<u>AGRICULTURAL COVERS</u> (cont.) -					
Legumes, Close Seeded (Alfalfa, sweetclover, timothy, etc.)	Poor	66	77	85	89
	Good	58	72	81	85
Orchards, Deciduous (Apples, apricots, pears, walnuts, etc.)	See Note 4				
Orchards, Evergreen (Citrus, avocados, etc.)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
Pasture, Dryland (Annual grasses)	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Pasture, Irrigated (Legumes and perennial grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
Row Crops (Field crops - tomatoes, sugar beets, etc.)	Poor	72	81	88	91
	Good	67	78	85	89
Small Grain (Wheat, oats, barley, etc.)	Poor	65	76	84	88
	Good	63	75	83	87
Vineyard	See Note 4				

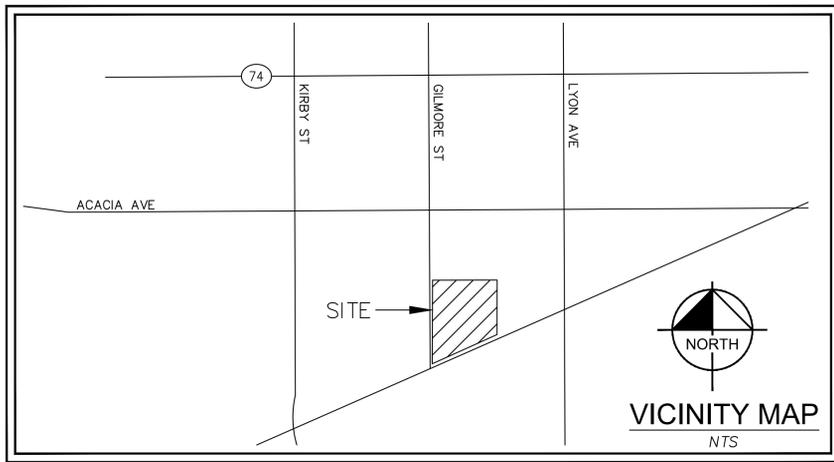
Notes:

1. All runoff index (RI) numbers are for Antecedent Moisture Condition (AMC) II.
2. Quality of cover definitions:  
 Poor-Heavily grazed or regularly burned areas. Less than 50 percent of the ground surface is protected by plant cover or brush and tree canopy.  
 Fair-Moderate cover with 50 percent to 75 percent of the ground surface protected.  
 Good-Heavy or dense cover with more than 75 percent of the ground surface protected.
3. See Plate C-2 for a detailed description of cover types.
4. Use runoff index numbers based on ground cover type. See discussion under "Cover Type Descriptions" on Plate C-2.
5. Reference Bibliography item 17.

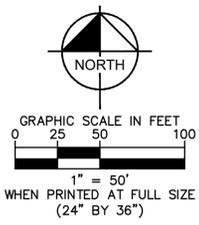
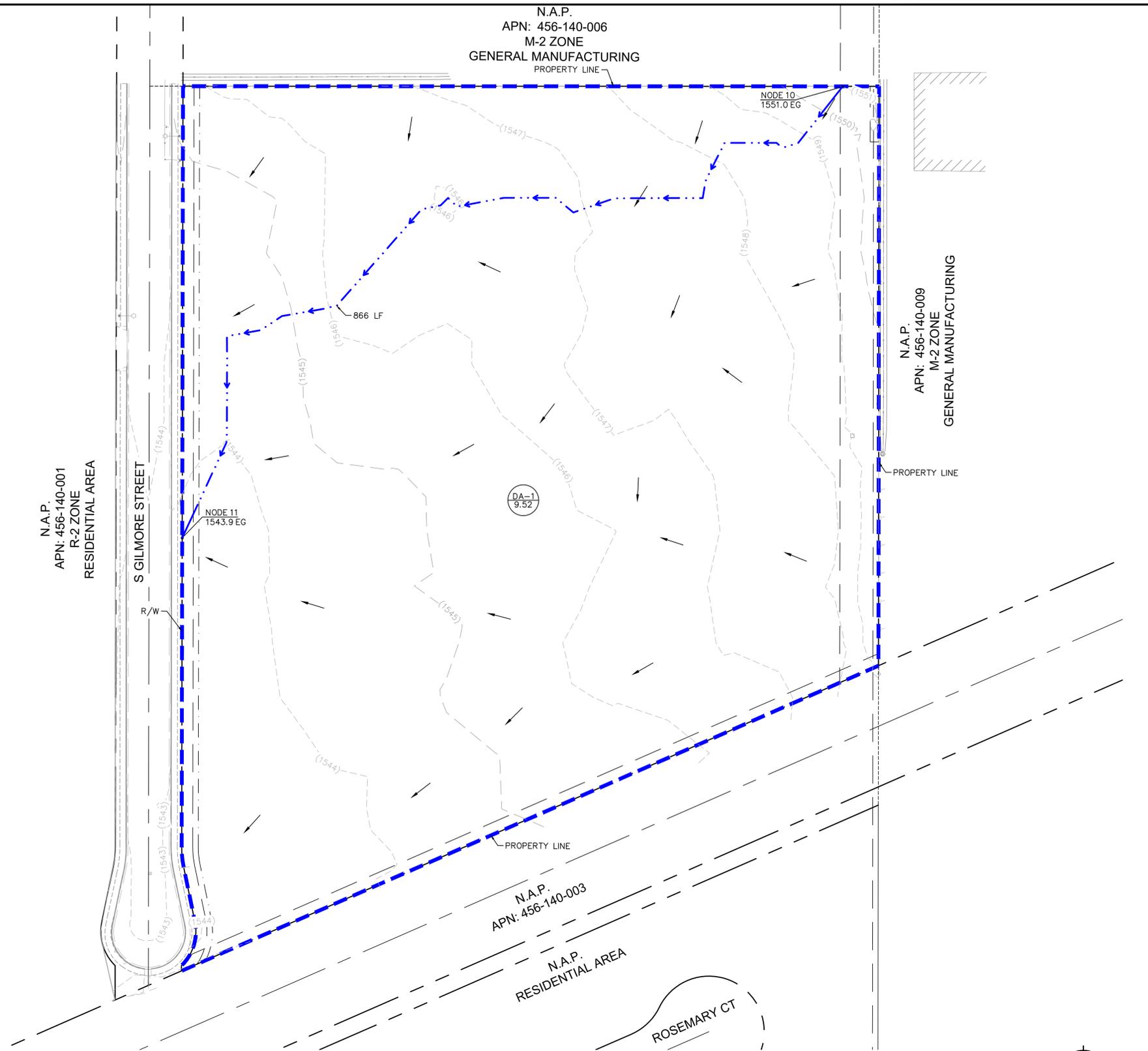
**RCFC & WCD**  
 HYDROLOGY MANUAL

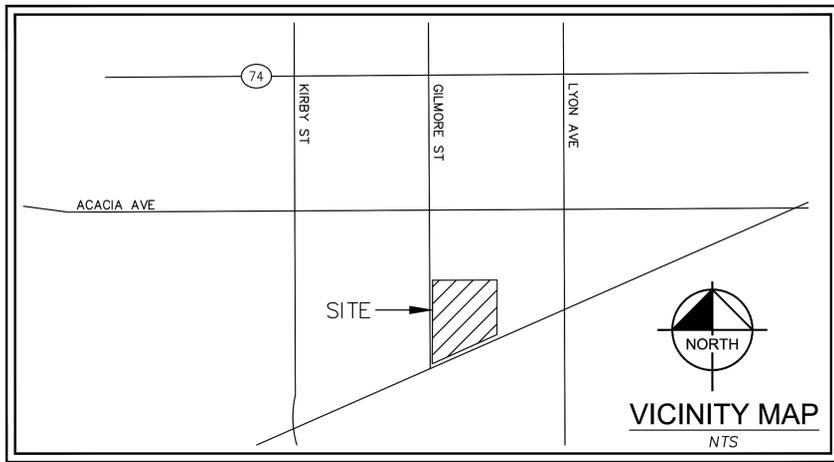
**RUNOFF INDEX NUMBERS  
 FOR  
 PERVIOUS AREAS**

**Appendix E**  
**Drainage Plans**



- LEGEND**
- DRAINAGE MANAGEMENT BOUNDARY
  - FLOW PATH
  - EXISTING CONTOUR
  - EXISTING MINOR CONTOUR
  - HYDROLOGY SUBAREA ACREAGE
  - FLOW ARROWS





**KEY NOTES:**

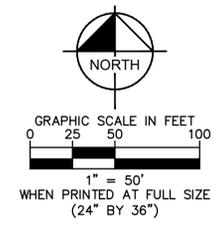
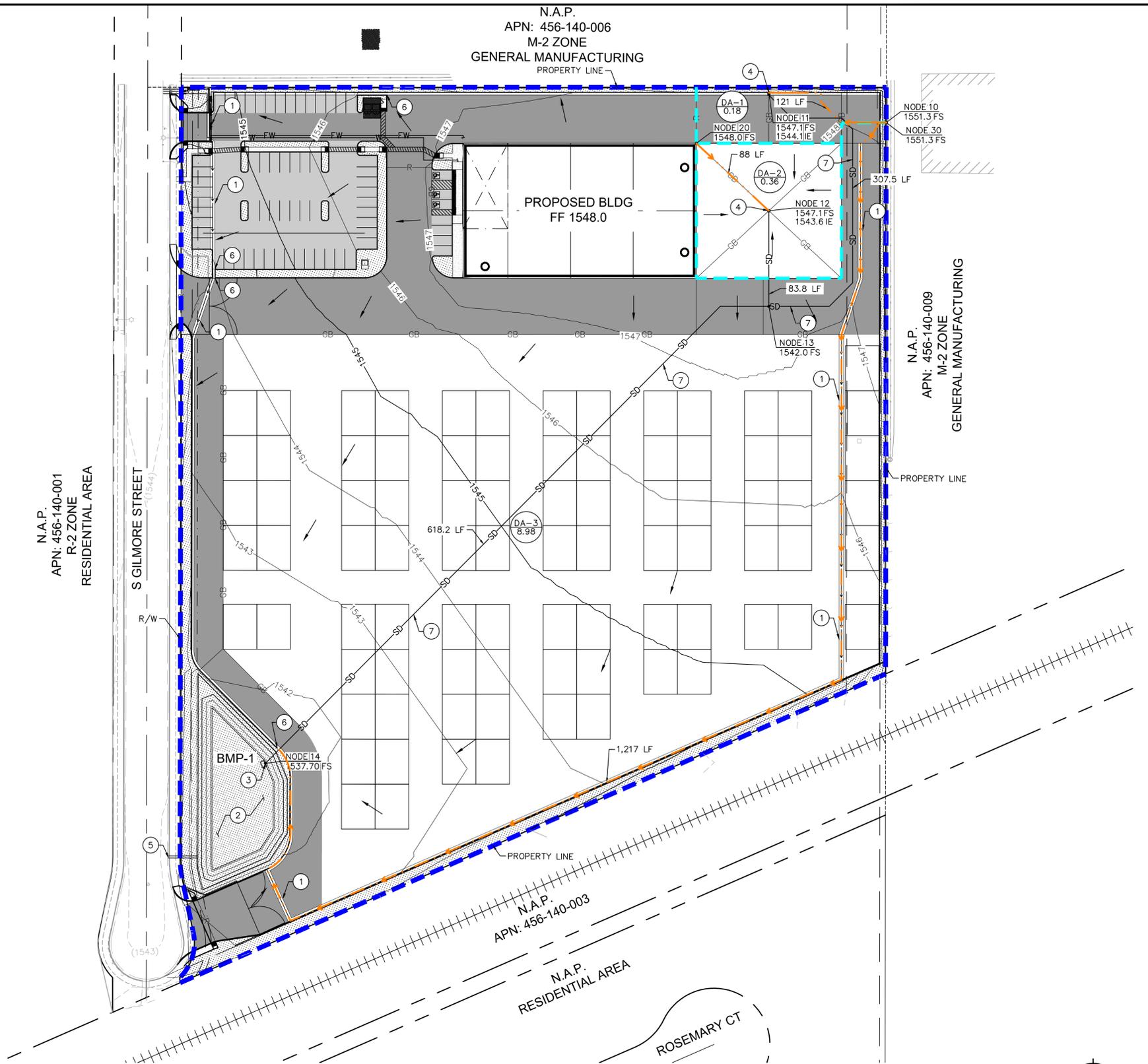
- 1 PROPOSED 4' RIBBON GUTTER
- 2 PROPOSED INFILTRATION BASIN
- 3 PROPOSED SAND FOREBAY
- 4 PROPOSED GRATED INLET WITH FILTER INSERT
- 5 PROPOSED UNDER SIDEWALK OVERFLOW DRAIN WITH FILTER INSERT
- 6 PROPOSED 2 FOOT CURB CUT
- 7 PROPOSED STORM DRAIN PIPE

**LANDSCAPE NOTE:**

FINISH GRADE OF LANDSCAPE AREAS IS TO BE DEPRESSED 1-2 INCHES (MIN.) BELOW TOP OF CURB, SIDEWALK OR PAVEMENT.

**LEGEND**

- DRAINAGE MANAGEMENT BOUNDARY
- DRAINAGE SUBAREA BOUNDARY
- FLOW PATH
- (XXXX) EXISTING CONTOUR
- (XXXX) EXISTING MINOR CONTOUR
- XXXX PROPOSED CONTOUR
- XXXX PROPOSED MINOR CONTOUR
- HYDROLOGY SUBAREA ACREAGE
- FLOW ARROWS



## **Appendix F**

### **Rational Method Calculations**

\*\*\*\*\*  
RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON  
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT  
(RCFC&WCD) 1978 HYDROLOGY MANUAL  
(c) Copyright 1982-2011 Advanced Engineering Software (aes)  
(Rational Tabling Version 18.0)  
Release Date: 07/01/2011 License ID 1499

Analysis prepared by:

Kimley-Horn and Associates, Inc.  
765 The City Drive  
Suite 200  
Orange, CA 92868

\*\*\*\*\* DESCRIPTION OF STUDY \*\*\*\*\*  
\* JD FIELDS HEMET \*  
\* EXISTING 2 YEAR \*  
\* 10/14/2021 LA \*  
\*\*\*\*\*

FILE NAME: JDH2E.DAT  
TIME/DATE OF STUDY: 22:06 10/13/2021

-----  
USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:  
-----

USER SPECIFIED STORM EVENT (YEAR) = 2.00  
SPECIFIED MINIMUM PIPE SIZE (INCH) = 8.00  
SPECIFIED PERCENT OF GRADIENTS (DECIMAL) TO USE FOR FRICTION SLOPE = 1.00  
10-YEAR STORM 10-MINUTE INTENSITY (INCH/HOUR) = 1.960  
10-YEAR STORM 60-MINUTE INTENSITY (INCH/HOUR) = 0.760  
100-YEAR STORM 10-MINUTE INTENSITY (INCH/HOUR) = 3.050  
100-YEAR STORM 60-MINUTE INTENSITY (INCH/HOUR) = 1.180  
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.5287434  
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.5299969  
COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 2.00 1-HOUR INTENSITY (INCH/HOUR) = 0.466  
SLOPE OF INTENSITY DURATION CURVE = 0.5287

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL  
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

\*USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL\*

NO.	HALF- WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL: IN- / OUT- / PARK- SIDE / SIDE / WAY	CURB HEIGHT (FT)	GUTTER-GEOMETRIES: WIDTH (FT)	LIP (FT)	HIKE (FT)	MANNING FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET  
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)\*(Velocity) Constraint = 6.0 (FT\*FT/S)

\*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN  
OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.\*

\*\*\*\*\*  
FLOW PROCESS FROM NODE 10.00 TO NODE 11.00 IS CODE = 21  
-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS: UNDEVELOPED WITH POOR COVER  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH (FEET) = 866.00

UPSTREAM ELEVATION (FEET) = 1551.00  
DOWNSTREAM ELEVATION (FEET) = 1543.90  
ELEVATION DIFFERENCE (FEET) = 7.10  
TC =  $0.533 * [(866.00 ** 3) / (7.10)] ** .2$  = 20.829  
2 YEAR RAINFALL INTENSITY (INCH/HOUR) = 0.816  
UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .2013  
SOIL CLASSIFICATION IS "A"  
SUBAREA RUNOFF (CFS) = 1.56  
TOTAL AREA (ACRES) = 9.52 TOTAL RUNOFF (CFS) = 1.56

=====

END OF STUDY SUMMARY:

TOTAL AREA (ACRES) = 9.5 TC (MIN.) = 20.83  
PEAK FLOW RATE (CFS) = 1.56

=====

END OF RATIONAL METHOD ANALYSIS

\*\*\*\*\*  
RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON  
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT  
(RCFC&WCD) 1978 HYDROLOGY MANUAL  
(c) Copyright 1982-2011 Advanced Engineering Software (aes)  
(Rational Tabling Version 18.0)  
Release Date: 07/01/2011 License ID 1499

Analysis prepared by:

Kimley-Horn and Associates, Inc.  
765 The City Drive  
Suite 200  
Orange, CA 92868

\*\*\*\*\* DESCRIPTION OF STUDY \*\*\*\*\*  
\* JD FIELDS HEMET \*  
\* EXISTING 5 YEAR \*  
\* 10/14/2021 LA \*  
\*\*\*\*\*

FILE NAME: JDH5E.DAT  
TIME/DATE OF STUDY: 22:09 10/13/2021

-----  
USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:  
-----

USER SPECIFIED STORM EVENT (YEAR) = 5.00  
SPECIFIED MINIMUM PIPE SIZE (INCH) = 8.00  
SPECIFIED PERCENT OF GRADIENTS (DECIMAL) TO USE FOR FRICTION SLOPE = 1.00  
10-YEAR STORM 10-MINUTE INTENSITY (INCH/HOUR) = 1.960  
10-YEAR STORM 60-MINUTE INTENSITY (INCH/HOUR) = 0.760  
100-YEAR STORM 10-MINUTE INTENSITY (INCH/HOUR) = 3.050  
100-YEAR STORM 60-MINUTE INTENSITY (INCH/HOUR) = 1.180  
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.5287434  
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.5299969  
COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 5.00 1-HOUR INTENSITY (INCH/HOUR) = 0.650  
SLOPE OF INTENSITY DURATION CURVE = 0.5287

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL  
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

\*USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL\*

NO.	HALF- WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL: IN- / OUT- / PARK- SIDE / SIDE / WAY	CURB HEIGHT (FT)	GUTTER-GEOMETRIES: WIDTH (FT)	LIP (FT)	HIKE (FT)	MANNING FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

- Relative Flow-Depth = 0.00 FEET  
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
  - (Depth)\*(Velocity) Constraint = 6.0 (FT\*FT/S)
- \*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN  
OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.\*

\*\*\*\*\*  
FLOW PROCESS FROM NODE 10.00 TO NODE 11.00 IS CODE = 21  
-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS: UNDEVELOPED WITH POOR COVER  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH (FEET) = 866.00

UPSTREAM ELEVATION (FEET) = 1551.00  
 DOWNSTREAM ELEVATION (FEET) = 1543.90  
 ELEVATION DIFFERENCE (FEET) = 7.10  
 $TC = 0.533 * [(866.00^{**3}) / (7.10)]^{**0.2} = 20.829$   
 5 YEAR RAINFALL INTENSITY (INCH/HOUR) = 1.137  
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .2577  
 SOIL CLASSIFICATION IS "A"  
 SUBAREA RUNOFF (CFS) = 2.79  
 TOTAL AREA (ACRES) = 9.52      TOTAL RUNOFF (CFS) = 2.79

=====  
 END OF STUDY SUMMARY:  
 TOTAL AREA (ACRES) = 9.5      TC (MIN.) = 20.83  
 PEAK FLOW RATE (CFS) = 2.79  
 =====

=====  
 END OF RATIONAL METHOD ANALYSIS

\*\*\*\*\*  
RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON  
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT  
(RCFC&WCD) 1978 HYDROLOGY MANUAL  
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(Rational Tabling Version 18.0)  
Release Date: 07/01/2011 License ID 1499

Analysis prepared by:

Kimley-Horn and Associates, Inc.  
765 The City Drive  
Suite 200  
Orange, CA 92868

\*\*\*\*\* DESCRIPTION OF STUDY \*\*\*\*\*  
\* JD FIELDS HEMET \*  
\* EXISTING 10 YEAR \*  
\* 10/14/2021 LA \*  
\*\*\*\*\*

FILE NAME: JDH10E.DAT  
TIME/DATE OF STUDY: 22:00 10/13/2021

-----  
USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:  
-----

USER SPECIFIED STORM EVENT(YEAR) = 10.00  
SPECIFIED MINIMUM PIPE SIZE(INCH) = 8.00  
SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 1.00  
10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.960  
10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.760  
100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 3.050  
100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.180  
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.5287434  
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.5299969  
COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 10.00 1-HOUR INTENSITY(INCH/HOUR) = 0.768  
SLOPE OF INTENSITY DURATION CURVE = 0.5287

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL  
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

\*USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL\*

NO.	HALF- CROWN TO		STREET-CROSSFALL:		CURB	GUTTER-GEOMETRIES: MANNING			
	WIDTH	CROSSFALL	IN-	OUT-/PARK-		HEIGHT	WIDTH	LIP	HIKE
====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	30.0	20.0	0.018/0.018/0.020		0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET  
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)\*(Velocity) Constraint = 6.0 (FT\*FT/S)

\*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN  
OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.\*

\*\*\*\*\*  
FLOW PROCESS FROM NODE 10.00 TO NODE 11.00 IS CODE = 21  
-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS: UNDEVELOPED WITH POOR COVER  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH(FEET) = 866.00

UPSTREAM ELEVATION (FEET) = 1551.00  
DOWNSTREAM ELEVATION (FEET) = 1543.90  
ELEVATION DIFFERENCE (FEET) = 7.10  
TC =  $0.533 * [(866.00 ** 3) / (7.10)] ** .2$  = 20.829  
10 YEAR RAINFALL INTENSITY (INCH/HOUR) = 1.343  
UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .2894  
SOIL CLASSIFICATION IS "A"  
SUBAREA RUNOFF (CFS) = 3.70  
TOTAL AREA (ACRES) = 9.52 TOTAL RUNOFF (CFS) = 3.70

=====  
END OF STUDY SUMMARY:  
TOTAL AREA (ACRES) = 9.5 TC (MIN.) = 20.83  
PEAK FLOW RATE (CFS) = 3.70  
=====

=====  
END OF RATIONAL METHOD ANALYSIS

\*\*\*\*\*  
RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON  
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT  
(RCFC&WCD) 1978 HYDROLOGY MANUAL  
(c) Copyright 1982-2011 Advanced Engineering Software (aes)  
(Rational Tabling Version 18.0)  
Release Date: 07/01/2011 License ID 1499

Analysis prepared by:

Kimley-Horn and Associates, Inc.  
765 The City Drive  
Suite 200  
Orange, CA 92868

\*\*\*\*\* DESCRIPTION OF STUDY \*\*\*\*\*  
\* JD FIELDS HEMET \*  
\* EXISTING 100 YEAR \*  
\* 10/14/2021 LA \*  
\*\*\*\*\*

FILE NAME: JDH100E.DAT  
TIME/DATE OF STUDY: 22:02 10/13/2021

-----  
USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:  
-----

USER SPECIFIED STORM EVENT(YEAR) = 100.00  
SPECIFIED MINIMUM PIPE SIZE(INCH) = 8.00  
SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 1.00  
10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.960  
10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.760  
100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 3.050  
100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.180  
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.5287434  
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.5299969  
COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 100.00 1-HOUR INTENSITY(INCH/HOUR) = 1.180  
SLOPE OF INTENSITY DURATION CURVE = 0.5300

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL  
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

\*USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL\*

NO.	HALF- WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL: IN- / OUT- / PARK- SIDE / SIDE / WAY	CURB HEIGHT (FT)	GUTTER-GEOMETRIES: WIDTH (FT)	LIP (FT)	HIKE (FT)	MANNING FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET  
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)\*(Velocity) Constraint = 6.0 (FT\*FT/S)

\*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN  
OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.\*

\*\*\*\*\*  
FLOW PROCESS FROM NODE 10.00 TO NODE 11.00 IS CODE = 21  
-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS: UNDEVELOPED WITH POOR COVER  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH(FEET) = 866.00

UPSTREAM ELEVATION (FEET) = 1551.00  
 DOWNSTREAM ELEVATION (FEET) = 1543.90  
 ELEVATION DIFFERENCE (FEET) = 7.10  
 $TC = 0.533 * [(866.00^{**3}) / (7.10)]^{**0.2} = 20.829$   
 100 YEAR RAINFALL INTENSITY (INCH/HOUR) = 2.067  
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .3797  
 SOIL CLASSIFICATION IS "A"  
 SUBAREA RUNOFF (CFS) = 7.47  
 TOTAL AREA (ACRES) = 9.52      TOTAL RUNOFF (CFS) = 7.47

=====  
 END OF STUDY SUMMARY:  
 TOTAL AREA (ACRES) = 9.5      TC (MIN.) = 20.83  
 PEAK FLOW RATE (CFS) = 7.47  
 =====

=====  
 END OF RATIONAL METHOD ANALYSIS

\*\*\*\*\*  
RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON  
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT  
(RCFC&WCD) 1978 HYDROLOGY MANUAL  
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(Rational Tabling Version 18.0)  
Release Date: 07/01/2011 License ID 1499

Analysis prepared by:

Kimley-Horn and Associates, Inc.  
765 The City Drive  
Suite 200  
Orange, CA 92868

\*\*\*\*\* DESCRIPTION OF STUDY \*\*\*\*\*  
\* JD FIELD HEMET \*  
\* PROPOSED 2 YEAR \*  
\* 10/14/2021 LA \*  
\*\*\*\*\*

FILE NAME: JDH2P.DAT  
TIME/DATE OF STUDY: 14:38 10/14/2021

-----  
USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:  
-----

USER SPECIFIED STORM EVENT (YEAR) = 2.00  
SPECIFIED MINIMUM PIPE SIZE (INCH) = 8.00  
SPECIFIED PERCENT OF GRADIENTS (DECIMAL) TO USE FOR FRICTION SLOPE = 1.00  
10-YEAR STORM 10-MINUTE INTENSITY (INCH/HOUR) = 1.960  
10-YEAR STORM 60-MINUTE INTENSITY (INCH/HOUR) = 0.760  
100-YEAR STORM 10-MINUTE INTENSITY (INCH/HOUR) = 3.050  
100-YEAR STORM 60-MINUTE INTENSITY (INCH/HOUR) = 1.180  
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.5287434  
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.5299969  
COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 2.00 1-HOUR INTENSITY (INCH/HOUR) = 0.466  
SLOPE OF INTENSITY DURATION CURVE = 0.5287

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL  
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

\*USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL\*

NO.	HALF- WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL: IN- / OUT- / PARK- SIDE / SIDE / WAY	CURB HEIGHT (FT)	GUTTER-GEOMETRIES: WIDTH (FT)	LIP (FT)	HIKE (FT)	MANNING FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET  
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)\*(Velocity) Constraint = 6.0 (FT\*FT/S)

\*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN  
OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.\*

\*\*\*\*\*  
FLOW PROCESS FROM NODE 10.00 TO NODE 11.00 IS CODE = 21  
-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH (FEET) = 121.00

```

UPSTREAM ELEVATION(FEET) = 1551.30
DOWNSTREAM ELEVATION(FEET) = 1547.10
ELEVATION DIFFERENCE(FEET) = 4.20
TC = 0.393*[( 121.00**3)/( 4.20)]**.2 = 5.236
2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.694
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .6184
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF(CFS) = 0.19
TOTAL AREA(ACRES) = 0.18 TOTAL RUNOFF(CFS) = 0.19
*****
FLOW PROCESS FROM NODE 11.00 TO NODE 12.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1544.10 DOWNSTREAM(FEET) = 1542.00
FLOW LENGTH(FEET) = 307.50 MANNING'S N = 0.013
ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 8.000
DEPTH OF FLOW IN 8.0 INCH PIPE IS 2.4 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 2.18
ESTIMATED PIPE DIAMETER(INCH) = 8.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.19
PIPE TRAVEL TIME(MIN.) = 2.35 Tc(MIN.) = 7.58
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 12.00 = 428.50 FEET.
*****
FLOW PROCESS FROM NODE 12.00 TO NODE 12.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 7.58
RAINFALL INTENSITY(INCH/HR) = 1.39
TOTAL STREAM AREA(ACRES) = 0.18
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.19
*****
FLOW PROCESS FROM NODE 20.00 TO NODE 12.00 IS CODE = 21
-----
>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<
=====
ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 88.00
UPSTREAM ELEVATION(FEET) = 1548.00
DOWNSTREAM ELEVATION(FEET) = 1547.10
ELEVATION DIFFERENCE(FEET) = 0.90
TC = 0.393*[( 88.00**3)/( 0.90)]**.2 = 5.886
2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.592
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .6119
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF(CFS) = 0.35
TOTAL AREA(ACRES) = 0.36 TOTAL RUNOFF(CFS) = 0.35
*****
FLOW PROCESS FROM NODE 12.00 TO NODE 13.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1543.60 DOWNSTREAM(FEET) = 1542.00
FLOW LENGTH(FEET) = 83.80 MANNING'S N = 0.013

```

```

ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 8.000
DEPTH OF FLOW IN 8.0 INCH PIPE IS 2.5 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 3.77
ESTIMATED PIPE DIAMETER(INCH) = 8.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.35
PIPE TRAVEL TIME(MIN.) = 0.37 Tc(MIN.) = 6.26
LONGEST FLOWPATH FROM NODE 20.00 TO NODE 13.00 = 171.80 FEET.
*****
FLOW PROCESS FROM NODE 13.00 TO NODE 13.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
TIME OF CONCENTRATION(MIN.) = 6.26
RAINFALL INTENSITY(INCH/HR) = 1.54
TOTAL STREAM AREA(ACRES) = 0.36
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.35

** CONFLUENCE DATA **
STREAM RUNOFF Tc INTENSITY AREA
NUMBER (CFS) (MIN.) (INCH/HOUR) (ACRE)
1 0.19 7.58 1.392 0.18
2 0.35 6.26 1.541 0.36

*****WARNING*****
IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.
*****

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **
STREAM RUNOFF Tc INTENSITY
NUMBER (CFS) (MIN.) (INCH/HOUR)
1 0.51 6.26 1.541
2 0.51 7.58 1.392

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
PEAK FLOW RATE(CFS) = 0.51 Tc(MIN.) = 6.26
TOTAL AREA(ACRES) = 0.5
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 13.00 = 428.50 FEET.
*****
FLOW PROCESS FROM NODE 13.00 TO NODE 14.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1542.00 DOWNSTREAM(FEET) = 1537.70
FLOW LENGTH(FEET) = 618.20 MANNING'S N = 0.013
DEPTH OF FLOW IN 9.0 INCH PIPE IS 3.8 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 2.89
ESTIMATED PIPE DIAMETER(INCH) = 9.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.51
PIPE TRAVEL TIME(MIN.) = 3.56 Tc(MIN.) = 9.82
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 14.00 = 1046.70 FEET.
*****
FLOW PROCESS FROM NODE 14.00 TO NODE 14.00 IS CODE = 1
-----

```

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2  
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:  
TIME OF CONCENTRATION(MIN.) = 9.82  
RAINFALL INTENSITY(INCH/HR) = 1.21  
TOTAL STREAM AREA(ACRES) = 0.54  
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.51

\*\*\*\*\*

FLOW PROCESS FROM NODE 30.00 TO NODE 14.00 IS CODE = 21

-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH(FEET) = 1217.00  
UPSTREAM ELEVATION(FEET) = 1551.30  
DOWNSTREAM ELEVATION(FEET) = 1537.70  
ELEVATION DIFFERENCE(FEET) = 13.60  
TC = 0.393\*[( 1217.00\*\*3)/( 13.60)]\*\*.2 = 16.535  
2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.922  
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .5605  
SOIL CLASSIFICATION IS "A"  
SUBAREA RUNOFF(CFS) = 4.64  
TOTAL AREA(ACRES) = 8.98 TOTAL RUNOFF(CFS) = 4.64

\*\*\*\*\*

FLOW PROCESS FROM NODE 14.00 TO NODE 14.00 IS CODE = 1

-----

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<

=====

TOTAL NUMBER OF STREAMS = 2  
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:  
TIME OF CONCENTRATION(MIN.) = 16.54  
RAINFALL INTENSITY(INCH/HR) = 0.92  
TOTAL STREAM AREA(ACRES) = 8.98  
PEAK FLOW RATE(CFS) AT CONFLUENCE = 4.64

\*\* CONFLUENCE DATA \*\*

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	0.51	9.82	1.215	0.54
2	4.64	16.54	0.922	8.98

\*\*\*\*\*WARNING\*\*\*\*\*

IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

\*\*\*\*\*

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO  
CONFLUENCE FORMULA USED FOR 2 STREAMS.

\*\* PEAK FLOW RATE TABLE \*\*

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	3.26	9.82	1.215
2	5.03	16.54	0.922

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:  
PEAK FLOW RATE(CFS) = 5.03 Tc(MIN.) = 16.54  
TOTAL AREA(ACRES) = 9.5

LONGEST FLOWPATH FROM NODE 30.00 TO NODE 14.00 = 1217.00 FEET.

=====

END OF STUDY SUMMARY:

TOTAL AREA (ACRES) = 9.5 TC (MIN.) = 16.54  
PEAK FLOW RATE (CFS) = 5.03

=====

END OF RATIONAL METHOD ANALYSIS

\*\*\*\*\*  
RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON  
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT  
(RCFC&WCD) 1978 HYDROLOGY MANUAL  
(c) Copyright 1982-2011 Advanced Engineering Software (aes)  
(Rational Tabling Version 18.0)  
Release Date: 07/01/2011 License ID 1499

Analysis prepared by:

Kimley-Horn and Associates, Inc.  
765 The City Drive  
Suite 200  
Orange, CA 92868

\*\*\*\*\* DESCRIPTION OF STUDY \*\*\*\*\*  
\* JD FIELD HEMET \*  
\* PROPOSED 5 YEAR \*  
\* 10/14/2021 LA \*  
\*\*\*\*\*

FILE NAME: JDH5P.DAT  
TIME/DATE OF STUDY: 14:40 10/14/2021

-----  
USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:  
-----

USER SPECIFIED STORM EVENT (YEAR) = 5.00  
SPECIFIED MINIMUM PIPE SIZE (INCH) = 8.00  
SPECIFIED PERCENT OF GRADIENTS (DECIMAL) TO USE FOR FRICTION SLOPE = 1.00  
10-YEAR STORM 10-MINUTE INTENSITY (INCH/HOUR) = 1.960  
10-YEAR STORM 60-MINUTE INTENSITY (INCH/HOUR) = 0.760  
100-YEAR STORM 10-MINUTE INTENSITY (INCH/HOUR) = 3.050  
100-YEAR STORM 60-MINUTE INTENSITY (INCH/HOUR) = 1.180  
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.5287434  
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.5299969  
COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 5.00 1-HOUR INTENSITY (INCH/HOUR) = 0.650  
SLOPE OF INTENSITY DURATION CURVE = 0.5287

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL  
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

\*USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL\*

NO.	HALF- WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL: IN- / OUT- / PARK- SIDE / SIDE / WAY	CURB HEIGHT (FT)	GUTTER-GEOMETRIES: WIDTH (FT)	LIP (FT)	HIKE (FT)	MANNING FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET  
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)\*(Velocity) Constraint = 6.0 (FT\*FT/S)

\*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN  
OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.\*

\*\*\*\*\*  
FLOW PROCESS FROM NODE 10.00 TO NODE 11.00 IS CODE = 21  
-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH (FEET) = 121.00

```

UPSTREAM ELEVATION(FEET) = 1551.30
DOWNSTREAM ELEVATION(FEET) = 1547.10
ELEVATION DIFFERENCE(FEET) = 4.20
TC = 0.393*[( 121.00**3)/( 4.20)]**.2 = 5.236
  5 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.359
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .6544
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF(CFS) = 0.28
TOTAL AREA(ACRES) = 0.18 TOTAL RUNOFF(CFS) = 0.28

*****
FLOW PROCESS FROM NODE 11.00 TO NODE 12.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1544.10 DOWNSTREAM(FEET) = 1542.00
FLOW LENGTH(FEET) = 307.50 MANNING'S N = 0.013
ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 8.000
DEPTH OF FLOW IN 8.0 INCH PIPE IS 2.9 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 2.44
ESTIMATED PIPE DIAMETER(INCH) = 8.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.28
PIPE TRAVEL TIME(MIN.) = 2.10 Tc(MIN.) = 7.34
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 12.00 = 428.50 FEET.

*****
FLOW PROCESS FROM NODE 12.00 TO NODE 12.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 7.34
RAINFALL INTENSITY(INCH/HR) = 1.97
TOTAL STREAM AREA(ACRES) = 0.18
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.28

*****
FLOW PROCESS FROM NODE 20.00 TO NODE 12.00 IS CODE = 21
-----
>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<
=====
ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 88.00
UPSTREAM ELEVATION(FEET) = 1548.00
DOWNSTREAM ELEVATION(FEET) = 1547.10
ELEVATION DIFFERENCE(FEET) = 0.90
TC = 0.393*[( 88.00**3)/( 0.90)]**.2 = 5.886
  5 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.217
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .6476
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF(CFS) = 0.52
TOTAL AREA(ACRES) = 0.36 TOTAL RUNOFF(CFS) = 0.52

*****
FLOW PROCESS FROM NODE 12.00 TO NODE 13.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1543.60 DOWNSTREAM(FEET) = 1542.00
FLOW LENGTH(FEET) = 83.80 MANNING'S N = 0.013

```

```

ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 8.000
DEPTH OF FLOW IN 8.0 INCH PIPE IS 3.1 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 4.20
ESTIMATED PIPE DIAMETER(INCH) = 8.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.52
PIPE TRAVEL TIME(MIN.) = 0.33 Tc(MIN.) = 6.22
LONGEST FLOWPATH FROM NODE 20.00 TO NODE 13.00 = 171.80 FEET.
*****
FLOW PROCESS FROM NODE 13.00 TO NODE 13.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
TIME OF CONCENTRATION(MIN.) = 6.22
RAINFALL INTENSITY(INCH/HR) = 2.15
TOTAL STREAM AREA(ACRES) = 0.36
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.52

** CONFLUENCE DATA **
STREAM RUNOFF Tc INTENSITY AREA
NUMBER (CFS) (MIN.) (INCH/HOUR) (ACRE)
1 0.28 7.34 1.973 0.18
2 0.52 6.22 2.154 0.36

*****WARNING*****
IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.
*****

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **
STREAM RUNOFF Tc INTENSITY
NUMBER (CFS) (MIN.) (INCH/HOUR)
1 0.75 6.22 2.154
2 0.75 7.34 1.973

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
PEAK FLOW RATE(CFS) = 0.75 Tc(MIN.) = 6.22
TOTAL AREA(ACRES) = 0.5
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 13.00 = 428.50 FEET.
*****
FLOW PROCESS FROM NODE 13.00 TO NODE 14.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1542.00 DOWNSTREAM(FEET) = 1537.70
FLOW LENGTH(FEET) = 618.20 MANNING'S N = 0.013
DEPTH OF FLOW IN 9.0 INCH PIPE IS 4.8 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 3.18
ESTIMATED PIPE DIAMETER(INCH) = 9.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.75
PIPE TRAVEL TIME(MIN.) = 3.24 Tc(MIN.) = 9.46
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 14.00 = 1046.70 FEET.
*****
FLOW PROCESS FROM NODE 14.00 TO NODE 14.00 IS CODE = 1
-----

```

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2  
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:  
TIME OF CONCENTRATION(MIN.) = 9.46  
RAINFALL INTENSITY(INCH/HR) = 1.73  
TOTAL STREAM AREA(ACRES) = 0.54  
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.75

\*\*\*\*\*

FLOW PROCESS FROM NODE 30.00 TO NODE 14.00 IS CODE = 21

-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH(FEET) = 1217.00  
UPSTREAM ELEVATION(FEET) = 1551.30  
DOWNSTREAM ELEVATION(FEET) = 1537.70  
ELEVATION DIFFERENCE(FEET) = 13.60  
TC = 0.393\*[(1217.00\*\*3)/(13.60)]\*\*.2 = 16.535  
5 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.284  
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .5904  
SOIL CLASSIFICATION IS "A"  
SUBAREA RUNOFF(CFS) = 6.81  
TOTAL AREA(ACRES) = 8.98 TOTAL RUNOFF(CFS) = 6.81

\*\*\*\*\*

FLOW PROCESS FROM NODE 14.00 TO NODE 14.00 IS CODE = 1

-----

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<  
>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<

=====

TOTAL NUMBER OF STREAMS = 2  
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:  
TIME OF CONCENTRATION(MIN.) = 16.54  
RAINFALL INTENSITY(INCH/HR) = 1.28  
TOTAL STREAM AREA(ACRES) = 8.98  
PEAK FLOW RATE(CFS) AT CONFLUENCE = 6.81

\*\* CONFLUENCE DATA \*\*

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	0.75	9.46	1.725	0.54
2	6.81	16.54	1.284	8.98

\*\*\*\*\*WARNING\*\*\*\*\*  
IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED  
ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA  
WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.  
\*\*\*\*\*

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO  
CONFLUENCE FORMULA USED FOR 2 STREAMS.

\*\* PEAK FLOW RATE TABLE \*\*

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	4.65	9.46	1.725
2	7.37	16.54	1.284

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:  
PEAK FLOW RATE(CFS) = 7.37 Tc(MIN.) = 16.54  
TOTAL AREA(ACRES) = 9.5

LONGEST FLOWPATH FROM NODE 30.00 TO NODE 14.00 = 1217.00 FEET.

=====

END OF STUDY SUMMARY:

TOTAL AREA (ACRES) = 9.5 TC (MIN.) = 16.54  
PEAK FLOW RATE (CFS) = 7.37

=====

END OF RATIONAL METHOD ANALYSIS

\*\*\*\*\*  
RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON  
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT  
(RCFC&WCD) 1978 HYDROLOGY MANUAL  
(c) Copyright 1982-2011 Advanced Engineering Software (aes)  
(Rational Tabling Version 18.0)  
Release Date: 07/01/2011 License ID 1499

Analysis prepared by:

Kimley-Horn and Associates, Inc.  
765 The City Drive  
Suite 200  
Orange, CA 92868

\*\*\*\*\* DESCRIPTION OF STUDY \*\*\*\*\*  
\* JD FIELD HEMET \*  
\* PROPOSED 10 YEAR \*  
\* 10/14/2021 LA \*  
\*\*\*\*\*

FILE NAME: JDH10P.DAT  
TIME/DATE OF STUDY: 14:41 10/14/2021

-----  
USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:  
-----

USER SPECIFIED STORM EVENT(YEAR) = 10.00  
SPECIFIED MINIMUM PIPE SIZE(INCH) = 8.00  
SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 1.00  
10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.960  
10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.760  
100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 3.050  
100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.180  
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.5287434  
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.5299969  
COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 10.00 1-HOUR INTENSITY(INCH/HOUR) = 0.768  
SLOPE OF INTENSITY DURATION CURVE = 0.5287

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL  
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

\*USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL\*

NO.	HALF- WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL: IN- / OUT- / PARK- SIDE / SIDE / WAY	CURB HEIGHT (FT)	GUTTER-GEOMETRIES: WIDTH (FT)	LIP (FT)	HIKE (FT)	MANNING FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET  
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)\*(Velocity) Constraint = 6.0 (FT\*FT/S)

\*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN  
OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.\*

\*\*\*\*\*  
FLOW PROCESS FROM NODE 10.00 TO NODE 11.00 IS CODE = 21  
-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH(FEET) = 121.00

```

UPSTREAM ELEVATION(FEET) = 1551.30
DOWNSTREAM ELEVATION(FEET) = 1547.10
ELEVATION DIFFERENCE(FEET) = 4.20
TC = 0.393*[( 121.00**3)/( 4.20)]**.2 = 5.236
10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.787
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .6732
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF(CFS) = 0.34
TOTAL AREA(ACRES) = 0.18 TOTAL RUNOFF(CFS) = 0.34
*****
FLOW PROCESS FROM NODE 11.00 TO NODE 12.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1544.10 DOWNSTREAM(FEET) = 1542.00
FLOW LENGTH(FEET) = 307.50 MANNING'S N = 0.013
ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 8.000
DEPTH OF FLOW IN 8.0 INCH PIPE IS 3.2 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 2.58
ESTIMATED PIPE DIAMETER(INCH) = 8.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.34
PIPE TRAVEL TIME(MIN.) = 1.98 Tc(MIN.) = 7.22
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 12.00 = 428.50 FEET.
*****
FLOW PROCESS FROM NODE 12.00 TO NODE 12.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 7.22
RAINFALL INTENSITY(INCH/HR) = 2.35
TOTAL STREAM AREA(ACRES) = 0.18
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.34
*****
FLOW PROCESS FROM NODE 20.00 TO NODE 12.00 IS CODE = 21
-----
>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<
=====
ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 88.00
UPSTREAM ELEVATION(FEET) = 1548.00
DOWNSTREAM ELEVATION(FEET) = 1547.10
ELEVATION DIFFERENCE(FEET) = 0.90
TC = 0.393*[( 88.00**3)/( 0.90)]**.2 = 5.886
10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.620
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .6662
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF(CFS) = 0.63
TOTAL AREA(ACRES) = 0.36 TOTAL RUNOFF(CFS) = 0.63
*****
FLOW PROCESS FROM NODE 12.00 TO NODE 13.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1543.60 DOWNSTREAM(FEET) = 1542.00
FLOW LENGTH(FEET) = 83.80 MANNING'S N = 0.013

```

```

ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 8.000
DEPTH OF FLOW IN 8.0 INCH PIPE IS 3.4 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 4.42
ESTIMATED PIPE DIAMETER(INCH) = 8.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.63
PIPE TRAVEL TIME(MIN.) = 0.32 Tc(MIN.) = 6.20
LONGEST FLOWPATH FROM NODE 20.00 TO NODE 13.00 = 171.80 FEET.
*****
FLOW PROCESS FROM NODE 13.00 TO NODE 13.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
TIME OF CONCENTRATION(MIN.) = 6.20
RAINFALL INTENSITY(INCH/HR) = 2.55
TOTAL STREAM AREA(ACRES) = 0.36
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.63

** CONFLUENCE DATA **
STREAM RUNOFF Tc INTENSITY AREA
NUMBER (CFS) (MIN.) (INCH/HOUR) (ACRE)
1 0.34 7.22 2.352 0.18
2 0.63 6.20 2.549 0.36

*****WARNING*****
IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.
*****

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **
STREAM RUNOFF Tc INTENSITY
NUMBER (CFS) (MIN.) (INCH/HOUR)
1 0.92 6.20 2.549
2 0.92 7.22 2.352

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
PEAK FLOW RATE(CFS) = 0.92 Tc(MIN.) = 6.20
TOTAL AREA(ACRES) = 0.5
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 13.00 = 428.50 FEET.
*****
FLOW PROCESS FROM NODE 13.00 TO NODE 14.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1542.00 DOWNSTREAM(FEET) = 1537.70
FLOW LENGTH(FEET) = 618.20 MANNING'S N = 0.013
DEPTH OF FLOW IN 9.0 INCH PIPE IS 5.4 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 3.33
ESTIMATED PIPE DIAMETER(INCH) = 9.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 0.92
PIPE TRAVEL TIME(MIN.) = 3.10 Tc(MIN.) = 9.30
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 14.00 = 1046.70 FEET.
*****
FLOW PROCESS FROM NODE 14.00 TO NODE 14.00 IS CODE = 1
-----

```

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2  
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:  
TIME OF CONCENTRATION(MIN.) = 9.30  
RAINFALL INTENSITY(INCH/HR) = 2.06  
TOTAL STREAM AREA(ACRES) = 0.54  
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.92

\*\*\*\*\*

FLOW PROCESS FROM NODE 30.00 TO NODE 14.00 IS CODE = 21

-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH(FEET) = 1217.00  
UPSTREAM ELEVATION(FEET) = 1551.30  
DOWNSTREAM ELEVATION(FEET) = 1537.70  
ELEVATION DIFFERENCE(FEET) = 13.60  
TC = 0.393\*[(1217.00\*\*3)/(13.60)]\*\*.2 = 16.535  
10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.517  
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .6069  
SOIL CLASSIFICATION IS "A"  
SUBAREA RUNOFF(CFS) = 8.27  
TOTAL AREA(ACRES) = 8.98 TOTAL RUNOFF(CFS) = 8.27

\*\*\*\*\*

FLOW PROCESS FROM NODE 14.00 TO NODE 14.00 IS CODE = 1

-----

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<  
>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<

=====

TOTAL NUMBER OF STREAMS = 2  
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:  
TIME OF CONCENTRATION(MIN.) = 16.54  
RAINFALL INTENSITY(INCH/HR) = 1.52  
TOTAL STREAM AREA(ACRES) = 8.98  
PEAK FLOW RATE(CFS) AT CONFLUENCE = 8.27

\*\* CONFLUENCE DATA \*\*

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	0.92	9.30	2.057	0.54
2	8.27	16.54	1.517	8.98

\*\*\*\*\*WARNING\*\*\*\*\*

IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

\*\*\*\*\*

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO  
CONFLUENCE FORMULA USED FOR 2 STREAMS.

\*\* PEAK FLOW RATE TABLE \*\*

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	5.57	9.30	2.057
2	8.95	16.54	1.517

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:  
PEAK FLOW RATE(CFS) = 8.95 Tc(MIN.) = 16.54  
TOTAL AREA(ACRES) = 9.5

LONGEST FLOWPATH FROM NODE 30.00 TO NODE 14.00 = 1217.00 FEET.

=====

END OF STUDY SUMMARY:

TOTAL AREA (ACRES) = 9.5 TC (MIN.) = 16.54  
PEAK FLOW RATE (CFS) = 8.95

=====

END OF RATIONAL METHOD ANALYSIS

\*\*\*\*\*  
RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON  
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT  
(RCFC&WCD) 1978 HYDROLOGY MANUAL  
(c) Copyright 1982-2011 Advanced Engineering Software (aes)  
(Rational Tabling Version 18.0)  
Release Date: 07/01/2011 License ID 1499

Analysis prepared by:

Kimley-Horn and Associates, Inc.  
765 The City Drive  
Suite 200  
Orange, CA 92868

\*\*\*\*\* DESCRIPTION OF STUDY \*\*\*\*\*  
\* JD FIELD HEMET \*  
\* PROPOSED 100 YEAR \*  
\* 10/14/2021 LA \*  
\*\*\*\*\*

FILE NAME: JDH100P.DAT  
TIME/DATE OF STUDY: 14:43 10/14/2021

-----  
USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:  
-----

USER SPECIFIED STORM EVENT(YEAR) = 100.00  
SPECIFIED MINIMUM PIPE SIZE(INCH) = 8.00  
SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 1.00  
10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.960  
10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.760  
100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 3.050  
100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.180  
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.5287434  
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.5299969  
COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 100.00 1-HOUR INTENSITY(INCH/HOUR) = 1.180  
SLOPE OF INTENSITY DURATION CURVE = 0.5300

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL  
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

\*USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL\*

NO.	HALF- WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL: IN- / OUT- / PARK- SIDE / SIDE / WAY	CURB HEIGHT (FT)	GUTTER-GEOMETRIES: WIDTH (FT)	LIP (FT)	HIKE (FT)	MANNING FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET  
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)\*(Velocity) Constraint = 6.0 (FT\*FT/S)

\*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN  
OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.\*

\*\*\*\*\*  
FLOW PROCESS FROM NODE 10.00 TO NODE 11.00 IS CODE = 21  
-----

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM  
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)  
TC = K\*[(LENGTH\*\*3)/(ELEVATION CHANGE)]\*\*.2  
INITIAL SUBAREA FLOW-LENGTH(FEET) = 121.00

```

UPSTREAM ELEVATION (FEET) = 1551.30
DOWNSTREAM ELEVATION (FEET) = 1547.10
ELEVATION DIFFERENCE (FEET) = 4.20
TC = 0.393 * [( 121.00**3) / ( 4.20)]**.2 = 5.236
100 YEAR RAINFALL INTENSITY (INCH/HOUR) = 4.298
SINGLE-FAMILY (1/4 ACRE LOT) RUNOFF COEFFICIENT = .7212
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF (CFS) = 0.56
TOTAL AREA (ACRES) = 0.18 TOTAL RUNOFF (CFS) = 0.56
*****
FLOW PROCESS FROM NODE 11.00 TO NODE 12.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM (FEET) = 1544.10 DOWNSTREAM (FEET) = 1542.00
FLOW LENGTH (FEET) = 307.50 MANNING'S N = 0.013
DEPTH OF FLOW IN 9.0 INCH PIPE IS 4.0 INCHES
PIPE-FLOW VELOCITY (FEET/SEC.) = 2.94
ESTIMATED PIPE DIAMETER (INCH) = 9.00 NUMBER OF PIPES = 1
PIPE-FLOW (CFS) = 0.56
PIPE TRAVEL TIME (MIN.) = 1.74 Tc (MIN.) = 6.98
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 12.00 = 428.50 FEET.
*****
FLOW PROCESS FROM NODE 12.00 TO NODE 12.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION (MIN.) = 6.98
RAINFALL INTENSITY (INCH/HR) = 3.69
TOTAL STREAM AREA (ACRES) = 0.18
PEAK FLOW RATE (CFS) AT CONFLUENCE = 0.56
*****
FLOW PROCESS FROM NODE 20.00 TO NODE 12.00 IS CODE = 21
-----
>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<
=====
ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)
TC = K * [(LENGTH**3) / (ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH (FEET) = 88.00
UPSTREAM ELEVATION (FEET) = 1548.00
DOWNSTREAM ELEVATION (FEET) = 1547.10
ELEVATION DIFFERENCE (FEET) = 0.90
TC = 0.393 * [( 88.00**3) / ( 0.90)]**.2 = 5.886
100 YEAR RAINFALL INTENSITY (INCH/HOUR) = 4.039
SINGLE-FAMILY (1/4 ACRE LOT) RUNOFF COEFFICIENT = .7145
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF (CFS) = 1.04
TOTAL AREA (ACRES) = 0.36 TOTAL RUNOFF (CFS) = 1.04
*****
FLOW PROCESS FROM NODE 12.00 TO NODE 13.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM (FEET) = 1543.60 DOWNSTREAM (FEET) = 1542.00
FLOW LENGTH (FEET) = 83.80 MANNING'S N = 0.013
DEPTH OF FLOW IN 9.0 INCH PIPE IS 4.3 INCHES

```

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PIPE-FLOW VELOCITY(FEET/SEC.) = 5.05
ESTIMATED PIPE DIAMETER(INCH) = 9.00    NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 1.04
PIPE TRAVEL TIME(MIN.) = 0.28    Tc(MIN.) = 6.16
LONGEST FLOWPATH FROM NODE 20.00 TO NODE 13.00 = 171.80 FEET.
*****
FLOW PROCESS FROM NODE 13.00 TO NODE 13.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
TIME OF CONCENTRATION(MIN.) = 6.16
RAINFALL INTENSITY(INCH/HR) = 3.94
TOTAL STREAM AREA(ACRES) = 0.36
PEAK FLOW RATE(CFS) AT CONFLUENCE = 1.04

** CONFLUENCE DATA **
STREAM    RUNOFF      Tc      INTENSITY      AREA
NUMBER    (CFS)      (MIN.)  (INCH/HOUR)    (ACRE)
  1        0.56      6.98      3.691          0.18
  2        1.04      6.16      3.942          0.36

*****WARNING*****
IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.
*****

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **
STREAM    RUNOFF      Tc      INTENSITY
NUMBER    (CFS)      (MIN.)  (INCH/HOUR)
  1        1.53      6.16      3.942
  2        1.53      6.98      3.691

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
PEAK FLOW RATE(CFS) = 1.53    Tc(MIN.) = 6.16
TOTAL AREA(ACRES) = 0.5
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 13.00 = 428.50 FEET.
*****
FLOW PROCESS FROM NODE 13.00 TO NODE 14.00 IS CODE = 31
-----
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<
>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<
=====
ELEVATION DATA: UPSTREAM(FEET) = 1542.00    DOWNSTREAM(FEET) = 1537.70
FLOW LENGTH(FEET) = 618.20    MANNING'S N = 0.013
DEPTH OF FLOW IN 12.0 INCH PIPE IS 6.1 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 3.82
ESTIMATED PIPE DIAMETER(INCH) = 12.00    NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 1.53
PIPE TRAVEL TIME(MIN.) = 2.70    Tc(MIN.) = 8.86
LONGEST FLOWPATH FROM NODE 10.00 TO NODE 14.00 = 1046.70 FEET.
*****
FLOW PROCESS FROM NODE 14.00 TO NODE 14.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
=====

```

```

TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 8.86
RAINFALL INTENSITY(INCH/HR) = 3.25
TOTAL STREAM AREA(ACRES) = 0.54
PEAK FLOW RATE(CFS) AT CONFLUENCE = 1.53
*****
FLOW PROCESS FROM NODE 30.00 TO NODE 14.00 IS CODE = 21
-----
>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<
=====
ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS SINGLE FAMILY (1/4 ACRE)
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 1217.00
UPSTREAM ELEVATION(FEET) = 1551.30
DOWNSTREAM ELEVATION(FEET) = 1537.70
ELEVATION DIFFERENCE(FEET) = 13.60
TC = 0.393*[(1217.00**3)/(13.60)]**.2 = 16.535
100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.336
SINGLE-FAMILY(1/4 ACRE LOT) RUNOFF COEFFICIENT = .6534
SOIL CLASSIFICATION IS "A"
SUBAREA RUNOFF(CFS) = 13.71
TOTAL AREA(ACRES) = 8.98 TOTAL RUNOFF(CFS) = 13.71
*****
FLOW PROCESS FROM NODE 14.00 TO NODE 14.00 IS CODE = 1
-----
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<
>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<
=====
TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
TIME OF CONCENTRATION(MIN.) = 16.54
RAINFALL INTENSITY(INCH/HR) = 2.34
TOTAL STREAM AREA(ACRES) = 8.98
PEAK FLOW RATE(CFS) AT CONFLUENCE = 13.71

** CONFLUENCE DATA **
STREAM RUNOFF Tc INTENSITY AREA
NUMBER (CFS) (MIN.) (INCH/HOUR) (ACRE)
1 1.53 8.86 3.252 0.54
2 13.71 16.54 2.336 8.98

*****WARNING*****
IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.
*****

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **
STREAM RUNOFF Tc INTENSITY
NUMBER (CFS) (MIN.) (INCH/HOUR)
1 8.88 8.86 3.252
2 14.81 16.54 2.336

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
PEAK FLOW RATE(CFS) = 14.81 Tc(MIN.) = 16.54
TOTAL AREA(ACRES) = 9.5
LONGEST FLOWPATH FROM NODE 30.00 TO NODE 14.00 = 1217.00 FEET.
=====

```

END OF STUDY SUMMARY:

TOTAL AREA (ACRES) = 9.5 TC (MIN.) = 16.54  
PEAK FLOW RATE (CFS) = 14.81

=====

END OF RATIONAL METHOD ANALYSIS

## **Appendix G**

### **Unit Hydrograph Analysis**

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018, Version 9.0

Study date 10/14/21 File: jdhu32.out

+++++

Riverside County Synthetic Unit Hydrology Method  
RCFC & WCD Manual date - April 1978

Program License Serial Number 6443

-----  
English (in-lb) Input Units Used  
English Rainfall Data (Inches) Input Values Used

English Units used in output format

-----  
JD FIELDS HEMET  
UNIT HYDROGRAPHS 2 YEAR  
10/14/2021 LA

-----  
Drainage Area = 9.52 (Ac.) = 0.015 Sq. Mi.  
Drainage Area for Depth-Area Areal Adjustment = 9.52 (Ac.) = 0.015  
Sq. Mi.

USER Entry of lag time in hours  
Lag time = 0.221 Hr.  
Lag time = 13.26 Min.  
25% of lag time = 3.31 Min.  
40% of lag time = 5.30 Min.  
Unit time = 5.00 Min.  
Duration of storm = 3 Hour(s)  
User Entered Base Flow = 0.00 (CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
9.52	0.83	7.90

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
9.52	2.19	20.85

STORM EVENT (YEAR) = 2.00  
Area Averaged 2-Year Rainfall = 0.830 (In)  
Area Averaged 100-Year Rainfall = 2.190 (In)

Point rain (area averaged) = 0.830 (In)  
Areal adjustment factor = 100.00 %  
Adjusted average point rain = 0.830 (In)

Sub-Area Data:

Area(Ac.)                      Runoff Index      Impervious %  
 9.520                              32.00                      0.500  
 Total Area Entered =              9.52(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
32.0	16.2	0.870	0.500	0.479	1.000	0.479
						Sum (F) = 0.479

Area averaged mean soil loss (F) (In/Hr) = 0.479  
 Minimum soil loss rate ((In/Hr)) = 0.239  
 (for 24 hour storm duration)  
 Soil low loss rate (decimal) = 0.900

-----  
 U n i t   H y d r o g r a p h  
 VALLEY S-Curve  
 -----

Unit Hydrograph Data  
 -----

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	37.707	3.990
2	0.167	75.415	16.108
3	0.250	113.122	25.333
4	0.333	150.830	18.548
5	0.417	188.537	9.265
6	0.500	226.244	5.593
7	0.583	263.952	4.141
8	0.667	301.659	3.257
9	0.750	339.367	2.495
10	0.833	377.074	2.107
11	0.917	414.781	1.648
12	1.000	452.489	1.290
13	1.083	490.196	1.164
14	1.167	527.903	1.049
15	1.250	565.611	0.827
16	1.333	603.318	0.704
17	1.417	641.026	0.591
18	1.500	678.733	0.484
19	1.583	716.440	0.381
20	1.667	754.148	0.377
21	1.750	791.855	0.377
22	1.833	829.563	0.270
		Sum = 100.000	Sum= 9.594

-----  
 Storm Event 5      Effective Rainfall =      0.083(In)  
 -----

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max   Low	Effective (In/Hr)
1	0.08	1.30	( 0.479)	0.012
2	0.17	1.30	( 0.479)	0.012
3	0.25	1.10	( 0.479)	0.010
4	0.33	1.50	( 0.479)	0.013
5	0.42	1.50	( 0.479)	0.013





24	2.00	3.00	0.057	( 0.479)	0.051	0.006
25	2.08	3.10	0.059	( 0.479)	0.053	0.006
26	2.17	4.20	0.079	( 0.479)	0.072	0.008
27	2.25	5.00	0.095	( 0.479)	0.085	0.009
28	2.33	3.50	0.066	( 0.479)	0.060	0.007
29	2.42	6.80	0.129	( 0.479)	0.116	0.013
30	2.50	7.30	0.138	( 0.479)	0.124	0.014
31	2.58	8.20	0.155	( 0.479)	0.140	0.016
32	2.67	5.90	0.112	( 0.479)	0.100	0.011
33	2.75	2.00	0.038	( 0.479)	0.034	0.004
34	2.83	1.80	0.034	( 0.479)	0.031	0.003
35	2.92	1.80	0.034	( 0.479)	0.031	0.003
36	3.00	0.60	0.011	( 0.479)	0.010	0.001

(Loss Rate Not Used)

Sum = 100.0 Sum = 0.2

Flood volume = Effective rainfall 0.02(In)  
times area 9.5(Ac.)/[ (In)/(Ft.) ] = 0.0(Ac.Ft)  
Total soil loss = 0.14(In)  
Total soil loss = 0.113(Ac.Ft)  
Total rainfall = 0.16(In)  
Flood volume = 545.0 Cubic Feet  
Total soil loss = 4904.6 Cubic Feet

-----  
Storm Event 2 Effective Rainfall = 0.299(In)  
-----

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	1.30	0.047	( 0.479)	0.042	0.005
2	0.17	1.30	0.047	( 0.479)	0.042	0.005
3	0.25	1.10	0.039	( 0.479)	0.035	0.004
4	0.33	1.50	0.054	( 0.479)	0.048	0.005
5	0.42	1.50	0.054	( 0.479)	0.048	0.005
6	0.50	1.80	0.065	( 0.479)	0.058	0.006
7	0.58	1.50	0.054	( 0.479)	0.048	0.005
8	0.67	1.80	0.065	( 0.479)	0.058	0.006
9	0.75	1.80	0.065	( 0.479)	0.058	0.006
10	0.83	1.50	0.054	( 0.479)	0.048	0.005
11	0.92	1.60	0.057	( 0.479)	0.052	0.006
12	1.00	1.80	0.065	( 0.479)	0.058	0.006
13	1.08	2.20	0.079	( 0.479)	0.071	0.008
14	1.17	2.20	0.079	( 0.479)	0.071	0.008
15	1.25	2.20	0.079	( 0.479)	0.071	0.008
16	1.33	2.00	0.072	( 0.479)	0.065	0.007
17	1.42	2.60	0.093	( 0.479)	0.084	0.009
18	1.50	2.70	0.097	( 0.479)	0.087	0.010
19	1.58	2.40	0.086	( 0.479)	0.077	0.009
20	1.67	2.70	0.097	( 0.479)	0.087	0.010
21	1.75	3.30	0.118	( 0.479)	0.106	0.012
22	1.83	3.10	0.111	( 0.479)	0.100	0.011
23	1.92	2.90	0.104	( 0.479)	0.094	0.010
24	2.00	3.00	0.108	( 0.479)	0.097	0.011
25	2.08	3.10	0.111	( 0.479)	0.100	0.011
26	2.17	4.20	0.151	( 0.479)	0.136	0.015
27	2.25	5.00	0.179	( 0.479)	0.161	0.018
28	2.33	3.50	0.125	( 0.479)	0.113	0.013
29	2.42	6.80	0.244	( 0.479)	0.219	0.024
30	2.50	7.30	0.262	( 0.479)	0.236	0.026
31	2.58	8.20	0.294	( 0.479)	0.265	0.029
32	2.67	5.90	0.212	( 0.479)	0.190	0.021



Total soil loss = 0.552(Ac.Ft)  
 Total rainfall = 0.83(In)  
 Flood volume = 4633.1 Cubic Feet  
 Total soil loss = 24048.5 Cubic Feet

-----  
 Peak flow rate of this hydrograph = 1.705(CFS)  
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TOTAL OF: 5 3 - H O U R S T O R M E V E N T S  
 R u n o f f H y d r o g r a p h

-----  
 Hydrograph in 5 Minute intervals ((CFS))  
 -----

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00	Q				
0+10	0.0000	0.00	Q				
0+15	0.0001	0.01	Q				
0+20	0.0001	0.01	Q				
0+25	0.0002	0.01	Q				
0+30	0.0002	0.01	Q				
0+35	0.0003	0.01	Q				
0+40	0.0004	0.01	Q				
0+45	0.0005	0.01	Q				
0+50	0.0006	0.01	Q				
0+55	0.0007	0.01	Q				
1+ 0	0.0008	0.01	Q				
1+ 5	0.0009	0.01	Q				
1+10	0.0010	0.02	Q				
1+15	0.0011	0.02	Q				
1+20	0.0013	0.02	Q				
1+25	0.0014	0.02	Q				
1+30	0.0015	0.02	Q				
1+35	0.0017	0.02	Q				
1+40	0.0018	0.02	Q				
1+45	0.0020	0.02	Q				
1+50	0.0022	0.02	Q				
1+55	0.0024	0.03	Q				
2+ 0	0.0025	0.03	Q				
2+ 5	0.0027	0.03	Q				
2+10	0.0029	0.03	Q				
2+15	0.0031	0.03	Q				
2+20	0.0034	0.03	Q				
2+25	0.0036	0.04	Q				
2+30	0.0039	0.04	QV				
2+35	0.0043	0.05	QV				
2+40	0.0046	0.06	QV				
2+45	0.0050	0.06	QV				
2+50	0.0054	0.05	QV				
2+55	0.0056	0.04	QV				
3+ 0	0.0058	0.03	QV				
3+ 5	0.0059	0.00	QV				
3+10	0.0059	0.00	QV				
3+15	0.0059	0.01	QV				
3+20	0.0060	0.01	QV				
3+25	0.0061	0.01	QV				
3+30	0.0062	0.02	QV				
3+35	0.0063	0.02	QV				
3+40	0.0065	0.02	QV				
3+45	0.0066	0.02	QV				
3+50	0.0068	0.02	QV				
3+55	0.0069	0.02	QV				

4+ 0	0.0071	0.02	QV				
4+ 5	0.0072	0.02	QV				
4+10	0.0074	0.02	QV				
4+15	0.0076	0.03	QV				
4+20	0.0078	0.03	Q V				
4+25	0.0080	0.03	Q V				
4+30	0.0082	0.03	Q V				
4+35	0.0084	0.03	Q V				
4+40	0.0086	0.03	Q V				
4+45	0.0089	0.03	Q V				
4+50	0.0091	0.04	Q V				
4+55	0.0094	0.04	Q V				
5+ 0	0.0097	0.04	Q V				
5+ 5	0.0099	0.04	Q V				
5+10	0.0102	0.04	Q V				
5+15	0.0105	0.05	Q V				
5+20	0.0109	0.05	Q V				
5+25	0.0113	0.06	Q V				
5+30	0.0117	0.06	Q V				
5+35	0.0122	0.07	Q V				
5+40	0.0128	0.08	Q V				
5+45	0.0134	0.09	Q V				
5+50	0.0139	0.07	Q V				
5+55	0.0143	0.06	Q V				
6+ 0	0.0146	0.05	Q V				
6+ 5	0.0146	0.00	Q V				
6+10	0.0147	0.00	Q V				
6+15	0.0147	0.01	Q V				
6+20	0.0148	0.01	Q V				
6+25	0.0150	0.02	Q V				
6+30	0.0151	0.02	Q V				
6+35	0.0152	0.02	Q V				
6+40	0.0154	0.02	Q V				
6+45	0.0156	0.03	Q V				
6+50	0.0158	0.03	Q V				
6+55	0.0160	0.03	Q V				
7+ 0	0.0162	0.03	Q V				
7+ 5	0.0164	0.03	Q V				
7+10	0.0166	0.03	Q V				
7+15	0.0168	0.03	Q V				
7+20	0.0170	0.04	Q V				
7+25	0.0173	0.04	Q V				
7+30	0.0176	0.04	Q V				
7+35	0.0178	0.04	Q V				
7+40	0.0181	0.04	Q V				
7+45	0.0184	0.04	Q V				
7+50	0.0188	0.05	Q V				
7+55	0.0191	0.05	Q V				
8+ 0	0.0195	0.05	Q V				
8+ 5	0.0198	0.05	Q V				
8+10	0.0202	0.05	Q V				
8+15	0.0206	0.06	Q V				
8+20	0.0210	0.06	Q V				
8+25	0.0215	0.07	Q V				
8+30	0.0221	0.08	Q V				
8+35	0.0227	0.09	Q V				
8+40	0.0234	0.11	Q V				
8+45	0.0242	0.11	Q V				
8+50	0.0248	0.09	Q V				
8+55	0.0253	0.07	Q V				
9+ 0	0.0257	0.06	Q V				
9+ 5	0.0258	0.00	Q V				
9+10	0.0258	0.01	Q V				

9+15	0.0260	0.02	Q	V				
9+20	0.0261	0.03	Q	V				
9+25	0.0264	0.03	Q	V				
9+30	0.0266	0.04	Q	V				
9+35	0.0269	0.04	Q	V				
9+40	0.0272	0.05	Q	V				
9+45	0.0276	0.05	Q	V				
9+50	0.0279	0.05	Q	V				
9+55	0.0283	0.05	Q	V				
10+ 0	0.0286	0.05	Q	V				
10+ 5	0.0290	0.05	Q	V				
10+10	0.0294	0.06	Q	V				
10+15	0.0299	0.06	Q	V				
10+20	0.0303	0.07	Q	V				
10+25	0.0308	0.07	Q	V				
10+30	0.0313	0.07	Q	V				
10+35	0.0318	0.08	Q	V				
10+40	0.0324	0.08	Q	V				
10+45	0.0330	0.08	Q	V				
10+50	0.0336	0.09	Q	V				
10+55	0.0342	0.09	Q	V				
11+ 0	0.0349	0.10	Q	V				
11+ 5	0.0356	0.10	Q	V				
11+10	0.0363	0.10	Q	V				
11+15	0.0370	0.11	Q	V				
11+20	0.0379	0.12	Q	V				
11+25	0.0388	0.13	Q	V				
11+30	0.0398	0.15	Q	V				
11+35	0.0410	0.18	Q	V				
11+40	0.0424	0.20	Q	V				
11+45	0.0439	0.21	Q	V				
11+50	0.0451	0.18	Q	V				
11+55	0.0461	0.14	Q	V				
12+ 0	0.0468	0.11	Q	V				
12+ 5	0.0468	0.00	Q	V				
12+10	0.0470	0.02	Q	V				
12+15	0.0474	0.06	Q	V				
12+20	0.0479	0.08	Q	V				
12+25	0.0485	0.09	Q	V				
12+30	0.0493	0.10	Q	V				
12+35	0.0501	0.12	Q	V				
12+40	0.0510	0.13	Q	V				
12+45	0.0519	0.14	Q	V				
12+50	0.0529	0.14	Q	V				
12+55	0.0539	0.15	Q	V				
13+ 0	0.0549	0.14	Q	V				
13+ 5	0.0559	0.15	Q	V				
13+10	0.0570	0.16	Q	V				
13+15	0.0583	0.18	Q	V				
13+20	0.0595	0.19	Q	V				
13+25	0.0609	0.19	Q	V				
13+30	0.0622	0.20	Q	V				
13+35	0.0637	0.21	Q	V				
13+40	0.0652	0.22	Q	V				
13+45	0.0668	0.23	Q	V				
13+50	0.0685	0.25	Q	V				
13+55	0.0704	0.26	Q	V				
14+ 0	0.0722	0.27	Q	V				
14+ 5	0.0741	0.27	Q	V				
14+10	0.0760	0.28	Q	V				
14+15	0.0781	0.31	Q	V				
14+20	0.0805	0.34	Q	V				
14+25	0.0834	0.42	Q	V				

14+30	0.0881	0.68	Q		v		
14+35	0.0962	1.18	Q		v		
14+40	0.1076	1.64	Q		v		
14+45	0.1193	1.71	Q		v		
14+50	0.1283	1.30	Q		v		
14+55	0.1341	0.85	Q		v		
15+ 0	0.1382	0.59	Q		v		
15+ 5	0.1413	0.46	Q		v		
15+10	0.1438	0.35	Q		v		
15+15	0.1456	0.27	Q		v		
15+20	0.1470	0.21	Q		v		
15+25	0.1482	0.17	Q		v		
15+30	0.1491	0.14	Q		v		
15+35	0.1499	0.12	Q				

Unit Hydrograph Analysis

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Study date 10/14/21 File: jdhu62.out

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Riverside County Synthetic Unit Hydrology Method  
RCFC & WCD Manual date - April 1978

Program License Serial Number 6443

-----  
English (in-lb) Input Units Used  
English Rainfall Data (Inches) Input Values Used

English Units used in output format

-----  
JD FIELDS HEMET  
UNIT HYDROGRAPHS 2 YEAR  
10/14/2021 LA

-----  
Drainage Area = 9.52 (Ac.) = 0.015 Sq. Mi.  
Drainage Area for Depth-Area Areal Adjustment = 9.52 (Ac.) = 0.015  
Sq. Mi.

USER Entry of lag time in hours  
Lag time = 0.221 Hr.  
Lag time = 13.26 Min.  
25% of lag time = 3.31 Min.  
40% of lag time = 5.30 Min.  
Unit time = 5.00 Min.  
Duration of storm = 6 Hour(s)  
User Entered Base Flow = 0.00 (CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
9.52	1.15	10.95

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
9.52	2.87	27.32

STORM EVENT (YEAR) = 2.00  
Area Averaged 2-Year Rainfall = 1.150 (In)  
Area Averaged 100-Year Rainfall = 2.870 (In)

Point rain (area averaged) = 1.150 (In)  
Areal adjustment factor = 100.00 %  
Adjusted average point rain = 1.150 (In)

Sub-Area Data:

Area(Ac.)                  Runoff Index      Impervious %  
 9.520                      32.00                  0.500  
 Total Area Entered =      9.52(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
32.0	16.2	0.870	0.500	0.479	1.000	0.479
						Sum (F) = 0.479

Area averaged mean soil loss (F) (In/Hr) = 0.479  
 Minimum soil loss rate ((In/Hr)) = 0.239  
 (for 24 hour storm duration)  
 Soil low loss rate (decimal) = 0.900

-----  
 U n i t   H y d r o g r a p h  
 VALLEY S-Curve  
 -----

Unit Hydrograph Data  
 -----

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	37.707	3.990
2	0.167	75.415	16.108
3	0.250	113.122	25.333
4	0.333	150.830	18.548
5	0.417	188.537	9.265
6	0.500	226.244	5.593
7	0.583	263.952	4.141
8	0.667	301.659	3.257
9	0.750	339.367	2.495
10	0.833	377.074	2.107
11	0.917	414.781	1.648
12	1.000	452.489	1.290
13	1.083	490.196	1.164
14	1.167	527.903	1.049
15	1.250	565.611	0.827
16	1.333	603.318	0.704
17	1.417	641.026	0.591
18	1.500	678.733	0.484
19	1.583	716.440	0.381
20	1.667	754.148	0.377
21	1.750	791.855	0.377
22	1.833	829.563	0.270
		Sum = 100.000	Sum= 9.594

-----  
 Storm Event 5      Effective Rainfall =      0.115(In)  
 -----

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max   Low	Effective (In/Hr)
1	0.08	0.50	( 0.479)	0.006
2	0.17	0.60	( 0.479)	0.007
3	0.25	0.60	( 0.479)	0.007
4	0.33	0.60	( 0.479)	0.007
5	0.42	0.60	( 0.479)	0.007

6	0.50	0.70	0.010	( 0.479)	0.009	0.001
7	0.58	0.70	0.010	( 0.479)	0.009	0.001
8	0.67	0.70	0.010	( 0.479)	0.009	0.001
9	0.75	0.70	0.010	( 0.479)	0.009	0.001
10	0.83	0.70	0.010	( 0.479)	0.009	0.001
11	0.92	0.70	0.010	( 0.479)	0.009	0.001
12	1.00	0.80	0.011	( 0.479)	0.010	0.001
13	1.08	0.80	0.011	( 0.479)	0.010	0.001
14	1.17	0.80	0.011	( 0.479)	0.010	0.001
15	1.25	0.80	0.011	( 0.479)	0.010	0.001
16	1.33	0.80	0.011	( 0.479)	0.010	0.001
17	1.42	0.80	0.011	( 0.479)	0.010	0.001
18	1.50	0.80	0.011	( 0.479)	0.010	0.001
19	1.58	0.80	0.011	( 0.479)	0.010	0.001
20	1.67	0.80	0.011	( 0.479)	0.010	0.001
21	1.75	0.80	0.011	( 0.479)	0.010	0.001
22	1.83	0.80	0.011	( 0.479)	0.010	0.001
23	1.92	0.80	0.011	( 0.479)	0.010	0.001
24	2.00	0.90	0.012	( 0.479)	0.011	0.001
25	2.08	0.80	0.011	( 0.479)	0.010	0.001
26	2.17	0.90	0.012	( 0.479)	0.011	0.001
27	2.25	0.90	0.012	( 0.479)	0.011	0.001
28	2.33	0.90	0.012	( 0.479)	0.011	0.001
29	2.42	0.90	0.012	( 0.479)	0.011	0.001
30	2.50	0.90	0.012	( 0.479)	0.011	0.001
31	2.58	0.90	0.012	( 0.479)	0.011	0.001
32	2.67	0.90	0.012	( 0.479)	0.011	0.001
33	2.75	1.00	0.014	( 0.479)	0.012	0.001
34	2.83	1.00	0.014	( 0.479)	0.012	0.001
35	2.92	1.00	0.014	( 0.479)	0.012	0.001
36	3.00	1.00	0.014	( 0.479)	0.012	0.001
37	3.08	1.00	0.014	( 0.479)	0.012	0.001
38	3.17	1.10	0.015	( 0.479)	0.014	0.002
39	3.25	1.10	0.015	( 0.479)	0.014	0.002
40	3.33	1.10	0.015	( 0.479)	0.014	0.002
41	3.42	1.20	0.017	( 0.479)	0.015	0.002
42	3.50	1.30	0.018	( 0.479)	0.016	0.002
43	3.58	1.40	0.019	( 0.479)	0.017	0.002
44	3.67	1.40	0.019	( 0.479)	0.017	0.002
45	3.75	1.50	0.021	( 0.479)	0.019	0.002
46	3.83	1.50	0.021	( 0.479)	0.019	0.002
47	3.92	1.60	0.022	( 0.479)	0.020	0.002
48	4.00	1.60	0.022	( 0.479)	0.020	0.002
49	4.08	1.70	0.023	( 0.479)	0.021	0.002
50	4.17	1.80	0.025	( 0.479)	0.022	0.002
51	4.25	1.90	0.026	( 0.479)	0.024	0.003
52	4.33	2.00	0.028	( 0.479)	0.025	0.003
53	4.42	2.10	0.029	( 0.479)	0.026	0.003
54	4.50	2.10	0.029	( 0.479)	0.026	0.003
55	4.58	2.20	0.030	( 0.479)	0.027	0.003
56	4.67	2.30	0.032	( 0.479)	0.029	0.003
57	4.75	2.40	0.033	( 0.479)	0.030	0.003
58	4.83	2.40	0.033	( 0.479)	0.030	0.003
59	4.92	2.50	0.034	( 0.479)	0.031	0.003
60	5.00	2.60	0.036	( 0.479)	0.032	0.004
61	5.08	3.10	0.043	( 0.479)	0.039	0.004
62	5.17	3.60	0.050	( 0.479)	0.045	0.005
63	5.25	3.90	0.054	( 0.479)	0.048	0.005
64	5.33	4.20	0.058	( 0.479)	0.052	0.006
65	5.42	4.70	0.065	( 0.479)	0.058	0.006
66	5.50	5.60	0.077	( 0.479)	0.070	0.008
67	5.58	1.90	0.026	( 0.479)	0.024	0.003
68	5.67	0.90	0.012	( 0.479)	0.011	0.001





15	1.25	0.80	0.021	( 0.479)	0.019	0.002
16	1.33	0.80	0.021	( 0.479)	0.019	0.002
17	1.42	0.80	0.021	( 0.479)	0.019	0.002
18	1.50	0.80	0.021	( 0.479)	0.019	0.002
19	1.58	0.80	0.021	( 0.479)	0.019	0.002
20	1.67	0.80	0.021	( 0.479)	0.019	0.002
21	1.75	0.80	0.021	( 0.479)	0.019	0.002
22	1.83	0.80	0.021	( 0.479)	0.019	0.002
23	1.92	0.80	0.021	( 0.479)	0.019	0.002
24	2.00	0.90	0.024	( 0.479)	0.021	0.002
25	2.08	0.80	0.021	( 0.479)	0.019	0.002
26	2.17	0.90	0.024	( 0.479)	0.021	0.002
27	2.25	0.90	0.024	( 0.479)	0.021	0.002
28	2.33	0.90	0.024	( 0.479)	0.021	0.002
29	2.42	0.90	0.024	( 0.479)	0.021	0.002
30	2.50	0.90	0.024	( 0.479)	0.021	0.002
31	2.58	0.90	0.024	( 0.479)	0.021	0.002
32	2.67	0.90	0.024	( 0.479)	0.021	0.002
33	2.75	1.00	0.026	( 0.479)	0.024	0.003
34	2.83	1.00	0.026	( 0.479)	0.024	0.003
35	2.92	1.00	0.026	( 0.479)	0.024	0.003
36	3.00	1.00	0.026	( 0.479)	0.024	0.003
37	3.08	1.00	0.026	( 0.479)	0.024	0.003
38	3.17	1.10	0.029	( 0.479)	0.026	0.003
39	3.25	1.10	0.029	( 0.479)	0.026	0.003
40	3.33	1.10	0.029	( 0.479)	0.026	0.003
41	3.42	1.20	0.031	( 0.479)	0.028	0.003
42	3.50	1.30	0.034	( 0.479)	0.031	0.003
43	3.58	1.40	0.037	( 0.479)	0.033	0.004
44	3.67	1.40	0.037	( 0.479)	0.033	0.004
45	3.75	1.50	0.039	( 0.479)	0.035	0.004
46	3.83	1.50	0.039	( 0.479)	0.035	0.004
47	3.92	1.60	0.042	( 0.479)	0.038	0.004
48	4.00	1.60	0.042	( 0.479)	0.038	0.004
49	4.08	1.70	0.045	( 0.479)	0.040	0.004
50	4.17	1.80	0.047	( 0.479)	0.042	0.005
51	4.25	1.90	0.050	( 0.479)	0.045	0.005
52	4.33	2.00	0.052	( 0.479)	0.047	0.005
53	4.42	2.10	0.055	( 0.479)	0.050	0.006
54	4.50	2.10	0.055	( 0.479)	0.050	0.006
55	4.58	2.20	0.058	( 0.479)	0.052	0.006
56	4.67	2.30	0.060	( 0.479)	0.054	0.006
57	4.75	2.40	0.063	( 0.479)	0.057	0.006
58	4.83	2.40	0.063	( 0.479)	0.057	0.006
59	4.92	2.50	0.066	( 0.479)	0.059	0.007
60	5.00	2.60	0.068	( 0.479)	0.061	0.007
61	5.08	3.10	0.081	( 0.479)	0.073	0.008
62	5.17	3.60	0.094	( 0.479)	0.085	0.009
63	5.25	3.90	0.102	( 0.479)	0.092	0.010
64	5.33	4.20	0.110	( 0.479)	0.099	0.011
65	5.42	4.70	0.123	( 0.479)	0.111	0.012
66	5.50	5.60	0.147	( 0.479)	0.132	0.015
67	5.58	1.90	0.050	( 0.479)	0.045	0.005
68	5.67	0.90	0.024	( 0.479)	0.021	0.002
69	5.75	0.60	0.016	( 0.479)	0.014	0.002
70	5.83	0.50	0.013	( 0.479)	0.012	0.001
71	5.92	0.30	0.008	( 0.479)	0.007	0.001
72	6.00	0.20	0.005	( 0.479)	0.005	0.001

(Loss Rate Not Used)

Sum = 100.0 Sum = 0.3

Flood volume = Effective rainfall 0.02 (In)  
times area 9.5 (Ac.) / [(In) / (Ft.)] = 0.0 (Ac.Ft)  
Total soil loss = 0.20 (In)

Total soil loss = 0.156(Ac.Ft)  
 Total rainfall = 0.22(In)  
 Flood volume = 755.1 Cubic Feet  
 Total soil loss = 6795.5 Cubic Feet

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 Storm Event 2 Effective Rainfall = 0.414(In)  
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The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.025	( 0.479)	0.022	0.002
2	0.17	0.60	0.030	( 0.479)	0.027	0.003
3	0.25	0.60	0.030	( 0.479)	0.027	0.003
4	0.33	0.60	0.030	( 0.479)	0.027	0.003
5	0.42	0.60	0.030	( 0.479)	0.027	0.003
6	0.50	0.70	0.035	( 0.479)	0.031	0.003
7	0.58	0.70	0.035	( 0.479)	0.031	0.003
8	0.67	0.70	0.035	( 0.479)	0.031	0.003
9	0.75	0.70	0.035	( 0.479)	0.031	0.003
10	0.83	0.70	0.035	( 0.479)	0.031	0.003
11	0.92	0.70	0.035	( 0.479)	0.031	0.003
12	1.00	0.80	0.040	( 0.479)	0.036	0.004
13	1.08	0.80	0.040	( 0.479)	0.036	0.004
14	1.17	0.80	0.040	( 0.479)	0.036	0.004
15	1.25	0.80	0.040	( 0.479)	0.036	0.004
16	1.33	0.80	0.040	( 0.479)	0.036	0.004
17	1.42	0.80	0.040	( 0.479)	0.036	0.004
18	1.50	0.80	0.040	( 0.479)	0.036	0.004
19	1.58	0.80	0.040	( 0.479)	0.036	0.004
20	1.67	0.80	0.040	( 0.479)	0.036	0.004
21	1.75	0.80	0.040	( 0.479)	0.036	0.004
22	1.83	0.80	0.040	( 0.479)	0.036	0.004
23	1.92	0.80	0.040	( 0.479)	0.036	0.004
24	2.00	0.90	0.045	( 0.479)	0.040	0.004
25	2.08	0.80	0.040	( 0.479)	0.036	0.004
26	2.17	0.90	0.045	( 0.479)	0.040	0.004
27	2.25	0.90	0.045	( 0.479)	0.040	0.004
28	2.33	0.90	0.045	( 0.479)	0.040	0.004
29	2.42	0.90	0.045	( 0.479)	0.040	0.004
30	2.50	0.90	0.045	( 0.479)	0.040	0.004
31	2.58	0.90	0.045	( 0.479)	0.040	0.004
32	2.67	0.90	0.045	( 0.479)	0.040	0.004
33	2.75	1.00	0.050	( 0.479)	0.045	0.005
34	2.83	1.00	0.050	( 0.479)	0.045	0.005
35	2.92	1.00	0.050	( 0.479)	0.045	0.005
36	3.00	1.00	0.050	( 0.479)	0.045	0.005
37	3.08	1.00	0.050	( 0.479)	0.045	0.005
38	3.17	1.10	0.055	( 0.479)	0.049	0.005
39	3.25	1.10	0.055	( 0.479)	0.049	0.005
40	3.33	1.10	0.055	( 0.479)	0.049	0.005
41	3.42	1.20	0.060	( 0.479)	0.054	0.006
42	3.50	1.30	0.065	( 0.479)	0.058	0.006
43	3.58	1.40	0.070	( 0.479)	0.063	0.007
44	3.67	1.40	0.070	( 0.479)	0.063	0.007
45	3.75	1.50	0.075	( 0.479)	0.067	0.007
46	3.83	1.50	0.075	( 0.479)	0.067	0.007
47	3.92	1.60	0.079	( 0.479)	0.072	0.008
48	4.00	1.60	0.079	( 0.479)	0.072	0.008
49	4.08	1.70	0.084	( 0.479)	0.076	0.008
50	4.17	1.80	0.089	( 0.479)	0.080	0.009





R u n o f f      H y d r o g r a p h

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Hydrograph in    5    Minute intervals ((CFS))  
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Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000		0.00	Q				
0+10	0.0000		0.00	Q				
0+15	0.0000		0.00	Q				
0+20	0.0001		0.00	Q				
0+25	0.0001		0.01	Q				
0+30	0.0001		0.01	Q				
0+35	0.0002		0.01	Q				
0+40	0.0002		0.01	Q				
0+45	0.0003		0.01	Q				
0+50	0.0004		0.01	Q				
0+55	0.0004		0.01	Q				
1+ 0	0.0005		0.01	Q				
1+ 5	0.0005		0.01	Q				
1+10	0.0006		0.01	Q				
1+15	0.0007		0.01	Q				
1+20	0.0007		0.01	Q				
1+25	0.0008		0.01	Q				
1+30	0.0009		0.01	Q				
1+35	0.0009		0.01	Q				
1+40	0.0010		0.01	Q				
1+45	0.0011		0.01	Q				
1+50	0.0012		0.01	Q				
1+55	0.0012		0.01	Q				
2+ 0	0.0013		0.01	Q				
2+ 5	0.0014		0.01	Q				
2+10	0.0015		0.01	Q				
2+15	0.0015		0.01	Q				
2+20	0.0016		0.01	Q				
2+25	0.0017		0.01	Q				
2+30	0.0018		0.01	Q				
2+35	0.0018		0.01	Q				
2+40	0.0019		0.01	Q				
2+45	0.0020		0.01	Q				
2+50	0.0021		0.01	Q				
2+55	0.0022		0.01	Q				
3+ 0	0.0023		0.01	Q				
3+ 5	0.0024		0.01	Q				
3+10	0.0024		0.01	Q				
3+15	0.0025		0.01	Q				
3+20	0.0026		0.01	Q				
3+25	0.0027		0.01	Q				
3+30	0.0028		0.01	Q				
3+35	0.0029		0.02	Q				
3+40	0.0030		0.02	Q				
3+45	0.0032		0.02	Q				
3+50	0.0033		0.02	Q				
3+55	0.0034		0.02	Q				
4+ 0	0.0035		0.02	Q				
4+ 5	0.0037		0.02	Q				
4+10	0.0038		0.02	Q				
4+15	0.0039		0.02	Q				
4+20	0.0041		0.02	Q				
4+25	0.0043		0.02	Q				
4+30	0.0044		0.02	Q				
4+35	0.0046		0.03	Q				
4+40	0.0048		0.03	QV				

4+45	0.0050	0.03	QV				
4+50	0.0052	0.03	QV				
4+55	0.0054	0.03	QV				
5+ 0	0.0056	0.03	QV				
5+ 5	0.0058	0.03	QV				
5+10	0.0060	0.03	QV				
5+15	0.0063	0.04	QV				
5+20	0.0066	0.04	QV				
5+25	0.0069	0.05	QV				
5+30	0.0072	0.05	QV				
5+35	0.0076	0.05	QV				
5+40	0.0079	0.05	QV				
5+45	0.0082	0.04	QV				
5+50	0.0084	0.03	QV				
5+55	0.0086	0.02	QV				
6+ 0	0.0087	0.02	QV				
6+ 5	0.0087	0.00	QV				
6+10	0.0087	0.00	QV				
6+15	0.0087	0.00	QV				
6+20	0.0088	0.01	QV				
6+25	0.0088	0.01	QV				
6+30	0.0089	0.01	QV				
6+35	0.0090	0.01	QV				
6+40	0.0090	0.01	QV				
6+45	0.0091	0.01	QV				
6+50	0.0092	0.01	QV				
6+55	0.0093	0.01	Q V				
7+ 0	0.0094	0.01	Q V				
7+ 5	0.0095	0.01	Q V				
7+10	0.0096	0.01	Q V				
7+15	0.0097	0.01	Q V				
7+20	0.0098	0.01	Q V				
7+25	0.0099	0.02	Q V				
7+30	0.0100	0.02	Q V				
7+35	0.0101	0.02	Q V				
7+40	0.0102	0.02	Q V				
7+45	0.0103	0.02	Q V				
7+50	0.0104	0.02	Q V				
7+55	0.0105	0.02	Q V				
8+ 0	0.0106	0.02	Q V				
8+ 5	0.0107	0.02	Q V				
8+10	0.0109	0.02	Q V				
8+15	0.0110	0.02	Q V				
8+20	0.0111	0.02	Q V				
8+25	0.0112	0.02	Q V				
8+30	0.0113	0.02	Q V				
8+35	0.0114	0.02	Q V				
8+40	0.0116	0.02	Q V				
8+45	0.0117	0.02	Q V				
8+50	0.0118	0.02	Q V				
8+55	0.0119	0.02	Q V				
9+ 0	0.0121	0.02	Q V				
9+ 5	0.0122	0.02	Q V				
9+10	0.0123	0.02	Q V				
9+15	0.0125	0.02	Q V				
9+20	0.0126	0.02	Q V				
9+25	0.0128	0.02	Q V				
9+30	0.0129	0.02	Q V				
9+35	0.0131	0.02	Q V				
9+40	0.0132	0.02	Q V				
9+45	0.0134	0.03	Q V				
9+50	0.0136	0.03	Q V				
9+55	0.0138	0.03	Q V				

10+ 0	0.0140	0.03	Q	V				
10+ 5	0.0142	0.03	Q	V				
10+10	0.0144	0.03	Q	V				
10+15	0.0146	0.03	Q	V				
10+20	0.0148	0.03	Q	V				
10+25	0.0151	0.03	Q	V				
10+30	0.0153	0.04	Q	V				
10+35	0.0156	0.04	Q	V				
10+40	0.0159	0.04	Q	V				
10+45	0.0161	0.04	Q	V				
10+50	0.0164	0.04	Q	V				
10+55	0.0167	0.04	Q	V				
11+ 0	0.0170	0.05	Q	V				
11+ 5	0.0174	0.05	Q	V				
11+10	0.0177	0.05	Q	V				
11+15	0.0181	0.06	Q	V				
11+20	0.0185	0.06	Q	V				
11+25	0.0190	0.07	Q	V				
11+30	0.0195	0.07	Q	V				
11+35	0.0201	0.08	Q	V				
11+40	0.0206	0.08	Q	V				
11+45	0.0210	0.06	Q	V				
11+50	0.0213	0.04	Q	V				
11+55	0.0215	0.03	Q	V				
12+ 0	0.0217	0.03	Q	V				
12+ 5	0.0217	0.00	Q	V				
12+10	0.0217	0.00	Q	V				
12+15	0.0217	0.01	Q	V				
12+20	0.0218	0.01	Q	V				
12+25	0.0219	0.01	Q	V				
12+30	0.0220	0.01	Q	V				
12+35	0.0221	0.01	Q	V				
12+40	0.0222	0.01	Q	V				
12+45	0.0223	0.01	Q	V				
12+50	0.0224	0.02	Q	V				
12+55	0.0225	0.02	Q	V				
13+ 0	0.0226	0.02	Q	V				
13+ 5	0.0227	0.02	Q	V				
13+10	0.0228	0.02	Q	V				
13+15	0.0229	0.02	Q	V				
13+20	0.0231	0.02	Q	V				
13+25	0.0232	0.02	Q	V				
13+30	0.0233	0.02	Q	V				
13+35	0.0235	0.02	Q	V				
13+40	0.0236	0.02	Q	V				
13+45	0.0238	0.02	Q	V				
13+50	0.0239	0.02	Q	V				
13+55	0.0240	0.02	Q	V				
14+ 0	0.0242	0.02	Q	V				
14+ 5	0.0243	0.02	Q	V				
14+10	0.0244	0.02	Q	V				
14+15	0.0246	0.02	Q	V				
14+20	0.0247	0.02	Q	V				
14+25	0.0249	0.02	Q	V				
14+30	0.0250	0.02	Q	V				
14+35	0.0252	0.02	Q	V				
14+40	0.0253	0.02	Q	V				
14+45	0.0255	0.02	Q	V				
14+50	0.0257	0.02	Q	V				
14+55	0.0258	0.02	Q	V				
15+ 0	0.0260	0.02	Q	V				
15+ 5	0.0262	0.02	Q	V				
15+10	0.0263	0.02	Q	V				

15+15	0.0265	0.03	Q	V				
15+20	0.0267	0.03	Q	V				
15+25	0.0269	0.03	Q	V				
15+30	0.0271	0.03	Q	V				
15+35	0.0272	0.03	Q	V				
15+40	0.0275	0.03	Q	V				
15+45	0.0277	0.03	Q	V				
15+50	0.0279	0.03	Q	V				
15+55	0.0281	0.03	Q	V				
16+ 0	0.0284	0.04	Q	V				
16+ 5	0.0286	0.04	Q	V				
16+10	0.0289	0.04	Q	V				
16+15	0.0292	0.04	Q	V				
16+20	0.0295	0.04	Q	V				
16+25	0.0298	0.04	Q	V				
16+30	0.0301	0.05	Q	V				
16+35	0.0304	0.05	Q	V				
16+40	0.0308	0.05	Q	V				
16+45	0.0311	0.05	Q	V				
16+50	0.0315	0.05	Q	V				
16+55	0.0319	0.06	Q	V				
17+ 0	0.0323	0.06	Q	V				
17+ 5	0.0327	0.06	Q	V				
17+10	0.0331	0.06	Q	V				
17+15	0.0336	0.07	Q	V				
17+20	0.0342	0.08	Q	V				
17+25	0.0348	0.09	Q	V				
17+30	0.0354	0.09	Q	V				
17+35	0.0361	0.10	Q	V				
17+40	0.0368	0.10	Q	V				
17+45	0.0373	0.07	Q	V				
17+50	0.0376	0.05	Q	V				
17+55	0.0379	0.04	Q	V				
18+ 0	0.0382	0.03	Q	V				
18+ 5	0.0382	0.00	Q	V				
18+10	0.0382	0.00	Q	V				
18+15	0.0383	0.01	Q	V				
18+20	0.0384	0.02	Q	V				
18+25	0.0385	0.02	Q	V				
18+30	0.0387	0.02	Q	V				
18+35	0.0389	0.02	Q	V				
18+40	0.0390	0.03	Q	V				
18+45	0.0392	0.03	Q	V				
18+50	0.0394	0.03	Q	V				
18+55	0.0397	0.03	Q	V				
19+ 0	0.0399	0.03	Q	V				
19+ 5	0.0401	0.03	Q	V				
19+10	0.0403	0.03	Q	V				
19+15	0.0406	0.04	Q	V				
19+20	0.0408	0.04	Q	V				
19+25	0.0411	0.04	Q	V				
19+30	0.0413	0.04	Q	V				
19+35	0.0416	0.04	Q	V				
19+40	0.0418	0.04	Q	V				
19+45	0.0421	0.04	Q	V				
19+50	0.0423	0.04	Q	V				
19+55	0.0426	0.04	Q	V				
20+ 0	0.0429	0.04	Q	V				
20+ 5	0.0431	0.04	Q	V				
20+10	0.0434	0.04	Q	V				
20+15	0.0437	0.04	Q	V				
20+20	0.0440	0.04	Q	V				
20+25	0.0442	0.04	Q	V				

20+30	0.0445	0.04	Q	V			
20+35	0.0448	0.04	Q	V			
20+40	0.0451	0.04	Q	V			
20+45	0.0454	0.04	Q	V			
20+50	0.0457	0.04	Q	V			
20+55	0.0460	0.04	Q	V			
21+ 0	0.0463	0.05	Q	V			
21+ 5	0.0466	0.05	Q	V			
21+10	0.0470	0.05	Q	V			
21+15	0.0473	0.05	Q	V			
21+20	0.0476	0.05	Q	V			
21+25	0.0480	0.05	Q	V			
21+30	0.0483	0.05	Q	V			
21+35	0.0487	0.05	Q	V			
21+40	0.0491	0.06	Q	V			
21+45	0.0495	0.06	Q	V			
21+50	0.0500	0.06	Q	V			
21+55	0.0504	0.07	Q	V			
22+ 0	0.0509	0.07	Q	V			
22+ 5	0.0514	0.07	Q	V			
22+10	0.0519	0.07	Q	V			
22+15	0.0524	0.08	Q	V			
22+20	0.0529	0.08	Q	V			
22+25	0.0535	0.08	Q	V			
22+30	0.0541	0.09	Q	V			
22+35	0.0547	0.09	Q	V			
22+40	0.0554	0.09	Q	V			
22+45	0.0561	0.10	Q	V			
22+50	0.0568	0.10	Q	V			
22+55	0.0575	0.11	Q	V			
23+ 0	0.0582	0.11	Q	V			
23+ 5	0.0590	0.11	Q	V			
23+10	0.0599	0.12	Q	V			
23+15	0.0608	0.13	Q	V			
23+20	0.0618	0.15	Q	V			
23+25	0.0629	0.16	Q	V			
23+30	0.0642	0.18	Q	V			
23+35	0.0655	0.19	Q	V			
23+40	0.0667	0.18	Q	V			
23+45	0.0677	0.14	Q	V			
23+50	0.0684	0.10	Q	V			
23+55	0.0690	0.08	Q	V			
24+ 0	0.0694	0.06	Q	V			
24+ 5	0.0694	0.00	Q	V			
24+10	0.0695	0.01	Q	V			
24+15	0.0697	0.03	Q	V			
24+20	0.0701	0.05	Q	V			
24+25	0.0704	0.06	Q	V			
24+30	0.0709	0.06	Q	V			
24+35	0.0713	0.07	Q	V			
24+40	0.0719	0.07	Q	V			
24+45	0.0724	0.08	Q	V			
24+50	0.0730	0.08	Q	V			
24+55	0.0735	0.08	Q	V			
25+ 0	0.0741	0.09	Q	V			
25+ 5	0.0747	0.09	Q	V			
25+10	0.0754	0.09	Q	V			
25+15	0.0761	0.10	Q	V			
25+20	0.0767	0.10	Q	V			
25+25	0.0774	0.10	Q	V			
25+30	0.0781	0.10	Q	V			
25+35	0.0788	0.10	Q	V			
25+40	0.0796	0.10	Q	V			

25+45	0.0803	0.10	Q		V			
25+50	0.0810	0.10	Q		V			
25+55	0.0817	0.10	Q		V			
26+ 0	0.0824	0.11	Q		V			
26+ 5	0.0832	0.11	Q		V			
26+10	0.0839	0.11	Q		V			
26+15	0.0847	0.11	Q		V			
26+20	0.0855	0.11	Q		V			
26+25	0.0863	0.12	Q		V			
26+30	0.0871	0.12	Q		V			
26+35	0.0879	0.12	Q		V			
26+40	0.0887	0.12	Q		V			
26+45	0.0895	0.12	Q		V			
26+50	0.0903	0.12	Q		V			
26+55	0.0912	0.12	Q		V			
27+ 0	0.0921	0.13	Q		V			
27+ 5	0.0929	0.13	Q		V			
27+10	0.0938	0.13	Q		V			
27+15	0.0947	0.13	Q		V			
27+20	0.0957	0.14	Q		V			
27+25	0.0966	0.14	Q		V			
27+30	0.0976	0.14	Q		V			
27+35	0.0987	0.15	Q		V			
27+40	0.0998	0.16	Q		V			
27+45	0.1009	0.17	Q		V			
27+50	0.1021	0.17	Q		V			
27+55	0.1034	0.18	Q		V			
28+ 0	0.1047	0.19	Q		V			
28+ 5	0.1060	0.20	Q		V			
28+10	0.							

Unit Hydrograph Analysis

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Study date 10/14/21 File: jdhu242.out

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Riverside County Synthetic Unit Hydrology Method  
RCFC & WCD Manual date - April 1978

Program License Serial Number 6443

-----  
English (in-lb) Input Units Used  
English Rainfall Data (Inches) Input Values Used

English Units used in output format

-----  
JD FIELDS HEMET  
UNIT HYDROGRAPHS 2 YEAR  
10/14/2021 LA

-----  
Drainage Area = 9.52 (Ac.) = 0.015 Sq. Mi.  
Drainage Area for Depth-Area Areal Adjustment = 9.52 (Ac.) = 0.015  
Sq. Mi.

USER Entry of lag time in hours  
Lag time = 0.221 Hr.  
Lag time = 13.26 Min.  
25% of lag time = 3.31 Min.  
40% of lag time = 5.30 Min.  
Unit time = 5.00 Min.  
Duration of storm = 24 Hour(s)  
User Entered Base Flow = 0.00 (CFS)

2 YEAR Area rainfall data:

Area (Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
9.52	2.01	19.14

100 YEAR Area rainfall data:

Area (Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
9.52	5.31	50.55

STORM EVENT (YEAR) = 2.00  
Area Averaged 2-Year Rainfall = 2.010 (In)  
Area Averaged 100-Year Rainfall = 5.310 (In)

Point rain (area averaged) = 2.010 (In)  
Areal adjustment factor = 100.00 %  
Adjusted average point rain = 2.010 (In)

Sub-Area Data:

Area(Ac.)                      Runoff Index      Impervious %  
 9.520                              32.00                      0.500  
 Total Area Entered =              9.52 (Ac.)

RI      RI      Infil. Rate      Impervious      Adj. Infil. Rate      Area%      F  
 AMC2   AMC-1      (In/Hr)      (Dec.%)      (In/Hr)      (Dec.)      (In/Hr)  
 32.0   16.2      0.870      0.500      0.479      1.000      0.479  
 Sum (F) =      0.479

Area averaged mean soil loss (F) (In/Hr) = 0.479  
 Minimum soil loss rate ((In/Hr)) = 0.239  
 (for 24 hour storm duration)  
 Soil low loss rate (decimal) = 0.900

U n i t   H y d r o g r a p h  
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	37.707	3.990
2	0.167	75.415	16.108
3	0.250	113.122	25.333
4	0.333	150.830	18.548
5	0.417	188.537	9.265
6	0.500	226.244	5.593
7	0.583	263.952	4.141
8	0.667	301.659	3.257
9	0.750	339.367	2.495
10	0.833	377.074	2.107
11	0.917	414.781	1.648
12	1.000	452.489	1.290
13	1.083	490.196	1.164
14	1.167	527.903	1.049
15	1.250	565.611	0.827
16	1.333	603.318	0.704
17	1.417	641.026	0.591
18	1.500	678.733	0.484
19	1.583	716.440	0.381
20	1.667	754.148	0.377
21	1.750	791.855	0.377
22	1.833	829.563	0.270
		Sum = 100.000	Sum= 9.594

Storm Event 5      Effective Rainfall =      0.201(In)

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max   Low	Effective (In/Hr)
1	0.08	0.07	( 0.849)	0.001
2	0.17	0.07	( 0.845)	0.001
3	0.25	0.07	( 0.842)	0.001
4	0.33	0.10	( 0.839)	0.002
5	0.42	0.10	( 0.836)	0.002

6	0.50	0.10	0.002	( 0.832)	0.002	0.000
7	0.58	0.10	0.002	( 0.829)	0.002	0.000
8	0.67	0.10	0.002	( 0.826)	0.002	0.000
9	0.75	0.10	0.002	( 0.823)	0.002	0.000
10	0.83	0.13	0.003	( 0.819)	0.003	0.000
11	0.92	0.13	0.003	( 0.816)	0.003	0.000
12	1.00	0.13	0.003	( 0.813)	0.003	0.000
13	1.08	0.10	0.002	( 0.810)	0.002	0.000
14	1.17	0.10	0.002	( 0.806)	0.002	0.000
15	1.25	0.10	0.002	( 0.803)	0.002	0.000
16	1.33	0.10	0.002	( 0.800)	0.002	0.000
17	1.42	0.10	0.002	( 0.797)	0.002	0.000
18	1.50	0.10	0.002	( 0.794)	0.002	0.000
19	1.58	0.10	0.002	( 0.791)	0.002	0.000
20	1.67	0.10	0.002	( 0.787)	0.002	0.000
21	1.75	0.10	0.002	( 0.784)	0.002	0.000
22	1.83	0.13	0.003	( 0.781)	0.003	0.000
23	1.92	0.13	0.003	( 0.778)	0.003	0.000
24	2.00	0.13	0.003	( 0.775)	0.003	0.000
25	2.08	0.13	0.003	( 0.772)	0.003	0.000
26	2.17	0.13	0.003	( 0.769)	0.003	0.000
27	2.25	0.13	0.003	( 0.765)	0.003	0.000
28	2.33	0.13	0.003	( 0.762)	0.003	0.000
29	2.42	0.13	0.003	( 0.759)	0.003	0.000
30	2.50	0.13	0.003	( 0.756)	0.003	0.000
31	2.58	0.17	0.004	( 0.753)	0.004	0.000
32	2.67	0.17	0.004	( 0.750)	0.004	0.000
33	2.75	0.17	0.004	( 0.747)	0.004	0.000
34	2.83	0.17	0.004	( 0.744)	0.004	0.000
35	2.92	0.17	0.004	( 0.741)	0.004	0.000
36	3.00	0.17	0.004	( 0.738)	0.004	0.000
37	3.08	0.17	0.004	( 0.735)	0.004	0.000
38	3.17	0.17	0.004	( 0.731)	0.004	0.000
39	3.25	0.17	0.004	( 0.728)	0.004	0.000
40	3.33	0.17	0.004	( 0.725)	0.004	0.000
41	3.42	0.17	0.004	( 0.722)	0.004	0.000
42	3.50	0.17	0.004	( 0.719)	0.004	0.000
43	3.58	0.17	0.004	( 0.716)	0.004	0.000
44	3.67	0.17	0.004	( 0.713)	0.004	0.000
45	3.75	0.17	0.004	( 0.710)	0.004	0.000
46	3.83	0.20	0.005	( 0.707)	0.004	0.000
47	3.92	0.20	0.005	( 0.704)	0.004	0.000
48	4.00	0.20	0.005	( 0.701)	0.004	0.000
49	4.08	0.20	0.005	( 0.698)	0.004	0.000
50	4.17	0.20	0.005	( 0.695)	0.004	0.000
51	4.25	0.20	0.005	( 0.692)	0.004	0.000
52	4.33	0.23	0.006	( 0.690)	0.005	0.001
53	4.42	0.23	0.006	( 0.687)	0.005	0.001
54	4.50	0.23	0.006	( 0.684)	0.005	0.001
55	4.58	0.23	0.006	( 0.681)	0.005	0.001
56	4.67	0.23	0.006	( 0.678)	0.005	0.001
57	4.75	0.23	0.006	( 0.675)	0.005	0.001
58	4.83	0.27	0.006	( 0.672)	0.006	0.001
59	4.92	0.27	0.006	( 0.669)	0.006	0.001
60	5.00	0.27	0.006	( 0.666)	0.006	0.001
61	5.08	0.20	0.005	( 0.663)	0.004	0.000
62	5.17	0.20	0.005	( 0.660)	0.004	0.000
63	5.25	0.20	0.005	( 0.657)	0.004	0.000
64	5.33	0.23	0.006	( 0.655)	0.005	0.001
65	5.42	0.23	0.006	( 0.652)	0.005	0.001
66	5.50	0.23	0.006	( 0.649)	0.005	0.001
67	5.58	0.27	0.006	( 0.646)	0.006	0.001
68	5.67	0.27	0.006	( 0.643)	0.006	0.001

69	5.75	0.27	0.006	( 0.640)	0.006	0.001
70	5.83	0.27	0.006	( 0.638)	0.006	0.001
71	5.92	0.27	0.006	( 0.635)	0.006	0.001
72	6.00	0.27	0.006	( 0.632)	0.006	0.001
73	6.08	0.30	0.007	( 0.629)	0.007	0.001
74	6.17	0.30	0.007	( 0.626)	0.007	0.001
75	6.25	0.30	0.007	( 0.624)	0.007	0.001
76	6.33	0.30	0.007	( 0.621)	0.007	0.001
77	6.42	0.30	0.007	( 0.618)	0.007	0.001
78	6.50	0.30	0.007	( 0.615)	0.007	0.001
79	6.58	0.33	0.008	( 0.612)	0.007	0.001
80	6.67	0.33	0.008	( 0.610)	0.007	0.001
81	6.75	0.33	0.008	( 0.607)	0.007	0.001
82	6.83	0.33	0.008	( 0.604)	0.007	0.001
83	6.92	0.33	0.008	( 0.601)	0.007	0.001
84	7.00	0.33	0.008	( 0.599)	0.007	0.001
85	7.08	0.33	0.008	( 0.596)	0.007	0.001
86	7.17	0.33	0.008	( 0.593)	0.007	0.001
87	7.25	0.33	0.008	( 0.591)	0.007	0.001
88	7.33	0.37	0.009	( 0.588)	0.008	0.001
89	7.42	0.37	0.009	( 0.585)	0.008	0.001
90	7.50	0.37	0.009	( 0.582)	0.008	0.001
91	7.58	0.40	0.010	( 0.580)	0.009	0.001
92	7.67	0.40	0.010	( 0.577)	0.009	0.001
93	7.75	0.40	0.010	( 0.574)	0.009	0.001
94	7.83	0.43	0.010	( 0.572)	0.009	0.001
95	7.92	0.43	0.010	( 0.569)	0.009	0.001
96	8.00	0.43	0.010	( 0.567)	0.009	0.001
97	8.08	0.50	0.012	( 0.564)	0.011	0.001
98	8.17	0.50	0.012	( 0.561)	0.011	0.001
99	8.25	0.50	0.012	( 0.559)	0.011	0.001
100	8.33	0.50	0.012	( 0.556)	0.011	0.001
101	8.42	0.50	0.012	( 0.553)	0.011	0.001
102	8.50	0.50	0.012	( 0.551)	0.011	0.001
103	8.58	0.53	0.013	( 0.548)	0.012	0.001
104	8.67	0.53	0.013	( 0.546)	0.012	0.001
105	8.75	0.53	0.013	( 0.543)	0.012	0.001
106	8.83	0.57	0.014	( 0.541)	0.012	0.001
107	8.92	0.57	0.014	( 0.538)	0.012	0.001
108	9.00	0.57	0.014	( 0.535)	0.012	0.001
109	9.08	0.63	0.015	( 0.533)	0.014	0.002
110	9.17	0.63	0.015	( 0.530)	0.014	0.002
111	9.25	0.63	0.015	( 0.528)	0.014	0.002
112	9.33	0.67	0.016	( 0.525)	0.014	0.002
113	9.42	0.67	0.016	( 0.523)	0.014	0.002
114	9.50	0.67	0.016	( 0.520)	0.014	0.002
115	9.58	0.70	0.017	( 0.518)	0.015	0.002
116	9.67	0.70	0.017	( 0.515)	0.015	0.002
117	9.75	0.70	0.017	( 0.513)	0.015	0.002
118	9.83	0.73	0.018	( 0.510)	0.016	0.002
119	9.92	0.73	0.018	( 0.508)	0.016	0.002
120	10.00	0.73	0.018	( 0.506)	0.016	0.002
121	10.08	0.50	0.012	( 0.503)	0.011	0.001
122	10.17	0.50	0.012	( 0.501)	0.011	0.001
123	10.25	0.50	0.012	( 0.498)	0.011	0.001
124	10.33	0.50	0.012	( 0.496)	0.011	0.001
125	10.42	0.50	0.012	( 0.493)	0.011	0.001
126	10.50	0.50	0.012	( 0.491)	0.011	0.001
127	10.58	0.67	0.016	( 0.489)	0.014	0.002
128	10.67	0.67	0.016	( 0.486)	0.014	0.002
129	10.75	0.67	0.016	( 0.484)	0.014	0.002
130	10.83	0.67	0.016	( 0.481)	0.014	0.002
131	10.92	0.67	0.016	( 0.479)	0.014	0.002

132	11.00	0.67	0.016	( 0.477)	0.014	0.002
133	11.08	0.63	0.015	( 0.474)	0.014	0.002
134	11.17	0.63	0.015	( 0.472)	0.014	0.002
135	11.25	0.63	0.015	( 0.470)	0.014	0.002
136	11.33	0.63	0.015	( 0.467)	0.014	0.002
137	11.42	0.63	0.015	( 0.465)	0.014	0.002
138	11.50	0.63	0.015	( 0.463)	0.014	0.002
139	11.58	0.57	0.014	( 0.460)	0.012	0.001
140	11.67	0.57	0.014	( 0.458)	0.012	0.001
141	11.75	0.57	0.014	( 0.456)	0.012	0.001
142	11.83	0.60	0.014	( 0.454)	0.013	0.001
143	11.92	0.60	0.014	( 0.451)	0.013	0.001
144	12.00	0.60	0.014	( 0.449)	0.013	0.001
145	12.08	0.83	0.020	( 0.447)	0.018	0.002
146	12.17	0.83	0.020	( 0.445)	0.018	0.002
147	12.25	0.83	0.020	( 0.442)	0.018	0.002
148	12.33	0.87	0.021	( 0.440)	0.019	0.002
149	12.42	0.87	0.021	( 0.438)	0.019	0.002
150	12.50	0.87	0.021	( 0.436)	0.019	0.002
151	12.58	0.93	0.023	( 0.434)	0.020	0.002
152	12.67	0.93	0.023	( 0.431)	0.020	0.002
153	12.75	0.93	0.023	( 0.429)	0.020	0.002
154	12.83	0.97	0.023	( 0.427)	0.021	0.002
155	12.92	0.97	0.023	( 0.425)	0.021	0.002
156	13.00	0.97	0.023	( 0.423)	0.021	0.002
157	13.08	1.13	0.027	( 0.421)	0.025	0.003
158	13.17	1.13	0.027	( 0.418)	0.025	0.003
159	13.25	1.13	0.027	( 0.416)	0.025	0.003
160	13.33	1.13	0.027	( 0.414)	0.025	0.003
161	13.42	1.13	0.027	( 0.412)	0.025	0.003
162	13.50	1.13	0.027	( 0.410)	0.025	0.003
163	13.58	0.77	0.018	( 0.408)	0.017	0.002
164	13.67	0.77	0.018	( 0.406)	0.017	0.002
165	13.75	0.77	0.018	( 0.404)	0.017	0.002
166	13.83	0.77	0.018	( 0.402)	0.017	0.002
167	13.92	0.77	0.018	( 0.400)	0.017	0.002
168	14.00	0.77	0.018	( 0.398)	0.017	0.002
169	14.08	0.90	0.022	( 0.396)	0.020	0.002
170	14.17	0.90	0.022	( 0.394)	0.020	0.002
171	14.25	0.90	0.022	( 0.392)	0.020	0.002
172	14.33	0.87	0.021	( 0.390)	0.019	0.002
173	14.42	0.87	0.021	( 0.388)	0.019	0.002
174	14.50	0.87	0.021	( 0.386)	0.019	0.002
175	14.58	0.87	0.021	( 0.384)	0.019	0.002
176	14.67	0.87	0.021	( 0.382)	0.019	0.002
177	14.75	0.87	0.021	( 0.380)	0.019	0.002
178	14.83	0.83	0.020	( 0.378)	0.018	0.002
179	14.92	0.83	0.020	( 0.376)	0.018	0.002
180	15.00	0.83	0.020	( 0.374)	0.018	0.002
181	15.08	0.80	0.019	( 0.372)	0.017	0.002
182	15.17	0.80	0.019	( 0.370)	0.017	0.002
183	15.25	0.80	0.019	( 0.368)	0.017	0.002
184	15.33	0.77	0.018	( 0.366)	0.017	0.002
185	15.42	0.77	0.018	( 0.364)	0.017	0.002
186	15.50	0.77	0.018	( 0.363)	0.017	0.002
187	15.58	0.63	0.015	( 0.361)	0.014	0.002
188	15.67	0.63	0.015	( 0.359)	0.014	0.002
189	15.75	0.63	0.015	( 0.357)	0.014	0.002
190	15.83	0.63	0.015	( 0.355)	0.014	0.002
191	15.92	0.63	0.015	( 0.353)	0.014	0.002
192	16.00	0.63	0.015	( 0.352)	0.014	0.002
193	16.08	0.13	0.003	( 0.350)	0.003	0.000
194	16.17	0.13	0.003	( 0.348)	0.003	0.000

195	16.25	0.13	0.003	( 0.346)	0.003	0.000
196	16.33	0.13	0.003	( 0.344)	0.003	0.000
197	16.42	0.13	0.003	( 0.343)	0.003	0.000
198	16.50	0.13	0.003	( 0.341)	0.003	0.000
199	16.58	0.10	0.002	( 0.339)	0.002	0.000
200	16.67	0.10	0.002	( 0.337)	0.002	0.000
201	16.75	0.10	0.002	( 0.336)	0.002	0.000
202	16.83	0.10	0.002	( 0.334)	0.002	0.000
203	16.92	0.10	0.002	( 0.332)	0.002	0.000
204	17.00	0.10	0.002	( 0.331)	0.002	0.000
205	17.08	0.17	0.004	( 0.329)	0.004	0.000
206	17.17	0.17	0.004	( 0.327)	0.004	0.000
207	17.25	0.17	0.004	( 0.326)	0.004	0.000
208	17.33	0.17	0.004	( 0.324)	0.004	0.000
209	17.42	0.17	0.004	( 0.322)	0.004	0.000
210	17.50	0.17	0.004	( 0.321)	0.004	0.000
211	17.58	0.17	0.004	( 0.319)	0.004	0.000
212	17.67	0.17	0.004	( 0.318)	0.004	0.000
213	17.75	0.17	0.004	( 0.316)	0.004	0.000
214	17.83	0.13	0.003	( 0.314)	0.003	0.000
215	17.92	0.13	0.003	( 0.313)	0.003	0.000
216	18.00	0.13	0.003	( 0.311)	0.003	0.000
217	18.08	0.13	0.003	( 0.310)	0.003	0.000
218	18.17	0.13	0.003	( 0.308)	0.003	0.000
219	18.25	0.13	0.003	( 0.307)	0.003	0.000
220	18.33	0.13	0.003	( 0.305)	0.003	0.000
221	18.42	0.13	0.003	( 0.304)	0.003	0.000
222	18.50	0.13	0.003	( 0.302)	0.003	0.000
223	18.58	0.10	0.002	( 0.301)	0.002	0.000
224	18.67	0.10	0.002	( 0.299)	0.002	0.000
225	18.75	0.10	0.002	( 0.298)	0.002	0.000
226	18.83	0.07	0.002	( 0.297)	0.001	0.000
227	18.92	0.07	0.002	( 0.295)	0.001	0.000
228	19.00	0.07	0.002	( 0.294)	0.001	0.000
229	19.08	0.10	0.002	( 0.292)	0.002	0.000
230	19.17	0.10	0.002	( 0.291)	0.002	0.000
231	19.25	0.10	0.002	( 0.290)	0.002	0.000
232	19.33	0.13	0.003	( 0.288)	0.003	0.000
233	19.42	0.13	0.003	( 0.287)	0.003	0.000
234	19.50	0.13	0.003	( 0.286)	0.003	0.000
235	19.58	0.10	0.002	( 0.284)	0.002	0.000
236	19.67	0.10	0.002	( 0.283)	0.002	0.000
237	19.75	0.10	0.002	( 0.282)	0.002	0.000
238	19.83	0.07	0.002	( 0.280)	0.001	0.000
239	19.92	0.07	0.002	( 0.279)	0.001	0.000
240	20.00	0.07	0.002	( 0.278)	0.001	0.000
241	20.08	0.10	0.002	( 0.277)	0.002	0.000
242	20.17	0.10	0.002	( 0.276)	0.002	0.000
243	20.25	0.10	0.002	( 0.274)	0.002	0.000
244	20.33	0.10	0.002	( 0.273)	0.002	0.000
245	20.42	0.10	0.002	( 0.272)	0.002	0.000
246	20.50	0.10	0.002	( 0.271)	0.002	0.000
247	20.58	0.10	0.002	( 0.270)	0.002	0.000
248	20.67	0.10	0.002	( 0.269)	0.002	0.000
249	20.75	0.10	0.002	( 0.267)	0.002	0.000
250	20.83	0.07	0.002	( 0.266)	0.001	0.000
251	20.92	0.07	0.002	( 0.265)	0.001	0.000
252	21.00	0.07	0.002	( 0.264)	0.001	0.000
253	21.08	0.10	0.002	( 0.263)	0.002	0.000
254	21.17	0.10	0.002	( 0.262)	0.002	0.000
255	21.25	0.10	0.002	( 0.261)	0.002	0.000
256	21.33	0.07	0.002	( 0.260)	0.001	0.000
257	21.42	0.07	0.002	( 0.259)	0.001	0.000



15	1.25	0.10	0.004	( 0.803)	0.003	0.000
16	1.33	0.10	0.004	( 0.800)	0.003	0.000
17	1.42	0.10	0.004	( 0.797)	0.003	0.000
18	1.50	0.10	0.004	( 0.794)	0.003	0.000
19	1.58	0.10	0.004	( 0.791)	0.003	0.000
20	1.67	0.10	0.004	( 0.787)	0.003	0.000
21	1.75	0.10	0.004	( 0.784)	0.003	0.000
22	1.83	0.13	0.005	( 0.781)	0.004	0.000
23	1.92	0.13	0.005	( 0.778)	0.004	0.000
24	2.00	0.13	0.005	( 0.775)	0.004	0.000
25	2.08	0.13	0.005	( 0.772)	0.004	0.000
26	2.17	0.13	0.005	( 0.769)	0.004	0.000
27	2.25	0.13	0.005	( 0.765)	0.004	0.000
28	2.33	0.13	0.005	( 0.762)	0.004	0.000
29	2.42	0.13	0.005	( 0.759)	0.004	0.000
30	2.50	0.13	0.005	( 0.756)	0.004	0.000
31	2.58	0.17	0.006	( 0.753)	0.005	0.001
32	2.67	0.17	0.006	( 0.750)	0.005	0.001
33	2.75	0.17	0.006	( 0.747)	0.005	0.001
34	2.83	0.17	0.006	( 0.744)	0.005	0.001
35	2.92	0.17	0.006	( 0.741)	0.005	0.001
36	3.00	0.17	0.006	( 0.738)	0.005	0.001
37	3.08	0.17	0.006	( 0.735)	0.005	0.001
38	3.17	0.17	0.006	( 0.731)	0.005	0.001
39	3.25	0.17	0.006	( 0.728)	0.005	0.001
40	3.33	0.17	0.006	( 0.725)	0.005	0.001
41	3.42	0.17	0.006	( 0.722)	0.005	0.001
42	3.50	0.17	0.006	( 0.719)	0.005	0.001
43	3.58	0.17	0.006	( 0.716)	0.005	0.001
44	3.67	0.17	0.006	( 0.713)	0.005	0.001
45	3.75	0.17	0.006	( 0.710)	0.005	0.001
46	3.83	0.20	0.007	( 0.707)	0.007	0.001
47	3.92	0.20	0.007	( 0.704)	0.007	0.001
48	4.00	0.20	0.007	( 0.701)	0.007	0.001
49	4.08	0.20	0.007	( 0.698)	0.007	0.001
50	4.17	0.20	0.007	( 0.695)	0.007	0.001
51	4.25	0.20	0.007	( 0.692)	0.007	0.001
52	4.33	0.23	0.008	( 0.690)	0.008	0.001
53	4.42	0.23	0.008	( 0.687)	0.008	0.001
54	4.50	0.23	0.008	( 0.684)	0.008	0.001
55	4.58	0.23	0.008	( 0.681)	0.008	0.001
56	4.67	0.23	0.008	( 0.678)	0.008	0.001
57	4.75	0.23	0.008	( 0.675)	0.008	0.001
58	4.83	0.27	0.010	( 0.672)	0.009	0.001
59	4.92	0.27	0.010	( 0.669)	0.009	0.001
60	5.00	0.27	0.010	( 0.666)	0.009	0.001
61	5.08	0.20	0.007	( 0.663)	0.007	0.001
62	5.17	0.20	0.007	( 0.660)	0.007	0.001
63	5.25	0.20	0.007	( 0.657)	0.007	0.001
64	5.33	0.23	0.008	( 0.655)	0.008	0.001
65	5.42	0.23	0.008	( 0.652)	0.008	0.001
66	5.50	0.23	0.008	( 0.649)	0.008	0.001
67	5.58	0.27	0.010	( 0.646)	0.009	0.001
68	5.67	0.27	0.010	( 0.643)	0.009	0.001
69	5.75	0.27	0.010	( 0.640)	0.009	0.001
70	5.83	0.27	0.010	( 0.638)	0.009	0.001
71	5.92	0.27	0.010	( 0.635)	0.009	0.001
72	6.00	0.27	0.010	( 0.632)	0.009	0.001
73	6.08	0.30	0.011	( 0.629)	0.010	0.001
74	6.17	0.30	0.011	( 0.626)	0.010	0.001
75	6.25	0.30	0.011	( 0.624)	0.010	0.001
76	6.33	0.30	0.011	( 0.621)	0.010	0.001
77	6.42	0.30	0.011	( 0.618)	0.010	0.001

78	6.50	0.30	0.011	( 0.615)	0.010	0.001
79	6.58	0.33	0.012	( 0.612)	0.011	0.001
80	6.67	0.33	0.012	( 0.610)	0.011	0.001
81	6.75	0.33	0.012	( 0.607)	0.011	0.001
82	6.83	0.33	0.012	( 0.604)	0.011	0.001
83	6.92	0.33	0.012	( 0.601)	0.011	0.001
84	7.00	0.33	0.012	( 0.599)	0.011	0.001
85	7.08	0.33	0.012	( 0.596)	0.011	0.001
86	7.17	0.33	0.012	( 0.593)	0.011	0.001
87	7.25	0.33	0.012	( 0.591)	0.011	0.001
88	7.33	0.37	0.013	( 0.588)	0.012	0.001
89	7.42	0.37	0.013	( 0.585)	0.012	0.001
90	7.50	0.37	0.013	( 0.582)	0.012	0.001
91	7.58	0.40	0.014	( 0.580)	0.013	0.001
92	7.67	0.40	0.014	( 0.577)	0.013	0.001
93	7.75	0.40	0.014	( 0.574)	0.013	0.001
94	7.83	0.43	0.016	( 0.572)	0.014	0.002
95	7.92	0.43	0.016	( 0.569)	0.014	0.002
96	8.00	0.43	0.016	( 0.567)	0.014	0.002
97	8.08	0.50	0.018	( 0.564)	0.016	0.002
98	8.17	0.50	0.018	( 0.561)	0.016	0.002
99	8.25	0.50	0.018	( 0.559)	0.016	0.002
100	8.33	0.50	0.018	( 0.556)	0.016	0.002
101	8.42	0.50	0.018	( 0.553)	0.016	0.002
102	8.50	0.50	0.018	( 0.551)	0.016	0.002
103	8.58	0.53	0.019	( 0.548)	0.017	0.002
104	8.67	0.53	0.019	( 0.546)	0.017	0.002
105	8.75	0.53	0.019	( 0.543)	0.017	0.002
106	8.83	0.57	0.021	( 0.541)	0.018	0.002
107	8.92	0.57	0.021	( 0.538)	0.018	0.002
108	9.00	0.57	0.021	( 0.535)	0.018	0.002
109	9.08	0.63	0.023	( 0.533)	0.021	0.002
110	9.17	0.63	0.023	( 0.530)	0.021	0.002
111	9.25	0.63	0.023	( 0.528)	0.021	0.002
112	9.33	0.67	0.024	( 0.525)	0.022	0.002
113	9.42	0.67	0.024	( 0.523)	0.022	0.002
114	9.50	0.67	0.024	( 0.520)	0.022	0.002
115	9.58	0.70	0.025	( 0.518)	0.023	0.003
116	9.67	0.70	0.025	( 0.515)	0.023	0.003
117	9.75	0.70	0.025	( 0.513)	0.023	0.003
118	9.83	0.73	0.027	( 0.510)	0.024	0.003
119	9.92	0.73	0.027	( 0.508)	0.024	0.003
120	10.00	0.73	0.027	( 0.506)	0.024	0.003
121	10.08	0.50	0.018	( 0.503)	0.016	0.002
122	10.17	0.50	0.018	( 0.501)	0.016	0.002
123	10.25	0.50	0.018	( 0.498)	0.016	0.002
124	10.33	0.50	0.018	( 0.496)	0.016	0.002
125	10.42	0.50	0.018	( 0.493)	0.016	0.002
126	10.50	0.50	0.018	( 0.491)	0.016	0.002
127	10.58	0.67	0.024	( 0.489)	0.022	0.002
128	10.67	0.67	0.024	( 0.486)	0.022	0.002
129	10.75	0.67	0.024	( 0.484)	0.022	0.002
130	10.83	0.67	0.024	( 0.481)	0.022	0.002
131	10.92	0.67	0.024	( 0.479)	0.022	0.002
132	11.00	0.67	0.024	( 0.477)	0.022	0.002
133	11.08	0.63	0.023	( 0.474)	0.021	0.002
134	11.17	0.63	0.023	( 0.472)	0.021	0.002
135	11.25	0.63	0.023	( 0.470)	0.021	0.002
136	11.33	0.63	0.023	( 0.467)	0.021	0.002
137	11.42	0.63	0.023	( 0.465)	0.021	0.002
138	11.50	0.63	0.023	( 0.463)	0.021	0.002
139	11.58	0.57	0.021	( 0.460)	0.018	0.002
140	11.67	0.57	0.021	( 0.458)	0.018	0.002

141	11.75	0.57	0.021	( 0.456)	0.018	0.002
142	11.83	0.60	0.022	( 0.454)	0.020	0.002
143	11.92	0.60	0.022	( 0.451)	0.020	0.002
144	12.00	0.60	0.022	( 0.449)	0.020	0.002
145	12.08	0.83	0.030	( 0.447)	0.027	0.003
146	12.17	0.83	0.030	( 0.445)	0.027	0.003
147	12.25	0.83	0.030	( 0.442)	0.027	0.003
148	12.33	0.87	0.031	( 0.440)	0.028	0.003
149	12.42	0.87	0.031	( 0.438)	0.028	0.003
150	12.50	0.87	0.031	( 0.436)	0.028	0.003
151	12.58	0.93	0.034	( 0.434)	0.030	0.003
152	12.67	0.93	0.034	( 0.431)	0.030	0.003
153	12.75	0.93	0.034	( 0.429)	0.030	0.003
154	12.83	0.97	0.035	( 0.427)	0.031	0.003
155	12.92	0.97	0.035	( 0.425)	0.031	0.003
156	13.00	0.97	0.035	( 0.423)	0.031	0.003
157	13.08	1.13	0.041	( 0.421)	0.037	0.004
158	13.17	1.13	0.041	( 0.418)	0.037	0.004
159	13.25	1.13	0.041	( 0.416)	0.037	0.004
160	13.33	1.13	0.041	( 0.414)	0.037	0.004
161	13.42	1.13	0.041	( 0.412)	0.037	0.004
162	13.50	1.13	0.041	( 0.410)	0.037	0.004
163	13.58	0.77	0.028	( 0.408)	0.025	0.003
164	13.67	0.77	0.028	( 0.406)	0.025	0.003
165	13.75	0.77	0.028	( 0.404)	0.025	0.003
166	13.83	0.77	0.028	( 0.402)	0.025	0.003
167	13.92	0.77	0.028	( 0.400)	0.025	0.003
168	14.00	0.77	0.028	( 0.398)	0.025	0.003
169	14.08	0.90	0.033	( 0.396)	0.029	0.003
170	14.17	0.90	0.033	( 0.394)	0.029	0.003
171	14.25	0.90	0.033	( 0.392)	0.029	0.003
172	14.33	0.87	0.031	( 0.390)	0.028	0.003
173	14.42	0.87	0.031	( 0.388)	0.028	0.003
174	14.50	0.87	0.031	( 0.386)	0.028	0.003
175	14.58	0.87	0.031	( 0.384)	0.028	0.003
176	14.67	0.87	0.031	( 0.382)	0.028	0.003
177	14.75	0.87	0.031	( 0.380)	0.028	0.003
178	14.83	0.83	0.030	( 0.378)	0.027	0.003
179	14.92	0.83	0.030	( 0.376)	0.027	0.003
180	15.00	0.83	0.030	( 0.374)	0.027	0.003
181	15.08	0.80	0.029	( 0.372)	0.026	0.003
182	15.17	0.80	0.029	( 0.370)	0.026	0.003
183	15.25	0.80	0.029	( 0.368)	0.026	0.003
184	15.33	0.77	0.028	( 0.366)	0.025	0.003
185	15.42	0.77	0.028	( 0.364)	0.025	0.003
186	15.50	0.77	0.028	( 0.363)	0.025	0.003
187	15.58	0.63	0.023	( 0.361)	0.021	0.002
188	15.67	0.63	0.023	( 0.359)	0.021	0.002
189	15.75	0.63	0.023	( 0.357)	0.021	0.002
190	15.83	0.63	0.023	( 0.355)	0.021	0.002
191	15.92	0.63	0.023	( 0.353)	0.021	0.002
192	16.00	0.63	0.023	( 0.352)	0.021	0.002
193	16.08	0.13	0.005	( 0.350)	0.004	0.000
194	16.17	0.13	0.005	( 0.348)	0.004	0.000
195	16.25	0.13	0.005	( 0.346)	0.004	0.000
196	16.33	0.13	0.005	( 0.344)	0.004	0.000
197	16.42	0.13	0.005	( 0.343)	0.004	0.000
198	16.50	0.13	0.005	( 0.341)	0.004	0.000
199	16.58	0.10	0.004	( 0.339)	0.003	0.000
200	16.67	0.10	0.004	( 0.337)	0.003	0.000
201	16.75	0.10	0.004	( 0.336)	0.003	0.000
202	16.83	0.10	0.004	( 0.334)	0.003	0.000
203	16.92	0.10	0.004	( 0.332)	0.003	0.000

204	17.00	0.10	0.004	( 0.331)	0.003	0.000
205	17.08	0.17	0.006	( 0.329)	0.005	0.001
206	17.17	0.17	0.006	( 0.327)	0.005	0.001
207	17.25	0.17	0.006	( 0.326)	0.005	0.001
208	17.33	0.17	0.006	( 0.324)	0.005	0.001
209	17.42	0.17	0.006	( 0.322)	0.005	0.001
210	17.50	0.17	0.006	( 0.321)	0.005	0.001
211	17.58	0.17	0.006	( 0.319)	0.005	0.001
212	17.67	0.17	0.006	( 0.318)	0.005	0.001
213	17.75	0.17	0.006	( 0.316)	0.005	0.001
214	17.83	0.13	0.005	( 0.314)	0.004	0.000
215	17.92	0.13	0.005	( 0.313)	0.004	0.000
216	18.00	0.13	0.005	( 0.311)	0.004	0.000
217	18.08	0.13	0.005	( 0.310)	0.004	0.000
218	18.17	0.13	0.005	( 0.308)	0.004	0.000
219	18.25	0.13	0.005	( 0.307)	0.004	0.000
220	18.33	0.13	0.005	( 0.305)	0.004	0.000
221	18.42	0.13	0.005	( 0.304)	0.004	0.000
222	18.50	0.13	0.005	( 0.302)	0.004	0.000
223	18.58	0.10	0.004	( 0.301)	0.003	0.000
224	18.67	0.10	0.004	( 0.299)	0.003	0.000
225	18.75	0.10	0.004	( 0.298)	0.003	0.000
226	18.83	0.07	0.002	( 0.297)	0.002	0.000
227	18.92	0.07	0.002	( 0.295)	0.002	0.000
228	19.00	0.07	0.002	( 0.294)	0.002	0.000
229	19.08	0.10	0.004	( 0.292)	0.003	0.000
230	19.17	0.10	0.004	( 0.291)	0.003	0.000
231	19.25	0.10	0.004	( 0.290)	0.003	0.000
232	19.33	0.13	0.005	( 0.288)	0.004	0.000
233	19.42	0.13	0.005	( 0.287)	0.004	0.000
234	19.50	0.13	0.005	( 0.286)	0.004	0.000
235	19.58	0.10	0.004	( 0.284)	0.003	0.000
236	19.67	0.10	0.004	( 0.283)	0.003	0.000
237	19.75	0.10	0.004	( 0.282)	0.003	0.000
238	19.83	0.07	0.002	( 0.280)	0.002	0.000
239	19.92	0.07	0.002	( 0.279)	0.002	0.000
240	20.00	0.07	0.002	( 0.278)	0.002	0.000
241	20.08	0.10	0.004	( 0.277)	0.003	0.000
242	20.17	0.10	0.004	( 0.276)	0.003	0.000
243	20.25	0.10	0.004	( 0.274)	0.003	0.000
244	20.33	0.10	0.004	( 0.273)	0.003	0.000
245	20.42	0.10	0.004	( 0.272)	0.003	0.000
246	20.50	0.10	0.004	( 0.271)	0.003	0.000
247	20.58	0.10	0.004	( 0.270)	0.003	0.000
248	20.67	0.10	0.004	( 0.269)	0.003	0.000
249	20.75	0.10	0.004	( 0.267)	0.003	0.000
250	20.83	0.07	0.002	( 0.266)	0.002	0.000
251	20.92	0.07	0.002	( 0.265)	0.002	0.000
252	21.00	0.07	0.002	( 0.264)	0.002	0.000
253	21.08	0.10	0.004	( 0.263)	0.003	0.000
254	21.17	0.10	0.004	( 0.262)	0.003	0.000
255	21.25	0.10	0.004	( 0.261)	0.003	0.000
256	21.33	0.07	0.002	( 0.260)	0.002	0.000
257	21.42	0.07	0.002	( 0.259)	0.002	0.000
258	21.50	0.07	0.002	( 0.258)	0.002	0.000
259	21.58	0.10	0.004	( 0.257)	0.003	0.000
260	21.67	0.10	0.004	( 0.256)	0.003	0.000
261	21.75	0.10	0.004	( 0.255)	0.003	0.000
262	21.83	0.07	0.002	( 0.254)	0.002	0.000
263	21.92	0.07	0.002	( 0.254)	0.002	0.000
264	22.00	0.07	0.002	( 0.253)	0.002	0.000
265	22.08	0.10	0.004	( 0.252)	0.003	0.000
266	22.17	0.10	0.004	( 0.251)	0.003	0.000



24	2.00	0.13	0.006	( 0.775)	0.005	0.001
25	2.08	0.13	0.006	( 0.772)	0.005	0.001
26	2.17	0.13	0.006	( 0.769)	0.005	0.001
27	2.25	0.13	0.006	( 0.765)	0.005	0.001
28	2.33	0.13	0.006	( 0.762)	0.005	0.001
29	2.42	0.13	0.006	( 0.759)	0.005	0.001
30	2.50	0.13	0.006	( 0.756)	0.005	0.001
31	2.58	0.17	0.008	( 0.753)	0.007	0.001
32	2.67	0.17	0.008	( 0.750)	0.007	0.001
33	2.75	0.17	0.008	( 0.747)	0.007	0.001
34	2.83	0.17	0.008	( 0.744)	0.007	0.001
35	2.92	0.17	0.008	( 0.741)	0.007	0.001
36	3.00	0.17	0.008	( 0.738)	0.007	0.001
37	3.08	0.17	0.008	( 0.735)	0.007	0.001
38	3.17	0.17	0.008	( 0.731)	0.007	0.001
39	3.25	0.17	0.008	( 0.728)	0.007	0.001
40	3.33	0.17	0.008	( 0.725)	0.007	0.001
41	3.42	0.17	0.008	( 0.722)	0.007	0.001
42	3.50	0.17	0.008	( 0.719)	0.007	0.001
43	3.58	0.17	0.008	( 0.716)	0.007	0.001
44	3.67	0.17	0.008	( 0.713)	0.007	0.001
45	3.75	0.17	0.008	( 0.710)	0.007	0.001
46	3.83	0.20	0.009	( 0.707)	0.008	0.001
47	3.92	0.20	0.009	( 0.704)	0.008	0.001
48	4.00	0.20	0.009	( 0.701)	0.008	0.001
49	4.08	0.20	0.009	( 0.698)	0.008	0.001
50	4.17	0.20	0.009	( 0.695)	0.008	0.001
51	4.25	0.20	0.009	( 0.692)	0.008	0.001
52	4.33	0.23	0.011	( 0.690)	0.010	0.001
53	4.42	0.23	0.011	( 0.687)	0.010	0.001
54	4.50	0.23	0.011	( 0.684)	0.010	0.001
55	4.58	0.23	0.011	( 0.681)	0.010	0.001
56	4.67	0.23	0.011	( 0.678)	0.010	0.001
57	4.75	0.23	0.011	( 0.675)	0.010	0.001
58	4.83	0.27	0.012	( 0.672)	0.011	0.001
59	4.92	0.27	0.012	( 0.669)	0.011	0.001
60	5.00	0.27	0.012	( 0.666)	0.011	0.001
61	5.08	0.20	0.009	( 0.663)	0.008	0.001
62	5.17	0.20	0.009	( 0.660)	0.008	0.001
63	5.25	0.20	0.009	( 0.657)	0.008	0.001
64	5.33	0.23	0.011	( 0.655)	0.010	0.001
65	5.42	0.23	0.011	( 0.652)	0.010	0.001
66	5.50	0.23	0.011	( 0.649)	0.010	0.001
67	5.58	0.27	0.012	( 0.646)	0.011	0.001
68	5.67	0.27	0.012	( 0.643)	0.011	0.001
69	5.75	0.27	0.012	( 0.640)	0.011	0.001
70	5.83	0.27	0.012	( 0.638)	0.011	0.001
71	5.92	0.27	0.012	( 0.635)	0.011	0.001
72	6.00	0.27	0.012	( 0.632)	0.011	0.001
73	6.08	0.30	0.014	( 0.629)	0.012	0.001
74	6.17	0.30	0.014	( 0.626)	0.012	0.001
75	6.25	0.30	0.014	( 0.624)	0.012	0.001
76	6.33	0.30	0.014	( 0.621)	0.012	0.001
77	6.42	0.30	0.014	( 0.618)	0.012	0.001
78	6.50	0.30	0.014	( 0.615)	0.012	0.001
79	6.58	0.33	0.015	( 0.612)	0.014	0.002
80	6.67	0.33	0.015	( 0.610)	0.014	0.002
81	6.75	0.33	0.015	( 0.607)	0.014	0.002
82	6.83	0.33	0.015	( 0.604)	0.014	0.002
83	6.92	0.33	0.015	( 0.601)	0.014	0.002
84	7.00	0.33	0.015	( 0.599)	0.014	0.002
85	7.08	0.33	0.015	( 0.596)	0.014	0.002
86	7.17	0.33	0.015	( 0.593)	0.014	0.002

87	7.25	0.33	0.015	( 0.591)	0.014	0.002
88	7.33	0.37	0.017	( 0.588)	0.015	0.002
89	7.42	0.37	0.017	( 0.585)	0.015	0.002
90	7.50	0.37	0.017	( 0.582)	0.015	0.002
91	7.58	0.40	0.018	( 0.580)	0.016	0.002
92	7.67	0.40	0.018	( 0.577)	0.016	0.002
93	7.75	0.40	0.018	( 0.574)	0.016	0.002
94	7.83	0.43	0.020	( 0.572)	0.018	0.002
95	7.92	0.43	0.020	( 0.569)	0.018	0.002
96	8.00	0.43	0.020	( 0.567)	0.018	0.002
97	8.08	0.50	0.023	( 0.564)	0.021	0.002
98	8.17	0.50	0.023	( 0.561)	0.021	0.002
99	8.25	0.50	0.023	( 0.559)	0.021	0.002
100	8.33	0.50	0.023	( 0.556)	0.021	0.002
101	8.42	0.50	0.023	( 0.553)	0.021	0.002
102	8.50	0.50	0.023	( 0.551)	0.021	0.002
103	8.58	0.53	0.024	( 0.548)	0.022	0.002
104	8.67	0.53	0.024	( 0.546)	0.022	0.002
105	8.75	0.53	0.024	( 0.543)	0.022	0.002
106	8.83	0.57	0.026	( 0.541)	0.023	0.003
107	8.92	0.57	0.026	( 0.538)	0.023	0.003
108	9.00	0.57	0.026	( 0.535)	0.023	0.003
109	9.08	0.63	0.029	( 0.533)	0.026	0.003
110	9.17	0.63	0.029	( 0.530)	0.026	0.003
111	9.25	0.63	0.029	( 0.528)	0.026	0.003
112	9.33	0.67	0.031	( 0.525)	0.027	0.003
113	9.42	0.67	0.031	( 0.523)	0.027	0.003
114	9.50	0.67	0.031	( 0.520)	0.027	0.003
115	9.58	0.70	0.032	( 0.518)	0.029	0.003
116	9.67	0.70	0.032	( 0.515)	0.029	0.003
117	9.75	0.70	0.032	( 0.513)	0.029	0.003
118	9.83	0.73	0.034	( 0.510)	0.030	0.003
119	9.92	0.73	0.034	( 0.508)	0.030	0.003
120	10.00	0.73	0.034	( 0.506)	0.030	0.003
121	10.08	0.50	0.023	( 0.503)	0.021	0.002
122	10.17	0.50	0.023	( 0.501)	0.021	0.002
123	10.25	0.50	0.023	( 0.498)	0.021	0.002
124	10.33	0.50	0.023	( 0.496)	0.021	0.002
125	10.42	0.50	0.023	( 0.493)	0.021	0.002
126	10.50	0.50	0.023	( 0.491)	0.021	0.002
127	10.58	0.67	0.031	( 0.489)	0.027	0.003
128	10.67	0.67	0.031	( 0.486)	0.027	0.003
129	10.75	0.67	0.031	( 0.484)	0.027	0.003
130	10.83	0.67	0.031	( 0.481)	0.027	0.003
131	10.92	0.67	0.031	( 0.479)	0.027	0.003
132	11.00	0.67	0.031	( 0.477)	0.027	0.003
133	11.08	0.63	0.029	( 0.474)	0.026	0.003
134	11.17	0.63	0.029	( 0.472)	0.026	0.003
135	11.25	0.63	0.029	( 0.470)	0.026	0.003
136	11.33	0.63	0.029	( 0.467)	0.026	0.003
137	11.42	0.63	0.029	( 0.465)	0.026	0.003
138	11.50	0.63	0.029	( 0.463)	0.026	0.003
139	11.58	0.57	0.026	( 0.460)	0.023	0.003
140	11.67	0.57	0.026	( 0.458)	0.023	0.003
141	11.75	0.57	0.026	( 0.456)	0.023	0.003
142	11.83	0.60	0.027	( 0.454)	0.025	0.003
143	11.92	0.60	0.027	( 0.451)	0.025	0.003
144	12.00	0.60	0.027	( 0.449)	0.025	0.003
145	12.08	0.83	0.038	( 0.447)	0.034	0.004
146	12.17	0.83	0.038	( 0.445)	0.034	0.004
147	12.25	0.83	0.038	( 0.442)	0.034	0.004
148	12.33	0.87	0.040	( 0.440)	0.036	0.004
149	12.42	0.87	0.040	( 0.438)	0.036	0.004

150	12.50	0.87	0.040	( 0.436)	0.036	0.004
151	12.58	0.93	0.043	( 0.434)	0.038	0.004
152	12.67	0.93	0.043	( 0.431)	0.038	0.004
153	12.75	0.93	0.043	( 0.429)	0.038	0.004
154	12.83	0.97	0.044	( 0.427)	0.040	0.004
155	12.92	0.97	0.044	( 0.425)	0.040	0.004
156	13.00	0.97	0.044	( 0.423)	0.040	0.004
157	13.08	1.13	0.052	( 0.421)	0.047	0.005
158	13.17	1.13	0.052	( 0.418)	0.047	0.005
159	13.25	1.13	0.052	( 0.416)	0.047	0.005
160	13.33	1.13	0.052	( 0.414)	0.047	0.005
161	13.42	1.13	0.052	( 0.412)	0.047	0.005
162	13.50	1.13	0.052	( 0.410)	0.047	0.005
163	13.58	0.77	0.035	( 0.408)	0.032	0.004
164	13.67	0.77	0.035	( 0.406)	0.032	0.004
165	13.75	0.77	0.035	( 0.404)	0.032	0.004
166	13.83	0.77	0.035	( 0.402)	0.032	0.004
167	13.92	0.77	0.035	( 0.400)	0.032	0.004
168	14.00	0.77	0.035	( 0.398)	0.032	0.004
169	14.08	0.90	0.041	( 0.396)	0.037	0.004
170	14.17	0.90	0.041	( 0.394)	0.037	0.004
171	14.25	0.90	0.041	( 0.392)	0.037	0.004
172	14.33	0.87	0.040	( 0.390)	0.036	0.004
173	14.42	0.87	0.040	( 0.388)	0.036	0.004
174	14.50	0.87	0.040	( 0.386)	0.036	0.004
175	14.58	0.87	0.040	( 0.384)	0.036	0.004
176	14.67	0.87	0.040	( 0.382)	0.036	0.004
177	14.75	0.87	0.040	( 0.380)	0.036	0.004
178	14.83	0.83	0.038	( 0.378)	0.034	0.004
179	14.92	0.83	0.038	( 0.376)	0.034	0.004
180	15.00	0.83	0.038	( 0.374)	0.034	0.004
181	15.08	0.80	0.037	( 0.372)	0.033	0.004
182	15.17	0.80	0.037	( 0.370)	0.033	0.004
183	15.25	0.80	0.037	( 0.368)	0.033	0.004
184	15.33	0.77	0.035	( 0.366)	0.032	0.004
185	15.42	0.77	0.035	( 0.364)	0.032	0.004
186	15.50	0.77	0.035	( 0.363)	0.032	0.004
187	15.58	0.63	0.029	( 0.361)	0.026	0.003
188	15.67	0.63	0.029	( 0.359)	0.026	0.003
189	15.75	0.63	0.029	( 0.357)	0.026	0.003
190	15.83	0.63	0.029	( 0.355)	0.026	0.003
191	15.92	0.63	0.029	( 0.353)	0.026	0.003
192	16.00	0.63	0.029	( 0.352)	0.026	0.003
193	16.08	0.13	0.006	( 0.350)	0.005	0.001
194	16.17	0.13	0.006	( 0.348)	0.005	0.001
195	16.25	0.13	0.006	( 0.346)	0.005	0.001
196	16.33	0.13	0.006	( 0.344)	0.005	0.001
197	16.42	0.13	0.006	( 0.343)	0.005	0.001
198	16.50	0.13	0.006	( 0.341)	0.005	0.001
199	16.58	0.10	0.005	( 0.339)	0.004	0.000
200	16.67	0.10	0.005	( 0.337)	0.004	0.000
201	16.75	0.10	0.005	( 0.336)	0.004	0.000
202	16.83	0.10	0.005	( 0.334)	0.004	0.000
203	16.92	0.10	0.005	( 0.332)	0.004	0.000
204	17.00	0.10	0.005	( 0.331)	0.004	0.000
205	17.08	0.17	0.008	( 0.329)	0.007	0.001
206	17.17	0.17	0.008	( 0.327)	0.007	0.001
207	17.25	0.17	0.008	( 0.326)	0.007	0.001
208	17.33	0.17	0.008	( 0.324)	0.007	0.001
209	17.42	0.17	0.008	( 0.322)	0.007	0.001
210	17.50	0.17	0.008	( 0.321)	0.007	0.001
211	17.58	0.17	0.008	( 0.319)	0.007	0.001
212	17.67	0.17	0.008	( 0.318)	0.007	0.001

213	17.75	0.17	0.008	( 0.316)	0.007	0.001
214	17.83	0.13	0.006	( 0.314)	0.005	0.001
215	17.92	0.13	0.006	( 0.313)	0.005	0.001
216	18.00	0.13	0.006	( 0.311)	0.005	0.001
217	18.08	0.13	0.006	( 0.310)	0.005	0.001
218	18.17	0.13	0.006	( 0.308)	0.005	0.001
219	18.25	0.13	0.006	( 0.307)	0.005	0.001
220	18.33	0.13	0.006	( 0.305)	0.005	0.001
221	18.42	0.13	0.006	( 0.304)	0.005	0.001
222	18.50	0.13	0.006	( 0.302)	0.005	0.001
223	18.58	0.10	0.005	( 0.301)	0.004	0.000
224	18.67	0.10	0.005	( 0.299)	0.004	0.000
225	18.75	0.10	0.005	( 0.298)	0.004	0.000
226	18.83	0.07	0.003	( 0.297)	0.003	0.000
227	18.92	0.07	0.003	( 0.295)	0.003	0.000
228	19.00	0.07	0.003	( 0.294)	0.003	0.000
229	19.08	0.10	0.005	( 0.292)	0.004	0.000
230	19.17	0.10	0.005	( 0.291)	0.004	0.000
231	19.25	0.10	0.005	( 0.290)	0.004	0.000
232	19.33	0.13	0.006	( 0.288)	0.005	0.001
233	19.42	0.13	0.006	( 0.287)	0.005	0.001
234	19.50	0.13	0.006	( 0.286)	0.005	0.001
235	19.58	0.10	0.005	( 0.284)	0.004	0.000
236	19.67	0.10	0.005	( 0.283)	0.004	0.000
237	19.75	0.10	0.005	( 0.282)	0.004	0.000
238	19.83	0.07	0.003	( 0.280)	0.003	0.000
239	19.92	0.07	0.003	( 0.279)	0.003	0.000
240	20.00	0.07	0.003	( 0.278)	0.003	0.000
241	20.08	0.10	0.005	( 0.277)	0.004	0.000
242	20.17	0.10	0.005	( 0.276)	0.004	0.000
243	20.25	0.10	0.005	( 0.274)	0.004	0.000
244	20.33	0.10	0.005	( 0.273)	0.004	0.000
245	20.42	0.10	0.005	( 0.272)	0.004	0.000
246	20.50	0.10	0.005	( 0.271)	0.004	0.000
247	20.58	0.10	0.005	( 0.270)	0.004	0.000
248	20.67	0.10	0.005	( 0.269)	0.004	0.000
249	20.75	0.10	0.005	( 0.267)	0.004	0.000
250	20.83	0.07	0.003	( 0.266)	0.003	0.000
251	20.92	0.07	0.003	( 0.265)	0.003	0.000
252	21.00	0.07	0.003	( 0.264)	0.003	0.000
253	21.08	0.10	0.005	( 0.263)	0.004	0.000
254	21.17	0.10	0.005	( 0.262)	0.004	0.000
255	21.25	0.10	0.005	( 0.261)	0.004	0.000
256	21.33	0.07	0.003	( 0.260)	0.003	0.000
257	21.42	0.07	0.003	( 0.259)	0.003	0.000
258	21.50	0.07	0.003	( 0.258)	0.003	0.000
259	21.58	0.10	0.005	( 0.257)	0.004	0.000
260	21.67	0.10	0.005	( 0.256)	0.004	0.000
261	21.75	0.10	0.005	( 0.255)	0.004	0.000
262	21.83	0.07	0.003	( 0.254)	0.003	0.000
263	21.92	0.07	0.003	( 0.254)	0.003	0.000
264	22.00	0.07	0.003	( 0.253)	0.003	0.000
265	22.08	0.10	0.005	( 0.252)	0.004	0.000
266	22.17	0.10	0.005	( 0.251)	0.004	0.000
267	22.25	0.10	0.005	( 0.250)	0.004	0.000
268	22.33	0.07	0.003	( 0.250)	0.003	0.000
269	22.42	0.07	0.003	( 0.249)	0.003	0.000
270	22.50	0.07	0.003	( 0.248)	0.003	0.000
271	22.58	0.07	0.003	( 0.247)	0.003	0.000
272	22.67	0.07	0.003	( 0.247)	0.003	0.000
273	22.75	0.07	0.003	( 0.246)	0.003	0.000
274	22.83	0.07	0.003	( 0.245)	0.003	0.000
275	22.92	0.07	0.003	( 0.245)	0.003	0.000



33	2.75	0.17	0.014	( 0.747)	0.013	0.001
34	2.83	0.17	0.014	( 0.744)	0.013	0.001
35	2.92	0.17	0.014	( 0.741)	0.013	0.001
36	3.00	0.17	0.014	( 0.738)	0.013	0.001
37	3.08	0.17	0.014	( 0.735)	0.013	0.001
38	3.17	0.17	0.014	( 0.731)	0.013	0.001
39	3.25	0.17	0.014	( 0.728)	0.013	0.001
40	3.33	0.17	0.014	( 0.725)	0.013	0.001
41	3.42	0.17	0.014	( 0.722)	0.013	0.001
42	3.50	0.17	0.014	( 0.719)	0.013	0.001
43	3.58	0.17	0.014	( 0.716)	0.013	0.001
44	3.67	0.17	0.014	( 0.713)	0.013	0.001
45	3.75	0.17	0.014	( 0.710)	0.013	0.001
46	3.83	0.20	0.017	( 0.707)	0.016	0.002
47	3.92	0.20	0.017	( 0.704)	0.016	0.002
48	4.00	0.20	0.017	( 0.701)	0.016	0.002
49	4.08	0.20	0.017	( 0.698)	0.016	0.002
50	4.17	0.20	0.017	( 0.695)	0.016	0.002
51	4.25	0.20	0.017	( 0.692)	0.016	0.002
52	4.33	0.23	0.020	( 0.690)	0.018	0.002
53	4.42	0.23	0.020	( 0.687)	0.018	0.002
54	4.50	0.23	0.020	( 0.684)	0.018	0.002
55	4.58	0.23	0.020	( 0.681)	0.018	0.002
56	4.67	0.23	0.020	( 0.678)	0.018	0.002
57	4.75	0.23	0.020	( 0.675)	0.018	0.002
58	4.83	0.27	0.023	( 0.672)	0.021	0.002
59	4.92	0.27	0.023	( 0.669)	0.021	0.002
60	5.00	0.27	0.023	( 0.666)	0.021	0.002
61	5.08	0.20	0.017	( 0.663)	0.016	0.002
62	5.17	0.20	0.017	( 0.660)	0.016	0.002
63	5.25	0.20	0.017	( 0.657)	0.016	0.002
64	5.33	0.23	0.020	( 0.655)	0.018	0.002
65	5.42	0.23	0.020	( 0.652)	0.018	0.002
66	5.50	0.23	0.020	( 0.649)	0.018	0.002
67	5.58	0.27	0.023	( 0.646)	0.021	0.002
68	5.67	0.27	0.023	( 0.643)	0.021	0.002
69	5.75	0.27	0.023	( 0.640)	0.021	0.002
70	5.83	0.27	0.023	( 0.638)	0.021	0.002
71	5.92	0.27	0.023	( 0.635)	0.021	0.002
72	6.00	0.27	0.023	( 0.632)	0.021	0.002
73	6.08	0.30	0.026	( 0.629)	0.023	0.003
74	6.17	0.30	0.026	( 0.626)	0.023	0.003
75	6.25	0.30	0.026	( 0.624)	0.023	0.003
76	6.33	0.30	0.026	( 0.621)	0.023	0.003
77	6.42	0.30	0.026	( 0.618)	0.023	0.003
78	6.50	0.30	0.026	( 0.615)	0.023	0.003
79	6.58	0.33	0.029	( 0.612)	0.026	0.003
80	6.67	0.33	0.029	( 0.610)	0.026	0.003
81	6.75	0.33	0.029	( 0.607)	0.026	0.003
82	6.83	0.33	0.029	( 0.604)	0.026	0.003
83	6.92	0.33	0.029	( 0.601)	0.026	0.003
84	7.00	0.33	0.029	( 0.599)	0.026	0.003
85	7.08	0.33	0.029	( 0.596)	0.026	0.003
86	7.17	0.33	0.029	( 0.593)	0.026	0.003
87	7.25	0.33	0.029	( 0.591)	0.026	0.003
88	7.33	0.37	0.032	( 0.588)	0.029	0.003
89	7.42	0.37	0.032	( 0.585)	0.029	0.003
90	7.50	0.37	0.032	( 0.582)	0.029	0.003
91	7.58	0.40	0.035	( 0.580)	0.031	0.003
92	7.67	0.40	0.035	( 0.577)	0.031	0.003
93	7.75	0.40	0.035	( 0.574)	0.031	0.003
94	7.83	0.43	0.038	( 0.572)	0.034	0.004
95	7.92	0.43	0.038	( 0.569)	0.034	0.004

96	8.00	0.43	0.038	( 0.567)	0.034	0.004
97	8.08	0.50	0.043	( 0.564)	0.039	0.004
98	8.17	0.50	0.043	( 0.561)	0.039	0.004
99	8.25	0.50	0.043	( 0.559)	0.039	0.004
100	8.33	0.50	0.043	( 0.556)	0.039	0.004
101	8.42	0.50	0.043	( 0.553)	0.039	0.004
102	8.50	0.50	0.043	( 0.551)	0.039	0.004
103	8.58	0.53	0.046	( 0.548)	0.042	0.005
104	8.67	0.53	0.046	( 0.546)	0.042	0.005
105	8.75	0.53	0.046	( 0.543)	0.042	0.005
106	8.83	0.57	0.049	( 0.541)	0.044	0.005
107	8.92	0.57	0.049	( 0.538)	0.044	0.005
108	9.00	0.57	0.049	( 0.535)	0.044	0.005
109	9.08	0.63	0.055	( 0.533)	0.049	0.005
110	9.17	0.63	0.055	( 0.530)	0.049	0.005
111	9.25	0.63	0.055	( 0.528)	0.049	0.005
112	9.33	0.67	0.058	( 0.525)	0.052	0.006
113	9.42	0.67	0.058	( 0.523)	0.052	0.006
114	9.50	0.67	0.058	( 0.520)	0.052	0.006
115	9.58	0.70	0.061	( 0.518)	0.055	0.006
116	9.67	0.70	0.061	( 0.515)	0.055	0.006
117	9.75	0.70	0.061	( 0.513)	0.055	0.006
118	9.83	0.73	0.064	( 0.510)	0.057	0.006
119	9.92	0.73	0.064	( 0.508)	0.057	0.006
120	10.00	0.73	0.064	( 0.506)	0.057	0.006
121	10.08	0.50	0.043	( 0.503)	0.039	0.004
122	10.17	0.50	0.043	( 0.501)	0.039	0.004
123	10.25	0.50	0.043	( 0.498)	0.039	0.004
124	10.33	0.50	0.043	( 0.496)	0.039	0.004
125	10.42	0.50	0.043	( 0.493)	0.039	0.004
126	10.50	0.50	0.043	( 0.491)	0.039	0.004
127	10.58	0.67	0.058	( 0.489)	0.052	0.006
128	10.67	0.67	0.058	( 0.486)	0.052	0.006
129	10.75	0.67	0.058	( 0.484)	0.052	0.006
130	10.83	0.67	0.058	( 0.481)	0.052	0.006
131	10.92	0.67	0.058	( 0.479)	0.052	0.006
132	11.00	0.67	0.058	( 0.477)	0.052	0.006
133	11.08	0.63	0.055	( 0.474)	0.049	0.005
134	11.17	0.63	0.055	( 0.472)	0.049	0.005
135	11.25	0.63	0.055	( 0.470)	0.049	0.005
136	11.33	0.63	0.055	( 0.467)	0.049	0.005
137	11.42	0.63	0.055	( 0.465)	0.049	0.005
138	11.50	0.63	0.055	( 0.463)	0.049	0.005
139	11.58	0.57	0.049	( 0.460)	0.044	0.005
140	11.67	0.57	0.049	( 0.458)	0.044	0.005
141	11.75	0.57	0.049	( 0.456)	0.044	0.005
142	11.83	0.60	0.052	( 0.454)	0.047	0.005
143	11.92	0.60	0.052	( 0.451)	0.047	0.005
144	12.00	0.60	0.052	( 0.449)	0.047	0.005
145	12.08	0.83	0.072	( 0.447)	0.065	0.007
146	12.17	0.83	0.072	( 0.445)	0.065	0.007
147	12.25	0.83	0.072	( 0.442)	0.065	0.007
148	12.33	0.87	0.075	( 0.440)	0.068	0.008
149	12.42	0.87	0.075	( 0.438)	0.068	0.008
150	12.50	0.87	0.075	( 0.436)	0.068	0.008
151	12.58	0.93	0.081	( 0.434)	0.073	0.008
152	12.67	0.93	0.081	( 0.431)	0.073	0.008
153	12.75	0.93	0.081	( 0.429)	0.073	0.008
154	12.83	0.97	0.084	( 0.427)	0.076	0.008
155	12.92	0.97	0.084	( 0.425)	0.076	0.008
156	13.00	0.97	0.084	( 0.423)	0.076	0.008
157	13.08	1.13	0.098	( 0.421)	0.089	0.010
158	13.17	1.13	0.098	( 0.418)	0.089	0.010

159	13.25	1.13	0.098	( 0.416)	0.089	0.010
160	13.33	1.13	0.098	( 0.414)	0.089	0.010
161	13.42	1.13	0.098	( 0.412)	0.089	0.010
162	13.50	1.13	0.098	( 0.410)	0.089	0.010
163	13.58	0.77	0.067	( 0.408)	0.060	0.007
164	13.67	0.77	0.067	( 0.406)	0.060	0.007
165	13.75	0.77	0.067	( 0.404)	0.060	0.007
166	13.83	0.77	0.067	( 0.402)	0.060	0.007
167	13.92	0.77	0.067	( 0.400)	0.060	0.007
168	14.00	0.77	0.067	( 0.398)	0.060	0.007
169	14.08	0.90	0.078	( 0.396)	0.070	0.008
170	14.17	0.90	0.078	( 0.394)	0.070	0.008
171	14.25	0.90	0.078	( 0.392)	0.070	0.008
172	14.33	0.87	0.075	( 0.390)	0.068	0.008
173	14.42	0.87	0.075	( 0.388)	0.068	0.008
174	14.50	0.87	0.075	( 0.386)	0.068	0.008
175	14.58	0.87	0.075	( 0.384)	0.068	0.008
176	14.67	0.87	0.075	( 0.382)	0.068	0.008
177	14.75	0.87	0.075	( 0.380)	0.068	0.008
178	14.83	0.83	0.072	( 0.378)	0.065	0.007
179	14.92	0.83	0.072	( 0.376)	0.065	0.007
180	15.00	0.83	0.072	( 0.374)	0.065	0.007
181	15.08	0.80	0.069	( 0.372)	0.063	0.007
182	15.17	0.80	0.069	( 0.370)	0.063	0.007
183	15.25	0.80	0.069	( 0.368)	0.063	0.007
184	15.33	0.77	0.067	( 0.366)	0.060	0.007
185	15.42	0.77	0.067	( 0.364)	0.060	0.007
186	15.50	0.77	0.067	( 0.363)	0.060	0.007
187	15.58	0.63	0.055	( 0.361)	0.049	0.005
188	15.67	0.63	0.055	( 0.359)	0.049	0.005
189	15.75	0.63	0.055	( 0.357)	0.049	0.005
190	15.83	0.63	0.055	( 0.355)	0.049	0.005
191	15.92	0.63	0.055	( 0.353)	0.049	0.005
192	16.00	0.63	0.055	( 0.352)	0.049	0.005
193	16.08	0.13	0.012	( 0.350)	0.010	0.001
194	16.17	0.13	0.012	( 0.348)	0.010	0.001
195	16.25	0.13	0.012	( 0.346)	0.010	0.001
196	16.33	0.13	0.012	( 0.344)	0.010	0.001
197	16.42	0.13	0.012	( 0.343)	0.010	0.001
198	16.50	0.13	0.012	( 0.341)	0.010	0.001
199	16.58	0.10	0.009	( 0.339)	0.008	0.001
200	16.67	0.10	0.009	( 0.337)	0.008	0.001
201	16.75	0.10	0.009	( 0.336)	0.008	0.001
202	16.83	0.10	0.009	( 0.334)	0.008	0.001
203	16.92	0.10	0.009	( 0.332)	0.008	0.001
204	17.00	0.10	0.009	( 0.331)	0.008	0.001
205	17.08	0.17	0.014	( 0.329)	0.013	0.001
206	17.17	0.17	0.014	( 0.327)	0.013	0.001
207	17.25	0.17	0.014	( 0.326)	0.013	0.001
208	17.33	0.17	0.014	( 0.324)	0.013	0.001
209	17.42	0.17	0.014	( 0.322)	0.013	0.001
210	17.50	0.17	0.014	( 0.321)	0.013	0.001
211	17.58	0.17	0.014	( 0.319)	0.013	0.001
212	17.67	0.17	0.014	( 0.318)	0.013	0.001
213	17.75	0.17	0.014	( 0.316)	0.013	0.001
214	17.83	0.13	0.012	( 0.314)	0.010	0.001
215	17.92	0.13	0.012	( 0.313)	0.010	0.001
216	18.00	0.13	0.012	( 0.311)	0.010	0.001
217	18.08	0.13	0.012	( 0.310)	0.010	0.001
218	18.17	0.13	0.012	( 0.308)	0.010	0.001
219	18.25	0.13	0.012	( 0.307)	0.010	0.001
220	18.33	0.13	0.012	( 0.305)	0.010	0.001
221	18.42	0.13	0.012	( 0.304)	0.010	0.001

222	18.50	0.13	0.012	( 0.302)	0.010	0.001
223	18.58	0.10	0.009	( 0.301)	0.008	0.001
224	18.67	0.10	0.009	( 0.299)	0.008	0.001
225	18.75	0.10	0.009	( 0.298)	0.008	0.001
226	18.83	0.07	0.006	( 0.297)	0.005	0.001
227	18.92	0.07	0.006	( 0.295)	0.005	0.001
228	19.00	0.07	0.006	( 0.294)	0.005	0.001
229	19.08	0.10	0.009	( 0.292)	0.008	0.001
230	19.17	0.10	0.009	( 0.291)	0.008	0.001
231	19.25	0.10	0.009	( 0.290)	0.008	0.001
232	19.33	0.13	0.012	( 0.288)	0.010	0.001
233	19.42	0.13	0.012	( 0.287)	0.010	0.001
234	19.50	0.13	0.012	( 0.286)	0.010	0.001
235	19.58	0.10	0.009	( 0.284)	0.008	0.001
236	19.67	0.10	0.009	( 0.283)	0.008	0.001
237	19.75	0.10	0.009	( 0.282)	0.008	0.001
238	19.83	0.07	0.006	( 0.280)	0.005	0.001
239	19.92	0.07	0.006	( 0.279)	0.005	0.001
240	20.00	0.07	0.006	( 0.278)	0.005	0.001
241	20.08	0.10	0.009	( 0.277)	0.008	0.001
242	20.17	0.10	0.009	( 0.276)	0.008	0.001
243	20.25	0.10	0.009	( 0.274)	0.008	0.001
244	20.33	0.10	0.009	( 0.273)	0.008	0.001
245	20.42	0.10	0.009	( 0.272)	0.008	0.001
246	20.50	0.10	0.009	( 0.271)	0.008	0.001
247	20.58	0.10	0.009	( 0.270)	0.008	0.001
248	20.67	0.10	0.009	( 0.269)	0.008	0.001
249	20.75	0.10	0.009	( 0.267)	0.008	0.001
250	20.83	0.07	0.006	( 0.266)	0.005	0.001
251	20.92	0.07	0.006	( 0.265)	0.005	0.001
252	21.00	0.07	0.006	( 0.264)	0.005	0.001
253	21.08	0.10	0.009	( 0.263)	0.008	0.001
254	21.17	0.10	0.009	( 0.262)	0.008	0.001
255	21.25	0.10	0.009	( 0.261)	0.008	0.001
256	21.33	0.07	0.006	( 0.260)	0.005	0.001
257	21.42	0.07	0.006	( 0.259)	0.005	0.001
258	21.50	0.07	0.006	( 0.258)	0.005	0.001
259	21.58	0.10	0.009	( 0.257)	0.008	0.001
260	21.67	0.10	0.009	( 0.256)	0.008	0.001
261	21.75	0.10	0.009	( 0.255)	0.008	0.001
262	21.83	0.07	0.006	( 0.254)	0.005	0.001
263	21.92	0.07	0.006	( 0.254)	0.005	0.001
264	22.00	0.07	0.006	( 0.253)	0.005	0.001
265	22.08	0.10	0.009	( 0.252)	0.008	0.001
266	22.17	0.10	0.009	( 0.251)	0.008	0.001
267	22.25	0.10	0.009	( 0.250)	0.008	0.001
268	22.33	0.07	0.006	( 0.250)	0.005	0.001
269	22.42	0.07	0.006	( 0.249)	0.005	0.001
270	22.50	0.07	0.006	( 0.248)	0.005	0.001
271	22.58	0.07	0.006	( 0.247)	0.005	0.001
272	22.67	0.07	0.006	( 0.247)	0.005	0.001
273	22.75	0.07	0.006	( 0.246)	0.005	0.001
274	22.83	0.07	0.006	( 0.245)	0.005	0.001
275	22.92	0.07	0.006	( 0.245)	0.005	0.001
276	23.00	0.07	0.006	( 0.244)	0.005	0.001
277	23.08	0.07	0.006	( 0.244)	0.005	0.001
278	23.17	0.07	0.006	( 0.243)	0.005	0.001
279	23.25	0.07	0.006	( 0.242)	0.005	0.001
280	23.33	0.07	0.006	( 0.242)	0.005	0.001
281	23.42	0.07	0.006	( 0.241)	0.005	0.001
282	23.50	0.07	0.006	( 0.241)	0.005	0.001
283	23.58	0.07	0.006	( 0.241)	0.005	0.001
284	23.67	0.07	0.006	( 0.240)	0.005	0.001

285	23.75	0.07	0.006	( 0.240)	0.005	0.001
286	23.83	0.07	0.006	( 0.240)	0.005	0.001
287	23.92	0.07	0.006	( 0.240)	0.005	0.001
288	24.00	0.07	0.006	( 0.239)	0.005	0.001

(Loss Rate Not Used)

Sum = 100.0 Sum = 0.9

Flood volume = Effective rainfall 0.07 (In)  
times area 9.5 (Ac.) / [(In) / (Ft.)] = 0.1 (Ac.Ft)  
Total soil loss = 0.65 (In)  
Total soil loss = 0.517 (Ac.Ft)  
Total rainfall = 0.72 (In)  
Flood volume = 2500.5 Cubic Feet  
Total soil loss = 22504.9 Cubic Feet

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Storm Event 1 Effective Rainfall = 2.010 (In)  
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The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate (In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.016	( 0.849)	0.014	0.002
2	0.17	0.07	0.016	( 0.845)	0.014	0.002
3	0.25	0.07	0.016	( 0.842)	0.014	0.002
4	0.33	0.10	0.024	( 0.839)	0.022	0.002
5	0.42	0.10	0.024	( 0.836)	0.022	0.002
6	0.50	0.10	0.024	( 0.832)	0.022	0.002
7	0.58	0.10	0.024	( 0.829)	0.022	0.002
8	0.67	0.10	0.024	( 0.826)	0.022	0.002
9	0.75	0.10	0.024	( 0.823)	0.022	0.002
10	0.83	0.13	0.032	( 0.819)	0.029	0.003
11	0.92	0.13	0.032	( 0.816)	0.029	0.003
12	1.00	0.13	0.032	( 0.813)	0.029	0.003
13	1.08	0.10	0.024	( 0.810)	0.022	0.002
14	1.17	0.10	0.024	( 0.806)	0.022	0.002
15	1.25	0.10	0.024	( 0.803)	0.022	0.002
16	1.33	0.10	0.024	( 0.800)	0.022	0.002
17	1.42	0.10	0.024	( 0.797)	0.022	0.002
18	1.50	0.10	0.024	( 0.794)	0.022	0.002
19	1.58	0.10	0.024	( 0.791)	0.022	0.002
20	1.67	0.10	0.024	( 0.787)	0.022	0.002
21	1.75	0.10	0.024	( 0.784)	0.022	0.002
22	1.83	0.13	0.032	( 0.781)	0.029	0.003
23	1.92	0.13	0.032	( 0.778)	0.029	0.003
24	2.00	0.13	0.032	( 0.775)	0.029	0.003
25	2.08	0.13	0.032	( 0.772)	0.029	0.003
26	2.17	0.13	0.032	( 0.769)	0.029	0.003
27	2.25	0.13	0.032	( 0.765)	0.029	0.003
28	2.33	0.13	0.032	( 0.762)	0.029	0.003
29	2.42	0.13	0.032	( 0.759)	0.029	0.003
30	2.50	0.13	0.032	( 0.756)	0.029	0.003
31	2.58	0.17	0.040	( 0.753)	0.036	0.004
32	2.67	0.17	0.040	( 0.750)	0.036	0.004
33	2.75	0.17	0.040	( 0.747)	0.036	0.004
34	2.83	0.17	0.040	( 0.744)	0.036	0.004
35	2.92	0.17	0.040	( 0.741)	0.036	0.004
36	3.00	0.17	0.040	( 0.738)	0.036	0.004
37	3.08	0.17	0.040	( 0.735)	0.036	0.004
38	3.17	0.17	0.040	( 0.731)	0.036	0.004
39	3.25	0.17	0.040	( 0.728)	0.036	0.004
40	3.33	0.17	0.040	( 0.725)	0.036	0.004
41	3.42	0.17	0.040	( 0.722)	0.036	0.004

42	3.50	0.17	0.040	( 0.719)	0.036	0.004
43	3.58	0.17	0.040	( 0.716)	0.036	0.004
44	3.67	0.17	0.040	( 0.713)	0.036	0.004
45	3.75	0.17	0.040	( 0.710)	0.036	0.004
46	3.83	0.20	0.048	( 0.707)	0.043	0.005
47	3.92	0.20	0.048	( 0.704)	0.043	0.005
48	4.00	0.20	0.048	( 0.701)	0.043	0.005
49	4.08	0.20	0.048	( 0.698)	0.043	0.005
50	4.17	0.20	0.048	( 0.695)	0.043	0.005
51	4.25	0.20	0.048	( 0.692)	0.043	0.005
52	4.33	0.23	0.056	( 0.690)	0.051	0.006
53	4.42	0.23	0.056	( 0.687)	0.051	0.006
54	4.50	0.23	0.056	( 0.684)	0.051	0.006
55	4.58	0.23	0.056	( 0.681)	0.051	0.006
56	4.67	0.23	0.056	( 0.678)	0.051	0.006
57	4.75	0.23	0.056	( 0.675)	0.051	0.006
58	4.83	0.27	0.064	( 0.672)	0.058	0.006
59	4.92	0.27	0.064	( 0.669)	0.058	0.006
60	5.00	0.27	0.064	( 0.666)	0.058	0.006
61	5.08	0.20	0.048	( 0.663)	0.043	0.005
62	5.17	0.20	0.048	( 0.660)	0.043	0.005
63	5.25	0.20	0.048	( 0.657)	0.043	0.005
64	5.33	0.23	0.056	( 0.655)	0.051	0.006
65	5.42	0.23	0.056	( 0.652)	0.051	0.006
66	5.50	0.23	0.056	( 0.649)	0.051	0.006
67	5.58	0.27	0.064	( 0.646)	0.058	0.006
68	5.67	0.27	0.064	( 0.643)	0.058	0.006
69	5.75	0.27	0.064	( 0.640)	0.058	0.006
70	5.83	0.27	0.064	( 0.638)	0.058	0.006
71	5.92	0.27	0.064	( 0.635)	0.058	0.006
72	6.00	0.27	0.064	( 0.632)	0.058	0.006
73	6.08	0.30	0.072	( 0.629)	0.065	0.007
74	6.17	0.30	0.072	( 0.626)	0.065	0.007
75	6.25	0.30	0.072	( 0.624)	0.065	0.007
76	6.33	0.30	0.072	( 0.621)	0.065	0.007
77	6.42	0.30	0.072	( 0.618)	0.065	0.007
78	6.50	0.30	0.072	( 0.615)	0.065	0.007
79	6.58	0.33	0.080	( 0.612)	0.072	0.008
80	6.67	0.33	0.080	( 0.610)	0.072	0.008
81	6.75	0.33	0.080	( 0.607)	0.072	0.008
82	6.83	0.33	0.080	( 0.604)	0.072	0.008
83	6.92	0.33	0.080	( 0.601)	0.072	0.008
84	7.00	0.33	0.080	( 0.599)	0.072	0.008
85	7.08	0.33	0.080	( 0.596)	0.072	0.008
86	7.17	0.33	0.080	( 0.593)	0.072	0.008
87	7.25	0.33	0.080	( 0.591)	0.072	0.008
88	7.33	0.37	0.088	( 0.588)	0.080	0.009
89	7.42	0.37	0.088	( 0.585)	0.080	0.009
90	7.50	0.37	0.088	( 0.582)	0.080	0.009
91	7.58	0.40	0.096	( 0.580)	0.087	0.010
92	7.67	0.40	0.096	( 0.577)	0.087	0.010
93	7.75	0.40	0.096	( 0.574)	0.087	0.010
94	7.83	0.43	0.105	( 0.572)	0.094	0.010
95	7.92	0.43	0.105	( 0.569)	0.094	0.010
96	8.00	0.43	0.105	( 0.567)	0.094	0.010
97	8.08	0.50	0.121	( 0.564)	0.109	0.012
98	8.17	0.50	0.121	( 0.561)	0.109	0.012
99	8.25	0.50	0.121	( 0.559)	0.109	0.012
100	8.33	0.50	0.121	( 0.556)	0.109	0.012
101	8.42	0.50	0.121	( 0.553)	0.109	0.012
102	8.50	0.50	0.121	( 0.551)	0.109	0.012
103	8.58	0.53	0.129	( 0.548)	0.116	0.013
104	8.67	0.53	0.129	( 0.546)	0.116	0.013

105	8.75	0.53	0.129	( 0.543)	0.116	0.013
106	8.83	0.57	0.137	( 0.541)	0.123	0.014
107	8.92	0.57	0.137	( 0.538)	0.123	0.014
108	9.00	0.57	0.137	( 0.535)	0.123	0.014
109	9.08	0.63	0.153	( 0.533)	0.137	0.015
110	9.17	0.63	0.153	( 0.530)	0.137	0.015
111	9.25	0.63	0.153	( 0.528)	0.137	0.015
112	9.33	0.67	0.161	( 0.525)	0.145	0.016
113	9.42	0.67	0.161	( 0.523)	0.145	0.016
114	9.50	0.67	0.161	( 0.520)	0.145	0.016
115	9.58	0.70	0.169	( 0.518)	0.152	0.017
116	9.67	0.70	0.169	( 0.515)	0.152	0.017
117	9.75	0.70	0.169	( 0.513)	0.152	0.017
118	9.83	0.73	0.177	( 0.510)	0.159	0.018
119	9.92	0.73	0.177	( 0.508)	0.159	0.018
120	10.00	0.73	0.177	( 0.506)	0.159	0.018
121	10.08	0.50	0.121	( 0.503)	0.109	0.012
122	10.17	0.50	0.121	( 0.501)	0.109	0.012
123	10.25	0.50	0.121	( 0.498)	0.109	0.012
124	10.33	0.50	0.121	( 0.496)	0.109	0.012
125	10.42	0.50	0.121	( 0.493)	0.109	0.012
126	10.50	0.50	0.121	( 0.491)	0.109	0.012
127	10.58	0.67	0.161	( 0.489)	0.145	0.016
128	10.67	0.67	0.161	( 0.486)	0.145	0.016
129	10.75	0.67	0.161	( 0.484)	0.145	0.016
130	10.83	0.67	0.161	( 0.481)	0.145	0.016
131	10.92	0.67	0.161	( 0.479)	0.145	0.016
132	11.00	0.67	0.161	( 0.477)	0.145	0.016
133	11.08	0.63	0.153	( 0.474)	0.137	0.015
134	11.17	0.63	0.153	( 0.472)	0.137	0.015
135	11.25	0.63	0.153	( 0.470)	0.137	0.015
136	11.33	0.63	0.153	( 0.467)	0.137	0.015
137	11.42	0.63	0.153	( 0.465)	0.137	0.015
138	11.50	0.63	0.153	( 0.463)	0.137	0.015
139	11.58	0.57	0.137	( 0.460)	0.123	0.014
140	11.67	0.57	0.137	( 0.458)	0.123	0.014
141	11.75	0.57	0.137	( 0.456)	0.123	0.014
142	11.83	0.60	0.145	( 0.454)	0.130	0.014
143	11.92	0.60	0.145	( 0.451)	0.130	0.014
144	12.00	0.60	0.145	( 0.449)	0.130	0.014
145	12.08	0.83	0.201	( 0.447)	0.181	0.020
146	12.17	0.83	0.201	( 0.445)	0.181	0.020
147	12.25	0.83	0.201	( 0.442)	0.181	0.020
148	12.33	0.87	0.209	( 0.440)	0.188	0.021
149	12.42	0.87	0.209	( 0.438)	0.188	0.021
150	12.50	0.87	0.209	( 0.436)	0.188	0.021
151	12.58	0.93	0.225	( 0.434)	0.203	0.023
152	12.67	0.93	0.225	( 0.431)	0.203	0.023
153	12.75	0.93	0.225	( 0.429)	0.203	0.023
154	12.83	0.97	0.233	( 0.427)	0.210	0.023
155	12.92	0.97	0.233	( 0.425)	0.210	0.023
156	13.00	0.97	0.233	( 0.423)	0.210	0.023
157	13.08	1.13	0.273	( 0.421)	0.246	0.027
158	13.17	1.13	0.273	( 0.418)	0.246	0.027
159	13.25	1.13	0.273	( 0.416)	0.246	0.027
160	13.33	1.13	0.273	( 0.414)	0.246	0.027
161	13.42	1.13	0.273	( 0.412)	0.246	0.027
162	13.50	1.13	0.273	( 0.410)	0.246	0.027
163	13.58	0.77	0.185	( 0.408)	0.166	0.018
164	13.67	0.77	0.185	( 0.406)	0.166	0.018
165	13.75	0.77	0.185	( 0.404)	0.166	0.018
166	13.83	0.77	0.185	( 0.402)	0.166	0.018
167	13.92	0.77	0.185	( 0.400)	0.166	0.018

168	14.00	0.77	0.185	( 0.398)	0.166	0.018
169	14.08	0.90	0.217	( 0.396)	0.195	0.022
170	14.17	0.90	0.217	( 0.394)	0.195	0.022
171	14.25	0.90	0.217	( 0.392)	0.195	0.022
172	14.33	0.87	0.209	( 0.390)	0.188	0.021
173	14.42	0.87	0.209	( 0.388)	0.188	0.021
174	14.50	0.87	0.209	( 0.386)	0.188	0.021
175	14.58	0.87	0.209	( 0.384)	0.188	0.021
176	14.67	0.87	0.209	( 0.382)	0.188	0.021
177	14.75	0.87	0.209	( 0.380)	0.188	0.021
178	14.83	0.83	0.201	( 0.378)	0.181	0.020
179	14.92	0.83	0.201	( 0.376)	0.181	0.020
180	15.00	0.83	0.201	( 0.374)	0.181	0.020
181	15.08	0.80	0.193	( 0.372)	0.174	0.019
182	15.17	0.80	0.193	( 0.370)	0.174	0.019
183	15.25	0.80	0.193	( 0.368)	0.174	0.019
184	15.33	0.77	0.185	( 0.366)	0.166	0.018
185	15.42	0.77	0.185	( 0.364)	0.166	0.018
186	15.50	0.77	0.185	( 0.363)	0.166	0.018
187	15.58	0.63	0.153	( 0.361)	0.137	0.015
188	15.67	0.63	0.153	( 0.359)	0.137	0.015
189	15.75	0.63	0.153	( 0.357)	0.137	0.015
190	15.83	0.63	0.153	( 0.355)	0.137	0.015
191	15.92	0.63	0.153	( 0.353)	0.137	0.015
192	16.00	0.63	0.153	( 0.352)	0.137	0.015
193	16.08	0.13	0.032	( 0.350)	0.029	0.003
194	16.17	0.13	0.032	( 0.348)	0.029	0.003
195	16.25	0.13	0.032	( 0.346)	0.029	0.003
196	16.33	0.13	0.032	( 0.344)	0.029	0.003
197	16.42	0.13	0.032	( 0.343)	0.029	0.003
198	16.50	0.13	0.032	( 0.341)	0.029	0.003
199	16.58	0.10	0.024	( 0.339)	0.022	0.002
200	16.67	0.10	0.024	( 0.337)	0.022	0.002
201	16.75	0.10	0.024	( 0.336)	0.022	0.002
202	16.83	0.10	0.024	( 0.334)	0.022	0.002
203	16.92	0.10	0.024	( 0.332)	0.022	0.002
204	17.00	0.10	0.024	( 0.331)	0.022	0.002
205	17.08	0.17	0.040	( 0.329)	0.036	0.004
206	17.17	0.17	0.040	( 0.327)	0.036	0.004
207	17.25	0.17	0.040	( 0.326)	0.036	0.004
208	17.33	0.17	0.040	( 0.324)	0.036	0.004
209	17.42	0.17	0.040	( 0.322)	0.036	0.004
210	17.50	0.17	0.040	( 0.321)	0.036	0.004
211	17.58	0.17	0.040	( 0.319)	0.036	0.004
212	17.67	0.17	0.040	( 0.318)	0.036	0.004
213	17.75	0.17	0.040	( 0.316)	0.036	0.004
214	17.83	0.13	0.032	( 0.314)	0.029	0.003
215	17.92	0.13	0.032	( 0.313)	0.029	0.003
216	18.00	0.13	0.032	( 0.311)	0.029	0.003
217	18.08	0.13	0.032	( 0.310)	0.029	0.003
218	18.17	0.13	0.032	( 0.308)	0.029	0.003
219	18.25	0.13	0.032	( 0.307)	0.029	0.003
220	18.33	0.13	0.032	( 0.305)	0.029	0.003
221	18.42	0.13	0.032	( 0.304)	0.029	0.003
222	18.50	0.13	0.032	( 0.302)	0.029	0.003
223	18.58	0.10	0.024	( 0.301)	0.022	0.002
224	18.67	0.10	0.024	( 0.299)	0.022	0.002
225	18.75	0.10	0.024	( 0.298)	0.022	0.002
226	18.83	0.07	0.016	( 0.297)	0.014	0.002
227	18.92	0.07	0.016	( 0.295)	0.014	0.002
228	19.00	0.07	0.016	( 0.294)	0.014	0.002
229	19.08	0.10	0.024	( 0.292)	0.022	0.002
230	19.17	0.10	0.024	( 0.291)	0.022	0.002

231	19.25	0.10	0.024	( 0.290)	0.022	0.002
232	19.33	0.13	0.032	( 0.288)	0.029	0.003
233	19.42	0.13	0.032	( 0.287)	0.029	0.003
234	19.50	0.13	0.032	( 0.286)	0.029	0.003
235	19.58	0.10	0.024	( 0.284)	0.022	0.002
236	19.67	0.10	0.024	( 0.283)	0.022	0.002
237	19.75	0.10	0.024	( 0.282)	0.022	0.002
238	19.83	0.07	0.016	( 0.280)	0.014	0.002
239	19.92	0.07	0.016	( 0.279)	0.014	0.002
240	20.00	0.07	0.016	( 0.278)	0.014	0.002
241	20.08	0.10	0.024	( 0.277)	0.022	0.002
242	20.17	0.10	0.024	( 0.276)	0.022	0.002
243	20.25	0.10	0.024	( 0.274)	0.022	0.002
244	20.33	0.10	0.024	( 0.273)	0.022	0.002
245	20.42	0.10	0.024	( 0.272)	0.022	0.002
246	20.50	0.10	0.024	( 0.271)	0.022	0.002
247	20.58	0.10	0.024	( 0.270)	0.022	0.002
248	20.67	0.10	0.024	( 0.269)	0.022	0.002
249	20.75	0.10	0.024	( 0.267)	0.022	0.002
250	20.83	0.07	0.016	( 0.266)	0.014	0.002
251	20.92	0.07	0.016	( 0.265)	0.014	0.002
252	21.00	0.07	0.016	( 0.264)	0.014	0.002
253	21.08	0.10	0.024	( 0.263)	0.022	0.002
254	21.17	0.10	0.024	( 0.262)	0.022	0.002
255	21.25	0.10	0.024	( 0.261)	0.022	0.002
256	21.33	0.07	0.016	( 0.260)	0.014	0.002
257	21.42	0.07	0.016	( 0.259)	0.014	0.002
258	21.50	0.07	0.016	( 0.258)	0.014	0.002
259	21.58	0.10	0.024	( 0.257)	0.022	0.002
260	21.67	0.10	0.024	( 0.256)	0.022	0.002
261	21.75	0.10	0.024	( 0.255)	0.022	0.002
262	21.83	0.07	0.016	( 0.254)	0.014	0.002
263	21.92	0.07	0.016	( 0.254)	0.014	0.002
264	22.00	0.07	0.016	( 0.253)	0.014	0.002
265	22.08	0.10	0.024	( 0.252)	0.022	0.002
266	22.17	0.10	0.024	( 0.251)	0.022	0.002
267	22.25	0.10	0.024	( 0.250)	0.022	0.002
268	22.33	0.07	0.016	( 0.250)	0.014	0.002
269	22.42	0.07	0.016	( 0.249)	0.014	0.002
270	22.50	0.07	0.016	( 0.248)	0.014	0.002
271	22.58	0.07	0.016	( 0.247)	0.014	0.002
272	22.67	0.07	0.016	( 0.247)	0.014	0.002
273	22.75	0.07	0.016	( 0.246)	0.014	0.002
274	22.83	0.07	0.016	( 0.245)	0.014	0.002
275	22.92	0.07	0.016	( 0.245)	0.014	0.002
276	23.00	0.07	0.016	( 0.244)	0.014	0.002
277	23.08	0.07	0.016	( 0.244)	0.014	0.002
278	23.17	0.07	0.016	( 0.243)	0.014	0.002
279	23.25	0.07	0.016	( 0.242)	0.014	0.002
280	23.33	0.07	0.016	( 0.242)	0.014	0.002
281	23.42	0.07	0.016	( 0.241)	0.014	0.002
282	23.50	0.07	0.016	( 0.241)	0.014	0.002
283	23.58	0.07	0.016	( 0.241)	0.014	0.002
284	23.67	0.07	0.016	( 0.240)	0.014	0.002
285	23.75	0.07	0.016	( 0.240)	0.014	0.002
286	23.83	0.07	0.016	( 0.240)	0.014	0.002
287	23.92	0.07	0.016	( 0.240)	0.014	0.002
288	24.00	0.07	0.016	( 0.239)	0.014	0.002

(Loss Rate Not Used)

Sum = 100.0 Sum = 2.4

Flood volume = Effective rainfall 0.20(In)

times area 9.5(Ac.)/[ (In)/(Ft.) ] = 0.2(Ac.Ft)

Total soil loss = 1.81(In)

Total soil loss = 1.435(Ac.Ft)  
 Total rainfall = 2.01(In)  
 Flood volume = 6945.9 Cubic Feet  
 Total soil loss = 62513.5 Cubic Feet

-----  
 Peak flow rate of this hydrograph = 0.251(CFS)  
 -----

+++++

TOTAL OF: 5 24 - H O U R S T O R M E V E N T S  
 R u n o f f H y d r o g r a p h

-----  
 Hydrograph in 5 Minute intervals ((CFS))  
 -----

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00	Q				
0+10	0.0000	0.00	Q				
0+15	0.0000	0.00	Q				
0+20	0.0000	0.00	Q				
0+25	0.0000	0.00	Q				
0+30	0.0000	0.00	Q				
0+35	0.0000	0.00	Q				
0+40	0.0001	0.00	Q				
0+45	0.0001	0.00	Q				
0+50	0.0001	0.00	Q				
0+55	0.0001	0.00	Q				
1+ 0	0.0001	0.00	Q				
1+ 5	0.0001	0.00	Q				
1+10	0.0002	0.00	Q				
1+15	0.0002	0.00	Q				
1+20	0.0002	0.00	Q				
1+25	0.0002	0.00	Q				
1+30	0.0002	0.00	Q				
1+35	0.0002	0.00	Q				
1+40	0.0003	0.00	Q				
1+45	0.0003	0.00	Q				
1+50	0.0003	0.00	Q				
1+55	0.0003	0.00	Q				
2+ 0	0.0003	0.00	Q				
2+ 5	0.0003	0.00	Q				
2+10	0.0004	0.00	Q				
2+15	0.0004	0.00	Q				
2+20	0.0004	0.00	Q				
2+25	0.0004	0.00	Q				
2+30	0.0004	0.00	Q				
2+35	0.0005	0.00	Q				
2+40	0.0005	0.00	Q				
2+45	0.0005	0.00	Q				
2+50	0.0005	0.00	Q				
2+55	0.0006	0.00	Q				
3+ 0	0.0006	0.00	Q				
3+ 5	0.0006	0.00	Q				
3+10	0.0006	0.00	Q				
3+15	0.0007	0.00	Q				
3+20	0.0007	0.00	Q				
3+25	0.0007	0.00	Q				
3+30	0.0007	0.00	Q				
3+35	0.0008	0.00	Q				
3+40	0.0008	0.00	Q				
3+45	0.0008	0.00	Q				
3+50	0.0008	0.00	Q				
3+55	0.0009	0.00	Q				

4+ 0	0.0009	0.00	Q				
4+ 5	0.0009	0.00	Q				
4+10	0.0010	0.00	Q				
4+15	0.0010	0.00	Q				
4+20	0.0010	0.00	Q				
4+25	0.0011	0.00	Q				
4+30	0.0011	0.00	Q				
4+35	0.0011	0.01	Q				
4+40	0.0012	0.01	Q				
4+45	0.0012	0.01	Q				
4+50	0.0012	0.01	Q				
4+55	0.0013	0.01	Q				
5+ 0	0.0013	0.01	Q				
5+ 5	0.0013	0.01	Q				
5+10	0.0014	0.01	Q				
5+15	0.0014	0.01	Q				
5+20	0.0015	0.01	Q				
5+25	0.0015	0.01	Q				
5+30	0.0015	0.01	Q				
5+35	0.0016	0.01	Q				
5+40	0.0016	0.01	Q				
5+45	0.0016	0.01	Q				
5+50	0.0017	0.01	Q				
5+55	0.0017	0.01	Q				
6+ 0	0.0018	0.01	Q				
6+ 5	0.0018	0.01	Q				
6+10	0.0018	0.01	Q				
6+15	0.0019	0.01	Q				
6+20	0.0019	0.01	Q				
6+25	0.0020	0.01	Q				
6+30	0.0020	0.01	Q				
6+35	0.0021	0.01	Q				
6+40	0.0021	0.01	Q				
6+45	0.0022	0.01	Q				
6+50	0.0022	0.01	Q				
6+55	0.0023	0.01	Q				
7+ 0	0.0023	0.01	Q				
7+ 5	0.0024	0.01	Q				
7+10	0.0024	0.01	Q				
7+15	0.0025	0.01	Q				
7+20	0.0025	0.01	Q				
7+25	0.0026	0.01	Q				
7+30	0.0026	0.01	Q				
7+35	0.0027	0.01	Q				
7+40	0.0028	0.01	Q				
7+45	0.0028	0.01	Q				
7+50	0.0029	0.01	Q				
7+55	0.0029	0.01	Q				
8+ 0	0.0030	0.01	Q				
8+ 5	0.0031	0.01	Q				
8+10	0.0031	0.01	Q				
8+15	0.0032	0.01	Q				
8+20	0.0033	0.01	Q				
8+25	0.0034	0.01	Q				
8+30	0.0034	0.01	Q				
8+35	0.0035	0.01	Q				
8+40	0.0036	0.01	Q				
8+45	0.0037	0.01	Q				
8+50	0.0038	0.01	Q				
8+55	0.0038	0.01	Q				
9+ 0	0.0039	0.01	Q				
9+ 5	0.0040	0.01	Q				
9+10	0.0041	0.01	Q				

9+15	0.0042	0.01	Q				
9+20	0.0043	0.01	Q				
9+25	0.0044	0.01	Q				
9+30	0.0045	0.01	Q				
9+35	0.0046	0.01	Q				
9+40	0.0047	0.02	Q				
9+45	0.0048	0.02	Q				
9+50	0.0049	0.02	Q				
9+55	0.0050	0.02	Q				
10+ 0	0.0051	0.02	Q				
10+ 5	0.0052	0.02	Q				
10+10	0.0054	0.02	Q				
10+15	0.0054	0.01	Q				
10+20	0.0055	0.01	Q				
10+25	0.0056	0.01	Q				
10+30	0.0057	0.01	Q				
10+35	0.0058	0.01	Q				
10+40	0.0059	0.01	Q				
10+45	0.0060	0.01	Q				
10+50	0.0061	0.01	Q				
10+55	0.0062	0.01	Q				
11+ 0	0.0063	0.01	Q				
11+ 5	0.0064	0.01	Q				
11+10	0.0065	0.01	Q				
11+15	0.0066	0.01	Q				
11+20	0.0067	0.01	Q				
11+25	0.0068	0.01	Q				
11+30	0.0069	0.01	Q				
11+35	0.0070	0.01	Q				
11+40	0.0071	0.01	Q				
11+45	0.0072	0.01	QV				
11+50	0.0073	0.01	QV				
11+55	0.0074	0.01	QV				
12+ 0	0.0075	0.01	QV				
12+ 5	0.0076	0.01	QV				
12+10	0.0077	0.01	QV				
12+15	0.0078	0.02	QV				
12+20	0.0079	0.02	QV				
12+25	0.0080	0.02	QV				
12+30	0.0082	0.02	QV				
12+35	0.0083	0.02	QV				
12+40	0.0084	0.02	QV				
12+45	0.0086	0.02	QV				
12+50	0.0087	0.02	QV				
12+55	0.0088	0.02	QV				
13+ 0	0.0090	0.02	QV				
13+ 5	0.0091	0.02	QV				
13+10	0.0093	0.02	QV				
13+15	0.0095	0.02	QV				
13+20	0.0096	0.02	QV				
13+25	0.0098	0.02	QV				
13+30	0.0100	0.03	QV				
13+35	0.0101	0.03	QV				
13+40	0.0103	0.02	QV				
13+45	0.0105	0.02	QV				
13+50	0.0106	0.02	QV				
13+55	0.0107	0.02	QV				
14+ 0	0.0109	0.02	QV				
14+ 5	0.0110	0.02	QV				
14+10	0.0111	0.02	QV				
14+15	0.0113	0.02	QV				
14+20	0.0114	0.02	QV				
14+25	0.0116	0.02	QV				

14+30	0.0117	0.02	QV				
14+35	0.0118	0.02	QV				
14+40	0.0120	0.02	QV				
14+45	0.0121	0.02	QV				
14+50	0.0122	0.02	QV				
14+55	0.0124	0.02	QV				
15+ 0	0.0125	0.02	QV				
15+ 5	0.0127	0.02	QV				
15+10	0.0128	0.02	QV				
15+15	0.0129	0.02	QV				
15+20	0.0130	0.02	QV				
15+25	0.0132	0.02	QV				
15+30	0.0133	0.02	QV				
15+35	0.0134	0.02	QV				
15+40	0.0136	0.02	QV				
15+45	0.0137	0.02	QV				
15+50	0.0138	0.02	QV				
15+55	0.0139	0.02	QV				
16+ 0	0.0140	0.02	QV				
16+ 5	0.0141	0.01	QV				
16+10	0.0142	0.01	QV				
16+15	0.0142	0.01	QV				
16+20	0.0143	0.01	QV				
16+25	0.0143	0.01	Q V				
16+30	0.0144	0.01	Q V				
16+35	0.0144	0.01	Q V				
16+40	0.0145	0.00	Q V				
16+45	0.0145	0.00	Q V				
16+50	0.0145	0.00	Q V				
16+55	0.0145	0.00	Q V				
17+ 0	0.0146	0.00	Q V				
17+ 5	0.0146	0.00	Q V				
17+10	0.0146	0.00	Q V				
17+15	0.0146	0.00	Q V				
17+20	0.0146	0.00	Q V				
17+25	0.0147	0.00	Q V				
17+30	0.0147	0.00	Q V				
17+35	0.0147	0.00	Q V				
17+40	0.0147	0.00	Q V				
17+45	0.0148	0.00	Q V				
17+50	0.0148	0.00	Q V				
17+55	0.0148	0.00	Q V				
18+ 0	0.0148	0.00	Q V				
18+ 5	0.0149	0.00	Q V				
18+10	0.0149	0.00	Q V				
18+15	0.0149	0.00	Q V				
18+20	0.0149	0.00	Q V				
18+25	0.0150	0.00	Q V				
18+30	0.0150	0.00	Q V				
18+35	0.0150	0.00	Q V				
18+40	0.0150	0.00	Q V				
18+45	0.0150	0.00	Q V				
18+50	0.0151	0.00	Q V				
18+55	0.0151	0.00	Q V				
19+ 0	0.0151	0.00	Q V				
19+ 5	0.0151	0.00	Q V				
19+10	0.0151	0.00	Q V				
19+15	0.0151	0.00	Q V				
19+20	0.0152	0.00	Q V				
19+25	0.0152	0.00	Q V				
19+30	0.0152	0.00	Q V				
19+35	0.0152	0.00	Q V				
19+40	0.0152	0.00	Q V				

19+45	0.0152	0.00	Q V				
19+50	0.0153	0.00	Q V				
19+55	0.0153	0.00	Q V				
20+ 0	0.0153	0.00	Q V				
20+ 5	0.0153	0.00	Q V				
20+10	0.0153	0.00	Q V				
20+15	0.0153	0.00	Q V				
20+20	0.0153	0.00	Q V				
20+25	0.0154	0.00	Q V				
20+30	0.0154	0.00	Q V				
20+35	0.0154	0.00	Q V				
20+40	0.0154	0.00	Q V				
20+45	0.0154	0.00	Q V				
20+50	0.0154	0.00	Q V				
20+55	0.0155	0.00	Q V				
21+ 0	0.0155	0.00	Q V				
21+ 5	0.0155	0.00	Q V				
21+10	0.0155	0.00	Q V				
21+15	0.0155	0.00	Q V				
21+20	0.0155	0.00	Q V				
21+25	0.0155	0.00	Q V				
21+30	0.0155	0.00	Q V				
21+35	0.0156	0.00	Q V				
21+40	0.0156	0.00	Q V				
21+45	0.0156	0.00	Q V				
21+50	0.0156	0.00	Q V				
21+55	0.0156	0.00	Q V				
22+ 0	0.0156	0.00	Q V				
22+ 5	0.0156	0.00	Q V				
22+10	0.0157	0.00	Q V				
22+15	0.0157	0.00	Q V				
22+20	0.0157	0.00	Q V				
22+25	0.0157	0.00	Q V				
22+30	0.0157	0.00	Q V				
22+35	0.0157	0.00	Q V				
22+40	0.0157	0.00	Q V				
22+45	0.0157	0.00	Q V				
22+50	0.0158	0.00	Q V				
22+55	0.0158	0.00	Q V				
23+ 0	0.0158	0.00	Q V				
23+ 5	0.0158	0.00	Q V				
23+10	0.0158	0.00	Q V				
23+15	0.0158	0.00	Q V				
23+20	0.0158	0.00	Q V				
23+25	0.0158	0.00	Q V				
23+30	0.0158	0.00	Q V				
23+35	0.0158	0.00	Q V				
23+40	0.0159	0.00	Q V				
23+45	0.0159	0.00	Q V				
23+50	0.0159	0.00	Q V				
23+55	0.0159	0.00	Q V				
24+ 0	0.0159	0.00	Q V				
24+ 5	0.0159	0.00	Q V				
24+10	0.0159	0.00	Q V				
24+15	0.0159	0.00	Q V				
24+20	0.0159	0.00	Q V				
24+25	0.0159	0.00	Q V				
24+30	0.0160	0.00	Q V				
24+35	0.0160	0.00	Q V				
24+40	0.0160	0.00	Q V				
24+45	0.0160	0.00	Q V				
24+50	0.0160	0.00	Q V				
24+55	0.0161	0.00	Q V				

25+ 0	0.0161	0.00	Q V				
25+ 5	0.0161	0.00	Q V				
25+10	0.0161	0.00	Q V				
25+15	0.0162	0.00	Q V				
25+20	0.0162	0.00	Q V				
25+25	0.0162	0.00	Q V				
25+30	0.0162	0.00	Q V				
25+35	0.0163	0.00	Q V				
25+40	0.0163	0.00	Q V				
25+45	0.0163	0.00	Q V				
25+50	0.0163	0.00	Q V				
25+55	0.0164	0.00	Q V				
26+ 0	0.0164	0.00	Q V				
26+ 5	0.0164	0.00	Q V				
26+10	0.0164	0.00	Q V				
26+15	0.0165	0.00	Q V				
26+20	0.0165	0.00	Q V				
26+25	0.0165	0.00	Q V				
26+30	0.0166	0.00	Q V				
26+35	0.0166	0.00	Q V				
26+40	0.0166	0.00	Q V				
26+45	0.0167	0.01	Q V				
26+50	0.0167	0.01	Q V				
26+55	0.0167	0.01	Q V				
27+ 0	0.0168	0.01	Q V				
27+ 5	0.0168	0.01	Q V				
27+10	0.0169	0.01	Q V				
27+15	0.0169	0.01	Q V				
27+20	0.0169	0.01	Q V				
27+25	0.0170	0.01	Q V				
27+30	0.0170	0.01	Q V				
27+35	0.0171	0.01	Q V				
27+40	0.0171	0.01	Q V				
27+45	0.0171	0.01	Q V				
27+50	0.0172	0.01	Q V				
27+55	0.0172	0.01	Q V				
28+ 0	0.0173	0.01	Q V				
28+ 5	0.0173	0.01	Q V				
28+10	0.0173	0.01	Q V				
28+15	0.0174	0.01	Q V				
28+20	0.0174	0.01	Q V				
28+25	0.0175	0.01	Q V				
28+30	0.0175	0.01	Q V				
28+35	0.0176	0.01	Q V				
28+40	0.0176	0.01	Q V				
28+45	0.0177	0.01	Q V				
28+50	0.0178	0.01	Q V				
28+55	0.0178	0.01	Q V				
29+ 0	0.0179	0.01	Q V				
29+ 5	0.0179	0.01	Q V				
29+10	0.0180	0.01	Q V				
29+15	0.0180	0.01	Q V				
29+20	0.0181	0.01	Q V				
29+25	0.0181	0.01	Q V				
29+30	0.0182	0.01	Q V				
29+35	0.0183	0.01	Q V				
29+40	0.0183	0.01	Q V				
29+45	0.0184	0.01	Q V				
29+50	0.0184	0.01	Q V				
29+55	0.0185	0.01	Q V				
30+ 0	0.0186	0.01	Q V				
30+ 5	0.0186	0.01	Q V				
30+10	0.0187	0.01	Q V				

30+15	0.0187	0.01	Q V				
30+20	0.0188	0.01	Q V				
30+25	0.0189	0.01	Q V				
30+30	0.0190	0.01	Q V				
30+35	0.0190	0.01	Q V				
30+40	0.0191	0.01	Q V				
30+45	0.0192	0.01	Q V				
30+50	0.0192	0.01	Q V				
30+55	0.0193	0.01	Q V				
31+ 0	0.0194	0.01	Q V				
31+ 5	0.0195	0.01	Q V				
31+10	0.0196	0.01	Q V				
31+15	0.0196	0.01	Q V				
31+20	0.0197	0.01	Q V				
31+25	0.0198	0.01	Q V				
31+30	0.0199	0.01	Q V				
31+35	0.0200	0.01	Q V				
31+40	0.0200	0.01	Q V				
31+45	0.0201	0.01	Q V				
31+50	0.0202	0.01	Q V				
31+55	0.0203	0.01	Q V				
32+ 0	0.0204	0.01	Q V				
32+ 5	0.0205	0.01	Q V				
32+10	0.0206	0.01	Q V				
32+15	0.0207	0.02	Q V				
32+20	0.0208	0.02	Q V				
32+25	0.0210	0.02	Q V				
32+30	0.0211	0.02	Q V				
32+35	0.0212	0.02	Q V				
32+40	0.0213	0.02	Q V				
32+45	0.0214	0.02	Q V				
32+50	0.0215	0.02	Q V				
32+55	0.0217	0.02	Q V				
33+ 0	0.0218	0.02	Q V				
33+ 5	0.0219	0.02	Q V				
33+10	0.0221	0.02	Q V				
33+15	0.0222	0.02	Q V				
33+20	0.0223	0.02	Q V				
33+25	0.0225	0.02	Q V				
33+30	0.0226	0.02	Q V				
33+35	0.0228	0.02	Q V				
33+40	0.0230	0.02	Q V				
33+45	0.0231	0.02	Q V				
33+50	0.0233	0.02	Q V				
33+55	0.0234	0.02	Q V				
34+ 0	0.0236	0.02	Q V				
34+ 5	0.0238	0.02	Q V				
34+10	0.0239	0.02	Q V				
34+15	0.0241	0.02	Q V				
34+20	0.0242	0.02	Q V				
34+25	0.0243	0.02	Q V				
34+30	0.0245	0.02	Q V				
34+35	0.0246	0.02	Q V				
34+40	0.0247	0.02	Q V				
34+45	0.0249	0.02	Q V				
34+50	0.0250	0.02	Q V				
34+55	0.0252	0.02	Q V				
35+ 0	0.0253	0.02	Q V				
35+ 5	0.0255	0.02	Q V				
35+10	0.0256	0.02	Q V				
35+15	0.0258	0.02	Q V				
35+20	0.0260	0.02	Q V				
35+25	0.0261	0.02	Q V				

35+30	0.0263	0.02	Q	V				
35+35	0.0264	0.02	Q	V				
35+40	0.0266	0.02	Q	V				
35+45	0.0267	0.02	Q	V				
35+50	0.0268	0.02	Q	V				
35+55	0.0270	0.02	Q	V				
36+ 0	0.0271	0.02	Q	V				
36+ 5	0.0273	0.02	Q	V				
36+10	0.0274	0.02	Q	V				
36+15	0.0276	0.02	Q	V				
36+20	0.0278	0.03	Q	V				
36+25	0.0280	0.03	Q	V				
36+30	0.0281	0.03	Q	V				
36+35	0.0283	0.03	Q	V				
36+40	0.0285	0.03	Q	V				
36+45	0.0288	0.03	Q	V				
36+50	0.0290	0.03	Q	V				
36+55	0.0292	0.03	Q	V				
37+ 0	0.0294	0.03	Q	V				
37+ 5	0.0296	0.03	Q	V				
37+10	0.0299	0.03	Q	V				
37+15	0.0301	0.04	Q	V				
37+20	0.0303	0.04	Q	V				
37+25	0.0306	0.04	Q	V				
37+30	0.0309	0.04	Q	V				
37+35	0.0311	0.04	Q	V				
37+40	0.0314	0.04	Q	V				
37+45	0.0316	0.03	Q	V				
37+50	0.0318	0.03	Q	V				
37+55	0.0320	0.03	Q	V				
38+ 0	0.0322	0.03	Q	V				
38+ 5	0.0324	0.03	Q	V				
38+10	0.0326	0.03	Q	V				
38+15	0.0328	0.03	Q	V				
38+20	0.0330	0.03	Q	V				
38+25	0.0332	0.03	Q	V				
38+30	0.0334	0.03	Q	V				
38+35	0.0337	0.03	Q	V				
38+40	0.0339	0.03	Q	V				
38+45	0.0341	0.03	Q	V				
38+50	0.0343	0.03	Q	V				
38+55	0.0345	0.03	Q	V				
39+ 0	0.0347	0.03	Q	V				
39+ 5	0.0349	0.03	Q	V				
39+10	0.0351	0.03	Q	V				
39+15	0.0353	0.03	Q	V				
39+20	0.0355	0.03	Q	V				
39+25	0.0357	0.03	Q	V				
39+30	0.0359	0.03	Q	V				
39+35	0.0360	0.03	Q	V				
39+40	0.0362	0.03	Q	V				
39+45	0.0364	0.02	Q	V				
39+50	0.0366	0.02	Q	V				
39+55	0.0367	0.02	Q	V				
40+ 0	0.0369	0.02	Q	V				
40+ 5	0.0370	0.02	Q	V				
40+10	0.0372	0.02	Q	V				
40+15	0.0373	0.01	Q	V				
40+20	0.0374	0.01	Q	V				
40+25	0.0374	0.01	Q	V				
40+30	0.0375	0.01	Q	V				
40+35	0.0375	0.01	Q	V				
40+40	0.0376	0.01	Q	V				

40+45	0.0376	0.01	Q	V				
40+50	0.0377	0.01	Q	V				
40+55	0.0377	0.01	Q	V				
41+ 0	0.0377	0.00	Q	V				
41+ 5	0.0378	0.00	Q	V				
41+10	0.0378	0.00	Q	V				
41+15	0.0378	0.01	Q	V				
41+20	0.0379	0.01	Q	V				
41+25	0.0379	0.01	Q	V				
41+30	0.0380	0.01	Q	V				
41+35	0.0380	0.01	Q	V				
41+40	0.0380	0.01	Q	V				
41+45	0.0381	0.01	Q	V				
41+50	0.0381	0.01	Q	V				
41+55	0.0381	0.01	Q	V				
42+ 0	0.0382	0.01	Q	V				
42+ 5	0.0382	0.00	Q	V				
42+10	0.0382	0.00	Q	V				
42+15	0.0383	0.00	Q	V				
42+20	0.0383	0.00	Q	V				
42+25	0.0383	0.00	Q	V				
42+30	0.0384	0.00	Q	V				
42+35	0.0384	0.00	Q	V				
42+40	0.0384	0.00	Q	V				
42+45	0.0385	0.00	Q	V				
42+50	0.0385	0.00	Q	V				
42+55	0.0385	0.00	Q	V				
43+ 0	0.0385	0.00	Q	V				
43+ 5	0.0386	0.00	Q	V				
43+10	0.0386	0.00	Q	V				
43+15	0.0386	0.00	Q	V				
43+20	0.0386	0.00	Q	V				
43+25	0.0387	0.00	Q	V				
43+30	0.0387	0.00	Q	V				
43+35	0.0387	0.00	Q	V				
43+40	0.0387	0.00	Q	V				
43+45	0.0388	0.00	Q	V				
43+50	0.0388	0.00	Q	V				
43+55	0.0388	0.00	Q	V				
44+ 0	0.0388	0.00	Q	V				
44+ 5	0.0389	0.00	Q	V				
44+10	0.0389	0.00	Q	V				
44+15	0.0389	0.00	Q	V				
44+20	0.0389	0.00	Q	V				
44+25	0.0389	0.00	Q	V				
44+30	0.0390	0.00	Q	V				
44+35	0.0390	0.00	Q	V				
44+40	0.0390	0.00	Q	V				
44+45	0.0390	0.00	Q	V				
44+50	0.0391	0.00	Q	V				
44+55	0.0391	0.00	Q	V				
45+ 0	0.0391	0.00	Q	V				
45+ 5	0.0391	0.00	Q	V				
45+10	0.0391	0.00	Q	V				
45+15	0.0392	0.00	Q	V				
45+20	0.0392	0.00	Q	V				
45+25	0.0392	0.00	Q	V				
45+30	0.0392	0.00	Q	V				
45+35	0.0392	0.00	Q	V				
45+40	0.0393	0.00	Q	V				
45+45	0.0393	0.00	Q	V				
45+50	0.0393	0.00	Q	V				
45+55	0.0393	0.00	Q	V				

46+ 0	0.0393	0.00	Q	V				
46+ 5	0.0394	0.00	Q	V				
46+10	0.0394	0.00	Q	V				
46+15	0.0394	0.00	Q	V				
46+20	0.0394	0.00	Q	V				
46+25	0.0394	0.00	Q	V				
46+30	0.0395	0.00	Q	V				
46+35	0.0395	0.00	Q	V				
46+40	0.0395	0.00	Q	V				
46+45	0.0395	0.00	Q	V				
46+50	0.0395	0.00	Q	V				
46+55	0.0395	0.00	Q	V				
47+ 0	0.0396	0.00	Q	V				
47+ 5	0.0396	0.00	Q	V				
47+10	0.0396	0.00	Q	V				
47+15	0.0396	0.00	Q	V				
47+20	0.0396	0.00	Q	V				
47+25	0.0396	0.00	Q	V				
47+30	0.0397	0.00	Q	V				
47+35	0.0397	0.00	Q	V				
47+40	0.0397	0.00	Q	V				
47+45	0.0397	0.00	Q	V				
47+50	0.0397	0.00	Q	V				
47+55	0.0397	0.00	Q	V				
48+ 0	0.0398	0.00	Q	V				
48+ 5	0.0398	0.00	Q	V				
48+10	0.0398	0.00	Q	V				
48+15	0.0398	0.00	Q	V				
48+20	0.0398	0.00	Q	V				
48+25	0.0398	0.00	Q	V				
48+30	0.0398	0.00	Q	V				
48+35	0.0398	0.00	Q	V				
48+40	0.0399	0.00	Q	V				
48+45	0.0399	0.00	Q	V				
48+50	0.0399	0.00	Q	V				
48+55	0.0400	0.00	Q	V				
49+ 0	0.0400	0.00	Q	V				
49+ 5	0.0400	0.00	Q	V				
49+10	0.0401	0.00	Q	V				
49+15	0.0401	0.00	Q	V				
49+20	0.0401	0.00	Q	V				
49+25	0.0401	0.00	Q	V				
49+30	0.0402	0.00	Q	V				
49+35	0.0402	0.00	Q	V				
49+40	0.0402	0.00	Q	V				
49+45	0.0403	0.00	Q	V				
49+50	0.0403	0.00	Q	V				
49+55	0.0403	0.00	Q	V				
50+ 0	0.0404	0.01	Q	V				
50+ 5	0.0404	0.01	Q	V				
50+10	0.0404	0.01	Q	V				
50+15	0.0405	0.01	Q	V				
50+20	0.0405	0.01	Q	V				
50+25	0.0406	0.01	Q	V				
50+30	0.0406	0.01	Q	V				
50+35	0.0406	0.01	Q	V				
50+40	0.0407	0.01	Q	V				
50+45	0.0407	0.01	Q	V				
50+50	0.0408	0.01	Q	V				
50+55	0.0408	0.01	Q	V				
51+ 0	0.0409	0.01	Q	V				
51+ 5	0.0409	0.01	Q	V				
51+10	0.0410	0.01	Q	V				

51+15	0.0410	0.01	Q	V				
51+20	0.0411	0.01	Q	V				
51+25	0.0411	0.01	Q	V				
51+30	0.0412	0.01	Q	V				
51+35	0.0412	0.01	Q	V				
51+40	0.0413	0.01	Q	V				
51+45	0.0413	0.01	Q	V				
51+50	0.0414	0.01	Q	V				
51+55	0.0414	0.01	Q	V				
52+ 0	0.0415	0.01	Q	V				
52+ 5	0.0415	0.01	Q	V				
52+10	0.0416	0.01	Q	V				
52+15	0.0416	0.01	Q	V				
52+20	0.0417	0.01	Q	V				
52+25	0.0418	0.01	Q	V				
52+30	0.0418	0.01	Q	V				
52+35	0.0419	0.01	Q	V				
52+40	0.0420	0.01	Q	V				
52+45	0.0420	0.01	Q	V				
52+50	0.0421	0.01	Q	V				
52+55	0.0422	0.01	Q	V				
53+ 0	0.0422	0.01	Q	V				
53+ 5	0.0423	0.01	Q	V				
53+10	0.0424	0.01	Q	V				
53+15	0.0425	0.01	Q	V				
53+20	0.0425	0.01	Q	V				
53+25	0.0426	0.01	Q	V				
53+30	0.0427	0.01	Q	V				
53+35	0.0427	0.01	Q	V				
53+40	0.0428	0.01	Q	V				
53+45	0.0429	0.01	Q	V				
53+50	0.0430	0.01	Q	V				
53+55	0.0430	0.01	Q	V				
54+ 0	0.0431	0.01	Q	V				
54+ 5	0.0432	0.01	Q	V				
54+10	0.0433	0.01	Q	V				
54+15	0.0434	0.01	Q	V				
54+20	0.0434	0.01	Q	V				
54+25	0.0435	0.01	Q	V				
54+30	0.0436	0.01	Q	V				
54+35	0.0437	0.01	Q	V				
54+40	0.0438	0.01	Q	V				
54+45	0.0439	0.01	Q	V				
54+50	0.0440	0.01	Q	V				
54+55	0.0441	0.01	Q	V				
55+ 0	0.0442	0.01	Q	V				
55+ 5	0.0443	0.01	Q	V				
55+10	0.0444	0.01	Q	V				
55+15	0.0445	0.01	Q	V				
55+20	0.0446	0.01	Q	V				
55+25	0.0447	0.01	Q	V				
55+30	0.0448	0.02	Q	V				
55+35	0.0449	0.02	Q	V				
55+40	0.0450	0.02	Q	V				
55+45	0.0451	0.02	Q	V				
55+50	0.0452	0.02	Q	V				
55+55	0.0454	0.02	Q	V				
56+ 0	0.0455	0.02	Q	V				
56+ 5	0.0456	0.02	Q	V				
56+10	0.0457	0.02	Q	V				
56+15	0.0459	0.02	Q	V				
56+20	0.0460	0.02	Q	V				
56+25	0.0462	0.02	Q	V				

56+30	0.0463	0.02	Q	V				
56+35	0.0464	0.02	Q	V				
56+40	0.0466	0.02	Q	V				
56+45	0.0467	0.02	Q	V				
56+50	0.0469	0.02	Q	V				
56+55	0.0471	0.02	Q	V				
57+ 0	0.0472	0.02	Q	V				
57+ 5	0.0474	0.02	Q	V				
57+10	0.0476	0.02	Q	V				
57+15	0.0477	0.03	Q	V				
57+20	0.0479	0.03	Q	V				
57+25	0.0481	0.03	Q	V				
57+30	0.0483	0.03	Q	V				
57+35	0.0485	0.03	Q	V				
57+40	0.0487	0.03	Q	V				
57+45	0.0489	0.03	Q	V				
57+50	0.0491	0.03	Q	V				
57+55	0.0493	0.03	Q	V				
58+ 0	0.0495	0.03	Q	V				
58+ 5	0.0497	0.03	Q	V				
58+10	0.0499	0.03	Q	V				
58+15	0.0501	0.03	Q	V				
58+20	0.0503	0.03	Q	V				
58+25	0.0504	0.02	Q	V				
58+30	0.0506	0.02	Q	V				
58+35	0.0508	0.02	Q	V				
58+40	0.0509	0.02	Q	V				
58+45	0.0511	0.03	Q	V				
58+50	0.0513	0.03	Q	V				
58+55	0.0515	0.03	Q	V				
59+ 0	0.0517	0.03	Q	V				
59+ 5	0.0519	0.03	Q	V				
59+10	0.0521	0.03	Q	V				
59+15	0.0523	0.03	Q	V				
59+20	0.0525	0.03	Q	V				
59+25	0.0527	0.03	Q	V				
59+30	0.0529	0.03	Q	V				
59+35	0.0531	0.03	Q	V				
59+40	0.0532	0.03	Q	V				
59+45	0.0534	0.03	Q	V				
59+50	0.0536	0.03	Q	V				
59+55	0.0538	0.03	Q	V				
60+ 0	0.0540	0.03	Q	V				
60+ 5	0.0542	0.03	Q	V				
60+10	0.0543	0.03	Q	V				
60+15	0.0546	0.03	Q	V				
60+20	0.0548	0.03	Q	V				
60+25	0.0550	0.03	Q	V				
60+30	0.0553	0.04	Q	V				
60+35	0.0555	0.04	Q	V				
60+40	0.0558	0.04	Q	V				
60+45	0.0560	0.04	Q	V				
60+50	0.0563	0.04	Q	V				
60+55	0.0566	0.04	Q	V				
61+ 0	0.0569	0.04	Q	V				
61+ 5	0.0571	0.04	Q	V				
61+10	0.0574	0.04	Q	V				
61+15	0.0577	0.04	Q	V				
61+20	0.0581	0.05	Q	V				
61+25	0.0584	0.05	Q	V				
61+30	0.0587	0.05	Q	V				
61+35	0.0590	0.05	Q	V				
61+40	0.0593	0.05	Q	V				

61+45	0.0596	0.04	Q	V			
61+50	0.0599	0.04	Q	V			
61+55	0.0602	0.04	Q	V			
62+ 0	0.0604	0.04	Q	V			
62+ 5	0.0607	0.04	Q	V			
62+10	0.0609	0.04	Q	V			
62+15	0.0612	0.04	Q	V			
62+20	0.0614	0.04	Q	V			
62+25	0.0617	0.04	Q	V			
62+30	0.0620	0.04	Q	V			
62+35	0.0622	0.04	Q	V			
62+40	0.0625	0.04	Q	V			
62+45	0.0628	0.04	Q	V			
62+50	0.0630	0.04	Q	V			
62+55	0.0633	0.04	Q	V			
63+ 0	0.0635	0.04	Q	V			
63+ 5	0.0638	0.04	Q	V			
63+10	0.0641	0.04	Q	V			
63+15	0.0643	0.04	Q	V			
63+20	0.0646	0.04	Q	V			
63+25	0.0648	0.04	Q	V			
63+30	0.0650	0.03	Q	V			
63+35	0.0653	0.03	Q	V			
63+40	0.0655	0.03	Q	V			
63+45	0.0657	0.03	Q	V			
63+50	0.0659	0.03	Q	V			
63+55	0.0661	0.03	Q	V			
64+ 0	0.0663	0.03	Q	V			
64+ 5	0.0665	0.03	Q	V			
64+10	0.0667	0.02	Q	V			
64+15	0.0668	0.02	Q	V			
64+20	0.0669	0.01	Q	V			
64+25	0.0670	0.01	Q	V			
64+30	0.0671	0.01	Q	V			
64+35	0.0672	0.01	Q	V			
64+40	0.0672	0.01	Q	V			
64+45	0.0673	0.01	Q	V			
64+50	0.0673	0.01	Q	V			
64+55	0.0674	0.01	Q	V			
65+ 0	0.0674	0.01	Q	V			
65+ 5	0.0675	0.01	Q	V			
65+10	0.0675	0.01	Q	V			
65+15	0.0675	0.01	Q	V			
65+20	0.0676	0.01	Q	V			
65+25	0.0676	0.01	Q	V			
65+30	0.0677	0.01	Q	V			
65+35	0.0677	0.01	Q	V			
65+40	0.0678	0.01	Q	V			
65+45	0.0678	0.01	Q	V			
65+50	0.0679	0.01	Q	V			
65+55	0.0679	0.01	Q	V			
66+ 0	0.0680	0.01	Q	V			
66+ 5	0.0680	0.01	Q	V			
66+10	0.0681	0.01	Q	V			
66+15	0.0681	0.01	Q	V			
66+20	0.0681	0.01	Q	V			
66+25	0.0682	0.01	Q	V			
66+30	0.0682	0.01	Q	V			
66+35	0.0683	0.01	Q	V			
66+40	0.0683	0.01	Q	V			
66+45	0.0683	0.01	Q	V			
66+50	0.0684	0.00	Q	V			
66+55	0.0684	0.00	Q	V			

67+ 0	0.0684	0.00	Q	V			
67+ 5	0.0685	0.00	Q	V			
67+10	0.0685	0.00	Q	V			
67+15	0.0685	0.00	Q	V			
67+20	0.0685	0.00	Q	V			
67+25	0.0686	0.00	Q	V			
67+30	0.0686	0.01	Q	V			
67+35	0.0686	0.01	Q	V			
67+40	0.0687	0.01	Q	V			
67+45	0.0687	0.00	Q	V			
67+50	0.0687	0.00	Q	V			
67+55	0.0688	0.00	Q	V			
68+ 0	0.0688	0.00	Q	V			
68+ 5	0.0688	0.00	Q	V			
68+10	0.0689	0.00	Q	V			
68+15	0.0689	0.00	Q	V			
68+20	0.0689	0.00	Q	V			
68+25	0.0689	0.00	Q	V			
68+30	0.0690	0.00	Q	V			
68+35	0.0690	0.00	Q	V			
68+40	0.0690	0.00	Q	V			
68+45	0.0691	0.00	Q	V			
68+50	0.0691	0.00	Q	V			
68+55	0.0691	0.00	Q	V			
69+ 0	0.0691	0.00	Q	V			
69+ 5	0.0692	0.00	Q	V			
69+10	0.0692	0.00	Q	V			
69+15	0.0692	0.00	Q	V			
69+20	0.0692	0.00	Q	V			
69+25	0.0693	0.00	Q	V			
69+30	0.0693	0.00	Q	V			
69+35	0.0693	0.00	Q	V			
69+40	0.0693	0.00	Q	V			
69+45	0.0694	0.00	Q	V			
69+50	0.0694	0.00	Q	V			
69+55	0.0694	0.00	Q	V			
70+ 0	0.0694	0.00	Q	V			
70+ 5	0.0695	0.00	Q	V			
70+10	0.0695	0.00	Q	V			
70+15	0.0695	0.00	Q	V			
70+20	0.0695	0.00	Q	V			
70+25	0.0696	0.00	Q	V			
70+30	0.0696	0.00	Q	V			
70+35	0.0696	0.00	Q	V			
70+40	0.0696	0.00	Q	V			
70+45	0.0697	0.00	Q	V			
70+50	0.0697	0.00	Q	V			
70+55	0.0697	0.00	Q	V			
71+ 0	0.0697	0.00	Q	V			
71+ 5	0.0697	0.00	Q	V			
71+10	0.0698	0.00	Q	V			
71+15	0.0698	0.00	Q	V			
71+20	0.0698	0.00	Q	V			
71+25	0.0698	0.00	Q	V			
71+30	0.0699	0.00	Q	V			
71+35	0.0699	0.00	Q	V			
71+40	0.0699	0.00	Q	V			
71+45	0.0699	0.00	Q	V			
71+50	0.0699	0.00	Q	V			
71+55	0.0700	0.00	Q	V			
72+ 0	0.0700	0.00	Q	V			
72+ 5	0.0700	0.00	Q	V			
72+10	0.0700	0.00	Q	V			

72+15	0.0700	0.00	Q	V			
72+20	0.0700	0.00	Q	V			
72+25	0.0701	0.00	Q	V			
72+30	0.0701	0.01	Q	V			
72+35	0.0701	0.01	Q	V			
72+40	0.0702	0.01	Q	V			
72+45	0.0702	0.01	Q	V			
72+50	0.0703	0.01	Q	V			
72+55	0.0703	0.01	Q	V			
73+ 0	0.0704	0.01	Q	V			
73+ 5	0.0705	0.01	Q	V			
73+10	0.0705	0.01	Q	V			
73+15	0.0706	0.01	Q	V			
73+20	0.0707	0.01	Q	V			
73+25	0.0707	0.01	Q	V			
73+30	0.0708	0.01	Q	V			
73+35	0.0708	0.01	Q	V			
73+40	0.0709	0.01	Q	V			
73+45	0.0709	0.01	Q	V			
73+50	0.0710	0.01	Q	V			
73+55	0.0711	0.01	Q	V			
74+ 0	0.0711	0.01	Q	V			
74+ 5	0.0712	0.01	Q	V			
74+10	0.0713	0.01	Q	V			
74+15	0.0713	0.01	Q	V			
74+20	0.0714	0.01	Q	V			
74+25	0.0715	0.01	Q	V			
74+30	0.0716	0.01	Q	V			
74+35	0.0716	0.01	Q	V			
74+40	0.0717	0.01	Q	V			
74+45	0.0718	0.01	Q	V			
74+50	0.0719	0.01	Q	V			
74+55	0.0720	0.01	Q	V			
75+ 0	0.0721	0.01	Q	V			
75+ 5	0.0722	0.01	Q	V			
75+10	0.0723	0.01	Q	V			
75+15	0.0724	0.01	Q	V			
75+20	0.0724	0.01	Q	V			
75+25	0.0725	0.01	Q	V			
75+30	0.0726	0.01	Q	V			
75+35	0.0727	0.01	Q	V			
75+40	0.0728	0.01	Q	V			
75+45	0.0729	0.01	Q	V			
75+50	0.0730	0.01	Q	V			
75+55	0.0731	0.01	Q	V			
76+ 0	0.0732	0.02	Q	V			
76+ 5	0.0733	0.02	Q	V			
76+10	0.0734	0.02	Q	V			
76+15	0.0736	0.02	Q	V			
76+20	0.0737	0.02	Q	V			
76+25	0.0738	0.02	Q	V			
76+30	0.0739	0.02	Q	V			
76+35	0.0740	0.02	Q	V			
76+40	0.0742	0.02	Q	V			
76+45	0.0743	0.02	Q	V			
76+50	0.0744	0.02	Q	V			
76+55	0.0745	0.02	Q	V			
77+ 0	0.0747	0.02	Q	V			
77+ 5	0.0748	0.02	Q	V			
77+10	0.0750	0.02	Q	V			
77+15	0.0751	0.02	Q	V			
77+20	0.0752	0.02	Q	V			
77+25	0.0753	0.02	Q	V			

77+30	0.0755	0.02	Q	V			
77+35	0.0756	0.02	Q	V			
77+40	0.0757	0.02	Q	V			
77+45	0.0759	0.02	Q	V			
77+50	0.0760	0.02	Q	V			
77+55	0.0762	0.02	Q	V			
78+ 0	0.0763	0.02	Q	V			
78+ 5	0.0765	0.02	Q	V			
78+10	0.0766	0.02	Q	V			
78+15	0.0768	0.02	Q	V			
78+20	0.0770	0.02	Q	V			
78+25	0.0771	0.02	Q	V			
78+30	0.0773	0.02	Q	V			
78+35	0.0775	0.02	Q	V			
78+40	0.0776	0.03	Q	V			
78+45	0.0778	0.03	Q	V			
78+50	0.0780	0.03	Q	V			
78+55	0.0782	0.03	Q	V			
79+ 0	0.0784	0.03	Q	V			
79+ 5	0.0785	0.03	Q	V			
79+10	0.0787	0.03	Q	V			
79+15	0.0789	0.03	Q	V			
79+20	0.0791	0.03	Q	V			
79+25	0.0793	0.03	Q	V			
79+30	0.0795	0.03	Q	V			
79+35	0.0797	0.03	Q	V			
79+40	0.0799	0.03	Q	V			
79+45	0.0801	0.03	Q	V			
79+50	0.0803	0.03	Q	V			
79+55	0.0806	0.03	Q	V			
80+ 0	0.0808	0.03	Q	V			
80+ 5	0.0810	0.03	Q	V			
80+10	0.0813	0.04	Q	V			
80+15	0.0815	0.04	Q	V			
80+20	0.0818	0.04	Q	V			
80+25	0.0821	0.04	Q	V			
80+30	0.0824	0.04	Q	V			
80+35	0.0826	0.04	Q	V			
80+40	0.0829	0.04	Q	V			
80+45	0.0832	0.04	Q	V			
80+50	0.0835	0.04	Q	V			
80+55	0.0838	0.04	Q	V			
81+ 0	0.0841	0.04	Q	V			
81+ 5	0.0844	0.05	Q	V			
81+10	0.0848	0.05	Q	V			
81+15	0.0851	0.05	Q	V			
81+20	0.0854	0.05	Q	V			
81+25	0.0858	0.05	Q	V			
81+30	0.0861	0.05	Q	V			
81+35	0.0865	0.05	Q	V			
81+40	0.0869	0.05	Q	V			
81+45	0.0873	0.06	Q	V			
81+50	0.0877	0.06	Q	V			
81+55	0.0880	0.06	Q	V			
82+ 0	0.0885	0.06	Q	V			
82+ 5	0.0889	0.06	Q	V			
82+10	0.0892	0.06	Q	V			
82+15	0.0896	0.05	Q	V			
82+20	0.0899	0.05	Q	V			
82+25	0.0902	0.05	Q	V			
82+30	0.0905	0.05	Q	V			
82+35	0.0909	0.05	Q	V			
82+40	0.0912	0.05	Q	V			

82+45	0.0915	0.05	Q		V			
82+50	0.0919	0.05	Q		V			
82+55	0.0922	0.05	Q		V			
83+ 0	0.0926	0.05	Q		V			
83+ 5	0.0930	0.05	Q		V			
83+10	0.0934	0.05	Q		V			
83+15	0.0937	0.05	Q		V			
83+20	0.0941	0.05	Q		V			
83+25	0.0945	0.05	Q		V			
83+30	0.0948	0.05	Q		V			
83+35	0.0952	0.05	Q		V			
83+40	0.0955	0.05	Q		V			
83+45	0.0959	0.05	Q		V			
83+50	0.0962	0.05	Q		V			
83+55	0.0966	0.05	Q		V			
84+ 0	0.0969	0.05	Q		V			
84+ 5	0.0972	0.05	Q		V			
84+10	0.0976	0.05	Q		V			
84+15	0.0980	0.06	Q		V			
84+20	0.0985	0.06	Q		V			
84+25	0.0989	0.06	Q		V			
84+30	0.0994	0.07	Q		V			
84+35	0.0998	0.07	Q		V			
84+40	0.1003	0.07	Q		V			
84+45	0.1008	0.07	Q		V			
84+50	0.1013	0.07	Q		V			
84+55	0.1018	0.08	Q		V			
85+ 0	0.1024	0.08	Q		V			
85+ 5	0.1029	0.08	Q		V			
85+10	0.1035	0.08	Q		V			
85+15	0.1040	0.08	Q		V			
85+20	0.1046	0.09	Q		V			
85+25	0.1053	0.09	Q		V			
85+30	0.1059	0.09	Q		V			
85+35	0.1065	0.09	Q		V			
85+40	0.1071	0.09	Q		V			
85+45	0.1076	0.08	Q		V			
85+50	0.1081	0.07	Q		V			
85+55	0.1086	0.07	Q		V			
86+ 0	0.1091	0.07	Q		V			
86+ 5	0.1096	0.07	Q		V			
86+10	0.1101	0.07	Q		V			
86+15	0.1106	0.07	Q		V			
86+20	0.1111	0.07	Q		V			
86+25	0.1116	0.07	Q		V			
86+30	0.1121	0.07	Q		V			
86+35	0.1126	0.07	Q		V			
86+40	0.1131	0.07	Q		V			
86+45	0.1136	0.07	Q		V			
86+50	0.1141	0.07	Q		V			
86+55	0.1146	0.07	Q		V			
87+ 0	0.1150	0.07	Q		V			
87+ 5	0.1155	0.07	Q		V			
87+10	0.1160	0.07	Q		V			
87+15	0.1165	0.07	Q		V			
87+20	0.1170	0.07	Q		V			
87+25	0.1174	0.07	Q		V			
87+30	0.1179	0.07	Q		V			
87+35	0.1183	0.07	Q		V			
87+40	0.1188	0.06	Q		V			
87+45	0.1192	0.06	Q		V			
87+50	0.1196	0.06	Q		V			
87+55	0.1200	0.06	Q		V			

88+ 0	0.1203	0.06	Q		V			
88+ 5	0.1207	0.05	Q		V			
88+10	0.1210	0.05	Q		V			
88+15	0.1213	0.04	Q		V			
88+20	0.1215	0.03	Q		V			
88+25	0.1216	0.02	Q		V			
88+30	0.1218	0.02	Q		V			
88+35	0.1219	0.02	Q		V			
88+40	0.1220	0.02	Q		V			
88+45	0.1221	0.01	Q		V			
88+50	0.1222	0.01	Q		V			
88+55	0.1223	0.01	Q		V			
89+ 0	0.1224	0.01	Q		V			
89+ 5	0.1224	0.01	Q		V			
89+10	0.1225	0.01	Q		V			
89+15	0.1226	0.01	Q		V			
89+20	0.1227	0.01	Q		V			
89+25	0.1228	0.01	Q		V			
89+30	0.1229	0.01	Q		V			
89+35	0.1230	0.01	Q		V			
89+40	0.1231	0.01	Q		V			
89+45	0.1232	0.01	Q		V			
89+50	0.1233	0.01	Q		V			
89+55	0.1233	0.01	Q		V			
90+ 0	0.1234	0.01	Q		V			
90+ 5	0.1235	0.01	Q		V			
90+10	0.1236	0.01	Q		V			
90+15	0.1237	0.01	Q		V			
90+20	0.1238	0.01	Q		V			
90+25	0.1238	0.01	Q		V			
90+30	0.1239	0.01	Q		V			
90+35	0.1240	0.01	Q		V			
90+40	0.1241	0.01	Q		V			
90+45	0.1241	0.01	Q		V			
90+50	0.1242	0.01	Q		V			
90+55	0.1243	0.01	Q		V			
91+ 0	0.1243	0.01	Q		V			
91+ 5	0.1244	0.01	Q		V			
91+10	0.1244	0.01	Q		V			
91+15	0.1245	0.01	Q		V			
91+20	0.1245	0.01	Q		V			
91+25	0.1246	0.01	Q		V			
91+30	0.1246	0.01	Q		V			
91+35	0.1247	0.01	Q		V			
91+40	0.1248	0.01	Q		V			
91+45	0.1248	0.01	Q		V			
91+50	0.1249	0.01	Q		V			
91+55	0.1250	0.01	Q		V			
92+ 0	0.1250	0.01	Q		V			
92+ 5	0.1251	0.01	Q		V			
92+10	0.1251	0.01	Q		V			
92+15	0.1252	0.01	Q		V			
92+20	0.1252	0.01	Q		V			
92+25	0.1253	0.01	Q		V			
92+30	0.1253	0.01	Q		V			
92+35	0.1254	0.01	Q		V			
92+40	0.1254	0.01	Q		V			
92+45	0.1255	0.01	Q		V			
92+50	0.1255	0.01	Q		V			
92+55	0.1256	0.01	Q		V			
93+ 0	0.1256	0.01	Q		V			
93+ 5	0.1257	0.01	Q		V			
93+10	0.1257	0.01	Q		V			

93+15	0.1258	0.01	Q		V			
93+20	0.1258	0.01	Q		V			
93+25	0.1259	0.01	Q		V			
93+30	0.1259	0.01	Q		V			
93+35	0.1260	0.01	Q		V			
93+40	0.1260	0.01	Q		V			
93+45	0.1261	0.01	Q		V			
93+50	0.1261	0.01	Q		V			
93+55	0.1262	0.01	Q		V			
94+ 0	0.1262	0.01	Q		V			
94+ 5	0.1263	0.01	Q		V			
94+10	0.1263	0.01	Q		V			
94+15	0.1264	0.01	Q		V			
94+20	0.1264	0.01	Q		V			
94+25	0.1265	0.01	Q		V			
94+30	0.1265	0.01	Q		V			
94+35	0.1266	0.01	Q		V			
94+40	0.1266	0.01	Q		V			
94+45	0.1266	0.01	Q		V			
94+50	0.1267	0.01	Q		V			
94+55	0.1267	0.01	Q		V			
95+ 0	0.1268	0.01	Q		V			
95+ 5	0.1268	0.01	Q		V			
95+10	0.1268	0.01	Q		V			
95+15	0.1269	0.01	Q		V			
95+20	0.1269	0.01	Q		V			
95+25	0.1270	0.01	Q		V			
95+30	0.1270	0.01	Q		V			
95+35	0.1270	0.01	Q		V			
95+40	0.1271	0.01	Q		V			
95+45	0.1271	0.01	Q		V			
95+50	0.1271	0.01	Q		V			
95+55	0.1272	0.01	Q		V			
96+ 0	0.1272	0.01	Q		V			
96+ 5	0.1272	0.00	Q		V			
96+10	0.1273	0.00	Q		V			
96+15	0.1273	0.01	Q		V			
96+20	0.1274	0.01	Q		V			
96+25	0.1275	0.01	Q		V			
96+30	0.1276	0.02	Q		V			
96+35	0.1277	0.02	Q		V			
96+40	0.1278	0.02	Q		V			
96+45	0.1280	0.02	Q		V			
96+50	0.1281	0.02	Q		V			
96+55	0.1283	0.02	Q		V			
97+ 0	0.1284	0.02	Q		V			
97+ 5	0.1286	0.03	Q		V			
97+10	0.1288	0.03	Q		V			
97+15	0.1290	0.02	Q		V			
97+20	0.1291	0.02	Q		V			
97+25	0.1293	0.02	Q		V			
97+30	0.1294	0.02	Q		V			
97+35	0.1296	0.02	Q		V			
97+40	0.1298	0.02	Q		V			
97+45	0.1299	0.02	Q		V			
97+50	0.1301	0.02	Q		V			
97+55	0.1303	0.02	Q		V			
98+ 0	0.1304	0.03	Q		V			
98+ 5	0.1306	0.03	Q		V			
98+10	0.1308	0.03	Q		V			
98+15	0.1310	0.03	Q		V			
98+20	0.1312	0.03	Q		V			
98+25	0.1315	0.03	Q		V			

98+30	0.1317	0.03	Q		V			
98+35	0.1319	0.03	Q		V			
98+40	0.1321	0.03	Q		V			
98+45	0.1323	0.03	Q		V			
98+50	0.1326	0.04	Q		V			
98+55	0.1328	0.04	Q		V			
99+ 0	0.1331	0.04	Q		V			
99+ 5	0.1333	0.04	Q		V			
99+10	0.1336	0.04	Q		V			
99+15	0.1338	0.04	Q		V			
99+20	0.1341	0.04	Q		V			
99+25	0.1344	0.04	Q		V			
99+30	0.1346	0.04	Q		V			
99+35	0.1349	0.04	Q		V			
99+40	0.1352	0.04	Q		V			
99+45	0.1354	0.04	Q		V			
99+50	0.1357	0.04	Q		V			
99+55	0.1360	0.04	Q		V			
100+ 0	0.1362	0.04	Q		V			
100+ 5	0.1365	0.04	Q		V			
100+10	0.1369	0.04	Q		V			
100+15	0.1372	0.04	Q		V			
100+20	0.1375	0.05	Q		V			
100+25	0.1378	0.05	Q		V			
100+30	0.1381	0.05	Q		V			
100+35	0.1385	0.05	Q		V			
100+40	0.1388	0.05	Q		V			
100+45	0.1392	0.05	Q		V			
100+50	0.1396	0.05	Q		V			
100+55	0.1399	0.05	Q		V			
101+ 0	0.1403	0.06	Q		V			
101+ 5	0.1407	0.06	Q		V			
101+10	0.1411	0.06	Q		V			
101+15	0.1415	0.05	Q		V			
101+20	0.1418	0.05	Q		V			
101+25	0.1422	0.05	Q		V			
101+30	0.1425	0.05	Q		V			
101+35	0.1429	0.05	Q		V			
101+40	0.1433	0.05	Q		V			
101+45	0.1436	0.06	Q		V			
101+50	0.1441	0.06	Q		V			
101+55	0.1445	0.06	Q		V			
102+ 0	0.1449	0.06	Q		V			
102+ 5	0.1453	0.06	Q		V			
102+10	0.1457	0.06	Q		V			
102+15	0.1462	0.06	Q		V			
102+20	0.1466	0.07	Q		V			
102+25	0.1471	0.07	Q		V			
102+30	0.1475	0.07	Q		V			
102+35	0.1480	0.07	Q		V			
102+40	0.1485	0.07	Q		V			
102+45	0.1490	0.07	Q		V			
102+50	0.1495	0.07	Q		V			
102+55	0.1500	0.07	Q		V			
103+ 0	0.1505	0.07	Q		V			
103+ 5	0.1510	0.08	Q		V			
103+10	0.1516	0.08	Q		V			
103+15	0.1521	0.08	Q		V			
103+20	0.1526	0.08	Q		V			
103+25	0.1531	0.08	Q		V			
103+30	0.1537	0.08	Q		V			
103+35	0.1543	0.08	Q		V			
103+40	0.1548	0.08	Q		V			

103+45	0.1554	0.09	Q		V		
103+50	0.1560	0.09	Q		V		
103+55	0.1567	0.09	Q		V		
104+ 0	0.1573	0.09	Q		V		
104+ 5	0.1580	0.10	Q		V		
104+10	0.1587	0.10	Q		V		
104+15	0.1594	0.10	Q		V		
104+20	0.1601	0.11	Q		V		
104+25	0.1609	0.11	Q		V		
104+30	0.1616	0.11	Q		V		
104+35	0.1624	0.11	Q		V		
104+40	0.1632	0.11	Q		V		
104+45	0.1640	0.12	Q		V		
104+50	0.1648	0.12	Q		V		
104+55	0.1657	0.12	Q		V		
105+ 0	0.1665	0.12	Q		V		
105+ 5	0.1674	0.13	Q		V		
105+10	0.1683	0.13	Q		V		
105+15	0.1692	0.14	Q		V		
105+20	0.1702	0.14	Q		V		
105+25	0.1711	0.14	Q		V		
105+30	0.1721	0.15	Q		V		
105+35	0.1732	0.15	Q		V		
105+40	0.1742	0.15	Q		V		
105+45	0.1753	0.15	Q		V		
105+50	0.1763	0.16	Q		V		
105+55	0.1774	0.16	Q		V		
106+ 0	0.1786	0.16	Q		V		
106+ 5	0.1797	0.16	Q		V		
106+10	0.1807	0.15	Q		V		
106+15	0.1817	0.14	Q		V		
106+20	0.1826	0.13	Q		V		
106+25	0.1835	0.13	Q		V		
106+30	0.1844	0.13	Q		V		
106+35	0.1852	0.13	Q		V		
106+40	0.1861	0.13	Q		V		
106+45	0.1871	0.14	Q		V		
106+50	0.1881	0.14	Q		V		
106+55	0.1891	0.15	Q		V		
107+ 0	0.1901	0.15	Q		V		
107+ 5	0.1911	0.15	Q		V		
107+10	0.1922	0.15	Q		V		
107+15	0.1932	0.15	Q		V		
107+20	0.1942	0.15	Q		V		
107+25	0.1952	0.15	Q		V		
107+30	0.1962	0.15	Q		V		
107+35	0.1972	0.15	Q		V		
107+40	0.1982	0.14	Q		V		
107+45	0.1992	0.14	Q		V		
107+50	0.2001	0.14	Q		V		
107+55	0.2011	0.14	Q		V		
108+ 0	0.2020	0.14	Q		V		
108+ 5	0.2030	0.14	Q		V		
108+10	0.2040	0.15	Q		V		
108+15	0.2051	0.16	Q		V		
108+20	0.2063	0.17	Q		V		
108+25	0.2076	0.18	Q		V		
108+30	0.2089	0.19	Q		V		
108+35	0.2102	0.19	Q		V		
108+40	0.2115	0.19	Q		V		
108+45	0.2129	0.20	Q		V		
108+50	0.2143	0.20	Q		V		
108+55	0.2157	0.21	Q		V		

109+ 0	0.2172	0.21	Q			V	
109+ 5	0.2187	0.22	Q			V	
109+10	0.2202	0.22	Q			V	
109+15	0.2218	0.24	Q			V	
109+20	0.2235	0.24	Q			V	
109+25	0.2252	0.25	Q			V	
109+30	0.2270	0.25	Q			V	
109+35	0.2287	0.25	Q			V	
109+40	0.2303	0.24	Q			V	
109+45	0.2318	0.22	Q			V	
109+50	0.2332	0.20	Q			V	
109+55	0.2346	0.20	Q			V	
110+ 0	0.2359	0.19	Q			V	
110+ 5	0.2372	0.19	Q			V	
110+10	0.2386	0.19	Q			V	
110+15	0.2399	0.20	Q			V	
110+20	0.2413	0.20	Q			V	
110+25	0.2428	0.20	Q			V	
110+30	0.2441	0.20	Q			V	
110+35	0.2455	0.20	Q			V	
110+40	0.2469	0.20	Q			V	
110+45	0.2483	0.20	Q			V	
110+50	0.2497	0.20	Q			V	
110+55	0.2511	0.20	Q			V	
111+ 0	0.2524	0.20	Q			V	
111+ 5	0.2538	0.20	Q			V	
111+10	0.2551	0.19	Q			V	
111+15	0.2564	0.19	Q			V	
111+20	0.2577	0.19	Q			V	
111+25	0.2590	0.19	Q			V	
111+30	0.2603	0.18	Q			V	
111+35	0.2615	0.18	Q			V	
111+40	0.2627	0.17	Q			V	
111+45	0.2639	0.17	Q			V	
111+50	0.2650	0.16	Q			V	
111+55	0.2661	0.16	Q			V	
112+ 0	0.2671	0.15	Q			V	
112+ 5	0.2681	0.15	Q			V	
112+10	0.2690	0.13	Q			V	
112+15	0.2697	0.10	Q			V	
112+20	0.2702	0.08	Q			V	
112+25	0.2707	0.06	Q			V	
112+30	0.2711	0.06	Q			V	
112+35	0.2714	0.05	Q			V	
112+40	0.2718	0.05	Q			V	
112+45	0.2720	0.04	Q			V	
112+50	0.2723	0.04	Q			V	
112+55	0.2725	0.03	Q			V	
113+ 0	0.2728	0.03	Q			V	
113+ 5	0.2730	0.03	Q			V	
113+10	0.2732	0.03	Q			V	
113+15	0.2734	0.03	Q			V	
113+20	0.2737	0.04	Q			V	
113+25	0.2739	0.04	Q			V	
113+30	0.2742	0.04	Q			V	
113+35	0.2745	0.04	Q			V	
113+40	0.2747	0.04	Q			V	
113+45	0.2750	0.04	Q			V	
113+50	0.2752	0.04	Q			V	
113+55	0.2755	0.04	Q			V	
114+ 0	0.2757	0.03	Q			V	
114+ 5	0.2759	0.03	Q			V	
114+10	0.2762	0.03	Q			V	

114+15	0.2764	0.03	Q				V	
114+20	0.2766	0.03	Q				V	
114+25	0.2768	0.03	Q				V	
114+30	0.2770	0.03	Q				V	
114+35	0.2773	0.03	Q				V	
114+40	0.2775	0.03	Q				V	
114+45	0.2777	0.03	Q				V	
114+50	0.2778	0.03	Q				V	
114+55	0.2780	0.02	Q				V	
115+ 0	0.2781	0.02	Q				V	
115+ 5	0.2783	0.02	Q				V	
115+10	0.2784	0.02	Q				V	
115+15	0.2786	0.02	Q				V	
115+20	0.2787	0.02	Q				V	
115+25	0.2789	0.02	Q				V	
115+30	0.2791	0.03	Q				V	
115+35	0.2793	0.03	Q				V	
115+40	0.2795	0.03	Q				V	
115+45	0.2796	0.03	Q				V	
115+50	0.2798	0.02	Q				V	
115+55	0.2800	0.02	Q				V	
116+ 0	0.2801	0.02	Q				V	
116+ 5	0.2802	0.02	Q				V	
116+10	0.2804	0.02	Q				V	
116+15	0.2805	0.02	Q				V	
116+20	0.2807	0.02	Q				V	
116+25	0.2808	0.02	Q				V	
116+30	0.2810	0.02	Q				V	
116+35	0.2811	0.02	Q				V	
116+40	0.2813	0.02	Q				V	
116+45	0.2814	0.02	Q				V	
116+50	0.2816	0.02	Q				V	
116+55	0.2817	0.02	Q				V	
117+ 0	0.2819	0.02	Q				V	
117+ 5	0.2820	0.02	Q				V	
117+10	0.2821	0.02	Q				V	
117+15	0.2823	0.02	Q				V	
117+20	0.2824	0.02	Q				V	
117+25	0.2826	0.02	Q				V	
117+30	0.2827	0.02	Q				V	
117+35	0.2828	0.02	Q				V	
117+40	0.2829	0.02	Q				V	
117+45	0.2831	0.02	Q				V	
117+50	0.2832	0.02	Q				V	
117+55	0.2834	0.02	Q				V	
118+ 0	0.2835	0.02	Q				V	
118+ 5	0.2836	0.02	Q				V	
118+10	0.2837	0.02	Q				V	
118+15	0.2839	0.02	Q				V	
118+20	0.2840	0.02	Q				V	
118+25	0.2842	0.02	Q				V	
118+30	0.2843	0.02	Q				V	
118+35	0.2844	0.02	Q				V	
118+40	0.2845	0.02	Q				V	
118+45	0.2846	0.02	Q				V	
118+50	0.2847	0.02	Q				V	
118+55	0.2849	0.02	Q				V	
119+ 0	0.2850	0.02	Q				V	
119+ 5	0.2851	0.02	Q				V	
119+10	0.2852	0.02	Q				V	
119+15	0.2853	0.02	Q				V	
119+20	0.2854	0.02	Q				V	
119+25	0.2855	0.02	Q				V	

119+30	0.2856	0.02	Q				V
119+35	0.2857	0.02	Q				V
119+40	0.2858	0.02	Q				V
119+45	0.2859	0.02	Q				V
119+50	0.2860	0.02	Q				V
119+55	0.2862	0.02	Q				V
120+ 0	0.2863	0.02	Q				V
120+ 5	0.2864	0.01	Q				V
120+10	0.2864	0.01	Q				V
120+15	0.2865	0.01	Q				V
120+20	0.2865	0.01	Q				V
120+25	0.2866	0.00	Q				V
120+30	0.2866	0.00	Q				V
120+35	0.2866	0.00	Q				V
120+40	0.2866	0.00	Q				V
120+45	0.2866	0.00	Q				V
120+50	0.2866	0.00	Q				V
120+55	0.2867	0.00	Q				V
121+ 0	0.2867	0.00	Q				V
121+ 5	0.2867	0.00	Q				V
121+10	0.2867	0.00	Q				V
121+15	0.2867	0.00	Q				V
121+20	0.2867	0.00	Q				V
121+25	0.2867	0.00	Q				V
121+30	0.2867	0.00	Q				V
121+35	0.2867	0.00	Q				V
121+40	0.2867	0.00	Q				V
121+45	0.2867	0.00	Q				V

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Unit Hydrograph Analysis

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Study date 10/14/21 File: jdhu3100.out

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Riverside County Synthetic Unit Hydrology Method  
RCFC & WCD Manual date - April 1978

Program License Serial Number 6443

-----  
English (in-lb) Input Units Used  
English Rainfall Data (Inches) Input Values Used

English Units used in output format

-----  
JD FIELDS HEMET  
UNIT HYDROGRAPHS 100 YEAR  
10/14/2021 LA

-----  
Drainage Area = 9.52 (Ac.) = 0.015 Sq. Mi.  
Drainage Area for Depth-Area Areal Adjustment = 9.52 (Ac.) = 0.015  
Sq. Mi.

USER Entry of lag time in hours  
Lag time = 0.221 Hr.  
Lag time = 13.26 Min.  
25% of lag time = 3.31 Min.  
40% of lag time = 5.30 Min.  
Unit time = 5.00 Min.  
Duration of storm = 3 Hour(s)  
User Entered Base Flow = 0.00 (CFS)

2 YEAR Area rainfall data:

Area (Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
9.52	0.83	7.90

100 YEAR Area rainfall data:

Area (Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
9.52	2.19	20.85

STORM EVENT (YEAR) = 100.00  
Area Averaged 2-Year Rainfall = 0.830 (In)  
Area Averaged 100-Year Rainfall = 2.190 (In)

Point rain (area averaged) = 2.190 (In)  
Areal adjustment factor = 100.00 %  
Adjusted average point rain = 2.190 (In)

Sub-Area Data:

Area(Ac.)                  Runoff Index      Impervious %  
 9.520                      32.00              0.500  
 Total Area Entered =      9.52(Ac.)

RI    RI    Infil. Rate   Impervious    Adj. Infil. Rate   Area%    F  
 AMC2 AMC-3    (In/Hr)    (Dec.%)    (In/Hr)    (Dec.)    (In/Hr)  
 32.0   52.0    0.552    0.500    0.303    1.000    0.303  
 Sum (F) =    0.303

Area averaged mean soil loss (F) (In/Hr) = 0.303  
 Minimum soil loss rate ((In/Hr)) = 0.152  
 (for 24 hour storm duration)  
 Soil low loss rate (decimal) = 0.900

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 U n i t   H y d r o g r a p h  
 VALLEY S-Curve  
 -----

Unit Hydrograph Data  
 -----

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	37.707	3.990
2	0.167	75.415	16.108
3	0.250	113.122	25.333
4	0.333	150.830	18.548
5	0.417	188.537	9.265
6	0.500	226.244	5.593
7	0.583	263.952	4.141
8	0.667	301.659	3.257
9	0.750	339.367	2.495
10	0.833	377.074	2.107
11	0.917	414.781	1.648
12	1.000	452.489	1.290
13	1.083	490.196	1.164
14	1.167	527.903	1.049
15	1.250	565.611	0.827
16	1.333	603.318	0.704
17	1.417	641.026	0.591
18	1.500	678.733	0.484
19	1.583	716.440	0.381
20	1.667	754.148	0.377
21	1.750	791.855	0.377
22	1.833	829.563	0.270
		Sum = 100.000	Sum= 9.594

-----  
 Storm Event 5    Effective Rainfall =    0.219(In)  
 -----

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max   Low	Effective (In/Hr)
1	0.08	1.30	( 0.303)	0.031
2	0.17	1.30	( 0.303)	0.031
3	0.25	1.10	( 0.303)	0.026
4	0.33	1.50	( 0.303)	0.035
5	0.42	1.50	( 0.303)	0.035





24	2.00	3.00	0.150	( 0.303)	0.135	0.015
25	2.08	3.10	0.155	( 0.303)	0.139	0.015
26	2.17	4.20	0.210	( 0.303)	0.189	0.021
27	2.25	5.00	0.250	( 0.303)	0.225	0.025
28	2.33	3.50	0.175	( 0.303)	0.157	0.017
29	2.42	6.80	0.340	0.303 ( 0.306)		0.036
30	2.50	7.30	0.364	0.303 ( 0.328)		0.061
31	2.58	8.20	0.409	0.303 ( 0.368)		0.106
32	2.67	5.90	0.295	( 0.303)	0.265	0.029
33	2.75	2.00	0.100	( 0.303)	0.090	0.010
34	2.83	1.80	0.090	( 0.303)	0.081	0.009
35	2.92	1.80	0.090	( 0.303)	0.081	0.009
36	3.00	0.60	0.030	( 0.303)	0.027	0.003

(Loss Rate Not Used)

Sum = 100.0 Sum = 0.6

Flood volume = Effective rainfall 0.05 (In)  
times area 9.5 (Ac.) / [(In) / (Ft.)] = 0.0 (Ac.Ft)  
Total soil loss = 0.37 (In)  
Total soil loss = 0.291 (Ac.Ft)  
Total rainfall = 0.42 (In)  
Flood volume = 1702.7 Cubic Feet  
Total soil loss = 12676.1 Cubic Feet

-----  
Storm Event 2 Effective Rainfall = 0.788 (In)  
-----

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate (In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	1.30	0.123	( 0.303)	0.111	0.012
2	0.17	1.30	0.123	( 0.303)	0.111	0.012
3	0.25	1.10	0.104	( 0.303)	0.094	0.010
4	0.33	1.50	0.142	( 0.303)	0.128	0.014
5	0.42	1.50	0.142	( 0.303)	0.128	0.014
6	0.50	1.80	0.170	( 0.303)	0.153	0.017
7	0.58	1.50	0.142	( 0.303)	0.128	0.014
8	0.67	1.80	0.170	( 0.303)	0.153	0.017
9	0.75	1.80	0.170	( 0.303)	0.153	0.017
10	0.83	1.50	0.142	( 0.303)	0.128	0.014
11	0.92	1.60	0.151	( 0.303)	0.136	0.015
12	1.00	1.80	0.170	( 0.303)	0.153	0.017
13	1.08	2.20	0.208	( 0.303)	0.187	0.021
14	1.17	2.20	0.208	( 0.303)	0.187	0.021
15	1.25	2.20	0.208	( 0.303)	0.187	0.021
16	1.33	2.00	0.189	( 0.303)	0.170	0.019
17	1.42	2.60	0.246	( 0.303)	0.221	0.025
18	1.50	2.70	0.255	( 0.303)	0.230	0.026
19	1.58	2.40	0.227	( 0.303)	0.204	0.023
20	1.67	2.70	0.255	( 0.303)	0.230	0.026
21	1.75	3.30	0.312	( 0.303)	0.281	0.031
22	1.83	3.10	0.293	( 0.303)	0.264	0.029
23	1.92	2.90	0.274	( 0.303)	0.247	0.027
24	2.00	3.00	0.284	( 0.303)	0.255	0.028
25	2.08	3.10	0.293	( 0.303)	0.264	0.029
26	2.17	4.20	0.397	0.303 ( 0.358)		0.094
27	2.25	5.00	0.473	0.303 ( 0.426)		0.170
28	2.33	3.50	0.331	( 0.303)	0.298	0.033
29	2.42	6.80	0.643	0.303 ( 0.579)		0.340
30	2.50	7.30	0.691	0.303 ( 0.622)		0.387
31	2.58	8.20	0.776	0.303 ( 0.698)		0.472
32	2.67	5.90	0.558	0.303 ( 0.502)		0.255

33	2.75	2.00	0.189	( 0.303)	0.170	0.019
34	2.83	1.80	0.170	( 0.303)	0.153	0.017
35	2.92	1.80	0.170	( 0.303)	0.153	0.017
36	3.00	0.60	0.057	( 0.303)	0.051	0.006

(Loss Rate Not Used)

Sum = 100.0 Sum = 2.3

Flood volume = Effective rainfall 0.19(In)  
times area 9.5(Ac.)/[ (In)/(Ft.) ] = 0.2(Ac.Ft)  
Total soil loss = 0.60(In)  
Total soil loss = 0.473(Ac.Ft)  
Total rainfall = 0.79(In)  
Flood volume = 6652.7 Cubic Feet  
Total soil loss = 20591.4 Cubic Feet

-----  
Storm Event 1 Effective Rainfall = 2.190(In)  
-----

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	1.30	0.342	0.303	( 0.307)	0.038
2	0.17	1.30	0.342	0.303	( 0.307)	0.038
3	0.25	1.10	0.289	( 0.303)	0.260	0.029
4	0.33	1.50	0.394	0.303	( 0.355)	0.091
5	0.42	1.50	0.394	0.303	( 0.355)	0.091
6	0.50	1.80	0.473	0.303	( 0.426)	0.170
7	0.58	1.50	0.394	0.303	( 0.355)	0.091
8	0.67	1.80	0.473	0.303	( 0.426)	0.170
9	0.75	1.80	0.473	0.303	( 0.426)	0.170
10	0.83	1.50	0.394	0.303	( 0.355)	0.091
11	0.92	1.60	0.420	0.303	( 0.378)	0.117
12	1.00	1.80	0.473	0.303	( 0.426)	0.170
13	1.08	2.20	0.578	0.303	( 0.520)	0.275
14	1.17	2.20	0.578	0.303	( 0.520)	0.275
15	1.25	2.20	0.578	0.303	( 0.520)	0.275
16	1.33	2.00	0.526	0.303	( 0.473)	0.222
17	1.42	2.60	0.683	0.303	( 0.615)	0.380
18	1.50	2.70	0.710	0.303	( 0.639)	0.406
19	1.58	2.40	0.631	0.303	( 0.568)	0.327
20	1.67	2.70	0.710	0.303	( 0.639)	0.406
21	1.75	3.30	0.867	0.303	( 0.780)	0.564
22	1.83	3.10	0.815	0.303	( 0.733)	0.511
23	1.92	2.90	0.762	0.303	( 0.686)	0.459
24	2.00	3.00	0.788	0.303	( 0.710)	0.485
25	2.08	3.10	0.815	0.303	( 0.733)	0.511
26	2.17	4.20	1.104	0.303	( 0.993)	0.800
27	2.25	5.00	1.314	0.303	( 1.183)	1.011
28	2.33	3.50	0.920	0.303	( 0.828)	0.616
29	2.42	6.80	1.787	0.303	( 1.608)	1.484
30	2.50	7.30	1.918	0.303	( 1.727)	1.615
31	2.58	8.20	2.155	0.303	( 1.939)	1.851
32	2.67	5.90	1.550	0.303	( 1.395)	1.247
33	2.75	2.00	0.526	0.303	( 0.473)	0.222
34	2.83	1.80	0.473	0.303	( 0.426)	0.170
35	2.92	1.80	0.473	0.303	( 0.426)	0.170
36	3.00	0.60	0.158	( 0.303)	0.142	0.016

(Loss Rate Not Used)

Sum = 100.0 Sum = 15.6

Flood volume = Effective rainfall 1.30(In)  
times area 9.5(Ac.)/[ (In)/(Ft.) ] = 1.0(Ac.Ft)  
Total soil loss = 0.89(In)

Total soil loss = 0.709(Ac.Ft)  
 Total rainfall = 2.19(In)  
 Flood volume = 44815.2 Cubic Feet  
 Total soil loss = 30862.8 Cubic Feet

-----  
 Peak flow rate of this hydrograph = 12.274 (CFS)  
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TOTAL OF: 5 3 - H O U R S T O R M E V E N T S  
 R u n o f f H y d r o g r a p h

-----  
 Hydrograph in 5 Minute intervals ((CFS))  
 -----

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0000	0.00	Q				
0+10	0.0001	0.01	Q				
0+15	0.0002	0.01	Q				
0+20	0.0003	0.02	Q				
0+25	0.0005	0.02	Q				
0+30	0.0006	0.03	Q				
0+35	0.0009	0.03	Q				
0+40	0.0011	0.03	Q				
0+45	0.0013	0.04	Q				
0+50	0.0016	0.04	Q				
0+55	0.0019	0.04	Q				
1+ 0	0.0021	0.04	Q				
1+ 5	0.0024	0.04	Q				
1+10	0.0027	0.04	Q				
1+15	0.0030	0.05	Q				
1+20	0.0034	0.05	Q				
1+25	0.0037	0.05	Q				
1+30	0.0041	0.05	Q				
1+35	0.0045	0.06	Q				
1+40	0.0049	0.06	Q				
1+45	0.0053	0.06	Q				
1+50	0.0057	0.07	Q				
1+55	0.0062	0.07	Q				
2+ 0	0.0067	0.07	Q				
2+ 5	0.0072	0.07	Q				
2+10	0.0077	0.07	Q				
2+15	0.0083	0.08	Q				
2+20	0.0089	0.09	Q				
2+25	0.0096	0.10	Q				
2+30	0.0103	0.11	Q				
2+35	0.0112	0.13	Q				
2+40	0.0122	0.15	Q				
2+45	0.0133	0.15	Q				
2+50	0.0142	0.13	Q				
2+55	0.0149	0.10	Q				
3+ 0	0.0154	0.08	Q				
3+ 5	0.0154	0.00	Q				
3+10	0.0155	0.01	Q				
3+15	0.0157	0.02	Q				
3+20	0.0159	0.03	Q				
3+25	0.0161	0.04	Q				
3+30	0.0164	0.04	Q				
3+35	0.0167	0.05	Q				
3+40	0.0171	0.05	Q				
3+45	0.0175	0.05	Q				
3+50	0.0178	0.06	Q				
3+55	0.0182	0.06	Q				

4+ 0	0.0186	0.06	Q				
4+ 5	0.0190	0.06	Q				
4+10	0.0195	0.06	Q				
4+15	0.0200	0.07	Q				
4+20	0.0205	0.07	Q				
4+25	0.0210	0.08	Q				
4+30	0.0215	0.08	Q				
4+35	0.0221	0.08	Q				
4+40	0.0227	0.09	Q				
4+45	0.0234	0.09	Q				
4+50	0.0240	0.10	Q				
4+55	0.0248	0.10	Q				
5+ 0	0.0255	0.11	Q				
5+ 5	0.0262	0.11	Q				
5+10	0.0270	0.11	Q				
5+15	0.0278	0.12	Q				
5+20	0.0288	0.14	Q				
5+25	0.0298	0.15	Q				
5+30	0.0309	0.16	QV				
5+35	0.0323	0.20	QV				
5+40	0.0338	0.22	QV				
5+45	0.0354	0.23	QV				
5+50	0.0367	0.20	QV				
5+55	0.0378	0.15	QV				
6+ 0	0.0386	0.12	QV				
6+ 5	0.0386	0.00	QV				
6+10	0.0387	0.01	QV				
6+15	0.0389	0.03	QV				
6+20	0.0392	0.04	QV				
6+25	0.0395	0.05	QV				
6+30	0.0398	0.05	QV				
6+35	0.0402	0.06	QV				
6+40	0.0407	0.06	QV				
6+45	0.0411	0.07	QV				
6+50	0.0416	0.07	QV				
6+55	0.0421	0.07	QV				
7+ 0	0.0426	0.07	QV				
7+ 5	0.0432	0.08	QV				
7+10	0.0437	0.08	QV				
7+15	0.0443	0.09	QV				
7+20	0.0450	0.09	QV				
7+25	0.0456	0.10	QV				
7+30	0.0463	0.10	QV				
7+35	0.0471	0.11	QV				
7+40	0.0478	0.11	QV				
7+45	0.0486	0.12	QV				
7+50	0.0495	0.12	QV				
7+55	0.0504	0.13	QV				
8+ 0	0.0513	0.14	QV				
8+ 5	0.0523	0.14	QV				
8+10	0.0532	0.14	QV				
8+15	0.0543	0.15	QV				
8+20	0.0555	0.17	QV				
8+25	0.0568	0.19	QV				
8+30	0.0583	0.22	QV				
8+35	0.0605	0.32	QV				
8+40	0.0636	0.45	Q V				
8+45	0.0669	0.49	Q V				
8+50	0.0696	0.39	Q V				
8+55	0.0714	0.26	Q V				
9+ 0	0.0728	0.20	Q V				
9+ 5	0.0728	0.00	Q V				
9+10	0.0730	0.02	Q V				

9+15	0.0733	0.05	Q V				
9+20	0.0739	0.07	Q V				
9+25	0.0744	0.09	Q V				
9+30	0.0751	0.10	Q V				
9+35	0.0759	0.11	Q V				
9+40	0.0767	0.12	Q V				
9+45	0.0776	0.13	Q V				
9+50	0.0786	0.14	Q V				
9+55	0.0795	0.14	Q V				
10+ 0	0.0805	0.14	Q V				
10+ 5	0.0814	0.14	Q V				
10+10	0.0825	0.15	Q V				
10+15	0.0837	0.17	Q V				
10+20	0.0849	0.18	Q V				
10+25	0.0861	0.18	Q V				
10+30	0.0874	0.19	Q V				
10+35	0.0888	0.20	Q V				
10+40	0.0903	0.21	Q V				
10+45	0.0918	0.22	Q V				
10+50	0.0934	0.23	Q V				
10+55	0.0952	0.25	Q V				
11+ 0	0.0969	0.26	Q V				
11+ 5	0.0987	0.26	Q V				
11+10	0.1007	0.29	Q V				
11+15	0.1036	0.42	Q V				
11+20	0.1080	0.65	Q V				
11+25	0.1139	0.85	Q V				
11+30	0.1222	1.21	QV				
11+35	0.1355	1.92	QV				
11+40	0.1532	2.58	VQ				
11+45	0.1717	2.69	Q				
11+50	0.1865	2.14	Q V				
11+55	0.1961	1.39	Q V				
12+ 0	0.2024	0.92	Q V				
12+ 5	0.2025	0.01	Q V				
12+10	0.2030	0.07	Q V				
12+15	0.2041	0.16	Q V				
12+20	0.2058	0.24	Q V				
12+25	0.2082	0.35	Q V				
12+30	0.2118	0.53	Q V				
12+35	0.2169	0.74	Q V				
12+40	0.2232	0.90	Q V				
12+45	0.2301	1.01	Q V				
12+50	0.2379	1.13	Q V				
12+55	0.2459	1.16	Q V				
13+ 0	0.2535	1.10	Q V				
13+ 5	0.2618	1.20	Q V				
13+10	0.2721	1.50	Q V				
13+15	0.2850	1.87	Q V				
13+20	0.2993	2.09	Q V				
13+25	0.3144	2.19	Q V				
13+30	0.3310	2.40	Q V				
13+35	0.3500	2.77	Q V				
13+40	0.3709	3.02	Q V				
13+45	0.3930	3.21	Q V				
13+50	0.4178	3.61	Q V				
13+55	0.4457	4.04	Q V				
14+ 0	0.4748	4.22	Q V				
14+ 5	0.5041	4.26	Q V				
14+10	0.5349	4.47	Q V				
14+15	0.5702	5.14	Q V				
14+20	0.6123	6.11	Q V				
14+25	0.6600	6.93	Q V				

14+30	0.7154	8.04			Q		V		
14+35	0.7851	10.12				Q	V		
14+40	0.8680	12.03					Q	V	
14+45	0.9525	12.27					Q	V	
14+50	1.0228	10.20				Q		V	
14+55	1.0722	7.18			Q			V	
15+ 0	1.1073	5.09		Q				V	
15+ 5	1.1339	3.86		Q				V	
15+10	1.1539	2.91		Q				V	
15+15	1.1691	2.20		Q				V	
15+20	1.1810	1.73		Q				V	
15+25	1.1907	1.41		Q				V	
15+30	1.1987	1.16		Q				V	
15+35	1.2053	0.96		Q				V	

Unit Hydrograph Analysis

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Study date 10/14/21 File: jdhu6100.out

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Riverside County Synthetic Unit Hydrology Method  
RCFC & WCD Manual date - April 1978

Program License Serial Number 6443

-----  
English (in-lb) Input Units Used  
English Rainfall Data (Inches) Input Values Used

English Units used in output format

-----  
JD FIELDS HEMET  
UNIT HYDROGRAPHS 100 YEAR  
10/14/2021 LA

-----  
Drainage Area = 9.52 (Ac.) = 0.015 Sq. Mi.  
Drainage Area for Depth-Area Areal Adjustment = 9.52 (Ac.) = 0.015  
Sq. Mi.

USER Entry of lag time in hours  
Lag time = 0.221 Hr.  
Lag time = 13.26 Min.  
25% of lag time = 3.31 Min.  
40% of lag time = 5.30 Min.  
Unit time = 5.00 Min.  
Duration of storm = 6 Hour(s)  
User Entered Base Flow = 0.00 (CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
9.52	1.15	10.95

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
9.52	2.87	27.32

STORM EVENT (YEAR) = 100.00  
Area Averaged 2-Year Rainfall = 1.150 (In)  
Area Averaged 100-Year Rainfall = 2.870 (In)

Point rain (area averaged) = 2.870 (In)  
Areal adjustment factor = 100.00 %  
Adjusted average point rain = 2.870 (In)

Sub-Area Data:

Area(Ac.)                  Runoff Index      Impervious %  
 9.520                      32.00              0.500  
 Total Area Entered =      9.52(Ac.)

RI    RI    Infil. Rate   Impervious    Adj. Infil. Rate   Area%    F  
 AMC2 AMC-3    (In/Hr)    (Dec.%)    (In/Hr)    (Dec.)    (In/Hr)  
 32.0 52.0    0.552    0.500    0.303    1.000    0.303  
 Sum (F) =    0.303

Area averaged mean soil loss (F) (In/Hr) = 0.303  
 Minimum soil loss rate ((In/Hr)) = 0.152  
 (for 24 hour storm duration)  
 Soil loss rate (decimal) = 0.900

U n i t   H y d r o g r a p h  
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	37.707	0.383
2	0.167	75.415	1.545
3	0.250	113.122	2.431
4	0.333	150.830	1.780
5	0.417	188.537	0.889
6	0.500	226.244	0.537
7	0.583	263.952	0.397
8	0.667	301.659	0.312
9	0.750	339.367	0.239
10	0.833	377.074	0.202
11	0.917	414.781	0.158
12	1.000	452.489	0.124
13	1.083	490.196	0.112
14	1.167	527.903	0.101
15	1.250	565.611	0.079
16	1.333	603.318	0.068
17	1.417	641.026	0.057
18	1.500	678.733	0.046
19	1.583	716.440	0.037
20	1.667	754.148	0.036
21	1.750	791.855	0.036
22	1.833	829.563	0.026
		Sum = 100.000	Sum= 9.594

Storm Event 5    Effective Rainfall =    0.287(In)

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max   Low	Effective (In/Hr)
1	0.08	0.50	( 0.303)	0.015
2	0.17	0.60	( 0.303)	0.019
3	0.25	0.60	( 0.303)	0.019
4	0.33	0.60	( 0.303)	0.019
5	0.42	0.60	( 0.303)	0.019

6	0.50	0.70	0.024	( 0.303)	0.022	0.002
7	0.58	0.70	0.024	( 0.303)	0.022	0.002
8	0.67	0.70	0.024	( 0.303)	0.022	0.002
9	0.75	0.70	0.024	( 0.303)	0.022	0.002
10	0.83	0.70	0.024	( 0.303)	0.022	0.002
11	0.92	0.70	0.024	( 0.303)	0.022	0.002
12	1.00	0.80	0.028	( 0.303)	0.025	0.003
13	1.08	0.80	0.028	( 0.303)	0.025	0.003
14	1.17	0.80	0.028	( 0.303)	0.025	0.003
15	1.25	0.80	0.028	( 0.303)	0.025	0.003
16	1.33	0.80	0.028	( 0.303)	0.025	0.003
17	1.42	0.80	0.028	( 0.303)	0.025	0.003
18	1.50	0.80	0.028	( 0.303)	0.025	0.003
19	1.58	0.80	0.028	( 0.303)	0.025	0.003
20	1.67	0.80	0.028	( 0.303)	0.025	0.003
21	1.75	0.80	0.028	( 0.303)	0.025	0.003
22	1.83	0.80	0.028	( 0.303)	0.025	0.003
23	1.92	0.80	0.028	( 0.303)	0.025	0.003
24	2.00	0.90	0.031	( 0.303)	0.028	0.003
25	2.08	0.80	0.028	( 0.303)	0.025	0.003
26	2.17	0.90	0.031	( 0.303)	0.028	0.003
27	2.25	0.90	0.031	( 0.303)	0.028	0.003
28	2.33	0.90	0.031	( 0.303)	0.028	0.003
29	2.42	0.90	0.031	( 0.303)	0.028	0.003
30	2.50	0.90	0.031	( 0.303)	0.028	0.003
31	2.58	0.90	0.031	( 0.303)	0.028	0.003
32	2.67	0.90	0.031	( 0.303)	0.028	0.003
33	2.75	1.00	0.034	( 0.303)	0.031	0.003
34	2.83	1.00	0.034	( 0.303)	0.031	0.003
35	2.92	1.00	0.034	( 0.303)	0.031	0.003
36	3.00	1.00	0.034	( 0.303)	0.031	0.003
37	3.08	1.00	0.034	( 0.303)	0.031	0.003
38	3.17	1.10	0.038	( 0.303)	0.034	0.004
39	3.25	1.10	0.038	( 0.303)	0.034	0.004
40	3.33	1.10	0.038	( 0.303)	0.034	0.004
41	3.42	1.20	0.041	( 0.303)	0.037	0.004
42	3.50	1.30	0.045	( 0.303)	0.040	0.004
43	3.58	1.40	0.048	( 0.303)	0.043	0.005
44	3.67	1.40	0.048	( 0.303)	0.043	0.005
45	3.75	1.50	0.052	( 0.303)	0.046	0.005
46	3.83	1.50	0.052	( 0.303)	0.046	0.005
47	3.92	1.60	0.055	( 0.303)	0.050	0.006
48	4.00	1.60	0.055	( 0.303)	0.050	0.006
49	4.08	1.70	0.059	( 0.303)	0.053	0.006
50	4.17	1.80	0.062	( 0.303)	0.056	0.006
51	4.25	1.90	0.065	( 0.303)	0.059	0.007
52	4.33	2.00	0.069	( 0.303)	0.062	0.007
53	4.42	2.10	0.072	( 0.303)	0.065	0.007
54	4.50	2.10	0.072	( 0.303)	0.065	0.007
55	4.58	2.20	0.076	( 0.303)	0.068	0.008
56	4.67	2.30	0.079	( 0.303)	0.071	0.008
57	4.75	2.40	0.083	( 0.303)	0.074	0.008
58	4.83	2.40	0.083	( 0.303)	0.074	0.008
59	4.92	2.50	0.086	( 0.303)	0.077	0.009
60	5.00	2.60	0.090	( 0.303)	0.081	0.009
61	5.08	3.10	0.107	( 0.303)	0.096	0.011
62	5.17	3.60	0.124	( 0.303)	0.112	0.012
63	5.25	3.90	0.134	( 0.303)	0.121	0.013
64	5.33	4.20	0.145	( 0.303)	0.130	0.014
65	5.42	4.70	0.162	( 0.303)	0.146	0.016
66	5.50	5.60	0.193	( 0.303)	0.174	0.019
67	5.58	1.90	0.065	( 0.303)	0.059	0.007
68	5.67	0.90	0.031	( 0.303)	0.028	0.003





15	1.25	0.80	0.052	( 0.303)	0.047	0.005
16	1.33	0.80	0.052	( 0.303)	0.047	0.005
17	1.42	0.80	0.052	( 0.303)	0.047	0.005
18	1.50	0.80	0.052	( 0.303)	0.047	0.005
19	1.58	0.80	0.052	( 0.303)	0.047	0.005
20	1.67	0.80	0.052	( 0.303)	0.047	0.005
21	1.75	0.80	0.052	( 0.303)	0.047	0.005
22	1.83	0.80	0.052	( 0.303)	0.047	0.005
23	1.92	0.80	0.052	( 0.303)	0.047	0.005
24	2.00	0.90	0.059	( 0.303)	0.053	0.006
25	2.08	0.80	0.052	( 0.303)	0.047	0.005
26	2.17	0.90	0.059	( 0.303)	0.053	0.006
27	2.25	0.90	0.059	( 0.303)	0.053	0.006
28	2.33	0.90	0.059	( 0.303)	0.053	0.006
29	2.42	0.90	0.059	( 0.303)	0.053	0.006
30	2.50	0.90	0.059	( 0.303)	0.053	0.006
31	2.58	0.90	0.059	( 0.303)	0.053	0.006
32	2.67	0.90	0.059	( 0.303)	0.053	0.006
33	2.75	1.00	0.065	( 0.303)	0.059	0.007
34	2.83	1.00	0.065	( 0.303)	0.059	0.007
35	2.92	1.00	0.065	( 0.303)	0.059	0.007
36	3.00	1.00	0.065	( 0.303)	0.059	0.007
37	3.08	1.00	0.065	( 0.303)	0.059	0.007
38	3.17	1.10	0.072	( 0.303)	0.065	0.007
39	3.25	1.10	0.072	( 0.303)	0.065	0.007
40	3.33	1.10	0.072	( 0.303)	0.065	0.007
41	3.42	1.20	0.079	( 0.303)	0.071	0.008
42	3.50	1.30	0.085	( 0.303)	0.077	0.009
43	3.58	1.40	0.092	( 0.303)	0.082	0.009
44	3.67	1.40	0.092	( 0.303)	0.082	0.009
45	3.75	1.50	0.098	( 0.303)	0.088	0.010
46	3.83	1.50	0.098	( 0.303)	0.088	0.010
47	3.92	1.60	0.105	( 0.303)	0.094	0.010
48	4.00	1.60	0.105	( 0.303)	0.094	0.010
49	4.08	1.70	0.111	( 0.303)	0.100	0.011
50	4.17	1.80	0.118	( 0.303)	0.106	0.012
51	4.25	1.90	0.124	( 0.303)	0.112	0.012
52	4.33	2.00	0.131	( 0.303)	0.118	0.013
53	4.42	2.10	0.137	( 0.303)	0.124	0.014
54	4.50	2.10	0.137	( 0.303)	0.124	0.014
55	4.58	2.20	0.144	( 0.303)	0.130	0.014
56	4.67	2.30	0.150	( 0.303)	0.135	0.015
57	4.75	2.40	0.157	( 0.303)	0.141	0.016
58	4.83	2.40	0.157	( 0.303)	0.141	0.016
59	4.92	2.50	0.164	( 0.303)	0.147	0.016
60	5.00	2.60	0.170	( 0.303)	0.153	0.017
61	5.08	3.10	0.203	( 0.303)	0.183	0.020
62	5.17	3.60	0.236	( 0.303)	0.212	0.024
63	5.25	3.90	0.255	( 0.303)	0.230	0.026
64	5.33	4.20	0.275	( 0.303)	0.247	0.027
65	5.42	4.70	0.308	( 0.303)	0.277	0.031
66	5.50	5.60	0.366	0.303 ( 0.330)		0.063
67	5.58	1.90	0.124	( 0.303)	0.112	0.012
68	5.67	0.90	0.059	( 0.303)	0.053	0.006
69	5.75	0.60	0.039	( 0.303)	0.035	0.004
70	5.83	0.50	0.033	( 0.303)	0.029	0.003
71	5.92	0.30	0.020	( 0.303)	0.018	0.002
72	6.00	0.20	0.013	( 0.303)	0.012	0.001

(Loss Rate Not Used)

Sum = 100.0 Sum = 0.7

Flood volume = Effective rainfall 0.06(In)  
times area 9.5(Ac.)/[ (In)/(Ft.) ] = 0.0(Ac.Ft)  
Total soil loss = 0.49(In)

Total soil loss = 0.388(Ac.Ft)  
 Total rainfall = 0.55(In)  
 Flood volume = 1960.4 Cubic Feet  
 Total soil loss = 16883.2 Cubic Feet

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 Storm Event 2 Effective Rainfall = 1.033(In)  
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The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.062	( 0.303)	0.056	0.006
2	0.17	0.60	0.074	( 0.303)	0.067	0.007
3	0.25	0.60	0.074	( 0.303)	0.067	0.007
4	0.33	0.60	0.074	( 0.303)	0.067	0.007
5	0.42	0.60	0.074	( 0.303)	0.067	0.007
6	0.50	0.70	0.087	( 0.303)	0.078	0.009
7	0.58	0.70	0.087	( 0.303)	0.078	0.009
8	0.67	0.70	0.087	( 0.303)	0.078	0.009
9	0.75	0.70	0.087	( 0.303)	0.078	0.009
10	0.83	0.70	0.087	( 0.303)	0.078	0.009
11	0.92	0.70	0.087	( 0.303)	0.078	0.009
12	1.00	0.80	0.099	( 0.303)	0.089	0.010
13	1.08	0.80	0.099	( 0.303)	0.089	0.010
14	1.17	0.80	0.099	( 0.303)	0.089	0.010
15	1.25	0.80	0.099	( 0.303)	0.089	0.010
16	1.33	0.80	0.099	( 0.303)	0.089	0.010
17	1.42	0.80	0.099	( 0.303)	0.089	0.010
18	1.50	0.80	0.099	( 0.303)	0.089	0.010
19	1.58	0.80	0.099	( 0.303)	0.089	0.010
20	1.67	0.80	0.099	( 0.303)	0.089	0.010
21	1.75	0.80	0.099	( 0.303)	0.089	0.010
22	1.83	0.80	0.099	( 0.303)	0.089	0.010
23	1.92	0.80	0.099	( 0.303)	0.089	0.010
24	2.00	0.90	0.112	( 0.303)	0.100	0.011
25	2.08	0.80	0.099	( 0.303)	0.089	0.010
26	2.17	0.90	0.112	( 0.303)	0.100	0.011
27	2.25	0.90	0.112	( 0.303)	0.100	0.011
28	2.33	0.90	0.112	( 0.303)	0.100	0.011
29	2.42	0.90	0.112	( 0.303)	0.100	0.011
30	2.50	0.90	0.112	( 0.303)	0.100	0.011
31	2.58	0.90	0.112	( 0.303)	0.100	0.011
32	2.67	0.90	0.112	( 0.303)	0.100	0.011
33	2.75	1.00	0.124	( 0.303)	0.112	0.012
34	2.83	1.00	0.124	( 0.303)	0.112	0.012
35	2.92	1.00	0.124	( 0.303)	0.112	0.012
36	3.00	1.00	0.124	( 0.303)	0.112	0.012
37	3.08	1.00	0.124	( 0.303)	0.112	0.012
38	3.17	1.10	0.136	( 0.303)	0.123	0.014
39	3.25	1.10	0.136	( 0.303)	0.123	0.014
40	3.33	1.10	0.136	( 0.303)	0.123	0.014
41	3.42	1.20	0.149	( 0.303)	0.134	0.015
42	3.50	1.30	0.161	( 0.303)	0.145	0.016
43	3.58	1.40	0.174	( 0.303)	0.156	0.017
44	3.67	1.40	0.174	( 0.303)	0.156	0.017
45	3.75	1.50	0.186	( 0.303)	0.167	0.019
46	3.83	1.50	0.186	( 0.303)	0.167	0.019
47	3.92	1.60	0.198	( 0.303)	0.179	0.020
48	4.00	1.60	0.198	( 0.303)	0.179	0.020
49	4.08	1.70	0.211	( 0.303)	0.190	0.021
50	4.17	1.80	0.223	( 0.303)	0.201	0.022





R u n o f f      H y d r o g r a p h

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 Hydrograph in    5    Minute intervals ((CFS))  
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Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0000	0.00	Q				
0+10	0.0000	0.00	Q				
0+15	0.0001	0.01	Q				
0+20	0.0002	0.01	Q				
0+25	0.0003	0.01	Q				
0+30	0.0004	0.02	Q				
0+35	0.0005	0.02	Q				
0+40	0.0006	0.02	Q				
0+45	0.0008	0.02	Q				
0+50	0.0009	0.02	Q				
0+55	0.0010	0.02	Q				
1+ 0	0.0012	0.02	Q				
1+ 5	0.0013	0.02	Q				
1+10	0.0015	0.02	Q				
1+15	0.0017	0.02	Q				
1+20	0.0018	0.02	Q				
1+25	0.0020	0.03	Q				
1+30	0.0022	0.03	Q				
1+35	0.0024	0.03	Q				
1+40	0.0025	0.03	Q				
1+45	0.0027	0.03	Q				
1+50	0.0029	0.03	Q				
1+55	0.0031	0.03	Q				
2+ 0	0.0033	0.03	Q				
2+ 5	0.0034	0.03	Q				
2+10	0.0036	0.03	Q				
2+15	0.0038	0.03	Q				
2+20	0.0040	0.03	Q				
2+25	0.0042	0.03	Q				
2+30	0.0044	0.03	Q				
2+35	0.0046	0.03	Q				
2+40	0.0048	0.03	Q				
2+45	0.0050	0.03	Q				
2+50	0.0052	0.03	Q				
2+55	0.0054	0.03	Q				
3+ 0	0.0057	0.03	Q				
3+ 5	0.0059	0.03	Q				
3+10	0.0061	0.03	Q				
3+15	0.0063	0.03	Q				
3+20	0.0066	0.03	Q				
3+25	0.0068	0.03	Q				
3+30	0.0071	0.04	Q				
3+35	0.0073	0.04	Q				
3+40	0.0076	0.04	Q				
3+45	0.0079	0.04	Q				
3+50	0.0082	0.04	Q				
3+55	0.0085	0.05	Q				
4+ 0	0.0088	0.05	Q				
4+ 5	0.0091	0.05	Q				
4+10	0.0095	0.05	Q				
4+15	0.0099	0.05	Q				
4+20	0.0102	0.06	Q				
4+25	0.0106	0.06	Q				
4+30	0.0111	0.06	Q				
4+35	0.0115	0.06	Q				
4+40	0.0119	0.07	Q				

4+45	0.0124	0.07	Q				
4+50	0.0129	0.07	Q				
4+55	0.0134	0.07	Q				
5+ 0	0.0139	0.08	Q				
5+ 5	0.0145	0.08	Q				
5+10	0.0150	0.08	Q				
5+15	0.0157	0.09	Q				
5+20	0.0164	0.10	Q				
5+25	0.0172	0.11	Q				
5+30	0.0180	0.12	Q				
5+35	0.0189	0.13	Q				
5+40	0.0198	0.13	Q				
5+45	0.0205	0.10	Q				
5+50	0.0210	0.07	Q				
5+55	0.0213	0.05	Q				
6+ 0	0.0216	0.04	Q				
6+ 5	0.0216	0.00	Q				
6+10	0.0217	0.01	Q				
6+15	0.0218	0.01	Q				
6+20	0.0219	0.02	Q				
6+25	0.0220	0.02	Q				
6+30	0.0222	0.02	Q				
6+35	0.0224	0.03	Q				
6+40	0.0226	0.03	Q				
6+45	0.0228	0.03	Q				
6+50	0.0230	0.03	Q				
6+55	0.0232	0.03	Q				
7+ 0	0.0234	0.03	Q				
7+ 5	0.0237	0.03	Q				
7+10	0.0239	0.04	Q				
7+15	0.0241	0.04	Q				
7+20	0.0244	0.04	Q				
7+25	0.0247	0.04	Q				
7+30	0.0249	0.04	Q				
7+35	0.0252	0.04	Q				
7+40	0.0255	0.04	Q				
7+45	0.0257	0.04	Q				
7+50	0.0260	0.04	Q				
7+55	0.0263	0.04	Q				
8+ 0	0.0265	0.04	Q				
8+ 5	0.0268	0.04	Q				
8+10	0.0271	0.04	Q				
8+15	0.0274	0.04	Q				
8+20	0.0277	0.04	Q				
8+25	0.0280	0.04	Q				
8+30	0.0283	0.04	Q				
8+35	0.0286	0.04	Q				
8+40	0.0289	0.04	Q				
8+45	0.0292	0.04	Q				
8+50	0.0295	0.05	Q				
8+55	0.0298	0.05	Q				
9+ 0	0.0301	0.05	Q				
9+ 5	0.0305	0.05	Q				
9+10	0.0308	0.05	Q				
9+15	0.0311	0.05	Q				
9+20	0.0315	0.05	QV				
9+25	0.0319	0.05	QV				
9+30	0.0322	0.05	QV				
9+35	0.0326	0.06	QV				
9+40	0.0330	0.06	QV				
9+45	0.0335	0.06	QV				
9+50	0.0339	0.07	QV				
9+55	0.0344	0.07	QV				

10+ 0	0.0349	0.07	QV				
10+ 5	0.0354	0.07	QV				
10+10	0.0359	0.08	QV				
10+15	0.0364	0.08	QV				
10+20	0.0370	0.08	QV				
10+25	0.0376	0.09	QV				
10+30	0.0382	0.09	QV				
10+35	0.0389	0.10	QV				
10+40	0.0396	0.10	QV				
10+45	0.0403	0.10	QV				
10+50	0.0410	0.11	QV				
10+55	0.0418	0.11	QV				
11+ 0	0.0425	0.11	QV				
11+ 5	0.0433	0.12	QV				
11+10	0.0442	0.13	QV				
11+15	0.0452	0.14	QV				
11+20	0.0462	0.15	QV				
11+25	0.0474	0.17	QV				
11+30	0.0487	0.19	QV				
11+35	0.0501	0.20	QV				
11+40	0.0514	0.19	QV				
11+45	0.0524	0.15	QV				
11+50	0.0531	0.11	QV				
11+55	0.0537	0.08	QV				
12+ 0	0.0541	0.06	QV				
12+ 5	0.0541	0.00	QV				
12+10	0.0542	0.01	QV				
12+15	0.0543	0.02	QV				
12+20	0.0544	0.02	QV				
12+25	0.0546	0.03	QV				
12+30	0.0548	0.03	QV				
12+35	0.0550	0.03	QV				
12+40	0.0553	0.04	QV				
12+45	0.0555	0.04	QV				
12+50	0.0558	0.04	QV				
12+55	0.0561	0.04	QV				
13+ 0	0.0564	0.04	QV				
13+ 5	0.0567	0.04	QV				
13+10	0.0570	0.04	QV				
13+15	0.0573	0.05	QV				
13+20	0.0576	0.05	QV				
13+25	0.0579	0.05	QV				
13+30	0.0583	0.05	QV				
13+35	0.0586	0.05	QV				
13+40	0.0589	0.05	QV				
13+45	0.0593	0.05	QV				
13+50	0.0596	0.05	QV				
13+55	0.0600	0.05	QV				
14+ 0	0.0603	0.05	QV				
14+ 5	0.0607	0.05	QV				
14+10	0.0610	0.05	QV				
14+15	0.0614	0.05	QV				
14+20	0.0617	0.05	QV				
14+25	0.0621	0.05	QV				
14+30	0.0625	0.06	Q V				
14+35	0.0629	0.06	Q V				
14+40	0.0633	0.06	Q V				
14+45	0.0636	0.06	Q V				
14+50	0.0640	0.06	Q V				
14+55	0.0644	0.06	Q V				
15+ 0	0.0649	0.06	Q V				
15+ 5	0.0653	0.06	Q V				
15+10	0.0657	0.06	Q V				

15+15	0.0661	0.06	Q V				
15+20	0.0666	0.06	Q V				
15+25	0.0670	0.07	Q V				
15+30	0.0675	0.07	Q V				
15+35	0.0680	0.07	Q V				
15+40	0.0685	0.08	Q V				
15+45	0.0691	0.08	Q V				
15+50	0.0696	0.08	Q V				
15+55	0.0702	0.09	Q V				
16+ 0	0.0709	0.09	Q V				
16+ 5	0.0715	0.09	Q V				
16+10	0.0721	0.10	Q V				
16+15	0.0728	0.10	Q V				
16+20	0.0736	0.11	Q V				
16+25	0.0743	0.11	Q V				
16+30	0.0751	0.12	Q V				
16+35	0.0759	0.12	Q V				
16+40	0.0768	0.12	Q V				
16+45	0.0777	0.13	Q V				
16+50	0.0786	0.13	Q V				
16+55	0.0796	0.14	Q V				
17+ 0	0.0806	0.14	Q V				
17+ 5	0.0816	0.15	Q V				
17+10	0.0827	0.16	Q V				
17+15	0.0839	0.18	Q V				
17+20	0.0853	0.20	Q V				
17+25	0.0867	0.21	Q V				
17+30	0.0884	0.25	Q V				
17+35	0.0905	0.29	Q V				
17+40	0.0925	0.30	Q V				
17+45	0.0941	0.23	Q V				
17+50	0.0952	0.16	Q V				
17+55	0.0960	0.12	Q V				
18+ 0	0.0967	0.09	Q V				
18+ 5	0.0967	0.00	Q V				
18+10	0.0968	0.01	Q V				
18+15	0.0970	0.03	Q V				
18+20	0.0973	0.04	Q V				
18+25	0.0976	0.05	Q V				
18+30	0.0980	0.06	Q V				
18+35	0.0984	0.06	Q V				
18+40	0.0989	0.07	Q V				
18+45	0.0994	0.07	Q V				
18+50	0.0999	0.07	Q V				
18+55	0.1004	0.08	Q V				
19+ 0	0.1009	0.08	Q V				
19+ 5	0.1015	0.08	Q V				
19+10	0.1021	0.08	Q V				
19+15	0.1027	0.09	Q V				
19+20	0.1033	0.09	Q V				
19+25	0.1039	0.09	Q V				
19+30	0.1045	0.09	Q V				
19+35	0.1052	0.09	Q V				
19+40	0.1058	0.09	Q V				
19+45	0.1065	0.09	Q V				
19+50	0.1071	0.09	Q V				
19+55	0.1078	0.09	Q V				
20+ 0	0.1084	0.09	Q V				
20+ 5	0.1091	0.10	Q V				
20+10	0.1098	0.10	Q V				
20+15	0.1104	0.10	Q V				
20+20	0.1111	0.10	Q V				
20+25	0.1119	0.10	Q V				

20+30	0.1126	0.10	Q	V				
20+35	0.1133	0.10	Q	V				
20+40	0.1140	0.11	Q	V				
20+45	0.1148	0.11	Q	V				
20+50	0.1155	0.11	Q	V				
20+55	0.1163	0.11	Q	V				
21+ 0	0.1171	0.11	Q	V				
21+ 5	0.1178	0.12	Q	V				
21+10	0.1187	0.12	Q	V				
21+15	0.1195	0.12	Q	V				
21+20	0.1203	0.12	Q	V				
21+25	0.1212	0.13	Q	V				
21+30	0.1221	0.13	Q	V				
21+35	0.1230	0.14	Q	V				
21+40	0.1240	0.14	Q	V				
21+45	0.1250	0.15	Q	V				
21+50	0.1261	0.16	Q	V				
21+55	0.1272	0.16	Q	V				
22+ 0	0.1284	0.17	Q	V				
22+ 5	0.1296	0.18	Q	V				
22+10	0.1309	0.18	Q	V				
22+15	0.1322	0.19	Q	V				
22+20	0.1335	0.20	Q	V				
22+25	0.1350	0.21	Q	V				
22+30	0.1365	0.22	Q	V				
22+35	0.1381	0.23	Q	V				
22+40	0.1397	0.24	Q	V				
22+45	0.1414	0.25	Q	V				
22+50	0.1431	0.25	Q	V				
22+55	0.1449	0.26	Q	V				
23+ 0	0.1468	0.27	Q	V				
23+ 5	0.1489	0.30	Q	V				
23+10	0.1517	0.41	Q	V				
23+15	0.1561	0.64	Q	V				
23+20	0.1626	0.95	Q	V				
23+25	0.1714	1.28	Q	V				
23+30	0.1829	1.66	Q	V				
23+35	0.1966	2.00	Q	V				
23+40	0.2097	1.90	Q	V				
23+45	0.2187	1.30	Q	V				
23+50	0.2242	0.80	Q	V				
23+55	0.2281	0.56	Q	V				
24+ 0	0.2311	0.44	Q	V				
24+ 5	0.2311	0.01	Q	V				
24+10	0.2314	0.03	Q	V				
24+15	0.2319	0.08	Q	V				
24+20	0.2328	0.12	Q	V				
24+25	0.2337	0.14	Q	V				
24+30	0.2348	0.16	Q	V				
24+35	0.2360	0.17	Q	V				
24+40	0.2373	0.18	Q	V				
24+45	0.2386	0.20	Q	V				
24+50	0.2400	0.20	Q	V				
24+55	0.2415	0.21	Q	V				
25+ 0	0.2429	0.21	Q	V				
25+ 5	0.2445	0.22	Q	V				
25+10	0.2461	0.23	Q	V				
25+15	0.2478	0.24	Q	V				
25+20	0.2495	0.25	Q	V				
25+25	0.2512	0.25	Q	V				
25+30	0.2529	0.25	Q	V				
25+35	0.2547	0.26	Q	V				
25+40	0.2565	0.26	Q	V				

25+45	0.2583	0.26	Q	V				
25+50	0.2601	0.26	Q	V				
25+55	0.2619	0.26	Q	V				
26+ 0	0.2637	0.26	Q	V				
26+ 5	0.2656	0.27	Q	V				
26+10	0.2674	0.27	Q	V				
26+15	0.2693	0.28	Q	V				
26+20	0.2713	0.28	Q	V				
26+25	0.2733	0.29	Q	V				
26+30	0.2752	0.29	Q	V				
26+35	0.2773	0.29	Q	V				
26+40	0.2793	0.29	Q	V				
26+45	0.2813	0.30	Q	V				
26+50	0.2835	0.31	Q	V				
26+55	0.2858	0.34	Q	V				
27+ 0	0.2883	0.36	Q	V				
27+ 5	0.2908	0.37	Q	V				
27+10	0.2934	0.39	Q	V				
27+15	0.2965	0.44	Q	V				
27+20	0.3001	0.53	Q	V				
27+25	0.3043	0.61	Q	V				
27+30	0.3092	0.71	Q	V				
27+35	0.3152	0.88	Q	V				
27+40	0.3227	1.09	Q	V				
27+45	0.3316	1.29	Q	V				
27+50	0.3417	1.46	Q	V				
27+55	0.3529	1.63	Q	V				
28+ 0	0.3653	1.80	Q	V				
28+ 5	0.3788	1.96	Q	V				
28+10								

Unit Hydrograph Analysis

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Study date 10/14/21 File: jdhu24100.out

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Riverside County Synthetic Unit Hydrology Method  
RCFC & WCD Manual date - April 1978

Program License Serial Number 6443

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English (in-lb) Input Units Used  
English Rainfall Data (Inches) Input Values Used

English Units used in output format

-----  
JD FIELDS HEMET  
UNIT HYDROGRAPHS 100 YEAR  
10/14/2021 LA

-----  
Drainage Area = 9.52 (Ac.) = 0.015 Sq. Mi.  
Drainage Area for Depth-Area Areal Adjustment = 9.52 (Ac.) = 0.015  
Sq. Mi.

USER Entry of lag time in hours  
Lag time = 0.221 Hr.  
Lag time = 13.26 Min.  
25% of lag time = 3.31 Min.  
40% of lag time = 5.30 Min.  
Unit time = 5.00 Min.  
Duration of storm = 24 Hour(s)  
User Entered Base Flow = 0.00 (CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
9.52	2.01	19.14

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
9.52	5.31	50.55

STORM EVENT (YEAR) = 100.00  
Area Averaged 2-Year Rainfall = 2.010 (In)  
Area Averaged 100-Year Rainfall = 5.310 (In)

Point rain (area averaged) = 5.310 (In)  
Areal adjustment factor = 100.00 %  
Adjusted average point rain = 5.310 (In)

Sub-Area Data:

Area(Ac.)                      Runoff Index      Impervious %  
 9.520                              32.00                      0.500  
 Total Area Entered =              9.52(Ac.)

RI    RI    Infil. Rate   Impervious    Adj. Infil. Rate   Area%    F  
 AMC2 AMC-3    (In/Hr)    (Dec.%)    (In/Hr)    (Dec.)    (In/Hr)  
 32.0   52.0    0.552    0.500    0.303    1.000    0.303  
 Sum (F) =    0.303

Area averaged mean soil loss (F) (In/Hr) = 0.303  
 Minimum soil loss rate ((In/Hr)) = 0.152  
 (for 24 hour storm duration)  
 Soil low loss rate (decimal) = 0.900

U n i t   H y d r o g r a p h  
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	37.707	3.990
2	0.167	75.415	16.108
3	0.250	113.122	25.333
4	0.333	150.830	18.548
5	0.417	188.537	9.265
6	0.500	226.244	5.593
7	0.583	263.952	4.141
8	0.667	301.659	3.257
9	0.750	339.367	2.495
10	0.833	377.074	2.107
11	0.917	414.781	1.648
12	1.000	452.489	1.290
13	1.083	490.196	1.164
14	1.167	527.903	1.049
15	1.250	565.611	0.827
16	1.333	603.318	0.704
17	1.417	641.026	0.591
18	1.500	678.733	0.484
19	1.583	716.440	0.381
20	1.667	754.148	0.377
21	1.750	791.855	0.377
22	1.833	829.563	0.270
		Sum = 100.000	Sum= 9.594

Storm Event 5    Effective Rainfall =    0.531(In)

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max   Low	Effective (In/Hr)
1	0.08	0.07	( 0.538)	0.004
2	0.17	0.07	( 0.536)	0.004
3	0.25	0.07	( 0.534)	0.004
4	0.33	0.10	( 0.532)	0.006
5	0.42	0.10	( 0.530)	0.006

6	0.50	0.10	0.006	( 0.527)	0.006	0.001
7	0.58	0.10	0.006	( 0.525)	0.006	0.001
8	0.67	0.10	0.006	( 0.523)	0.006	0.001
9	0.75	0.10	0.006	( 0.521)	0.006	0.001
10	0.83	0.13	0.008	( 0.519)	0.008	0.001
11	0.92	0.13	0.008	( 0.517)	0.008	0.001
12	1.00	0.13	0.008	( 0.515)	0.008	0.001
13	1.08	0.10	0.006	( 0.513)	0.006	0.001
14	1.17	0.10	0.006	( 0.511)	0.006	0.001
15	1.25	0.10	0.006	( 0.509)	0.006	0.001
16	1.33	0.10	0.006	( 0.507)	0.006	0.001
17	1.42	0.10	0.006	( 0.505)	0.006	0.001
18	1.50	0.10	0.006	( 0.503)	0.006	0.001
19	1.58	0.10	0.006	( 0.501)	0.006	0.001
20	1.67	0.10	0.006	( 0.499)	0.006	0.001
21	1.75	0.10	0.006	( 0.497)	0.006	0.001
22	1.83	0.13	0.008	( 0.495)	0.008	0.001
23	1.92	0.13	0.008	( 0.493)	0.008	0.001
24	2.00	0.13	0.008	( 0.491)	0.008	0.001
25	2.08	0.13	0.008	( 0.489)	0.008	0.001
26	2.17	0.13	0.008	( 0.487)	0.008	0.001
27	2.25	0.13	0.008	( 0.485)	0.008	0.001
28	2.33	0.13	0.008	( 0.483)	0.008	0.001
29	2.42	0.13	0.008	( 0.481)	0.008	0.001
30	2.50	0.13	0.008	( 0.479)	0.008	0.001
31	2.58	0.17	0.011	( 0.477)	0.010	0.001
32	2.67	0.17	0.011	( 0.475)	0.010	0.001
33	2.75	0.17	0.011	( 0.473)	0.010	0.001
34	2.83	0.17	0.011	( 0.471)	0.010	0.001
35	2.92	0.17	0.011	( 0.469)	0.010	0.001
36	3.00	0.17	0.011	( 0.467)	0.010	0.001
37	3.08	0.17	0.011	( 0.465)	0.010	0.001
38	3.17	0.17	0.011	( 0.464)	0.010	0.001
39	3.25	0.17	0.011	( 0.462)	0.010	0.001
40	3.33	0.17	0.011	( 0.460)	0.010	0.001
41	3.42	0.17	0.011	( 0.458)	0.010	0.001
42	3.50	0.17	0.011	( 0.456)	0.010	0.001
43	3.58	0.17	0.011	( 0.454)	0.010	0.001
44	3.67	0.17	0.011	( 0.452)	0.010	0.001
45	3.75	0.17	0.011	( 0.450)	0.010	0.001
46	3.83	0.20	0.013	( 0.448)	0.011	0.001
47	3.92	0.20	0.013	( 0.446)	0.011	0.001
48	4.00	0.20	0.013	( 0.444)	0.011	0.001
49	4.08	0.20	0.013	( 0.443)	0.011	0.001
50	4.17	0.20	0.013	( 0.441)	0.011	0.001
51	4.25	0.20	0.013	( 0.439)	0.011	0.001
52	4.33	0.23	0.015	( 0.437)	0.013	0.001
53	4.42	0.23	0.015	( 0.435)	0.013	0.001
54	4.50	0.23	0.015	( 0.433)	0.013	0.001
55	4.58	0.23	0.015	( 0.431)	0.013	0.001
56	4.67	0.23	0.015	( 0.430)	0.013	0.001
57	4.75	0.23	0.015	( 0.428)	0.013	0.001
58	4.83	0.27	0.017	( 0.426)	0.015	0.002
59	4.92	0.27	0.017	( 0.424)	0.015	0.002
60	5.00	0.27	0.017	( 0.422)	0.015	0.002
61	5.08	0.20	0.013	( 0.420)	0.011	0.001
62	5.17	0.20	0.013	( 0.418)	0.011	0.001
63	5.25	0.20	0.013	( 0.417)	0.011	0.001
64	5.33	0.23	0.015	( 0.415)	0.013	0.001
65	5.42	0.23	0.015	( 0.413)	0.013	0.001
66	5.50	0.23	0.015	( 0.411)	0.013	0.001
67	5.58	0.27	0.017	( 0.409)	0.015	0.002
68	5.67	0.27	0.017	( 0.408)	0.015	0.002

69	5.75	0.27	0.017	( 0.406)	0.015	0.002
70	5.83	0.27	0.017	( 0.404)	0.015	0.002
71	5.92	0.27	0.017	( 0.402)	0.015	0.002
72	6.00	0.27	0.017	( 0.400)	0.015	0.002
73	6.08	0.30	0.019	( 0.399)	0.017	0.002
74	6.17	0.30	0.019	( 0.397)	0.017	0.002
75	6.25	0.30	0.019	( 0.395)	0.017	0.002
76	6.33	0.30	0.019	( 0.393)	0.017	0.002
77	6.42	0.30	0.019	( 0.392)	0.017	0.002
78	6.50	0.30	0.019	( 0.390)	0.017	0.002
79	6.58	0.33	0.021	( 0.388)	0.019	0.002
80	6.67	0.33	0.021	( 0.386)	0.019	0.002
81	6.75	0.33	0.021	( 0.385)	0.019	0.002
82	6.83	0.33	0.021	( 0.383)	0.019	0.002
83	6.92	0.33	0.021	( 0.381)	0.019	0.002
84	7.00	0.33	0.021	( 0.379)	0.019	0.002
85	7.08	0.33	0.021	( 0.378)	0.019	0.002
86	7.17	0.33	0.021	( 0.376)	0.019	0.002
87	7.25	0.33	0.021	( 0.374)	0.019	0.002
88	7.33	0.37	0.023	( 0.373)	0.021	0.002
89	7.42	0.37	0.023	( 0.371)	0.021	0.002
90	7.50	0.37	0.023	( 0.369)	0.021	0.002
91	7.58	0.40	0.025	( 0.367)	0.023	0.003
92	7.67	0.40	0.025	( 0.366)	0.023	0.003
93	7.75	0.40	0.025	( 0.364)	0.023	0.003
94	7.83	0.43	0.028	( 0.362)	0.025	0.003
95	7.92	0.43	0.028	( 0.361)	0.025	0.003
96	8.00	0.43	0.028	( 0.359)	0.025	0.003
97	8.08	0.50	0.032	( 0.357)	0.029	0.003
98	8.17	0.50	0.032	( 0.356)	0.029	0.003
99	8.25	0.50	0.032	( 0.354)	0.029	0.003
100	8.33	0.50	0.032	( 0.352)	0.029	0.003
101	8.42	0.50	0.032	( 0.351)	0.029	0.003
102	8.50	0.50	0.032	( 0.349)	0.029	0.003
103	8.58	0.53	0.034	( 0.347)	0.031	0.003
104	8.67	0.53	0.034	( 0.346)	0.031	0.003
105	8.75	0.53	0.034	( 0.344)	0.031	0.003
106	8.83	0.57	0.036	( 0.343)	0.032	0.004
107	8.92	0.57	0.036	( 0.341)	0.032	0.004
108	9.00	0.57	0.036	( 0.339)	0.032	0.004
109	9.08	0.63	0.040	( 0.338)	0.036	0.004
110	9.17	0.63	0.040	( 0.336)	0.036	0.004
111	9.25	0.63	0.040	( 0.335)	0.036	0.004
112	9.33	0.67	0.042	( 0.333)	0.038	0.004
113	9.42	0.67	0.042	( 0.331)	0.038	0.004
114	9.50	0.67	0.042	( 0.330)	0.038	0.004
115	9.58	0.70	0.045	( 0.328)	0.040	0.004
116	9.67	0.70	0.045	( 0.327)	0.040	0.004
117	9.75	0.70	0.045	( 0.325)	0.040	0.004
118	9.83	0.73	0.047	( 0.323)	0.042	0.005
119	9.92	0.73	0.047	( 0.322)	0.042	0.005
120	10.00	0.73	0.047	( 0.320)	0.042	0.005
121	10.08	0.50	0.032	( 0.319)	0.029	0.003
122	10.17	0.50	0.032	( 0.317)	0.029	0.003
123	10.25	0.50	0.032	( 0.316)	0.029	0.003
124	10.33	0.50	0.032	( 0.314)	0.029	0.003
125	10.42	0.50	0.032	( 0.313)	0.029	0.003
126	10.50	0.50	0.032	( 0.311)	0.029	0.003
127	10.58	0.67	0.042	( 0.310)	0.038	0.004
128	10.67	0.67	0.042	( 0.308)	0.038	0.004
129	10.75	0.67	0.042	( 0.307)	0.038	0.004
130	10.83	0.67	0.042	( 0.305)	0.038	0.004
131	10.92	0.67	0.042	( 0.304)	0.038	0.004

132	11.00	0.67	0.042	( 0.302)	0.038	0.004
133	11.08	0.63	0.040	( 0.301)	0.036	0.004
134	11.17	0.63	0.040	( 0.299)	0.036	0.004
135	11.25	0.63	0.040	( 0.298)	0.036	0.004
136	11.33	0.63	0.040	( 0.296)	0.036	0.004
137	11.42	0.63	0.040	( 0.295)	0.036	0.004
138	11.50	0.63	0.040	( 0.293)	0.036	0.004
139	11.58	0.57	0.036	( 0.292)	0.032	0.004
140	11.67	0.57	0.036	( 0.290)	0.032	0.004
141	11.75	0.57	0.036	( 0.289)	0.032	0.004
142	11.83	0.60	0.038	( 0.287)	0.034	0.004
143	11.92	0.60	0.038	( 0.286)	0.034	0.004
144	12.00	0.60	0.038	( 0.285)	0.034	0.004
145	12.08	0.83	0.053	( 0.283)	0.048	0.005
146	12.17	0.83	0.053	( 0.282)	0.048	0.005
147	12.25	0.83	0.053	( 0.280)	0.048	0.005
148	12.33	0.87	0.055	( 0.279)	0.050	0.006
149	12.42	0.87	0.055	( 0.278)	0.050	0.006
150	12.50	0.87	0.055	( 0.276)	0.050	0.006
151	12.58	0.93	0.059	( 0.275)	0.054	0.006
152	12.67	0.93	0.059	( 0.273)	0.054	0.006
153	12.75	0.93	0.059	( 0.272)	0.054	0.006
154	12.83	0.97	0.062	( 0.271)	0.055	0.006
155	12.92	0.97	0.062	( 0.269)	0.055	0.006
156	13.00	0.97	0.062	( 0.268)	0.055	0.006
157	13.08	1.13	0.072	( 0.267)	0.065	0.007
158	13.17	1.13	0.072	( 0.265)	0.065	0.007
159	13.25	1.13	0.072	( 0.264)	0.065	0.007
160	13.33	1.13	0.072	( 0.263)	0.065	0.007
161	13.42	1.13	0.072	( 0.261)	0.065	0.007
162	13.50	1.13	0.072	( 0.260)	0.065	0.007
163	13.58	0.77	0.049	( 0.259)	0.044	0.005
164	13.67	0.77	0.049	( 0.257)	0.044	0.005
165	13.75	0.77	0.049	( 0.256)	0.044	0.005
166	13.83	0.77	0.049	( 0.255)	0.044	0.005
167	13.92	0.77	0.049	( 0.253)	0.044	0.005
168	14.00	0.77	0.049	( 0.252)	0.044	0.005
169	14.08	0.90	0.057	( 0.251)	0.052	0.006
170	14.17	0.90	0.057	( 0.249)	0.052	0.006
171	14.25	0.90	0.057	( 0.248)	0.052	0.006
172	14.33	0.87	0.055	( 0.247)	0.050	0.006
173	14.42	0.87	0.055	( 0.246)	0.050	0.006
174	14.50	0.87	0.055	( 0.244)	0.050	0.006
175	14.58	0.87	0.055	( 0.243)	0.050	0.006
176	14.67	0.87	0.055	( 0.242)	0.050	0.006
177	14.75	0.87	0.055	( 0.241)	0.050	0.006
178	14.83	0.83	0.053	( 0.239)	0.048	0.005
179	14.92	0.83	0.053	( 0.238)	0.048	0.005
180	15.00	0.83	0.053	( 0.237)	0.048	0.005
181	15.08	0.80	0.051	( 0.236)	0.046	0.005
182	15.17	0.80	0.051	( 0.235)	0.046	0.005
183	15.25	0.80	0.051	( 0.233)	0.046	0.005
184	15.33	0.77	0.049	( 0.232)	0.044	0.005
185	15.42	0.77	0.049	( 0.231)	0.044	0.005
186	15.50	0.77	0.049	( 0.230)	0.044	0.005
187	15.58	0.63	0.040	( 0.229)	0.036	0.004
188	15.67	0.63	0.040	( 0.227)	0.036	0.004
189	15.75	0.63	0.040	( 0.226)	0.036	0.004
190	15.83	0.63	0.040	( 0.225)	0.036	0.004
191	15.92	0.63	0.040	( 0.224)	0.036	0.004
192	16.00	0.63	0.040	( 0.223)	0.036	0.004
193	16.08	0.13	0.008	( 0.222)	0.008	0.001
194	16.17	0.13	0.008	( 0.221)	0.008	0.001

195	16.25	0.13	0.008	( 0.219)	0.008	0.001
196	16.33	0.13	0.008	( 0.218)	0.008	0.001
197	16.42	0.13	0.008	( 0.217)	0.008	0.001
198	16.50	0.13	0.008	( 0.216)	0.008	0.001
199	16.58	0.10	0.006	( 0.215)	0.006	0.001
200	16.67	0.10	0.006	( 0.214)	0.006	0.001
201	16.75	0.10	0.006	( 0.213)	0.006	0.001
202	16.83	0.10	0.006	( 0.212)	0.006	0.001
203	16.92	0.10	0.006	( 0.211)	0.006	0.001
204	17.00	0.10	0.006	( 0.210)	0.006	0.001
205	17.08	0.17	0.011	( 0.209)	0.010	0.001
206	17.17	0.17	0.011	( 0.207)	0.010	0.001
207	17.25	0.17	0.011	( 0.206)	0.010	0.001
208	17.33	0.17	0.011	( 0.205)	0.010	0.001
209	17.42	0.17	0.011	( 0.204)	0.010	0.001
210	17.50	0.17	0.011	( 0.203)	0.010	0.001
211	17.58	0.17	0.011	( 0.202)	0.010	0.001
212	17.67	0.17	0.011	( 0.201)	0.010	0.001
213	17.75	0.17	0.011	( 0.200)	0.010	0.001
214	17.83	0.13	0.008	( 0.199)	0.008	0.001
215	17.92	0.13	0.008	( 0.198)	0.008	0.001
216	18.00	0.13	0.008	( 0.197)	0.008	0.001
217	18.08	0.13	0.008	( 0.196)	0.008	0.001
218	18.17	0.13	0.008	( 0.195)	0.008	0.001
219	18.25	0.13	0.008	( 0.194)	0.008	0.001
220	18.33	0.13	0.008	( 0.193)	0.008	0.001
221	18.42	0.13	0.008	( 0.193)	0.008	0.001
222	18.50	0.13	0.008	( 0.192)	0.008	0.001
223	18.58	0.10	0.006	( 0.191)	0.006	0.001
224	18.67	0.10	0.006	( 0.190)	0.006	0.001
225	18.75	0.10	0.006	( 0.189)	0.006	0.001
226	18.83	0.07	0.004	( 0.188)	0.004	0.000
227	18.92	0.07	0.004	( 0.187)	0.004	0.000
228	19.00	0.07	0.004	( 0.186)	0.004	0.000
229	19.08	0.10	0.006	( 0.185)	0.006	0.001
230	19.17	0.10	0.006	( 0.184)	0.006	0.001
231	19.25	0.10	0.006	( 0.184)	0.006	0.001
232	19.33	0.13	0.008	( 0.183)	0.008	0.001
233	19.42	0.13	0.008	( 0.182)	0.008	0.001
234	19.50	0.13	0.008	( 0.181)	0.008	0.001
235	19.58	0.10	0.006	( 0.180)	0.006	0.001
236	19.67	0.10	0.006	( 0.179)	0.006	0.001
237	19.75	0.10	0.006	( 0.179)	0.006	0.001
238	19.83	0.07	0.004	( 0.178)	0.004	0.000
239	19.92	0.07	0.004	( 0.177)	0.004	0.000
240	20.00	0.07	0.004	( 0.176)	0.004	0.000
241	20.08	0.10	0.006	( 0.175)	0.006	0.001
242	20.17	0.10	0.006	( 0.175)	0.006	0.001
243	20.25	0.10	0.006	( 0.174)	0.006	0.001
244	20.33	0.10	0.006	( 0.173)	0.006	0.001
245	20.42	0.10	0.006	( 0.172)	0.006	0.001
246	20.50	0.10	0.006	( 0.172)	0.006	0.001
247	20.58	0.10	0.006	( 0.171)	0.006	0.001
248	20.67	0.10	0.006	( 0.170)	0.006	0.001
249	20.75	0.10	0.006	( 0.169)	0.006	0.001
250	20.83	0.07	0.004	( 0.169)	0.004	0.000
251	20.92	0.07	0.004	( 0.168)	0.004	0.000
252	21.00	0.07	0.004	( 0.167)	0.004	0.000
253	21.08	0.10	0.006	( 0.167)	0.006	0.001
254	21.17	0.10	0.006	( 0.166)	0.006	0.001
255	21.25	0.10	0.006	( 0.165)	0.006	0.001
256	21.33	0.07	0.004	( 0.165)	0.004	0.000
257	21.42	0.07	0.004	( 0.164)	0.004	0.000



15	1.25	0.10	0.010	( 0.509)	0.009	0.001
16	1.33	0.10	0.010	( 0.507)	0.009	0.001
17	1.42	0.10	0.010	( 0.505)	0.009	0.001
18	1.50	0.10	0.010	( 0.503)	0.009	0.001
19	1.58	0.10	0.010	( 0.501)	0.009	0.001
20	1.67	0.10	0.010	( 0.499)	0.009	0.001
21	1.75	0.10	0.010	( 0.497)	0.009	0.001
22	1.83	0.13	0.013	( 0.495)	0.011	0.001
23	1.92	0.13	0.013	( 0.493)	0.011	0.001
24	2.00	0.13	0.013	( 0.491)	0.011	0.001
25	2.08	0.13	0.013	( 0.489)	0.011	0.001
26	2.17	0.13	0.013	( 0.487)	0.011	0.001
27	2.25	0.13	0.013	( 0.485)	0.011	0.001
28	2.33	0.13	0.013	( 0.483)	0.011	0.001
29	2.42	0.13	0.013	( 0.481)	0.011	0.001
30	2.50	0.13	0.013	( 0.479)	0.011	0.001
31	2.58	0.17	0.016	( 0.477)	0.014	0.002
32	2.67	0.17	0.016	( 0.475)	0.014	0.002
33	2.75	0.17	0.016	( 0.473)	0.014	0.002
34	2.83	0.17	0.016	( 0.471)	0.014	0.002
35	2.92	0.17	0.016	( 0.469)	0.014	0.002
36	3.00	0.17	0.016	( 0.467)	0.014	0.002
37	3.08	0.17	0.016	( 0.465)	0.014	0.002
38	3.17	0.17	0.016	( 0.464)	0.014	0.002
39	3.25	0.17	0.016	( 0.462)	0.014	0.002
40	3.33	0.17	0.016	( 0.460)	0.014	0.002
41	3.42	0.17	0.016	( 0.458)	0.014	0.002
42	3.50	0.17	0.016	( 0.456)	0.014	0.002
43	3.58	0.17	0.016	( 0.454)	0.014	0.002
44	3.67	0.17	0.016	( 0.452)	0.014	0.002
45	3.75	0.17	0.016	( 0.450)	0.014	0.002
46	3.83	0.20	0.019	( 0.448)	0.017	0.002
47	3.92	0.20	0.019	( 0.446)	0.017	0.002
48	4.00	0.20	0.019	( 0.444)	0.017	0.002
49	4.08	0.20	0.019	( 0.443)	0.017	0.002
50	4.17	0.20	0.019	( 0.441)	0.017	0.002
51	4.25	0.20	0.019	( 0.439)	0.017	0.002
52	4.33	0.23	0.022	( 0.437)	0.020	0.002
53	4.42	0.23	0.022	( 0.435)	0.020	0.002
54	4.50	0.23	0.022	( 0.433)	0.020	0.002
55	4.58	0.23	0.022	( 0.431)	0.020	0.002
56	4.67	0.23	0.022	( 0.430)	0.020	0.002
57	4.75	0.23	0.022	( 0.428)	0.020	0.002
58	4.83	0.27	0.025	( 0.426)	0.023	0.003
59	4.92	0.27	0.025	( 0.424)	0.023	0.003
60	5.00	0.27	0.025	( 0.422)	0.023	0.003
61	5.08	0.20	0.019	( 0.420)	0.017	0.002
62	5.17	0.20	0.019	( 0.418)	0.017	0.002
63	5.25	0.20	0.019	( 0.417)	0.017	0.002
64	5.33	0.23	0.022	( 0.415)	0.020	0.002
65	5.42	0.23	0.022	( 0.413)	0.020	0.002
66	5.50	0.23	0.022	( 0.411)	0.020	0.002
67	5.58	0.27	0.025	( 0.409)	0.023	0.003
68	5.67	0.27	0.025	( 0.408)	0.023	0.003
69	5.75	0.27	0.025	( 0.406)	0.023	0.003
70	5.83	0.27	0.025	( 0.404)	0.023	0.003
71	5.92	0.27	0.025	( 0.402)	0.023	0.003
72	6.00	0.27	0.025	( 0.400)	0.023	0.003
73	6.08	0.30	0.029	( 0.399)	0.026	0.003
74	6.17	0.30	0.029	( 0.397)	0.026	0.003
75	6.25	0.30	0.029	( 0.395)	0.026	0.003
76	6.33	0.30	0.029	( 0.393)	0.026	0.003
77	6.42	0.30	0.029	( 0.392)	0.026	0.003

78	6.50	0.30	0.029	( 0.390)	0.026	0.003
79	6.58	0.33	0.032	( 0.388)	0.029	0.003
80	6.67	0.33	0.032	( 0.386)	0.029	0.003
81	6.75	0.33	0.032	( 0.385)	0.029	0.003
82	6.83	0.33	0.032	( 0.383)	0.029	0.003
83	6.92	0.33	0.032	( 0.381)	0.029	0.003
84	7.00	0.33	0.032	( 0.379)	0.029	0.003
85	7.08	0.33	0.032	( 0.378)	0.029	0.003
86	7.17	0.33	0.032	( 0.376)	0.029	0.003
87	7.25	0.33	0.032	( 0.374)	0.029	0.003
88	7.33	0.37	0.035	( 0.373)	0.032	0.004
89	7.42	0.37	0.035	( 0.371)	0.032	0.004
90	7.50	0.37	0.035	( 0.369)	0.032	0.004
91	7.58	0.40	0.038	( 0.367)	0.034	0.004
92	7.67	0.40	0.038	( 0.366)	0.034	0.004
93	7.75	0.40	0.038	( 0.364)	0.034	0.004
94	7.83	0.43	0.041	( 0.362)	0.037	0.004
95	7.92	0.43	0.041	( 0.361)	0.037	0.004
96	8.00	0.43	0.041	( 0.359)	0.037	0.004
97	8.08	0.50	0.048	( 0.357)	0.043	0.005
98	8.17	0.50	0.048	( 0.356)	0.043	0.005
99	8.25	0.50	0.048	( 0.354)	0.043	0.005
100	8.33	0.50	0.048	( 0.352)	0.043	0.005
101	8.42	0.50	0.048	( 0.351)	0.043	0.005
102	8.50	0.50	0.048	( 0.349)	0.043	0.005
103	8.58	0.53	0.051	( 0.347)	0.046	0.005
104	8.67	0.53	0.051	( 0.346)	0.046	0.005
105	8.75	0.53	0.051	( 0.344)	0.046	0.005
106	8.83	0.57	0.054	( 0.343)	0.049	0.005
107	8.92	0.57	0.054	( 0.341)	0.049	0.005
108	9.00	0.57	0.054	( 0.339)	0.049	0.005
109	9.08	0.63	0.061	( 0.338)	0.054	0.006
110	9.17	0.63	0.061	( 0.336)	0.054	0.006
111	9.25	0.63	0.061	( 0.335)	0.054	0.006
112	9.33	0.67	0.064	( 0.333)	0.057	0.006
113	9.42	0.67	0.064	( 0.331)	0.057	0.006
114	9.50	0.67	0.064	( 0.330)	0.057	0.006
115	9.58	0.70	0.067	( 0.328)	0.060	0.007
116	9.67	0.70	0.067	( 0.327)	0.060	0.007
117	9.75	0.70	0.067	( 0.325)	0.060	0.007
118	9.83	0.73	0.070	( 0.323)	0.063	0.007
119	9.92	0.73	0.070	( 0.322)	0.063	0.007
120	10.00	0.73	0.070	( 0.320)	0.063	0.007
121	10.08	0.50	0.048	( 0.319)	0.043	0.005
122	10.17	0.50	0.048	( 0.317)	0.043	0.005
123	10.25	0.50	0.048	( 0.316)	0.043	0.005
124	10.33	0.50	0.048	( 0.314)	0.043	0.005
125	10.42	0.50	0.048	( 0.313)	0.043	0.005
126	10.50	0.50	0.048	( 0.311)	0.043	0.005
127	10.58	0.67	0.064	( 0.310)	0.057	0.006
128	10.67	0.67	0.064	( 0.308)	0.057	0.006
129	10.75	0.67	0.064	( 0.307)	0.057	0.006
130	10.83	0.67	0.064	( 0.305)	0.057	0.006
131	10.92	0.67	0.064	( 0.304)	0.057	0.006
132	11.00	0.67	0.064	( 0.302)	0.057	0.006
133	11.08	0.63	0.061	( 0.301)	0.054	0.006
134	11.17	0.63	0.061	( 0.299)	0.054	0.006
135	11.25	0.63	0.061	( 0.298)	0.054	0.006
136	11.33	0.63	0.061	( 0.296)	0.054	0.006
137	11.42	0.63	0.061	( 0.295)	0.054	0.006
138	11.50	0.63	0.061	( 0.293)	0.054	0.006
139	11.58	0.57	0.054	( 0.292)	0.049	0.005
140	11.67	0.57	0.054	( 0.290)	0.049	0.005

141	11.75	0.57	0.054	( 0.289)	0.049	0.005
142	11.83	0.60	0.057	( 0.287)	0.052	0.006
143	11.92	0.60	0.057	( 0.286)	0.052	0.006
144	12.00	0.60	0.057	( 0.285)	0.052	0.006
145	12.08	0.83	0.080	( 0.283)	0.072	0.008
146	12.17	0.83	0.080	( 0.282)	0.072	0.008
147	12.25	0.83	0.080	( 0.280)	0.072	0.008
148	12.33	0.87	0.083	( 0.279)	0.075	0.008
149	12.42	0.87	0.083	( 0.278)	0.075	0.008
150	12.50	0.87	0.083	( 0.276)	0.075	0.008
151	12.58	0.93	0.089	( 0.275)	0.080	0.009
152	12.67	0.93	0.089	( 0.273)	0.080	0.009
153	12.75	0.93	0.089	( 0.272)	0.080	0.009
154	12.83	0.97	0.092	( 0.271)	0.083	0.009
155	12.92	0.97	0.092	( 0.269)	0.083	0.009
156	13.00	0.97	0.092	( 0.268)	0.083	0.009
157	13.08	1.13	0.108	( 0.267)	0.097	0.011
158	13.17	1.13	0.108	( 0.265)	0.097	0.011
159	13.25	1.13	0.108	( 0.264)	0.097	0.011
160	13.33	1.13	0.108	( 0.263)	0.097	0.011
161	13.42	1.13	0.108	( 0.261)	0.097	0.011
162	13.50	1.13	0.108	( 0.260)	0.097	0.011
163	13.58	0.77	0.073	( 0.259)	0.066	0.007
164	13.67	0.77	0.073	( 0.257)	0.066	0.007
165	13.75	0.77	0.073	( 0.256)	0.066	0.007
166	13.83	0.77	0.073	( 0.255)	0.066	0.007
167	13.92	0.77	0.073	( 0.253)	0.066	0.007
168	14.00	0.77	0.073	( 0.252)	0.066	0.007
169	14.08	0.90	0.086	( 0.251)	0.077	0.009
170	14.17	0.90	0.086	( 0.249)	0.077	0.009
171	14.25	0.90	0.086	( 0.248)	0.077	0.009
172	14.33	0.87	0.083	( 0.247)	0.075	0.008
173	14.42	0.87	0.083	( 0.246)	0.075	0.008
174	14.50	0.87	0.083	( 0.244)	0.075	0.008
175	14.58	0.87	0.083	( 0.243)	0.075	0.008
176	14.67	0.87	0.083	( 0.242)	0.075	0.008
177	14.75	0.87	0.083	( 0.241)	0.075	0.008
178	14.83	0.83	0.080	( 0.239)	0.072	0.008
179	14.92	0.83	0.080	( 0.238)	0.072	0.008
180	15.00	0.83	0.080	( 0.237)	0.072	0.008
181	15.08	0.80	0.076	( 0.236)	0.069	0.008
182	15.17	0.80	0.076	( 0.235)	0.069	0.008
183	15.25	0.80	0.076	( 0.233)	0.069	0.008
184	15.33	0.77	0.073	( 0.232)	0.066	0.007
185	15.42	0.77	0.073	( 0.231)	0.066	0.007
186	15.50	0.77	0.073	( 0.230)	0.066	0.007
187	15.58	0.63	0.061	( 0.229)	0.054	0.006
188	15.67	0.63	0.061	( 0.227)	0.054	0.006
189	15.75	0.63	0.061	( 0.226)	0.054	0.006
190	15.83	0.63	0.061	( 0.225)	0.054	0.006
191	15.92	0.63	0.061	( 0.224)	0.054	0.006
192	16.00	0.63	0.061	( 0.223)	0.054	0.006
193	16.08	0.13	0.013	( 0.222)	0.011	0.001
194	16.17	0.13	0.013	( 0.221)	0.011	0.001
195	16.25	0.13	0.013	( 0.219)	0.011	0.001
196	16.33	0.13	0.013	( 0.218)	0.011	0.001
197	16.42	0.13	0.013	( 0.217)	0.011	0.001
198	16.50	0.13	0.013	( 0.216)	0.011	0.001
199	16.58	0.10	0.010	( 0.215)	0.009	0.001
200	16.67	0.10	0.010	( 0.214)	0.009	0.001
201	16.75	0.10	0.010	( 0.213)	0.009	0.001
202	16.83	0.10	0.010	( 0.212)	0.009	0.001
203	16.92	0.10	0.010	( 0.211)	0.009	0.001

204	17.00	0.10	0.010	( 0.210)	0.009	0.001
205	17.08	0.17	0.016	( 0.209)	0.014	0.002
206	17.17	0.17	0.016	( 0.207)	0.014	0.002
207	17.25	0.17	0.016	( 0.206)	0.014	0.002
208	17.33	0.17	0.016	( 0.205)	0.014	0.002
209	17.42	0.17	0.016	( 0.204)	0.014	0.002
210	17.50	0.17	0.016	( 0.203)	0.014	0.002
211	17.58	0.17	0.016	( 0.202)	0.014	0.002
212	17.67	0.17	0.016	( 0.201)	0.014	0.002
213	17.75	0.17	0.016	( 0.200)	0.014	0.002
214	17.83	0.13	0.013	( 0.199)	0.011	0.001
215	17.92	0.13	0.013	( 0.198)	0.011	0.001
216	18.00	0.13	0.013	( 0.197)	0.011	0.001
217	18.08	0.13	0.013	( 0.196)	0.011	0.001
218	18.17	0.13	0.013	( 0.195)	0.011	0.001
219	18.25	0.13	0.013	( 0.194)	0.011	0.001
220	18.33	0.13	0.013	( 0.193)	0.011	0.001
221	18.42	0.13	0.013	( 0.193)	0.011	0.001
222	18.50	0.13	0.013	( 0.192)	0.011	0.001
223	18.58	0.10	0.010	( 0.191)	0.009	0.001
224	18.67	0.10	0.010	( 0.190)	0.009	0.001
225	18.75	0.10	0.010	( 0.189)	0.009	0.001
226	18.83	0.07	0.006	( 0.188)	0.006	0.001
227	18.92	0.07	0.006	( 0.187)	0.006	0.001
228	19.00	0.07	0.006	( 0.186)	0.006	0.001
229	19.08	0.10	0.010	( 0.185)	0.009	0.001
230	19.17	0.10	0.010	( 0.184)	0.009	0.001
231	19.25	0.10	0.010	( 0.184)	0.009	0.001
232	19.33	0.13	0.013	( 0.183)	0.011	0.001
233	19.42	0.13	0.013	( 0.182)	0.011	0.001
234	19.50	0.13	0.013	( 0.181)	0.011	0.001
235	19.58	0.10	0.010	( 0.180)	0.009	0.001
236	19.67	0.10	0.010	( 0.179)	0.009	0.001
237	19.75	0.10	0.010	( 0.179)	0.009	0.001
238	19.83	0.07	0.006	( 0.178)	0.006	0.001
239	19.92	0.07	0.006	( 0.177)	0.006	0.001
240	20.00	0.07	0.006	( 0.176)	0.006	0.001
241	20.08	0.10	0.010	( 0.175)	0.009	0.001
242	20.17	0.10	0.010	( 0.175)	0.009	0.001
243	20.25	0.10	0.010	( 0.174)	0.009	0.001
244	20.33	0.10	0.010	( 0.173)	0.009	0.001
245	20.42	0.10	0.010	( 0.172)	0.009	0.001
246	20.50	0.10	0.010	( 0.172)	0.009	0.001
247	20.58	0.10	0.010	( 0.171)	0.009	0.001
248	20.67	0.10	0.010	( 0.170)	0.009	0.001
249	20.75	0.10	0.010	( 0.169)	0.009	0.001
250	20.83	0.07	0.006	( 0.169)	0.006	0.001
251	20.92	0.07	0.006	( 0.168)	0.006	0.001
252	21.00	0.07	0.006	( 0.167)	0.006	0.001
253	21.08	0.10	0.010	( 0.167)	0.009	0.001
254	21.17	0.10	0.010	( 0.166)	0.009	0.001
255	21.25	0.10	0.010	( 0.165)	0.009	0.001
256	21.33	0.07	0.006	( 0.165)	0.006	0.001
257	21.42	0.07	0.006	( 0.164)	0.006	0.001
258	21.50	0.07	0.006	( 0.164)	0.006	0.001
259	21.58	0.10	0.010	( 0.163)	0.009	0.001
260	21.67	0.10	0.010	( 0.162)	0.009	0.001
261	21.75	0.10	0.010	( 0.162)	0.009	0.001
262	21.83	0.07	0.006	( 0.161)	0.006	0.001
263	21.92	0.07	0.006	( 0.161)	0.006	0.001
264	22.00	0.07	0.006	( 0.160)	0.006	0.001
265	22.08	0.10	0.010	( 0.160)	0.009	0.001
266	22.17	0.10	0.010	( 0.159)	0.009	0.001



24	2.00	0.13	0.016	( 0.491)	0.015	0.002
25	2.08	0.13	0.016	( 0.489)	0.015	0.002
26	2.17	0.13	0.016	( 0.487)	0.015	0.002
27	2.25	0.13	0.016	( 0.485)	0.015	0.002
28	2.33	0.13	0.016	( 0.483)	0.015	0.002
29	2.42	0.13	0.016	( 0.481)	0.015	0.002
30	2.50	0.13	0.016	( 0.479)	0.015	0.002
31	2.58	0.17	0.020	( 0.477)	0.018	0.002
32	2.67	0.17	0.020	( 0.475)	0.018	0.002
33	2.75	0.17	0.020	( 0.473)	0.018	0.002
34	2.83	0.17	0.020	( 0.471)	0.018	0.002
35	2.92	0.17	0.020	( 0.469)	0.018	0.002
36	3.00	0.17	0.020	( 0.467)	0.018	0.002
37	3.08	0.17	0.020	( 0.465)	0.018	0.002
38	3.17	0.17	0.020	( 0.464)	0.018	0.002
39	3.25	0.17	0.020	( 0.462)	0.018	0.002
40	3.33	0.17	0.020	( 0.460)	0.018	0.002
41	3.42	0.17	0.020	( 0.458)	0.018	0.002
42	3.50	0.17	0.020	( 0.456)	0.018	0.002
43	3.58	0.17	0.020	( 0.454)	0.018	0.002
44	3.67	0.17	0.020	( 0.452)	0.018	0.002
45	3.75	0.17	0.020	( 0.450)	0.018	0.002
46	3.83	0.20	0.024	( 0.448)	0.022	0.002
47	3.92	0.20	0.024	( 0.446)	0.022	0.002
48	4.00	0.20	0.024	( 0.444)	0.022	0.002
49	4.08	0.20	0.024	( 0.443)	0.022	0.002
50	4.17	0.20	0.024	( 0.441)	0.022	0.002
51	4.25	0.20	0.024	( 0.439)	0.022	0.002
52	4.33	0.23	0.028	( 0.437)	0.025	0.003
53	4.42	0.23	0.028	( 0.435)	0.025	0.003
54	4.50	0.23	0.028	( 0.433)	0.025	0.003
55	4.58	0.23	0.028	( 0.431)	0.025	0.003
56	4.67	0.23	0.028	( 0.430)	0.025	0.003
57	4.75	0.23	0.028	( 0.428)	0.025	0.003
58	4.83	0.27	0.032	( 0.426)	0.029	0.003
59	4.92	0.27	0.032	( 0.424)	0.029	0.003
60	5.00	0.27	0.032	( 0.422)	0.029	0.003
61	5.08	0.20	0.024	( 0.420)	0.022	0.002
62	5.17	0.20	0.024	( 0.418)	0.022	0.002
63	5.25	0.20	0.024	( 0.417)	0.022	0.002
64	5.33	0.23	0.028	( 0.415)	0.025	0.003
65	5.42	0.23	0.028	( 0.413)	0.025	0.003
66	5.50	0.23	0.028	( 0.411)	0.025	0.003
67	5.58	0.27	0.032	( 0.409)	0.029	0.003
68	5.67	0.27	0.032	( 0.408)	0.029	0.003
69	5.75	0.27	0.032	( 0.406)	0.029	0.003
70	5.83	0.27	0.032	( 0.404)	0.029	0.003
71	5.92	0.27	0.032	( 0.402)	0.029	0.003
72	6.00	0.27	0.032	( 0.400)	0.029	0.003
73	6.08	0.30	0.036	( 0.399)	0.033	0.004
74	6.17	0.30	0.036	( 0.397)	0.033	0.004
75	6.25	0.30	0.036	( 0.395)	0.033	0.004
76	6.33	0.30	0.036	( 0.393)	0.033	0.004
77	6.42	0.30	0.036	( 0.392)	0.033	0.004
78	6.50	0.30	0.036	( 0.390)	0.033	0.004
79	6.58	0.33	0.040	( 0.388)	0.036	0.004
80	6.67	0.33	0.040	( 0.386)	0.036	0.004
81	6.75	0.33	0.040	( 0.385)	0.036	0.004
82	6.83	0.33	0.040	( 0.383)	0.036	0.004
83	6.92	0.33	0.040	( 0.381)	0.036	0.004
84	7.00	0.33	0.040	( 0.379)	0.036	0.004
85	7.08	0.33	0.040	( 0.378)	0.036	0.004
86	7.17	0.33	0.040	( 0.376)	0.036	0.004

87	7.25	0.33	0.040	( 0.374)	0.036	0.004
88	7.33	0.37	0.044	( 0.373)	0.040	0.004
89	7.42	0.37	0.044	( 0.371)	0.040	0.004
90	7.50	0.37	0.044	( 0.369)	0.040	0.004
91	7.58	0.40	0.048	( 0.367)	0.044	0.005
92	7.67	0.40	0.048	( 0.366)	0.044	0.005
93	7.75	0.40	0.048	( 0.364)	0.044	0.005
94	7.83	0.43	0.052	( 0.362)	0.047	0.005
95	7.92	0.43	0.052	( 0.361)	0.047	0.005
96	8.00	0.43	0.052	( 0.359)	0.047	0.005
97	8.08	0.50	0.061	( 0.357)	0.054	0.006
98	8.17	0.50	0.061	( 0.356)	0.054	0.006
99	8.25	0.50	0.061	( 0.354)	0.054	0.006
100	8.33	0.50	0.061	( 0.352)	0.054	0.006
101	8.42	0.50	0.061	( 0.351)	0.054	0.006
102	8.50	0.50	0.061	( 0.349)	0.054	0.006
103	8.58	0.53	0.065	( 0.347)	0.058	0.006
104	8.67	0.53	0.065	( 0.346)	0.058	0.006
105	8.75	0.53	0.065	( 0.344)	0.058	0.006
106	8.83	0.57	0.069	( 0.343)	0.062	0.007
107	8.92	0.57	0.069	( 0.341)	0.062	0.007
108	9.00	0.57	0.069	( 0.339)	0.062	0.007
109	9.08	0.63	0.077	( 0.338)	0.069	0.008
110	9.17	0.63	0.077	( 0.336)	0.069	0.008
111	9.25	0.63	0.077	( 0.335)	0.069	0.008
112	9.33	0.67	0.081	( 0.333)	0.073	0.008
113	9.42	0.67	0.081	( 0.331)	0.073	0.008
114	9.50	0.67	0.081	( 0.330)	0.073	0.008
115	9.58	0.70	0.085	( 0.328)	0.076	0.008
116	9.67	0.70	0.085	( 0.327)	0.076	0.008
117	9.75	0.70	0.085	( 0.325)	0.076	0.008
118	9.83	0.73	0.089	( 0.323)	0.080	0.009
119	9.92	0.73	0.089	( 0.322)	0.080	0.009
120	10.00	0.73	0.089	( 0.320)	0.080	0.009
121	10.08	0.50	0.061	( 0.319)	0.054	0.006
122	10.17	0.50	0.061	( 0.317)	0.054	0.006
123	10.25	0.50	0.061	( 0.316)	0.054	0.006
124	10.33	0.50	0.061	( 0.314)	0.054	0.006
125	10.42	0.50	0.061	( 0.313)	0.054	0.006
126	10.50	0.50	0.061	( 0.311)	0.054	0.006
127	10.58	0.67	0.081	( 0.310)	0.073	0.008
128	10.67	0.67	0.081	( 0.308)	0.073	0.008
129	10.75	0.67	0.081	( 0.307)	0.073	0.008
130	10.83	0.67	0.081	( 0.305)	0.073	0.008
131	10.92	0.67	0.081	( 0.304)	0.073	0.008
132	11.00	0.67	0.081	( 0.302)	0.073	0.008
133	11.08	0.63	0.077	( 0.301)	0.069	0.008
134	11.17	0.63	0.077	( 0.299)	0.069	0.008
135	11.25	0.63	0.077	( 0.298)	0.069	0.008
136	11.33	0.63	0.077	( 0.296)	0.069	0.008
137	11.42	0.63	0.077	( 0.295)	0.069	0.008
138	11.50	0.63	0.077	( 0.293)	0.069	0.008
139	11.58	0.57	0.069	( 0.292)	0.062	0.007
140	11.67	0.57	0.069	( 0.290)	0.062	0.007
141	11.75	0.57	0.069	( 0.289)	0.062	0.007
142	11.83	0.60	0.073	( 0.287)	0.065	0.007
143	11.92	0.60	0.073	( 0.286)	0.065	0.007
144	12.00	0.60	0.073	( 0.285)	0.065	0.007
145	12.08	0.83	0.101	( 0.283)	0.091	0.010
146	12.17	0.83	0.101	( 0.282)	0.091	0.010
147	12.25	0.83	0.101	( 0.280)	0.091	0.010
148	12.33	0.87	0.105	( 0.279)	0.094	0.010
149	12.42	0.87	0.105	( 0.278)	0.094	0.010

150	12.50	0.87	0.105	( 0.276)	0.094	0.010
151	12.58	0.93	0.113	( 0.275)	0.102	0.011
152	12.67	0.93	0.113	( 0.273)	0.102	0.011
153	12.75	0.93	0.113	( 0.272)	0.102	0.011
154	12.83	0.97	0.117	( 0.271)	0.105	0.012
155	12.92	0.97	0.117	( 0.269)	0.105	0.012
156	13.00	0.97	0.117	( 0.268)	0.105	0.012
157	13.08	1.13	0.137	( 0.267)	0.123	0.014
158	13.17	1.13	0.137	( 0.265)	0.123	0.014
159	13.25	1.13	0.137	( 0.264)	0.123	0.014
160	13.33	1.13	0.137	( 0.263)	0.123	0.014
161	13.42	1.13	0.137	( 0.261)	0.123	0.014
162	13.50	1.13	0.137	( 0.260)	0.123	0.014
163	13.58	0.77	0.093	( 0.259)	0.084	0.009
164	13.67	0.77	0.093	( 0.257)	0.084	0.009
165	13.75	0.77	0.093	( 0.256)	0.084	0.009
166	13.83	0.77	0.093	( 0.255)	0.084	0.009
167	13.92	0.77	0.093	( 0.253)	0.084	0.009
168	14.00	0.77	0.093	( 0.252)	0.084	0.009
169	14.08	0.90	0.109	( 0.251)	0.098	0.011
170	14.17	0.90	0.109	( 0.249)	0.098	0.011
171	14.25	0.90	0.109	( 0.248)	0.098	0.011
172	14.33	0.87	0.105	( 0.247)	0.094	0.010
173	14.42	0.87	0.105	( 0.246)	0.094	0.010
174	14.50	0.87	0.105	( 0.244)	0.094	0.010
175	14.58	0.87	0.105	( 0.243)	0.094	0.010
176	14.67	0.87	0.105	( 0.242)	0.094	0.010
177	14.75	0.87	0.105	( 0.241)	0.094	0.010
178	14.83	0.83	0.101	( 0.239)	0.091	0.010
179	14.92	0.83	0.101	( 0.238)	0.091	0.010
180	15.00	0.83	0.101	( 0.237)	0.091	0.010
181	15.08	0.80	0.097	( 0.236)	0.087	0.010
182	15.17	0.80	0.097	( 0.235)	0.087	0.010
183	15.25	0.80	0.097	( 0.233)	0.087	0.010
184	15.33	0.77	0.093	( 0.232)	0.084	0.009
185	15.42	0.77	0.093	( 0.231)	0.084	0.009
186	15.50	0.77	0.093	( 0.230)	0.084	0.009
187	15.58	0.63	0.077	( 0.229)	0.069	0.008
188	15.67	0.63	0.077	( 0.227)	0.069	0.008
189	15.75	0.63	0.077	( 0.226)	0.069	0.008
190	15.83	0.63	0.077	( 0.225)	0.069	0.008
191	15.92	0.63	0.077	( 0.224)	0.069	0.008
192	16.00	0.63	0.077	( 0.223)	0.069	0.008
193	16.08	0.13	0.016	( 0.222)	0.015	0.002
194	16.17	0.13	0.016	( 0.221)	0.015	0.002
195	16.25	0.13	0.016	( 0.219)	0.015	0.002
196	16.33	0.13	0.016	( 0.218)	0.015	0.002
197	16.42	0.13	0.016	( 0.217)	0.015	0.002
198	16.50	0.13	0.016	( 0.216)	0.015	0.002
199	16.58	0.10	0.012	( 0.215)	0.011	0.001
200	16.67	0.10	0.012	( 0.214)	0.011	0.001
201	16.75	0.10	0.012	( 0.213)	0.011	0.001
202	16.83	0.10	0.012	( 0.212)	0.011	0.001
203	16.92	0.10	0.012	( 0.211)	0.011	0.001
204	17.00	0.10	0.012	( 0.210)	0.011	0.001
205	17.08	0.17	0.020	( 0.209)	0.018	0.002
206	17.17	0.17	0.020	( 0.207)	0.018	0.002
207	17.25	0.17	0.020	( 0.206)	0.018	0.002
208	17.33	0.17	0.020	( 0.205)	0.018	0.002
209	17.42	0.17	0.020	( 0.204)	0.018	0.002
210	17.50	0.17	0.020	( 0.203)	0.018	0.002
211	17.58	0.17	0.020	( 0.202)	0.018	0.002
212	17.67	0.17	0.020	( 0.201)	0.018	0.002

213	17.75	0.17	0.020	( 0.200)	0.018	0.002
214	17.83	0.13	0.016	( 0.199)	0.015	0.002
215	17.92	0.13	0.016	( 0.198)	0.015	0.002
216	18.00	0.13	0.016	( 0.197)	0.015	0.002
217	18.08	0.13	0.016	( 0.196)	0.015	0.002
218	18.17	0.13	0.016	( 0.195)	0.015	0.002
219	18.25	0.13	0.016	( 0.194)	0.015	0.002
220	18.33	0.13	0.016	( 0.193)	0.015	0.002
221	18.42	0.13	0.016	( 0.193)	0.015	0.002
222	18.50	0.13	0.016	( 0.192)	0.015	0.002
223	18.58	0.10	0.012	( 0.191)	0.011	0.001
224	18.67	0.10	0.012	( 0.190)	0.011	0.001
225	18.75	0.10	0.012	( 0.189)	0.011	0.001
226	18.83	0.07	0.008	( 0.188)	0.007	0.001
227	18.92	0.07	0.008	( 0.187)	0.007	0.001
228	19.00	0.07	0.008	( 0.186)	0.007	0.001
229	19.08	0.10	0.012	( 0.185)	0.011	0.001
230	19.17	0.10	0.012	( 0.184)	0.011	0.001
231	19.25	0.10	0.012	( 0.184)	0.011	0.001
232	19.33	0.13	0.016	( 0.183)	0.015	0.002
233	19.42	0.13	0.016	( 0.182)	0.015	0.002
234	19.50	0.13	0.016	( 0.181)	0.015	0.002
235	19.58	0.10	0.012	( 0.180)	0.011	0.001
236	19.67	0.10	0.012	( 0.179)	0.011	0.001
237	19.75	0.10	0.012	( 0.179)	0.011	0.001
238	19.83	0.07	0.008	( 0.178)	0.007	0.001
239	19.92	0.07	0.008	( 0.177)	0.007	0.001
240	20.00	0.07	0.008	( 0.176)	0.007	0.001
241	20.08	0.10	0.012	( 0.175)	0.011	0.001
242	20.17	0.10	0.012	( 0.175)	0.011	0.001
243	20.25	0.10	0.012	( 0.174)	0.011	0.001
244	20.33	0.10	0.012	( 0.173)	0.011	0.001
245	20.42	0.10	0.012	( 0.172)	0.011	0.001
246	20.50	0.10	0.012	( 0.172)	0.011	0.001
247	20.58	0.10	0.012	( 0.171)	0.011	0.001
248	20.67	0.10	0.012	( 0.170)	0.011	0.001
249	20.75	0.10	0.012	( 0.169)	0.011	0.001
250	20.83	0.07	0.008	( 0.169)	0.007	0.001
251	20.92	0.07	0.008	( 0.168)	0.007	0.001
252	21.00	0.07	0.008	( 0.167)	0.007	0.001
253	21.08	0.10	0.012	( 0.167)	0.011	0.001
254	21.17	0.10	0.012	( 0.166)	0.011	0.001
255	21.25	0.10	0.012	( 0.165)	0.011	0.001
256	21.33	0.07	0.008	( 0.165)	0.007	0.001
257	21.42	0.07	0.008	( 0.164)	0.007	0.001
258	21.50	0.07	0.008	( 0.164)	0.007	0.001
259	21.58	0.10	0.012	( 0.163)	0.011	0.001
260	21.67	0.10	0.012	( 0.162)	0.011	0.001
261	21.75	0.10	0.012	( 0.162)	0.011	0.001
262	21.83	0.07	0.008	( 0.161)	0.007	0.001
263	21.92	0.07	0.008	( 0.161)	0.007	0.001
264	22.00	0.07	0.008	( 0.160)	0.007	0.001
265	22.08	0.10	0.012	( 0.160)	0.011	0.001
266	22.17	0.10	0.012	( 0.159)	0.011	0.001
267	22.25	0.10	0.012	( 0.159)	0.011	0.001
268	22.33	0.07	0.008	( 0.158)	0.007	0.001
269	22.42	0.07	0.008	( 0.158)	0.007	0.001
270	22.50	0.07	0.008	( 0.157)	0.007	0.001
271	22.58	0.07	0.008	( 0.157)	0.007	0.001
272	22.67	0.07	0.008	( 0.156)	0.007	0.001
273	22.75	0.07	0.008	( 0.156)	0.007	0.001
274	22.83	0.07	0.008	( 0.155)	0.007	0.001
275	22.92	0.07	0.008	( 0.155)	0.007	0.001

276	23.00	0.07	0.008	( 0.155)	0.007	0.001
277	23.08	0.07	0.008	( 0.154)	0.007	0.001
278	23.17	0.07	0.008	( 0.154)	0.007	0.001
279	23.25	0.07	0.008	( 0.154)	0.007	0.001
280	23.33	0.07	0.008	( 0.153)	0.007	0.001
281	23.42	0.07	0.008	( 0.153)	0.007	0.001
282	23.50	0.07	0.008	( 0.153)	0.007	0.001
283	23.58	0.07	0.008	( 0.153)	0.007	0.001
284	23.67	0.07	0.008	( 0.152)	0.007	0.001
285	23.75	0.07	0.008	( 0.152)	0.007	0.001
286	23.83	0.07	0.008	( 0.152)	0.007	0.001
287	23.92	0.07	0.008	( 0.152)	0.007	0.001
288	24.00	0.07	0.008	( 0.152)	0.007	0.001

(Loss Rate Not Used)

Sum = 100.0 Sum = 1.2

Flood volume = Effective rainfall 0.10(In)  
times area 9.5(Ac.)/[ (In)/(Ft.) ] = 0.1(Ac.Ft)  
Total soil loss = 0.91(In)  
Total soil loss = 0.720(Ac.Ft)  
Total rainfall = 1.01(In)  
Flood volume = 3486.5 Cubic Feet  
Total soil loss = 31378.1 Cubic Feet

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Storm Event 2 Effective Rainfall = 1.912(In)  
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The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.015	( 0.538)	0.014	0.002
2	0.17	0.07	0.015	( 0.536)	0.014	0.002
3	0.25	0.07	0.015	( 0.534)	0.014	0.002
4	0.33	0.10	0.023	( 0.532)	0.021	0.002
5	0.42	0.10	0.023	( 0.530)	0.021	0.002
6	0.50	0.10	0.023	( 0.527)	0.021	0.002
7	0.58	0.10	0.023	( 0.525)	0.021	0.002
8	0.67	0.10	0.023	( 0.523)	0.021	0.002
9	0.75	0.10	0.023	( 0.521)	0.021	0.002
10	0.83	0.13	0.031	( 0.519)	0.028	0.003
11	0.92	0.13	0.031	( 0.517)	0.028	0.003
12	1.00	0.13	0.031	( 0.515)	0.028	0.003
13	1.08	0.10	0.023	( 0.513)	0.021	0.002
14	1.17	0.10	0.023	( 0.511)	0.021	0.002
15	1.25	0.10	0.023	( 0.509)	0.021	0.002
16	1.33	0.10	0.023	( 0.507)	0.021	0.002
17	1.42	0.10	0.023	( 0.505)	0.021	0.002
18	1.50	0.10	0.023	( 0.503)	0.021	0.002
19	1.58	0.10	0.023	( 0.501)	0.021	0.002
20	1.67	0.10	0.023	( 0.499)	0.021	0.002
21	1.75	0.10	0.023	( 0.497)	0.021	0.002
22	1.83	0.13	0.031	( 0.495)	0.028	0.003
23	1.92	0.13	0.031	( 0.493)	0.028	0.003
24	2.00	0.13	0.031	( 0.491)	0.028	0.003
25	2.08	0.13	0.031	( 0.489)	0.028	0.003
26	2.17	0.13	0.031	( 0.487)	0.028	0.003
27	2.25	0.13	0.031	( 0.485)	0.028	0.003
28	2.33	0.13	0.031	( 0.483)	0.028	0.003
29	2.42	0.13	0.031	( 0.481)	0.028	0.003
30	2.50	0.13	0.031	( 0.479)	0.028	0.003
31	2.58	0.17	0.038	( 0.477)	0.034	0.004
32	2.67	0.17	0.038	( 0.475)	0.034	0.004

33	2.75	0.17	0.038	( 0.473)	0.034	0.004
34	2.83	0.17	0.038	( 0.471)	0.034	0.004
35	2.92	0.17	0.038	( 0.469)	0.034	0.004
36	3.00	0.17	0.038	( 0.467)	0.034	0.004
37	3.08	0.17	0.038	( 0.465)	0.034	0.004
38	3.17	0.17	0.038	( 0.464)	0.034	0.004
39	3.25	0.17	0.038	( 0.462)	0.034	0.004
40	3.33	0.17	0.038	( 0.460)	0.034	0.004
41	3.42	0.17	0.038	( 0.458)	0.034	0.004
42	3.50	0.17	0.038	( 0.456)	0.034	0.004
43	3.58	0.17	0.038	( 0.454)	0.034	0.004
44	3.67	0.17	0.038	( 0.452)	0.034	0.004
45	3.75	0.17	0.038	( 0.450)	0.034	0.004
46	3.83	0.20	0.046	( 0.448)	0.041	0.005
47	3.92	0.20	0.046	( 0.446)	0.041	0.005
48	4.00	0.20	0.046	( 0.444)	0.041	0.005
49	4.08	0.20	0.046	( 0.443)	0.041	0.005
50	4.17	0.20	0.046	( 0.441)	0.041	0.005
51	4.25	0.20	0.046	( 0.439)	0.041	0.005
52	4.33	0.23	0.054	( 0.437)	0.048	0.005
53	4.42	0.23	0.054	( 0.435)	0.048	0.005
54	4.50	0.23	0.054	( 0.433)	0.048	0.005
55	4.58	0.23	0.054	( 0.431)	0.048	0.005
56	4.67	0.23	0.054	( 0.430)	0.048	0.005
57	4.75	0.23	0.054	( 0.428)	0.048	0.005
58	4.83	0.27	0.061	( 0.426)	0.055	0.006
59	4.92	0.27	0.061	( 0.424)	0.055	0.006
60	5.00	0.27	0.061	( 0.422)	0.055	0.006
61	5.08	0.20	0.046	( 0.420)	0.041	0.005
62	5.17	0.20	0.046	( 0.418)	0.041	0.005
63	5.25	0.20	0.046	( 0.417)	0.041	0.005
64	5.33	0.23	0.054	( 0.415)	0.048	0.005
65	5.42	0.23	0.054	( 0.413)	0.048	0.005
66	5.50	0.23	0.054	( 0.411)	0.048	0.005
67	5.58	0.27	0.061	( 0.409)	0.055	0.006
68	5.67	0.27	0.061	( 0.408)	0.055	0.006
69	5.75	0.27	0.061	( 0.406)	0.055	0.006
70	5.83	0.27	0.061	( 0.404)	0.055	0.006
71	5.92	0.27	0.061	( 0.402)	0.055	0.006
72	6.00	0.27	0.061	( 0.400)	0.055	0.006
73	6.08	0.30	0.069	( 0.399)	0.062	0.007
74	6.17	0.30	0.069	( 0.397)	0.062	0.007
75	6.25	0.30	0.069	( 0.395)	0.062	0.007
76	6.33	0.30	0.069	( 0.393)	0.062	0.007
77	6.42	0.30	0.069	( 0.392)	0.062	0.007
78	6.50	0.30	0.069	( 0.390)	0.062	0.007
79	6.58	0.33	0.076	( 0.388)	0.069	0.008
80	6.67	0.33	0.076	( 0.386)	0.069	0.008
81	6.75	0.33	0.076	( 0.385)	0.069	0.008
82	6.83	0.33	0.076	( 0.383)	0.069	0.008
83	6.92	0.33	0.076	( 0.381)	0.069	0.008
84	7.00	0.33	0.076	( 0.379)	0.069	0.008
85	7.08	0.33	0.076	( 0.378)	0.069	0.008
86	7.17	0.33	0.076	( 0.376)	0.069	0.008
87	7.25	0.33	0.076	( 0.374)	0.069	0.008
88	7.33	0.37	0.084	( 0.373)	0.076	0.008
89	7.42	0.37	0.084	( 0.371)	0.076	0.008
90	7.50	0.37	0.084	( 0.369)	0.076	0.008
91	7.58	0.40	0.092	( 0.367)	0.083	0.009
92	7.67	0.40	0.092	( 0.366)	0.083	0.009
93	7.75	0.40	0.092	( 0.364)	0.083	0.009
94	7.83	0.43	0.099	( 0.362)	0.089	0.010
95	7.92	0.43	0.099	( 0.361)	0.089	0.010

96	8.00	0.43	0.099	( 0.359)	0.089	0.010
97	8.08	0.50	0.115	( 0.357)	0.103	0.011
98	8.17	0.50	0.115	( 0.356)	0.103	0.011
99	8.25	0.50	0.115	( 0.354)	0.103	0.011
100	8.33	0.50	0.115	( 0.352)	0.103	0.011
101	8.42	0.50	0.115	( 0.351)	0.103	0.011
102	8.50	0.50	0.115	( 0.349)	0.103	0.011
103	8.58	0.53	0.122	( 0.347)	0.110	0.012
104	8.67	0.53	0.122	( 0.346)	0.110	0.012
105	8.75	0.53	0.122	( 0.344)	0.110	0.012
106	8.83	0.57	0.130	( 0.343)	0.117	0.013
107	8.92	0.57	0.130	( 0.341)	0.117	0.013
108	9.00	0.57	0.130	( 0.339)	0.117	0.013
109	9.08	0.63	0.145	( 0.338)	0.131	0.015
110	9.17	0.63	0.145	( 0.336)	0.131	0.015
111	9.25	0.63	0.145	( 0.335)	0.131	0.015
112	9.33	0.67	0.153	( 0.333)	0.138	0.015
113	9.42	0.67	0.153	( 0.331)	0.138	0.015
114	9.50	0.67	0.153	( 0.330)	0.138	0.015
115	9.58	0.70	0.161	( 0.328)	0.145	0.016
116	9.67	0.70	0.161	( 0.327)	0.145	0.016
117	9.75	0.70	0.161	( 0.325)	0.145	0.016
118	9.83	0.73	0.168	( 0.323)	0.151	0.017
119	9.92	0.73	0.168	( 0.322)	0.151	0.017
120	10.00	0.73	0.168	( 0.320)	0.151	0.017
121	10.08	0.50	0.115	( 0.319)	0.103	0.011
122	10.17	0.50	0.115	( 0.317)	0.103	0.011
123	10.25	0.50	0.115	( 0.316)	0.103	0.011
124	10.33	0.50	0.115	( 0.314)	0.103	0.011
125	10.42	0.50	0.115	( 0.313)	0.103	0.011
126	10.50	0.50	0.115	( 0.311)	0.103	0.011
127	10.58	0.67	0.153	( 0.310)	0.138	0.015
128	10.67	0.67	0.153	( 0.308)	0.138	0.015
129	10.75	0.67	0.153	( 0.307)	0.138	0.015
130	10.83	0.67	0.153	( 0.305)	0.138	0.015
131	10.92	0.67	0.153	( 0.304)	0.138	0.015
132	11.00	0.67	0.153	( 0.302)	0.138	0.015
133	11.08	0.63	0.145	( 0.301)	0.131	0.015
134	11.17	0.63	0.145	( 0.299)	0.131	0.015
135	11.25	0.63	0.145	( 0.298)	0.131	0.015
136	11.33	0.63	0.145	( 0.296)	0.131	0.015
137	11.42	0.63	0.145	( 0.295)	0.131	0.015
138	11.50	0.63	0.145	( 0.293)	0.131	0.015
139	11.58	0.57	0.130	( 0.292)	0.117	0.013
140	11.67	0.57	0.130	( 0.290)	0.117	0.013
141	11.75	0.57	0.130	( 0.289)	0.117	0.013
142	11.83	0.60	0.138	( 0.287)	0.124	0.014
143	11.92	0.60	0.138	( 0.286)	0.124	0.014
144	12.00	0.60	0.138	( 0.285)	0.124	0.014
145	12.08	0.83	0.191	( 0.283)	0.172	0.019
146	12.17	0.83	0.191	( 0.282)	0.172	0.019
147	12.25	0.83	0.191	( 0.280)	0.172	0.019
148	12.33	0.87	0.199	( 0.279)	0.179	0.020
149	12.42	0.87	0.199	( 0.278)	0.179	0.020
150	12.50	0.87	0.199	( 0.276)	0.179	0.020
151	12.58	0.93	0.214	( 0.275)	0.193	0.021
152	12.67	0.93	0.214	( 0.273)	0.193	0.021
153	12.75	0.93	0.214	( 0.272)	0.193	0.021
154	12.83	0.97	0.222	( 0.271)	0.200	0.022
155	12.92	0.97	0.222	( 0.269)	0.200	0.022
156	13.00	0.97	0.222	( 0.268)	0.200	0.022
157	13.08	1.13	0.260	( 0.267)	0.234	0.026
158	13.17	1.13	0.260	( 0.265)	0.234	0.026

159	13.25	1.13	0.260	( 0.264)	0.234	0.026
160	13.33	1.13	0.260	( 0.263)	0.234	0.026
161	13.42	1.13	0.260	( 0.261)	0.234	0.026
162	13.50	1.13	0.260	( 0.260)	0.234	0.026
163	13.58	0.77	0.176	( 0.259)	0.158	0.018
164	13.67	0.77	0.176	( 0.257)	0.158	0.018
165	13.75	0.77	0.176	( 0.256)	0.158	0.018
166	13.83	0.77	0.176	( 0.255)	0.158	0.018
167	13.92	0.77	0.176	( 0.253)	0.158	0.018
168	14.00	0.77	0.176	( 0.252)	0.158	0.018
169	14.08	0.90	0.206	( 0.251)	0.186	0.021
170	14.17	0.90	0.206	( 0.249)	0.186	0.021
171	14.25	0.90	0.206	( 0.248)	0.186	0.021
172	14.33	0.87	0.199	( 0.247)	0.179	0.020
173	14.42	0.87	0.199	( 0.246)	0.179	0.020
174	14.50	0.87	0.199	( 0.244)	0.179	0.020
175	14.58	0.87	0.199	( 0.243)	0.179	0.020
176	14.67	0.87	0.199	( 0.242)	0.179	0.020
177	14.75	0.87	0.199	( 0.241)	0.179	0.020
178	14.83	0.83	0.191	( 0.239)	0.172	0.019
179	14.92	0.83	0.191	( 0.238)	0.172	0.019
180	15.00	0.83	0.191	( 0.237)	0.172	0.019
181	15.08	0.80	0.184	( 0.236)	0.165	0.018
182	15.17	0.80	0.184	( 0.235)	0.165	0.018
183	15.25	0.80	0.184	( 0.233)	0.165	0.018
184	15.33	0.77	0.176	( 0.232)	0.158	0.018
185	15.42	0.77	0.176	( 0.231)	0.158	0.018
186	15.50	0.77	0.176	( 0.230)	0.158	0.018
187	15.58	0.63	0.145	( 0.229)	0.131	0.015
188	15.67	0.63	0.145	( 0.227)	0.131	0.015
189	15.75	0.63	0.145	( 0.226)	0.131	0.015
190	15.83	0.63	0.145	( 0.225)	0.131	0.015
191	15.92	0.63	0.145	( 0.224)	0.131	0.015
192	16.00	0.63	0.145	( 0.223)	0.131	0.015
193	16.08	0.13	0.031	( 0.222)	0.028	0.003
194	16.17	0.13	0.031	( 0.221)	0.028	0.003
195	16.25	0.13	0.031	( 0.219)	0.028	0.003
196	16.33	0.13	0.031	( 0.218)	0.028	0.003
197	16.42	0.13	0.031	( 0.217)	0.028	0.003
198	16.50	0.13	0.031	( 0.216)	0.028	0.003
199	16.58	0.10	0.023	( 0.215)	0.021	0.002
200	16.67	0.10	0.023	( 0.214)	0.021	0.002
201	16.75	0.10	0.023	( 0.213)	0.021	0.002
202	16.83	0.10	0.023	( 0.212)	0.021	0.002
203	16.92	0.10	0.023	( 0.211)	0.021	0.002
204	17.00	0.10	0.023	( 0.210)	0.021	0.002
205	17.08	0.17	0.038	( 0.209)	0.034	0.004
206	17.17	0.17	0.038	( 0.207)	0.034	0.004
207	17.25	0.17	0.038	( 0.206)	0.034	0.004
208	17.33	0.17	0.038	( 0.205)	0.034	0.004
209	17.42	0.17	0.038	( 0.204)	0.034	0.004
210	17.50	0.17	0.038	( 0.203)	0.034	0.004
211	17.58	0.17	0.038	( 0.202)	0.034	0.004
212	17.67	0.17	0.038	( 0.201)	0.034	0.004
213	17.75	0.17	0.038	( 0.200)	0.034	0.004
214	17.83	0.13	0.031	( 0.199)	0.028	0.003
215	17.92	0.13	0.031	( 0.198)	0.028	0.003
216	18.00	0.13	0.031	( 0.197)	0.028	0.003
217	18.08	0.13	0.031	( 0.196)	0.028	0.003
218	18.17	0.13	0.031	( 0.195)	0.028	0.003
219	18.25	0.13	0.031	( 0.194)	0.028	0.003
220	18.33	0.13	0.031	( 0.193)	0.028	0.003
221	18.42	0.13	0.031	( 0.193)	0.028	0.003

222	18.50	0.13	0.031	( 0.192)	0.028	0.003
223	18.58	0.10	0.023	( 0.191)	0.021	0.002
224	18.67	0.10	0.023	( 0.190)	0.021	0.002
225	18.75	0.10	0.023	( 0.189)	0.021	0.002
226	18.83	0.07	0.015	( 0.188)	0.014	0.002
227	18.92	0.07	0.015	( 0.187)	0.014	0.002
228	19.00	0.07	0.015	( 0.186)	0.014	0.002
229	19.08	0.10	0.023	( 0.185)	0.021	0.002
230	19.17	0.10	0.023	( 0.184)	0.021	0.002
231	19.25	0.10	0.023	( 0.184)	0.021	0.002
232	19.33	0.13	0.031	( 0.183)	0.028	0.003
233	19.42	0.13	0.031	( 0.182)	0.028	0.003
234	19.50	0.13	0.031	( 0.181)	0.028	0.003
235	19.58	0.10	0.023	( 0.180)	0.021	0.002
236	19.67	0.10	0.023	( 0.179)	0.021	0.002
237	19.75	0.10	0.023	( 0.179)	0.021	0.002
238	19.83	0.07	0.015	( 0.178)	0.014	0.002
239	19.92	0.07	0.015	( 0.177)	0.014	0.002
240	20.00	0.07	0.015	( 0.176)	0.014	0.002
241	20.08	0.10	0.023	( 0.175)	0.021	0.002
242	20.17	0.10	0.023	( 0.175)	0.021	0.002
243	20.25	0.10	0.023	( 0.174)	0.021	0.002
244	20.33	0.10	0.023	( 0.173)	0.021	0.002
245	20.42	0.10	0.023	( 0.172)	0.021	0.002
246	20.50	0.10	0.023	( 0.172)	0.021	0.002
247	20.58	0.10	0.023	( 0.171)	0.021	0.002
248	20.67	0.10	0.023	( 0.170)	0.021	0.002
249	20.75	0.10	0.023	( 0.169)	0.021	0.002
250	20.83	0.07	0.015	( 0.169)	0.014	0.002
251	20.92	0.07	0.015	( 0.168)	0.014	0.002
252	21.00	0.07	0.015	( 0.167)	0.014	0.002
253	21.08	0.10	0.023	( 0.167)	0.021	0.002
254	21.17	0.10	0.023	( 0.166)	0.021	0.002
255	21.25	0.10	0.023	( 0.165)	0.021	0.002
256	21.33	0.07	0.015	( 0.165)	0.014	0.002
257	21.42	0.07	0.015	( 0.164)	0.014	0.002
258	21.50	0.07	0.015	( 0.164)	0.014	0.002
259	21.58	0.10	0.023	( 0.163)	0.021	0.002
260	21.67	0.10	0.023	( 0.162)	0.021	0.002
261	21.75	0.10	0.023	( 0.162)	0.021	0.002
262	21.83	0.07	0.015	( 0.161)	0.014	0.002
263	21.92	0.07	0.015	( 0.161)	0.014	0.002
264	22.00	0.07	0.015	( 0.160)	0.014	0.002
265	22.08	0.10	0.023	( 0.160)	0.021	0.002
266	22.17	0.10	0.023	( 0.159)	0.021	0.002
267	22.25	0.10	0.023	( 0.159)	0.021	0.002
268	22.33	0.07	0.015	( 0.158)	0.014	0.002
269	22.42	0.07	0.015	( 0.158)	0.014	0.002
270	22.50	0.07	0.015	( 0.157)	0.014	0.002
271	22.58	0.07	0.015	( 0.157)	0.014	0.002
272	22.67	0.07	0.015	( 0.156)	0.014	0.002
273	22.75	0.07	0.015	( 0.156)	0.014	0.002
274	22.83	0.07	0.015	( 0.155)	0.014	0.002
275	22.92	0.07	0.015	( 0.155)	0.014	0.002
276	23.00	0.07	0.015	( 0.155)	0.014	0.002
277	23.08	0.07	0.015	( 0.154)	0.014	0.002
278	23.17	0.07	0.015	( 0.154)	0.014	0.002
279	23.25	0.07	0.015	( 0.154)	0.014	0.002
280	23.33	0.07	0.015	( 0.153)	0.014	0.002
281	23.42	0.07	0.015	( 0.153)	0.014	0.002
282	23.50	0.07	0.015	( 0.153)	0.014	0.002
283	23.58	0.07	0.015	( 0.153)	0.014	0.002
284	23.67	0.07	0.015	( 0.152)	0.014	0.002

285	23.75	0.07	0.015	( 0.152)	0.014	0.002
286	23.83	0.07	0.015	( 0.152)	0.014	0.002
287	23.92	0.07	0.015	( 0.152)	0.014	0.002
288	24.00	0.07	0.015	( 0.152)	0.014	0.002

(Loss Rate Not Used)

Sum = 100.0 Sum = 2.3

Flood volume = Effective rainfall 0.19(In)  
times area 9.5(Ac.)/[ (In)/(Ft.) ] = 0.2(Ac.Ft)  
Total soil loss = 1.72(In)  
Total soil loss = 1.365(Ac.Ft)  
Total rainfall = 1.91(In)  
Flood volume = 6605.9 Cubic Feet  
Total soil loss = 59453.2 Cubic Feet

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Storm Event 1 Effective Rainfall = 5.310(In)  
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The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.042	( 0.538)	0.038	0.004
2	0.17	0.07	0.042	( 0.536)	0.038	0.004
3	0.25	0.07	0.042	( 0.534)	0.038	0.004
4	0.33	0.10	0.064	( 0.532)	0.057	0.006
5	0.42	0.10	0.064	( 0.530)	0.057	0.006
6	0.50	0.10	0.064	( 0.527)	0.057	0.006
7	0.58	0.10	0.064	( 0.525)	0.057	0.006
8	0.67	0.10	0.064	( 0.523)	0.057	0.006
9	0.75	0.10	0.064	( 0.521)	0.057	0.006
10	0.83	0.13	0.085	( 0.519)	0.076	0.008
11	0.92	0.13	0.085	( 0.517)	0.076	0.008
12	1.00	0.13	0.085	( 0.515)	0.076	0.008
13	1.08	0.10	0.064	( 0.513)	0.057	0.006
14	1.17	0.10	0.064	( 0.511)	0.057	0.006
15	1.25	0.10	0.064	( 0.509)	0.057	0.006
16	1.33	0.10	0.064	( 0.507)	0.057	0.006
17	1.42	0.10	0.064	( 0.505)	0.057	0.006
18	1.50	0.10	0.064	( 0.503)	0.057	0.006
19	1.58	0.10	0.064	( 0.501)	0.057	0.006
20	1.67	0.10	0.064	( 0.499)	0.057	0.006
21	1.75	0.10	0.064	( 0.497)	0.057	0.006
22	1.83	0.13	0.085	( 0.495)	0.076	0.008
23	1.92	0.13	0.085	( 0.493)	0.076	0.008
24	2.00	0.13	0.085	( 0.491)	0.076	0.008
25	2.08	0.13	0.085	( 0.489)	0.076	0.008
26	2.17	0.13	0.085	( 0.487)	0.076	0.008
27	2.25	0.13	0.085	( 0.485)	0.076	0.008
28	2.33	0.13	0.085	( 0.483)	0.076	0.008
29	2.42	0.13	0.085	( 0.481)	0.076	0.008
30	2.50	0.13	0.085	( 0.479)	0.076	0.008
31	2.58	0.17	0.106	( 0.477)	0.096	0.011
32	2.67	0.17	0.106	( 0.475)	0.096	0.011
33	2.75	0.17	0.106	( 0.473)	0.096	0.011
34	2.83	0.17	0.106	( 0.471)	0.096	0.011
35	2.92	0.17	0.106	( 0.469)	0.096	0.011
36	3.00	0.17	0.106	( 0.467)	0.096	0.011
37	3.08	0.17	0.106	( 0.465)	0.096	0.011
38	3.17	0.17	0.106	( 0.464)	0.096	0.011
39	3.25	0.17	0.106	( 0.462)	0.096	0.011
40	3.33	0.17	0.106	( 0.460)	0.096	0.011
41	3.42	0.17	0.106	( 0.458)	0.096	0.011

42	3.50	0.17	0.106	( 0.456)	0.096	0.011
43	3.58	0.17	0.106	( 0.454)	0.096	0.011
44	3.67	0.17	0.106	( 0.452)	0.096	0.011
45	3.75	0.17	0.106	( 0.450)	0.096	0.011
46	3.83	0.20	0.127	( 0.448)	0.115	0.013
47	3.92	0.20	0.127	( 0.446)	0.115	0.013
48	4.00	0.20	0.127	( 0.444)	0.115	0.013
49	4.08	0.20	0.127	( 0.443)	0.115	0.013
50	4.17	0.20	0.127	( 0.441)	0.115	0.013
51	4.25	0.20	0.127	( 0.439)	0.115	0.013
52	4.33	0.23	0.149	( 0.437)	0.134	0.015
53	4.42	0.23	0.149	( 0.435)	0.134	0.015
54	4.50	0.23	0.149	( 0.433)	0.134	0.015
55	4.58	0.23	0.149	( 0.431)	0.134	0.015
56	4.67	0.23	0.149	( 0.430)	0.134	0.015
57	4.75	0.23	0.149	( 0.428)	0.134	0.015
58	4.83	0.27	0.170	( 0.426)	0.153	0.017
59	4.92	0.27	0.170	( 0.424)	0.153	0.017
60	5.00	0.27	0.170	( 0.422)	0.153	0.017
61	5.08	0.20	0.127	( 0.420)	0.115	0.013
62	5.17	0.20	0.127	( 0.418)	0.115	0.013
63	5.25	0.20	0.127	( 0.417)	0.115	0.013
64	5.33	0.23	0.149	( 0.415)	0.134	0.015
65	5.42	0.23	0.149	( 0.413)	0.134	0.015
66	5.50	0.23	0.149	( 0.411)	0.134	0.015
67	5.58	0.27	0.170	( 0.409)	0.153	0.017
68	5.67	0.27	0.170	( 0.408)	0.153	0.017
69	5.75	0.27	0.170	( 0.406)	0.153	0.017
70	5.83	0.27	0.170	( 0.404)	0.153	0.017
71	5.92	0.27	0.170	( 0.402)	0.153	0.017
72	6.00	0.27	0.170	( 0.400)	0.153	0.017
73	6.08	0.30	0.191	( 0.399)	0.172	0.019
74	6.17	0.30	0.191	( 0.397)	0.172	0.019
75	6.25	0.30	0.191	( 0.395)	0.172	0.019
76	6.33	0.30	0.191	( 0.393)	0.172	0.019
77	6.42	0.30	0.191	( 0.392)	0.172	0.019
78	6.50	0.30	0.191	( 0.390)	0.172	0.019
79	6.58	0.33	0.212	( 0.388)	0.191	0.021
80	6.67	0.33	0.212	( 0.386)	0.191	0.021
81	6.75	0.33	0.212	( 0.385)	0.191	0.021
82	6.83	0.33	0.212	( 0.383)	0.191	0.021
83	6.92	0.33	0.212	( 0.381)	0.191	0.021
84	7.00	0.33	0.212	( 0.379)	0.191	0.021
85	7.08	0.33	0.212	( 0.378)	0.191	0.021
86	7.17	0.33	0.212	( 0.376)	0.191	0.021
87	7.25	0.33	0.212	( 0.374)	0.191	0.021
88	7.33	0.37	0.234	( 0.373)	0.210	0.023
89	7.42	0.37	0.234	( 0.371)	0.210	0.023
90	7.50	0.37	0.234	( 0.369)	0.210	0.023
91	7.58	0.40	0.255	( 0.367)	0.229	0.025
92	7.67	0.40	0.255	( 0.366)	0.229	0.025
93	7.75	0.40	0.255	( 0.364)	0.229	0.025
94	7.83	0.43	0.276	( 0.362)	0.249	0.028
95	7.92	0.43	0.276	( 0.361)	0.249	0.028
96	8.00	0.43	0.276	( 0.359)	0.249	0.028
97	8.08	0.50	0.319	( 0.357)	0.287	0.032
98	8.17	0.50	0.319	( 0.356)	0.287	0.032
99	8.25	0.50	0.319	( 0.354)	0.287	0.032
100	8.33	0.50	0.319	( 0.352)	0.287	0.032
101	8.42	0.50	0.319	( 0.351)	0.287	0.032
102	8.50	0.50	0.319	( 0.349)	0.287	0.032
103	8.58	0.53	0.340	( 0.347)	0.306	0.034
104	8.67	0.53	0.340	( 0.346)	0.306	0.034

105	8.75	0.53	0.340	( 0.344)	0.306	0.034
106	8.83	0.57	0.361	( 0.343)	0.325	0.036
107	8.92	0.57	0.361	( 0.341)	0.325	0.036
108	9.00	0.57	0.361	( 0.339)	0.325	0.036
109	9.08	0.63	0.404	0.338	( 0.363)	0.066
110	9.17	0.63	0.404	0.336	( 0.363)	0.067
111	9.25	0.63	0.404	0.335	( 0.363)	0.069
112	9.33	0.67	0.425	0.333	( 0.382)	0.092
113	9.42	0.67	0.425	0.331	( 0.382)	0.093
114	9.50	0.67	0.425	0.330	( 0.382)	0.095
115	9.58	0.70	0.446	0.328	( 0.401)	0.118
116	9.67	0.70	0.446	0.327	( 0.401)	0.119
117	9.75	0.70	0.446	0.325	( 0.401)	0.121
118	9.83	0.73	0.467	0.323	( 0.421)	0.144
119	9.92	0.73	0.467	0.322	( 0.421)	0.145
120	10.00	0.73	0.467	0.320	( 0.421)	0.147
121	10.08	0.50	0.319	( 0.319)	0.287	0.032
122	10.17	0.50	0.319	( 0.317)	0.287	0.032
123	10.25	0.50	0.319	( 0.316)	0.287	0.032
124	10.33	0.50	0.319	( 0.314)	0.287	0.032
125	10.42	0.50	0.319	( 0.313)	0.287	0.032
126	10.50	0.50	0.319	( 0.311)	0.287	0.032
127	10.58	0.67	0.425	0.310	( 0.382)	0.115
128	10.67	0.67	0.425	0.308	( 0.382)	0.117
129	10.75	0.67	0.425	0.307	( 0.382)	0.118
130	10.83	0.67	0.425	0.305	( 0.382)	0.120
131	10.92	0.67	0.425	0.304	( 0.382)	0.121
132	11.00	0.67	0.425	0.302	( 0.382)	0.123
133	11.08	0.63	0.404	0.301	( 0.363)	0.103
134	11.17	0.63	0.404	0.299	( 0.363)	0.104
135	11.25	0.63	0.404	0.298	( 0.363)	0.106
136	11.33	0.63	0.404	0.296	( 0.363)	0.107
137	11.42	0.63	0.404	0.295	( 0.363)	0.109
138	11.50	0.63	0.404	0.293	( 0.363)	0.110
139	11.58	0.57	0.361	0.292	( 0.325)	0.069
140	11.67	0.57	0.361	0.290	( 0.325)	0.071
141	11.75	0.57	0.361	0.289	( 0.325)	0.072
142	11.83	0.60	0.382	0.287	( 0.344)	0.095
143	11.92	0.60	0.382	0.286	( 0.344)	0.096
144	12.00	0.60	0.382	0.285	( 0.344)	0.098
145	12.08	0.83	0.531	0.283	( 0.478)	0.248
146	12.17	0.83	0.531	0.282	( 0.478)	0.249
147	12.25	0.83	0.531	0.280	( 0.478)	0.251
148	12.33	0.87	0.552	0.279	( 0.497)	0.273
149	12.42	0.87	0.552	0.278	( 0.497)	0.275
150	12.50	0.87	0.552	0.276	( 0.497)	0.276
151	12.58	0.93	0.595	0.275	( 0.535)	0.320
152	12.67	0.93	0.595	0.273	( 0.535)	0.321
153	12.75	0.93	0.595	0.272	( 0.535)	0.323
154	12.83	0.97	0.616	0.271	( 0.554)	0.345
155	12.92	0.97	0.616	0.269	( 0.554)	0.347
156	13.00	0.97	0.616	0.268	( 0.554)	0.348
157	13.08	1.13	0.722	0.267	( 0.650)	0.456
158	13.17	1.13	0.722	0.265	( 0.650)	0.457
159	13.25	1.13	0.722	0.264	( 0.650)	0.458
160	13.33	1.13	0.722	0.263	( 0.650)	0.460
161	13.42	1.13	0.722	0.261	( 0.650)	0.461
162	13.50	1.13	0.722	0.260	( 0.650)	0.462
163	13.58	0.77	0.489	0.259	( 0.440)	0.230
164	13.67	0.77	0.489	0.257	( 0.440)	0.231
165	13.75	0.77	0.489	0.256	( 0.440)	0.233
166	13.83	0.77	0.489	0.255	( 0.440)	0.234
167	13.92	0.77	0.489	0.253	( 0.440)	0.235

168	14.00	0.77	0.489	0.252	( 0.440)	0.237
169	14.08	0.90	0.573	0.251	( 0.516)	0.323
170	14.17	0.90	0.573	0.249	( 0.516)	0.324
171	14.25	0.90	0.573	0.248	( 0.516)	0.325
172	14.33	0.87	0.552	0.247	( 0.497)	0.305
173	14.42	0.87	0.552	0.246	( 0.497)	0.307
174	14.50	0.87	0.552	0.244	( 0.497)	0.308
175	14.58	0.87	0.552	0.243	( 0.497)	0.309
176	14.67	0.87	0.552	0.242	( 0.497)	0.310
177	14.75	0.87	0.552	0.241	( 0.497)	0.312
178	14.83	0.83	0.531	0.239	( 0.478)	0.292
179	14.92	0.83	0.531	0.238	( 0.478)	0.293
180	15.00	0.83	0.531	0.237	( 0.478)	0.294
181	15.08	0.80	0.510	0.236	( 0.459)	0.274
182	15.17	0.80	0.510	0.235	( 0.459)	0.275
183	15.25	0.80	0.510	0.233	( 0.459)	0.276
184	15.33	0.77	0.489	0.232	( 0.440)	0.256
185	15.42	0.77	0.489	0.231	( 0.440)	0.258
186	15.50	0.77	0.489	0.230	( 0.440)	0.259
187	15.58	0.63	0.404	0.229	( 0.363)	0.175
188	15.67	0.63	0.404	0.227	( 0.363)	0.176
189	15.75	0.63	0.404	0.226	( 0.363)	0.177
190	15.83	0.63	0.404	0.225	( 0.363)	0.178
191	15.92	0.63	0.404	0.224	( 0.363)	0.180
192	16.00	0.63	0.404	0.223	( 0.363)	0.181
193	16.08	0.13	0.085	( 0.222)	0.076	0.008
194	16.17	0.13	0.085	( 0.221)	0.076	0.008
195	16.25	0.13	0.085	( 0.219)	0.076	0.008
196	16.33	0.13	0.085	( 0.218)	0.076	0.008
197	16.42	0.13	0.085	( 0.217)	0.076	0.008
198	16.50	0.13	0.085	( 0.216)	0.076	0.008
199	16.58	0.10	0.064	( 0.215)	0.057	0.006
200	16.67	0.10	0.064	( 0.214)	0.057	0.006
201	16.75	0.10	0.064	( 0.213)	0.057	0.006
202	16.83	0.10	0.064	( 0.212)	0.057	0.006
203	16.92	0.10	0.064	( 0.211)	0.057	0.006
204	17.00	0.10	0.064	( 0.210)	0.057	0.006
205	17.08	0.17	0.106	( 0.209)	0.096	0.011
206	17.17	0.17	0.106	( 0.207)	0.096	0.011
207	17.25	0.17	0.106	( 0.206)	0.096	0.011
208	17.33	0.17	0.106	( 0.205)	0.096	0.011
209	17.42	0.17	0.106	( 0.204)	0.096	0.011
210	17.50	0.17	0.106	( 0.203)	0.096	0.011
211	17.58	0.17	0.106	( 0.202)	0.096	0.011
212	17.67	0.17	0.106	( 0.201)	0.096	0.011
213	17.75	0.17	0.106	( 0.200)	0.096	0.011
214	17.83	0.13	0.085	( 0.199)	0.076	0.008
215	17.92	0.13	0.085	( 0.198)	0.076	0.008
216	18.00	0.13	0.085	( 0.197)	0.076	0.008
217	18.08	0.13	0.085	( 0.196)	0.076	0.008
218	18.17	0.13	0.085	( 0.195)	0.076	0.008
219	18.25	0.13	0.085	( 0.194)	0.076	0.008
220	18.33	0.13	0.085	( 0.193)	0.076	0.008
221	18.42	0.13	0.085	( 0.193)	0.076	0.008
222	18.50	0.13	0.085	( 0.192)	0.076	0.008
223	18.58	0.10	0.064	( 0.191)	0.057	0.006
224	18.67	0.10	0.064	( 0.190)	0.057	0.006
225	18.75	0.10	0.064	( 0.189)	0.057	0.006
226	18.83	0.07	0.042	( 0.188)	0.038	0.004
227	18.92	0.07	0.042	( 0.187)	0.038	0.004
228	19.00	0.07	0.042	( 0.186)	0.038	0.004
229	19.08	0.10	0.064	( 0.185)	0.057	0.006
230	19.17	0.10	0.064	( 0.184)	0.057	0.006

231	19.25	0.10	0.064	( 0.184)	0.057	0.006
232	19.33	0.13	0.085	( 0.183)	0.076	0.008
233	19.42	0.13	0.085	( 0.182)	0.076	0.008
234	19.50	0.13	0.085	( 0.181)	0.076	0.008
235	19.58	0.10	0.064	( 0.180)	0.057	0.006
236	19.67	0.10	0.064	( 0.179)	0.057	0.006
237	19.75	0.10	0.064	( 0.179)	0.057	0.006
238	19.83	0.07	0.042	( 0.178)	0.038	0.004
239	19.92	0.07	0.042	( 0.177)	0.038	0.004
240	20.00	0.07	0.042	( 0.176)	0.038	0.004
241	20.08	0.10	0.064	( 0.175)	0.057	0.006
242	20.17	0.10	0.064	( 0.175)	0.057	0.006
243	20.25	0.10	0.064	( 0.174)	0.057	0.006
244	20.33	0.10	0.064	( 0.173)	0.057	0.006
245	20.42	0.10	0.064	( 0.172)	0.057	0.006
246	20.50	0.10	0.064	( 0.172)	0.057	0.006
247	20.58	0.10	0.064	( 0.171)	0.057	0.006
248	20.67	0.10	0.064	( 0.170)	0.057	0.006
249	20.75	0.10	0.064	( 0.169)	0.057	0.006
250	20.83	0.07	0.042	( 0.169)	0.038	0.004
251	20.92	0.07	0.042	( 0.168)	0.038	0.004
252	21.00	0.07	0.042	( 0.167)	0.038	0.004
253	21.08	0.10	0.064	( 0.167)	0.057	0.006
254	21.17	0.10	0.064	( 0.166)	0.057	0.006
255	21.25	0.10	0.064	( 0.165)	0.057	0.006
256	21.33	0.07	0.042	( 0.165)	0.038	0.004
257	21.42	0.07	0.042	( 0.164)	0.038	0.004
258	21.50	0.07	0.042	( 0.164)	0.038	0.004
259	21.58	0.10	0.064	( 0.163)	0.057	0.006
260	21.67	0.10	0.064	( 0.162)	0.057	0.006
261	21.75	0.10	0.064	( 0.162)	0.057	0.006
262	21.83	0.07	0.042	( 0.161)	0.038	0.004
263	21.92	0.07	0.042	( 0.161)	0.038	0.004
264	22.00	0.07	0.042	( 0.160)	0.038	0.004
265	22.08	0.10	0.064	( 0.160)	0.057	0.006
266	22.17	0.10	0.064	( 0.159)	0.057	0.006
267	22.25	0.10	0.064	( 0.159)	0.057	0.006
268	22.33	0.07	0.042	( 0.158)	0.038	0.004
269	22.42	0.07	0.042	( 0.158)	0.038	0.004
270	22.50	0.07	0.042	( 0.157)	0.038	0.004
271	22.58	0.07	0.042	( 0.157)	0.038	0.004
272	22.67	0.07	0.042	( 0.156)	0.038	0.004
273	22.75	0.07	0.042	( 0.156)	0.038	0.004
274	22.83	0.07	0.042	( 0.155)	0.038	0.004
275	22.92	0.07	0.042	( 0.155)	0.038	0.004
276	23.00	0.07	0.042	( 0.155)	0.038	0.004
277	23.08	0.07	0.042	( 0.154)	0.038	0.004
278	23.17	0.07	0.042	( 0.154)	0.038	0.004
279	23.25	0.07	0.042	( 0.154)	0.038	0.004
280	23.33	0.07	0.042	( 0.153)	0.038	0.004
281	23.42	0.07	0.042	( 0.153)	0.038	0.004
282	23.50	0.07	0.042	( 0.153)	0.038	0.004
283	23.58	0.07	0.042	( 0.153)	0.038	0.004
284	23.67	0.07	0.042	( 0.152)	0.038	0.004
285	23.75	0.07	0.042	( 0.152)	0.038	0.004
286	23.83	0.07	0.042	( 0.152)	0.038	0.004
287	23.92	0.07	0.042	( 0.152)	0.038	0.004
288	24.00	0.07	0.042	( 0.152)	0.038	0.004

(Loss Rate Not Used)

Sum = 100.0 Sum = 19.7

Flood volume = Effective rainfall 1.64 (In)  
times area 9.5 (Ac.) / [(In) / (Ft.)] = 1.3 (Ac.Ft)  
Total soil loss = 3.67 (In)

Total soil loss = 2.908(Ac.Ft)  
 Total rainfall = 5.31(In)  
 Flood volume = 56839.8 Cubic Feet  
 Total soil loss = 126657.7 Cubic Feet

-----  
 Peak flow rate of this hydrograph = 4.095(CFS)  
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TOTAL OF: 5 24 - H O U R S T O R M E V E N T S  
 R u n o f f H y d r o g r a p h

-----  
 Hydrograph in 5 Minute intervals ((CFS))  
 -----

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00	Q				
0+10	0.0000	0.00	Q				
0+15	0.0000	0.00	Q				
0+20	0.0000	0.00	Q				
0+25	0.0001	0.00	Q				
0+30	0.0001	0.00	Q				
0+35	0.0001	0.00	Q				
0+40	0.0002	0.01	Q				
0+45	0.0002	0.01	Q				
0+50	0.0002	0.01	Q				
0+55	0.0003	0.01	Q				
1+ 0	0.0003	0.01	Q				
1+ 5	0.0004	0.01	Q				
1+10	0.0004	0.01	Q				
1+15	0.0005	0.01	Q				
1+20	0.0005	0.01	Q				
1+25	0.0005	0.01	Q				
1+30	0.0006	0.01	Q				
1+35	0.0006	0.01	Q				
1+40	0.0007	0.01	Q				
1+45	0.0007	0.01	Q				
1+50	0.0008	0.01	Q				
1+55	0.0008	0.01	Q				
2+ 0	0.0009	0.01	Q				
2+ 5	0.0009	0.01	Q				
2+10	0.0010	0.01	Q				
2+15	0.0010	0.01	Q				
2+20	0.0011	0.01	Q				
2+25	0.0011	0.01	Q				
2+30	0.0012	0.01	Q				
2+35	0.0012	0.01	Q				
2+40	0.0013	0.01	Q				
2+45	0.0013	0.01	Q				
2+50	0.0014	0.01	Q				
2+55	0.0015	0.01	Q				
3+ 0	0.0015	0.01	Q				
3+ 5	0.0016	0.01	Q				
3+10	0.0017	0.01	Q				
3+15	0.0017	0.01	Q				
3+20	0.0018	0.01	Q				
3+25	0.0019	0.01	Q				
3+30	0.0020	0.01	Q				
3+35	0.0020	0.01	Q				
3+40	0.0021	0.01	Q				
3+45	0.0022	0.01	Q				
3+50	0.0022	0.01	Q				
3+55	0.0023	0.01	Q				

4+ 0	0.0024	0.01	Q				
4+ 5	0.0025	0.01	Q				
4+10	0.0025	0.01	Q				
4+15	0.0026	0.01	Q				
4+20	0.0027	0.01	Q				
4+25	0.0028	0.01	Q				
4+30	0.0029	0.01	Q				
4+35	0.0030	0.01	Q				
4+40	0.0031	0.01	Q				
4+45	0.0032	0.01	Q				
4+50	0.0033	0.01	Q				
4+55	0.0034	0.01	Q				
5+ 0	0.0035	0.01	Q				
5+ 5	0.0036	0.02	Q				
5+10	0.0037	0.01	Q				
5+15	0.0038	0.01	Q				
5+20	0.0039	0.01	Q				
5+25	0.0039	0.01	Q				
5+30	0.0040	0.01	Q				
5+35	0.0041	0.01	Q				
5+40	0.0042	0.01	Q				
5+45	0.0043	0.02	Q				
5+50	0.0044	0.02	Q				
5+55	0.0046	0.02	Q				
6+ 0	0.0047	0.02	Q				
6+ 5	0.0048	0.02	Q				
6+10	0.0049	0.02	Q				
6+15	0.0050	0.02	Q				
6+20	0.0051	0.02	Q				
6+25	0.0052	0.02	Q				
6+30	0.0054	0.02	Q				
6+35	0.0055	0.02	Q				
6+40	0.0056	0.02	Q				
6+45	0.0057	0.02	Q				
6+50	0.0059	0.02	Q				
6+55	0.0060	0.02	Q				
7+ 0	0.0062	0.02	Q				
7+ 5	0.0063	0.02	Q				
7+10	0.0064	0.02	Q				
7+15	0.0066	0.02	Q				
7+20	0.0067	0.02	Q				
7+25	0.0068	0.02	Q				
7+30	0.0070	0.02	Q				
7+35	0.0071	0.02	Q				
7+40	0.0073	0.02	Q				
7+45	0.0075	0.02	Q				
7+50	0.0076	0.02	Q				
7+55	0.0078	0.02	Q				
8+ 0	0.0079	0.02	Q				
8+ 5	0.0081	0.03	Q				
8+10	0.0083	0.03	Q				
8+15	0.0085	0.03	Q				
8+20	0.0087	0.03	Q				
8+25	0.0089	0.03	Q				
8+30	0.0091	0.03	Q				
8+35	0.0093	0.03	Q				
8+40	0.0095	0.03	Q				
8+45	0.0097	0.03	Q				
8+50	0.0099	0.03	Q				
8+55	0.0102	0.03	Q				
9+ 0	0.0104	0.03	Q				
9+ 5	0.0106	0.03	Q				
9+10	0.0108	0.03	Q				

9+15	0.0111	0.04	Q				
9+20	0.0113	0.04	Q				
9+25	0.0116	0.04	Q				
9+30	0.0119	0.04	Q				
9+35	0.0121	0.04	Q				
9+40	0.0124	0.04	Q				
9+45	0.0127	0.04	Q				
9+50	0.0130	0.04	Q				
9+55	0.0133	0.04	Q				
10+ 0	0.0136	0.04	Q				
10+ 5	0.0139	0.04	Q				
10+10	0.0141	0.04	Q				
10+15	0.0144	0.04	Q				
10+20	0.0146	0.03	Q				
10+25	0.0149	0.03	Q				
10+30	0.0151	0.03	Q				
10+35	0.0153	0.03	Q				
10+40	0.0156	0.03	Q				
10+45	0.0158	0.04	Q				
10+50	0.0161	0.04	Q				
10+55	0.0163	0.04	Q				
11+ 0	0.0166	0.04	Q				
11+ 5	0.0169	0.04	Q				
11+10	0.0172	0.04	Q				
11+15	0.0174	0.04	Q				
11+20	0.0177	0.04	Q				
11+25	0.0180	0.04	Q				
11+30	0.0182	0.04	Q				
11+35	0.0185	0.04	Q				
11+40	0.0188	0.04	Q				
11+45	0.0190	0.04	Q				
11+50	0.0193	0.04	Q				
11+55	0.0195	0.04	Q				
12+ 0	0.0198	0.04	Q				
12+ 5	0.0200	0.04	Q				
12+10	0.0203	0.04	Q				
12+15	0.0206	0.04	Q				
12+20	0.0209	0.05	Q				
12+25	0.0212	0.05	Q				
12+30	0.0216	0.05	Q				
12+35	0.0219	0.05	Q				
12+40	0.0223	0.05	Q				
12+45	0.0226	0.05	Q				
12+50	0.0230	0.05	Q				
12+55	0.0234	0.06	Q				
13+ 0	0.0238	0.06	Q				
13+ 5	0.0242	0.06	Q				
13+10	0.0246	0.06	Q				
13+15	0.0250	0.06	Q				
13+20	0.0254	0.06	Q				
13+25	0.0259	0.07	Q				
13+30	0.0263	0.07	Q				
13+35	0.0268	0.07	Q				
13+40	0.0272	0.06	Q				
13+45	0.0276	0.06	Q				
13+50	0.0280	0.05	Q				
13+55	0.0284	0.05	Q				
14+ 0	0.0287	0.05	Q				
14+ 5	0.0291	0.05	Q				
14+10	0.0294	0.05	Q				
14+15	0.0298	0.05	Q				
14+20	0.0301	0.05	Q				
14+25	0.0305	0.05	Q				

14+30	0.0309	0.05	Q				
14+35	0.0313	0.05	Q				
14+40	0.0316	0.05	Q				
14+45	0.0320	0.05	Q				
14+50	0.0324	0.05	Q				
14+55	0.0327	0.05	Q				
15+ 0	0.0331	0.05	Q				
15+ 5	0.0334	0.05	Q				
15+10	0.0338	0.05	Q				
15+15	0.0341	0.05	Q				
15+20	0.0345	0.05	Q				
15+25	0.0348	0.05	Q				
15+30	0.0351	0.05	Q				
15+35	0.0355	0.05	Q				
15+40	0.0358	0.05	Q				
15+45	0.0361	0.04	Q				
15+50	0.0364	0.04	Q				
15+55	0.0367	0.04	Q				
16+ 0	0.0370	0.04	Q				
16+ 5	0.0372	0.04	Q				
16+10	0.0375	0.03	Q				
16+15	0.0376	0.03	Q				
16+20	0.0378	0.02	Q				
16+25	0.0379	0.02	Q				
16+30	0.0380	0.02	Q				
16+35	0.0381	0.01	Q				
16+40	0.0382	0.01	Q				
16+45	0.0383	0.01	Q				
16+50	0.0383	0.01	Q				
16+55	0.0384	0.01	Q				
17+ 0	0.0384	0.01	Q				
17+ 5	0.0385	0.01	Q				
17+10	0.0386	0.01	Q				
17+15	0.0386	0.01	Q				
17+20	0.0387	0.01	Q				
17+25	0.0388	0.01	Q				
17+30	0.0388	0.01	Q				
17+35	0.0389	0.01	Q				
17+40	0.0390	0.01	Q				
17+45	0.0390	0.01	Q				
17+50	0.0391	0.01	Q				
17+55	0.0392	0.01	Q				
18+ 0	0.0392	0.01	Q				
18+ 5	0.0393	0.01	Q				
18+10	0.0393	0.01	Q				
18+15	0.0394	0.01	Q				
18+20	0.0395	0.01	Q				
18+25	0.0395	0.01	Q				
18+30	0.0396	0.01	Q				
18+35	0.0396	0.01	Q				
18+40	0.0397	0.01	Q				
18+45	0.0397	0.01	Q				
18+50	0.0398	0.01	Q				
18+55	0.0398	0.01	Q				
19+ 0	0.0399	0.01	Q				
19+ 5	0.0399	0.01	Q				
19+10	0.0399	0.01	Q				
19+15	0.0400	0.01	Q				
19+20	0.0400	0.01	Q				
19+25	0.0401	0.01	Q				
19+30	0.0401	0.01	Q				
19+35	0.0402	0.01	Q				
19+40	0.0402	0.01	Q				

19+45	0.0403	0.01	Q				
19+50	0.0403	0.01	Q				
19+55	0.0403	0.01	Q				
20+ 0	0.0404	0.01	Q				
20+ 5	0.0404	0.01	Q				
20+10	0.0405	0.01	Q				
20+15	0.0405	0.01	Q				
20+20	0.0405	0.01	Q				
20+25	0.0406	0.01	Q				
20+30	0.0406	0.01	Q				
20+35	0.0407	0.01	Q				
20+40	0.0407	0.01	Q				
20+45	0.0407	0.01	Q				
20+50	0.0408	0.01	Q				
20+55	0.0408	0.01	Q				
21+ 0	0.0409	0.01	Q				
21+ 5	0.0409	0.00	Q				
21+10	0.0409	0.01	Q				
21+15	0.0410	0.01	Q				
21+20	0.0410	0.01	Q				
21+25	0.0410	0.01	QV				
21+30	0.0411	0.00	QV				
21+35	0.0411	0.00	QV				
21+40	0.0411	0.00	QV				
21+45	0.0412	0.01	QV				
21+50	0.0412	0.01	QV				
21+55	0.0412	0.01	QV				
22+ 0	0.0413	0.00	QV				
22+ 5	0.0413	0.00	QV				
22+10	0.0413	0.00	QV				
22+15	0.0414	0.01	QV				
22+20	0.0414	0.01	QV				
22+25	0.0415	0.01	QV				
22+30	0.0415	0.00	QV				
22+35	0.0415	0.00	QV				
22+40	0.0416	0.00	QV				
22+45	0.0416	0.00	QV				
22+50	0.0416	0.00	QV				
22+55	0.0416	0.00	QV				
23+ 0	0.0417	0.00	QV				
23+ 5	0.0417	0.00	QV				
23+10	0.0417	0.00	QV				
23+15	0.0418	0.00	QV				
23+20	0.0418	0.00	QV				
23+25	0.0418	0.00	QV				
23+30	0.0418	0.00	QV				
23+35	0.0419	0.00	QV				
23+40	0.0419	0.00	QV				
23+45	0.0419	0.00	QV				
23+50	0.0420	0.00	QV				
23+55	0.0420	0.00	QV				
24+ 0	0.0420	0.00	QV				
24+ 5	0.0420	0.00	QV				
24+10	0.0420	0.00	QV				
24+15	0.0420	0.00	QV				
24+20	0.0421	0.00	QV				
24+25	0.0421	0.01	QV				
24+30	0.0421	0.01	QV				
24+35	0.0422	0.01	QV				
24+40	0.0422	0.01	QV				
24+45	0.0423	0.01	QV				
24+50	0.0424	0.01	QV				
24+55	0.0424	0.01	QV				

25+ 0	0.0425	0.01	QV				
25+ 5	0.0426	0.01	QV				
25+10	0.0426	0.01	QV				
25+15	0.0427	0.01	QV				
25+20	0.0428	0.01	QV				
25+25	0.0428	0.01	QV				
25+30	0.0429	0.01	QV				
25+35	0.0430	0.01	QV				
25+40	0.0430	0.01	QV				
25+45	0.0431	0.01	QV				
25+50	0.0431	0.01	QV				
25+55	0.0432	0.01	QV				
26+ 0	0.0433	0.01	QV				
26+ 5	0.0434	0.01	QV				
26+10	0.0434	0.01	QV				
26+15	0.0435	0.01	QV				
26+20	0.0436	0.01	QV				
26+25	0.0437	0.01	QV				
26+30	0.0438	0.01	QV				
26+35	0.0439	0.01	QV				
26+40	0.0439	0.01	QV				
26+45	0.0440	0.01	QV				
26+50	0.0441	0.01	QV				
26+55	0.0442	0.01	QV				
27+ 0	0.0443	0.01	QV				
27+ 5	0.0444	0.01	QV				
27+10	0.0445	0.01	QV				
27+15	0.0446	0.01	QV				
27+20	0.0447	0.01	QV				
27+25	0.0448	0.02	QV				
27+30	0.0449	0.02	QV				
27+35	0.0450	0.02	QV				
27+40	0.0452	0.02	QV				
27+45	0.0453	0.02	QV				
27+50	0.0454	0.02	QV				
27+55	0.0455	0.02	QV				
28+ 0	0.0456	0.02	QV				
28+ 5	0.0457	0.02	QV				
28+10	0.0458	0.02	QV				
28+15	0.0459	0.02	QV				
28+20	0.0461	0.02	QV				
28+25	0.0462	0.02	QV				
28+30	0.0463	0.02	QV				
28+35	0.0465	0.02	QV				
28+40	0.0466	0.02	QV				
28+45	0.0468	0.02	QV				
28+50	0.0469	0.02	QV				
28+55	0.0470	0.02	QV				
29+ 0	0.0472	0.02	QV				
29+ 5	0.0474	0.02	QV				
29+10	0.0475	0.02	QV				
29+15	0.0477	0.02	QV				
29+20	0.0478	0.02	QV				
29+25	0.0479	0.02	QV				
29+30	0.0481	0.02	QV				
29+35	0.0482	0.02	QV				
29+40	0.0484	0.02	QV				
29+45	0.0485	0.02	QV				
29+50	0.0487	0.02	QV				
29+55	0.0488	0.02	QV				
30+ 0	0.0490	0.02	QV				
30+ 5	0.0492	0.02	QV				
30+10	0.0493	0.02	QV				

30+15	0.0495	0.03	QV				
30+20	0.0497	0.03	QV				
30+25	0.0499	0.03	QV				
30+30	0.0501	0.03	QV				
30+35	0.0502	0.03	QV				
30+40	0.0504	0.03	QV				
30+45	0.0506	0.03	QV				
30+50	0.0508	0.03	QV				
30+55	0.0510	0.03	QV				
31+ 0	0.0512	0.03	QV				
31+ 5	0.0514	0.03	QV				
31+10	0.0517	0.03	QV				
31+15	0.0519	0.03	QV				
31+20	0.0521	0.03	QV				
31+25	0.0523	0.03	QV				
31+30	0.0525	0.03	QV				
31+35	0.0527	0.03	QV				
31+40	0.0530	0.03	QV				
31+45	0.0532	0.03	QV				
31+50	0.0534	0.04	QV				
31+55	0.0537	0.04	QV				
32+ 0	0.0539	0.04	QV				
32+ 5	0.0542	0.04	QV				
32+10	0.0545	0.04	QV				
32+15	0.0548	0.04	QV				
32+20	0.0550	0.04	QV				
32+25	0.0553	0.04	QV				
32+30	0.0557	0.04	QV				
32+35	0.0560	0.04	QV				
32+40	0.0563	0.05	QV				
32+45	0.0566	0.05	QV				
32+50	0.0569	0.05	QV				
32+55	0.0572	0.05	QV				
33+ 0	0.0576	0.05	QV				
33+ 5	0.0579	0.05	QV				
33+10	0.0583	0.05	QV				
33+15	0.0587	0.05	QV				
33+20	0.0590	0.06	QV				
33+25	0.0594	0.06	QV				
33+30	0.0598	0.06	QV				
33+35	0.0602	0.06	QV				
33+40	0.0606	0.06	QV				
33+45	0.0610	0.06	QV				
33+50	0.0615	0.06	QV				
33+55	0.0619	0.06	QV				
34+ 0	0.0624	0.06	QV				
34+ 5	0.0628	0.06	QV				
34+10	0.0632	0.06	QV				
34+15	0.0636	0.06	QV				
34+20	0.0640	0.05	QV				
34+25	0.0643	0.05	QV				
34+30	0.0647	0.05	QV				
34+35	0.0650	0.05	QV				
34+40	0.0653	0.05	QV				
34+45	0.0657	0.05	QV				
34+50	0.0661	0.06	QV				
34+55	0.0665	0.06	QV				
35+ 0	0.0669	0.06	QV				
35+ 5	0.0673	0.06	QV				
35+10	0.0677	0.06	QV				
35+15	0.0682	0.06	QV				
35+20	0.0686	0.06	QV				
35+25	0.0690	0.06	QV				

35+30	0.0694	0.06	QV				
35+35	0.0698	0.06	QV				
35+40	0.0701	0.06	QV				
35+45	0.0705	0.06	QV				
35+50	0.0709	0.05	QV				
35+55	0.0713	0.05	QV				
36+ 0	0.0716	0.05	QV				
36+ 5	0.0720	0.06	QV				
36+10	0.0724	0.06	QV				
36+15	0.0729	0.06	QV				
36+20	0.0734	0.07	QV				
36+25	0.0739	0.07	QV				
36+30	0.0744	0.07	QV				
36+35	0.0749	0.08	QV				
36+40	0.0754	0.08	QV				
36+45	0.0760	0.08	QV				
36+50	0.0765	0.08	QV				
36+55	0.0771	0.08	QV				
37+ 0	0.0777	0.08	QV				
37+ 5	0.0783	0.09	QV				
37+10	0.0789	0.09	QV				
37+15	0.0795	0.09	QV				
37+20	0.0802	0.10	QV				
37+25	0.0809	0.10	QV				
37+30	0.0815	0.10	QV				
37+35	0.0822	0.10	Q V				
37+40	0.0829	0.09	Q V				
37+45	0.0835	0.09	Q V				
37+50	0.0840	0.08	Q V				
37+55	0.0846	0.08	Q V				
38+ 0	0.0851	0.08	Q V				
38+ 5	0.0856	0.08	Q V				
38+10	0.0861	0.08	Q V				
38+15	0.0867	0.08	Q V				
38+20	0.0872	0.08	Q V				
38+25	0.0878	0.08	Q V				
38+30	0.0883	0.08	Q V				
38+35	0.0889	0.08	Q V				
38+40	0.0894	0.08	Q V				
38+45	0.0900	0.08	Q V				
38+50	0.0905	0.08	Q V				
38+55	0.0911	0.08	Q V				
39+ 0	0.0916	0.08	Q V				
39+ 5	0.0922	0.08	Q V				
39+10	0.0927	0.08	Q V				
39+15	0.0932	0.08	Q V				
39+20	0.0937	0.07	Q V				
39+25	0.0942	0.07	Q V				
39+30	0.0947	0.07	Q V				
39+35	0.0952	0.07	Q V				
39+40	0.0957	0.07	Q V				
39+45	0.0962	0.07	Q V				
39+50	0.0966	0.06	Q V				
39+55	0.0970	0.06	Q V				
40+ 0	0.0975	0.06	Q V				
40+ 5	0.0979	0.06	Q V				
40+10	0.0982	0.05	Q V				
40+15	0.0985	0.04	Q V				
40+20	0.0987	0.03	Q V				
40+25	0.0989	0.03	Q V				
40+30	0.0990	0.02	Q V				
40+35	0.0992	0.02	Q V				
40+40	0.0993	0.02	Q V				

40+45	0.0994	0.02	Q V				
40+50	0.0995	0.01	Q V				
40+55	0.0996	0.01	Q V				
41+ 0	0.0997	0.01	Q V				
41+ 5	0.0998	0.01	Q V				
41+10	0.0999	0.01	Q V				
41+15	0.1000	0.01	Q V				
41+20	0.1001	0.01	Q V				
41+25	0.1002	0.01	Q V				
41+30	0.1003	0.01	Q V				
41+35	0.1004	0.01	Q V				
41+40	0.1005	0.01	Q V				
41+45	0.1006	0.01	Q V				
41+50	0.1007	0.01	Q V				
41+55	0.1008	0.01	Q V				
42+ 0	0.1009	0.01	Q V				
42+ 5	0.1009	0.01	Q V				
42+10	0.1010	0.01	Q V				
42+15	0.1011	0.01	Q V				
42+20	0.1012	0.01	Q V				
42+25	0.1013	0.01	Q V				
42+30	0.1014	0.01	Q V				
42+35	0.1015	0.01	Q V				
42+40	0.1015	0.01	Q V				
42+45	0.1016	0.01	Q V				
42+50	0.1017	0.01	Q V				
42+55	0.1018	0.01	Q V				
43+ 0	0.1018	0.01	Q V				
43+ 5	0.1019	0.01	Q V				
43+10	0.1019	0.01	Q V				
43+15	0.1020	0.01	Q V				
43+20	0.1020	0.01	Q V				
43+25	0.1021	0.01	Q V				
43+30	0.1022	0.01	Q V				
43+35	0.1023	0.01	Q V				
43+40	0.1023	0.01	Q V				
43+45	0.1024	0.01	Q V				
43+50	0.1025	0.01	Q V				
43+55	0.1025	0.01	Q V				
44+ 0	0.1026	0.01	Q V				
44+ 5	0.1026	0.01	Q V				
44+10	0.1027	0.01	Q V				
44+15	0.1028	0.01	Q V				
44+20	0.1028	0.01	Q V				
44+25	0.1029	0.01	Q V				
44+30	0.1029	0.01	Q V				
44+35	0.1030	0.01	Q V				
44+40	0.1031	0.01	Q V				
44+45	0.1031	0.01	Q V				
44+50	0.1032	0.01	Q V				
44+55	0.1032	0.01	Q V				
45+ 0	0.1033	0.01	Q V				
45+ 5	0.1033	0.01	Q V				
45+10	0.1034	0.01	Q V				
45+15	0.1035	0.01	Q V				
45+20	0.1035	0.01	Q V				
45+25	0.1036	0.01	Q V				
45+30	0.1036	0.01	Q V				
45+35	0.1037	0.01	Q V				
45+40	0.1037	0.01	Q V				
45+45	0.1038	0.01	Q V				
45+50	0.1038	0.01	Q V				
45+55	0.1039	0.01	Q V				

46+ 0	0.1039	0.01	Q V				
46+ 5	0.1040	0.01	Q V				
46+10	0.1040	0.01	Q V				
46+15	0.1041	0.01	Q V				
46+20	0.1041	0.01	Q V				
46+25	0.1042	0.01	Q V				
46+30	0.1043	0.01	Q V				
46+35	0.1043	0.01	Q V				
46+40	0.1043	0.01	Q V				
46+45	0.1044	0.01	Q V				
46+50	0.1044	0.01	Q V				
46+55	0.1045	0.01	Q V				
47+ 0	0.1045	0.01	Q V				
47+ 5	0.1046	0.01	Q V				
47+10	0.1046	0.01	Q V				
47+15	0.1047	0.01	Q V				
47+20	0.1047	0.01	Q V				
47+25	0.1047	0.01	Q V				
47+30	0.1048	0.01	Q V				
47+35	0.1048	0.01	Q V				
47+40	0.1049	0.01	Q V				
47+45	0.1049	0.01	Q V				
47+50	0.1049	0.01	Q V				
47+55	0.1050	0.01	Q V				
48+ 0	0.1050	0.01	Q V				
48+ 5	0.1050	0.00	Q V				
48+10	0.1050	0.00	Q V				
48+15	0.1051	0.00	Q V				
48+20	0.1051	0.01	Q V				
48+25	0.1051	0.01	Q V				
48+30	0.1052	0.01	Q V				
48+35	0.1053	0.01	Q V				
48+40	0.1053	0.01	Q V				
48+45	0.1054	0.01	Q V				
48+50	0.1055	0.01	Q V				
48+55	0.1055	0.01	Q V				
49+ 0	0.1056	0.01	Q V				
49+ 5	0.1057	0.01	Q V				
49+10	0.1058	0.01	Q V				
49+15	0.1059	0.01	Q V				
49+20	0.1060	0.01	Q V				
49+25	0.1061	0.01	Q V				
49+30	0.1061	0.01	Q V				
49+35	0.1062	0.01	Q V				
49+40	0.1063	0.01	Q V				
49+45	0.1064	0.01	Q V				
49+50	0.1065	0.01	Q V				
49+55	0.1066	0.01	Q V				
50+ 0	0.1066	0.01	Q V				
50+ 5	0.1067	0.01	Q V				
50+10	0.1068	0.01	Q V				
50+15	0.1069	0.01	Q V				
50+20	0.1071	0.01	Q V				
50+25	0.1072	0.02	Q V				
50+30	0.1073	0.02	Q V				
50+35	0.1074	0.02	Q V				
50+40	0.1075	0.02	Q V				
50+45	0.1076	0.02	Q V				
50+50	0.1077	0.02	Q V				
50+55	0.1078	0.02	Q V				
51+ 0	0.1080	0.02	Q V				
51+ 5	0.1081	0.02	Q V				
51+10	0.1082	0.02	Q V				

51+15	0.1084	0.02	Q V				
51+20	0.1085	0.02	Q V				
51+25	0.1086	0.02	Q V				
51+30	0.1087	0.02	Q V				
51+35	0.1089	0.02	Q V				
51+40	0.1090	0.02	Q V				
51+45	0.1091	0.02	Q V				
51+50	0.1093	0.02	Q V				
51+55	0.1094	0.02	Q V				
52+ 0	0.1096	0.02	Q V				
52+ 5	0.1097	0.02	Q V				
52+10	0.1099	0.02	Q V				
52+15	0.1100	0.02	Q V				
52+20	0.1102	0.02	Q V				
52+25	0.1103	0.02	Q V				
52+30	0.1105	0.02	Q V				
52+35	0.1107	0.03	Q V				
52+40	0.1109	0.03	Q V				
52+45	0.1110	0.03	Q V				
52+50	0.1112	0.03	Q V				
52+55	0.1114	0.03	Q V				
53+ 0	0.1116	0.03	Q V				
53+ 5	0.1118	0.03	Q V				
53+10	0.1120	0.03	Q V				
53+15	0.1122	0.03	Q V				
53+20	0.1123	0.03	Q V				
53+25	0.1125	0.03	Q V				
53+30	0.1127	0.03	Q V				
53+35	0.1129	0.03	Q V				
53+40	0.1131	0.03	Q V				
53+45	0.1133	0.03	Q V				
53+50	0.1135	0.03	Q V				
53+55	0.1137	0.03	Q V				
54+ 0	0.1139	0.03	Q V				
54+ 5	0.1141	0.03	Q V				
54+10	0.1143	0.03	Q V				
54+15	0.1145	0.03	Q V				
54+20	0.1148	0.03	Q V				
54+25	0.1150	0.03	Q V				
54+30	0.1152	0.03	Q V				
54+35	0.1155	0.03	Q V				
54+40	0.1157	0.03	Q V				
54+45	0.1160	0.04	Q V				
54+50	0.1162	0.04	Q V				
54+55	0.1165	0.04	Q V				
55+ 0	0.1167	0.04	Q V				
55+ 5	0.1170	0.04	Q V				
55+10	0.1172	0.04	Q V				
55+15	0.1175	0.04	Q V				
55+20	0.1178	0.04	Q V				
55+25	0.1180	0.04	Q V				
55+30	0.1183	0.04	Q V				
55+35	0.1186	0.04	Q V				
55+40	0.1189	0.04	Q V				
55+45	0.1192	0.04	Q V				
55+50	0.1195	0.04	Q V				
55+55	0.1198	0.05	Q V				
56+ 0	0.1201	0.05	Q V				
56+ 5	0.1205	0.05	Q V				
56+10	0.1208	0.05	Q V				
56+15	0.1212	0.05	Q V				
56+20	0.1215	0.05	Q V				
56+25	0.1219	0.06	Q V				

56+30	0.1223	0.06	Q V				
56+35	0.1227	0.06	Q V				
56+40	0.1231	0.06	Q V				
56+45	0.1235	0.06	Q V				
56+50	0.1239	0.06	Q V				
56+55	0.1243	0.06	Q V				
57+ 0	0.1248	0.06	Q V				
57+ 5	0.1252	0.06	Q V				
57+10	0.1256	0.07	Q V				
57+15	0.1261	0.07	Q V				
57+20	0.1266	0.07	Q V				
57+25	0.1271	0.07	Q V				
57+30	0.1276	0.07	Q V				
57+35	0.1281	0.07	Q V				
57+40	0.1286	0.08	Q V				
57+45	0.1291	0.08	Q V				
57+50	0.1297	0.08	Q V				
57+55	0.1302	0.08	Q V				
58+ 0	0.1308	0.08	Q V				
58+ 5	0.1314	0.08	Q V				
58+10	0.1319	0.08	Q V				
58+15	0.1324	0.07	Q V				
58+20	0.1328	0.07	Q V				
58+25	0.1333	0.06	Q V				
58+30	0.1337	0.06	Q V				
58+35	0.1341	0.06	Q V				
58+40	0.1346	0.07	Q V				
58+45	0.1351	0.07	Q V				
58+50	0.1356	0.07	Q V				
58+55	0.1361	0.07	Q V				
59+ 0	0.1366	0.07	Q V				
59+ 5	0.1371	0.08	Q V				
59+10	0.1376	0.08	Q V				
59+15	0.1381	0.07	Q V				
59+20	0.1387	0.07	Q V				
59+25	0.1392	0.07	Q V				
59+30	0.1397	0.07	Q V				
59+35	0.1402	0.07	Q V				
59+40	0.1407	0.07	Q V				
59+45	0.1411	0.07	Q V				
59+50	0.1416	0.07	Q V				
59+55	0.1421	0.07	Q V				
60+ 0	0.1426	0.07	Q V				
60+ 5	0.1431	0.07	Q V				
60+10	0.1436	0.08	Q V				
60+15	0.1441	0.08	Q V				
60+20	0.1447	0.09	Q V				
60+25	0.1454	0.09	Q V				
60+30	0.1460	0.09	Q V				
60+35	0.1467	0.10	Q V				
60+40	0.1473	0.10	Q V				
60+45	0.1480	0.10	Q V				
60+50	0.1487	0.10	Q V				
60+55	0.1495	0.10	Q V				
61+ 0	0.1502	0.11	Q V				
61+ 5	0.1509	0.11	Q V				
61+10	0.1517	0.11	Q V				
61+15	0.1525	0.12	Q V				
61+20	0.1534	0.12	Q V				
61+25	0.1542	0.12	Q V				
61+30	0.1551	0.13	Q V				
61+35	0.1560	0.13	Q V				
61+40	0.1568	0.12	Q V				

61+45	0.1575	0.11	Q	V				
61+50	0.1582	0.10	Q	V				
61+55	0.1589	0.10	Q	V				
62+ 0	0.1596	0.10	Q	V				
62+ 5	0.1602	0.10	Q	V				
62+10	0.1609	0.10	Q	V				
62+15	0.1616	0.10	Q	V				
62+20	0.1623	0.10	Q	V				
62+25	0.1630	0.10	Q	V				
62+30	0.1637	0.10	Q	V				
62+35	0.1644	0.10	Q	V				
62+40	0.1651	0.10	Q	V				
62+45	0.1658	0.10	Q	V				
62+50	0.1665	0.10	Q	V				
62+55	0.1672	0.10	Q	V				
63+ 0	0.1679	0.10	Q	V				
63+ 5	0.1686	0.10	Q	V				
63+10	0.1692	0.10	Q	V				
63+15	0.1699	0.10	Q	V				
63+20	0.1705	0.09	Q	V				
63+25	0.1712	0.09	Q	V				
63+30	0.1718	0.09	Q	V				
63+35	0.1724	0.09	Q	V				
63+40	0.1730	0.09	Q	V				
63+45	0.1736	0.08	Q	V				
63+50	0.1742	0.08	Q	V				
63+55	0.1747	0.08	Q	V				
64+ 0	0.1753	0.08	Q	V				
64+ 5	0.1758	0.07	Q	V				
64+10	0.1762	0.06	Q	V				
64+15	0.1766	0.05	Q	V				
64+20	0.1768	0.04	Q	V				
64+25	0.1770	0.03	Q	V				
64+30	0.1772	0.03	Q	V				
64+35	0.1774	0.03	Q	V				
64+40	0.1776	0.02	Q	V				
64+45	0.1777	0.02	Q	V				
64+50	0.1779	0.02	Q	V				
64+55	0.1780	0.02	Q	V				
65+ 0	0.1781	0.02	Q	V				
65+ 5	0.1782	0.02	Q	V				
65+10	0.1783	0.02	Q	V				
65+15	0.1784	0.02	Q	V				
65+20	0.1785	0.02	Q	V				
65+25	0.1787	0.02	Q	V				
65+30	0.1788	0.02	Q	V				
65+35	0.1789	0.02	Q	V				
65+40	0.1791	0.02	Q	V				
65+45	0.1792	0.02	Q	V				
65+50	0.1793	0.02	Q	V				
65+55	0.1794	0.02	Q	V				
66+ 0	0.1796	0.02	Q	V				
66+ 5	0.1797	0.02	Q	V				
66+10	0.1798	0.02	Q	V				
66+15	0.1799	0.02	Q	V				
66+20	0.1800	0.02	Q	V				
66+25	0.1801	0.02	Q	V				
66+30	0.1802	0.02	Q	V				
66+35	0.1803	0.02	Q	V				
66+40	0.1804	0.01	Q	V				
66+45	0.1805	0.01	Q	V				
66+50	0.1806	0.01	Q	V				
66+55	0.1807	0.01	Q	V				

67+ 0	0.1808	0.01	Q	V				
67+ 5	0.1809	0.01	Q	V				
67+10	0.1809	0.01	Q	V				
67+15	0.1810	0.01	Q	V				
67+20	0.1811	0.01	Q	V				
67+25	0.1812	0.01	Q	V				
67+30	0.1813	0.01	Q	V				
67+35	0.1813	0.01	Q	V				
67+40	0.1814	0.01	Q	V				
67+45	0.1815	0.01	Q	V				
67+50	0.1816	0.01	Q	V				
67+55	0.1817	0.01	Q	V				
68+ 0	0.1818	0.01	Q	V				
68+ 5	0.1818	0.01	Q	V				
68+10	0.1819	0.01	Q	V				
68+15	0.1820	0.01	Q	V				
68+20	0.1820	0.01	Q	V				
68+25	0.1821	0.01	Q	V				
68+30	0.1822	0.01	Q	V				
68+35	0.1823	0.01	Q	V				
68+40	0.1824	0.01	Q	V				
68+45	0.1824	0.01	Q	V				
68+50	0.1825	0.01	Q	V				
68+55	0.1826	0.01	Q	V				
69+ 0	0.1827	0.01	Q	V				
69+ 5	0.1827	0.01	Q	V				
69+10	0.1828	0.01	Q	V				
69+15	0.1829	0.01	Q	V				
69+20	0.1829	0.01	Q	V				
69+25	0.1830	0.01	Q	V				
69+30	0.1831	0.01	Q	V				
69+35	0.1831	0.01	Q	V				
69+40	0.1832	0.01	Q	V				
69+45	0.1833	0.01	Q	V				
69+50	0.1833	0.01	Q	V				
69+55	0.1834	0.01	Q	V				
70+ 0	0.1835	0.01	Q	V				
70+ 5	0.1835	0.01	Q	V				
70+10	0.1836	0.01	Q	V				
70+15	0.1837	0.01	Q	V				
70+20	0.1837	0.01	Q	V				
70+25	0.1838	0.01	Q	V				
70+30	0.1839	0.01	Q	V				
70+35	0.1839	0.01	Q	V				
70+40	0.1840	0.01	Q	V				
70+45	0.1840	0.01	Q	V				
70+50	0.1841	0.01	Q	V				
70+55	0.1842	0.01	Q	V				
71+ 0	0.1842	0.01	Q	V				
71+ 5	0.1843	0.01	Q	V				
71+10	0.1843	0.01	Q	V				
71+15	0.1844	0.01	Q	V				
71+20	0.1844	0.01	Q	V				
71+25	0.1845	0.01	Q	V				
71+30	0.1845	0.01	Q	V				
71+35	0.1846	0.01	Q	V				
71+40	0.1846	0.01	Q	V				
71+45	0.1847	0.01	Q	V				
71+50	0.1848	0.01	Q	V				
71+55	0.1848	0.01	Q	V				
72+ 0	0.1849	0.01	Q	V				
72+ 5	0.1849	0.00	Q	V				
72+10	0.1849	0.00	Q	V				

72+15	0.1849	0.01	Q	V				
72+20	0.1850	0.01	Q	V				
72+25	0.1851	0.01	Q	V				
72+30	0.1852	0.01	Q	V				
72+35	0.1853	0.02	Q	V				
72+40	0.1854	0.02	Q	V				
72+45	0.1856	0.02	Q	V				
72+50	0.1857	0.02	Q	V				
72+55	0.1858	0.02	Q	V				
73+ 0	0.1860	0.02	Q	V				
73+ 5	0.1862	0.03	Q	V				
73+10	0.1863	0.02	Q	V				
73+15	0.1865	0.02	Q	V				
73+20	0.1867	0.02	Q	V				
73+25	0.1868	0.02	Q	V				
73+30	0.1870	0.02	Q	V				
73+35	0.1871	0.02	Q	V				
73+40	0.1873	0.02	Q	V				
73+45	0.1874	0.02	Q	V				
73+50	0.1876	0.02	Q	V				
73+55	0.1877	0.02	Q	V				
74+ 0	0.1879	0.03	Q	V				
74+ 5	0.1881	0.03	Q	V				
74+10	0.1883	0.03	Q	V				
74+15	0.1885	0.03	Q	V				
74+20	0.1887	0.03	Q	V				
74+25	0.1889	0.03	Q	V				
74+30	0.1891	0.03	Q	V				
74+35	0.1893	0.03	Q	V				
74+40	0.1895	0.03	Q	V				
74+45	0.1897	0.03	Q	V				
74+50	0.1899	0.03	Q	V				
74+55	0.1902	0.03	Q	V				
75+ 0	0.1904	0.03	Q	V				
75+ 5	0.1907	0.04	Q	V				
75+10	0.1909	0.04	Q	V				
75+15	0.1912	0.04	Q	V				
75+20	0.1914	0.04	Q	V				
75+25	0.1916	0.04	Q	V				
75+30	0.1919	0.04	Q	V				
75+35	0.1921	0.04	Q	V				
75+40	0.1924	0.04	Q	V				
75+45	0.1926	0.04	Q	V				
75+50	0.1929	0.04	Q	V				
75+55	0.1932	0.04	Q	V				
76+ 0	0.1934	0.04	Q	V				
76+ 5	0.1937	0.04	Q	V				
76+10	0.1940	0.04	Q	V				
76+15	0.1943	0.04	Q	V				
76+20	0.1946	0.04	Q	V				
76+25	0.1949	0.04	Q	V				
76+30	0.1952	0.05	Q	V				
76+35	0.1956	0.05	Q	V				
76+40	0.1959	0.05	Q	V				
76+45	0.1962	0.05	Q	V				
76+50	0.1966	0.05	Q	V				
76+55	0.1969	0.05	Q	V				
77+ 0	0.1973	0.05	Q	V				
77+ 5	0.1977	0.05	Q	V				
77+10	0.1980	0.05	Q	V				
77+15	0.1984	0.05	Q	V				
77+20	0.1987	0.05	Q	V				
77+25	0.1991	0.05	Q	V				

77+30	0.1994	0.05	Q	V				
77+35	0.1997	0.05	Q	V				
77+40	0.2001	0.05	Q	V				
77+45	0.2005	0.05	Q	V				
77+50	0.2009	0.06	Q	V				
77+55	0.2012	0.06	Q	V				
78+ 0	0.2016	0.06	Q	V				
78+ 5	0.2020	0.06	Q	V				
78+10	0.2024	0.06	Q	V				
78+15	0.2029	0.06	Q	V				
78+20	0.2033	0.06	Q	V				
78+25	0.2037	0.06	Q	V				
78+30	0.2042	0.06	Q	V				
78+35	0.2046	0.06	Q	V				
78+40	0.2051	0.07	Q	V				
78+45	0.2055	0.07	Q	V				
78+50	0.2060	0.07	Q	V				
78+55	0.2065	0.07	Q	V				
79+ 0	0.2070	0.07	Q	V				
79+ 5	0.2075	0.07	Q	V				
79+10	0.2080	0.07	Q	V				
79+15	0.2085	0.07	Q	V				
79+20	0.2090	0.07	Q	V				
79+25	0.2095	0.07	Q	V				
79+30	0.2100	0.08	Q	V				
79+35	0.2106	0.08	Q	V				
79+40	0.2111	0.08	Q	V				
79+45	0.2117	0.08	Q	V				
79+50	0.2123	0.08	Q	V				
79+55	0.2129	0.09	Q	V				
80+ 0	0.2135	0.09	Q	V				
80+ 5	0.2141	0.09	Q	V				
80+10	0.2148	0.09	Q	V				
80+15	0.2154	0.10	Q	V				
80+20	0.2161	0.10	Q	V				
80+25	0.2169	0.10	Q	V				
80+30	0.2176	0.11	Q	V				
80+35	0.2183	0.11	Q	V				
80+40	0.2191	0.11	Q	V				
80+45	0.2198	0.11	Q	V				
80+50	0.2206	0.11	Q	V				
80+55	0.2214	0.12	Q	V				
81+ 0	0.2222	0.12	Q	V				
81+ 5	0.2231	0.12	Q	V				
81+10	0.2239	0.12	Q	V				
81+15	0.2248	0.13	Q	V				
81+20	0.2257	0.13	Q	V				
81+25	0.2266	0.14	Q	V				
81+30	0.2276	0.14	Q	V				
81+35	0.2286	0.14	Q	V				
81+40	0.2295	0.14	Q	V				
81+45	0.2305	0.15	Q	V				
81+50	0.2316	0.15	Q	V				
81+55	0.2326	0.15	Q	V				
82+ 0	0.2337	0.15	Q	V				
82+ 5	0.2347	0.15	Q	V				
82+10	0.2357	0.15	Q	V				
82+15	0.2367	0.13	Q	V				
82+20	0.2375	0.13	Q	V				
82+25	0.2384	0.12	Q	V				
82+30	0.2392	0.12	Q	V				
82+35	0.2400	0.12	Q	V				
82+40	0.2409	0.12	Q	V				

82+45	0.2418	0.13	Q	V				
82+50	0.2427	0.14	Q	V				
82+55	0.2437	0.14	Q	V				
83+ 0	0.2447	0.14	Q	V				
83+ 5	0.2456	0.14	Q	V				
83+10	0.2466	0.14	Q	V				
83+15	0.2476	0.14	Q	V				
83+20	0.2486	0.14	Q	V				
83+25	0.2495	0.14	Q	V				
83+30	0.2505	0.14	Q	V				
83+35	0.2514	0.14	Q	V				
83+40	0.2524	0.14	Q	V				
83+45	0.2533	0.13	Q	V				
83+50	0.2542	0.13	Q	V				
83+55	0.2551	0.13	Q	V				
84+ 0	0.2560	0.13	Q	V				
84+ 5	0.2569	0.13	Q	V				
84+10	0.2579	0.14	Q	V				
84+15	0.2590	0.16	Q	V				
84+20	0.2601	0.17	Q	V				
84+25	0.2613	0.17	Q	V				
84+30	0.2625	0.18	Q	V				
84+35	0.2637	0.18	Q	V				
84+40	0.2650	0.18	Q	V				
84+45	0.2663	0.19	Q	V				
84+50	0.2677	0.19	Q	V				
84+55	0.2690	0.20	Q	V				
85+ 0	0.2704	0.20	Q	V				
85+ 5	0.2718	0.21	Q	V				
85+10	0.2733	0.21	Q	V				
85+15	0.2748	0.22	Q	V				
85+20	0.2764	0.23	Q	V				
85+25	0.2781	0.24	Q	V				
85+30	0.2797	0.24	Q	V				
85+35	0.2814	0.24	Q	V				
85+40	0.2829	0.23	Q	V				
85+45	0.2843	0.21	Q	V				
85+50	0.2857	0.19	Q	V				
85+55	0.2870	0.19	Q	V				
86+ 0	0.2882	0.18	Q	V				
86+ 5	0.2895	0.18	Q	V				
86+10	0.2907	0.18	Q	V				
86+15	0.2921	0.19	Q	V				
86+20	0.2934	0.19	Q	V				
86+25	0.2947	0.19	Q	V				
86+30	0.2961	0.19	Q	V				
86+35	0.2974	0.19	Q	V				
86+40	0.2987	0.19	Q	V				
86+45	0.3000	0.19	Q	V				
86+50	0.3013	0.19	Q	V				
86+55	0.3026	0.19	Q	V				
87+ 0	0.3039	0.19	Q	V				
87+ 5	0.3052	0.19	Q	V				
87+10	0.3065	0.18	Q	V				
87+15	0.3077	0.18	Q	V				
87+20	0.3090	0.18	Q	V				
87+25	0.3102	0.18	Q	V				
87+30	0.3114	0.18	Q	V				
87+35	0.3126	0.17	Q	V				
87+40	0.3137	0.17	Q	V				
87+45	0.3148	0.16	Q	V				
87+50	0.3159	0.15	Q	V				
87+55	0.3169	0.15	Q	V				

88+ 0	0.3179	0.15	Q	V				
88+ 5	0.3189	0.14	Q	V				
88+10	0.3197	0.12	Q	V				
88+15	0.3204	0.09	Q	V				
88+20	0.3209	0.07	Q	V				
88+25	0.3213	0.06	Q	V				
88+30	0.3217	0.05	Q	V				
88+35	0.3220	0.05	Q	V				
88+40	0.3223	0.04	Q	V				
88+45	0.3226	0.04	Q	V				
88+50	0.3228	0.04	Q	V				
88+55	0.3231	0.03	Q	V				
89+ 0	0.3233	0.03	Q	V				
89+ 5	0.3235	0.03	Q	V				
89+10	0.3237	0.03	Q	V				
89+15	0.3239	0.03	Q	V				
89+20	0.3242	0.03	Q	V				
89+25	0.3244	0.04	Q	V				
89+30	0.3246	0.04	Q	V				
89+35	0.3249	0.04	Q	V				
89+40	0.3251	0.04	Q	V				
89+45	0.3254	0.04	Q	V				
89+50	0.3256	0.04	Q	V				
89+55	0.3259	0.03	Q	V				
90+ 0	0.3261	0.03	Q	V				
90+ 5	0.3263	0.03	Q	V				
90+10	0.3265	0.03	Q	V				
90+15	0.3267	0.03	Q	V				
90+20	0.3269	0.03	Q	V				
90+25	0.3271	0.03	Q	V				
90+30	0.3273	0.03	Q	V				
90+35	0.3275	0.03	Q	V				
90+40	0.3277	0.03	Q	V				
90+45	0.3279	0.03	Q	V				
90+50	0.3281	0.02	Q	V				
90+55	0.3282	0.02	Q	V				
91+ 0	0.3284	0.02	Q	V				
91+ 5	0.3285	0.02	Q	V				
91+10	0.3287	0.02	Q	V				
91+15	0.3288	0.02	Q	V				
91+20	0.3289	0.02	Q	V				
91+25	0.3291	0.02	Q	V				
91+30	0.3293	0.03	Q	V				
91+35	0.3295	0.03	Q	V				
91+40	0.3296	0.03	Q	V				
91+45	0.3298	0.02	Q	V				
91+50	0.3300	0.02	Q	V				
91+55	0.3301	0.02	Q	V				
92+ 0	0.3302	0.02	Q	V				
92+ 5	0.3304	0.02	Q	V				
92+10	0.3305	0.02	Q	V				
92+15	0.3306	0.02	Q	V				
92+20	0.3308	0.02	Q	V				
92+25	0.3309	0.02	Q	V				
92+30	0.3311	0.02	Q	V				
92+35	0.3312	0.02	Q	V				
92+40	0.3314	0.02	Q	V				
92+45	0.3315	0.02	Q	V				
92+50	0.3317	0.02	Q	V				
92+55	0.3318	0.02	Q	V				
93+ 0	0.3319	0.02	Q	V				
93+ 5	0.3321	0.02	Q	V				
93+10	0.3322	0.02	Q	V				

93+15	0.3323	0.02	Q	V				
93+20	0.3324	0.02	Q	V				
93+25	0.3326	0.02	Q	V				
93+30	0.3327	0.02	Q	V				
93+35	0.3328	0.02	Q	V				
93+40	0.3329	0.02	Q	V				
93+45	0.3331	0.02	Q	V				
93+50	0.3332	0.02	Q	V				
93+55	0.3333	0.02	Q	V				
94+ 0	0.3335	0.02	Q	V				
94+ 5	0.3336	0.02	Q	V				
94+10	0.3337	0.02	Q	V				
94+15	0.3338	0.02	Q	V				
94+20	0.3340	0.02	Q	V				
94+25	0.3341	0.02	Q	V				
94+30	0.3342	0.02	Q	V				
94+35	0.3343	0.02	Q	V				
94+40	0.3345	0.02	Q	V				
94+45	0.3346	0.02	Q	V				
94+50	0.3347	0.02	Q	V				
94+55	0.3348	0.02	Q	V				
95+ 0	0.3349	0.02	Q	V				
95+ 5	0.3350	0.02	Q	V				
95+10	0.3351	0.02	Q	V				
95+15	0.3352	0.01	Q	V				
95+20	0.3353	0.01	Q	V				
95+25	0.3354	0.01	Q	V				
95+30	0.3355	0.01	Q	V				
95+35	0.3356	0.01	Q	V				
95+40	0.3357	0.01	Q	V				
95+45	0.3358	0.01	Q	V				
95+50	0.3359	0.01	Q	V				
95+55	0.3360	0.01	Q	V				
96+ 0	0.3361	0.01	Q	V				
96+ 5	0.3361	0.00	Q	V				
96+10	0.3362	0.01	Q	V				
96+15	0.3363	0.02	Q	V				
96+20	0.3365	0.03	Q	V				
96+25	0.3367	0.03	Q	V				
96+30	0.3370	0.04	Q	V				
96+35	0.3373	0.05	Q	V				
96+40	0.3377	0.05	Q	V				
96+45	0.3380	0.05	Q	V				
96+50	0.3384	0.05	Q	V				
96+55	0.3388	0.06	Q	V				
97+ 0	0.3393	0.07	Q	V				
97+ 5	0.3397	0.07	Q	V				
97+10	0.3402	0.07	Q	V				
97+15	0.3407	0.07	Q	V				
97+20	0.3411	0.06	Q	V				
97+25	0.3415	0.06	Q	V				
97+30	0.3420	0.06	Q	V				
97+35	0.3424	0.06	Q	V				
97+40	0.3428	0.06	Q	V				
97+45	0.3432	0.06	Q	V				
97+50	0.3437	0.06	Q	V				
97+55	0.3441	0.07	Q	V				
98+ 0	0.3446	0.07	Q	V				
98+ 5	0.3451	0.07	Q	V				
98+10	0.3457	0.08	Q	V				
98+15	0.3462	0.08	Q	V				
98+20	0.3467	0.08	Q	V				
98+25	0.3473	0.08	Q	V				

98+30	0.3478	0.08	Q	V				
98+35	0.3484	0.08	Q	V				
98+40	0.3490	0.08	Q	V				
98+45	0.3496	0.09	Q	V				
98+50	0.3502	0.09	Q	V				
98+55	0.3509	0.10	Q	V				
99+ 0	0.3515	0.10	Q	V				
99+ 5	0.3522	0.10	Q	V				
99+10	0.3529	0.10	Q	V				
99+15	0.3536	0.10	Q	V				
99+20	0.3543	0.10	Q	V				
99+25	0.3550	0.10	Q	V				
99+30	0.3557	0.10	Q	V				
99+35	0.3564	0.10	Q	V				
99+40	0.3570	0.10	Q	V				
99+45	0.3577	0.10	Q	V				
99+50	0.3584	0.10	Q	V				
99+55	0.3592	0.11	Q	V				
100+ 0	0.3599	0.11	Q	V				
100+ 5	0.3607	0.11	Q	V				
100+10	0.3615	0.12	Q	V				
100+15	0.3623	0.12	Q	V				
100+20	0.3632	0.12	Q	V				
100+25	0.3640	0.12	Q	V				
100+30	0.3649	0.13	Q	V				
100+35	0.3658	0.13	Q	V				
100+40	0.3668	0.14	Q	V				
100+45	0.3677	0.14	Q	V				
100+50	0.3687	0.14	Q	V				
100+55	0.3697	0.14	Q	V				
101+ 0	0.3707	0.15	Q	V				
101+ 5	0.3717	0.15	Q	V				
101+10	0.3727	0.15	Q	V				
101+15	0.3737	0.14	Q	V				
101+20	0.3746	0.13	Q	V				
101+25	0.3755	0.13	Q	V				
101+30	0.3765	0.14	Q	V				
101+35	0.3774	0.14	Q	V				
101+40	0.3784	0.15	Q	V				
101+45	0.3795	0.15	Q	V				
101+50	0.3806	0.15	Q	V				
101+55	0.3816	0.16	Q	V				
102+ 0	0.3827	0.16	Q	V				
102+ 5	0.3838	0.16	Q	V				
102+10	0.3850	0.16	Q	V				
102+15	0.3861	0.17	Q	V				
102+20	0.3873	0.17	Q	V				
102+25	0.3885	0.18	Q	V				
102+30	0.3898	0.18	Q	V				
102+35	0.3910	0.18	Q	V				
102+40	0.3923	0.18	Q	V				
102+45	0.3936	0.19	Q	V				
102+50	0.3949	0.19	Q	V				
102+55	0.3963	0.20	Q	V				
103+ 0	0.3976	0.20	Q	V				
103+ 5	0.3990	0.20	Q	V				
103+10	0.4004	0.20	Q	V				
103+15	0.4018	0.20	Q	V				
103+20	0.4032	0.20	Q	V				
103+25	0.4046	0.21	Q	V				
103+30	0.4060	0.21	Q	V				
103+35	0.4075	0.22	Q	V				
103+40	0.4090	0.22	Q	V				

103+45	0.4106	0.23	Q	V			
103+50	0.4122	0.23	Q	V			
103+55	0.4139	0.24	Q	V			
104+ 0	0.4156	0.25	Q	V			
104+ 5	0.4173	0.25	Q	V			
104+10	0.4192	0.26	Q	V			
104+15	0.4211	0.28	Q	V			
104+20	0.4230	0.28	Q	V			
104+25	0.4250	0.29	Q	V			
104+30	0.4270	0.29	Q	V			
104+35	0.4291	0.30	Q	V			
104+40	0.4311	0.30	Q	V			
104+45	0.4333	0.31	Q	V			
104+50	0.4354	0.31	Q	V			
104+55	0.4376	0.32	Q	V			
105+ 0	0.4399	0.33	Q	V			
105+ 5	0.4423	0.34	Q	V			
105+10	0.4450	0.39	Q	V			
105+15	0.4482	0.47	Q	V			
105+20	0.4520	0.54	Q	V			
105+25	0.4562	0.61	Q	V			
105+30	0.4609	0.69	Q	V			
105+35	0.4662	0.76	Q	V			
105+40	0.4719	0.84	Q	V			
105+45	0.4783	0.92	Q	V			
105+50	0.4851	0.99	Q	V			
105+55	0.4925	1.07	Q	V			
106+ 0	0.5005	1.16	Q	V			
106+ 5	0.5086	1.18	Q	V			
106+10	0.5158	1.05	Q	V			
106+15	0.5213	0.80	Q	V			
106+20	0.5255	0.61	Q	V			
106+25	0.5292	0.53	Q	V			
106+30	0.5325	0.48	Q	V			
106+35	0.5358	0.48	Q	V			
106+40	0.5398	0.58	Q	V			
106+45	0.5451	0.77	Q	V			
106+50	0.5513	0.91	Q	V			
106+55	0.5581	0.98	Q	V			
107+ 0	0.5651	1.02	Q	V			
107+ 5	0.5723	1.05	Q	V			
107+10	0.5795	1.05	Q	V			
107+15	0.5865	1.02	Q	V			
107+20	0.5935	1.00	Q	V			
107+25	0.6004	1.01	Q	V			
107+30	0.6074	1.01	Q	V			
107+35	0.6143	1.01	Q	V			
107+40	0.6209	0.95	Q	V			
107+45	0.6268	0.86	Q	V			
107+50	0.6324	0.81	Q	V			
107+55	0.6380	0.82	Q	V			
108+ 0	0.6439	0.86	Q	V			
108+ 5	0.6505	0.95	Q	V			
108+10	0.6587	1.20	Q	V			
108+15	0.6696	1.58	Q	V			
108+20	0.6825	1.87	Q	V			
108+25	0.6965	2.04	Q	V			
108+30	0.7116	2.19	Q	V			
108+35	0.7275	2.31	Q	V			
108+40	0.7444	2.46	Q	V			
108+45	0.7625	2.62	Q	V			
108+50	0.7814	2.75	Q	V			
108+55	0.8012	2.87	Q	V			

109+ 0	0.8217	2.98		Q	V		
109+ 5	0.8431	3.11		Q	V		
109+10	0.8661	3.33		Q	V		
109+15	0.8911	3.64		Q	V		
109+20	0.9178	3.87		Q	V		
109+25	0.9454	4.01		Q	V		
109+30	0.9736	4.09		Q	V		
109+35	1.0017	4.08		Q	V		
109+40	1.0277	3.78		Q	V		
109+45	1.0501	3.26		Q	V		
109+50	1.0700	2.89		Q	V		
109+55	1.0887	2.71		Q	V		
110+ 0	1.1067	2.62		Q	V		
110+ 5	1.1245	2.59		Q	V		
110+10	1.1429	2.67		Q	V		
110+15	1.1625	2.84		Q	V		
110+20	1.1829	2.96		Q	V		
110+25	1.2035	2.99		Q	V		
110+30	1.2239	2.97		Q	V		
110+35	1.2443	2.96		Q	V		
110+40	1.2647	2.96		Q	V		
110+45	1.2851	2.96		Q	V		
110+50	1.3055	2.96		Q	V		
110+55	1.3257	2.94		Q	V		
111+ 0	1.3456	2.89		Q	V		
111+ 5	1.3652	2.85		Q	V		
111+10	1.3846	2.81		Q	V		
111+15	1.4036	2.75		Q	V		
111+20	1.4222	2.71		Q	V		
111+25	1.4406	2.66		Q	V		
111+30	1.4585	2.61		Q	V		
111+35	1.4760	2.54		Q	V		
111+40	1.4925	2.39		Q	V		
111+45	1.5075	2.18		Q	V		
111+50	1.5215	2.03		Q	V		
111+55	1.5349	1.95		Q	V		
112+ 0	1.5481	1.91		Q	V		
112+ 5	1.5605	1.81		Q	V		
112+10	1.5710	1.52		Q	V		
112+15	1.5784	1.08		Q	V		
112+20	1.5836	0.75		Q	V		
112+25	1.5876	0.59		Q	V		
112+30	1.5909	0.48		Q	V		
112+35	1.5937	0.40		Q	V		
112+40	1.5960	0.34		Q	V		
112+45	1.5980	0.28		Q	V		
112+50	1.5996	0.24		Q	V		
112+55	1.6010	0.20		Q	V		
113+ 0	1.6023	0.18		Q	V		
113+ 5	1.6034	0.16		Q	V		
113+10	1.6043	0.14		Q	V		
113+15	1.6053	0.14		Q	V		
113+20	1.6062	0.13		Q	V		
113+25	1.6070	0.12		Q	V		
113+30	1.6078	0.12		Q	V		
113+35	1.6086	0.11		Q	V		
113+40	1.6093	0.11		Q	V		
113+45	1.6100	0.10		Q	V		
113+50	1.6107	0.10		Q	V		
113+55	1.6114	0.10		Q	V		
114+ 0	1.6120	0.09		Q	V		
114+ 5	1.6126	0.09		Q	V		
114+10	1.6132	0.09		Q	V		

114+15	1.6138	0.08	Q				V
114+20	1.6144	0.08	Q				V
114+25	1.6149	0.08	Q				V
114+30	1.6155	0.08	Q				V
114+35	1.6161	0.08	Q				V
114+40	1.6166	0.08	Q				V
114+45	1.6171	0.07	Q				V
114+50	1.6176	0.07	Q				V
114+55	1.6180	0.06	Q				V
115+ 0	1.6184	0.06	Q				V
115+ 5	1.6188	0.05	Q				V
115+10	1.6191	0.05	Q				V
115+15	1.6195	0.06	Q				V
115+20	1.6200	0.06	Q				V
115+25	1.6204	0.06	Q				V
115+30	1.6209	0.07	Q				V
115+35	1.6214	0.07	Q				V
115+40	1.6219	0.07	Q				V
115+45	1.6223	0.07	Q				V
115+50	1.6228	0.06	Q				V
115+55	1.6232	0.06	Q				V
116+ 0	1.6236	0.05	Q				V
116+ 5	1.6239	0.05	Q				V
116+10	1.6243	0.05	Q				V
116+15	1.6246	0.06	Q				V
116+20	1.6250	0.06	Q				V
116+25	1.6254	0.06	Q				V
116+30	1.6258	0.06	Q				V
116+35	1.6263	0.06	Q				V
116+40	1.6267	0.06	Q				V
116+45	1.6271	0.06	Q				V
116+50	1.6275	0.06	Q				V
116+55	1.6279	0.06	Q				V
117+ 0	1.6282	0.05	Q				V
117+ 5	1.6286	0.05	Q				V
117+10	1.6289	0.05	Q				V
117+15	1.6293	0.05	Q				V
117+20	1.6297	0.06	Q				V
117+25	1.6301	0.05	Q				V
117+30	1.6304	0.05	Q				V
117+35	1.6307	0.05	Q				V
117+40	1.6311	0.05	Q				V
117+45	1.6314	0.05	Q				V
117+50	1.6318	0.06	Q				V
117+55	1.6322	0.05	Q				V
118+ 0	1.6325	0.05	Q				V
118+ 5	1.6328	0.05	Q				V
118+10	1.6332	0.05	Q				V
118+15	1.6335	0.05	Q				V
118+20	1.6339	0.06	Q				V
118+25	1.6343	0.05	Q				V
118+30	1.6346	0.05	Q				V
118+35	1.6349	0.05	Q				V
118+40	1.6353	0.04	Q				V
118+45	1.6356	0.04	Q				V
118+50	1.6359	0.04	Q				V
118+55	1.6361	0.04	Q				V
119+ 0	1.6364	0.04	Q				V
119+ 5	1.6367	0.04	Q				V
119+10	1.6370	0.04	Q				V
119+15	1.6373	0.04	Q				V
119+20	1.6376	0.04	Q				V
119+25	1.6379	0.04	Q				V

119+30	1.6382	0.04	Q				V
119+35	1.6384	0.04	Q				V
119+40	1.6387	0.04	Q				V
119+45	1.6390	0.04	Q				V
119+50	1.6393	0.04	Q				V
119+55	1.6396	0.04	Q				V
120+ 0	1.6398	0.04	Q				V
120+ 5	1.6401	0.04	Q				V
120+10	1.6403	0.03	Q				V
120+15	1.6405	0.02	Q				V
120+20	1.6406	0.01	Q				V
120+25	1.6407	0.01	Q				V
120+30	1.6407	0.01	Q				V
120+35	1.6408	0.01	Q				V
120+40	1.6408	0.01	Q				V
120+45	1.6408	0.00	Q				V
120+50	1.6409	0.00	Q				V
120+55	1.6409	0.00	Q				V
121+ 0	1.6409	0.00	Q				V
121+ 5	1.6409	0.00	Q				V
121+10	1.6409	0.00	Q				V
121+15	1.6409	0.00	Q				V
121+20	1.6410	0.00	Q				V
121+25	1.6410	0.00	Q				V
121+30	1.6410	0.00	Q				V
121+35	1.6410	0.00	Q				V
121+40	1.6410	0.00	Q				V
121+45	1.6410	0.00	Q				V

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## **Appendix H**

### **Bentley PondPack Basin Routing Analysis**

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Project Summary

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Title	JD Fields Hemet
Engineer	Shea-Michael Anti, P.E.
Company	Kimley-Horn and Associates, Inc.
Date	10/14/2021

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Notes

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## Table of Contents

	User Notifications	2
	Master Network Summary	3
Unit Hydrograph (Onsite Runoff)	Read Hydrograph	4
Infiltration Basin (IN)	Time vs. Elevation	5
Infiltration Basin	Time vs. Volume	8
Infiltration Basin	Elevation vs. Volume Curve	11
Composite Outlet Structure - 1	Outlet Input Data	12
Infiltration Basin		
	Elevation-Volume-Flow Table (Pond)	14
Infiltration Basin (IN)		
	Level Pool Pond Routing Summary	15
	Pond Inflow Summary	16

Subsection: User Notifications

User Notifications?	No user notifications generated.
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Subsection: Master Network Summary

**Catchments Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Unit Hydrograph (Onsite Runoff)	Base	0	6,498.000	885.000	1.71

**Node Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Outfall (POC)	Base	0	0.000	0.000	0.00

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft <sup>3</sup> )
Infiltration Basin (IN)	Base	0	6,499.000	885.000	1.71	(N/A)	(N/A)
Infiltration Basin (OUT)	Base	0	0.000	0.000	0.00	1,538.31	3,881.000

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

Peak Discharge	1.71 ft <sup>3</sup> /s
Time to Peak	885.000 min
Hydrograph Volume	6,498.000 ft <sup>3</sup>

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**

**Output Time Increment = 5.000 min**

**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
5.000	0.00	0.00	0.01	0.01	0.01
30.000	0.01	0.01	0.01	0.01	0.01
55.000	0.01	0.01	0.01	0.02	0.02
80.000	0.02	0.02	0.02	0.02	0.02
105.000	0.02	0.02	0.03	0.03	0.03
130.000	0.03	0.03	0.03	0.04	0.04
155.000	0.05	0.06	0.06	0.05	0.04
180.000	0.03	0.00	0.00	0.01	0.01
205.000	0.01	0.02	0.02	0.02	0.02
230.000	0.02	0.02	0.02	0.02	0.02
255.000	0.03	0.03	0.03	0.03	0.03
280.000	0.03	0.03	0.04	0.04	0.04
305.000	0.04	0.04	0.05	0.05	0.06
330.000	0.06	0.07	0.08	0.09	0.07
355.000	0.06	0.05	0.00	0.00	0.01
380.000	0.01	0.02	0.02	0.02	0.02
405.000	0.03	0.03	0.03	0.03	0.03
430.000	0.03	0.03	0.04	0.04	0.04
455.000	0.04	0.04	0.04	0.05	0.05
480.000	0.05	0.05	0.05	0.06	0.06
505.000	0.07	0.08	0.09	0.11	0.11
530.000	0.09	0.07	0.06	0.00	0.01
555.000	0.02	0.03	0.03	0.04	0.04
580.000	0.05	0.05	0.05	0.05	0.05
605.000	0.05	0.06	0.06	0.07	0.07
630.000	0.07	0.08	0.08	0.08	0.09
655.000	0.09	0.10	0.10	0.10	0.11
680.000	0.12	0.13	0.15	0.18	0.20
705.000	0.21	0.18	0.14	0.11	0.00
730.000	0.02	0.06	0.08	0.09	0.10
755.000	0.12	0.13	0.14	0.14	0.15
780.000	0.14	0.15	0.16	0.18	0.19
805.000	0.19	0.20	0.21	0.22	0.23
830.000	0.25	0.26	0.27	0.27	0.28
855.000	0.31	0.34	0.42	0.68	1.18
880.000	1.64	1.71	1.30	0.85	0.59
905.000	0.46	0.35	0.27	0.21	0.17
930.000	0.14	0.12	(N/A)	(N/A)	(N/A)

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
0.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
15.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
30.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
45.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
60.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.71
75.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
90.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
105.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
120.000	1,537.71	1,537.71	1,537.71	1,537.72	1,537.72
135.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
150.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.73
165.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
180.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
195.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
210.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
225.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
240.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
255.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
270.000	1,537.73	1,537.74	1,537.74	1,537.74	1,537.74
285.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
300.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
315.000	1,537.74	1,537.74	1,537.74	1,537.75	1,537.75
330.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
345.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
360.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
375.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
390.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
405.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
420.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
435.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
450.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
465.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
480.000	1,537.76	1,537.76	1,537.77	1,537.77	1,537.77
495.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
510.000	1,537.77	1,537.77	1,537.78	1,537.78	1,537.78
525.000	1,537.78	1,537.78	1,537.79	1,537.79	1,537.79
540.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
555.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
570.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
585.000	1,537.78	1,537.78	1,537.79	1,537.79	1,537.79
600.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
615.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
630.000	1,537.79	1,537.79	1,537.79	1,537.80	1,537.80

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
645.000	1,537.80	1,537.80	1,537.80	1,537.80	1,537.80
660.000	1,537.80	1,537.81	1,537.81	1,537.81	1,537.81
675.000	1,537.81	1,537.81	1,537.82	1,537.82	1,537.82
690.000	1,537.82	1,537.82	1,537.83	1,537.83	1,537.84
705.000	1,537.84	1,537.84	1,537.85	1,537.85	1,537.85
720.000	1,537.85	1,537.85	1,537.85	1,537.85	1,537.85
735.000	1,537.85	1,537.85	1,537.85	1,537.85	1,537.85
750.000	1,537.85	1,537.85	1,537.85	1,537.86	1,537.86
765.000	1,537.86	1,537.86	1,537.86	1,537.86	1,537.87
780.000	1,537.87	1,537.87	1,537.87	1,537.87	1,537.88
795.000	1,537.88	1,537.88	1,537.89	1,537.89	1,537.89
810.000	1,537.90	1,537.90	1,537.90	1,537.91	1,537.91
825.000	1,537.91	1,537.92	1,537.92	1,537.93	1,537.93
840.000	1,537.93	1,537.94	1,537.94	1,537.95	1,537.95
855.000	1,537.96	1,537.96	1,537.97	1,537.98	1,537.99
870.000	1,538.00	1,538.02	1,538.05	1,538.09	1,538.13
885.000	1,538.17	1,538.21	1,538.24	1,538.26	1,538.28
900.000	1,538.29	1,538.30	1,538.30	1,538.31	1,538.31
915.000	1,538.31	1,538.31	1,538.31	1,538.31	1,538.31
930.000	1,538.31	1,538.31	1,538.30	1,538.30	1,538.29
945.000	1,538.28	1,538.28	1,538.27	1,538.27	1,538.26
960.000	1,538.25	1,538.25	1,538.24	1,538.24	1,538.23
975.000	1,538.22	1,538.22	1,538.21	1,538.21	1,538.20
990.000	1,538.19	1,538.19	1,538.18	1,538.17	1,538.17
1,005.000	1,538.16	1,538.16	1,538.15	1,538.14	1,538.14
1,020.000	1,538.13	1,538.13	1,538.12	1,538.12	1,538.11
1,035.000	1,538.10	1,538.10	1,538.09	1,538.09	1,538.08
1,050.000	1,538.08	1,538.07	1,538.07	1,538.06	1,538.06
1,065.000	1,538.05	1,538.05	1,538.05	1,538.04	1,538.04
1,080.000	1,538.03	1,538.03	1,538.02	1,538.02	1,538.01
1,095.000	1,538.01	1,538.01	1,538.00	1,538.00	1,537.99
1,110.000	1,537.99	1,537.99	1,537.98	1,537.98	1,537.98
1,125.000	1,537.97	1,537.97	1,537.96	1,537.96	1,537.96
1,140.000	1,537.95	1,537.95	1,537.95	1,537.94	1,537.94
1,155.000	1,537.94	1,537.94	1,537.93	1,537.93	1,537.93
1,170.000	1,537.92	1,537.92	1,537.92	1,537.91	1,537.91
1,185.000	1,537.91	1,537.91	1,537.90	1,537.90	1,537.90
1,200.000	1,537.90	1,537.89	1,537.89	1,537.89	1,537.89
1,215.000	1,537.88	1,537.88	1,537.88	1,537.88	1,537.87
1,230.000	1,537.87	1,537.87	1,537.87	1,537.86	1,537.86
1,245.000	1,537.86	1,537.86	1,537.86	1,537.85	1,537.85
1,260.000	1,537.85	1,537.85	1,537.85	1,537.84	1,537.84
1,275.000	1,537.84	1,537.84	1,537.84	1,537.84	1,537.83

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
1,290.000	1,537.83	1,537.83	1,537.83	1,537.83	1,537.82
1,305.000	1,537.82	1,537.82	1,537.82	1,537.82	1,537.82
1,320.000	1,537.82	1,537.81	1,537.81	1,537.81	1,537.81
1,335.000	1,537.81	1,537.81	1,537.81	1,537.80	1,537.80
1,350.000	1,537.80	1,537.80	1,537.80	1,537.80	1,537.80
1,365.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
1,380.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.78
1,395.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,410.000	1,537.78	1,537.78	1,537.78	1,537.77	1,537.77
1,425.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
1,440.000	1,537.77	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time vs. Volume  
 Label: Infiltration Basin

Scenario: Base

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
0.000	0.000	0.000	0.000	0.000	0.000
15.000	2.000	3.000	5.000	6.000	8.000
30.000	10.000	11.000	13.000	14.000	16.000
45.000	17.000	19.000	20.000	22.000	23.000
60.000	24.000	26.000	27.000	29.000	32.000
75.000	35.000	38.000	41.000	44.000	46.000
90.000	49.000	52.000	55.000	57.000	60.000
105.000	63.000	65.000	68.000	71.000	75.000
120.000	79.000	83.000	87.000	91.000	95.000
135.000	99.000	102.000	106.000	111.000	116.000
150.000	121.000	127.000	133.000	141.000	149.000
165.000	157.000	165.000	171.000	176.000	181.000
180.000	184.000	185.000	183.000	181.000	179.000
195.000	178.000	177.000	177.000	176.000	176.000
210.000	176.000	177.000	178.000	179.000	180.000
225.000	181.000	182.000	183.000	184.000	185.000
240.000	186.000	187.000	188.000	189.000	190.000
255.000	192.000	195.000	197.000	200.000	202.000
270.000	204.000	207.000	209.000	211.000	214.000
285.000	216.000	219.000	222.000	226.000	230.000
300.000	234.000	237.000	241.000	244.000	248.000
315.000	253.000	258.000	263.000	269.000	275.000
330.000	282.000	289.000	297.000	305.000	315.000
345.000	326.000	335.000	343.000	350.000	355.000
360.000	359.000	360.000	357.000	353.000	348.000
375.000	345.000	342.000	340.000	338.000	336.000
390.000	335.000	334.000	333.000	332.000	332.000
405.000	332.000	333.000	333.000	334.000	335.000
420.000	335.000	336.000	337.000	337.000	338.000
435.000	338.000	339.000	341.000	344.000	346.000
450.000	348.000	350.000	352.000	355.000	357.000
465.000	359.000	361.000	365.000	368.000	372.000
480.000	375.000	379.000	382.000	386.000	389.000
495.000	394.000	399.000	404.000	409.000	416.000
510.000	423.000	432.000	441.000	452.000	465.000
525.000	477.000	488.000	497.000	504.000	510.000
540.000	513.000	514.000	509.000	503.000	499.000
555.000	495.000	492.000	491.000	489.000	488.000
570.000	488.000	488.000	489.000	490.000	492.000
585.000	494.000	496.000	498.000	499.000	501.000
600.000	503.000	505.000	507.000	510.000	513.000
615.000	516.000	520.000	525.000	530.000	534.000
630.000	539.000	544.000	550.000	557.000	563.000

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
645.000	569.000	575.000	583.000	590.000	598.000
660.000	606.000	615.000	624.000	633.000	641.000
675.000	651.000	662.000	673.000	685.000	698.000
690.000	714.000	731.000	751.000	773.000	797.000
705.000	821.000	844.000	864.000	879.000	891.000
720.000	899.000	900.000	893.000	883.000	875.000
735.000	872.000	872.000	873.000	876.000	880.000
750.000	885.000	891.000	899.000	908.000	918.000
765.000	929.000	941.000	952.000	964.000	976.000
780.000	987.000	998.000	1,010.000	1,023.000	1,037.000
795.000	1,053.000	1,070.000	1,088.000	1,105.000	1,123.000
810.000	1,141.000	1,161.000	1,181.000	1,201.000	1,223.000
825.000	1,245.000	1,268.000	1,293.000	1,319.000	1,346.000
840.000	1,373.000	1,401.000	1,428.000	1,455.000	1,484.000
855.000	1,515.000	1,549.000	1,586.000	1,630.000	1,686.000
870.000	1,767.000	1,902.000	2,092.000	2,336.000	2,614.000
885.000	2,905.000	3,167.000	3,367.000	3,519.000	3,630.000
900.000	3,709.000	3,767.000	3,812.000	3,844.000	3,865.000
915.000	3,877.000	3,881.000	3,879.000	3,872.000	3,861.000
930.000	3,847.000	3,830.000	3,801.000	3,760.000	3,719.000
945.000	3,678.000	3,637.000	3,596.000	3,555.000	3,513.000
960.000	3,472.000	3,431.000	3,390.000	3,349.000	3,308.000
975.000	3,267.000	3,226.000	3,185.000	3,144.000	3,103.000
990.000	3,058.000	3,015.000	2,972.000	2,929.000	2,887.000
1,005.000	2,846.000	2,805.000	2,764.000	2,724.000	2,685.000
1,020.000	2,646.000	2,608.000	2,570.000	2,533.000	2,496.000
1,035.000	2,460.000	2,424.000	2,388.000	2,353.000	2,319.000
1,050.000	2,285.000	2,251.000	2,218.000	2,185.000	2,153.000
1,065.000	2,121.000	2,090.000	2,059.000	2,028.000	1,998.000
1,080.000	1,968.000	1,939.000	1,910.000	1,881.000	1,853.000
1,095.000	1,825.000	1,798.000	1,770.000	1,745.000	1,722.000
1,110.000	1,700.000	1,677.000	1,655.000	1,633.000	1,612.000
1,125.000	1,591.000	1,570.000	1,549.000	1,529.000	1,509.000
1,140.000	1,489.000	1,470.000	1,450.000	1,431.000	1,413.000
1,155.000	1,394.000	1,376.000	1,358.000	1,340.000	1,322.000
1,170.000	1,305.000	1,288.000	1,271.000	1,254.000	1,238.000
1,185.000	1,222.000	1,205.000	1,190.000	1,174.000	1,159.000
1,200.000	1,143.000	1,128.000	1,114.000	1,099.000	1,085.000
1,215.000	1,070.000	1,056.000	1,042.000	1,029.000	1,015.000
1,230.000	1,002.000	989.000	976.000	963.000	950.000
1,245.000	938.000	926.000	913.000	901.000	890.000
1,260.000	878.000	866.000	855.000	844.000	833.000
1,275.000	822.000	811.000	800.000	790.000	780.000

Subsection: Time vs. Volume  
 Label: Infiltration Basin

Scenario: Base

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
1,290.000	769.000	759.000	749.000	739.000	730.000
1,305.000	720.000	711.000	701.000	692.000	683.000
1,320.000	674.000	665.000	657.000	648.000	639.000
1,335.000	631.000	623.000	615.000	607.000	599.000
1,350.000	591.000	583.000	575.000	568.000	560.000
1,365.000	553.000	546.000	539.000	531.000	524.000
1,380.000	518.000	511.000	504.000	497.000	491.000
1,395.000	485.000	478.000	472.000	466.000	460.000
1,410.000	454.000	448.000	442.000	436.000	430.000
1,425.000	425.000	419.000	413.000	408.000	403.000
1,440.000	397.000	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation vs. Volume Curve  
Label: Infiltration Basin

Scenario: Base

### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft <sup>3</sup> )
1,537.70	0.000
1,538.00	1,754.750
1,539.00	8,515.070
1,540.00	16,770.050
1,541.00	26,728.200
1,542.00	41,675.180
1,543.00	80,599.530

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,537.74 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,543.00 ft

**Outlet Connectivity**

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	1,542.88 (N/A)	1,543.00 (N/A)

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Structure ID: Weir - 1	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,542.88 ft
Weir Length	2.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Infiltration Basin

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s
Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ft <sup>3</sup> )	Area (ft <sup>2</sup> )	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
1,537.70	0.00	0.000	0	0.00	0.00	0.00
1,538.20	0.00	3,106.814	0	0.23	0.23	34.75
1,538.70	0.00	6,486.974	0	0.23	0.23	72.31
1,539.20	0.00	10,166.066	0	0.23	0.23	113.18
1,539.70	0.00	14,293.556	0	0.23	0.23	159.05
1,540.20	0.00	18,761.680	0	0.23	0.23	208.69
1,540.70	0.00	23,740.755	0	0.23	0.23	264.01
1,541.20	0.00	29,717.596	0	0.23	0.23	330.42
1,541.70	0.00	37,191.086	0	0.23	0.23	413.46
1,542.20	0.00	49,460.050	0	0.23	0.23	549.78
1,542.70	0.00	68,922.225	0	0.23	0.23	766.03
1,542.88	0.00	75,928.608	0	0.23	0.23	843.88
1,543.00	0.25	80,599.530	0	0.23	0.48	896.03

Subsection: Level Pool Pond Routing Summary  
 Label: Infiltration Basin (IN)

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s

Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.71 ft <sup>3</sup> /s	Time to Peak (Flow, In)	885.000 min
Infiltration (Peak)	0.23 ft <sup>3</sup> /s	Time to Peak (Infiltration)	888.000 min
Flow (Peak Outlet)	0.00 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	0.000 min

Elevation (Water Surface, Peak)	1,538.31 ft
Volume (Peak)	3,880.846 ft <sup>3</sup>

Mass Balance (ft <sup>3</sup> )	
Volume (Initial)	0.000 ft <sup>3</sup>
Volume (Total Inflow)	6,499.000 ft <sup>3</sup>
Volume (Total Infiltration)	6,082.000 ft <sup>3</sup>
Volume (Total Outlet Outflow)	0.000 ft <sup>3</sup>
Volume (Retained)	392.000 ft <sup>3</sup>
Volume (Unrouted)	-24.000 ft <sup>3</sup>
Error (Mass Balance)	0.4 %

Subsection: Pond Inflow Summary  
 Label: Infiltration Basin (IN)

Scenario: Base

**Summary for Hydrograph Addition at 'Infiltration Basin'**

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Unit Hydrograph (Onsite Runoff)

**Node Inflows**

Inflow Type	Element	Volume (ft <sup>3</sup> )	Time to Peak (min)	Flow (Peak) (ft <sup>3</sup> /s)
Flow (From)	Unit Hydrograph (Onsite Runoff)	6,498.000	885.000	1.71
Flow (In)	Infiltration Basin	6,499.080	885.000	1.71

## Index

### C

Composite Outlet Structure - 1 (Outlet Input Data)...

### I

Infiltration Basin (Elevation vs. Volume Curve)...

Infiltration Basin (Elevation-Volume-Flow Table (Pond))...

Infiltration Basin (IN) (Level Pool Pond Routing Summary)...

Infiltration Basin (IN) (Pond Inflow Summary)...

Infiltration Basin (IN) (Time vs. Elevation)...

Infiltration Basin (Time vs. Volume)...

### M

Master Network Summary...3

### U

Unit Hydrograph (Onsite Runoff) (Read Hydrograph)...

User Notifications...2

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Project Summary

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Title	JF Fields Hemet
Engineer	Shea-Michael Anti, P.E.
Company	Kimley-Horn and Associates, Inc.
Date	10/14/2021

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Notes

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## Table of Contents

	User Notifications	2
	Master Network Summary	3
Unit Hydrograph (Onsite Runoff)	Read Hydrograph	4
Infiltration Basin (IN)	Time vs. Elevation	6
Infiltration Basin	Time vs. Volume	9
Infiltration Basin	Elevation vs. Volume Curve	12
Composite Outlet Structure - 1	Outlet Input Data	13
Infiltration Basin		
	Elevation-Volume-Flow Table (Pond)	15
Infiltration Basin (IN)		
	Level Pool Pond Routing Summary	16
	Pond Inflow Summary	17

Subsection: User Notifications

**User Notifications**

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Message Id	40
Scenario	Base
Element Type	Pond
Element Id	16
Label	Infiltration Basin
Time	(N/A)
Message	Mass balance for routing volumes vary by more than 0.5 %. (1.9 % of Inflow Volume))
Source	Warning

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Subsection: Master Network Summary

**Catchments Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Unit Hydrograph (Onsite Runoff)	Base	0	4,617.000	1,685.000	0.20

**Node Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Outfall (POC)	Base	0	0.000	0.000	0.00

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft <sup>3</sup> )
Infiltration Basin (IN)	Base	0	3,016.000	1,416.000	0.19	(N/A)	(N/A)
Infiltration Basin (OUT)	Base	0	0.000	0.000	0.00	1,537.86	917.000

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

Peak Discharge	0.20 ft <sup>3</sup> /s
Time to Peak	1,685.000 min
Hydrograph Volume	4,617.000 ft <sup>3</sup>

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**

**Output Time Increment = 5.000 min**

**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
5.000	0.00	0.00	0.00	0.00	0.01
30.000	0.01	0.01	0.01	0.01	0.01
55.000	0.01	0.01	0.01	0.01	0.01
80.000	0.01	0.01	0.01	0.01	0.01
105.000	0.01	0.01	0.01	0.01	0.01
130.000	0.01	0.01	0.01	0.01	0.01
155.000	0.01	0.01	0.01	0.01	0.01
180.000	0.01	0.01	0.01	0.01	0.01
205.000	0.01	0.01	0.02	0.02	0.02
230.000	0.02	0.02	0.02	0.02	0.02
255.000	0.02	0.02	0.02	0.02	0.03
280.000	0.03	0.03	0.03	0.03	0.03
305.000	0.03	0.03	0.04	0.04	0.05
330.000	0.05	0.05	0.05	0.04	0.03
355.000	0.02	0.02	0.00	0.00	0.00
380.000	0.01	0.01	0.01	0.01	0.01
405.000	0.01	0.01	0.01	0.01	0.01
430.000	0.01	0.01	0.01	0.02	0.02
455.000	0.02	0.02	0.02	0.02	0.02
480.000	0.02	0.02	0.02	0.02	0.02
505.000	0.02	0.02	0.02	0.02	0.02
530.000	0.02	0.02	0.02	0.02	0.02
555.000	0.02	0.02	0.02	0.02	0.02
580.000	0.02	0.03	0.03	0.03	0.03
605.000	0.03	0.03	0.03	0.03	0.03
630.000	0.04	0.04	0.04	0.04	0.04
655.000	0.04	0.05	0.05	0.05	0.06
680.000	0.06	0.07	0.07	0.08	0.08
705.000	0.06	0.04	0.03	0.03	0.00
730.000	0.00	0.01	0.01	0.01	0.01
755.000	0.01	0.01	0.01	0.02	0.02
780.000	0.02	0.02	0.02	0.02	0.02
805.000	0.02	0.02	0.02	0.02	0.02
830.000	0.02	0.02	0.02	0.02	0.02
855.000	0.02	0.02	0.02	0.02	0.02
880.000	0.02	0.02	0.02	0.02	0.02
905.000	0.02	0.02	0.03	0.03	0.03
930.000	0.03	0.03	0.03	0.03	0.03
955.000	0.03	0.04	0.04	0.04	0.04

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
980.000	0.04	0.04	0.05	0.05	0.05
1,005.000	0.05	0.05	0.06	0.06	0.06
1,030.000	0.06	0.07	0.08	0.09	0.09
1,055.000	0.10	0.10	0.07	0.05	0.04
1,080.000	0.03	0.00	0.00	0.01	0.02
1,105.000	0.02	0.02	0.02	0.03	0.03
1,130.000	0.03	0.03	0.03	0.03	0.03
1,155.000	0.04	0.04	0.04	0.04	0.04
1,180.000	0.04	0.04	0.04	0.04	0.04
1,205.000	0.04	0.04	0.04	0.04	0.04
1,230.000	0.04	0.04	0.04	0.04	0.04
1,255.000	0.04	0.05	0.05	0.05	0.05
1,280.000	0.05	0.05	0.05	0.05	0.06
1,305.000	0.06	0.06	0.07	0.07	0.07
1,330.000	0.07	0.08	0.08	0.08	0.09
1,355.000	0.09	0.09	0.10	0.10	0.11
1,380.000	0.11	0.11	0.12	0.13	0.15
1,405.000	0.16	0.18	0.19	0.18	0.14
1,430.000	0.10	0.08	0.06	0.00	0.01
1,455.000	0.03	0.05	0.06	0.06	0.07
1,480.000	0.07	0.08	0.08	0.08	0.09
1,505.000	0.09	0.09	0.10	0.10	0.10
1,530.000	0.10	0.10	0.10	0.10	0.10
1,555.000	0.10	0.11	0.11	0.11	0.11
1,580.000	0.11	0.12	0.12	0.12	0.12
1,605.000	0.12	0.12	0.12	0.13	0.13
1,630.000	0.13	0.13	0.14	0.14	0.14
1,655.000	0.15	0.16	0.17	0.17	0.18
1,680.000	0.19	0.20	0.00	(N/A)	(N/A)

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
0.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
15.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
30.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
45.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
60.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
75.000	1,537.70	1,537.70	1,537.70	1,537.71	1,537.71
90.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
105.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
120.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
135.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
150.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
165.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
180.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
195.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
210.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
225.000	1,537.71	1,537.71	1,537.71	1,537.72	1,537.72
240.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
255.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
270.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
285.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
300.000	1,537.72	1,537.73	1,537.73	1,537.73	1,537.73
315.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
330.000	1,537.73	1,537.73	1,537.73	1,537.74	1,537.74
345.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
360.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
375.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
390.000	1,537.74	1,537.74	1,537.73	1,537.73	1,537.73
405.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
420.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
435.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
450.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
465.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
480.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
495.000	1,537.73	1,537.73	1,537.74	1,537.74	1,537.74
510.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
525.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
540.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
555.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
570.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
585.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
600.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
615.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
630.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.75

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
645.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
660.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
675.000	1,537.75	1,537.75	1,537.76	1,537.76	1,537.76
690.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
705.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
720.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.76
735.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
750.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
765.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
780.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
795.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
810.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
825.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
840.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
855.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
870.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
885.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
900.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
915.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
930.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
945.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
960.000	1,537.75	1,537.75	1,537.76	1,537.76	1,537.76
975.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
990.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
1,005.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
1,020.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
1,035.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.78
1,050.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,065.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
1,080.000	1,537.79	1,537.79	1,537.79	1,537.78	1,537.78
1,095.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,110.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,125.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,140.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,155.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,170.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,185.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,200.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,215.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,230.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,245.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,260.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,275.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
1,290.000	1,537.78	1,537.78	1,537.79	1,537.79	1,537.79
1,305.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
1,320.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
1,335.000	1,537.79	1,537.80	1,537.80	1,537.80	1,537.80
1,350.000	1,537.80	1,537.80	1,537.80	1,537.80	1,537.81
1,365.000	1,537.81	1,537.81	1,537.81	1,537.81	1,537.81
1,380.000	1,537.81	1,537.82	1,537.82	1,537.82	1,537.82
1,395.000	1,537.82	1,537.83	1,537.83	1,537.83	1,537.83
1,410.000	1,537.84	1,537.84	1,537.84	1,537.85	1,537.85
1,425.000	1,537.85	1,537.85	1,537.86	1,537.86	1,537.86
1,440.000	1,537.86	(N/A)	(N/A)	(N/A)	(N/A)

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
0.000	0.000	0.000	0.000	0.000	0.000
15.000	0.000	0.000	0.000	1.000	3.000
30.000	4.000	6.000	7.000	9.000	11.000
45.000	12.000	14.000	15.000	17.000	18.000
60.000	20.000	21.000	22.000	24.000	25.000
75.000	26.000	28.000	29.000	30.000	32.000
90.000	33.000	34.000	35.000	37.000	38.000
105.000	39.000	40.000	41.000	43.000	44.000
120.000	45.000	46.000	47.000	48.000	49.000
135.000	50.000	51.000	52.000	53.000	54.000
150.000	55.000	56.000	57.000	58.000	59.000
165.000	60.000	61.000	62.000	62.000	63.000
180.000	64.000	65.000	66.000	67.000	67.000
195.000	68.000	69.000	70.000	71.000	71.000
210.000	72.000	73.000	75.000	78.000	80.000
225.000	82.000	85.000	87.000	89.000	91.000
240.000	94.000	96.000	98.000	100.000	102.000
255.000	104.000	106.000	108.000	110.000	112.000
270.000	114.000	116.000	119.000	123.000	126.000
285.000	130.000	133.000	136.000	140.000	143.000
300.000	146.000	149.000	152.000	155.000	159.000
315.000	163.000	167.000	172.000	177.000	183.000
330.000	189.000	195.000	201.000	207.000	212.000
345.000	217.000	220.000	222.000	224.000	224.000
360.000	225.000	224.000	222.000	219.000	216.000
375.000	213.000	211.000	209.000	208.000	207.000
390.000	206.000	205.000	204.000	203.000	202.000
405.000	201.000	200.000	199.000	199.000	198.000
420.000	197.000	196.000	195.000	194.000	193.000
435.000	192.000	191.000	191.000	191.000	192.000
450.000	192.000	193.000	194.000	195.000	196.000
465.000	196.000	197.000	198.000	199.000	200.000
480.000	200.000	201.000	202.000	202.000	203.000
495.000	204.000	205.000	205.000	206.000	207.000
510.000	207.000	208.000	209.000	209.000	210.000
525.000	210.000	211.000	212.000	212.000	213.000
540.000	213.000	214.000	214.000	215.000	216.000
555.000	216.000	217.000	217.000	218.000	218.000
570.000	219.000	219.000	220.000	220.000	221.000
585.000	223.000	225.000	227.000	229.000	231.000
600.000	233.000	235.000	237.000	239.000	241.000
615.000	243.000	245.000	246.000	248.000	250.000
630.000	253.000	257.000	260.000	263.000	267.000

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
645.000	270.000	273.000	276.000	279.000	283.000
660.000	287.000	292.000	296.000	301.000	306.000
675.000	311.000	317.000	323.000	330.000	337.000
690.000	345.000	352.000	361.000	370.000	378.000
705.000	384.000	388.000	390.000	391.000	391.000
720.000	391.000	389.000	385.000	380.000	375.000
735.000	372.000	368.000	365.000	362.000	359.000
750.000	356.000	353.000	350.000	347.000	344.000
765.000	341.000	339.000	338.000	337.000	336.000
780.000	335.000	334.000	333.000	332.000	331.000
795.000	330.000	329.000	328.000	327.000	326.000
810.000	325.000	324.000	323.000	322.000	321.000
825.000	321.000	320.000	319.000	318.000	317.000
840.000	316.000	316.000	315.000	314.000	313.000
855.000	313.000	312.000	311.000	310.000	310.000
870.000	309.000	308.000	308.000	307.000	306.000
885.000	306.000	305.000	304.000	304.000	303.000
900.000	303.000	302.000	301.000	301.000	301.000
915.000	301.000	302.000	303.000	304.000	305.000
930.000	306.000	307.000	309.000	310.000	310.000
945.000	311.000	312.000	313.000	314.000	316.000
960.000	318.000	320.000	323.000	325.000	328.000
975.000	330.000	333.000	335.000	337.000	340.000
990.000	343.000	347.000	351.000	355.000	359.000
1,005.000	362.000	366.000	370.000	374.000	379.000
1,020.000	384.000	389.000	394.000	399.000	405.000
1,035.000	411.000	417.000	425.000	434.000	443.000
1,050.000	453.000	462.000	473.000	483.000	493.000
1,065.000	500.000	504.000	506.000	507.000	507.000
1,080.000	506.000	503.000	497.000	491.000	485.000
1,095.000	479.000	475.000	472.000	469.000	467.000
1,110.000	464.000	461.000	459.000	457.000	456.000
1,125.000	455.000	454.000	453.000	452.000	451.000
1,140.000	450.000	449.000	449.000	448.000	447.000
1,155.000	448.000	448.000	449.000	450.000	451.000
1,170.000	452.000	453.000	453.000	454.000	455.000
1,185.000	456.000	456.000	457.000	458.000	459.000
1,200.000	459.000	460.000	461.000	461.000	462.000
1,215.000	463.000	463.000	464.000	465.000	465.000
1,230.000	466.000	467.000	467.000	468.000	468.000
1,245.000	469.000	470.000	470.000	471.000	472.000
1,260.000	473.000	476.000	478.000	480.000	482.000
1,275.000	484.000	486.000	488.000	490.000	492.000

Subsection: Time vs. Volume  
 Label: Infiltration Basin

Scenario: Base

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
1,290.000	494.000	496.000	498.000	501.000	504.000
1,305.000	508.000	511.000	515.000	519.000	524.000
1,320.000	529.000	533.000	538.000	543.000	548.000
1,335.000	554.000	560.000	566.000	572.000	578.000
1,350.000	585.000	593.000	600.000	608.000	615.000
1,365.000	623.000	632.000	641.000	650.000	660.000
1,380.000	670.000	679.000	689.000	699.000	711.000
1,395.000	723.000	736.000	751.000	767.000	785.000
1,410.000	804.000	824.000	845.000	865.000	882.000
1,425.000	896.000	906.000	912.000	915.000	917.000
1,440.000	916.000	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation vs. Volume Curve  
Label: Infiltration Basin

Scenario: Base

### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft <sup>3</sup> )
1,537.70	0.000
1,538.00	1,754.750
1,539.00	8,515.070
1,540.00	16,770.050
1,541.00	26,728.200
1,542.00	41,675.180
1,543.00	80,599.530

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,537.74 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,543.00 ft

**Outlet Connectivity**

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	1,542.88 (N/A)	1,543.00 (N/A)

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Structure ID: Weir - 1	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,542.88 ft
Weir Length	2.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Infiltration Basin

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s
Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ft <sup>3</sup> )	Area (ft <sup>2</sup> )	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
1,537.70	0.00	0.000	0	0.00	0.00	0.00
1,538.20	0.00	3,106.814	0	0.23	0.23	34.75
1,538.70	0.00	6,486.974	0	0.23	0.23	72.31
1,539.20	0.00	10,166.066	0	0.23	0.23	113.18
1,539.70	0.00	14,293.556	0	0.23	0.23	159.05
1,540.20	0.00	18,761.680	0	0.23	0.23	208.69
1,540.70	0.00	23,740.755	0	0.23	0.23	264.01
1,541.20	0.00	29,717.596	0	0.23	0.23	330.42
1,541.70	0.00	37,191.086	0	0.23	0.23	413.46
1,542.20	0.00	49,460.050	0	0.23	0.23	549.78
1,542.70	0.00	68,922.225	0	0.23	0.23	766.03
1,542.88	0.00	75,928.608	0	0.23	0.23	843.88
1,543.00	0.25	80,599.530	0	0.23	0.48	896.03

Subsection: Level Pool Pond Routing Summary  
 Label: Infiltration Basin (IN)

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s

Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.19 ft <sup>3</sup> /s	Time to Peak (Flow, In)	1,416.000 min
Infiltration (Peak)	0.07 ft <sup>3</sup> /s	Time to Peak (Infiltration)	1,437.000 min
Flow (Peak Outlet)	0.00 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	0.000 min

Elevation (Water Surface, Peak)	1,537.86 ft
Volume (Peak)	916.522 ft <sup>3</sup>

Mass Balance (ft <sup>3</sup> )	
Volume (Initial)	0.000 ft <sup>3</sup>
Volume (Total Inflow)	3,016.000 ft <sup>3</sup>
Volume (Total Infiltration)	2,057.000 ft <sup>3</sup>
Volume (Total Outlet Outflow)	0.000 ft <sup>3</sup>
Volume (Retained)	904.000 ft <sup>3</sup>
Volume (Unrouted)	-56.000 ft <sup>3</sup>
Error (Mass Balance)	1.9 %

Subsection: Pond Inflow Summary  
Label: Infiltration Basin (IN)

Scenario: Base

### Summary for Hydrograph Addition at 'Infiltration Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Unit Hydrograph (Onsite Runoff)

### Node Inflows

Inflow Type	Element	Volume (ft <sup>3</sup> )	Time to Peak (min)	Flow (Peak) (ft <sup>3</sup> /s)
Flow (From)	Unit Hydrograph (Onsite Runoff)	4,617.000	1,685.000	0.20
Flow (In)	Infiltration Basin	3,016.440	1,416.000	0.19

# Index

## C

Composite Outlet Structure - 1 (Outlet Input Data)...

## I

Infiltration Basin (Elevation vs. Volume Curve)...

Infiltration Basin (Elevation-Volume-Flow Table (Pond))...

Infiltration Basin (IN) (Level Pool Pond Routing Summary)...

Infiltration Basin (IN) (Pond Inflow Summary)...

Infiltration Basin (IN) (Time vs. Elevation)...

Infiltration Basin (Time vs. Volume)...

## M

Master Network Summary...3

## U

Unit Hydrograph (Onsite Runoff) (Read Hydrograph)...

User Notifications...2

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Project Summary

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Title	JD Fields Hemet
Engineer	Shea-Michael Anti, P.E.
Company	Kimley-Horn and Associates, Inc.
Date	10/14/2021

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Notes

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## Table of Contents

	User Notifications	2
	Master Network Summary	3
Unit Hydrograph (Onsite Runoff)	Read Hydrograph	4
Infiltration Basin (IN)	Time vs. Elevation	11
Infiltration Basin	Time vs. Volume	14
Infiltration Basin	Elevation vs. Volume Curve	17
Composite Outlet Structure - 1	Outlet Input Data	18
Infiltration Basin		
	Elevation-Volume-Flow Table (Pond)	20
Infiltration Basin (IN)		
	Level Pool Pond Routing Summary	21
	Pond Inflow Summary	22

Subsection: User Notifications

User Notifications?	No user notifications generated.
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Subsection: Master Network Summary

**Catchments Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Unit Hydrograph (Onsite Runoff)	Base	0	12,348.000	6,565.000	0.25

**Node Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Outfall (POC)	Base	0	0.000	0.000	0.00

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft <sup>3</sup> )
Infiltration Basin (IN)	Base	0	600.000	810.000	0.03	(N/A)	(N/A)
Infiltration Basin (OUT)	Base	0	0.000	0.000	0.00	1,537.74	210.000

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

Peak Discharge	0.25 ft <sup>3</sup> /s
Time to Peak	6,570.000 min
Hydrograph Volume	12,348.000 ft <sup>3</sup>

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**

**Output Time Increment = 5.000 min**

**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
5.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
80.000	0.00	0.00	0.00	0.00	0.00
105.000	0.00	0.00	0.00	0.00	0.00
130.000	0.00	0.00	0.00	0.00	0.00
155.000	0.00	0.00	0.00	0.00	0.00
180.000	0.00	0.00	0.00	0.00	0.00
205.000	0.00	0.00	0.00	0.00	0.00
230.000	0.00	0.00	0.00	0.00	0.00
255.000	0.00	0.00	0.00	0.00	0.01
280.000	0.01	0.01	0.01	0.01	0.01
305.000	0.01	0.01	0.01	0.01	0.01
330.000	0.01	0.01	0.01	0.01	0.01
355.000	0.01	0.01	0.01	0.01	0.01
380.000	0.01	0.01	0.01	0.01	0.01
405.000	0.01	0.01	0.01	0.01	0.01
430.000	0.01	0.01	0.01	0.01	0.01
455.000	0.01	0.01	0.01	0.01	0.01
480.000	0.01	0.01	0.01	0.01	0.01
505.000	0.01	0.01	0.01	0.01	0.01
530.000	0.01	0.01	0.01	0.01	0.01
555.000	0.01	0.01	0.01	0.01	0.01
580.000	0.02	0.02	0.02	0.02	0.02
605.000	0.02	0.02	0.01	0.01	0.01
630.000	0.01	0.01	0.01	0.01	0.01
655.000	0.01	0.01	0.01	0.01	0.01
680.000	0.01	0.01	0.01	0.01	0.01
705.000	0.01	0.01	0.01	0.01	0.01
730.000	0.01	0.02	0.02	0.02	0.02
755.000	0.02	0.02	0.02	0.02	0.02
780.000	0.02	0.02	0.02	0.02	0.02
805.000	0.02	0.03	0.03	0.02	0.02
830.000	0.02	0.02	0.02	0.02	0.02
855.000	0.02	0.02	0.02	0.02	0.02
880.000	0.02	0.02	0.02	0.02	0.02
905.000	0.02	0.02	0.02	0.02	0.02
930.000	0.02	0.02	0.02	0.02	0.02
955.000	0.02	0.02	0.01	0.01	0.01

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
980.000	0.01	0.01	0.01	0.01	0.00
1,005.000	0.00	0.00	0.00	0.00	0.00
1,030.000	0.00	0.00	0.00	0.00	0.00
1,055.000	0.00	0.00	0.00	0.00	0.00
1,080.000	0.00	0.00	0.00	0.00	0.00
1,105.000	0.00	0.00	0.00	0.00	0.00
1,130.000	0.00	0.00	0.00	0.00	0.00
1,155.000	0.00	0.00	0.00	0.00	0.00
1,180.000	0.00	0.00	0.00	0.00	0.00
1,205.000	0.00	0.00	0.00	0.00	0.00
1,230.000	0.00	0.00	0.00	0.00	0.00
1,255.000	0.00	0.00	0.00	0.00	0.00
1,280.000	0.00	0.00	0.00	0.00	0.00
1,305.000	0.00	0.00	0.00	0.00	0.00
1,330.000	0.00	0.00	0.00	0.00	0.00
1,355.000	0.00	0.00	0.00	0.00	0.00
1,380.000	0.00	0.00	0.00	0.00	0.00
1,405.000	0.00	0.00	0.00	0.00	0.00
1,430.000	0.00	0.00	0.00	0.00	0.00
1,455.000	0.00	0.00	0.00	0.00	0.00
1,480.000	0.00	0.00	0.00	0.00	0.00
1,505.000	0.00	0.00	0.00	0.00	0.00
1,530.000	0.00	0.00	0.00	0.00	0.00
1,555.000	0.00	0.00	0.00	0.00	0.00
1,580.000	0.00	0.00	0.00	0.00	0.00
1,605.000	0.01	0.01	0.01	0.01	0.01
1,630.000	0.01	0.01	0.01	0.01	0.01
1,655.000	0.01	0.01	0.01	0.01	0.01
1,680.000	0.01	0.01	0.01	0.01	0.01
1,705.000	0.01	0.01	0.01	0.01	0.01
1,730.000	0.01	0.01	0.01	0.01	0.01
1,755.000	0.01	0.01	0.01	0.01	0.01
1,780.000	0.01	0.01	0.01	0.01	0.01
1,805.000	0.01	0.01	0.01	0.01	0.01
1,830.000	0.01	0.01	0.01	0.01	0.01
1,855.000	0.01	0.01	0.01	0.01	0.01
1,880.000	0.01	0.01	0.01	0.01	0.01
1,905.000	0.01	0.01	0.01	0.01	0.01
1,930.000	0.01	0.02	0.02	0.02	0.02
1,955.000	0.02	0.02	0.02	0.02	0.02
1,980.000	0.02	0.02	0.02	0.02	0.02
2,005.000	0.02	0.02	0.02	0.02	0.02
2,030.000	0.02	0.02	0.02	0.02	0.02
2,055.000	0.02	0.02	0.02	0.02	0.02

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
2,080.000	0.02	0.02	0.02	0.02	0.02
2,105.000	0.02	0.02	0.02	0.02	0.02
2,130.000	0.02	0.02	0.02	0.02	0.02
2,155.000	0.02	0.02	0.02	0.02	0.02
2,180.000	0.03	0.03	0.03	0.03	0.03
2,205.000	0.03	0.03	0.03	0.03	0.03
2,230.000	0.03	0.04	0.04	0.04	0.04
2,255.000	0.04	0.04	0.03	0.03	0.03
2,280.000	0.03	0.03	0.03	0.03	0.03
2,305.000	0.03	0.03	0.03	0.03	0.03
2,330.000	0.03	0.03	0.03	0.03	0.03
2,355.000	0.03	0.03	0.03	0.03	0.03
2,380.000	0.03	0.02	0.02	0.02	0.02
2,405.000	0.02	0.02	0.01	0.01	0.01
2,430.000	0.01	0.01	0.01	0.01	0.01
2,455.000	0.01	0.00	0.00	0.00	0.01
2,480.000	0.01	0.01	0.01	0.01	0.01
2,505.000	0.01	0.01	0.01	0.01	0.00
2,530.000	0.00	0.00	0.00	0.00	0.00
2,555.000	0.00	0.00	0.00	0.00	0.00
2,580.000	0.00	0.00	0.00	0.00	0.00
2,605.000	0.00	0.00	0.00	0.00	0.00
2,630.000	0.00	0.00	0.00	0.00	0.00
2,655.000	0.00	0.00	0.00	0.00	0.00
2,680.000	0.00	0.00	0.00	0.00	0.00
2,705.000	0.00	0.00	0.00	0.00	0.00
2,730.000	0.00	0.00	0.00	0.00	0.00
2,755.000	0.00	0.00	0.00	0.00	0.00
2,780.000	0.00	0.00	0.00	0.00	0.00
2,805.000	0.00	0.00	0.00	0.00	0.00
2,830.000	0.00	0.00	0.00	0.00	0.00
2,855.000	0.00	0.00	0.00	0.00	0.00
2,880.000	0.00	0.00	0.00	0.00	0.00
2,905.000	0.00	0.00	0.00	0.00	0.00
2,930.000	0.00	0.00	0.00	0.00	0.00
2,955.000	0.00	0.00	0.00	0.00	0.00
2,980.000	0.00	0.00	0.00	0.00	0.01
3,005.000	0.01	0.01	0.01	0.01	0.01
3,030.000	0.01	0.01	0.01	0.01	0.01
3,055.000	0.01	0.01	0.01	0.01	0.01
3,080.000	0.01	0.01	0.01	0.01	0.01
3,105.000	0.01	0.01	0.01	0.01	0.01
3,130.000	0.01	0.01	0.01	0.01	0.01
3,155.000	0.01	0.01	0.01	0.01	0.01

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
3,180.000	0.01	0.01	0.01	0.01	0.01
3,205.000	0.01	0.01	0.01	0.01	0.01
3,230.000	0.01	0.01	0.01	0.01	0.01
3,255.000	0.01	0.01	0.01	0.01	0.01
3,280.000	0.01	0.01	0.01	0.01	0.01
3,305.000	0.01	0.01	0.01	0.01	0.01
3,330.000	0.02	0.02	0.02	0.02	0.02
3,355.000	0.02	0.02	0.02	0.02	0.02
3,380.000	0.02	0.02	0.02	0.02	0.02
3,405.000	0.02	0.02	0.02	0.02	0.02
3,430.000	0.02	0.03	0.03	0.03	0.03
3,455.000	0.03	0.03	0.03	0.03	0.03
3,480.000	0.03	0.03	0.03	0.03	0.03
3,505.000	0.02	0.02	0.02	0.02	0.03
3,530.000	0.03	0.03	0.03	0.03	0.03
3,555.000	0.03	0.03	0.03	0.03	0.03
3,580.000	0.03	0.03	0.03	0.03	0.03
3,605.000	0.03	0.03	0.03	0.03	0.03
3,630.000	0.04	0.04	0.04	0.04	0.04
3,655.000	0.04	0.04	0.04	0.04	0.04
3,680.000	0.05	0.05	0.05	0.05	0.05
3,705.000	0.04	0.04	0.04	0.04	0.04
3,730.000	0.04	0.04	0.04	0.04	0.04
3,755.000	0.04	0.04	0.04	0.04	0.04
3,780.000	0.04	0.04	0.04	0.04	0.04
3,805.000	0.04	0.03	0.03	0.03	0.03
3,830.000	0.03	0.03	0.03	0.03	0.02
3,855.000	0.02	0.01	0.01	0.01	0.01
3,880.000	0.01	0.01	0.01	0.01	0.01
3,905.000	0.01	0.01	0.01	0.01	0.01
3,930.000	0.01	0.01	0.01	0.01	0.01
3,955.000	0.01	0.01	0.01	0.01	0.01
3,980.000	0.01	0.01	0.01	0.01	0.01
4,005.000	0.01	0.00	0.00	0.00	0.00
4,030.000	0.00	0.00	0.00	0.00	0.01
4,055.000	0.01	0.01	0.00	0.00	0.00
4,080.000	0.00	0.00	0.00	0.00	0.00
4,105.000	0.00	0.00	0.00	0.00	0.00
4,130.000	0.00	0.00	0.00	0.00	0.00
4,155.000	0.00	0.00	0.00	0.00	0.00
4,180.000	0.00	0.00	0.00	0.00	0.00
4,205.000	0.00	0.00	0.00	0.00	0.00
4,230.000	0.00	0.00	0.00	0.00	0.00
4,255.000	0.00	0.00	0.00	0.00	0.00

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
4,280.000	0.00	0.00	0.00	0.00	0.00
4,305.000	0.00	0.00	0.00	0.00	0.00
4,330.000	0.00	0.00	0.00	0.00	0.01
4,355.000	0.01	0.01	0.01	0.01	0.01
4,380.000	0.01	0.01	0.01	0.01	0.01
4,405.000	0.01	0.01	0.01	0.01	0.01
4,430.000	0.01	0.01	0.01	0.01	0.01
4,455.000	0.01	0.01	0.01	0.01	0.01
4,480.000	0.01	0.01	0.01	0.01	0.01
4,505.000	0.01	0.01	0.01	0.01	0.01
4,530.000	0.01	0.01	0.01	0.01	0.01
4,555.000	0.01	0.02	0.02	0.02	0.02
4,580.000	0.02	0.02	0.02	0.02	0.02
4,605.000	0.02	0.02	0.02	0.02	0.02
4,630.000	0.02	0.02	0.02	0.02	0.02
4,655.000	0.02	0.02	0.02	0.02	0.02
4,680.000	0.02	0.02	0.02	0.02	0.02
4,705.000	0.02	0.02	0.02	0.03	0.03
4,730.000	0.03	0.03	0.03	0.03	0.03
4,755.000	0.03	0.03	0.03	0.03	0.03
4,780.000	0.03	0.03	0.03	0.03	0.03
4,805.000	0.03	0.04	0.04	0.04	0.04
4,830.000	0.04	0.04	0.04	0.04	0.04
4,855.000	0.04	0.04	0.05	0.05	0.05
4,880.000	0.05	0.05	0.05	0.05	0.05
4,905.000	0.06	0.06	0.06	0.06	0.06
4,930.000	0.06	0.05	0.05	0.05	0.05
4,955.000	0.05	0.05	0.05	0.05	0.05
4,980.000	0.05	0.05	0.05	0.05	0.05
5,005.000	0.05	0.05	0.05	0.05	0.05
5,030.000	0.05	0.05	0.05	0.05	0.05
5,055.000	0.06	0.06	0.06	0.07	0.07
5,080.000	0.07	0.07	0.07	0.08	0.08
5,105.000	0.08	0.08	0.08	0.09	0.09
5,130.000	0.09	0.09	0.09	0.08	0.07
5,155.000	0.07	0.07	0.07	0.07	0.07
5,180.000	0.07	0.07	0.07	0.07	0.07
5,205.000	0.07	0.07	0.07	0.07	0.07
5,230.000	0.07	0.07	0.07	0.07	0.07
5,255.000	0.07	0.06	0.06	0.06	0.06
5,280.000	0.06	0.05	0.05	0.04	0.03
5,305.000	0.02	0.02	0.02	0.02	0.01
5,330.000	0.01	0.01	0.01	0.01	0.01
5,355.000	0.01	0.01	0.01	0.01	0.01

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
5,380.000	0.01	0.01	0.01	0.01	0.01
5,405.000	0.01	0.01	0.01	0.01	0.01
5,430.000	0.01	0.01	0.01	0.01	0.01
5,455.000	0.01	0.01	0.01	0.01	0.01
5,480.000	0.01	0.01	0.01	0.01	0.01
5,505.000	0.01	0.01	0.01	0.01	0.01
5,530.000	0.01	0.01	0.01	0.01	0.01
5,555.000	0.01	0.01	0.01	0.01	0.01
5,580.000	0.01	0.01	0.01	0.01	0.01
5,605.000	0.01	0.01	0.01	0.01	0.01
5,630.000	0.01	0.01	0.01	0.01	0.01
5,655.000	0.01	0.01	0.01	0.01	0.01
5,680.000	0.01	0.01	0.01	0.01	0.01
5,705.000	0.01	0.01	0.01	0.01	0.01
5,730.000	0.01	0.01	0.01	0.01	0.01
5,755.000	0.01	0.01	0.00	0.00	0.01
5,780.000	0.01	0.01	0.02	0.02	0.02
5,805.000	0.02	0.02	0.02	0.02	0.03
5,830.000	0.03	0.02	0.02	0.02	0.02
5,855.000	0.02	0.02	0.02	0.02	0.02
5,880.000	0.03	0.03	0.03	0.03	0.03
5,905.000	0.03	0.03	0.03	0.03	0.03
5,930.000	0.04	0.04	0.04	0.04	0.04
5,955.000	0.04	0.04	0.04	0.04	0.04
5,980.000	0.04	0.04	0.04	0.04	0.04
6,005.000	0.04	0.04	0.04	0.05	0.05
6,030.000	0.05	0.05	0.05	0.05	0.05
6,055.000	0.05	0.06	0.06	0.06	0.05
6,080.000	0.05	0.05	0.05	0.05	0.05
6,105.000	0.06	0.06	0.06	0.06	0.06
6,130.000	0.06	0.06	0.07	0.07	0.07
6,155.000	0.07	0.07	0.07	0.07	0.07
6,180.000	0.07	0.08	0.08	0.08	0.08
6,205.000	0.08	0.08	0.08	0.08	0.09
6,230.000	0.09	0.09	0.09	0.10	0.10
6,255.000	0.10	0.11	0.11	0.11	0.11
6,280.000	0.11	0.12	0.12	0.12	0.12
6,305.000	0.13	0.13	0.14	0.14	0.14
6,330.000	0.15	0.15	0.15	0.15	0.16
6,355.000	0.16	0.16	0.16	0.15	0.14
6,380.000	0.13	0.13	0.13	0.13	0.13
6,405.000	0.14	0.14	0.15	0.15	0.15
6,430.000	0.15	0.15	0.15	0.15	0.15
6,455.000	0.15	0.14	0.14	0.14	0.14

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
6,480.000	0.14	0.14	0.15	0.16	0.17
6,505.000	0.18	0.19	0.19	0.19	0.20
6,530.000	0.20	0.21	0.21	0.22	0.22
6,555.000	0.24	0.24	0.25	0.25	0.25
6,580.000	0.24	0.22	0.20	0.20	0.19
6,605.000	0.19	0.19	0.20	0.20	0.20
6,630.000	0.20	0.20	0.20	0.20	0.20
6,655.000	0.20	0.20	0.20	0.19	0.19
6,680.000	0.19	0.19	0.18	0.18	0.17
6,705.000	0.17	0.16	0.16	0.15	0.15
6,730.000	0.13	0.10	0.08	0.06	0.06
6,755.000	0.05	0.05	0.04	0.04	0.03
6,780.000	0.03	0.03	0.03	0.03	0.04
6,805.000	0.04	0.04	0.04	0.04	0.04
6,830.000	0.04	0.04	0.03	0.03	0.03
6,855.000	0.03	0.03	0.03	0.03	0.03
6,880.000	0.03	0.03	0.03	0.02	0.02
6,905.000	0.02	0.02	0.02	0.02	0.02
6,930.000	0.03	0.03	0.03	0.03	0.02
6,955.000	0.02	0.02	0.02	0.02	0.02
6,980.000	0.02	0.02	0.02	0.02	0.02
7,005.000	0.02	0.02	0.02	0.02	0.02
7,030.000	0.02	0.02	0.02	0.02	0.02
7,055.000	0.02	0.02	0.02	0.02	0.02
7,080.000	0.02	0.02	0.02	0.02	0.02
7,105.000	0.02	0.02	0.02	0.02	0.02
7,130.000	0.02	0.02	0.02	0.02	0.02
7,155.000	0.02	0.02	0.02	0.02	0.02
7,180.000	0.02	0.02	0.02	0.02	0.02
7,205.000	0.01	0.01	0.01	0.01	0.00
7,230.000	0.00	0.00	0.00	0.00	0.00
7,255.000	0.00	0.00	0.00	0.00	0.00
7,280.000	0.00	0.00	0.00	0.00	0.00
7,305.000	0.00	0.00	(N/A)	(N/A)	(N/A)

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
0.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
15.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
30.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
45.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
60.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
75.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
90.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
105.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
120.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
135.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
150.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
165.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
180.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
195.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
210.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
225.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
240.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
255.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
270.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
285.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
300.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
315.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
330.000	1,537.70	1,537.71	1,537.71	1,537.71	1,537.71
345.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
360.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
375.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
390.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
405.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
420.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
435.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
450.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
465.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
480.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
495.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
510.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
525.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.72
540.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
555.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
570.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
585.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
600.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
615.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
630.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
645.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
660.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
675.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
690.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
705.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
720.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
735.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
750.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
765.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
780.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
795.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
810.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
825.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
840.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
855.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
870.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
885.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
900.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
915.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
930.000	1,537.73	1,537.73	1,537.74	1,537.74	1,537.74
945.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
960.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
975.000	1,537.74	1,537.74	1,537.73	1,537.73	1,537.73
990.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,005.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,020.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,035.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,050.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,065.000	1,537.73	1,537.72	1,537.72	1,537.72	1,537.72
1,080.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
1,095.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
1,110.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
1,125.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
1,140.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
1,155.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
1,170.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
1,185.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,200.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,215.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,230.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,245.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,260.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,275.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
1,290.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,305.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,320.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,335.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,350.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,365.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,380.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,395.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,410.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
1,425.000	1,537.71	1,537.71	1,537.71	1,537.70	1,537.70
1,440.000	1,537.70	(N/A)	(N/A)	(N/A)	(N/A)

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
0.000	0.000	0.000	0.000	0.000	0.000
15.000	0.000	0.000	0.000	0.000	0.000
30.000	0.000	0.000	0.000	0.000	0.000
45.000	0.000	0.000	0.000	0.000	0.000
60.000	0.000	0.000	0.000	0.000	0.000
75.000	0.000	0.000	0.000	0.000	0.000
90.000	0.000	0.000	0.000	0.000	0.000
105.000	0.000	0.000	0.000	0.000	0.000
120.000	0.000	0.000	0.000	0.000	0.000
135.000	0.000	0.000	0.000	0.000	0.000
150.000	0.000	0.000	0.000	0.000	0.000
165.000	0.000	0.000	0.000	0.000	0.000
180.000	0.000	0.000	0.000	0.000	0.000
195.000	0.000	0.000	0.000	0.000	0.000
210.000	0.000	0.000	0.000	0.000	0.000
225.000	0.000	0.000	0.000	0.000	0.000
240.000	0.000	0.000	0.000	0.000	0.000
255.000	0.000	0.000	0.000	0.000	0.000
270.000	0.000	0.000	2.000	4.000	5.000
285.000	7.000	8.000	10.000	11.000	13.000
300.000	15.000	16.000	17.000	19.000	20.000
315.000	22.000	23.000	25.000	26.000	27.000
330.000	29.000	30.000	31.000	32.000	34.000
345.000	35.000	36.000	37.000	39.000	40.000
360.000	41.000	42.000	43.000	44.000	45.000
375.000	47.000	48.000	49.000	50.000	51.000
390.000	52.000	53.000	54.000	55.000	56.000
405.000	57.000	58.000	59.000	59.000	60.000
420.000	61.000	62.000	63.000	64.000	65.000
435.000	65.000	66.000	67.000	68.000	69.000
450.000	70.000	70.000	71.000	72.000	73.000
465.000	73.000	74.000	75.000	75.000	76.000
480.000	77.000	77.000	78.000	79.000	79.000
495.000	80.000	81.000	81.000	82.000	83.000
510.000	83.000	84.000	84.000	85.000	85.000
525.000	86.000	87.000	87.000	88.000	88.000
540.000	89.000	89.000	90.000	90.000	91.000
555.000	91.000	92.000	92.000	93.000	93.000
570.000	94.000	94.000	95.000	96.000	98.000
585.000	100.000	102.000	104.000	106.000	108.000
600.000	110.000	112.000	114.000	116.000	117.000
615.000	118.000	118.000	118.000	118.000	118.000
630.000	119.000	119.000	119.000	119.000	119.000

**Time vs. Volume (ft³)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft³)				
645.000	119.000	119.000	119.000	120.000	120.000
660.000	120.000	120.000	120.000	120.000	120.000
675.000	120.000	120.000	120.000	121.000	121.000
690.000	121.000	121.000	121.000	121.000	121.000
705.000	121.000	121.000	121.000	122.000	122.000
720.000	122.000	122.000	122.000	122.000	122.000
735.000	124.000	125.000	127.000	129.000	130.000
750.000	132.000	134.000	135.000	137.000	139.000
765.000	140.000	142.000	143.000	145.000	146.000
780.000	148.000	149.000	150.000	152.000	153.000
795.000	155.000	156.000	157.000	158.000	160.000
810.000	163.000	165.000	168.000	170.000	171.000
825.000	173.000	174.000	175.000	176.000	177.000
840.000	178.000	179.000	180.000	181.000	182.000
855.000	183.000	184.000	185.000	186.000	187.000
870.000	188.000	189.000	189.000	190.000	191.000
885.000	192.000	193.000	194.000	195.000	195.000
900.000	196.000	197.000	198.000	199.000	199.000
915.000	200.000	201.000	202.000	202.000	203.000
930.000	204.000	204.000	205.000	206.000	206.000
945.000	207.000	208.000	208.000	209.000	210.000
960.000	210.000	210.000	210.000	209.000	207.000
975.000	206.000	205.000	204.000	203.000	202.000
990.000	201.000	200.000	199.000	198.000	195.000
1,005.000	193.000	190.000	188.000	185.000	183.000
1,020.000	180.000	178.000	176.000	173.000	171.000
1,035.000	169.000	167.000	164.000	162.000	160.000
1,050.000	158.000	156.000	154.000	152.000	150.000
1,065.000	148.000	146.000	144.000	142.000	140.000
1,080.000	138.000	137.000	135.000	133.000	131.000
1,095.000	130.000	128.000	126.000	125.000	123.000
1,110.000	121.000	120.000	118.000	117.000	115.000
1,125.000	114.000	112.000	111.000	109.000	108.000
1,140.000	106.000	105.000	104.000	102.000	101.000
1,155.000	99.000	98.000	97.000	96.000	94.000
1,170.000	93.000	92.000	91.000	90.000	88.000
1,185.000	87.000	86.000	85.000	84.000	83.000
1,200.000	82.000	81.000	79.000	78.000	77.000
1,215.000	76.000	75.000	74.000	73.000	72.000
1,230.000	72.000	71.000	70.000	69.000	68.000
1,245.000	67.000	66.000	65.000	64.000	63.000
1,260.000	63.000	62.000	61.000	60.000	59.000
1,275.000	59.000	58.000	57.000	56.000	56.000

Subsection: Time vs. Volume  
 Label: Infiltration Basin

Scenario: Base

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
1,290.000	55.000	54.000	53.000	53.000	52.000
1,305.000	51.000	51.000	50.000	49.000	49.000
1,320.000	48.000	47.000	47.000	46.000	46.000
1,335.000	45.000	44.000	44.000	43.000	43.000
1,350.000	42.000	42.000	41.000	41.000	40.000
1,365.000	39.000	39.000	38.000	38.000	37.000
1,380.000	37.000	36.000	36.000	36.000	35.000
1,395.000	35.000	34.000	34.000	33.000	33.000
1,410.000	32.000	32.000	32.000	31.000	31.000
1,425.000	30.000	30.000	30.000	29.000	29.000
1,440.000	28.000	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation vs. Volume Curve  
Label: Infiltration Basin

Scenario: Base

### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft <sup>3</sup> )
1,537.70	0.000
1,538.00	1,754.750
1,539.00	8,515.070
1,540.00	16,770.050
1,541.00	26,728.200
1,542.00	41,675.180
1,543.00	80,599.530

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,537.74 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,543.00 ft

**Outlet Connectivity**

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	1,542.88 (N/A)	1,543.00 (N/A)

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Structure ID: Weir - 1	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,542.88 ft
Weir Length	2.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Infiltration Basin

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s
Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ft <sup>3</sup> )	Area (ft <sup>2</sup> )	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
1,537.70	0.00	0.000	0	0.00	0.00	0.00
1,538.20	0.00	3,106.814	0	0.23	0.23	34.75
1,538.70	0.00	6,486.974	0	0.23	0.23	72.31
1,539.20	0.00	10,166.066	0	0.23	0.23	113.18
1,539.70	0.00	14,293.556	0	0.23	0.23	159.05
1,540.20	0.00	18,761.680	0	0.23	0.23	208.69
1,540.70	0.00	23,740.755	0	0.23	0.23	264.01
1,541.20	0.00	29,717.596	0	0.23	0.23	330.42
1,541.70	0.00	37,191.086	0	0.23	0.23	413.46
1,542.20	0.00	49,460.050	0	0.23	0.23	549.78
1,542.70	0.00	68,922.225	0	0.23	0.23	766.03
1,542.88	0.00	75,928.608	0	0.23	0.23	843.88
1,543.00	0.25	80,599.530	0	0.23	0.48	896.03

Subsection: Level Pool Pond Routing Summary  
 Label: Infiltration Basin (IN)

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s

Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.03 ft <sup>3</sup> /s	Time to Peak (Flow, In)	810.000 min
Infiltration (Peak)	0.02 ft <sup>3</sup> /s	Time to Peak (Infiltration)	963.000 min
Flow (Peak Outlet)	0.00 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	0.000 min

Elevation (Water Surface, Peak)	1,537.74 ft
Volume (Peak)	210.310 ft <sup>3</sup>

Mass Balance (ft <sup>3</sup> )	
Volume (Initial)	0.000 ft <sup>3</sup>
Volume (Total Inflow)	600.000 ft <sup>3</sup>
Volume (Total Infiltration)	570.000 ft <sup>3</sup>
Volume (Total Outlet Outflow)	0.000 ft <sup>3</sup>
Volume (Retained)	28.000 ft <sup>3</sup>
Volume (Unrouted)	-2.000 ft <sup>3</sup>
Error (Mass Balance)	0.3 %

Subsection: Pond Inflow Summary  
 Label: Infiltration Basin (IN)

Scenario: Base

**Summary for Hydrograph Addition at 'Infiltration Basin'**

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Unit Hydrograph (Onsite Runoff)

**Node Inflows**

Inflow Type	Element	Volume (ft <sup>3</sup> )	Time to Peak (min)	Flow (Peak) (ft <sup>3</sup> /s)
Flow (From)	Unit Hydrograph (Onsite Runoff)	12,348.000	6,565.000	0.25
Flow (In)	Infiltration Basin	600.120	810.000	0.03

## Index

### C

Composite Outlet Structure - 1 (Outlet Input Data)...

### I

Infiltration Basin (Elevation vs. Volume Curve)...

Infiltration Basin (Elevation-Volume-Flow Table (Pond))...

Infiltration Basin (IN) (Level Pool Pond Routing Summary)...

Infiltration Basin (IN) (Pond Inflow Summary)...

Infiltration Basin (IN) (Time vs. Elevation)...

Infiltration Basin (Time vs. Volume)...

### M

Master Network Summary...3

### U

Unit Hydrograph (Onsite Runoff) (Read Hydrograph)...

User Notifications...2

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Project Summary

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Title	JD Fields Hemet
Engineer	Shea-Michael Anti, P.E.
Company	Kimley-Horn and Associates, Inc.
Date	10/14/2021

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Notes

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## Table of Contents

	User Notifications	2
	Master Network Summary	3
Unit Hydrograph (Onsite Runoff)	Read Hydrograph	4
Infiltration Basin (IN)	Time vs. Elevation	5
Infiltration Basin	Time vs. Volume	8
Infiltration Basin	Elevation vs. Volume Curve	11
Composite Outlet Structure - 1	Outlet Input Data	12
Infiltration Basin		
	Elevation-Volume-Flow Table (Pond)	14
Infiltration Basin (IN)		
	Level Pool Pond Routing Summary	15
	Pond Inflow Summary	16

Subsection: User Notifications

**User Notifications**

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Message Id	40
Scenario	Base
Element Type	Pond
Element Id	16
Label	Infiltration Basin
Time	(N/A)
Message	Mass balance for routing volumes vary by more than 0.5 %. (4.4 % of Inflow Volume))
Source	Warning

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Subsection: Master Network Summary

**Catchments Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Unit Hydrograph (Onsite Runoff)	Base	0	52,494.000	885.000	12.27

**Node Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Outfall (POC)	Base	0	0.000	0.000	0.00

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft <sup>3</sup> )
Infiltration Basin (IN)	Base	0	58,256.000	885.000	12.27	(N/A)	(N/A)
Infiltration Basin (OUT)	Base	0	0.000	0.000	0.00	1,542.07	44,562.000

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

Peak Discharge	12.27 ft <sup>3</sup> /s
Time to Peak	885.000 min
Hydrograph Volume	52,494.000 ft <sup>3</sup>

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**

**Output Time Increment = 5.000 min**

**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
5.000	0.00	0.01	0.01	0.02	0.02
30.000	0.03	0.03	0.03	0.04	0.04
55.000	0.04	0.04	0.04	0.04	0.05
80.000	0.05	0.05	0.05	0.06	0.06
105.000	0.06	0.07	0.07	0.07	0.07
130.000	0.07	0.08	0.09	0.10	0.11
155.000	0.13	0.15	0.15	0.13	0.10
180.000	0.08	0.00	0.01	0.02	0.03
205.000	0.04	0.04	0.05	0.05	0.05
230.000	0.06	0.06	0.06	0.06	0.06
255.000	0.07	0.07	0.08	0.08	0.08
280.000	0.09	0.09	0.10	0.10	0.11
305.000	0.11	0.11	0.12	0.14	0.15
330.000	0.16	0.20	0.22	0.23	0.20
355.000	0.15	0.12	0.00	0.01	0.03
380.000	0.04	0.05	0.05	0.06	0.06
405.000	0.07	0.07	0.07	0.07	0.08
430.000	0.08	0.09	0.09	0.10	0.10
455.000	0.11	0.11	0.12	0.12	0.13
480.000	0.14	0.14	0.14	0.15	0.17
505.000	0.19	0.22	0.32	0.45	0.49
530.000	0.39	0.26	0.20	0.00	0.02
555.000	0.05	0.07	0.09	0.10	0.11
580.000	0.12	0.13	0.14	0.14	0.14
605.000	0.14	0.15	0.17	0.18	0.18
630.000	0.19	0.20	0.21	0.22	0.23
655.000	0.25	0.26	0.26	0.29	0.42
680.000	0.65	0.85	1.21	1.92	2.58
705.000	2.69	2.14	1.39	0.92	0.01
730.000	0.07	0.16	0.24	0.35	0.53
755.000	0.74	0.90	1.01	1.13	1.16
780.000	1.10	1.20	1.50	1.87	2.09
805.000	2.19	2.40	2.77	3.02	3.21
830.000	3.61	4.04	4.22	4.26	4.47
855.000	5.14	6.11	6.93	8.04	10.12
880.000	12.03	12.27	10.20	7.18	5.09
905.000	3.86	2.91	2.20	1.73	1.41
930.000	1.16	0.96	0.00	(N/A)	(N/A)

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
0.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
15.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
30.000	1,537.74	1,537.74	1,537.74	1,537.75	1,537.75
45.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
60.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.76
75.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
90.000	1,537.76	1,537.76	1,537.76	1,537.77	1,537.77
105.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
120.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
135.000	1,537.78	1,537.78	1,537.79	1,537.79	1,537.79
150.000	1,537.79	1,537.80	1,537.80	1,537.80	1,537.80
165.000	1,537.81	1,537.81	1,537.81	1,537.82	1,537.82
180.000	1,537.82	1,537.82	1,537.82	1,537.82	1,537.82
195.000	1,537.82	1,537.82	1,537.82	1,537.82	1,537.82
210.000	1,537.82	1,537.82	1,537.82	1,537.82	1,537.82
225.000	1,537.82	1,537.82	1,537.82	1,537.82	1,537.82
240.000	1,537.82	1,537.82	1,537.82	1,537.82	1,537.82
255.000	1,537.82	1,537.83	1,537.83	1,537.83	1,537.83
270.000	1,537.83	1,537.83	1,537.83	1,537.83	1,537.83
285.000	1,537.83	1,537.84	1,537.84	1,537.84	1,537.84
300.000	1,537.84	1,537.84	1,537.85	1,537.85	1,537.85
315.000	1,537.85	1,537.85	1,537.86	1,537.86	1,537.86
330.000	1,537.86	1,537.87	1,537.87	1,537.87	1,537.88
345.000	1,537.88	1,537.89	1,537.89	1,537.89	1,537.89
360.000	1,537.90	1,537.90	1,537.90	1,537.89	1,537.89
375.000	1,537.89	1,537.89	1,537.89	1,537.89	1,537.89
390.000	1,537.89	1,537.89	1,537.89	1,537.89	1,537.89
405.000	1,537.89	1,537.89	1,537.89	1,537.89	1,537.89
420.000	1,537.89	1,537.89	1,537.89	1,537.89	1,537.89
435.000	1,537.89	1,537.89	1,537.89	1,537.89	1,537.89
450.000	1,537.89	1,537.89	1,537.90	1,537.90	1,537.90
465.000	1,537.90	1,537.90	1,537.90	1,537.90	1,537.90
480.000	1,537.91	1,537.91	1,537.91	1,537.91	1,537.91
495.000	1,537.91	1,537.92	1,537.92	1,537.92	1,537.92
510.000	1,537.93	1,537.93	1,537.94	1,537.95	1,537.96
525.000	1,537.97	1,537.97	1,537.98	1,537.99	1,537.99
540.000	1,537.99	1,538.00	1,537.99	1,537.99	1,537.99
555.000	1,537.99	1,537.99	1,537.98	1,537.98	1,537.98
570.000	1,537.98	1,537.98	1,537.98	1,537.98	1,537.98
585.000	1,537.98	1,537.98	1,537.98	1,537.99	1,537.99
600.000	1,537.99	1,537.99	1,537.99	1,537.99	1,537.99
615.000	1,537.99	1,537.99	1,538.00	1,538.00	1,538.00
630.000	1,538.00	1,538.00	1,538.00	1,538.01	1,538.01

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
645.000	1,538.01	1,538.01	1,538.02	1,538.02	1,538.02
660.000	1,538.03	1,538.03	1,538.03	1,538.04	1,538.04
675.000	1,538.05	1,538.06	1,538.07	1,538.09	1,538.11
690.000	1,538.13	1,538.16	1,538.21	1,538.26	1,538.32
705.000	1,538.39	1,538.45	1,538.50	1,538.54	1,538.57
720.000	1,538.60	1,538.61	1,538.61	1,538.60	1,538.60
735.000	1,538.60	1,538.59	1,538.59	1,538.60	1,538.60
750.000	1,538.61	1,538.62	1,538.63	1,538.65	1,538.66
765.000	1,538.68	1,538.71	1,538.73	1,538.75	1,538.77
780.000	1,538.80	1,538.82	1,538.84	1,538.87	1,538.90
795.000	1,538.94	1,538.98	1,539.02	1,539.07	1,539.12
810.000	1,539.17	1,539.22	1,539.28	1,539.34	1,539.40
825.000	1,539.46	1,539.53	1,539.60	1,539.68	1,539.76
840.000	1,539.84	1,539.92	1,540.00	1,540.08	1,540.17
855.000	1,540.26	1,540.35	1,540.46	1,540.57	1,540.70
870.000	1,540.81	1,540.94	1,541.08	1,541.24	1,541.38
885.000	1,541.52	1,541.66	1,541.76	1,541.82	1,541.87
900.000	1,541.90	1,541.93	1,541.96	1,541.98	1,542.00
915.000	1,542.01	1,542.03	1,542.04	1,542.05	1,542.06
930.000	1,542.06	1,542.07	1,542.07	1,542.07	1,542.07
945.000	1,542.07	1,542.07	1,542.07	1,542.07	1,542.07
960.000	1,542.07	1,542.07	1,542.07	1,542.07	1,542.07
975.000	1,542.07	1,542.07	1,542.07	1,542.07	1,542.07
990.000	1,542.07	1,542.07	1,542.07	1,542.07	1,542.07
1,005.000	1,542.07	1,542.07	1,542.07	1,542.07	1,542.07
1,020.000	1,542.07	1,542.07	1,542.07	1,542.07	1,542.07
1,035.000	1,542.07	1,542.07	1,542.07	1,542.07	1,542.07
1,050.000	1,542.07	1,542.07	1,542.07	1,542.07	1,542.06
1,065.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.06
1,080.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.06
1,095.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.06
1,110.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.06
1,125.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.06
1,140.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.06
1,155.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.06
1,170.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.06
1,185.000	1,542.06	1,542.06	1,542.06	1,542.06	1,542.05
1,200.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.05
1,215.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.05
1,230.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.05
1,245.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.05
1,260.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.05
1,275.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.05

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
1,290.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.05
1,305.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.05
1,320.000	1,542.05	1,542.05	1,542.05	1,542.05	1,542.04
1,335.000	1,542.04	1,542.04	1,542.04	1,542.04	1,542.04
1,350.000	1,542.04	1,542.04	1,542.04	1,542.04	1,542.04
1,365.000	1,542.04	1,542.04	1,542.04	1,542.04	1,542.04
1,380.000	1,542.04	1,542.04	1,542.04	1,542.04	1,542.04
1,395.000	1,542.04	1,542.04	1,542.04	1,542.04	1,542.04
1,410.000	1,542.04	1,542.04	1,542.04	1,542.04	1,542.04
1,425.000	1,542.04	1,542.04	1,542.04	1,542.04	1,542.04
1,440.000	1,542.04	(N/A)	(N/A)	(N/A)	(N/A)

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
0.000	0.000	0.000	0.000	1.000	3.000
15.000	4.000	7.000	10.000	13.000	17.000
30.000	22.000	27.000	32.000	37.000	42.000
45.000	48.000	55.000	61.000	68.000	74.000
60.000	80.000	87.000	93.000	99.000	105.000
75.000	112.000	120.000	127.000	135.000	142.000
90.000	149.000	157.000	165.000	174.000	183.000
105.000	191.000	200.000	210.000	220.000	230.000
120.000	240.000	250.000	259.000	268.000	278.000
135.000	289.000	300.000	312.000	326.000	340.000
150.000	355.000	371.000	390.000	410.000	432.000
165.000	453.000	474.000	492.000	506.000	518.000
180.000	527.000	531.000	528.000	522.000	518.000
195.000	515.000	513.000	512.000	512.000	513.000
210.000	514.000	515.000	518.000	521.000	523.000
225.000	526.000	529.000	533.000	538.000	542.000
240.000	546.000	551.000	555.000	559.000	563.000
255.000	568.000	574.000	580.000	587.000	594.000
270.000	601.000	608.000	615.000	623.000	632.000
285.000	640.000	649.000	659.000	669.000	679.000
300.000	690.000	702.000	713.000	724.000	736.000
315.000	748.000	761.000	777.000	793.000	811.000
330.000	829.000	850.000	875.000	902.000	930.000
345.000	960.000	988.000	1,012.000	1,031.000	1,046.000
360.000	1,056.000	1,059.000	1,051.000	1,039.000	1,029.000
375.000	1,021.000	1,015.000	1,010.000	1,006.000	1,002.000
390.000	999.000	997.000	995.000	994.000	993.000
405.000	994.000	994.000	995.000	996.000	996.000
420.000	997.000	998.000	1,000.000	1,002.000	1,005.000
435.000	1,009.000	1,013.000	1,017.000	1,022.000	1,027.000
450.000	1,033.000	1,039.000	1,046.000	1,053.000	1,061.000
465.000	1,069.000	1,078.000	1,087.000	1,096.000	1,106.000
480.000	1,118.000	1,129.000	1,141.000	1,152.000	1,164.000
495.000	1,176.000	1,190.000	1,206.000	1,224.000	1,244.000
510.000	1,267.000	1,296.000	1,337.000	1,390.000	1,453.000
525.000	1,521.000	1,585.000	1,637.000	1,676.000	1,702.000
540.000	1,721.000	1,726.000	1,713.000	1,694.000	1,678.000
555.000	1,665.000	1,656.000	1,648.000	1,643.000	1,639.000
570.000	1,637.000	1,636.000	1,636.000	1,637.000	1,639.000
585.000	1,642.000	1,646.000	1,651.000	1,657.000	1,662.000
600.000	1,667.000	1,672.000	1,678.000	1,684.000	1,691.000
615.000	1,700.000	1,711.000	1,722.000	1,734.000	1,746.000
630.000	1,758.000	1,772.000	1,786.000	1,802.000	1,818.000

**Time vs. Volume (ft³)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft³)				
645.000	1,835.000	1,853.000	1,872.000	1,893.000	1,915.000
660.000	1,938.000	1,962.000	1,985.000	2,011.000	2,043.000
675.000	2,087.000	2,149.000	2,235.000	2,343.000	2,477.000
690.000	2,644.000	2,868.000	3,164.000	3,530.000	3,946.000
705.000	4,383.000	4,797.000	5,148.000	5,426.000	5,632.000
720.000	5,782.000	5,858.000	5,854.000	5,820.000	5,794.000
735.000	5,778.000	5,771.000	5,772.000	5,785.000	5,812.000
750.000	5,857.000	5,923.000	6,011.000	6,118.000	6,241.000
765.000	6,376.000	6,524.000	6,683.000	6,840.000	6,990.000
780.000	7,135.000	7,282.000	7,443.000	7,626.000	7,840.000
795.000	8,090.000	8,369.000	8,700.000	9,080.000	9,477.000
810.000	9,897.000	10,351.000	10,814.000	11,295.000	11,800.000
825.000	12,327.000	12,886.000	13,489.000	14,137.000	14,804.000
840.000	15,450.000	16,106.000	16,769.000	17,587.000	18,448.000
855.000	19,360.000	20,297.000	21,336.000	22,469.000	23,701.000
870.000	24,872.000	26,096.000	27,886.000	30,249.000	32,360.000
885.000	34,515.000	36,571.000	38,127.000	38,988.000	39,683.000
900.000	40,242.000	40,699.000	41,084.000	41,405.000	41,673.000
915.000	42,250.000	42,736.000	43,151.000	43,507.000	43,816.000
930.000	44,083.000	44,315.000	44,495.000	44,562.000	44,554.000
945.000	44,545.000	44,536.000	44,528.000	44,519.000	44,510.000
960.000	44,501.000	44,493.000	44,484.000	44,475.000	44,466.000
975.000	44,458.000	44,449.000	44,440.000	44,431.000	44,423.000
990.000	44,414.000	44,405.000	44,396.000	44,388.000	44,379.000
1,005.000	44,370.000	44,361.000	44,353.000	44,344.000	44,335.000
1,020.000	44,327.000	44,318.000	44,309.000	44,300.000	44,292.000
1,035.000	44,283.000	44,274.000	44,265.000	44,257.000	44,248.000
1,050.000	44,239.000	44,230.000	44,222.000	44,213.000	44,204.000
1,065.000	44,195.000	44,187.000	44,178.000	44,169.000	44,160.000
1,080.000	44,152.000	44,143.000	44,134.000	44,126.000	44,117.000
1,095.000	44,108.000	44,099.000	44,091.000	44,082.000	44,073.000
1,110.000	44,064.000	44,056.000	44,047.000	44,038.000	44,029.000
1,125.000	44,021.000	44,012.000	44,003.000	43,994.000	43,986.000
1,140.000	43,977.000	43,968.000	43,959.000	43,951.000	43,942.000
1,155.000	43,933.000	43,925.000	43,916.000	43,907.000	43,898.000
1,170.000	43,890.000	43,881.000	43,872.000	43,863.000	43,855.000
1,185.000	43,846.000	43,837.000	43,828.000	43,820.000	43,811.000
1,200.000	43,802.000	43,793.000	43,785.000	43,776.000	43,767.000
1,215.000	43,758.000	43,750.000	43,741.000	43,732.000	43,724.000
1,230.000	43,715.000	43,706.000	43,697.000	43,689.000	43,680.000
1,245.000	43,671.000	43,662.000	43,654.000	43,645.000	43,636.000
1,260.000	43,627.000	43,619.000	43,610.000	43,601.000	43,592.000
1,275.000	43,584.000	43,575.000	43,566.000	43,557.000	43,549.000

Subsection: Time vs. Volume  
 Label: Infiltration Basin

Scenario: Base

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
1,290.000	43,540.000	43,531.000	43,522.000	43,514.000	43,505.000
1,305.000	43,496.000	43,488.000	43,479.000	43,470.000	43,461.000
1,320.000	43,453.000	43,444.000	43,435.000	43,426.000	43,418.000
1,335.000	43,409.000	43,400.000	43,391.000	43,383.000	43,374.000
1,350.000	43,365.000	43,356.000	43,348.000	43,339.000	43,330.000
1,365.000	43,321.000	43,313.000	43,304.000	43,295.000	43,287.000
1,380.000	43,278.000	43,269.000	43,260.000	43,252.000	43,243.000
1,395.000	43,234.000	43,225.000	43,217.000	43,208.000	43,199.000
1,410.000	43,190.000	43,182.000	43,173.000	43,164.000	43,155.000
1,425.000	43,147.000	43,138.000	43,129.000	43,120.000	43,112.000
1,440.000	43,103.000	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation vs. Volume Curve  
Label: Infiltration Basin

Scenario: Base

### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft <sup>3</sup> )
1,537.74	0.000
1,538.00	1,754.750
1,539.00	8,515.070
1,540.00	16,770.050
1,541.00	26,728.200
1,542.00	41,675.180
1,543.00	80,599.530

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,537.74 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,543.00 ft

**Outlet Connectivity**

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	1,542.88 (N/A)	1,543.00 (N/A)

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Structure ID: Weir - 1	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,542.88 ft
Weir Length	2.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Infiltration Basin

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s

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Initial Conditions	
Elevation (Water Surface, Initial)	1,537.74 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ft <sup>3</sup> )	Area (ft <sup>2</sup> )	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
1,537.74	0.00	0.000	0	0.00	0.00	0.00
1,538.24	0.00	3,377.227	0	0.23	0.23	37.75
1,538.74	0.00	6,757.387	0	0.23	0.23	75.31
1,539.24	0.00	10,496.265	0	0.23	0.23	116.85
1,539.74	0.00	14,623.755	0	0.23	0.23	162.71
1,540.24	0.00	19,160.006	0	0.23	0.23	213.11
1,540.74	0.00	24,139.081	0	0.23	0.23	268.44
1,541.24	0.00	30,315.475	0	0.23	0.23	337.06
1,541.74	0.00	37,788.965	0	0.23	0.23	420.10
1,542.24	0.00	51,017.024	0	0.23	0.23	567.08
1,542.74	0.00	70,479.199	0	0.23	0.23	783.33
1,542.88	0.00	75,928.608	0	0.23	0.23	843.88
1,543.00	0.25	80,599.530	0	0.23	0.47	896.02

Subsection: Level Pool Pond Routing Summary  
 Label: Infiltration Basin (IN)

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s

Initial Conditions	
Elevation (Water Surface, Initial)	1,537.74 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	12.27 ft <sup>3</sup> /s	Time to Peak (Flow, In)	885.000 min
Infiltration (Peak)	0.23 ft <sup>3</sup> /s	Time to Peak (Infiltration)	699.000 min
Flow (Peak Outlet)	0.00 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	0.000 min

Elevation (Water Surface, Peak)	1,542.07 ft
Volume (Peak)	44,562.483 ft <sup>3</sup>

Mass Balance (ft <sup>3</sup> )	
Volume (Initial)	0.000 ft <sup>3</sup>
Volume (Total Inflow)	58,256.000 ft <sup>3</sup>
Volume (Total Infiltration)	12,659.000 ft <sup>3</sup>
Volume (Total Outlet Outflow)	0.000 ft <sup>3</sup>
Volume (Retained)	43,043.000 ft <sup>3</sup>
Volume (Unrouted)	-2,554.000 ft <sup>3</sup>
Error (Mass Balance)	4.4 %

Subsection: Pond Inflow Summary  
Label: Infiltration Basin (IN)

Scenario: Base

### Summary for Hydrograph Addition at 'Infiltration Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Unit Hydrograph (Onsite Runoff)

### Node Inflows

Inflow Type	Element	Volume (ft <sup>3</sup> )	Time to Peak (min)	Flow (Peak) (ft <sup>3</sup> /s)
Flow (From)	Unit Hydrograph (Onsite Runoff)	52,494.000	885.000	12.27
Flow (In)	Infiltration Basin	58,256.280	885.000	12.27

## Index

### C

Composite Outlet Structure - 1 (Outlet Input Data)...

### I

Infiltration Basin (Elevation vs. Volume Curve)...

Infiltration Basin (Elevation-Volume-Flow Table (Pond))...

Infiltration Basin (IN) (Level Pool Pond Routing Summary)...

Infiltration Basin (IN) (Pond Inflow Summary)...

Infiltration Basin (IN) (Time vs. Elevation)...

Infiltration Basin (Time vs. Volume)...

### M

Master Network Summary...3

### U

Unit Hydrograph (Onsite Runoff) (Read Hydrograph)...

User Notifications...2

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Project Summary

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Title	JD Fields Hemet
Engineer	Shea-Michael Anti, P.E.
Company	Kimley-Horn and Associates, Inc.
Date	10/14/2021

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Notes

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## Table of Contents

	User Notifications	2
	Master Network Summary	3
Unit Hydrograph (Onsite Runoff)	Read Hydrograph	4
Infiltration Basin (IN)	Time vs. Elevation	6
Infiltration Basin	Time vs. Volume	9
Infiltration Basin	Elevation vs. Volume Curve	12
Composite Outlet Structure - 1	Outlet Input Data	13
Infiltration Basin		
	Elevation-Volume-Flow Table (Pond)	15
Infiltration Basin (IN)		
	Level Pool Pond Routing Summary	16
	Pond Inflow Summary	17

Subsection: User Notifications

User Notifications?	No user notifications generated.
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Subsection: Master Network Summary

**Catchments Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Unit Hydrograph (Onsite Runoff)	Base	0	16,515.000	1,415.000	2.00

**Node Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Outfall (POC)	Base	0	0.000	0.000	0.00

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft <sup>3</sup> )
Infiltration Basin (IN)	Base	0	10,015.000	1,416.000	1.98	(N/A)	(N/A)
Infiltration Basin (OUT)	Base	0	0.000	0.000	0.00	1,538.45	4,765.000

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

Peak Discharge	2.00 ft <sup>3</sup> /s
Time to Peak	1,415.000 min
Hydrograph Volume	16,515.000 ft <sup>3</sup>

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**

**Output Time Increment = 5.000 min**

**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
5.000	0.00	0.00	0.01	0.01	0.01
30.000	0.02	0.02	0.02	0.02	0.02
55.000	0.02	0.02	0.02	0.02	0.02
80.000	0.02	0.03	0.03	0.03	0.03
105.000	0.03	0.03	0.03	0.03	0.03
130.000	0.03	0.03	0.03	0.03	0.03
155.000	0.03	0.03	0.03	0.03	0.03
180.000	0.03	0.03	0.03	0.03	0.03
205.000	0.03	0.04	0.04	0.04	0.04
230.000	0.04	0.05	0.05	0.05	0.05
255.000	0.05	0.06	0.06	0.06	0.06
280.000	0.07	0.07	0.07	0.07	0.08
305.000	0.08	0.08	0.09	0.10	0.11
330.000	0.12	0.13	0.13	0.10	0.07
355.000	0.05	0.04	0.00	0.01	0.01
380.000	0.02	0.02	0.02	0.03	0.03
405.000	0.03	0.03	0.03	0.03	0.03
430.000	0.04	0.04	0.04	0.04	0.04
455.000	0.04	0.04	0.04	0.04	0.04
480.000	0.04	0.04	0.04	0.04	0.04
505.000	0.04	0.04	0.04	0.04	0.04
530.000	0.05	0.05	0.05	0.05	0.05
555.000	0.05	0.05	0.05	0.05	0.06
580.000	0.06	0.06	0.07	0.07	0.07
605.000	0.07	0.08	0.08	0.08	0.09
630.000	0.09	0.10	0.10	0.10	0.11
655.000	0.11	0.11	0.12	0.13	0.14
680.000	0.15	0.17	0.19	0.20	0.19
705.000	0.15	0.11	0.08	0.06	0.00
730.000	0.01	0.02	0.02	0.03	0.03
755.000	0.03	0.04	0.04	0.04	0.04
780.000	0.04	0.04	0.04	0.05	0.05
805.000	0.05	0.05	0.05	0.05	0.05
830.000	0.05	0.05	0.05	0.05	0.05
855.000	0.05	0.05	0.05	0.06	0.06
880.000	0.06	0.06	0.06	0.06	0.06
905.000	0.06	0.06	0.06	0.06	0.07
930.000	0.07	0.07	0.08	0.08	0.08
955.000	0.09	0.09	0.09	0.10	0.10

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
980.000	0.11	0.11	0.12	0.12	0.12
1,005.000	0.13	0.13	0.14	0.14	0.15
1,030.000	0.16	0.18	0.20	0.21	0.25
1,055.000	0.29	0.30	0.23	0.16	0.12
1,080.000	0.09	0.00	0.01	0.03	0.04
1,105.000	0.05	0.06	0.06	0.07	0.07
1,130.000	0.07	0.08	0.08	0.08	0.08
1,155.000	0.09	0.09	0.09	0.09	0.09
1,180.000	0.09	0.09	0.09	0.09	0.09
1,205.000	0.10	0.10	0.10	0.10	0.10
1,230.000	0.10	0.10	0.11	0.11	0.11
1,255.000	0.11	0.11	0.12	0.12	0.12
1,280.000	0.12	0.13	0.13	0.14	0.14
1,305.000	0.15	0.16	0.16	0.17	0.18
1,330.000	0.18	0.19	0.20	0.21	0.22
1,355.000	0.23	0.24	0.25	0.25	0.26
1,380.000	0.27	0.30	0.41	0.64	0.95
1,405.000	1.28	1.66	2.00	1.90	1.30
1,430.000	0.80	0.56	0.44	0.01	0.03
1,455.000	0.08	0.12	0.14	0.16	0.17
1,480.000	0.18	0.20	0.20	0.21	0.21
1,505.000	0.22	0.23	0.24	0.25	0.25
1,530.000	0.25	0.26	0.26	0.26	0.26
1,555.000	0.26	0.26	0.27	0.27	0.28
1,580.000	0.28	0.29	0.29	0.29	0.29
1,605.000	0.30	0.31	0.34	0.36	0.37
1,630.000	0.39	0.44	0.53	0.61	0.71
1,655.000	0.88	1.09	1.29	1.46	1.63
1,680.000	1.80	1.96	0.00	(N/A)	(N/A)

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
0.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
15.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
30.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
45.000	1,537.70	1,537.71	1,537.71	1,537.71	1,537.71
60.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
75.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
90.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.72
105.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
120.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
135.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
150.000	1,537.72	1,537.73	1,537.73	1,537.73	1,537.73
165.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
180.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
195.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
210.000	1,537.73	1,537.74	1,537.74	1,537.74	1,537.74
225.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
240.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.75
255.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
270.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.76
285.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
300.000	1,537.76	1,537.77	1,537.77	1,537.77	1,537.77
315.000	1,537.77	1,537.77	1,537.78	1,537.78	1,537.78
330.000	1,537.78	1,537.78	1,537.79	1,537.79	1,537.79
345.000	1,537.79	1,537.80	1,537.80	1,537.80	1,537.80
360.000	1,537.80	1,537.80	1,537.80	1,537.79	1,537.79
375.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
390.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
405.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
420.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
435.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
450.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
465.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
480.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
495.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
510.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
525.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
540.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
555.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
570.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
585.000	1,537.79	1,537.79	1,537.79	1,537.80	1,537.80
600.000	1,537.80	1,537.80	1,537.80	1,537.80	1,537.80
615.000	1,537.80	1,537.80	1,537.80	1,537.80	1,537.81
630.000	1,537.81	1,537.81	1,537.81	1,537.81	1,537.81

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
645.000	1,537.81	1,537.82	1,537.82	1,537.82	1,537.82
660.000	1,537.82	1,537.82	1,537.83	1,537.83	1,537.83
675.000	1,537.83	1,537.83	1,537.84	1,537.84	1,537.84
690.000	1,537.85	1,537.85	1,537.85	1,537.86	1,537.86
705.000	1,537.86	1,537.86	1,537.87	1,537.87	1,537.87
720.000	1,537.87	1,537.87	1,537.86	1,537.86	1,537.86
735.000	1,537.86	1,537.86	1,537.86	1,537.85	1,537.85
750.000	1,537.85	1,537.85	1,537.85	1,537.85	1,537.85
765.000	1,537.85	1,537.85	1,537.85	1,537.84	1,537.84
780.000	1,537.84	1,537.84	1,537.84	1,537.84	1,537.84
795.000	1,537.84	1,537.84	1,537.84	1,537.84	1,537.84
810.000	1,537.84	1,537.84	1,537.84	1,537.84	1,537.84
825.000	1,537.84	1,537.84	1,537.84	1,537.84	1,537.84
840.000	1,537.84	1,537.83	1,537.83	1,537.83	1,537.83
855.000	1,537.83	1,537.83	1,537.83	1,537.83	1,537.83
870.000	1,537.83	1,537.83	1,537.83	1,537.83	1,537.83
885.000	1,537.83	1,537.83	1,537.83	1,537.83	1,537.83
900.000	1,537.83	1,537.83	1,537.83	1,537.83	1,537.83
915.000	1,537.83	1,537.83	1,537.83	1,537.83	1,537.83
930.000	1,537.83	1,537.83	1,537.83	1,537.83	1,537.83
945.000	1,537.84	1,537.84	1,537.84	1,537.84	1,537.84
960.000	1,537.84	1,537.84	1,537.84	1,537.84	1,537.84
975.000	1,537.84	1,537.84	1,537.85	1,537.85	1,537.85
990.000	1,537.85	1,537.85	1,537.85	1,537.85	1,537.86
1,005.000	1,537.86	1,537.86	1,537.86	1,537.86	1,537.86
1,020.000	1,537.87	1,537.87	1,537.87	1,537.87	1,537.88
1,035.000	1,537.88	1,537.88	1,537.88	1,537.89	1,537.89
1,050.000	1,537.90	1,537.90	1,537.91	1,537.91	1,537.92
1,065.000	1,537.92	1,537.93	1,537.93	1,537.93	1,537.93
1,080.000	1,537.93	1,537.93	1,537.93	1,537.92	1,537.92
1,095.000	1,537.92	1,537.92	1,537.91	1,537.91	1,537.91
1,110.000	1,537.91	1,537.91	1,537.91	1,537.91	1,537.91
1,125.000	1,537.91	1,537.91	1,537.90	1,537.90	1,537.90
1,140.000	1,537.90	1,537.90	1,537.90	1,537.90	1,537.90
1,155.000	1,537.90	1,537.90	1,537.90	1,537.90	1,537.90
1,170.000	1,537.90	1,537.90	1,537.90	1,537.90	1,537.90
1,185.000	1,537.90	1,537.90	1,537.90	1,537.90	1,537.90
1,200.000	1,537.90	1,537.90	1,537.90	1,537.90	1,537.90
1,215.000	1,537.90	1,537.90	1,537.90	1,537.90	1,537.90
1,230.000	1,537.90	1,537.90	1,537.90	1,537.91	1,537.91
1,245.000	1,537.91	1,537.91	1,537.91	1,537.91	1,537.91
1,260.000	1,537.91	1,537.91	1,537.91	1,537.91	1,537.91
1,275.000	1,537.91	1,537.91	1,537.91	1,537.91	1,537.92

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
1,290.000	1,537.92	1,537.92	1,537.92	1,537.92	1,537.92
1,305.000	1,537.92	1,537.92	1,537.93	1,537.93	1,537.93
1,320.000	1,537.93	1,537.93	1,537.93	1,537.94	1,537.94
1,335.000	1,537.94	1,537.94	1,537.95	1,537.95	1,537.95
1,350.000	1,537.95	1,537.96	1,537.96	1,537.96	1,537.97
1,365.000	1,537.97	1,537.98	1,537.98	1,537.98	1,537.99
1,380.000	1,537.99	1,537.99	1,538.00	1,538.01	1,538.01
1,395.000	1,538.03	1,538.04	1,538.07	1,538.09	1,538.13
1,410.000	1,538.17	1,538.21	1,538.25	1,538.30	1,538.34
1,425.000	1,538.38	1,538.40	1,538.42	1,538.43	1,538.44
1,440.000	1,538.45	(N/A)	(N/A)	(N/A)	(N/A)

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
0.000	0.000	0.000	0.000	0.000	0.000
15.000	2.000	3.000	5.000	6.000	8.000
30.000	11.000	14.000	18.000	21.000	24.000
45.000	27.000	30.000	33.000	36.000	39.000
60.000	42.000	44.000	47.000	50.000	53.000
75.000	55.000	58.000	61.000	64.000	68.000
90.000	72.000	77.000	81.000	85.000	89.000
105.000	92.000	96.000	100.000	104.000	108.000
120.000	111.000	115.000	118.000	122.000	125.000
135.000	129.000	132.000	136.000	139.000	142.000
150.000	145.000	148.000	152.000	155.000	158.000
165.000	161.000	164.000	167.000	170.000	172.000
180.000	175.000	178.000	181.000	183.000	186.000
195.000	189.000	191.000	194.000	196.000	199.000
210.000	203.000	207.000	211.000	215.000	219.000
225.000	223.000	227.000	231.000	235.000	241.000
240.000	246.000	251.000	256.000	261.000	266.000
255.000	271.000	277.000	283.000	289.000	296.000
270.000	302.000	308.000	314.000	321.000	329.000
285.000	336.000	344.000	351.000	358.000	366.000
300.000	374.000	383.000	391.000	400.000	408.000
315.000	418.000	428.000	439.000	451.000	464.000
330.000	477.000	492.000	507.000	522.000	537.000
345.000	548.000	556.000	561.000	564.000	565.000
360.000	565.000	563.000	557.000	551.000	545.000
375.000	540.000	535.000	531.000	527.000	524.000
390.000	520.000	518.000	516.000	514.000	512.000
405.000	511.000	509.000	508.000	506.000	505.000
420.000	503.000	502.000	500.000	500.000	500.000
435.000	500.000	500.000	501.000	501.000	501.000
450.000	501.000	502.000	502.000	502.000	502.000
465.000	503.000	503.000	503.000	503.000	503.000
480.000	504.000	504.000	504.000	504.000	505.000
495.000	505.000	505.000	505.000	505.000	505.000
510.000	506.000	506.000	506.000	506.000	506.000
525.000	507.000	507.000	509.000	511.000	512.000
540.000	514.000	516.000	518.000	519.000	521.000
555.000	523.000	524.000	526.000	528.000	529.000
570.000	531.000	533.000	536.000	539.000	542.000
585.000	545.000	549.000	553.000	558.000	562.000
600.000	567.000	571.000	576.000	581.000	587.000
615.000	592.000	598.000	604.000	611.000	618.000
630.000	625.000	632.000	641.000	649.000	658.000

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
645.000	666.000	675.000	684.000	694.000	703.000
660.000	713.000	723.000	733.000	745.000	757.000
675.000	770.000	785.000	800.000	816.000	835.000
690.000	855.000	876.000	898.000	919.000	938.000
705.000	953.000	964.000	971.000	974.000	975.000
720.000	974.000	968.000	958.000	946.000	936.000
735.000	926.000	918.000	909.000	902.000	895.000
750.000	889.000	882.000	876.000	870.000	866.000
765.000	861.000	857.000	852.000	848.000	844.000
780.000	840.000	836.000	831.000	827.000	824.000
795.000	821.000	819.000	817.000	814.000	812.000
810.000	810.000	808.000	806.000	804.000	802.000
825.000	800.000	798.000	796.000	794.000	792.000
840.000	791.000	789.000	787.000	785.000	783.000
855.000	782.000	780.000	778.000	777.000	775.000
870.000	775.000	775.000	775.000	775.000	775.000
885.000	775.000	775.000	775.000	775.000	775.000
900.000	776.000	776.000	776.000	776.000	776.000
915.000	776.000	776.000	776.000	777.000	779.000
930.000	780.000	782.000	784.000	786.000	789.000
945.000	793.000	796.000	799.000	803.000	808.000
960.000	812.000	817.000	822.000	827.000	833.000
975.000	839.000	846.000	853.000	860.000	868.000
990.000	876.000	885.000	894.000	903.000	911.000
1,005.000	921.000	931.000	941.000	952.000	963.000
1,020.000	974.000	985.000	997.000	1,011.000	1,025.000
1,035.000	1,041.000	1,059.000	1,078.000	1,099.000	1,121.000
1,050.000	1,147.000	1,176.000	1,208.000	1,242.000	1,274.000
1,065.000	1,300.000	1,318.000	1,330.000	1,336.000	1,339.000
1,080.000	1,338.000	1,331.000	1,317.000	1,301.000	1,286.000
1,095.000	1,274.000	1,263.000	1,253.000	1,244.000	1,237.000
1,110.000	1,231.000	1,225.000	1,219.000	1,214.000	1,210.000
1,125.000	1,206.000	1,202.000	1,199.000	1,196.000	1,194.000
1,140.000	1,192.000	1,190.000	1,188.000	1,186.000	1,184.000
1,155.000	1,184.000	1,183.000	1,183.000	1,183.000	1,183.000
1,170.000	1,183.000	1,183.000	1,182.000	1,182.000	1,182.000
1,185.000	1,182.000	1,182.000	1,182.000	1,181.000	1,181.000
1,200.000	1,181.000	1,182.000	1,183.000	1,184.000	1,186.000
1,215.000	1,187.000	1,189.000	1,190.000	1,192.000	1,193.000
1,230.000	1,194.000	1,196.000	1,197.000	1,199.000	1,202.000
1,245.000	1,205.000	1,208.000	1,211.000	1,214.000	1,217.000
1,260.000	1,219.000	1,223.000	1,227.000	1,231.000	1,235.000
1,275.000	1,239.000	1,244.000	1,248.000	1,253.000	1,258.000

Subsection: Time vs. Volume  
 Label: Infiltration Basin

Scenario: Base

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
1,290.000	1,264.000	1,270.000	1,277.000	1,284.000	1,291.000
1,305.000	1,299.000	1,308.000	1,317.000	1,327.000	1,337.000
1,320.000	1,348.000	1,360.000	1,372.000	1,385.000	1,397.000
1,335.000	1,411.000	1,425.000	1,440.000	1,456.000	1,473.000
1,350.000	1,490.000	1,508.000	1,527.000	1,547.000	1,568.000
1,365.000	1,589.000	1,610.000	1,632.000	1,654.000	1,676.000
1,380.000	1,699.000	1,724.000	1,753.000	1,796.000	1,856.000
1,395.000	1,939.000	2,053.000	2,202.000	2,387.000	2,610.000
1,410.000	2,874.000	3,171.000	3,476.000	3,786.000	4,068.000
1,425.000	4,294.000	4,461.000	4,578.000	4,660.000	4,720.000
1,440.000	4,765.000	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation vs. Volume Curve  
Label: Infiltration Basin

Scenario: Base

### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft <sup>3</sup> )
1,537.70	0.000
1,538.00	1,754.750
1,539.00	8,515.070
1,540.00	16,770.050
1,541.00	26,728.200
1,542.00	41,675.180
1,543.00	80,599.530

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,537.70 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,543.00 ft

**Outlet Connectivity**

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	1,542.88 (N/A)	1,543.00 (N/A)

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Structure ID: Weir - 1	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,542.88 ft
Weir Length	2.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Infiltration Basin

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s

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Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ft <sup>3</sup> )	Area (ft <sup>2</sup> )	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
1,537.70	0.00	0.000	0	0.00	0.00	0.00
1,538.20	0.00	3,106.814	0	0.23	0.23	34.75
1,538.70	0.00	6,486.974	0	0.23	0.23	72.30
1,539.20	0.00	10,166.066	0	0.23	0.23	113.18
1,539.70	0.00	14,293.556	0	0.23	0.23	159.04
1,540.20	0.00	18,761.680	0	0.23	0.23	208.69
1,540.70	0.00	23,740.755	0	0.23	0.23	264.01
1,541.20	0.00	29,717.596	0	0.23	0.23	330.42
1,541.70	0.00	37,191.086	0	0.23	0.23	413.46
1,542.20	0.00	49,460.050	0	0.23	0.23	549.78
1,542.70	0.00	68,922.225	0	0.23	0.23	766.03
1,542.88	0.00	75,928.608	0	0.23	0.23	843.88
1,543.00	0.25	80,599.530	0	0.23	0.47	896.02

Subsection: Level Pool Pond Routing Summary  
 Label: Infiltration Basin (IN)

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s

Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.98 ft <sup>3</sup> /s	Time to Peak (Flow, In)	1,416.000 min
Infiltration (Peak)	0.23 ft <sup>3</sup> /s	Time to Peak (Infiltration)	1,413.000 min
Flow (Peak Outlet)	0.00 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	0.000 min

Elevation (Water Surface, Peak)	1,538.45 ft
Volume (Peak)	4,765.155 ft <sup>3</sup>

Mass Balance (ft <sup>3</sup> )	
Volume (Initial)	0.000 ft <sup>3</sup>
Volume (Total Inflow)	10,015.000 ft <sup>3</sup>
Volume (Total Infiltration)	5,291.000 ft <sup>3</sup>
Volume (Total Outlet Outflow)	0.000 ft <sup>3</sup>
Volume (Retained)	4,725.000 ft <sup>3</sup>
Volume (Unrouted)	0.000 ft <sup>3</sup>
Error (Mass Balance)	0.0 %

Subsection: Pond Inflow Summary  
Label: Infiltration Basin (IN)

Scenario: Base

**Summary for Hydrograph Addition at 'Infiltration Basin'**

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Unit Hydrograph (Onsite Runoff)

**Node Inflows**

Inflow Type	Element	Volume (ft <sup>3</sup> )	Time to Peak (min)	Flow (Peak) (ft <sup>3</sup> /s)
Flow (From)	Unit Hydrograph (Onsite Runoff)	16,515.000	1,415.000	2.00
Flow (In)	Infiltration Basin	10,015.200	1,416.000	1.98

## Index

### C

Composite Outlet Structure - 1 (Outlet Input Data)...

### I

Infiltration Basin (Elevation vs. Volume Curve)...

Infiltration Basin (Elevation-Volume-Flow Table (Pond))...

Infiltration Basin (IN) (Level Pool Pond Routing Summary)...

Infiltration Basin (IN) (Pond Inflow Summary)...

Infiltration Basin (IN) (Time vs. Elevation)...

Infiltration Basin (Time vs. Volume)...

### M

Master Network Summary...3

### U

Unit Hydrograph (Onsite Runoff) (Read Hydrograph)...

User Notifications...2

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Project Summary

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Title	JD Fields Hemet
Engineer	Shea-Michael Anti, P.E.
Company	Kimley-Horn and Associates, Inc.
Date	10/14/2021

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Notes

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## Table of Contents

	User Notifications	2
	Master Network Summary	3
Unit Hydrograph (Onsite Runoff)	Read Hydrograph	4
Infiltration Basin (IN)	Time vs. Elevation	11
Infiltration Basin	Time vs. Volume	14
Infiltration Basin	Elevation vs. Volume Curve	17
Composite Outlet Structure - 1	Outlet Input Data	18
Infiltration Basin		
	Elevation-Volume-Flow Table (Pond)	20
Infiltration Basin (IN)		
	Level Pool Pond Routing Summary	21
	Pond Inflow Summary	22

Subsection: User Notifications

User Notifications?	No user notifications generated.
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Subsection: Master Network Summary

**Catchments Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Unit Hydrograph (Onsite Runoff)	Base	0	71,511.000	6,570.000	4.09

**Node Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)
Outfall (POC)	Base	0	0.000	0.000	0.00

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (min)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft <sup>3</sup> )
Infiltration Basin (IN)	Base	0	1,854.000	807.000	0.07	(N/A)	(N/A)
Infiltration Basin (OUT)	Base	0	0.000	0.000	0.00	1,537.80	561.000

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

Peak Discharge	4.09 ft <sup>3</sup> /s
Time to Peak	6,570.000 min
Hydrograph Volume	71,511.000 ft <sup>3</sup>

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**

**Output Time Increment = 5.000 min**

**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
5.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.01	0.01	0.01
55.000	0.01	0.01	0.01	0.01	0.01
80.000	0.01	0.01	0.01	0.01	0.01
105.000	0.01	0.01	0.01	0.01	0.01
130.000	0.01	0.01	0.01	0.01	0.01
155.000	0.01	0.01	0.01	0.01	0.01
180.000	0.01	0.01	0.01	0.01	0.01
205.000	0.01	0.01	0.01	0.01	0.01
230.000	0.01	0.01	0.01	0.01	0.01
255.000	0.01	0.01	0.01	0.01	0.01
280.000	0.01	0.01	0.01	0.01	0.01
305.000	0.02	0.01	0.01	0.01	0.01
330.000	0.01	0.01	0.01	0.02	0.02
355.000	0.02	0.02	0.02	0.02	0.02
380.000	0.02	0.02	0.02	0.02	0.02
405.000	0.02	0.02	0.02	0.02	0.02
430.000	0.02	0.02	0.02	0.02	0.02
455.000	0.02	0.02	0.02	0.02	0.02
480.000	0.02	0.03	0.03	0.03	0.03
505.000	0.03	0.03	0.03	0.03	0.03
530.000	0.03	0.03	0.03	0.03	0.03
555.000	0.04	0.04	0.04	0.04	0.04
580.000	0.04	0.04	0.04	0.04	0.04
605.000	0.04	0.04	0.04	0.03	0.03
630.000	0.03	0.03	0.03	0.04	0.04
655.000	0.04	0.04	0.04	0.04	0.04
680.000	0.04	0.04	0.04	0.04	0.04
705.000	0.04	0.04	0.04	0.04	0.04
730.000	0.04	0.04	0.05	0.05	0.05
755.000	0.05	0.05	0.05	0.05	0.06
780.000	0.06	0.06	0.06	0.06	0.06
805.000	0.07	0.07	0.07	0.06	0.06
830.000	0.05	0.05	0.05	0.05	0.05
855.000	0.05	0.05	0.05	0.05	0.05
880.000	0.05	0.05	0.05	0.05	0.05
905.000	0.05	0.05	0.05	0.05	0.05
930.000	0.05	0.05	0.05	0.04	0.04
955.000	0.04	0.04	0.04	0.03	0.03

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
980.000	0.02	0.02	0.02	0.01	0.01
1,005.000	0.01	0.01	0.01	0.01	0.01
1,030.000	0.01	0.01	0.01	0.01	0.01
1,055.000	0.01	0.01	0.01	0.01	0.01
1,080.000	0.01	0.01	0.01	0.01	0.01
1,105.000	0.01	0.01	0.01	0.01	0.01
1,130.000	0.01	0.01	0.01	0.01	0.01
1,155.000	0.01	0.01	0.01	0.01	0.01
1,180.000	0.01	0.01	0.01	0.01	0.01
1,205.000	0.01	0.01	0.01	0.01	0.01
1,230.000	0.01	0.01	0.01	0.01	0.01
1,255.000	0.01	0.01	0.00	0.01	0.01
1,280.000	0.01	0.01	0.00	0.00	0.00
1,305.000	0.01	0.01	0.01	0.00	0.00
1,330.000	0.00	0.01	0.01	0.01	0.00
1,355.000	0.00	0.00	0.00	0.00	0.00
1,380.000	0.00	0.00	0.00	0.00	0.00
1,405.000	0.00	0.00	0.00	0.00	0.00
1,430.000	0.00	0.00	0.00	0.00	0.00
1,455.000	0.00	0.00	0.01	0.01	0.01
1,480.000	0.01	0.01	0.01	0.01	0.01
1,505.000	0.01	0.01	0.01	0.01	0.01
1,530.000	0.01	0.01	0.01	0.01	0.01
1,555.000	0.01	0.01	0.01	0.01	0.01
1,580.000	0.01	0.01	0.01	0.01	0.01
1,605.000	0.01	0.01	0.01	0.01	0.01
1,630.000	0.01	0.01	0.01	0.02	0.02
1,655.000	0.02	0.02	0.02	0.02	0.02
1,680.000	0.02	0.02	0.02	0.02	0.02
1,705.000	0.02	0.02	0.02	0.02	0.02
1,730.000	0.02	0.02	0.02	0.02	0.02
1,755.000	0.02	0.02	0.02	0.02	0.02
1,780.000	0.02	0.02	0.02	0.02	0.02
1,805.000	0.02	0.02	0.03	0.03	0.03
1,830.000	0.03	0.03	0.03	0.03	0.03
1,855.000	0.03	0.03	0.03	0.03	0.03
1,880.000	0.03	0.03	0.03	0.03	0.03
1,905.000	0.03	0.04	0.04	0.04	0.04
1,930.000	0.04	0.04	0.04	0.04	0.04
1,955.000	0.04	0.05	0.05	0.05	0.05
1,980.000	0.05	0.05	0.05	0.05	0.06
2,005.000	0.06	0.06	0.06	0.06	0.06
2,030.000	0.06	0.06	0.06	0.06	0.06
2,055.000	0.06	0.05	0.05	0.05	0.05

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
2,080.000	0.05	0.05	0.06	0.06	0.06
2,105.000	0.06	0.06	0.06	0.06	0.06
2,130.000	0.06	0.06	0.06	0.06	0.05
2,155.000	0.05	0.05	0.06	0.06	0.06
2,180.000	0.07	0.07	0.07	0.08	0.08
2,205.000	0.08	0.08	0.08	0.08	0.09
2,230.000	0.09	0.09	0.10	0.10	0.10
2,255.000	0.10	0.09	0.09	0.08	0.08
2,280.000	0.08	0.08	0.08	0.08	0.08
2,305.000	0.08	0.08	0.08	0.08	0.08
2,330.000	0.08	0.08	0.08	0.08	0.08
2,355.000	0.08	0.07	0.07	0.07	0.07
2,380.000	0.07	0.07	0.06	0.06	0.06
2,405.000	0.06	0.05	0.04	0.03	0.03
2,430.000	0.02	0.02	0.02	0.02	0.01
2,455.000	0.01	0.01	0.01	0.01	0.01
2,480.000	0.01	0.01	0.01	0.01	0.01
2,505.000	0.01	0.01	0.01	0.01	0.01
2,530.000	0.01	0.01	0.01	0.01	0.01
2,555.000	0.01	0.01	0.01	0.01	0.01
2,580.000	0.01	0.01	0.01	0.01	0.01
2,605.000	0.01	0.01	0.01	0.01	0.01
2,630.000	0.01	0.01	0.01	0.01	0.01
2,655.000	0.01	0.01	0.01	0.01	0.01
2,680.000	0.01	0.01	0.01	0.01	0.01
2,705.000	0.01	0.01	0.01	0.01	0.01
2,730.000	0.01	0.01	0.01	0.01	0.01
2,755.000	0.01	0.01	0.01	0.01	0.01
2,780.000	0.01	0.01	0.01	0.01	0.01
2,805.000	0.01	0.01	0.01	0.01	0.01
2,830.000	0.01	0.01	0.01	0.01	0.01
2,855.000	0.01	0.01	0.01	0.01	0.01
2,880.000	0.01	0.00	0.00	0.00	0.01
2,905.000	0.01	0.01	0.01	0.01	0.01
2,930.000	0.01	0.01	0.01	0.01	0.01
2,955.000	0.01	0.01	0.01	0.01	0.01
2,980.000	0.01	0.01	0.01	0.01	0.01
3,005.000	0.01	0.01	0.01	0.01	0.02
3,030.000	0.02	0.02	0.02	0.02	0.02
3,055.000	0.02	0.02	0.02	0.02	0.02
3,080.000	0.02	0.02	0.02	0.02	0.02
3,105.000	0.02	0.02	0.02	0.02	0.02
3,130.000	0.02	0.02	0.02	0.02	0.02
3,155.000	0.03	0.03	0.03	0.03	0.03

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
3,180.000	0.03	0.03	0.03	0.03	0.03
3,205.000	0.03	0.03	0.03	0.03	0.03
3,230.000	0.03	0.03	0.03	0.03	0.03
3,255.000	0.03	0.03	0.03	0.03	0.03
3,280.000	0.03	0.04	0.04	0.04	0.04
3,305.000	0.04	0.04	0.04	0.04	0.04
3,330.000	0.04	0.04	0.04	0.04	0.04
3,355.000	0.05	0.05	0.05	0.05	0.05
3,380.000	0.05	0.06	0.06	0.06	0.06
3,405.000	0.06	0.06	0.06	0.06	0.06
3,430.000	0.07	0.07	0.07	0.07	0.07
3,455.000	0.07	0.08	0.08	0.08	0.08
3,480.000	0.08	0.08	0.08	0.07	0.07
3,505.000	0.06	0.06	0.06	0.07	0.07
3,530.000	0.07	0.07	0.07	0.08	0.08
3,555.000	0.07	0.07	0.07	0.07	0.07
3,580.000	0.07	0.07	0.07	0.07	0.07
3,605.000	0.07	0.08	0.08	0.09	0.09
3,630.000	0.09	0.10	0.10	0.10	0.10
3,655.000	0.10	0.11	0.11	0.11	0.12
3,680.000	0.12	0.12	0.13	0.13	0.12
3,705.000	0.11	0.10	0.10	0.10	0.10
3,730.000	0.10	0.10	0.10	0.10	0.10
3,755.000	0.10	0.10	0.10	0.10	0.10
3,780.000	0.10	0.10	0.10	0.10	0.09
3,805.000	0.09	0.09	0.09	0.09	0.08
3,830.000	0.08	0.08	0.08	0.07	0.06
3,855.000	0.05	0.04	0.03	0.03	0.03
3,880.000	0.02	0.02	0.02	0.02	0.02
3,905.000	0.02	0.02	0.02	0.02	0.02
3,930.000	0.02	0.02	0.02	0.02	0.02
3,955.000	0.02	0.02	0.02	0.02	0.02
3,980.000	0.02	0.02	0.02	0.02	0.01
4,005.000	0.01	0.01	0.01	0.01	0.01
4,030.000	0.01	0.01	0.01	0.01	0.01
4,055.000	0.01	0.01	0.01	0.01	0.01
4,080.000	0.01	0.01	0.01	0.01	0.01
4,105.000	0.01	0.01	0.01	0.01	0.01
4,130.000	0.01	0.01	0.01	0.01	0.01
4,155.000	0.01	0.01	0.01	0.01	0.01
4,180.000	0.01	0.01	0.01	0.01	0.01
4,205.000	0.01	0.01	0.01	0.01	0.01
4,230.000	0.01	0.01	0.01	0.01	0.01
4,255.000	0.01	0.01	0.01	0.01	0.01

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
4,280.000	0.01	0.01	0.01	0.01	0.01
4,305.000	0.01	0.01	0.01	0.01	0.00
4,330.000	0.00	0.01	0.01	0.01	0.01
4,355.000	0.02	0.02	0.02	0.02	0.02
4,380.000	0.02	0.03	0.02	0.02	0.02
4,405.000	0.02	0.02	0.02	0.02	0.02
4,430.000	0.02	0.02	0.03	0.03	0.03
4,455.000	0.03	0.03	0.03	0.03	0.03
4,480.000	0.03	0.03	0.03	0.03	0.03
4,505.000	0.04	0.04	0.04	0.04	0.04
4,530.000	0.04	0.04	0.04	0.04	0.04
4,555.000	0.04	0.04	0.04	0.04	0.04
4,580.000	0.04	0.04	0.05	0.05	0.05
4,605.000	0.05	0.05	0.05	0.05	0.05
4,630.000	0.05	0.05	0.05	0.05	0.05
4,655.000	0.05	0.05	0.05	0.06	0.06
4,680.000	0.06	0.06	0.06	0.06	0.06
4,705.000	0.06	0.06	0.06	0.07	0.07
4,730.000	0.07	0.07	0.07	0.07	0.07
4,755.000	0.07	0.07	0.07	0.08	0.08
4,780.000	0.08	0.08	0.08	0.09	0.09
4,805.000	0.09	0.09	0.10	0.10	0.10
4,830.000	0.11	0.11	0.11	0.11	0.11
4,855.000	0.12	0.12	0.12	0.12	0.13
4,880.000	0.13	0.14	0.14	0.14	0.14
4,905.000	0.15	0.15	0.15	0.15	0.15
4,930.000	0.15	0.13	0.13	0.12	0.12
4,955.000	0.12	0.12	0.13	0.14	0.14
4,980.000	0.14	0.14	0.14	0.14	0.14
5,005.000	0.14	0.14	0.14	0.14	0.13
5,030.000	0.13	0.13	0.13	0.13	0.14
5,055.000	0.16	0.17	0.17	0.18	0.18
5,080.000	0.18	0.19	0.19	0.20	0.20
5,105.000	0.21	0.21	0.22	0.23	0.24
5,130.000	0.24	0.24	0.23	0.21	0.19
5,155.000	0.19	0.18	0.18	0.18	0.19
5,180.000	0.19	0.19	0.19	0.19	0.19
5,205.000	0.19	0.19	0.19	0.19	0.19
5,230.000	0.18	0.18	0.18	0.18	0.18
5,255.000	0.17	0.17	0.16	0.15	0.15
5,280.000	0.15	0.14	0.12	0.09	0.07
5,305.000	0.06	0.05	0.05	0.04	0.04
5,330.000	0.04	0.03	0.03	0.03	0.03
5,355.000	0.03	0.03	0.04	0.04	0.04

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
5,380.000	0.04	0.04	0.04	0.03	0.03
5,405.000	0.03	0.03	0.03	0.03	0.03
5,430.000	0.03	0.03	0.03	0.03	0.02
5,455.000	0.02	0.02	0.02	0.02	0.02
5,480.000	0.02	0.02	0.03	0.03	0.03
5,505.000	0.02	0.02	0.02	0.02	0.02
5,530.000	0.02	0.02	0.02	0.02	0.02
5,555.000	0.02	0.02	0.02	0.02	0.02
5,580.000	0.02	0.02	0.02	0.02	0.02
5,605.000	0.02	0.02	0.02	0.02	0.02
5,630.000	0.02	0.02	0.02	0.02	0.02
5,655.000	0.02	0.02	0.02	0.02	0.02
5,680.000	0.02	0.02	0.02	0.02	0.02
5,705.000	0.02	0.02	0.01	0.01	0.01
5,730.000	0.01	0.01	0.01	0.01	0.01
5,755.000	0.01	0.01	0.00	0.01	0.02
5,780.000	0.03	0.03	0.04	0.05	0.05
5,805.000	0.05	0.05	0.06	0.07	0.07
5,830.000	0.07	0.07	0.06	0.06	0.06
5,855.000	0.06	0.06	0.06	0.06	0.07
5,880.000	0.07	0.07	0.08	0.08	0.08
5,905.000	0.08	0.08	0.08	0.08	0.09
5,930.000	0.09	0.10	0.10	0.10	0.10
5,955.000	0.10	0.10	0.10	0.10	0.10
5,980.000	0.10	0.10	0.10	0.11	0.11
6,005.000	0.11	0.12	0.12	0.12	0.12
6,030.000	0.13	0.13	0.14	0.14	0.14
6,055.000	0.14	0.15	0.15	0.15	0.14
6,080.000	0.13	0.13	0.14	0.14	0.15
6,105.000	0.15	0.15	0.16	0.16	0.16
6,130.000	0.16	0.17	0.17	0.18	0.18
6,155.000	0.18	0.18	0.19	0.19	0.20
6,180.000	0.20	0.20	0.20	0.20	0.20
6,205.000	0.21	0.21	0.22	0.22	0.23
6,230.000	0.23	0.24	0.25	0.25	0.26
6,255.000	0.28	0.28	0.29	0.29	0.30
6,280.000	0.30	0.31	0.31	0.32	0.33
6,305.000	0.34	0.39	0.47	0.54	0.61
6,330.000	0.69	0.76	0.84	0.92	0.99
6,355.000	1.07	1.16	1.18	1.05	0.80
6,380.000	0.61	0.53	0.48	0.48	0.58
6,405.000	0.77	0.91	0.98	1.02	1.05
6,430.000	1.05	1.02	1.00	1.01	1.01
6,455.000	1.01	0.95	0.86	0.81	0.82

Subsection: Read Hydrograph  
 Label: Unit Hydrograph (Onsite Runoff)

Scenario: Base

**HYDROGRAPH ORDINATES (ft<sup>3</sup>/s)**  
**Output Time Increment = 5.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Flow (ft <sup>3</sup> /s)				
6,480.000	0.86	0.95	1.20	1.58	1.87
6,505.000	2.04	2.19	2.31	2.46	2.62
6,530.000	2.75	2.87	2.98	3.11	3.33
6,555.000	3.64	3.87	4.01	4.09	4.08
6,580.000	3.78	3.26	2.89	2.71	2.62
6,605.000	2.59	2.67	2.84	2.96	2.99
6,630.000	2.97	2.96	2.96	2.96	2.96
6,655.000	2.94	2.89	2.85	2.81	2.75
6,680.000	2.71	2.66	2.61	2.54	2.39
6,705.000	2.18	2.03	1.95	1.91	1.81
6,730.000	1.52	1.08	0.75	0.59	0.48
6,755.000	0.40	0.34	0.28	0.24	0.20
6,780.000	0.18	0.16	0.14	0.14	0.13
6,805.000	0.12	0.12	0.11	0.11	0.10
6,830.000	0.10	0.10	0.09	0.09	0.09
6,855.000	0.08	0.08	0.08	0.08	0.08
6,880.000	0.08	0.07	0.07	0.06	0.06
6,905.000	0.05	0.05	0.06	0.06	0.06
6,930.000	0.07	0.07	0.07	0.07	0.06
6,955.000	0.06	0.05	0.05	0.05	0.06
6,980.000	0.06	0.06	0.06	0.06	0.06
7,005.000	0.06	0.06	0.06	0.05	0.05
7,030.000	0.05	0.05	0.06	0.05	0.05
7,055.000	0.05	0.05	0.05	0.06	0.05
7,080.000	0.05	0.05	0.05	0.05	0.06
7,105.000	0.05	0.05	0.05	0.04	0.04
7,130.000	0.04	0.04	0.04	0.04	0.04
7,155.000	0.04	0.04	0.04	0.04	0.04
7,180.000	0.04	0.04	0.04	0.04	0.04
7,205.000	0.04	0.03	0.02	0.01	0.01
7,230.000	0.01	0.01	0.01	0.00	0.00
7,255.000	0.00	0.00	0.00	0.00	0.00
7,280.000	0.00	0.00	0.00	0.00	0.00
7,305.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
0.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
15.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
30.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
45.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
60.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
75.000	1,537.70	1,537.70	1,537.70	1,537.70	1,537.70
90.000	1,537.70	1,537.70	1,537.70	1,537.71	1,537.71
105.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
120.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
135.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
150.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
165.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
180.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
195.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
210.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
225.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
240.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
255.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
270.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
285.000	1,537.71	1,537.71	1,537.71	1,537.71	1,537.71
300.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
315.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
330.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
345.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
360.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
375.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
390.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
405.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
420.000	1,537.72	1,537.72	1,537.73	1,537.73	1,537.73
435.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
450.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
465.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
480.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
495.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
510.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.74
525.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
540.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
555.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
570.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.75
585.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
600.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
615.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
630.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
645.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.76
660.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
675.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
690.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
705.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
720.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
735.000	1,537.76	1,537.77	1,537.77	1,537.77	1,537.77
750.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
765.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
780.000	1,537.77	1,537.77	1,537.78	1,537.78	1,537.78
795.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
810.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
825.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
840.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
855.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
870.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
885.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
900.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
915.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
930.000	1,537.80	1,537.80	1,537.80	1,537.80	1,537.80
945.000	1,537.80	1,537.80	1,537.80	1,537.80	1,537.80
960.000	1,537.80	1,537.80	1,537.80	1,537.79	1,537.79
975.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
990.000	1,537.79	1,537.79	1,537.79	1,537.79	1,537.79
1,005.000	1,537.79	1,537.79	1,537.79	1,537.78	1,537.78
1,020.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,035.000	1,537.78	1,537.78	1,537.78	1,537.78	1,537.78
1,050.000	1,537.78	1,537.78	1,537.77	1,537.77	1,537.77
1,065.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
1,080.000	1,537.77	1,537.77	1,537.77	1,537.77	1,537.77
1,095.000	1,537.77	1,537.77	1,537.77	1,537.76	1,537.76
1,110.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
1,125.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
1,140.000	1,537.76	1,537.76	1,537.76	1,537.76	1,537.76
1,155.000	1,537.76	1,537.76	1,537.76	1,537.75	1,537.75
1,170.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
1,185.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
1,200.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
1,215.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
1,230.000	1,537.75	1,537.75	1,537.75	1,537.75	1,537.75
1,245.000	1,537.75	1,537.74	1,537.74	1,537.74	1,537.74
1,260.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
1,275.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74

Subsection: Time vs. Elevation  
 Label: Infiltration Basin (IN)

Scenario: Base

**Time vs. Elevation (ft)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Elevation (ft)				
1,290.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
1,305.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.74
1,320.000	1,537.74	1,537.74	1,537.74	1,537.74	1,537.73
1,335.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,350.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,365.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,380.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,395.000	1,537.73	1,537.73	1,537.73	1,537.73	1,537.73
1,410.000	1,537.73	1,537.73	1,537.73	1,537.72	1,537.72
1,425.000	1,537.72	1,537.72	1,537.72	1,537.72	1,537.72
1,440.000	1,537.72	(N/A)	(N/A)	(N/A)	(N/A)

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
0.000	0.000	0.000	0.000	0.000	0.000
15.000	0.000	0.000	0.000	0.000	0.000
30.000	0.000	0.000	0.000	1.000	3.000
45.000	4.000	6.000	7.000	9.000	11.000
60.000	12.000	14.000	15.000	17.000	18.000
75.000	20.000	21.000	22.000	24.000	25.000
90.000	27.000	28.000	29.000	30.000	32.000
105.000	33.000	34.000	36.000	37.000	38.000
120.000	39.000	40.000	41.000	43.000	44.000
135.000	45.000	46.000	47.000	48.000	49.000
150.000	50.000	51.000	52.000	53.000	54.000
165.000	55.000	56.000	57.000	58.000	59.000
180.000	60.000	61.000	62.000	63.000	64.000
195.000	64.000	65.000	66.000	67.000	68.000
210.000	69.000	69.000	70.000	71.000	72.000
225.000	72.000	73.000	74.000	75.000	75.000
240.000	76.000	77.000	77.000	78.000	79.000
255.000	79.000	80.000	81.000	81.000	82.000
270.000	83.000	83.000	84.000	84.000	85.000
285.000	86.000	86.000	87.000	87.000	88.000
300.000	88.000	89.000	91.000	93.000	93.000
315.000	94.000	94.000	95.000	95.000	96.000
330.000	96.000	96.000	97.000	97.000	98.000
345.000	100.000	102.000	104.000	106.000	108.000
360.000	110.000	112.000	114.000	115.000	117.000
375.000	119.000	121.000	123.000	125.000	126.000
390.000	128.000	130.000	131.000	133.000	135.000
405.000	136.000	138.000	140.000	141.000	143.000
420.000	144.000	146.000	147.000	149.000	150.000
435.000	152.000	153.000	154.000	156.000	157.000
450.000	158.000	160.000	161.000	162.000	164.000
465.000	165.000	166.000	167.000	168.000	170.000
480.000	171.000	172.000	175.000	178.000	180.000
495.000	183.000	186.000	188.000	191.000	194.000
510.000	196.000	199.000	201.000	204.000	206.000
525.000	208.000	211.000	213.000	215.000	218.000
540.000	220.000	222.000	224.000	226.000	229.000
555.000	232.000	236.000	240.000	243.000	247.000
570.000	250.000	254.000	257.000	261.000	264.000
585.000	267.000	271.000	274.000	277.000	280.000
600.000	283.000	286.000	289.000	292.000	295.000
615.000	298.000	301.000	302.000	303.000	304.000
630.000	305.000	307.000	308.000	309.000	310.000

**Time vs. Volume (ft³)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft³)				
645.000	312.000	315.000	318.000	320.000	323.000
660.000	325.000	328.000	330.000	333.000	335.000
675.000	338.000	340.000	342.000	345.000	347.000
690.000	349.000	351.000	354.000	356.000	358.000
705.000	360.000	362.000	364.000	366.000	368.000
720.000	370.000	372.000	374.000	376.000	378.000
735.000	379.000	382.000	385.000	388.000	392.000
750.000	395.000	398.000	402.000	405.000	408.000
765.000	411.000	414.000	417.000	421.000	426.000
780.000	430.000	435.000	439.000	444.000	448.000
795.000	452.000	457.000	461.000	466.000	472.000
810.000	477.000	483.000	488.000	493.000	497.000
825.000	500.000	504.000	506.000	508.000	509.000
840.000	511.000	513.000	515.000	517.000	518.000
855.000	520.000	522.000	523.000	525.000	527.000
870.000	528.000	530.000	531.000	533.000	534.000
885.000	536.000	537.000	539.000	540.000	542.000
900.000	543.000	544.000	546.000	547.000	549.000
915.000	550.000	551.000	552.000	554.000	555.000
930.000	556.000	557.000	559.000	560.000	561.000
945.000	561.000	560.000	560.000	559.000	558.000
960.000	558.000	558.000	557.000	556.000	554.000
975.000	551.000	549.000	545.000	542.000	538.000
990.000	534.000	530.000	526.000	520.000	515.000
1,005.000	510.000	505.000	501.000	496.000	491.000
1,020.000	486.000	482.000	477.000	473.000	468.000
1,035.000	464.000	460.000	455.000	451.000	447.000
1,050.000	443.000	439.000	435.000	431.000	427.000
1,065.000	423.000	419.000	416.000	412.000	408.000
1,080.000	405.000	401.000	398.000	394.000	391.000
1,095.000	387.000	384.000	381.000	377.000	374.000
1,110.000	371.000	368.000	365.000	362.000	359.000
1,125.000	356.000	353.000	350.000	347.000	344.000
1,140.000	342.000	339.000	336.000	333.000	331.000
1,155.000	328.000	326.000	323.000	321.000	318.000
1,170.000	316.000	313.000	311.000	309.000	306.000
1,185.000	304.000	302.000	300.000	297.000	295.000
1,200.000	293.000	291.000	289.000	287.000	285.000
1,215.000	283.000	281.000	279.000	277.000	275.000
1,230.000	273.000	271.000	269.000	268.000	266.000
1,245.000	264.000	262.000	261.000	259.000	257.000
1,260.000	256.000	253.000	251.000	248.000	247.000
1,275.000	245.000	244.000	242.000	241.000	239.000

Subsection: Time vs. Volume  
 Label: Infiltration Basin

Scenario: Base

**Time vs. Volume (ft<sup>3</sup>)**

**Output Time increment = 3.000 min**  
**Time on left represents time for first value in each row.**

Time (min)	Volume (ft <sup>3</sup> )				
1,290.000	236.000	233.000	230.000	227.000	225.000
1,305.000	223.000	222.000	221.000	219.000	218.000
1,320.000	216.000	213.000	210.000	207.000	205.000
1,335.000	203.000	202.000	202.000	201.000	199.000
1,350.000	197.000	195.000	192.000	190.000	187.000
1,365.000	185.000	182.000	180.000	178.000	175.000
1,380.000	173.000	171.000	169.000	167.000	164.000
1,395.000	162.000	160.000	158.000	156.000	154.000
1,410.000	152.000	150.000	148.000	146.000	144.000
1,425.000	142.000	141.000	139.000	137.000	135.000
1,440.000	133.000	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation vs. Volume Curve  
Label: Infiltration Basin

Scenario: Base

### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft <sup>3</sup> )
1,537.70	0.000
1,538.00	1,754.750
1,539.00	8,515.070
1,540.00	16,770.050
1,541.00	26,728.200
1,542.00	41,675.180
1,543.00	80,599.530

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,537.74 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,543.00 ft

**Outlet Connectivity**

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	1,542.88 (N/A)	1,543.00 (N/A)

Subsection: Outlet Input Data  
 Label: Composite Outlet Structure - 1

Scenario: Base

Structure ID: Weir - 1	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,542.88 ft
Weir Length	2.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Infiltration Basin

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s
Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ft <sup>3</sup> )	Area (ft <sup>2</sup> )	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
1,537.70	0.00	0.000	0	0.00	0.00	0.00
1,538.20	0.00	3,106.814	0	0.23	0.23	34.75
1,538.70	0.00	6,486.974	0	0.23	0.23	72.30
1,539.20	0.00	10,166.066	0	0.23	0.23	113.18
1,539.70	0.00	14,293.556	0	0.23	0.23	159.04
1,540.20	0.00	18,761.680	0	0.23	0.23	208.69
1,540.70	0.00	23,740.755	0	0.23	0.23	264.01
1,541.20	0.00	29,717.596	0	0.23	0.23	330.42
1,541.70	0.00	37,191.086	0	0.23	0.23	413.46
1,542.20	0.00	49,460.050	0	0.23	0.23	549.78
1,542.70	0.00	68,922.225	0	0.23	0.23	766.03
1,542.88	0.00	75,928.608	0	0.23	0.23	843.88
1,543.00	0.25	80,599.530	0	0.23	0.47	896.02

Subsection: Level Pool Pond Routing Summary  
 Label: Infiltration Basin (IN)

Scenario: Base

Infiltration	
Infiltration Method (Computed)	Constant
Infiltration Rate (Constant)	0.23 ft <sup>3</sup> /s

Initial Conditions	
Elevation (Water Surface, Initial)	1,537.70 ft
Volume (Initial)	0.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	3.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.07 ft <sup>3</sup> /s	Time to Peak (Flow, In)	807.000 min
Infiltration (Peak)	0.04 ft <sup>3</sup> /s	Time to Peak (Infiltration)	942.000 min
Flow (Peak Outlet)	0.00 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	0.000 min

Elevation (Water Surface, Peak)	1,537.80 ft
Volume (Peak)	560.583 ft <sup>3</sup>

Mass Balance (ft <sup>3</sup> )	
Volume (Initial)	0.000 ft <sup>3</sup>
Volume (Total Inflow)	1,854.000 ft <sup>3</sup>
Volume (Total Infiltration)	1,714.000 ft <sup>3</sup>
Volume (Total Outlet Outflow)	0.000 ft <sup>3</sup>
Volume (Retained)	132.000 ft <sup>3</sup>
Volume (Unrouted)	-8.000 ft <sup>3</sup>
Error (Mass Balance)	0.4 %

Subsection: Pond Inflow Summary  
Label: Infiltration Basin (IN)

Scenario: Base

**Summary for Hydrograph Addition at 'Infiltration Basin'**

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Unit Hydrograph (Onsite Runoff)

**Node Inflows**

Inflow Type	Element	Volume (ft <sup>3</sup> )	Time to Peak (min)	Flow (Peak) (ft <sup>3</sup> /s)
Flow (From)	Unit Hydrograph (Onsite Runoff)	71,511.000	6,570.000	4.09
Flow (In)	Infiltration Basin	1,854.360	807.000	0.07

## Index

### C

Composite Outlet Structure - 1 (Outlet Input Data)...

### I

Infiltration Basin (Elevation vs. Volume Curve)...

Infiltration Basin (Elevation-Volume-Flow Table (Pond))...

Infiltration Basin (IN) (Level Pool Pond Routing Summary)...

Infiltration Basin (IN) (Pond Inflow Summary)...

Infiltration Basin (IN) (Time vs. Elevation)...

Infiltration Basin (Time vs. Volume)...

### M

Master Network Summary...3

### U

Unit Hydrograph (Onsite Runoff) (Read Hydrograph)...

User Notifications...2

<u>Contour Elevation</u>	<u>Area SF</u>	<u>Volume</u>	<u>Cummulative Volume</u>
	0	0	0
1537.70	5,646.02	-	0
1538.00	6,054.68	1,754.75	1,754.75
1539.00	7,491.43	6,760.32	8,515.07
1540.00	9,042.84	8,254.98	16,770.05
1541.00	10,902.43	9,958.16	26,728.20
1542.00	19,396.53	14,946.98	41,675.18
1543.00	62,545.87	38,924.34	80,599.53

**Pond Volume Equations**

**\* Incremental volume computed by the Conic Method for Reservoir Volumes.**

$$\text{Volume} = (1/3) * (EL2 - EL1) * (\text{Area1} + \text{Area2} + \text{sqr}(\text{Area1} * \text{Area2}))$$

where:    EL1, EL2        Lower and upper elevations of the increment  
               Area1, Area2    Areas computed for EL1, EL2, respectively  
               Volume        Incremental volume between EL1 and EL2

Table 1 - Infiltration Testing Requirements							
Infiltration BMP	Testing Options	Ring Infiltrometer Tests <sup>(1)</sup>	Percolation Test <sup>(2)</sup>	Test Pits or Boring Logs <sup>(3)</sup>	Final Report <sup>(4)</sup>	Hydrology Manual <sup>(5)</sup>	Factor of Safety
Infiltration Trench	Option 1▶	2 tests min. with at least 1 per trench	not used	1 boring or test pit per trench	Required	not used	FS = 3
	Option 2▶	not used	4 tests min. with at least two per trench	1 boring or test pit per trench	Required	not used	FS = 3
	Option 3 <sup>(7)</sup> ▶	not used	not used	1 boring or test pit per trench	Required	not used	FS = 6
	Option 4▶	not used	not used	1 boring or test pit per site	not used	only	FS = 10
Infiltration Basin	Option 1▶	2 tests min. with at least 1 per basin <sup>(6)</sup>	not used	1 boring or test pit per basin	Required	not used	FS = 3
	Option 2▶	not used	4 tests min. with at least 2 per basin <sup>(6)</sup>	1 boring or test pit per trench	Required	not used	FS = 3
	Option 3 <sup>(7)</sup> ▶	not used	not used	1 boring or test pit per basin	Required	not used	FS = 6
	Option 4▶	not used	not used	1 boring or test pit per site	not used	only	FS = 10
Permeable Pavement	Option 1▶	2 tests min. with at least 1 every 10,000 ft <sup>2</sup>	not used	1 boring or test pit every 10,000 ft <sup>2</sup>	Required	not used	FS = 3
	Option 2▶	not used	4 tests min. with at least 2 every 10,000 ft <sup>2</sup>	1 boring or test pit every 10,000 ft <sup>2</sup>	Required	not used	FS = 3

Table Footnotes:

- (1) Ring Infiltrometer tests per Section 2.2
- (2) Percolation tests per Section 2.3 and Well Permeameter Test per Section 2.4
- (3) Test pits or boring logs per Section 2.5
- (4) Final Report per Section 1.7
- (5) See Plate E-6.2 of the District's Hydrology Manual
- (6) For basins in excess of 10,000 ft<sup>2</sup>, provide one (1) ring infiltrometer test or two (2) percolation tests for each additional 10,000 ft<sup>2</sup>
- (7) This option may be used for projects with a maximum tributary area of 5 acres only.

$$\text{Infiltration Rate} = \frac{5.175 \frac{\text{in}}{\text{hr}}}{3 \text{ Factor of Safety}} \times \frac{1'}{12"} = 0.144 \text{ ft/hr}$$

$$\text{Drawdown Time} = \frac{\text{Basin Depth}}{\text{Infiltration Rate}} = \frac{5.3 \text{ ft}}{0.144 \text{ ft/hr}} = 37 \text{ hrs} < 48 \text{ hrs}$$

**Appendix I**  
**Soils Information**



## WQMP Project Report

### County of Riverside Stormwater Program

Santa Ana River Watershed Geodatabase

Monday, July 26, 2021

Note: The information provided in this report and on the Stormwater Geodatabase for the County of Riverside Stormwater Program is intended to provide basic guidance in the preparation of the applicant's Water Quality Management Plan (WQMP) and should not be relied upon without independent verification.

<b>Project Site Parcel Number(s):</b>	456140008
<b>Latitude/Longitude:</b>	33.741, -116.9923
<b>Thomas Brothers Page:</b>	
<b>Project Site Acreage:</b>	8.82
<b>Watershed(s):</b>	SANTA ANA
<b>This Project Site Resides in the following Hydrologic Unit(s) (HUC):</b>	<b>HUC Name - HUC Number</b> <b>San Jacinto Valley - 180702020302</b>
<b>The HUCs Contribute stormwater to the following 303d listed water bodies and TMDLs which may include drainage from your proposed Project Site:</b>	<b>WBID Name - WBID Number</b> <b>Canyon Lake (Railroad Canyon Reservoir) - CAL8021100019990208151525</b> <b>Elsinore, Lake - CAL8023100019990208151100</b>
<b>These 303d listed Water bodies and TMDLs have the following Pollutants of Concern (POC):</b>	<b>Bacterial Indicators - Pathogens</b> <b>Nutrients - Nutrients, Organic Enrichment/Low Dissolved Oxygen</b> <b>Other Organics - PCBs (Polychlorinated biphenyls)</b> <b>Toxicity - Sediment Toxicity, Unknown Toxicity</b>
<b>Is the Site subject to Hydromodification:</b>	Yes
<b>Limitations on Infiltration:</b>	<b>Project Site Onsite Soils Group(s) - A</b> <b>Known Groundwater Contamination Plumes within 1000' - No</b> <b>Adjacent Water Supply Wells(s) - No information available please contact your local water agency for more information. Your local contact agency is EASTERN MUNICIPAL W.D.. Your local wholesaler contact agency is METROPOLITAN WATER DISTRICT.</b>
<b>Environmentally Sensitive Areas within 200'(Fish and Wildlife Habitat/Species):</b>	None  None

**Environmentally Sensitive Areas  
within 200'(CVMSHCP):****Environmentally Sensitive Areas  
within 200'(WRMSHCP):** None**Groundwater elevation from Mean  
Sea Level:** 1325**85th Percentile Design Storm  
Depth (in):** 0.693**Groundwater Basin:** Hemet-South**MSHCP/CVMSHCP Criteria Cell  
(s):** No Data**Retention Ordinance Information:** No Data**Studies and Reports Related to  
Project Site:** [Comprehensive Nutrient Reduction Plan](#)  
[IBI Scores - Southern Cal](#)[Bulletin 118 - hemet valley](#)[bulletin118\\_4-sc](#)[water fact 3 7.11](#)[8039-SAR-Hydromodification](#)[Hemet MDP](#)[Hemet Regional ADP Report](#)[Salt Creek Channel ADP Map](#)[Hemet Regional ADP Map](#)[Salt Creek Channel ADP Report](#)



United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Western Riverside Area, California



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# Contents

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<b>Preface</b> .....	2
<b>How Soil Surveys Are Made</b> .....	5
<b>Soil Map</b> .....	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Western Riverside Area, California.....	13
SeA—San Emigdio fine sandy loam, 0 to 2 percent slopes, occasional frost.....	13
SfA—San Emigdio fine sandy loam, deep, 0 to 2 percent slopes.....	14
<b>References</b> .....	16

# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

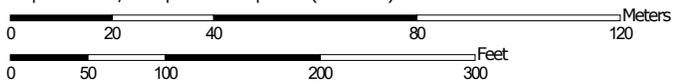
---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



Map Scale: 1:1,480 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)

**Soils**

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

**Special Point Features**

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California  
 Survey Area Data: Version 13, May 27, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 15, 2018—Jun 26, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
SeA	San Emigdio fine sandy loam, 0 to 2 percent slopes, occassional frost	6.8	73.5%
SfA	San Emigdio fine sandy loam, deep, 0 to 2 percent slopes	2.5	26.5%
<b>Totals for Area of Interest</b>		<b>9.3</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

## Custom Soil Resource Report

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Western Riverside Area, California

### SeA—San Emigdio fine sandy loam, 0 to 2 percent slopes, occasional frost

#### Map Unit Setting

*National map unit symbol:* 2y8t8  
*Elevation:* 1,440 to 1,800 feet  
*Mean annual precipitation:* 11 to 13 inches  
*Mean annual air temperature:* 65 to 67 degrees F  
*Frost-free period:* 305 to 330 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*San emigdio and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of San Emigdio

##### Setting

*Landform:* Alluvial fans  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Residuum weathered from sedimentary rock

##### Typical profile

*A - 0 to 8 inches:* fine sandy loam  
*C1 - 8 to 40 inches:* fine sandy loam  
*C2 - 40 to 60 inches:* stratified fine sandy loam to silt loam

##### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* RareNone  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 5 percent  
*Maximum salinity:* Nonsaline (0.0 to 1.0 mmhos/cm)  
*Available water capacity:* Moderate (about 8.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 1  
*Land capability classification (nonirrigated):* 3c  
*Hydrologic Soil Group:* A  
*Ecological site:* R019XD029CA  
*Hydric soil rating:* No

**Minor Components**

**Metz**

*Percent of map unit:* 10 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* No

**San timoteo**

*Percent of map unit:* 5 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**SfA—San Emigdio fine sandy loam, deep, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hcyv  
*Elevation:* 10 to 700 feet  
*Mean annual precipitation:* 12 to 18 inches  
*Mean annual air temperature:* 63 degrees F  
*Frost-free period:* 270 to 350 days  
*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*San emigdio and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of San Emigdio**

**Setting**

*Landform:* Alluvial fans  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Residuum weathered from sedimentary rock

**Typical profile**

*H1 - 0 to 8 inches:* fine sandy loam  
*H2 - 8 to 40 inches:* fine sandy loam  
*H3 - 40 to 60 inches:* loamy sand

**Properties and qualities**

*Slope:* 0 to 2 percent

## Custom Soil Resource Report

*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* Rare  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 5 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water capacity:* Moderate (about 6.6 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* 2s  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* A  
*Ecological site:* R019XD029CA  
*Hydric soil rating:* No

### **Minor Components**

#### **Metz**

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

#### **San timoteo**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

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Parameter	P1	P2
Location	Southwest Lot Area	Southeast Lot Area
Elevation of Tested Area	5 ft	5 ft
Pre-soak Depth (from top of pipe)	5 in.	5 in.
Test Start Depth (from top of pipe)	30.5 in.	36 in.
Water Drop During Test	5.5 in.	6.0
<b>Unfactored Infiltration Rate</b>	<b>4.48 in./hr</b>	<b>5.87 in./hr</b>

average = 5.175 in/hr

NO FACTOR OF SAFETY YET

