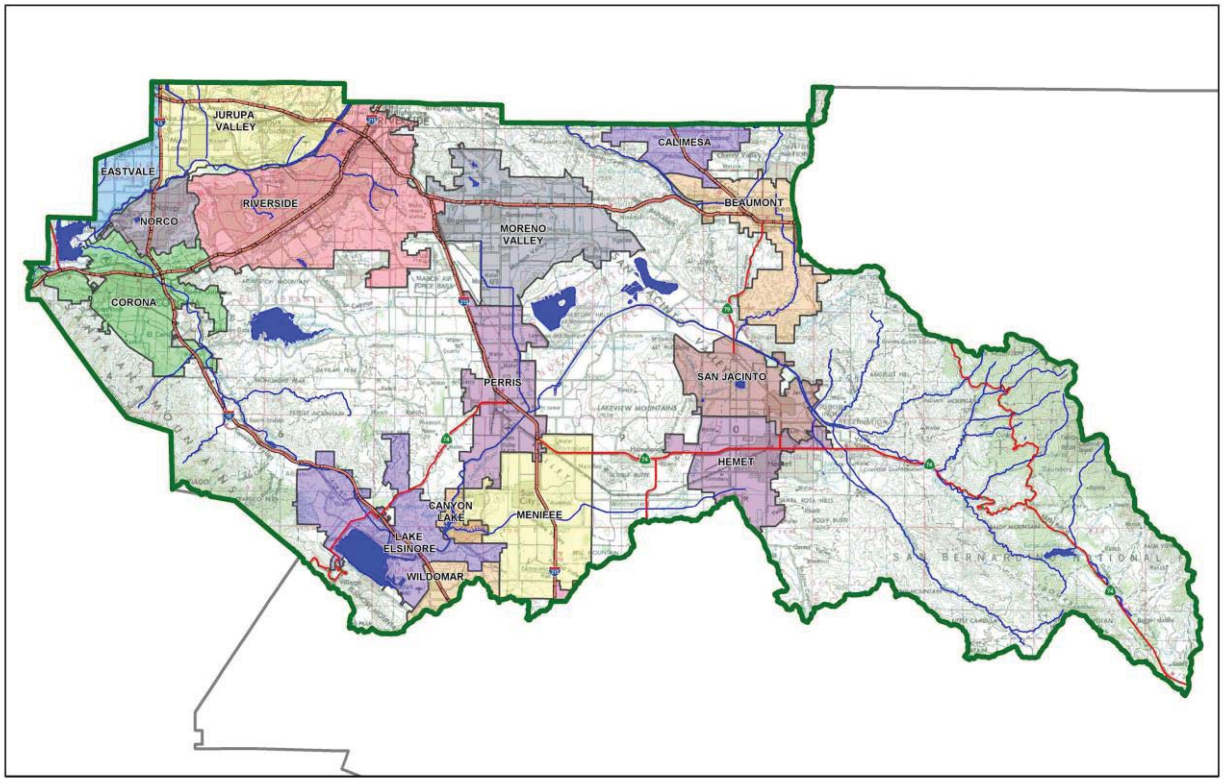
Project Specific Water Quality Management Plan

*A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County*

Project Title: TTM No. 38094

Development No:

Design Review/Case No:



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☒ **Preliminary**
☐ **Final**

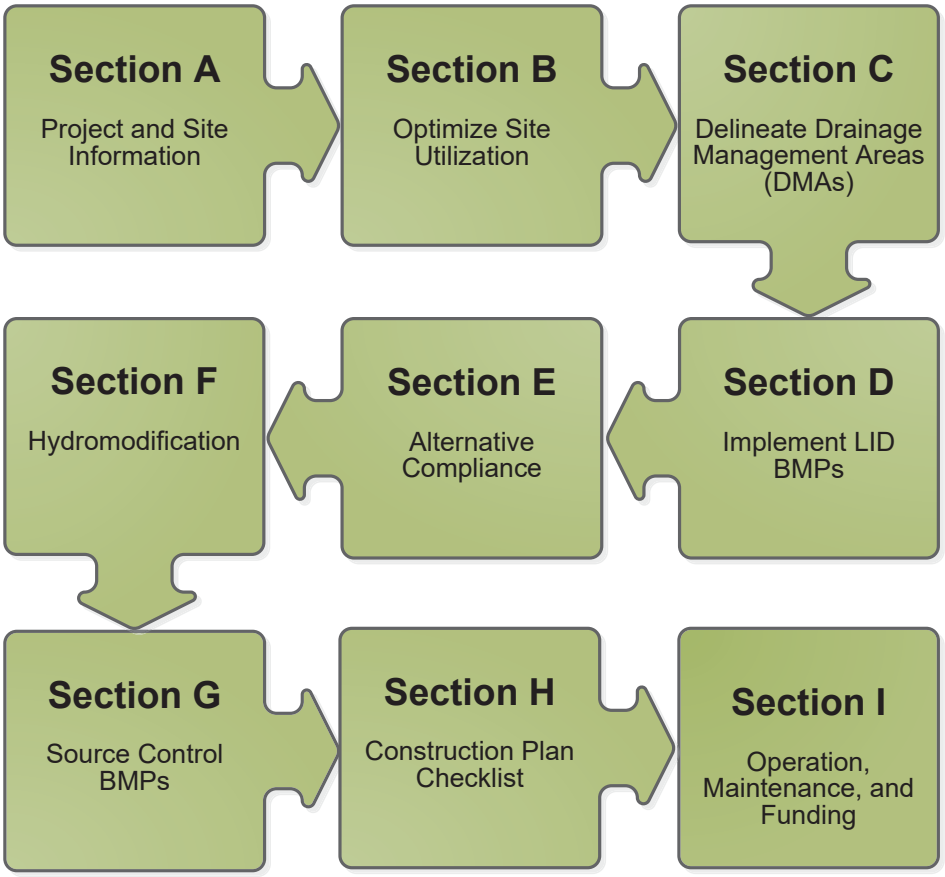
Original Date Prepared: February 2021

Revision Date(s):

Prepared for Compliance with
Regional Board Order No. **R8-2010-0033**
Template revised June 30, 2016

A Brief Introduction

This Project-Specific WQMP Template for the **Santa Ana Region** has been prepared to help guide you in documenting compliance for your project. Because this document has been designed to specifically document compliance, you will need to utilize the WQMP Guidance Document as your "how-to" manual to help guide you through this process. Both the Template and Guidance Document go hand-in-hand, and will help facilitate a well prepared Project-Specific WQMP. Below is a flowchart for the layout of this Template that will provide the steps required to document compliance.



OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for Coastal Commercial Properties by C&V Consulting, Inc. for the TTM No. 38094.

This WQMP is intended to comply with the requirements of City of Riverside for TTM No. 38094 which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable City of Riverside Water Quality Ordinance (Municipal Code Section 14.12.315).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature	Date
Owner's Printed Name	Owner's Title/Position

PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. **R8-2010-0033** and any subsequent amendments thereto."

Preparer's Signature	Date
Preparer's Printed Name	Preparer's Title/Position

Preparer's Licensure:

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Section A: Project and Site Information

PROJECT INFORMATION	
Type of Project:	Residential
Planning Area:	
Community Name:	
Development Name:	TTM No. 38094
PROJECT LOCATION	
Latitude & Longitude (DMS): 33.8777, -117.3297	
Project Watershed and Sub-Watershed: Santa Ana Watershed	
Gross Acres: 18.925 acres	
APN(s): 266-130-023, 266-130-024, 266-130-016	
Map Book and Page No.: MB 11/62	
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	Single Family Residential
Proposed or Potential SIC Code(s)	
Area of Impervious Project Footprint (SF)	756,311
Total Area of proposed Impervious Surfaces within the Project Footprint (SF)/or Replacement	436,651
Does the project consist of offsite road improvements?	☒ Y ☐ N
Does the project propose to construct unpaved roads?	☐ Y ☒ N
Is the project part of a larger common plan of development (phased project)?	☐ Y ☒ N
EXISTING SITE CHARACTERISTICS	
Total area of existing Impervious Surfaces within the Project limits Footprint (SF)	Insert text here.
Is the project located within any MSHCP Criteria Cell?	☐ Y ☒ N
If so, identify the Cell number:	N/A
Are there any natural hydrologic features on the project site?	☐ Y ☒ N
Is a Geotechnical Report attached?	☒ Y ☐ N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)	See Appendix 3
What is the Water Quality Design Storm Depth for the project?	0.53 in

A.1 Maps and Site Plans

In Appendix 1, The WQMP Site Plan includes the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling
- BMP Locations (Lat/Long)

Grading, drainage, landscape/plant palette and other pertinent construction plans are attached in Appendix 2.

A.2 Identify Receiving Waters

Using Table A.1 below, list in order of upstream to downstream, the receiving waters that the project site is tributary to. Continue to fill each row with the Receiving Water's 303(d) listed impairments (if any), designated beneficial uses, and proximity, if any, to a RARE beneficial use. Include a map of the receiving waters in Appendix 1.

Table A.1 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Mockingbird Reservoir	None	AGR, REC1, REC2, WARM, WILD	5.67 miles
Arlington Channel	None	REC1, REC2, WARM, WILD	9.84 miles
Temescal Creek	None	REC1, REC2, WARM, WILD	14.25 miles
Santa Ana River, Reach 3	Pathogens	AGR, GWR, REC1, REC2, WARM, WILD, RARE	18.14 miles

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Required	
State Department of Fish and Game, 1602 Streambed Alteration Agreement	☐ Y	☒ N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	☐ Y	☒ N
US Army Corps of Engineers, CWA Section 404 Permit	☐ Y	☒ N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion	☐ Y	☒ N
Statewide Construction General Permit Coverage	☐ Y	☐ N
Statewide Industrial General Permit Coverage	☐ Y	☒ N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	☐ Y	☒ N
Other *(please list in the space below as required)*		
City of Riverside Conditional Use Permit	☐ Y	☒ N
City of Riverside Review	☒ Y	☐ N
City of Riverside Building Permit	☒ Y	☐ N
City of Riverside Grading Permit	☒ Y	☐ N
City of Riverside Construction Permit	☒ Y	☐ N

If yes is answered to any of the questions above, the Co-Permittee may require proof of approval/coverage from those agencies as applicable including documentation of any associated requirements that may affect this Project-Specific WQMP.

Section B: Optimize Site Utilization (LID Principles)

Site Optimization

The following questions are based upon Section 3.2 of the WQMP Guidance Document. Review of the WQMP Guidance Document will help you determine how best to optimize your site and subsequently identify opportunities and/or constraints, and document compliance.

Did you identify and preserve existing drainage patterns? If so, how? If not, why?

Yes, the project site is currently draining form the north-easterly side of the project to the south-westerly side. Proposed drainage design replicates the existing drainage pattern.

Did you identify and protect existing vegetation? If so, how? If not, why?

No, existing vegetation will be removed during the grading process. However, the project proposes to incorporate landscaping and grassed public areas to increase the pervious surfaces.

Did you identify and preserve natural infiltration capacity? If so, how? If not, why?

No, the natural infiltration on site is poor, as indicated in the percolation test performed by the soils engineer. The runoffs generated by the proposed site will be directed to onsite bio-retention basins in lieu of natural infiltration.

Did you identify and minimize impervious area? If so, how? If not, why?

Yes, all impervious areas were minimized based on design standards to meet zoning and improvement requirements.

Did you identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

Yes, all runoff generated from impervious surfaces will drain to adjacent pervious areas which eventually enters the bio-retention basins on-site along the project boundary. Flows will exist the site via storm drain system.

Section C: Delineate Drainage Management Areas (DMAs)

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s)	Area (Sq. Ft.)	DMA Type
A-1	Homesites - Roof	122,762.05	D
A-2	Homesites - Landscaping	122,762.05	D
A-3	Street – Asphalt/Concrete	54,452.09	D
A-4	Hardscape – Asphalt/Concrete	27,033.52	D
A-5	Ornamental Landscaping	29,447.54	D
A-6	Bio-Retention – Gravel/Class II Permeable Base	7,913.31	B
B-1	Homesites - Roof	91,849.43	D
B-2	Homesites - Landscaping	91,849.43	D
B-3	Park - Asphalt/Concrete	30,954.69	D
B-4	Park - Landscaping	30,954.69	D
B-5	Street – Asphalt/Concrete	71,308.56	D
B-6	Hardscape – Asphalt/Concrete	24,135.79	D
B-7	Ornamental Landscaping	31,320.94	D
B-8	Bio-Retention – Gravel/Class II Permeable Base	7,777.41	B

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
N/A			

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				Type 'D' DMAs that are draining to the Self-Retaining Area		
DMA Name/ ID	Post-project surface type	Area (square feet) [A]	Storm Depth (inches) [B]	DMA Name / ID	AREA*RUNOFF FACTOR = [C]	Required Retention Depth (inches) [D]
A-6	Gravel/Class II Permeable Base	7,913.31	0.53	A-1	109,258.2	
				A-2	13,503.8	
				A-3	48,462.4	
				A-4	24,059.8	
				A-5	3,239.2	

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Self-Retaining Area				Type 'D' DMAs that are draining to the Self-Retaining Area		
DMA Name/ ID	Post-project surface type	Area (square feet) [A]	Storm Depth (inches) [B]	DMA Name / ID	AREA*RUNOFF FACTOR = [C]	Required Retention Depth (inches) [D]
B-8	Gravel/Class II Permeable Base	7,777.41	0.53	B-1	81,746.0	
				B-2	10,103.4	
				B-3	27,549.7	
				B-4	3,405.0	
				B-5	63,464.6	
				B-6	21,480.9	
				B-7	3,445.3	

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Impervious fraction	Product		Area (square feet)	Ratio
	[A]		[B]	[C] = [A] x [B]	DMA name /ID	[D]	[C]/[D]
N/A							

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
A-1	A-6
A-2	A-6
A-3	A-6
A-4	A-6
A-5	A-6
B-1	B-8
B-2	B-8
B-3	B-8
B-4	B-8
B-5	B-8
B-6	B-8
B-7	B-8

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream 'Highest and Best Use' for stormwater runoff (see discussion in Chapter 2.4.4 of the WQMP Guidance Document for further details)? ☐ Y ☒ N

Geotechnical Report

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? ☐ Y ☒ N

Infiltration Feasibility

Table D.1 Infiltration Feasibility

Does the project site…	YES	NO
…have any DMAs with a seasonal high groundwater mark shallower than 10 feet?		X
If Yes, list affected DMAs:		
…have any DMAs located within 100 feet of a water supply well?		X
If Yes, list affected DMAs:		
…have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact?		X
If Yes, list affected DMAs:		
…have measured in-situ infiltration rates of less than 1.6 inches / hour?	X	
If Yes, list affected DMAs: **(ALL DMAs)**		
…have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface?		X
If Yes, list affected DMAs:		
…geotechnical report identify other site-specific factors that would preclude effective and safe infiltration?		X
Describe here:		

D.2 Harvest and Use Assessment

Please check what applies*:*

☐ Reclaimed water will be used for the non-potable water demands for the project.

☐Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verify with the Copermittee).

☒The Design Capture Volume will be addressed using Infiltration Only BMPs. In such a case, Harvest and Use BMPs are still encouraged, but it would not be required if the Design Capture Volume will be infiltrated or evapotranspired.

Harvest and Use BMPs need not be assessed for the site.

Irrigation Use Feasibility

Step 1: *Total Area of Irrigated Landscape*: N/A

Type of Landscaping (Conservation Design or Active Turf): N/A

Step 2: *Total Area of Impervious Surfaces:* N/A

Step 3: *Enter your EIATIA factor*: N/A

Step 4: *Minimum required irrigated area*: N/A

Step 5:

Minimum required irrigated area (Step 4)	Available Irrigated Landscape (Step 1)
N/A	N/A

Toilet Use Feasibility

Step 1: *Projected Number of Daily Toilet Users: N/A*

Project Type: N/A

Step 2: *Total Area of Impervious Surfaces: N/A*

Step 3: *Enter your TUTIA factor: N/A*

Step 4: *Minimum number of toilet users: N/A*

Step 5:

Minimum required Toilet Users (Step 4)	Projected number of toilet users (Step 1)
N/A	N/A

Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? See Chapter 2 of the Guidance for further information. If yes, describe below. If no, write N/A.

N/A

Step 1: *Average Daily Demand: N/A*

Step 2: *Total Area of Impervious Surfaces: N/A*

Step 3: *Enter the factor from Table 2-4: N/A*

Step 4: *Minimum required use: N/A*

Step 5:

Minimum required non-potable use (Step 4)	Projected average daily use (Step 1)
N/A	N/A

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

Select one of the following:

☒ LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4 (note the requirements of Section 3.4.2 in the WQMP Guidance Document).

☐ A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5. If you plan to submit an analysis demonstrating the technical infeasibility of LID BMPs, request a pre-submittal meeting with the Copermittee to discuss this option. Proceed to Section E to document your alternative compliance measures.

D.4 Feasibility Assessment Summaries

Table D.2 LID Prioritization Summary Matrix

DMA Name/ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
A-1	☐	☐	☒	☐	☐
A-2	☐	☐	☒	☐	☐
A-3	☐	☐	☒	☐	☐
A-4	☐	☐	☒	☐	☐
A-5	☐	☐	☒	☐	☐
A-6	☐	☐	☒	☐	☐
B-1	☐	☐	☒	☐	☐
B-2	☐	☐	☒	☐	☐
B-3	☐	☐	☒	☐	☐
B-4	☐	☐	☒	☐	☐
B-5	☐	☐	☒	☐	☐
B-6	☐	☐	☒	☐	☐
B-7	☐	☐	☒	☐	☐
B-8	☐	☐	☒	☐	☐

For those DMAs where LID BMPs are not feasible, provide a brief narrative below summarizing why they are not feasible, include your technical infeasibility criteria in Appendix 5, and proceed to Section E below to document Alternative Compliance measures for those DMAs. Recall that each proposed DMA must pass through the LID BMP hierarchy before alternative compliance measures may be considered.

All DMAs runoffs are proposed to be routed to bio-retention basins on-site.

D.5 LID BMP Sizing

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Basin A – Bio-retention Basin*		
	[A]		[B]	[C]	[A] x [C]			
A-1	*122,762.05*	*Roofs*	*1.0*	*0.89*	*109,503.7*			
A-2	*122,762.05*	*Ornamental Landscaping*	*0.1*	*0.11*	*13,560.1*			
A-3	*54,452.09*	*Concrete or Asphalt*	*1.0*	*0.89*	*48,571.3*			
A-4	*27,033.52*	*Concrete or Asphalt*	*1.0*	*0.89*	*24,113.9*			
A-5	*29,447.54*	*Ornamental Landscaping*	*0.1*	*0.11*	*3,252.7*			
A-6	*7,913.31*	*Gravel or Class 2 Permeable Base*	*0.1*	*0.11*	*874.1*	*Design Storm Depth (in)*	*Design Capture Volume,* $\mathbf{V_{BMP}}$ *(cubic feet)*	*Proposed Volume on Plans (cubic feet)*
	A_T = 364,370.56				Σ= [D] = 199,875.8	[E] = 0.53	$[F] = \frac{[D]x[E]}{12} = 8{,}827.8$	[G] = 21,800

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Basin B – Bio-retention Basin*		
	[A]		[B]	[C]	[A] x [C]			
B-1	*91,849.43*	*Roofs*	*1.0*	*0.89*	*81,929.7*			
B-2	*91,849.43*	*Ornamental Landscaping*	*0.1*	*0.11*	*10,145.5*			
B-3	*30,954.69*	*Concrete or Asphalt*	*1.0*	*0.89*	*27,611.6*			
B-4	*30,954.69*	*Ornamental Landscaping*	*0.1*	*0.11*	*3,419.2*			
B-5	*71,308.56*	*Concrete or Asphalt*	*1.0*	*0.89*	*63,607.2*			
B-6	*24,135.79*	*Concrete or Asphalt*	*1.0*	*0.89*	*21,529.1*			
B-7	*31,320.94*	*Ornamental Landscaping*	*0.1*	*0.11*	*3,459.6*			
B-8	*7,777.41*	*Gravel or Class 2 Permeable Base*	*0.1*	*0.11*	*859.1*	*Design Storm Depth (in)*	*Design Capture Volume,* $\mathbf{V_{BMP}}$ *(cubic feet)*	*Proposed Volume on Plans (cubic feet)*
	A_T = 380,150.94				Σ= [D] = 212,561	[E] = 0.53	$[F] = \frac{[D]x[E]}{12} = 9{,}388.1$	[G] = 21,800

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Copermittee). Check one of the following Boxes:

☒ LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- *Or* -

☐ The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Co-Permittee and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The following alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

Section F: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

Once you have determined that the LID design is adequate to address water quality requirements, you will need to assess if the proposed LID Design may still create a HCOC. Review Chapters 2 and 3 (including Figure 3-7) of the WQMP Guidance Document to determine if your project must mitigate for Hydromodification impacts. If your project meets one of the following criteria which will be indicated by the check boxes below, you do not need to address Hydromodification at this time. However, if the project does not qualify for Exemptions 1, 2 or 3, then additional measures must be added to the design to comply with HCOC criteria. This is discussed in further detail below in Section F.2.

HCOC EXEMPTION 1: The Priority Development Project disturbs less than one acre. The Copermittee has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

If Yes, HCOC criteria do not apply.

HCOC EXEMPTION 2: The volume and time of concentration[1] of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the Co-Permittee

Does the project qualify for this HCOC Exemption? ☒ Y ☐ N

If Yes, report results in Table F.1 below and provide your substantiated hydrologic analysis in Appendix 7.

Table F.1 Hydrologic Conditions of Concern Summary

Basin A	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration	5 min	5 min	0
Flow (cfs)	0.182	0.19	4%

Basin B	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration	5 min	5 min	0
Flow (cfs)	0.188	0.19	1%

[1] Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Susceptibility Maps.

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

If Yes, HCOC criteria do not apply and note below which adequate sump applies to this HCOC qualifier:

F.2 HCOC Mitigation

If none of the above HCOC Exemption Criteria are applicable, HCOC criteria is considered mitigated if they meet one of the following conditions:

a. ☐ Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.

b. ☐ The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.

c. ☒ Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

Refer to Basin Routing Hydraulic Analysis in Appendix 7.

Section G: Source Control BMPs

Table G.1 Permanent and Operational Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
On-site storm drain inlets	Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951-955-1200 to verify.	Maintain and periodically repaint or replace inlet markings. Provide stormwater pollution prevention information to new site owners, lessees, or operators. See applicable operational BMPs in Fact Sheet SC-44 "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."
Landscape/ Outdoor Pesticide Use	Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. Consider using pest-resistant plans, especially adjacent to hardscape. To ensure successful establishment, select plans appropriate to site soils, slopes, climate, sun, wind,	Maintain landscaping using minimum or no pesticides. See applicable operational BMPs in "What you should know for…Landscape and Gardening" at https://www.rcwatershed.org/wp-content/uploads/2015/12/Landscaping-and-Gardening-Guide.pdf Provide IPM information to new owners, lessees and operators.

	rain, land use, air movement, ecological consistency, and plant interactions.	
Roofing, Gutters, and Trim	Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.	
Plazas, Sidewalks, and Parking Lots		Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Section H: Construction Plan Checklist

Populate Table H.1 below to assist the plan checker in an expeditious review of your project. The first two columns will contain information that was prepared in previous steps, while the last column will be populated with the corresponding plan sheets. This table is to be completed with the submittal of your final Project-Specific WQMP.

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Corresponding Plan Sheet(s)	BMP Location (Lat/Long)
BMP A	Bio-Retention Basin	TTM, RG Plan	33.877, -117.3297
BMP B	Bio-Retention Basin	TTM, RG Plan	33.877, -117.3297

Note that the updated table — or Construction Plan WQMP Checklist — is **only a reference tool** to facilitate an easy comparison of the construction plans to your Project-Specific WQMP. Co-Permittee staff can advise you regarding the process required to propose changes to the approved Project-Specific WQMP.

Section I: Operation, Maintenance and Funding

The Copermittee will periodically verify that Stormwater BMPs on your site are maintained and continue to operate as designed. To make this possible, your Copermittee will require that you include in Appendix 9 of this Project-Specific WQMP:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the Stormwater BMPs you have selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility. Geo-locating the BMPs using a coordinate system of latitude and longitude is recommended to help facilitate a future statewide database system.
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance. Include a brief description of typical landscape maintenance for these areas.

Your local Co-Permittee will also require that you prepare and submit a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on your site. An agreement assigning responsibility for maintenance and providing for inspections and certification may also be required.

Details of these requirements and instructions for preparing a Stormwater BMP Operation and Maintenance Plan are in Chapter 5 of the WQMP Guidance Document.

Maintenance Mechanism: H.O.A.

Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

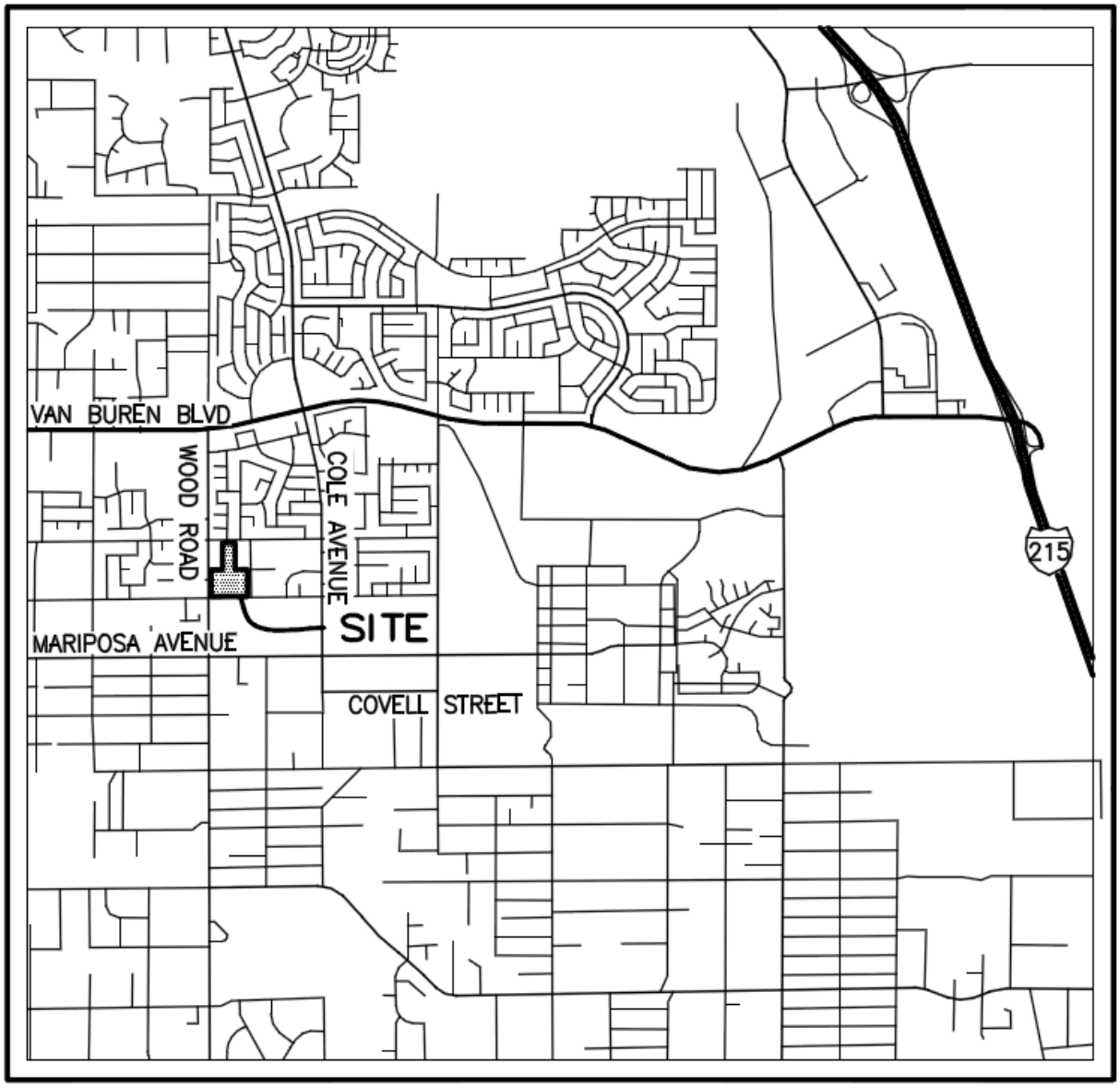
☒ Y ☐ N

Include your Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9. Additionally, include all pertinent forms of educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP in Appendix 10.

Appendix 1: Maps and Site Plans

Location Map, WQMP Site Plan and Receiving Waters Map

VICINITY MAP



N.T.S.

RECEIVING WATERS MAP

Lake Evans

Santa Ana River, Reach 3

Anza Park Drain

La Sierra Channel

Temescal Creek, Reach 1

Arlington Channel

Mockingbird Reservoir

Lake Matthews

PROJECT SITE

Sycamore Creek

Main St

215 Fwy

60/215 Fwy

3rd St

University Ave

14th St

RCC

Chicago Ave

UCR

Jurupa Ave

Central Ave

Arlington Ave

Madison St

Magnolia Ave

91 Fwy

Victoria Ave

Adams St

Washington St

Tyler St

La Sierra Ave

La Sierra Univ

Sycamore Canyon Park

60 Fwy

Alessandro Blvd

Trautwein Rd

Van Buren Blvd

215 Fwy

N

LEGEND

- Lake Evans to Santa Ana River, Reach 3
- Tequesquite Arroyo (Sycamore Creek) to Santa Ana River, Reach 3
- Anza Park Drain to Santa Ana River, Reach 3
- Santa Ana River, Reach 3
- Mockingbird Reservoir to Temescal Creek, Reach 1 to Santa Ana River, Reach 3 - via Arlington Channel
- Temescal Creek, Reach 1 to Santa Ana River, Reach 3 - via Arlington Channel
- Temescal Creek, Reach 1 to Santa Ana River, Reach 3 - via La Sierra Channel to Arlington Channel
- Outside City Limits
- San Jacinto Watershed

R 07 W | R 06 W | R 05 W | R 04 W | R 03 W | R 02 W | R 01 W | R 01 E | R 02 E | R 03 E | R 04 E | R 05 E

T 01 S
T 02 S
T 03 S
T 04 S
T 05 S
T 06 S
T 07 S
T 08 S

06	05	04	03	02	01
07	08	09	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

0.85 MiraLoma
0.61 RiversideNorth
0.54 RiversideSouth
0.68 PigeonPass
0.66 MorenoEast
0.85 Beaumont
0.88 PradoDam
0.51 Woodcrest
0.50 LakeMathews
0.68 PerrisReservoir
Project Site = 0.53
0.87 VistaGrandeGS
0.70 SanJacintoNWS
1.18 Idyllwild
0.58 SunCity
0.68 Winchester
0.90 HurkeyCreek
0.70 ElsinoreNWS
1.11 ElCarisoStation
0.77 WildomarLaCresta
0.52 SkinnerLake
0.65 Anza
0.77 SantaRosaPlateau
1.00 TemeculaNWS
0.64 AguangaValley

Santa Ana River Watershed
Santa Margarita Watershed

JURUPA VALLEY | EASTVALE | NORCO | CORONA | RIVERSIDE | MORENO VALLEY | CALIMESA | BEAUMONT | SAN JACINTO | PERRIS | CANYON LAKE | LAKE ELSINORE | WILDOMAR | MENIFEE | HEMET | MURRIETA | TEMECULA

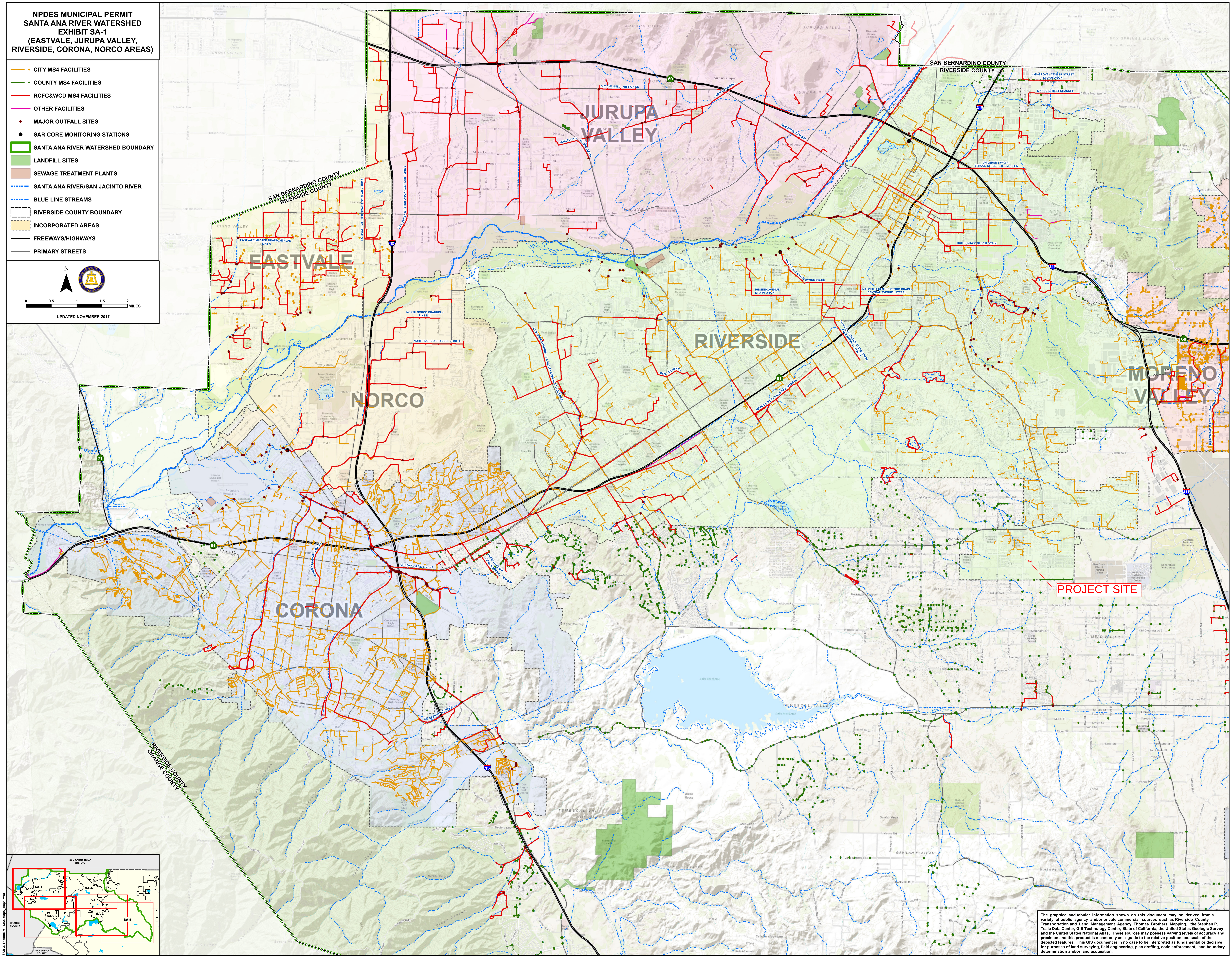
N

Rain Gage Locations

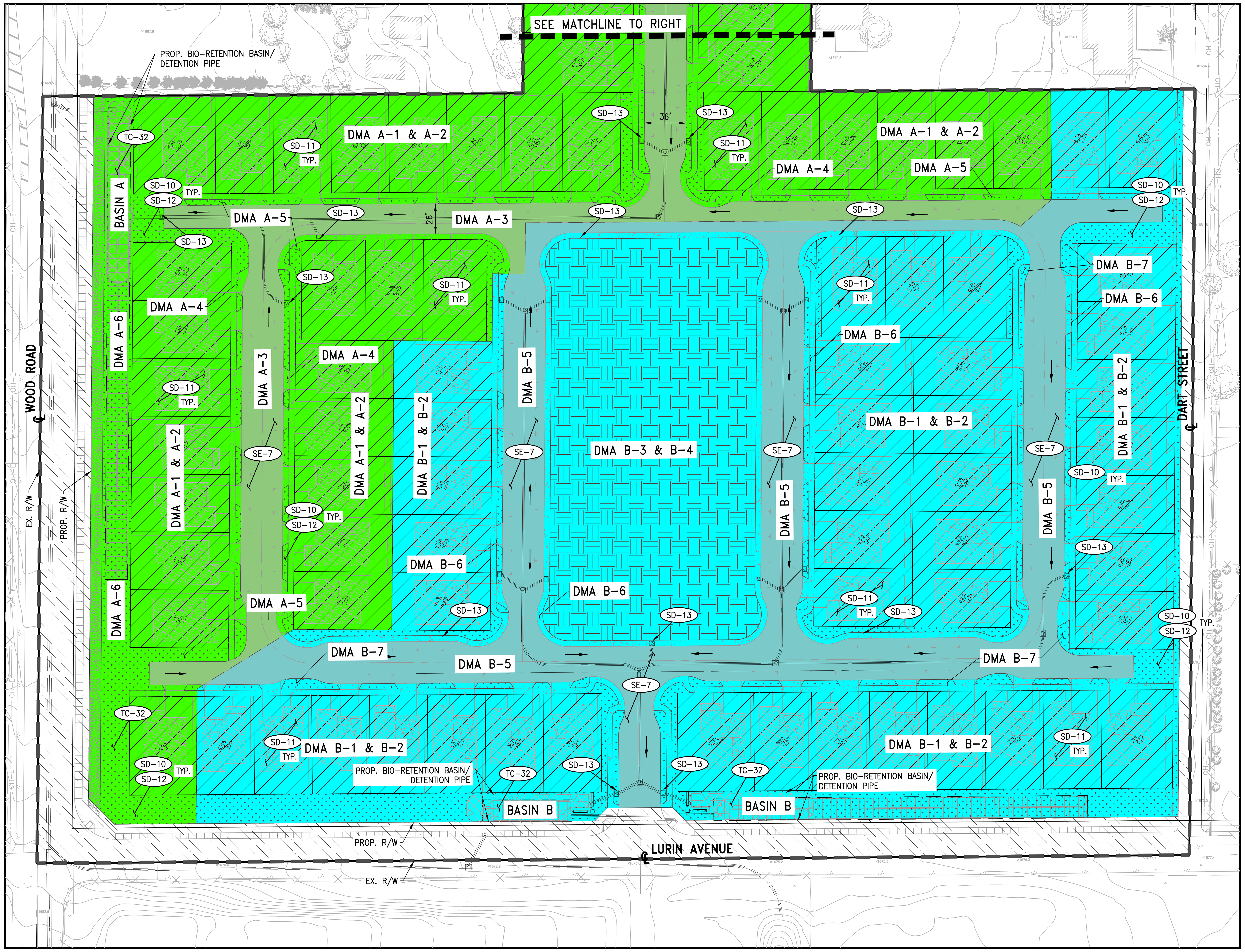
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

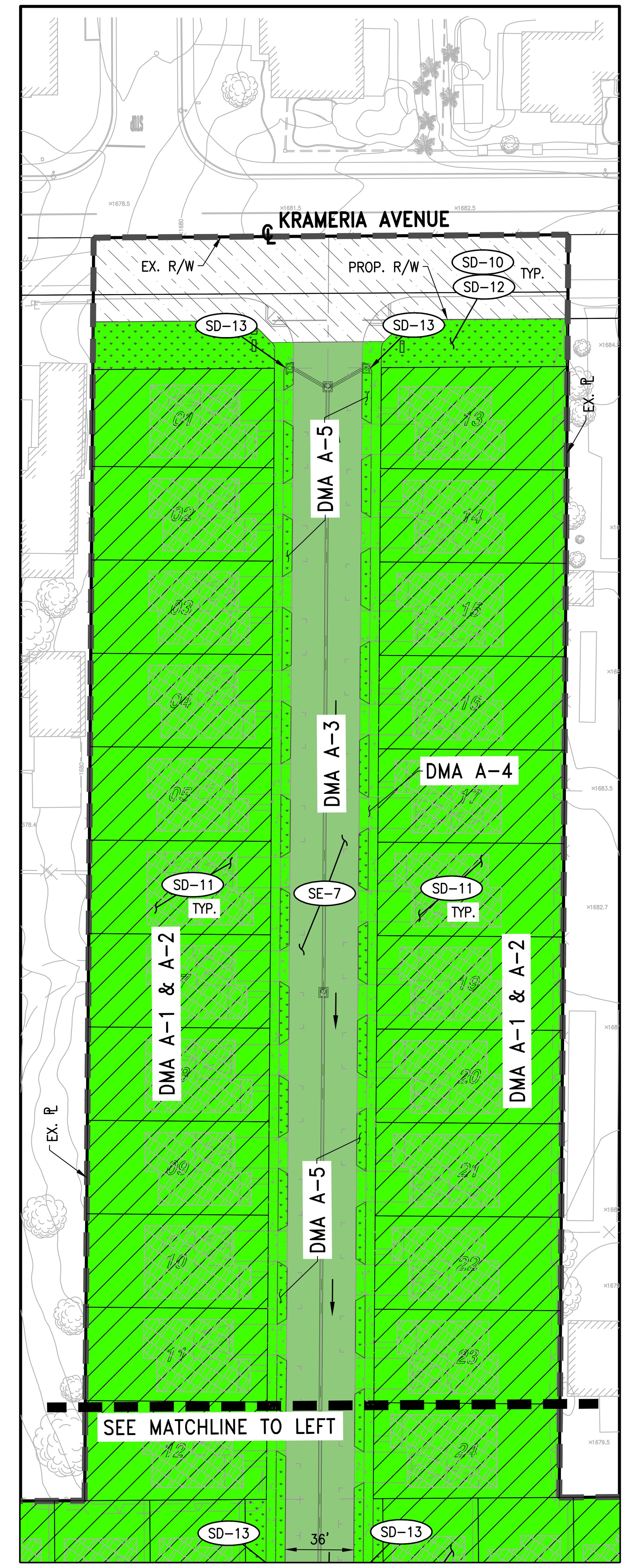
Isohyetal Map for the 85th Percentile 24 hour Storm Event

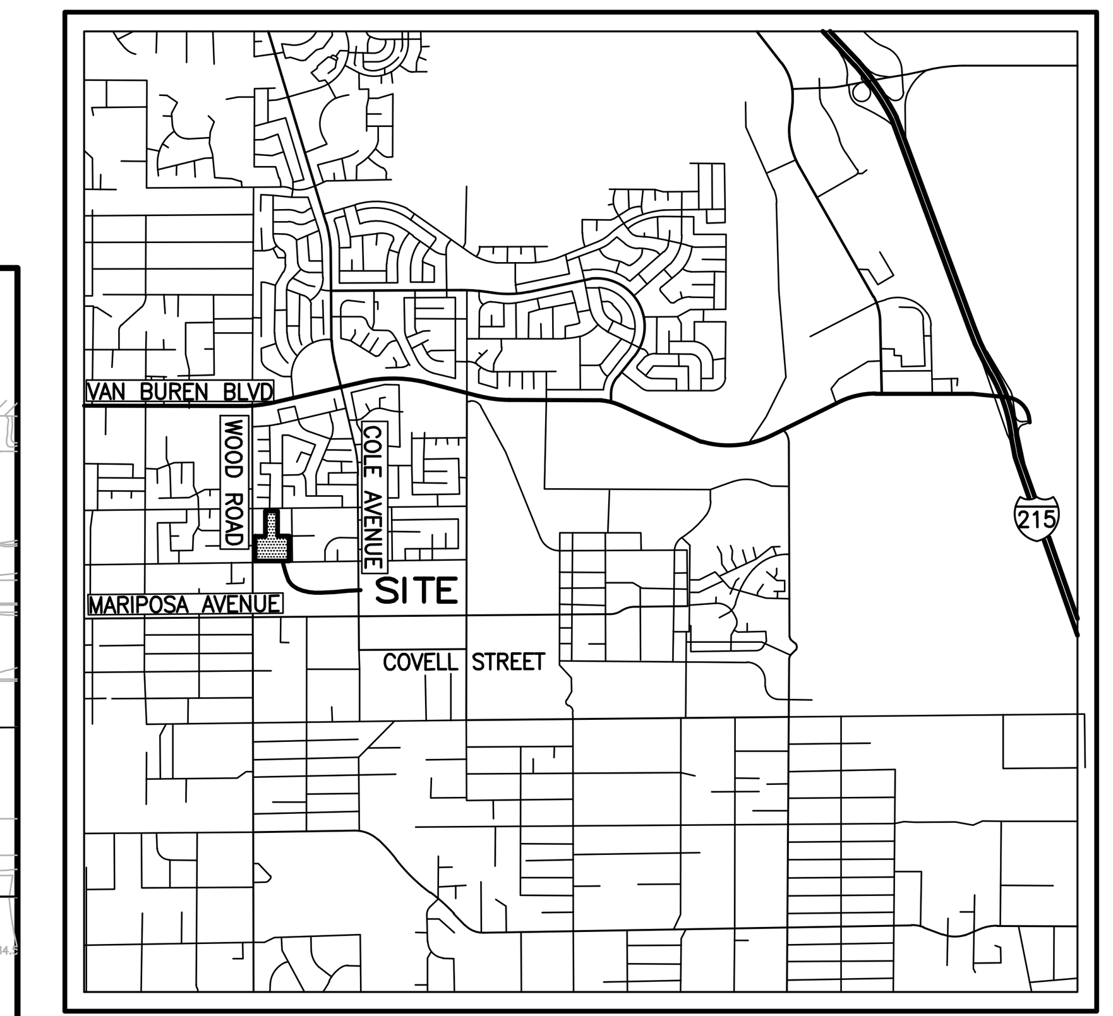
July 2011


NPDES MUNICIPAL PERMIT
SANTA ANA RIVER WATERSHED
EXHIBIT SA-1
(EASTVALE, JURUPA VALLEY, RIVERSIDE, CORONA, NORCO AREAS)
CITY MS4 FACILITIES
COUNTY MS4 FACILITIES
RCFC&WCD MS4 FACILITIES
OTHER FACILITIES
MAJOR OUTFALL SITES
SAR CORE MONITORING STATIONS
SANTA ANA RIVER WATERSHED BOUNDARY
LANDFILL SITES
SEWAGE TREATMENT PLANTS
SANTA ANA RIVER/SAN JACINTO RIVER
BLUE LINE STREAMS
RIVERSIDE COUNTY BOUNDARY
INCORPORATED AREAS
FREEWAYS/HIGHWAYS
PRIMARY STREETS
N
0 0.5 1 1.5 2 MILES
UPDATED NOVEMBER 2017
JURUPA VALLEY
EASTVALE
RIVERSIDE
NORCO
CORONA
MORENO VALLEY
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
RIVERSIDE COUNTY
ORANGE COUNTY
PROJECT SITE
The graphical and tabular information shown on this document may be derived from a variety of public agency and/or private commercial sources such as Riverside County Transportation and Land Management Agency, Thomas Brothers Mapping, the Stephen P. Teale Data Center, GIS Technology Center, State of California, the United States Geologic Survey and the United States National Atlas. These sources may possess varying levels of accuracy and precision and this product is meant only as a guide to the relative position and scale of the depicted features. This GIS document is in no case to be interpreted as fundamental or decisive for purposes of land surveying, field engineering, plan drafting, code enforcement, land boundary determination and/or land acquisition.

WQMP SITE PLAN







LEGEND:

- DRAINAGE MANAGEMENT AREA (DMA) BOUNDARY
- FLOW DIRECTION
- A1 — DMA NUMBER; 9.00 AC — DMA SIZE (ACRES)
- DMA A
- DMA B
- PORTLAND CONCRETE CEMENT (PCC) PAVEMENT AREA
- ASPHALT CONCRETE (AC) PAVEMENT AREA
- HOMESITES*
- ROOF TOP AREA
- BIORETENTION
- PUBLIC AREA*
- OFFSITE
- PUBLIC AREA*

NOTES:

*50% OF AREA ARE ESTIMATED TO BE UTILIZED AS IMPERVIOUS SURFACES (ROOFS, DRIVEWAYS, PATIOS, WALK, ETC.) 50% OF AREA ARE ESTIMATED TO BE UTILIZED AS PERVIOUS SURFACES (LANDSCAPING).

BEST MANAGEMENT PRACTICES:

- SE-7 — PRIVATE STREET SWEEPING
- SD-10 — SITE DESIGN & LANDSCAPE PLANNING
- SD-11 — ROOF RUNOFF CONTROLS
- SD-12 — EFFICIENT IRRIGATION
- SD-13 — STORM DRAIN SIGNAGE
- TC-32 — BIO-RETENTION

DMA	NAME	SURFACE TYPE	AREA (SF)
A-1	HOMESITES	ROOF	122,762.05
A-2	HOMESITES	ORNAMENTAL LANDSCAPE	122,762.05
A-3	STREET	ASPHALT/CONCRETE	54,452.09
A-4	HARDSCAPE	ASPHALT/CONCRETE	27,033.52
A-5	LANDSCAPE	ORNAMENTAL LANDSCAPING	29,447.54
A-6	BIORETENTION	GRAVEL/CLASS II PERMEABLE BASE	7,913.31

DMA	NAME	SURFACE TYPE	AREA (SF)
B-1	HOMESITES	ROOF	91,849.43
B-2	HOMESITES	ORNAMENTAL LANDSCAPE	91,849.43
B-3	PARK	ASPHALT/CONCRETE	30,954.69
B-4	PARK	ORNAMENTAL LANDSCAPING	30,954.69
B-5	STREET	ASPHALT/CONCRETE	71,308.56
B-6	HARDSCAPE	ASPHALT/CONCRETE	24,135.79
B-7	LANDSCAPE	ORNAMENTAL LANDSCAPING	31,320.94
B-8	BIORETENTION	GRAVEL/CLASS II PERMEABLE BASE	7,777.41

MARK	REVISIONS	APPR.	DATE

DESIGNED BY_____ DRAWN BY_____ CHECKED BY_____

CITY OF RIVERSIDE

TTM 38094
WQMP SITE PLAN

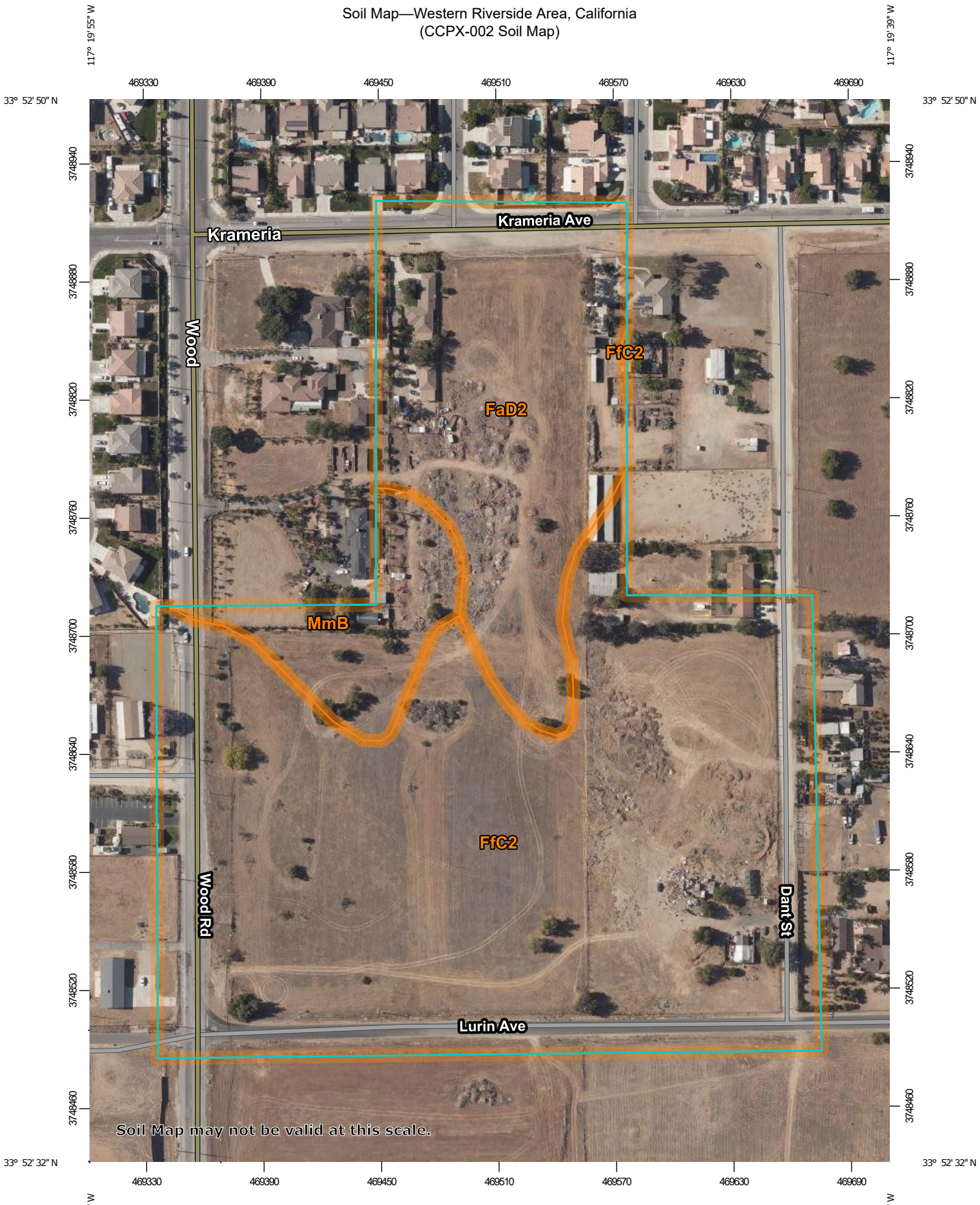
Appendix 2: Construction Plans

Grading and Drainage Plans

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

Soil Map—Western Riverside Area, California
(CCPX-002 Soil Map)



Map Scale: 1:2,630 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

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: Apr 17, 2018—Jun 28, 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
FaD2	Fallbrook sandy loam, 8 to 15 percent slopes, eroded	6.3	24.4%
FfC2	Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded	17.7	68.7%
MmB	Monserate sandy loam, 0 to 5 percent slopes	1.8	6.9%
Totals for Area of Interest		**25.7**	**100.0%**

Western Riverside Area, California

MmB—Monserate sandy loam, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: hcx4
Elevation: 700 to 2,500 feet
Mean annual precipitation: 10 to 18 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Monserate and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monserate

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 10 inches: sandy loam
H2 - 10 to 28 inches: sandy clay loam
H3 - 28 to 45 inches: indurated
H4 - 45 to 57 inches: cemented
H5 - 57 to 70 inches: loamy coarse sand, coarse sandy loam
H5 - 57 to 70 inches:

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: 20 to 39 inches to duripan
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R019XD029CA

Hydric soil rating: No

Minor Components

Greenfield
Percent of map unit: 5 percent
Hydric soil rating: No

Hanford
Percent of map unit: 5 percent
Hydric soil rating: No

Tujunga
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 13, May 27, 2020

Western Riverside Area, California

FfC2—Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded

Map Unit Setting

National map unit symbol: hctw
Elevation: 300 to 2,000 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 200 to 280 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Fallbrook and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallbrook

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from granodiorite and/or residuum weathered from tonalite

Typical profile

H1 - 0 to 14 inches: fine sandy loam
H2 - 14 to 24 inches: sandy clay loam
H3 - 24 to 28 inches: bedrock

Properties and qualities

Slope: 5 to 8 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R019XD029CA

Hydric soil rating: No

Minor Components

Vista
Percent of map unit: 5 percent
Hydric soil rating: No

Bonsall
Percent of map unit: 5 percent
Hydric soil rating: No

Cieneba
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 13, May 27, 2020

Western Riverside Area, California

FaD2—Fallbrook sandy loam, 8 to 15 percent slopes, eroded

Map Unit Setting

National map unit symbol: hctp
Elevation: 300 to 2,000 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 200 to 280 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Fallbrook and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallbrook

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Residuum weathered from granodiorite and/or residuum weathered from tonalite

Typical profile

H1 - 0 to 14 inches: sandy loam
H2 - 14 to 24 inches: sandy clay loam
H3 - 24 to 28 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R019XD029CA
Hydric soil rating: No

Minor Components

Buren
Percent of map unit: 3 percent
Hydric soil rating: No

Cieneba
Percent of map unit: 3 percent
Hydric soil rating: No

Monserate
Percent of map unit: 3 percent
Hydric soil rating: No

Bonsall
Percent of map unit: 3 percent
Hydric soil rating: No

Vista
Percent of map unit: 3 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 13, May 27, 2020

Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use

(Not applicable)

Appendix 5: LID Infeasibility

LID Technical Infeasibility Analysis

(Not applicable)

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

CCPX-002 DMA Summary

Project

DMA	NAME	SURFACE TYPE	AREA (sf)
A-1	HOMESITES	ROOF	122,762.05
A-2	HOMESITES	ORNAMENTAL LANDSCAPING	122,762.05
A-3	STREET	ASPALT/CONCRETE	54,452.09
A-4	HARDSCAPE	ASPALT/CONCRETE	27,033.52
A-5	LANDCAPE	ORNAMENTAL LANDSCAPING	29,447.54
A-6	BIORETENTION	GRAVEL/CLASS II PERMEABLE BASE	7,913.31
		IMPERVIOUS AREA	160,122.90
		PERVIOUS AREA	204,247.66
		TOTAL	364,370.56

DMA	NAME	SURFACE TYPE	AREA (sf)
B-1	HOMESITES	ROOF	91,849.43
B-2	HOMESITES	ORNAMENTAL LANDSCAPING	91,849.43
B-3	PARK	ASPALT/CONCRETE	30,954.69
B-4	PARK	ORNAMENTAL LANDSCAPING	30,954.69
B-5	STREET	ASPALT/CONCRETE	71,308.56
B-6	HARDSCAPE	ASPALT/CONCRETE	24,135.79
B-7	LANDCAPE	ORNAMENTAL LANDSCAPING	31,320.94
B-8	BIORETENTION	GRAVEL/CLASS II PERMEABLE BASE	7,777.41
		IMPERVIOUS AREA	218,248.47
		PERVIOUS AREA	161,902.47
		TOTAL	380,150.94

Project

IMPERVIOUS AREA	378,371.37
PERVIOUS AREA	366,150.13
TOTAL	744,521.50

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	C&V Consulting Inc.	Date	2/23/2021
Designed by	Ka Hei Lam	Case No	
Company Project Number/Name	CCPX-002		

BMP Identification

BMP NAME / ID: Basin A

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.53 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
A-1	122762.05	Roofs	1	0.89	109503.7			
A-2	122762.05	Ornamental Landscaping	0.1	0.11	13560.1			
A-3	54452.09	Concrete or Asphalt	1	0.89	48571.3			
A-4	27033.52	Concrete or Asphalt	1	0.89	24113.9			
A-5	29447.54	Ornamental Landscaping	0.1	0.11	3252.7			
A-6	7913.31	Gravel or Class 2 Permeable Base	0.1	0.11	874.1			
	364370.56	Total			199875.8	0.53	8827.8	21800

Notes:

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: C&V Consulting Inc. | Date: 2/23/2021

Designed by: Ka Hei Lam | Case No:

Company Project Number/Name: CCPX-002

BMP Identification

BMP NAME / ID: Basin B

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.53 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
B-1	91849.43	Roofs	1	0.89	81929.7			
B-2	91849.43	Ornamental Landscaping	0.1	0.11	10145.5			
B-3	30954.69	Concrete or Asphalt	1	0.89	27611.6			
B-4	30954.69	Ornamental Landscaping	0.1	0.11	3419.2			
B-5	71308.56	Concrete or Asphalt	1	0.89	63607.2			
B-6	24135.79	Concrete or Asphalt	1	0.89	21529.1			
B-7	31320.94	Ornamental Landscaping	0.1	0.11	3459.6			
B-8	7777.41	Gravel or Class 2 Permeable Base	0.1	0.11	859.1			
380150.94		**Total**			**212561**	**0.53**	**9388.1**	**21800**

Notes:

Effective Impervious Fraction

Developed Cover Types	Effective Impervious Fraction
Roofs	1.00
Concrete or Asphalt	1.00
Grouted or Gapless Paving Blocks	1.00
Compacted Soil (e.g. unpaved parking)	0.40
Decomposed Granite	0.40
Permeable Paving Blocks w/ Sand Filled Gap	0.25
Class 2 Base	0.30
Gravel or Class 2 Permeable Base	0.10
Pervious Concrete / Porous Asphalt	0.10
Open and Porous Pavers	0.10
Turf block	0.10
Ornamental Landscaping	0.10
Natural (A Soil)	0.03
Natural (B Soil)	0.15
Natural (C Soil)	0.30
Natural (D Soil)	0.40

Mixed Surface Types

Use this table to determine the effective impervious fraction for the V_{BMP} and Q_{BMP} calculation sheets

Bioretention Facility - Design Procedure	BMP ID: Basin A	Legend:	Required Entries / Calculated Cells

Company Name:	C&V Consulting Inc.	Date:	2/17/2021
Designed by:	Ka Hei Lam	County/City Case No.:	

Design Volume

Enter the area tributary to this feature	A_T=	8.36	acres
Enter V_{BMP} determined from Section 2.1 of this Handbook	V_{BMP}=	8,828	ft^3

Type of Bioretention Facility Design

(●) Side slopes required (parallel to parking spaces or adjacent to walkways)

( ) No side slopes required (perpendicular to parking space or Planter Boxes)

Bioretention Facility Surface Area

Depth of Soil Filter Media Layer	d_S =	1.5	ft
Top Width of Bioretention Facility, excluding curb	w_T =	10.0	ft
Total Effective Depth, d_E $d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$	d_E =	1.28	ft
Minimum Surface Area, A_m $A_M\ (ft^2) = \frac{V_{BMP}\ (ft^3)}{d_E\ (ft)}$	A_M =	6,897	ft^2
Proposed Surface Area	A=	7,913	ft^2

Bioretention Facility Properties

Side Slopes in Bioretention Facility	z =	4	:1
Diameter of Underdrain		6	inches
Longitudinal Slope of Site (3% maximum)		0	%
6" Check Dam Spacing		0	feet
Describe Vegetation:			

Notes:

Bioretention Facility - Design Procedure	BMP ID: Basin B	Legend:	Required Entries / Calculated Cells

Company Name:	C&V Consulting Inc.	Date:	2/17/2021
Designed by:	Ka Hei Lam	County/City Case No.:	

Design Volume

Enter the area tributary to this feature	A_T=	8.73	acres
Enter V_{BMP} determined from Section 2.1 of this Handbook	V_{BMP}=	9,388	ft^3

Type of Bioretention Facility Design

(●) Side slopes required (parallel to parking spaces or adjacent to walkways)

( ) No side slopes required (perpendicular to parking space or Planter Boxes)

Bioretention Facility Surface Area

Depth of Soil Filter Media Layer	d_S =	1.5	ft
Top Width of Bioretention Facility, excluding curb	w_T =	10.0	ft
Total Effective Depth, d_E $d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$	d_E =	1.28	ft
Minimum Surface Area, A_m $A_M\ (ft^2) = \frac{V_{BMP}\ (ft^3)}{d_E\ (ft)}$	A_M =	7,335	ft^2
Proposed Surface Area	A=	7,777	ft^2

Bioretention Facility Properties

Side Slopes in Bioretention Facility	z =	4	:1
Diameter of Underdrain		6	inches
Longitudinal Slope of Site (3% maximum)		0	%
6" Check Dam Spacing		0	feet
Describe Vegetation:			

Notes:

MC-4500 CHAMBER

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

STORMTECH MC-4500 CHAMBER
(not to scale)

Nominal Chamber Specifications

Size (L x W x H)
52” x 100” x 60”
1321 mm x 2540 mm x 1524 mm

Chamber Storage
106.5 ft^3 (3.01 m^3)

Min. Installed Storage*
162.6 ft^3 (4.60 m^3)

Weight
Nominal 125 lbs (56.7 kg)

Shipping
7 chambers/pallet
5 end caps/pallet
11 pallets/truck

*Assumes a minimum of 12” (300 mm) of stone above, 9” (230 mm) of stone below chambers, 9” (230 mm) of stone between chambers/end caps and 40% stone porosity.

STORMTECH MC-4500 END CAP
(not to scale)

Nominal End Cap Specifications

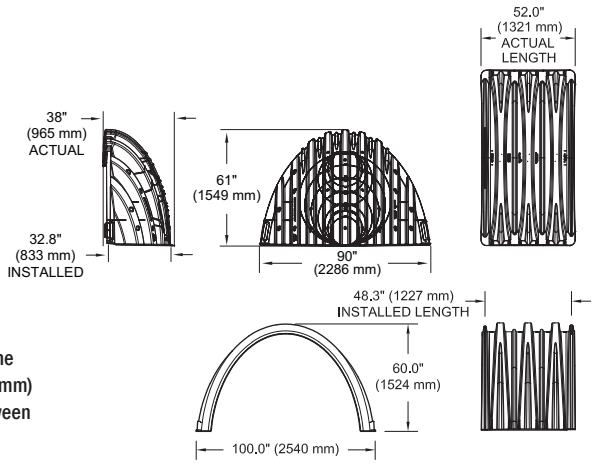
Size (L x W x H)
38” x 90” x 61”
965 mm x 2286 mm x 1549 mm

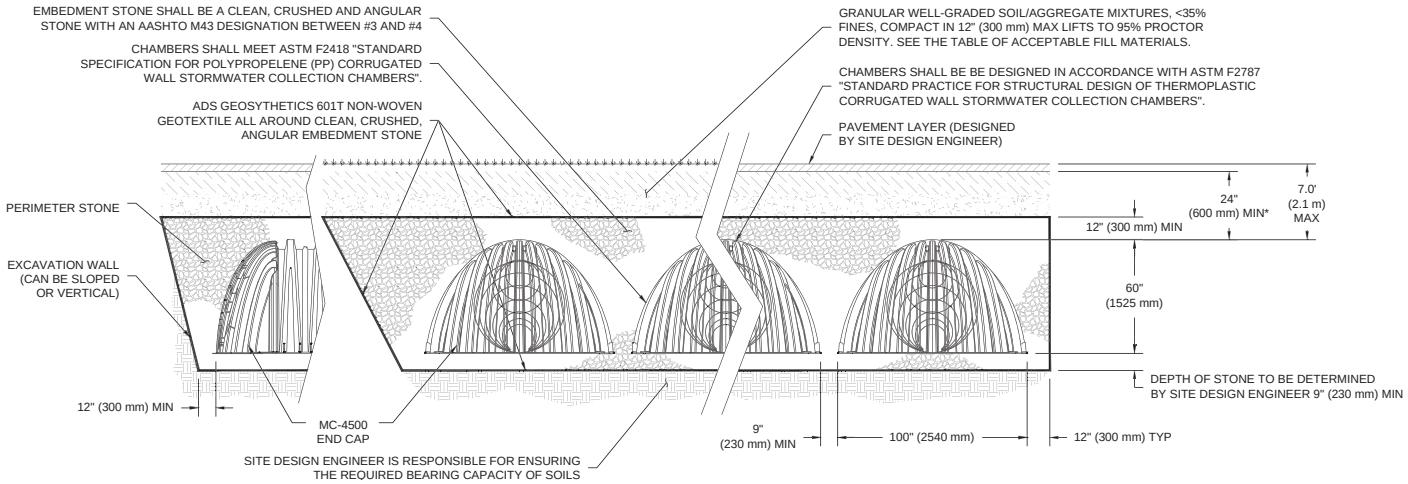
End Cap Storage
39.5 ft^3 (1.12 m^3)

Min. Installed Storage*
115.3 ft^3 (3.26 m^3)

Weight
Nominal 90.0 lbs (40.8 kg)

*Assumes a minimum of 12” (300 mm) of stone above, 9” (230 mm) of stone below, 12” (300 mm) of stone perimeter, 9” (230 mm) of stone between chambers/end caps and 40% stone porosity.





*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 30" (750 mm).

MC-4500 CHAMBER SPECIFICATIONS

STORAGE VOLUME PER CHAMBER FT³ (M³)

	Bare Chamber Storage ft³ (m³)	Chamber and Stone Foundation Depth in. (mm)			
		9" (230 mm)	12" (300 mm)	15" (375 mm)	18" (450 mm)
MC-4500 Chamber	106.5 (3.01)	162.6 (4.60)	166.3 (4.71)	169.9 (4.81)	173.6 (4.91)
MC-4500 End Cap	39.5 (1.12)	115.3 (3.26)	118.6 (3.36)	121.9 (3.45)	125.2 (3.54)

Note: Assumes 9" (230 mm) row spacing, 40% stone porosity, 12" (300 mm) stone above and includes the bare chamber/end cap volume. End cap volume assumes 12" (300 mm) stone perimeter in front of end cap.

AMOUNT OF STONE PER CHAMBER

ENGLISH TONS (yds³)	Stone Foundation Depth			
	9"	12"	15"	18"
MC-4500 Chamber	7.4 (5.2)	7.8 (5.5)	8.3 (5.9)	8.8 (6.2)
MC-4500 End Cap	9.8 (7.0)	10.2 (7.3)	10.6 (7.6)	11.1 (7.9)
METRIC KILOGRAMS (m³)	230 mm	300 mm	375 mm	450 mm
MC-4500 Chamber	6713 (4.0)	7076 (4.2)	7529 (4.5)	7983 (4.7)
MC-4500 End Cap	8890 (5.3)	9253 (5.5)	9616 (5.8)	10069 (6.0)

Note: Assumes 12" (300 mm) of stone above and 9" (230 mm) row spacing and 12" (300 mm) of perimeter stone in front of end caps.

VOLUME EXCAVATION PER CHAMBER YD³ (M³)

	Stone Foundation Depth			
	9" (230 mm)	12" (300 mm)	15" (375mm)	18" (450 mm)
MC-4500 Chamber	10.5 (8.0)	10.8 (8.3)	11.2 (8.5)	11.5 (8.8)
MC-4500 End Cap	9.7 (7.4)	10.0 (7.6)	10.3 (7.9)	10.6 (8.1)

Note: Assumes 9" (230 mm) of separation between chamber rows, 12" (300 mm) of perimeter in front of the end caps, and 24" (600 mm) of cover. The volume of excavation will vary as depth of cover increases.

Working on a project?
Visit us at www.stormtech.com
and utilize the StormTech Design Tool

For more information on the StormTech MC-4500 Chamber and other ADS products, please contact our Customer Service Representatives at 1-800-821-6710

*THE MOST **ADVANCED** NAME IN WATER MANAGEMENT SOLUTIONS™*

Advanced Drainage Systems, Inc.
4640 Trueman Blvd., Hilliard, OH 43026
1-800-821-6710 www.ads-pipe.com

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern

Basin A

Depth	Storage	Orifice #1 Outflow	Orifice #2 Outflow	Weir Outflow	Total Outflow
1660.0	0	0	0	0	0
1660.5	0.0762	0.0735			0.0735
1661.0	0.1515	0.1090			0.1090
1661.5	0.2244	0.1354			0.1354
1662.0	0.2938	0.1575			0.1575
1662.5	0.3581	0.1769			0.1769
1663.0	0.4154	0.1944			0.1944
1663.5	0.4630	0.2104			0.2104
1664.0	0.4957	0.2252			0.2252
1664.5	0.5005	0.2392			0.2392
1165.0	0.5238	0.2523	0.8213		1.0736
1665.5	0.5471	0.2649	2.1729		2.4378
1666.0	0.5705	0.2768	2.9612		3.2380
1666.5	0.5938	0.2883	3.5799		3.8682
1667.0	0.6171	0.2993	4.1064		4.4057
1667.5	0.6405	0.3099	4.5727		4.8826
1668.0	0.6638	0.3202	4.9957	9.4190	14.7349
1668.5	0.6871	0.3302	5.3855	26.6400	32.3557

	Size	Elev.
Bio-Retention /Detention Pipe	800 LF	1660.0
Orifice #1	2" dia	1660.0
Orifice #2	10" dia	1664.5
Weir	8' length	1667.0

U n i t H y d r o g r a p h A n a l y s i s

Study date 02/22/21 File: CC02XHYDA242.out

++

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

Program License Serial Number 6473

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

English Units used in output format

KRAMERIA AVENUE PROJECT
TTM NO. 38094
EXISTING CONDITION - DMA A
2YR, 24-HOUR STORM

Drainage Area = 8.36(Ac.) = 0.013 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 8.36(Ac.) = 0.013 Sq. Mi.
Length along longest watercourse = 764.00(Ft.)
Length along longest watercourse measured to centroid = 382.00(Ft.)
Length along longest watercourse = 0.145 Mi.
Length along longest watercourse measured to centroid = 0.072 Mi.
Difference in elevation = 16.60(Ft.)
Slope along watercourse = 114.7225 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time = 0.069 Hr.
Lag time = 4.14 Min.
25% of lag time = 1.03 Min.
40% of lag time = 1.65 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]
        8.36            1.60                  13.38

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        8.36            4.30                  35.95

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.600(In)
Area Averaged 100-Year Rainfall =    4.300(In)

Point rain (area averaged) =    1.600(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.600(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     8.360           74.00         0.000
 Total Area Entered =      8.36(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
74.0  55.8      0.513     0.000        0.513       1.000      0.513
                                                 Sum (F) =   0.513
Area averaged mean soil loss (F) (In/Hr) =  0.513
Minimum soil loss rate ((In/Hr)) =  0.256
(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
                       MOUNTAIN S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %            (CFS)
------------------------------------------------------------------------
    1   0.083        120.871         28.024              2.361
    2   0.167        241.742         38.056              3.206
    3   0.250        362.614         12.807              1.079
    4   0.333        483.485          6.815              0.574
    5   0.417        604.356          4.571              0.385
    6   0.500        725.227          3.356              0.283
    7   0.583        846.099          2.510              0.211
    8   0.667        966.970          2.181              0.184
```

9	0.750	1087.841	1.682		0.142
			Sum = 100.000	Sum=	8.425

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	0.013	(0.909)	0.012	0.001
2	0.17	0.07	0.013	(0.906)	0.012	0.001
3	0.25	0.07	0.013	(0.902)	0.012	0.001
4	0.33	0.10	0.019	(0.899)	0.017	0.002
5	0.42	0.10	0.019	(0.895)	0.017	0.002
6	0.50	0.10	0.019	(0.892)	0.017	0.002
7	0.58	0.10	0.019	(0.888)	0.017	0.002
8	0.67	0.10	0.019	(0.885)	0.017	0.002
9	0.75	0.10	0.019	(0.881)	0.017	0.002
10	0.83	0.13	0.026	(0.878)	0.023	0.003
11	0.92	0.13	0.026	(0.874)	0.023	0.003
12	1.00	0.13	0.026	(0.871)	0.023	0.003
13	1.08	0.10	0.019	(0.867)	0.017	0.002
14	1.17	0.10	0.019	(0.864)	0.017	0.002
15	1.25	0.10	0.019	(0.861)	0.017	0.002
16	1.33	0.10	0.019	(0.857)	0.017	0.002
17	1.42	0.10	0.019	(0.854)	0.017	0.002
18	1.50	0.10	0.019	(0.850)	0.017	0.002
19	1.58	0.10	0.019	(0.847)	0.017	0.002
20	1.67	0.10	0.019	(0.843)	0.017	0.002
21	1.75	0.10	0.019	(0.840)	0.017	0.002
22	1.83	0.13	0.026	(0.837)	0.023	0.003
23	1.92	0.13	0.026	(0.833)	0.023	0.003
24	2.00	0.13	0.026	(0.830)	0.023	0.003
25	2.08	0.13	0.026	(0.827)	0.023	0.003
26	2.17	0.13	0.026	(0.823)	0.023	0.003
27	2.25	0.13	0.026	(0.820)	0.023	0.003
28	2.33	0.13	0.026	(0.817)	0.023	0.003
29	2.42	0.13	0.026	(0.813)	0.023	0.003
30	2.50	0.13	0.026	(0.810)	0.023	0.003
31	2.58	0.17	0.032	(0.807)	0.029	0.003
32	2.67	0.17	0.032	(0.803)	0.029	0.003
33	2.75	0.17	0.032	(0.800)	0.029	0.003
34	2.83	0.17	0.032	(0.797)	0.029	0.003
35	2.92	0.17	0.032	(0.793)	0.029	0.003
36	3.00	0.17	0.032	(0.790)	0.029	0.003
37	3.08	0.17	0.032	(0.787)	0.029	0.003
38	3.17	0.17	0.032	(0.784)	0.029	0.003
39	3.25	0.17	0.032	(0.780)	0.029	0.003
40	3.33	0.17	0.032	(0.777)	0.029	0.003

41	3.42	0.17	0.032	(0.774)	0.029	0.003
42	3.50	0.17	0.032	(0.771)	0.029	0.003
43	3.58	0.17	0.032	(0.767)	0.029	0.003
44	3.67	0.17	0.032	(0.764)	0.029	0.003
45	3.75	0.17	0.032	(0.761)	0.029	0.003
46	3.83	0.20	0.038	(0.758)	0.035	0.004
47	3.92	0.20	0.038	(0.755)	0.035	0.004
48	4.00	0.20	0.038	(0.751)	0.035	0.004
49	4.08	0.20	0.038	(0.748)	0.035	0.004
50	4.17	0.20	0.038	(0.745)	0.035	0.004
51	4.25	0.20	0.038	(0.742)	0.035	0.004
52	4.33	0.23	0.045	(0.739)	0.040	0.004
53	4.42	0.23	0.045	(0.736)	0.040	0.004
54	4.50	0.23	0.045	(0.732)	0.040	0.004
55	4.58	0.23	0.045	(0.729)	0.040	0.004
56	4.67	0.23	0.045	(0.726)	0.040	0.004
57	4.75	0.23	0.045	(0.723)	0.040	0.004
58	4.83	0.27	0.051	(0.720)	0.046	0.005
59	4.92	0.27	0.051	(0.717)	0.046	0.005
60	5.00	0.27	0.051	(0.714)	0.046	0.005
61	5.08	0.20	0.038	(0.711)	0.035	0.004
62	5.17	0.20	0.038	(0.707)	0.035	0.004
63	5.25	0.20	0.038	(0.704)	0.035	0.004
64	5.33	0.23	0.045	(0.701)	0.040	0.004
65	5.42	0.23	0.045	(0.698)	0.040	0.004
66	5.50	0.23	0.045	(0.695)	0.040	0.004
67	5.58	0.27	0.051	(0.692)	0.046	0.005
68	5.67	0.27	0.051	(0.689)	0.046	0.005
69	5.75	0.27	0.051	(0.686)	0.046	0.005
70	5.83	0.27	0.051	(0.683)	0.046	0.005
71	5.92	0.27	0.051	(0.680)	0.046	0.005
72	6.00	0.27	0.051	(0.677)	0.046	0.005
73	6.08	0.30	0.058	(0.674)	0.052	0.006
74	6.17	0.30	0.058	(0.671)	0.052	0.006
75	6.25	0.30	0.058	(0.668)	0.052	0.006
76	6.33	0.30	0.058	(0.665)	0.052	0.006
77	6.42	0.30	0.058	(0.662)	0.052	0.006
78	6.50	0.30	0.058	(0.659)	0.052	0.006
79	6.58	0.33	0.064	(0.656)	0.058	0.006
80	6.67	0.33	0.064	(0.653)	0.058	0.006
81	6.75	0.33	0.064	(0.650)	0.058	0.006
82	6.83	0.33	0.064	(0.647)	0.058	0.006
83	6.92	0.33	0.064	(0.644)	0.058	0.006
84	7.00	0.33	0.064	(0.641)	0.058	0.006
85	7.08	0.33	0.064	(0.638)	0.058	0.006
86	7.17	0.33	0.064	(0.636)	0.058	0.006
87	7.25	0.33	0.064	(0.633)	0.058	0.006
88	7.33	0.37	0.070	(0.630)	0.063	0.007
89	7.42	0.37	0.070	(0.627)	0.063	0.007
90	7.50	0.37	0.070	(0.624)	0.063	0.007

91	7.58	0.40	0.077	(0.621)	0.069	0.008
92	7.67	0.40	0.077	(0.618)	0.069	0.008
93	7.75	0.40	0.077	(0.615)	0.069	0.008
94	7.83	0.43	0.083	(0.613)	0.075	0.008
95	7.92	0.43	0.083	(0.610)	0.075	0.008
96	8.00	0.43	0.083	(0.607)	0.075	0.008
97	8.08	0.50	0.096	(0.604)	0.086	0.010
98	8.17	0.50	0.096	(0.601)	0.086	0.010
99	8.25	0.50	0.096	(0.598)	0.086	0.010
100	8.33	0.50	0.096	(0.596)	0.086	0.010
101	8.42	0.50	0.096	(0.593)	0.086	0.010
102	8.50	0.50	0.096	(0.590)	0.086	0.010
103	8.58	0.53	0.102	(0.587)	0.092	0.010
104	8.67	0.53	0.102	(0.585)	0.092	0.010
105	8.75	0.53	0.102	(0.582)	0.092	0.010
106	8.83	0.57	0.109	(0.579)	0.098	0.011
107	8.92	0.57	0.109	(0.576)	0.098	0.011
108	9.00	0.57	0.109	(0.574)	0.098	0.011
109	9.08	0.63	0.122	(0.571)	0.109	0.012
110	9.17	0.63	0.122	(0.568)	0.109	0.012
111	9.25	0.63	0.122	(0.566)	0.109	0.012
112	9.33	0.67	0.128	(0.563)	0.115	0.013
113	9.42	0.67	0.128	(0.560)	0.115	0.013
114	9.50	0.67	0.128	(0.557)	0.115	0.013
115	9.58	0.70	0.134	(0.555)	0.121	0.013
116	9.67	0.70	0.134	(0.552)	0.121	0.013
117	9.75	0.70	0.134	(0.549)	0.121	0.013
118	9.83	0.73	0.141	(0.547)	0.127	0.014
119	9.92	0.73	0.141	(0.544)	0.127	0.014
120	10.00	0.73	0.141	(0.542)	0.127	0.014
121	10.08	0.50	0.096	(0.539)	0.086	0.010
122	10.17	0.50	0.096	(0.536)	0.086	0.010
123	10.25	0.50	0.096	(0.534)	0.086	0.010
124	10.33	0.50	0.096	(0.531)	0.086	0.010
125	10.42	0.50	0.096	(0.529)	0.086	0.010
126	10.50	0.50	0.096	(0.526)	0.086	0.010
127	10.58	0.67	0.128	(0.523)	0.115	0.013
128	10.67	0.67	0.128	(0.521)	0.115	0.013
129	10.75	0.67	0.128	(0.518)	0.115	0.013
130	10.83	0.67	0.128	(0.516)	0.115	0.013
131	10.92	0.67	0.128	(0.513)	0.115	0.013
132	11.00	0.67	0.128	(0.511)	0.115	0.013
133	11.08	0.63	0.122	(0.508)	0.109	0.012
134	11.17	0.63	0.122	(0.506)	0.109	0.012
135	11.25	0.63	0.122	(0.503)	0.109	0.012
136	11.33	0.63	0.122	(0.501)	0.109	0.012
137	11.42	0.63	0.122	(0.498)	0.109	0.012
138	11.50	0.63	0.122	(0.496)	0.109	0.012
139	11.58	0.57	0.109	(0.493)	0.098	0.011
140	11.67	0.57	0.109	(0.491)	0.098	0.011

141	11.75	0.57	0.109	(0.488)	0.098	0.011
142	11.83	0.60	0.115	(0.486)	0.104	0.012
143	11.92	0.60	0.115	(0.484)	0.104	0.012
144	12.00	0.60	0.115	(0.481)	0.104	0.012
145	12.08	0.83	0.160	(0.479)	0.144	0.016
146	12.17	0.83	0.160	(0.476)	0.144	0.016
147	12.25	0.83	0.160	(0.474)	0.144	0.016
148	12.33	0.87	0.166	(0.472)	0.150	0.017
149	12.42	0.87	0.166	(0.469)	0.150	0.017
150	12.50	0.87	0.166	(0.467)	0.150	0.017
151	12.58	0.93	0.179	(0.464)	0.161	0.018
152	12.67	0.93	0.179	(0.462)	0.161	0.018
153	12.75	0.93	0.179	(0.460)	0.161	0.018
154	12.83	0.97	0.186	(0.457)	0.167	0.019
155	12.92	0.97	0.186	(0.455)	0.167	0.019
156	13.00	0.97	0.186	(0.453)	0.167	0.019
157	13.08	1.13	0.218	(0.451)	0.196	0.022
158	13.17	1.13	0.218	(0.448)	0.196	0.022
159	13.25	1.13	0.218	(0.446)	0.196	0.022
160	13.33	1.13	0.218	(0.444)	0.196	0.022
161	13.42	1.13	0.218	(0.442)	0.196	0.022
162	13.50	1.13	0.218	(0.439)	0.196	0.022
163	13.58	0.77	0.147	(0.437)	0.132	0.015
164	13.67	0.77	0.147	(0.435)	0.132	0.015
165	13.75	0.77	0.147	(0.433)	0.132	0.015
166	13.83	0.77	0.147	(0.430)	0.132	0.015
167	13.92	0.77	0.147	(0.428)	0.132	0.015
168	14.00	0.77	0.147	(0.426)	0.132	0.015
169	14.08	0.90	0.173	(0.424)	0.156	0.017
170	14.17	0.90	0.173	(0.422)	0.156	0.017
171	14.25	0.90	0.173	(0.419)	0.156	0.017
172	14.33	0.87	0.166	(0.417)	0.150	0.017
173	14.42	0.87	0.166	(0.415)	0.150	0.017
174	14.50	0.87	0.166	(0.413)	0.150	0.017
175	14.58	0.87	0.166	(0.411)	0.150	0.017
176	14.67	0.87	0.166	(0.409)	0.150	0.017
177	14.75	0.87	0.166	(0.407)	0.150	0.017
178	14.83	0.83	0.160	(0.405)	0.144	0.016
179	14.92	0.83	0.160	(0.403)	0.144	0.016
180	15.00	0.83	0.160	(0.401)	0.144	0.016
181	15.08	0.80	0.154	(0.398)	0.138	0.015
182	15.17	0.80	0.154	(0.396)	0.138	0.015
183	15.25	0.80	0.154	(0.394)	0.138	0.015
184	15.33	0.77	0.147	(0.392)	0.132	0.015
185	15.42	0.77	0.147	(0.390)	0.132	0.015
186	15.50	0.77	0.147	(0.388)	0.132	0.015
187	15.58	0.63	0.122	(0.386)	0.109	0.012
188	15.67	0.63	0.122	(0.384)	0.109	0.012
189	15.75	0.63	0.122	(0.382)	0.109	0.012
190	15.83	0.63	0.122	(0.380)	0.109	0.012

191	15.92	0.63	0.122	(0.379)	0.109	0.012
192	16.00	0.63	0.122	(0.377)	0.109	0.012
193	16.08	0.13	0.026	(0.375)	0.023	0.003
194	16.17	0.13	0.026	(0.373)	0.023	0.003
195	16.25	0.13	0.026	(0.371)	0.023	0.003
196	16.33	0.13	0.026	(0.369)	0.023	0.003
197	16.42	0.13	0.026	(0.367)	0.023	0.003
198	16.50	0.13	0.026	(0.365)	0.023	0.003
199	16.58	0.10	0.019	(0.363)	0.017	0.002
200	16.67	0.10	0.019	(0.362)	0.017	0.002
201	16.75	0.10	0.019	(0.360)	0.017	0.002
202	16.83	0.10	0.019	(0.358)	0.017	0.002
203	16.92	0.10	0.019	(0.356)	0.017	0.002
204	17.00	0.10	0.019	(0.354)	0.017	0.002
205	17.08	0.17	0.032	(0.352)	0.029	0.003
206	17.17	0.17	0.032	(0.351)	0.029	0.003
207	17.25	0.17	0.032	(0.349)	0.029	0.003
208	17.33	0.17	0.032	(0.347)	0.029	0.003
209	17.42	0.17	0.032	(0.345)	0.029	0.003
210	17.50	0.17	0.032	(0.344)	0.029	0.003
211	17.58	0.17	0.032	(0.342)	0.029	0.003
212	17.67	0.17	0.032	(0.340)	0.029	0.003
213	17.75	0.17	0.032	(0.339)	0.029	0.003
214	17.83	0.13	0.026	(0.337)	0.023	0.003
215	17.92	0.13	0.026	(0.335)	0.023	0.003
216	18.00	0.13	0.026	(0.334)	0.023	0.003
217	18.08	0.13	0.026	(0.332)	0.023	0.003
218	18.17	0.13	0.026	(0.330)	0.023	0.003
219	18.25	0.13	0.026	(0.329)	0.023	0.003
220	18.33	0.13	0.026	(0.327)	0.023	0.003
221	18.42	0.13	0.026	(0.325)	0.023	0.003
222	18.50	0.13	0.026	(0.324)	0.023	0.003
223	18.58	0.10	0.019	(0.322)	0.017	0.002
224	18.67	0.10	0.019	(0.321)	0.017	0.002
225	18.75	0.10	0.019	(0.319)	0.017	0.002
226	18.83	0.07	0.013	(0.318)	0.012	0.001
227	18.92	0.07	0.013	(0.316)	0.012	0.001
228	19.00	0.07	0.013	(0.315)	0.012	0.001
229	19.08	0.10	0.019	(0.313)	0.017	0.002
230	19.17	0.10	0.019	(0.312)	0.017	0.002
231	19.25	0.10	0.019	(0.310)	0.017	0.002
232	19.33	0.13	0.026	(0.309)	0.023	0.003
233	19.42	0.13	0.026	(0.307)	0.023	0.003
234	19.50	0.13	0.026	(0.306)	0.023	0.003
235	19.58	0.10	0.019	(0.305)	0.017	0.002
236	19.67	0.10	0.019	(0.303)	0.017	0.002
237	19.75	0.10	0.019	(0.302)	0.017	0.002
238	19.83	0.07	0.013	(0.300)	0.012	0.001
239	19.92	0.07	0.013	(0.299)	0.012	0.001
240	20.00	0.07	0.013	(0.298)	0.012	0.001

241	20.08	0.10	0.019	(0.296)	0.017	0.002
242	20.17	0.10	0.019	(0.295)	0.017	0.002
243	20.25	0.10	0.019	(0.294)	0.017	0.002
244	20.33	0.10	0.019	(0.293)	0.017	0.002
245	20.42	0.10	0.019	(0.291)	0.017	0.002
246	20.50	0.10	0.019	(0.290)	0.017	0.002
247	20.58	0.10	0.019	(0.289)	0.017	0.002
248	20.67	0.10	0.019	(0.288)	0.017	0.002
249	20.75	0.10	0.019	(0.287)	0.017	0.002
250	20.83	0.07	0.013	(0.285)	0.012	0.001
251	20.92	0.07	0.013	(0.284)	0.012	0.001
252	21.00	0.07	0.013	(0.283)	0.012	0.001
253	21.08	0.10	0.019	(0.282)	0.017	0.002
254	21.17	0.10	0.019	(0.281)	0.017	0.002
255	21.25	0.10	0.019	(0.280)	0.017	0.002
256	21.33	0.07	0.013	(0.279)	0.012	0.001
257	21.42	0.07	0.013	(0.278)	0.012	0.001
258	21.50	0.07	0.013	(0.277)	0.012	0.001
259	21.58	0.10	0.019	(0.276)	0.017	0.002
260	21.67	0.10	0.019	(0.275)	0.017	0.002
261	21.75	0.10	0.019	(0.274)	0.017	0.002
262	21.83	0.07	0.013	(0.273)	0.012	0.001
263	21.92	0.07	0.013	(0.272)	0.012	0.001
264	22.00	0.07	0.013	(0.271)	0.012	0.001
265	22.08	0.10	0.019	(0.270)	0.017	0.002
266	22.17	0.10	0.019	(0.269)	0.017	0.002
267	22.25	0.10	0.019	(0.268)	0.017	0.002
268	22.33	0.07	0.013	(0.267)	0.012	0.001
269	22.42	0.07	0.013	(0.266)	0.012	0.001
270	22.50	0.07	0.013	(0.266)	0.012	0.001
271	22.58	0.07	0.013	(0.265)	0.012	0.001
272	22.67	0.07	0.013	(0.264)	0.012	0.001
273	22.75	0.07	0.013	(0.263)	0.012	0.001
274	22.83	0.07	0.013	(0.263)	0.012	0.001
275	22.92	0.07	0.013	(0.262)	0.012	0.001
276	23.00	0.07	0.013	(0.261)	0.012	0.001
277	23.08	0.07	0.013	(0.261)	0.012	0.001
278	23.17	0.07	0.013	(0.260)	0.012	0.001
279	23.25	0.07	0.013	(0.260)	0.012	0.001
280	23.33	0.07	0.013	(0.259)	0.012	0.001
281	23.42	0.07	0.013	(0.259)	0.012	0.001
282	23.50	0.07	0.013	(0.258)	0.012	0.001
283	23.58	0.07	0.013	(0.258)	0.012	0.001
284	23.67	0.07	0.013	(0.257)	0.012	0.001
285	23.75	0.07	0.013	(0.257)	0.012	0.001
286	23.83	0.07	0.013	(0.257)	0.012	0.001
287	23.92	0.07	0.013	(0.257)	0.012	0.001
288	24.00	0.07	0.013	(0.256)	0.012	0.001
		(Loss Rate Not Used)				
	Sum =	100.0			Sum =	1.9

```
 Flood volume = Effective rainfall      0.16(In)
  times area       8.4(Ac.)/[(In)/(Ft.)] =       0.1(Ac.Ft)
 Total soil loss =      1.44(In)
 Total soil loss =     1.003(Ac.Ft)
 Total rainfall =      1.60(In)
 Flood volume =        4855.4 Cubic Feet
 Total soil loss =       43698.7 Cubic Feet
 --------------------------------------------------------------------
  Peak flow rate of this hydrograph =      0.182(CFS)
 --------------------------------------------------------------------
 ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     24 - H O U R    S T O R M
                  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       0.0001      0.01  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      0.01  Q         |         |         |         |
  0+35       0.0005      0.01  Q         |         |         |         |
  0+40       0.0006      0.02  Q         |         |         |         |
  0+45       0.0007      0.02  Q         |         |         |         |
  0+50       0.0008      0.02  Q         |         |         |         |
  0+55       0.0010      0.02  Q         |         |         |         |
  1+ 0       0.0011      0.02  Q         |         |         |         |
  1+ 5       0.0012      0.02  Q         |         |         |         |
  1+10       0.0014      0.02  Q         |         |         |         |
  1+15       0.0015      0.02  Q         |         |         |         |
  1+20       0.0016      0.02  Q         |         |         |         |
  1+25       0.0017      0.02  Q         |         |         |         |
  1+30       0.0018      0.02  Q         |         |         |         |
  1+35       0.0019      0.02  Q         |         |         |         |
  1+40       0.0020      0.02  Q         |         |         |         |
  1+45       0.0022      0.02  Q         |         |         |         |
  1+50       0.0023      0.02  Q         |         |         |         |
  1+55       0.0024      0.02  Q         |         |         |         |
  2+ 0       0.0026      0.02  Q         |         |         |         |
  2+ 5       0.0027      0.02  Q         |         |         |         |
  2+10       0.0028      0.02  QV        |         |         |         |
  2+15       0.0030      0.02  QV        |         |         |         |
  2+20       0.0031      0.02  QV        |         |         |         |
  2+25       0.0033      0.02  QV        |         |         |         |
  2+30       0.0034      0.02  QV        |         |         |         |
  2+35       0.0036      0.02  QV        |         |         |         |
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2+40	0.0038	0.03	QV	|	|	|	|
2+45	0.0039	0.03	QV	|	|	|	|
2+50	0.0041	0.03	QV	|	|	|	|
2+55	0.0043	0.03	QV	|	|	|	|
3+ 0	0.0045	0.03	QV	|	|	|	|
3+ 5	0.0047	0.03	QV	|	|	|	|
3+10	0.0049	0.03	QV	|	|	|	|
3+15	0.0050	0.03	QV	|	|	|	|
3+20	0.0052	0.03	QV	|	|	|	|
3+25	0.0054	0.03	QV	|	|	|	|
3+30	0.0056	0.03	Q V	|	|	|	|
3+35	0.0058	0.03	Q V	|	|	|	|
3+40	0.0060	0.03	Q V	|	|	|	|
3+45	0.0062	0.03	Q V	|	|	|	|
3+50	0.0064	0.03	Q V	|	|	|	|
3+55	0.0066	0.03	Q V	|	|	|	|
4+ 0	0.0068	0.03	Q V	|	|	|	|
4+ 5	0.0070	0.03	Q V	|	|	|	|
4+10	0.0072	0.03	Q V	|	|	|	|
4+15	0.0074	0.03	Q V	|	|	|	|
4+20	0.0077	0.03	Q V	|	|	|	|
4+25	0.0079	0.04	Q V	|	|	|	|
4+30	0.0082	0.04	Q V	|	|	|	|
4+35	0.0084	0.04	Q V	|	|	|	|
4+40	0.0087	0.04	Q V	|	|	|	|
4+45	0.0089	0.04	Q V	|	|	|	|
4+50	0.0092	0.04	Q V	|	|	|	|
4+55	0.0095	0.04	Q V	|	|	|	|
5+ 0	0.0098	0.04	Q V	|	|	|	|
5+ 5	0.0101	0.04	Q V	|	|	|	|
5+10	0.0103	0.04	Q V	|	|	|	|
5+15	0.0105	0.03	Q V	|	|	|	|
5+20	0.0108	0.04	Q V	|	|	|	|
5+25	0.0110	0.04	Q V	|	|	|	|
5+30	0.0113	0.04	Q V	|	|	|	|
5+35	0.0116	0.04	Q V	|	|	|	|
5+40	0.0118	0.04	Q V	|	|	|	|
5+45	0.0121	0.04	Q V	|	|	|	|
5+50	0.0124	0.04	Q V	|	|	|	|
5+55	0.0127	0.04	Q V	|	|	|	|
6+ 0	0.0130	0.04	Q V	|	|	|	|
6+ 5	0.0133	0.04	Q V	|	|	|	|
6+10	0.0136	0.05	Q V	|	|	|	|
6+15	0.0140	0.05	Q V	|	|	|	|
6+20	0.0143	0.05	Q V	|	|	|	|
6+25	0.0146	0.05	Q V	|	|	|	|
6+30	0.0150	0.05	Q V	|	|	|	|
6+35	0.0153	0.05	Q V	|	|	|	|
6+40	0.0157	0.05	Q V	|	|	|	|
6+45	0.0160	0.05	Q V	|	|	|	|

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 6+50       0.0164      0.05  Q    V    |          |          |          |
 6+55       0.0168      0.05  Q     V   |          |          |          |
 7+ 0       0.0171      0.05  Q     V   |          |          |          |
 7+ 5       0.0175      0.05  Q     V   |          |          |          |
 7+10       0.0179      0.05  Q     V   |          |          |          |
 7+15       0.0182      0.05  Q     V   |          |          |          |
 7+20       0.0186      0.06  Q     V   |          |          |          |
 7+25       0.0190      0.06  Q     V   |          |          |          |
 7+30       0.0194      0.06  Q     V   |          |          |          |
 7+35       0.0198      0.06  Q      V  |          |          |          |
 7+40       0.0203      0.06  Q      V  |          |          |          |
 7+45       0.0207      0.06  Q      V  |          |          |          |
 7+50       0.0211      0.07  Q      V  |          |          |          |
 7+55       0.0216      0.07  Q      V  |          |          |          |
 8+ 0       0.0221      0.07  Q      V  |          |          |          |
 8+ 5       0.0226      0.07  Q       V |          |          |          |
 8+10       0.0231      0.08  Q       V |          |          |          |
 8+15       0.0236      0.08  Q       V |          |          |          |
 8+20       0.0242      0.08  Q       V |          |          |          |
 8+25       0.0247      0.08  Q       V |          |          |          |
 8+30       0.0253      0.08  Q        V|          |          |          |
 8+35       0.0259      0.08  Q        V|          |          |          |
 8+40       0.0264      0.08  Q        V|          |          |          |
 8+45       0.0270      0.09  Q        V|          |          |          |
 8+50       0.0276      0.09  Q        V|          |          |          |
 8+55       0.0282      0.09  Q         V          |          |          |
 9+ 0       0.0289      0.09  Q         V          |          |          |
 9+ 5       0.0295      0.09  Q         V          |          |          |
 9+10       0.0302      0.10  Q         V          |          |          |
 9+15       0.0309      0.10  Q         |V         |          |          |
 9+20       0.0316      0.10  Q         |V         |          |          |
 9+25       0.0323      0.10  Q         |V         |          |          |
 9+30       0.0330      0.11  Q         |V         |          |          |
 9+35       0.0338      0.11  Q         | V        |          |          |
 9+40       0.0345      0.11  Q         | V        |          |          |
 9+45       0.0353      0.11  Q         | V        |          |          |
 9+50       0.0361      0.11  Q         | V        |          |          |
 9+55       0.0369      0.12  Q         |  V       |          |          |
10+ 0       0.0377      0.12  Q         |  V       |          |          |
10+ 5       0.0384      0.11  Q         |  V       |          |          |
10+10       0.0391      0.09  Q         |   V      |          |          |
10+15       0.0397      0.09  Q         |   V      |          |          |
10+20       0.0403      0.09  Q         |   V      |          |          |
10+25       0.0409      0.08  Q         |   V      |          |          |
10+30       0.0414      0.08  Q         |   V      |          |          |
10+35       0.0421      0.09  Q         |    V     |          |          |
10+40       0.0427      0.10  Q         |    V     |          |          |
10+45       0.0434      0.10  Q         |    V     |          |          |
10+50       0.0442      0.10  Q         |    V     |          |          |
10+55       0.0449      0.11  Q         |     V    |          |          |
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11+ 0       0.0456      0.11  Q         |     V   |         |         |
11+ 5       0.0463      0.11  Q         |     V   |         |         |
11+10       0.0471      0.10  Q         |     V   |         |         |
11+15       0.0478      0.10  Q         |      V  |         |         |
11+20       0.0485      0.10  Q         |      V  |         |         |
11+25       0.0492      0.10  Q         |      V  |         |         |
11+30       0.0499      0.10  Q         |      V  |         |         |
11+35       0.0506      0.10  Q         |       V |         |         |
11+40       0.0512      0.10  Q         |       V |         |         |
11+45       0.0519      0.09  Q         |       V |         |         |
11+50       0.0525      0.09  Q         |       V |         |         |
11+55       0.0532      0.10  Q         |        V|         |         |
12+ 0       0.0539      0.10  Q         |        V|         |         |
12+ 5       0.0546      0.11  Q         |        V|         |         |
12+10       0.0554      0.12  Q         |        V|         |         |
12+15       0.0563      0.13  Q         |         V         |         |
12+20       0.0572      0.13  Q         |         V         |         |
12+25       0.0581      0.13  Q         |         V         |         |
12+30       0.0591      0.14  Q         |         |V        |         |
12+35       0.0601      0.14  Q         |         |V        |         |
12+40       0.0611      0.15  Q         |         |V        |         |
12+45       0.0621      0.15  Q         |         | V       |         |
12+50       0.0631      0.15  Q         |         | V       |         |
12+55       0.0642      0.15  Q         |         |  V      |         |
13+ 0       0.0653      0.15  Q         |         |  V      |         |
13+ 5       0.0664      0.16  Q         |         |  V      |         |
13+10       0.0676      0.17  Q         |         |   V     |         |
13+15       0.0688      0.18  Q         |         |   V     |         |
13+20       0.0700      0.18  Q         |         |    V    |         |
13+25       0.0713      0.18  Q         |         |    V    |         |
13+30       0.0725      0.18  Q         |         |     V   |         |
13+35       0.0737      0.17  Q         |         |     V   |         |
13+40       0.0747      0.14  Q         |         |     V   |         |
13+45       0.0756      0.14  Q         |         |      V  |         |
13+50       0.0765      0.13  Q         |         |      V  |         |
13+55       0.0774      0.13  Q         |         |      V  |         |
14+ 0       0.0783      0.13  Q         |         |       V |         |
14+ 5       0.0792      0.13  Q         |         |       V |         |
14+10       0.0802      0.14  Q         |         |       V |         |
14+15       0.0811      0.14  Q         |         |        V|         |
14+20       0.0821      0.14  Q         |         |        V|         |
14+25       0.0831      0.14  Q         |         |        V|         |
14+30       0.0840      0.14  Q         |         |         V         |
14+35       0.0850      0.14  Q         |         |         V         |
14+40       0.0860      0.14  Q         |         |         V         |
14+45       0.0869      0.14  Q         |         |         |V        |
14+50       0.0879      0.14  Q         |         |         |V        |
14+55       0.0888      0.14  Q         |         |         |V        |
15+ 0       0.0898      0.14  Q         |         |         | V       |
15+ 5       0.0907      0.13  Q         |         |         | V       |
```

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15+10       0.0916      0.13  Q        |          |          | V        |
15+15       0.0925      0.13  Q        |          |          |  V       |
15+20       0.0934      0.13  Q        |          |          |  V       |
15+25       0.0943      0.13  Q        |          |          |  V       |
15+30       0.0951      0.13  Q        |          |          |   V      |
15+35       0.0959      0.12  Q        |          |          |   V      |
15+40       0.0967      0.11  Q        |          |          |   V      |
15+45       0.0974      0.11  Q        |          |          |   V      |
15+50       0.0982      0.11  Q        |          |          |    V     |
15+55       0.0989      0.10  Q        |          |          |    V     |
16+ 0       0.0996      0.10  Q        |          |          |    V     |
16+ 5       0.1002      0.08  Q        |          |          |    V     |
16+10       0.1005      0.05  Q        |          |          |     V    |
16+15       0.1008      0.04  Q        |          |          |     V    |
16+20       0.1010      0.03  Q        |          |          |     V    |
16+25       0.1012      0.03  Q        |          |          |     V    |
16+30       0.1014      0.03  Q        |          |          |     V    |
16+35       0.1015      0.02  Q        |          |          |     V    |
16+40       0.1017      0.02  Q        |          |          |     V    |
16+45       0.1018      0.02  Q        |          |          |     V    |
16+50       0.1019      0.02  Q        |          |          |     V    |
16+55       0.1020      0.02  Q        |          |          |     V    |
17+ 0       0.1021      0.02  Q        |          |          |     V    |
17+ 5       0.1023      0.02  Q        |          |          |     V    |
17+10       0.1024      0.02  Q        |          |          |     V    |
17+15       0.1026      0.02  Q        |          |          |     V    |
17+20       0.1028      0.03  Q        |          |          |     V    |
17+25       0.1030      0.03  Q        |          |          |     V    |
17+30       0.1031      0.03  Q        |          |          |      V   |
17+35       0.1033      0.03  Q        |          |          |      V   |
17+40       0.1035      0.03  Q        |          |          |      V   |
17+45       0.1037      0.03  Q        |          |          |      V   |
17+50       0.1039      0.03  Q        |          |          |      V   |
17+55       0.1040      0.02  Q        |          |          |      V   |
18+ 0       0.1042      0.02  Q        |          |          |      V   |
18+ 5       0.1043      0.02  Q        |          |          |      V   |
18+10       0.1045      0.02  Q        |          |          |      V   |
18+15       0.1046      0.02  Q        |          |          |      V   |
18+20       0.1048      0.02  Q        |          |          |      V   |
18+25       0.1049      0.02  Q        |          |          |      V   |
18+30       0.1051      0.02  Q        |          |          |      V   |
18+35       0.1052      0.02  Q        |          |          |      V   |
18+40       0.1054      0.02  Q        |          |          |      V   |
18+45       0.1055      0.02  Q        |          |          |      V   |
18+50       0.1056      0.02  Q        |          |          |      V   |
18+55       0.1057      0.01  Q        |          |          |      V   |
19+ 0       0.1058      0.01  Q        |          |          |      V   |
19+ 5       0.1058      0.01  Q        |          |          |      V   |
19+10       0.1059      0.01  Q        |          |          |       V  |
19+15       0.1061      0.02  Q        |          |          |       V  |
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19+20	0.1062	0.02	Q	|	|	|	V |
19+25	0.1063	0.02	Q	|	|	|	V |
19+30	0.1064	0.02	Q	|	|	|	V |
19+35	0.1066	0.02	Q	|	|	|	V |
19+40	0.1067	0.02	Q	|	|	|	V |
19+45	0.1068	0.02	Q	|	|	|	V |
19+50	0.1069	0.02	Q	|	|	|	V |
19+55	0.1070	0.01	Q	|	|	|	V |
20+ 0	0.1071	0.01	Q	|	|	|	V |
20+ 5	0.1072	0.01	Q	|	|	|	V |
20+10	0.1073	0.01	Q	|	|	|	V |
20+15	0.1074	0.02	Q	|	|	|	V |
20+20	0.1075	0.02	Q	|	|	|	V |
20+25	0.1076	0.02	Q	|	|	|	V |
20+30	0.1077	0.02	Q	|	|	|	V |
20+35	0.1078	0.02	Q	|	|	|	V |
20+40	0.1079	0.02	Q	|	|	|	V |
20+45	0.1081	0.02	Q	|	|	|	V |
20+50	0.1082	0.01	Q	|	|	|	V |
20+55	0.1082	0.01	Q	|	|	|	V |
21+ 0	0.1083	0.01	Q	|	|	|	V |
21+ 5	0.1084	0.01	Q	|	|	|	V |
21+10	0.1085	0.01	Q	|	|	|	V |
21+15	0.1086	0.02	Q	|	|	|	V |
21+20	0.1087	0.01	Q	|	|	|	V|
21+25	0.1088	0.01	Q	|	|	|	V|
21+30	0.1089	0.01	Q	|	|	|	V|
21+35	0.1090	0.01	Q	|	|	|	V|
21+40	0.1091	0.01	Q	|	|	|	V|
21+45	0.1092	0.02	Q	|	|	|	V|
21+50	0.1093	0.01	Q	|	|	|	V|
21+55	0.1094	0.01	Q	|	|	|	V|
22+ 0	0.1094	0.01	Q	|	|	|	V|
22+ 5	0.1095	0.01	Q	|	|	|	V|
22+10	0.1096	0.01	Q	|	|	|	V|
22+15	0.1097	0.02	Q	|	|	|	V|
22+20	0.1098	0.01	Q	|	|	|	V|
22+25	0.1099	0.01	Q	|	|	|	V|
22+30	0.1100	0.01	Q	|	|	|	V|
22+35	0.1101	0.01	Q	|	|	|	V|
22+40	0.1102	0.01	Q	|	|	|	V|
22+45	0.1102	0.01	Q	|	|	|	V|
22+50	0.1103	0.01	Q	|	|	|	V|
22+55	0.1104	0.01	Q	|	|	|	V|
23+ 0	0.1105	0.01	Q	|	|	|	V|
23+ 5	0.1105	0.01	Q	|	|	|	V|
23+10	0.1106	0.01	Q	|	|	|	V|
23+15	0.1107	0.01	Q	|	|	|	V|
23+20	0.1107	0.01	Q	|	|	|	V|
23+25	0.1108	0.01	Q	|	|	|	V|

23+30	0.1109	0.01	Q	|	|	|	V|
23+35	0.1110	0.01	Q	|	|	|	V|
23+40	0.1110	0.01	Q	|	|	|	V|
23+45	0.1111	0.01	Q	|	|	|	V|
23+50	0.1112	0.01	Q	|	|	|	V|
23+55	0.1113	0.01	Q	|	|	|	V|
24+ 0	0.1113	0.01	Q	|	|	|	V|
24+ 5	0.1114	0.01	Q	|	|	|	V|
24+10	0.1114	0.00	Q	|	|	|	V|
24+15	0.1114	0.00	Q	|	|	|	V|
24+20	0.1114	0.00	Q	|	|	|	V|
24+25	0.1115	0.00	Q	|	|	|	V|
24+30	0.1115	0.00	Q	|	|	|	V|
24+35	0.1115	0.00	Q	|	|	|	V|
24+40	0.1115	0.00	Q	|	|	|	V|

U n i t H y d r o g r a p h A n a l y s i s

Study date 02/22/21 File: CC02PHYDA242.out

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

Program License Serial Number 6473

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

English Units used in output format

KRAMERIA AVENUE PROJECT
TTM NO. 38094
PROPOSED CONDITION - DMA A
2YR, 24-HOUR STORM

Drainage Area = 8.36(Ac.) = 0.013 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 8.36(Ac.) = 0.013 Sq. Mi.
Length along longest watercourse = 1228.00(Ft.)
Length along longest watercourse measured to centroid = 614.00(Ft.)
Length along longest watercourse = 0.233 Mi.
Length along longest watercourse measured to centroid = 0.116 Mi.
Difference in elevation = 16.80(Ft.)
Slope along watercourse = 72.2345 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.040 Hr.
Lag time = 2.43 Min.
25% of lag time = 0.61 Min.
40% of lag time = 0.97 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]
        8.36            1.60                  13.38

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        8.36            4.30                  35.95

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.600(In)
Area Averaged 100-Year Rainfall =    4.300(In)

Point rain (area averaged) =    1.600(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.600(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     8.360           69.00         0.500
 Total Area Entered =      8.36(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
69.0  49.8      0.574     0.500        0.316       1.000      0.316
                                                 Sum (F) =   0.316
Area averaged mean soil loss (F) (In/Hr) =  0.316
Minimum soil loss rate ((In/Hr)) =  0.158
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                       MOUNTAIN S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %            (CFS)
------------------------------------------------------------------------
    1   0.083        205.817         42.698              3.597
    2   0.167        411.633         36.230              3.053
    3   0.250        617.450         10.253              0.864
    4   0.333        823.266          5.628              0.474
    5   0.417       1029.083          5.190              0.437
                              Sum = 100.000   Sum=       8.425
------------------------------------------------------------------------
```

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	0.013	(0.560)	0.006	0.006
2	0.17	0.07	0.013	(0.557)	0.006	0.006
3	0.25	0.07	0.013	(0.555)	0.006	0.006
4	0.33	0.10	0.019	(0.553)	0.010	0.010
5	0.42	0.10	0.019	(0.551)	0.010	0.010
6	0.50	0.10	0.019	(0.549)	0.010	0.010
7	0.58	0.10	0.019	(0.547)	0.010	0.010
8	0.67	0.10	0.019	(0.545)	0.010	0.010
9	0.75	0.10	0.019	(0.542)	0.010	0.010
10	0.83	0.13	0.026	(0.540)	0.013	0.013
11	0.92	0.13	0.026	(0.538)	0.013	0.013
12	1.00	0.13	0.026	(0.536)	0.013	0.013
13	1.08	0.10	0.019	(0.534)	0.010	0.010
14	1.17	0.10	0.019	(0.532)	0.010	0.010
15	1.25	0.10	0.019	(0.530)	0.010	0.010
16	1.33	0.10	0.019	(0.528)	0.010	0.010
17	1.42	0.10	0.019	(0.525)	0.010	0.010
18	1.50	0.10	0.019	(0.523)	0.010	0.010
19	1.58	0.10	0.019	(0.521)	0.010	0.010
20	1.67	0.10	0.019	(0.519)	0.010	0.010
21	1.75	0.10	0.019	(0.517)	0.010	0.010
22	1.83	0.13	0.026	(0.515)	0.013	0.013
23	1.92	0.13	0.026	(0.513)	0.013	0.013
24	2.00	0.13	0.026	(0.511)	0.013	0.013
25	2.08	0.13	0.026	(0.509)	0.013	0.013
26	2.17	0.13	0.026	(0.507)	0.013	0.013
27	2.25	0.13	0.026	(0.505)	0.013	0.013
28	2.33	0.13	0.026	(0.503)	0.013	0.013
29	2.42	0.13	0.026	(0.501)	0.013	0.013
30	2.50	0.13	0.026	(0.499)	0.013	0.013
31	2.58	0.17	0.032	(0.497)	0.016	0.016
32	2.67	0.17	0.032	(0.494)	0.016	0.016
33	2.75	0.17	0.032	(0.492)	0.016	0.016
34	2.83	0.17	0.032	(0.490)	0.016	0.016
35	2.92	0.17	0.032	(0.488)	0.016	0.016
36	3.00	0.17	0.032	(0.486)	0.016	0.016
37	3.08	0.17	0.032	(0.484)	0.016	0.016
38	3.17	0.17	0.032	(0.482)	0.016	0.016
39	3.25	0.17	0.032	(0.480)	0.016	0.016
40	3.33	0.17	0.032	(0.478)	0.016	0.016
41	3.42	0.17	0.032	(0.476)	0.016	0.016
42	3.50	0.17	0.032	(0.474)	0.016	0.016
43	3.58	0.17	0.032	(0.472)	0.016	0.016
44	3.67	0.17	0.032	(0.470)	0.016	0.016

45	3.75	0.17	0.032	(0.468)	0.016	0.016
46	3.83	0.20	0.038	(0.466)	0.019	0.019
47	3.92	0.20	0.038	(0.464)	0.019	0.019
48	4.00	0.20	0.038	(0.463)	0.019	0.019
49	4.08	0.20	0.038	(0.461)	0.019	0.019
50	4.17	0.20	0.038	(0.459)	0.019	0.019
51	4.25	0.20	0.038	(0.457)	0.019	0.019
52	4.33	0.23	0.045	(0.455)	0.022	0.022
53	4.42	0.23	0.045	(0.453)	0.022	0.022
54	4.50	0.23	0.045	(0.451)	0.022	0.022
55	4.58	0.23	0.045	(0.449)	0.022	0.022
56	4.67	0.23	0.045	(0.447)	0.022	0.022
57	4.75	0.23	0.045	(0.445)	0.022	0.022
58	4.83	0.27	0.051	(0.443)	0.026	0.026
59	4.92	0.27	0.051	(0.441)	0.026	0.026
60	5.00	0.27	0.051	(0.439)	0.026	0.026
61	5.08	0.20	0.038	(0.437)	0.019	0.019
62	5.17	0.20	0.038	(0.435)	0.019	0.019
63	5.25	0.20	0.038	(0.434)	0.019	0.019
64	5.33	0.23	0.045	(0.432)	0.022	0.022
65	5.42	0.23	0.045	(0.430)	0.022	0.022
66	5.50	0.23	0.045	(0.428)	0.022	0.022
67	5.58	0.27	0.051	(0.426)	0.026	0.026
68	5.67	0.27	0.051	(0.424)	0.026	0.026
69	5.75	0.27	0.051	(0.422)	0.026	0.026
70	5.83	0.27	0.051	(0.420)	0.026	0.026
71	5.92	0.27	0.051	(0.419)	0.026	0.026
72	6.00	0.27	0.051	(0.417)	0.026	0.026
73	6.08	0.30	0.058	(0.415)	0.029	0.029
74	6.17	0.30	0.058	(0.413)	0.029	0.029
75	6.25	0.30	0.058	(0.411)	0.029	0.029
76	6.33	0.30	0.058	(0.409)	0.029	0.029
77	6.42	0.30	0.058	(0.407)	0.029	0.029
78	6.50	0.30	0.058	(0.406)	0.029	0.029
79	6.58	0.33	0.064	(0.404)	0.032	0.032
80	6.67	0.33	0.064	(0.402)	0.032	0.032
81	6.75	0.33	0.064	(0.400)	0.032	0.032
82	6.83	0.33	0.064	(0.398)	0.032	0.032
83	6.92	0.33	0.064	(0.397)	0.032	0.032
84	7.00	0.33	0.064	(0.395)	0.032	0.032
85	7.08	0.33	0.064	(0.393)	0.032	0.032
86	7.17	0.33	0.064	(0.391)	0.032	0.032
87	7.25	0.33	0.064	(0.389)	0.032	0.032
88	7.33	0.37	0.070	(0.388)	0.035	0.035
89	7.42	0.37	0.070	(0.386)	0.035	0.035
90	7.50	0.37	0.070	(0.384)	0.035	0.035
91	7.58	0.40	0.077	(0.382)	0.038	0.038
92	7.67	0.40	0.077	(0.381)	0.038	0.038
93	7.75	0.40	0.077	(0.379)	0.038	0.038
94	7.83	0.43	0.083	(0.377)	0.042	0.042

95	7.92	0.43	0.083	(0.375)	0.042	0.042
96	8.00	0.43	0.083	(0.374)	0.042	0.042
97	8.08	0.50	0.096	(0.372)	0.048	0.048
98	8.17	0.50	0.096	(0.370)	0.048	0.048
99	8.25	0.50	0.096	(0.368)	0.048	0.048
100	8.33	0.50	0.096	(0.367)	0.048	0.048
101	8.42	0.50	0.096	(0.365)	0.048	0.048
102	8.50	0.50	0.096	(0.363)	0.048	0.048
103	8.58	0.53	0.102	(0.362)	0.051	0.051
104	8.67	0.53	0.102	(0.360)	0.051	0.051
105	8.75	0.53	0.102	(0.358)	0.051	0.051
106	8.83	0.57	0.109	(0.356)	0.054	0.054
107	8.92	0.57	0.109	(0.355)	0.054	0.054
108	9.00	0.57	0.109	(0.353)	0.054	0.054
109	9.08	0.63	0.122	(0.351)	0.061	0.061
110	9.17	0.63	0.122	(0.350)	0.061	0.061
111	9.25	0.63	0.122	(0.348)	0.061	0.061
112	9.33	0.67	0.128	(0.346)	0.064	0.064
113	9.42	0.67	0.128	(0.345)	0.064	0.064
114	9.50	0.67	0.128	(0.343)	0.064	0.064
115	9.58	0.70	0.134	(0.341)	0.067	0.067
116	9.67	0.70	0.134	(0.340)	0.067	0.067
117	9.75	0.70	0.134	(0.338)	0.067	0.067
118	9.83	0.73	0.141	(0.337)	0.070	0.070
119	9.92	0.73	0.141	(0.335)	0.070	0.070
120	10.00	0.73	0.141	(0.333)	0.070	0.070
121	10.08	0.50	0.096	(0.332)	0.048	0.048
122	10.17	0.50	0.096	(0.330)	0.048	0.048
123	10.25	0.50	0.096	(0.329)	0.048	0.048
124	10.33	0.50	0.096	(0.327)	0.048	0.048
125	10.42	0.50	0.096	(0.325)	0.048	0.048
126	10.50	0.50	0.096	(0.324)	0.048	0.048
127	10.58	0.67	0.128	(0.322)	0.064	0.064
128	10.67	0.67	0.128	(0.321)	0.064	0.064
129	10.75	0.67	0.128	(0.319)	0.064	0.064
130	10.83	0.67	0.128	(0.317)	0.064	0.064
131	10.92	0.67	0.128	(0.316)	0.064	0.064
132	11.00	0.67	0.128	(0.314)	0.064	0.064
133	11.08	0.63	0.122	(0.313)	0.061	0.061
134	11.17	0.63	0.122	(0.311)	0.061	0.061
135	11.25	0.63	0.122	(0.310)	0.061	0.061
136	11.33	0.63	0.122	(0.308)	0.061	0.061
137	11.42	0.63	0.122	(0.307)	0.061	0.061
138	11.50	0.63	0.122	(0.305)	0.061	0.061
139	11.58	0.57	0.109	(0.304)	0.054	0.054
140	11.67	0.57	0.109	(0.302)	0.054	0.054
141	11.75	0.57	0.109	(0.301)	0.054	0.054
142	11.83	0.60	0.115	(0.299)	0.058	0.058
143	11.92	0.60	0.115	(0.298)	0.058	0.058
144	12.00	0.60	0.115	(0.296)	0.058	0.058

145	12.08	0.83	0.160	(0.295)	0.080	0.080
146	12.17	0.83	0.160	(0.293)	0.080	0.080
147	12.25	0.83	0.160	(0.292)	0.080	0.080
148	12.33	0.87	0.166	(0.290)	0.083	0.083
149	12.42	0.87	0.166	(0.289)	0.083	0.083
150	12.50	0.87	0.166	(0.287)	0.083	0.083
151	12.58	0.93	0.179	(0.286)	0.090	0.090
152	12.67	0.93	0.179	(0.284)	0.090	0.090
153	12.75	0.93	0.179	(0.283)	0.090	0.090
154	12.83	0.97	0.186	(0.282)	0.093	0.093
155	12.92	0.97	0.186	(0.280)	0.093	0.093
156	13.00	0.97	0.186	(0.279)	0.093	0.093
157	13.08	1.13	0.218	(0.277)	0.109	0.109
158	13.17	1.13	0.218	(0.276)	0.109	0.109
159	13.25	1.13	0.218	(0.275)	0.109	0.109
160	13.33	1.13	0.218	(0.273)	0.109	0.109
161	13.42	1.13	0.218	(0.272)	0.109	0.109
162	13.50	1.13	0.218	(0.270)	0.109	0.109
163	13.58	0.77	0.147	(0.269)	0.074	0.074
164	13.67	0.77	0.147	(0.268)	0.074	0.074
165	13.75	0.77	0.147	(0.266)	0.074	0.074
166	13.83	0.77	0.147	(0.265)	0.074	0.074
167	13.92	0.77	0.147	(0.264)	0.074	0.074
168	14.00	0.77	0.147	(0.262)	0.074	0.074
169	14.08	0.90	0.173	(0.261)	0.086	0.086
170	14.17	0.90	0.173	(0.260)	0.086	0.086
171	14.25	0.90	0.173	(0.258)	0.086	0.086
172	14.33	0.87	0.166	(0.257)	0.083	0.083
173	14.42	0.87	0.166	(0.256)	0.083	0.083
174	14.50	0.87	0.166	(0.254)	0.083	0.083
175	14.58	0.87	0.166	(0.253)	0.083	0.083
176	14.67	0.87	0.166	(0.252)	0.083	0.083
177	14.75	0.87	0.166	(0.250)	0.083	0.083
178	14.83	0.83	0.160	(0.249)	0.080	0.080
179	14.92	0.83	0.160	(0.248)	0.080	0.080
180	15.00	0.83	0.160	(0.247)	0.080	0.080
181	15.08	0.80	0.154	(0.245)	0.077	0.077
182	15.17	0.80	0.154	(0.244)	0.077	0.077
183	15.25	0.80	0.154	(0.243)	0.077	0.077
184	15.33	0.77	0.147	(0.242)	0.074	0.074
185	15.42	0.77	0.147	(0.240)	0.074	0.074
186	15.50	0.77	0.147	(0.239)	0.074	0.074
187	15.58	0.63	0.122	(0.238)	0.061	0.061
188	15.67	0.63	0.122	(0.237)	0.061	0.061
189	15.75	0.63	0.122	(0.235)	0.061	0.061
190	15.83	0.63	0.122	(0.234)	0.061	0.061
191	15.92	0.63	0.122	(0.233)	0.061	0.061
192	16.00	0.63	0.122	(0.232)	0.061	0.061
193	16.08	0.13	0.026	(0.231)	0.013	0.013
194	16.17	0.13	0.026	(0.229)	0.013	0.013

195	16.25	0.13	0.026	(0.228)	0.013	0.013
196	16.33	0.13	0.026	(0.227)	0.013	0.013
197	16.42	0.13	0.026	(0.226)	0.013	0.013
198	16.50	0.13	0.026	(0.225)	0.013	0.013
199	16.58	0.10	0.019	(0.224)	0.010	0.010
200	16.67	0.10	0.019	(0.223)	0.010	0.010
201	16.75	0.10	0.019	(0.221)	0.010	0.010
202	16.83	0.10	0.019	(0.220)	0.010	0.010
203	16.92	0.10	0.019	(0.219)	0.010	0.010
204	17.00	0.10	0.019	(0.218)	0.010	0.010
205	17.08	0.17	0.032	(0.217)	0.016	0.016
206	17.17	0.17	0.032	(0.216)	0.016	0.016
207	17.25	0.17	0.032	(0.215)	0.016	0.016
208	17.33	0.17	0.032	(0.214)	0.016	0.016
209	17.42	0.17	0.032	(0.213)	0.016	0.016
210	17.50	0.17	0.032	(0.212)	0.016	0.016
211	17.58	0.17	0.032	(0.211)	0.016	0.016
212	17.67	0.17	0.032	(0.209)	0.016	0.016
213	17.75	0.17	0.032	(0.208)	0.016	0.016
214	17.83	0.13	0.026	(0.207)	0.013	0.013
215	17.92	0.13	0.026	(0.206)	0.013	0.013
216	18.00	0.13	0.026	(0.205)	0.013	0.013
217	18.08	0.13	0.026	(0.204)	0.013	0.013
218	18.17	0.13	0.026	(0.203)	0.013	0.013
219	18.25	0.13	0.026	(0.202)	0.013	0.013
220	18.33	0.13	0.026	(0.201)	0.013	0.013
221	18.42	0.13	0.026	(0.200)	0.013	0.013
222	18.50	0.13	0.026	(0.199)	0.013	0.013
223	18.58	0.10	0.019	(0.198)	0.010	0.010
224	18.67	0.10	0.019	(0.197)	0.010	0.010
225	18.75	0.10	0.019	(0.197)	0.010	0.010
226	18.83	0.07	0.013	(0.196)	0.006	0.006
227	18.92	0.07	0.013	(0.195)	0.006	0.006
228	19.00	0.07	0.013	(0.194)	0.006	0.006
229	19.08	0.10	0.019	(0.193)	0.010	0.010
230	19.17	0.10	0.019	(0.192)	0.010	0.010
231	19.25	0.10	0.019	(0.191)	0.010	0.010
232	19.33	0.13	0.026	(0.190)	0.013	0.013
233	19.42	0.13	0.026	(0.189)	0.013	0.013
234	19.50	0.13	0.026	(0.188)	0.013	0.013
235	19.58	0.10	0.019	(0.187)	0.010	0.010
236	19.67	0.10	0.019	(0.187)	0.010	0.010
237	19.75	0.10	0.019	(0.186)	0.010	0.010
238	19.83	0.07	0.013	(0.185)	0.006	0.006
239	19.92	0.07	0.013	(0.184)	0.006	0.006
240	20.00	0.07	0.013	(0.183)	0.006	0.006
241	20.08	0.10	0.019	(0.182)	0.010	0.010
242	20.17	0.10	0.019	(0.182)	0.010	0.010
243	20.25	0.10	0.019	(0.181)	0.010	0.010
244	20.33	0.10	0.019	(0.180)	0.010	0.010

245	20.42	0.10	0.019	(0.179)	0.010	0.010
246	20.50	0.10	0.019	(0.179)	0.010	0.010
247	20.58	0.10	0.019	(0.178)	0.010	0.010
248	20.67	0.10	0.019	(0.177)	0.010	0.010
249	20.75	0.10	0.019	(0.176)	0.010	0.010
250	20.83	0.07	0.013	(0.176)	0.006	0.006
251	20.92	0.07	0.013	(0.175)	0.006	0.006
252	21.00	0.07	0.013	(0.174)	0.006	0.006
253	21.08	0.10	0.019	(0.174)	0.010	0.010
254	21.17	0.10	0.019	(0.173)	0.010	0.010
255	21.25	0.10	0.019	(0.172)	0.010	0.010
256	21.33	0.07	0.013	(0.172)	0.006	0.006
257	21.42	0.07	0.013	(0.171)	0.006	0.006
258	21.50	0.07	0.013	(0.170)	0.006	0.006
259	21.58	0.10	0.019	(0.170)	0.010	0.010
260	21.67	0.10	0.019	(0.169)	0.010	0.010
261	21.75	0.10	0.019	(0.168)	0.010	0.010
262	21.83	0.07	0.013	(0.168)	0.006	0.006
263	21.92	0.07	0.013	(0.167)	0.006	0.006
264	22.00	0.07	0.013	(0.167)	0.006	0.006
265	22.08	0.10	0.019	(0.166)	0.010	0.010
266	22.17	0.10	0.019	(0.166)	0.010	0.010
267	22.25	0.10	0.019	(0.165)	0.010	0.010
268	22.33	0.07	0.013	(0.165)	0.006	0.006
269	22.42	0.07	0.013	(0.164)	0.006	0.006
270	22.50	0.07	0.013	(0.164)	0.006	0.006
271	22.58	0.07	0.013	(0.163)	0.006	0.006
272	22.67	0.07	0.013	(0.163)	0.006	0.006
273	22.75	0.07	0.013	(0.162)	0.006	0.006
274	22.83	0.07	0.013	(0.162)	0.006	0.006
275	22.92	0.07	0.013	(0.161)	0.006	0.006
276	23.00	0.07	0.013	(0.161)	0.006	0.006
277	23.08	0.07	0.013	(0.161)	0.006	0.006
278	23.17	0.07	0.013	(0.160)	0.006	0.006
279	23.25	0.07	0.013	(0.160)	0.006	0.006
280	23.33	0.07	0.013	(0.160)	0.006	0.006
281	23.42	0.07	0.013	(0.159)	0.006	0.006
282	23.50	0.07	0.013	(0.159)	0.006	0.006
283	23.58	0.07	0.013	(0.159)	0.006	0.006
284	23.67	0.07	0.013	(0.158)	0.006	0.006
285	23.75	0.07	0.013	(0.158)	0.006	0.006
286	23.83	0.07	0.013	(0.158)	0.006	0.006
287	23.92	0.07	0.013	(0.158)	0.006	0.006
288	24.00	0.07	0.013	(0.158)	0.006	0.006

(Loss Rate Not Used)

Sum = 100.0 Sum = 9.6

Flood volume = Effective rainfall 0.80(In)
times area 8.4(Ac.)/[(In)/(Ft.)] = 0.6(Ac.Ft)
Total soil loss = 0.80(In)
Total soil loss = 0.557(Ac.Ft)

Total rainfall = 1.60(In)
Flood volume = 24277.0 Cubic Feet
Total soil loss = 24277.0 Cubic Feet

Peak flow rate of this hydrograph = 0.917(CFS)

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24 - H O U R S T O R M
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	0.0002	0.02	Q				
0+10	0.0005	0.04	Q				
0+15	0.0008	0.05	Q				
0+20	0.0012	0.06	Q				
0+25	0.0017	0.08	Q				
0+30	0.0023	0.08	Q				
0+35	0.0028	0.08	Q				
0+40	0.0034	0.08	Q				
0+45	0.0039	0.08	Q				
0+50	0.0046	0.09	Q				
0+55	0.0053	0.10	Q				
1+ 0	0.0060	0.10	Q				
1+ 5	0.0067	0.09	Q				
1+10	0.0072	0.09	Q				
1+15	0.0078	0.08	Q				
1+20	0.0084	0.08	Q				
1+25	0.0089	0.08	Q				
1+30	0.0095	0.08	Q				
1+35	0.0101	0.08	Q				
1+40	0.0106	0.08	Q				
1+45	0.0112	0.08	Q				
1+50	0.0118	0.09	Q				
1+55	0.0125	0.10	Q				
2+ 0	0.0132	0.10	Q				
2+ 5	0.0140	0.11	QV				
2+10	0.0147	0.11	QV				
2+15	0.0155	0.11	QV				
2+20	0.0162	0.11	QV				
2+25	0.0169	0.11	QV				
2+30	0.0177	0.11	QV				
2+35	0.0185	0.12	QV				
2+40	0.0194	0.13	QV				
2+45	0.0203	0.13	QV				
2+50	0.0212	0.13	QV				
2+55	0.0222	0.13	QV				

3+ 0	0.0231	0.13	QV	|	|	|	|
3+ 5	0.0240	0.13	QV	|	|	|	|
3+10	0.0249	0.13	QV	|	|	|	|
3+15	0.0259	0.13	QV	|	|	|	|
3+20	0.0268	0.13	QV	|	|	|	|
3+25	0.0277	0.13	QV	|	|	|	|
3+30	0.0287	0.13	Q V	|	|	|	|
3+35	0.0296	0.13	Q V	|	|	|	|
3+40	0.0305	0.13	Q V	|	|	|	|
3+45	0.0314	0.13	Q V	|	|	|	|
3+50	0.0325	0.15	Q V	|	|	|	|
3+55	0.0335	0.16	Q V	|	|	|	|
4+ 0	0.0346	0.16	Q V	|	|	|	|
4+ 5	0.0357	0.16	Q V	|	|	|	|
4+10	0.0368	0.16	Q V	|	|	|	|
4+15	0.0380	0.16	Q V	|	|	|	|
4+20	0.0392	0.17	Q V	|	|	|	|
4+25	0.0404	0.18	Q V	|	|	|	|
4+30	0.0417	0.19	Q V	|	|	|	|
4+35	0.0430	0.19	Q V	|	|	|	|
4+40	0.0443	0.19	Q V	|	|	|	|
4+45	0.0456	0.19	Q V	|	|	|	|
4+50	0.0470	0.20	Q V	|	|	|	|
4+55	0.0484	0.21	Q V	|	|	|	|
5+ 0	0.0499	0.21	Q V	|	|	|	|
5+ 5	0.0512	0.19	Q V	|	|	|	|
5+10	0.0524	0.17	Q V	|	|	|	|
5+15	0.0535	0.17	Q V	|	|	|	|
5+20	0.0548	0.18	Q V	|	|	|	|
5+25	0.0560	0.18	Q V	|	|	|	|
5+30	0.0573	0.19	Q V	|	|	|	|
5+35	0.0587	0.20	Q V	|	|	|	|
5+40	0.0601	0.21	Q V	|	|	|	|
5+45	0.0616	0.21	Q V	|	|	|	|
5+50	0.0631	0.21	Q V	|	|	|	|
5+55	0.0645	0.22	Q V	|	|	|	|
6+ 0	0.0660	0.22	Q V	|	|	|	|
6+ 5	0.0676	0.23	Q V	|	|	|	|
6+10	0.0692	0.24	Q V	|	|	|	|
6+15	0.0709	0.24	Q V	|	|	|	|
6+20	0.0725	0.24	Q V	|	|	|	|
6+25	0.0742	0.24	Q V	|	|	|	|
6+30	0.0759	0.24	Q V	|	|	|	|
6+35	0.0776	0.25	|Q V	|	|	|	|
6+40	0.0795	0.26	|Q V	|	|	|	|
6+45	0.0813	0.27	|Q V	|	|	|	|
6+50	0.0831	0.27	|Q V	|	|	|	|
6+55	0.0850	0.27	|Q V	|	|	|	|
7+ 0	0.0869	0.27	|Q V	|	|	|	|
7+ 5	0.0887	0.27	|Q V	|	|	|	|

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 7+10       0.0906      0.27  |Q    V   |          |          |          |
 7+15       0.0924      0.27  |Q    V   |          |          |          |
 7+20       0.0944      0.28  |Q    V   |          |          |          |
 7+25       0.0964      0.29  |Q    V   |          |          |          |
 7+30       0.0984      0.29  |Q     V  |          |          |          |
 7+35       0.1005      0.31  |Q     V  |          |          |          |
 7+40       0.1027      0.32  |Q     V  |          |          |          |
 7+45       0.1049      0.32  |Q     V  |          |          |          |
 7+50       0.1072      0.33  |Q     V  |          |          |          |
 7+55       0.1096      0.34  |Q     V  |          |          |          |
 8+ 0       0.1120      0.35  |Q      V |          |          |          |
 8+ 5       0.1145      0.37  |Q      V |          |          |          |
 8+10       0.1173      0.39  |Q      V |          |          |          |
 8+15       0.1200      0.40  |Q      V |          |          |          |
 8+20       0.1228      0.40  |Q      V |          |          |          |
 8+25       0.1256      0.40  |Q       V|          |          |          |
 8+30       0.1283      0.40  |Q       V|          |          |          |
 8+35       0.1312      0.42  |Q       V|          |          |          |
 8+40       0.1341      0.43  |Q       V|          |          |          |
 8+45       0.1371      0.43  |Q       V|          |          |          |
 8+50       0.1401      0.44  |Q        V          |          |          |
 8+55       0.1433      0.45  |Q        V          |          |          |
 9+ 0       0.1464      0.46  |Q        V          |          |          |
 9+ 5       0.1497      0.48  |Q        V          |          |          |
 9+10       0.1532      0.50  | Q       V          |          |          |
 9+15       0.1566      0.51  | Q       |V         |          |          |
 9+20       0.1602      0.52  | Q       |V         |          |          |
 9+25       0.1639      0.53  | Q       |V         |          |          |
 9+30       0.1676      0.54  | Q       | V        |          |          |
 9+35       0.1714      0.55  | Q       | V        |          |          |
 9+40       0.1752      0.56  | Q       | V        |          |          |
 9+45       0.1791      0.56  | Q       | V        |          |          |
 9+50       0.1831      0.58  | Q       |  V       |          |          |
 9+55       0.1871      0.59  | Q       |  V       |          |          |
10+ 0       0.1912      0.59  | Q       |  V       |          |          |
10+ 5       0.1947      0.51  | Q       |  V       |          |          |
10+10       0.1978      0.44  |Q        |   V      |          |          |
10+15       0.2007      0.43  |Q        |   V      |          |          |
10+20       0.2036      0.41  |Q        |   V      |          |          |
10+25       0.2064      0.40  |Q        |   V      |          |          |
10+30       0.2092      0.40  |Q        |    V     |          |          |
10+35       0.2123      0.46  |Q        |    V     |          |          |
10+40       0.2159      0.51  | Q       |    V     |          |          |
10+45       0.2195      0.52  | Q       |    V     |          |          |
10+50       0.2231      0.53  | Q       |     V    |          |          |
10+55       0.2269      0.54  | Q       |     V    |          |          |
11+ 0       0.2306      0.54  | Q       |     V    |          |          |
11+ 5       0.2342      0.53  | Q       |     V    |          |          |
11+10       0.2378      0.52  | Q       |      V   |          |          |
11+15       0.2413      0.52  | Q       |      V   |          |          |
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11+20       0.2449      0.51  | Q       |      V  |         |         |
11+25       0.2484      0.51  | Q       |      V  |         |         |
11+30       0.2519      0.51  | Q       |       V |         |         |
11+35       0.2553      0.49  |Q        |       V |         |         |
11+40       0.2585      0.47  |Q        |       V |         |         |
11+45       0.2617      0.46  |Q        |       V |         |         |
11+50       0.2650      0.47  |Q        |        V|         |         |
11+55       0.2683      0.48  |Q        |        V|         |         |
12+ 0       0.2716      0.48  |Q        |        V|         |         |
12+ 5       0.2755      0.56  | Q       |        V|         |         |
12+10       0.2799      0.63  | Q       |         V         |         |
12+15       0.2844      0.65  | Q       |         V         |         |
12+20       0.2890      0.68  | Q       |         V         |         |
12+25       0.2938      0.70  | Q       |         |V        |         |
12+30       0.2986      0.70  | Q       |         |V        |         |
12+35       0.3036      0.72  | Q       |         |V        |         |
12+40       0.3087      0.74  | Q       |         | V       |         |
12+45       0.3139      0.75  | Q       |         | V       |         |
12+50       0.3192      0.76  |  Q      |         | V       |         |
12+55       0.3245      0.78  |  Q      |         |  V      |         |
13+ 0       0.3299      0.78  |  Q      |         |  V      |         |
13+ 5       0.3357      0.84  |  Q      |         |   V     |         |
13+10       0.3418      0.89  |  Q      |         |   V     |         |
13+15       0.3480      0.90  |  Q      |         |   V     |         |
13+20       0.3543      0.91  |  Q      |         |    V    |         |
13+25       0.3606      0.92  |  Q      |         |    V    |         |
13+30       0.3669      0.92  |  Q      |         |     V   |         |
13+35       0.3723      0.79  |  Q      |         |     V   |         |
13+40       0.3770      0.68  | Q       |         |      V  |         |
13+45       0.3815      0.65  | Q       |         |      V  |         |
13+50       0.3859      0.64  | Q       |         |      V  |         |
13+55       0.3902      0.62  | Q       |         |       V |         |
14+ 0       0.3945      0.62  | Q       |         |       V |         |
14+ 5       0.3990      0.67  | Q       |         |       V |         |
14+10       0.4039      0.71  | Q       |         |       V |         |
14+15       0.4088      0.72  | Q       |         |        V|         |
14+20       0.4137      0.71  | Q       |         |        V|         |
14+25       0.4186      0.71  | Q       |         |         V         |
14+30       0.4235      0.70  | Q       |         |         V         |
14+35       0.4283      0.70  | Q       |         |         V         |
14+40       0.4331      0.70  | Q       |         |         |V        |
14+45       0.4380      0.70  | Q       |         |         |V        |
14+50       0.4427      0.69  | Q       |         |         |V        |
14+55       0.4474      0.68  | Q       |         |         | V       |
15+ 0       0.4521      0.68  | Q       |         |         | V       |
15+ 5       0.4566      0.66  | Q       |         |         | V       |
15+10       0.4611      0.65  | Q       |         |         |  V      |
15+15       0.4656      0.65  | Q       |         |         |  V      |
15+20       0.4700      0.64  | Q       |         |         |  V      |
15+25       0.4743      0.63  | Q       |         |         |   V     |
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15+30       0.4786      0.62  | Q       |         |         |   V     |
15+35       0.4826      0.58  | Q       |         |         |   V     |
15+40       0.4863      0.54  | Q       |         |         |   V     |
15+45       0.4899      0.52  | Q       |         |         |    V    |
15+50       0.4934      0.52  | Q       |         |         |    V    |
15+55       0.4970      0.51  | Q       |         |         |    V    |
16+ 0       0.5005      0.51  | Q       |         |         |    V    |
16+ 5       0.5028      0.34  |Q        |         |         |     V   |
16+10       0.5042      0.19  Q         |         |         |     V   |
16+15       0.5052      0.15  Q         |         |         |     V   |
16+20       0.5061      0.13  Q         |         |         |     V   |
16+25       0.5068      0.11  Q         |         |         |     V   |
16+30       0.5076      0.11  Q         |         |         |     V   |
16+35       0.5082      0.10  Q         |         |         |     V   |
16+40       0.5088      0.09  Q         |         |         |     V   |
16+45       0.5094      0.08  Q         |         |         |     V   |
16+50       0.5100      0.08  Q         |         |         |     V   |
16+55       0.5105      0.08  Q         |         |         |     V   |
17+ 0       0.5111      0.08  Q         |         |         |     V   |
17+ 5       0.5118      0.10  Q         |         |         |     V   |
17+10       0.5127      0.12  Q         |         |         |     V   |
17+15       0.5136      0.13  Q         |         |         |     V   |
17+20       0.5145      0.13  Q         |         |         |     V   |
17+25       0.5154      0.13  Q         |         |         |     V   |
17+30       0.5163      0.13  Q         |         |         |      V  |
17+35       0.5172      0.13  Q         |         |         |      V  |
17+40       0.5182      0.13  Q         |         |         |      V  |
17+45       0.5191      0.13  Q         |         |         |      V  |
17+50       0.5200      0.12  Q         |         |         |      V  |
17+55       0.5207      0.11  Q         |         |         |      V  |
18+ 0       0.5215      0.11  Q         |         |         |      V  |
18+ 5       0.5223      0.11  Q         |         |         |      V  |
18+10       0.5230      0.11  Q         |         |         |      V  |
18+15       0.5237      0.11  Q         |         |         |      V  |
18+20       0.5245      0.11  Q         |         |         |      V  |
18+25       0.5252      0.11  Q         |         |         |      V  |
18+30       0.5260      0.11  Q         |         |         |      V  |
18+35       0.5266      0.10  Q         |         |         |      V  |
18+40       0.5272      0.09  Q         |         |         |      V  |
18+45       0.5278      0.08  Q         |         |         |      V  |
18+50       0.5283      0.07  Q         |         |         |      V  |
18+55       0.5287      0.06  Q         |         |         |      V  |
19+ 0       0.5291      0.06  Q         |         |         |      V  |
19+ 5       0.5296      0.07  Q         |         |         |       V |
19+10       0.5301      0.08  Q         |         |         |       V |
19+15       0.5306      0.08  Q         |         |         |       V |
19+20       0.5312      0.09  Q         |         |         |       V |
19+25       0.5319      0.10  Q         |         |         |       V |
19+30       0.5327      0.10  Q         |         |         |       V |
19+35       0.5333      0.09  Q         |         |         |       V |
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19+40	0.5339	0.09	Q	|	|	|	V |
19+45	0.5345	0.08	Q	|	|	|	V |
19+50	0.5350	0.07	Q	|	|	|	V |
19+55	0.5354	0.06	Q	|	|	|	V |
20+ 0	0.5358	0.06	Q	|	|	|	V |
20+ 5	0.5362	0.07	Q	|	|	|	V |
20+10	0.5368	0.08	Q	|	|	|	V |
20+15	0.5373	0.08	Q	|	|	|	V |
20+20	0.5378	0.08	Q	|	|	|	V |
20+25	0.5384	0.08	Q	|	|	|	V |
20+30	0.5390	0.08	Q	|	|	|	V |
20+35	0.5395	0.08	Q	|	|	|	V |
20+40	0.5401	0.08	Q	|	|	|	V |
20+45	0.5406	0.08	Q	|	|	|	V |
20+50	0.5411	0.07	Q	|	|	|	V |
20+55	0.5415	0.06	Q	|	|	|	V |
21+ 0	0.5419	0.06	Q	|	|	|	V |
21+ 5	0.5424	0.07	Q	|	|	|	V |
21+10	0.5429	0.08	Q	|	|	|	V |
21+15	0.5434	0.08	Q	|	|	|	V|
21+20	0.5439	0.07	Q	|	|	|	V|
21+25	0.5443	0.06	Q	|	|	|	V|
21+30	0.5447	0.06	Q	|	|	|	V|
21+35	0.5452	0.07	Q	|	|	|	V|
21+40	0.5457	0.08	Q	|	|	|	V|
21+45	0.5462	0.08	Q	|	|	|	V|
21+50	0.5467	0.07	Q	|	|	|	V|
21+55	0.5471	0.06	Q	|	|	|	V|
22+ 0	0.5475	0.06	Q	|	|	|	V|
22+ 5	0.5479	0.07	Q	|	|	|	V|
22+10	0.5485	0.08	Q	|	|	|	V|
22+15	0.5490	0.08	Q	|	|	|	V|
22+20	0.5495	0.07	Q	|	|	|	V|
22+25	0.5499	0.06	Q	|	|	|	V|
22+30	0.5503	0.06	Q	|	|	|	V|
22+35	0.5507	0.06	Q	|	|	|	V|
22+40	0.5510	0.05	Q	|	|	|	V|
22+45	0.5514	0.05	Q	|	|	|	V|
22+50	0.5518	0.05	Q	|	|	|	V|
22+55	0.5521	0.05	Q	|	|	|	V|
23+ 0	0.5525	0.05	Q	|	|	|	V|
23+ 5	0.5529	0.05	Q	|	|	|	V|
23+10	0.5533	0.05	Q	|	|	|	V|
23+15	0.5536	0.05	Q	|	|	|	V|
23+20	0.5540	0.05	Q	|	|	|	V|
23+25	0.5544	0.05	Q	|	|	|	V|
23+30	0.5547	0.05	Q	|	|	|	V|
23+35	0.5551	0.05	Q	|	|	|	V|
23+40	0.5555	0.05	Q	|	|	|	V|
23+45	0.5559	0.05	Q	|	|	|	V|

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   23+50       0.5562      0.05  Q         |         |         |        V|
   23+55       0.5566      0.05  Q         |         |         |        V|
   24+ 0       0.5570      0.05  Q         |         |         |        V|
   24+ 5       0.5572      0.03  Q         |         |         |        V|
   24+10       0.5573      0.01  Q         |         |         |        V|
   24+15       0.5573      0.01  Q         |         |         |        V|
   24+20       0.5573      0.00  Q         |         |         |        V|
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FLOOD HYDROGRAPH ROUTING PROGRAM

Study date: 02/23/21

KRAMERIA AVENUE PROJECT
TTM NO. 38094
ROUTING BASIN A
2YR, 24-HOUR STORM

Program License Serial Number 6473

********** HYDROGRAPH INFORMATION **********

From study/file name: CC02PHYDA242.rte
**********HYDROGRAPH DATA**********
Number of intervals = 292
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.917 (CFS)
Total volume = 0.557 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 1.000 to Point/Station 2.000
**** RETARDING BASIN ROUTING ****
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User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 292
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.500	0.076	0.073	0.076	0.076
1.000	0.152	0.109	0.152	0.152
1.500	0.224	0.135	0.224	0.224
2.000	0.294	0.158	0.293	0.295
2.500	0.358	0.177	0.357	0.359
3.000	0.415	0.194	0.414	0.416
3.500	0.463	0.210	0.462	0.464
4.000	0.496	0.225	0.495	0.497
4.500	0.500	0.239	0.499	0.501
5.000	0.524	1.074	0.520	0.528
5.500	0.547	2.438	0.539	0.555
6.000	0.571	3.238	0.560	0.582
6.500	0.594	3.868	0.581	0.607
7.000	0.617	4.406	0.602	0.632
7.500	0.640	4.883	0.623	0.657
8.000	0.664	14.735	0.613	0.715
8.500	0.687	32.356	0.576	0.798

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	0.2	0.46	0.69	0.92	Depth (Ft.)
0.083	0.02	0.00	0.000	O	|	|	|	|	0.00
0.167	0.04	0.00	0.000	OI	|	|	|	|	0.00
0.250	0.05	0.00	0.001	OI	|	|	|	|	0.00
0.333	0.06	0.00	0.001	O I	|	|	|	|	0.01
0.417	0.08	0.00	0.001	O I	|	|	|	|	0.01
0.500	0.08	0.00	0.002	O I	|	|	|	|	0.01
0.583	0.08	0.00	0.003	O I	|	|	|	|	0.02
0.667	0.08	0.00	0.003	O I	|	|	|	|	0.02
0.750	0.08	0.00	0.004	O I	|	|	|	|	0.02
0.833	0.09	0.00	0.004	O I	|	|	|	|	0.03
0.917	0.10	0.00	0.005	O I	|	|	|	|	0.03
1.000	0.10	0.01	0.005	O I	|	|	|	|	0.04
1.083	0.09	0.01	0.006	O I	|	|	|	|	0.04
1.167	0.09	0.01	0.007	O I	|	|	|	|	0.04
1.250	0.08	0.01	0.007	O I	|	|	|	|	0.05
1.333	0.08	0.01	0.008	O I	|	|	|	|	0.05
1.417	0.08	0.01	0.008	O I	|	|	|	|	0.05
1.500	0.08	0.01	0.009	O I	|	|	|	|	0.06

1.583	0.08	0.01	0.009	O I	|	|	|	0.06
1.667	0.08	0.01	0.010	O I	|	|	|	0.06
1.750	0.08	0.01	0.010	O I	|	|	|	0.07
1.833	0.09	0.01	0.011	O I	|	|	|	0.07
1.917	0.10	0.01	0.011	O I	|	|	|	0.07
2.000	0.10	0.01	0.012	O I	|	|	|	0.08
2.083	0.11	0.01	0.013	O I	|	|	|	0.08
2.167	0.11	0.01	0.013	O I	|	|	|	0.09
2.250	0.11	0.01	0.014	O I	|	|	|	0.09
2.333	0.11	0.01	0.015	O I	|	|	|	0.10
2.417	0.11	0.01	0.015	O I	|	|	|	0.10
2.500	0.11	0.02	0.016	O I	|	|	|	0.10
2.583	0.12	0.02	0.017	O I	|	|	|	0.11
2.667	0.13	0.02	0.017	O I	|	|	|	0.11
2.750	0.13	0.02	0.018	O I	|	|	|	0.12
2.833	0.13	0.02	0.019	O I	|	|	|	0.12
2.917	0.13	0.02	0.020	O I	|	|	|	0.13
3.000	0.13	0.02	0.020	O I	|	|	|	0.13
3.083	0.13	0.02	0.021	O I	|	|	|	0.14
3.167	0.13	0.02	0.022	O I	|	|	|	0.15
3.250	0.13	0.02	0.023	O I	|	|	|	0.15
3.333	0.13	0.02	0.024	O I	|	|	|	0.16
3.417	0.13	0.02	0.024	O I	|	|	|	0.16
3.500	0.13	0.02	0.025	O I	|	|	|	0.17
3.583	0.13	0.02	0.026	O I	|	|	|	0.17
3.667	0.13	0.03	0.027	O I	|	|	|	0.18
3.750	0.13	0.03	0.027	O I	|	|	|	0.18
3.833	0.15	0.03	0.028	O I	|	|	|	0.19
3.917	0.16	0.03	0.029	O I	|	|	|	0.19
4.000	0.16	0.03	0.030	|O I	|	|	|	0.20
4.083	0.16	0.03	0.031	|O I	|	|	|	0.20
4.167	0.16	0.03	0.032	|O I	|	|	|	0.21
4.250	0.16	0.03	0.033	|O I	|	|	|	0.21
4.333	0.17	0.03	0.034	|O I	|	|	|	0.22
4.417	0.18	0.03	0.035	|O I	|	|	|	0.23
4.500	0.19	0.03	0.036	|O I	|	|	|	0.23
4.583	0.19	0.04	0.037	|O I	|	|	|	0.24
4.667	0.19	0.04	0.038	|O I	|	|	|	0.25
4.750	0.19	0.04	0.039	|O I	|	|	|	0.26
4.833	0.20	0.04	0.040	|O I	|	|	|	0.26
4.917	0.21	0.04	0.041	|O I|	|	|	|	0.27
5.000	0.21	0.04	0.042	|O I|	|	|	|	0.28
5.083	0.19	0.04	0.043	|O I	|	|	|	0.28
5.167	0.17	0.04	0.044	|O I	|	|	|	0.29
5.250	0.17	0.04	0.045	|O I	|	|	|	0.30
5.333	0.18	0.04	0.046	|O I	|	|	|	0.30
5.417	0.18	0.05	0.047	|O I	|	|	|	0.31
5.500	0.19	0.05	0.048	|O I	|	|	|	0.32
5.583	0.20	0.05	0.049	|O I	|	|	|	0.32
5.667	0.21	0.05	0.050	|O I|	|	|	|	0.33

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5.750    0.21    0.05      0.051  |O     I|       |       |       |      0.34
5.833    0.21    0.05      0.052  |O     I|       |       |       |      0.34
5.917    0.22    0.05      0.053  |O     I|       |       |       |      0.35
6.000    0.22    0.05      0.054  |O     I|       |       |       |      0.36
6.083    0.23    0.05      0.056  |O     I|       |       |       |      0.37
6.167    0.24    0.05      0.057  |O      I       |       |       |      0.37
6.250    0.24    0.06      0.058  |O      I       |       |       |      0.38
6.333    0.24    0.06      0.059  |O      I       |       |       |      0.39
6.417    0.24    0.06      0.061  | O     I       |       |       |      0.40
6.500    0.24    0.06      0.062  | O     I       |       |       |      0.41
6.583    0.25    0.06      0.063  | O     I       |       |       |      0.42
6.667    0.26    0.06      0.065  | O     |I      |       |       |      0.43
6.750    0.27    0.06      0.066  | O     |I      |       |       |      0.43
6.833    0.27    0.06      0.067  | O     |I      |       |       |      0.44
6.917    0.27    0.07      0.069  | O     |I      |       |       |      0.45
7.000    0.27    0.07      0.070  | O     |I      |       |       |      0.46
7.083    0.27    0.07      0.072  | O     |I      |       |       |      0.47
7.167    0.27    0.07      0.073  | O     |I      |       |       |      0.48
7.250    0.27    0.07      0.074  | O     |I      |       |       |      0.49
7.333    0.28    0.07      0.076  | O     |I      |       |       |      0.50
7.417    0.29    0.07      0.077  | O     | I     |       |       |      0.51
7.500    0.29    0.07      0.079  | O     | I     |       |       |      0.52
7.583    0.31    0.08      0.080  | O     | I     |       |       |      0.53
7.667    0.32    0.08      0.082  | O     |  I    |       |       |      0.54
7.750    0.32    0.08      0.084  | O     |  I    |       |       |      0.55
7.833    0.33    0.08      0.085  | O     |  I    |       |       |      0.56
7.917    0.34    0.08      0.087  | O     |   I   |       |       |      0.57
8.000    0.35    0.08      0.089  | O     |   I   |       |       |      0.59
8.083    0.37    0.08      0.091  | O     |   I   |       |       |      0.60
8.167    0.39    0.08      0.093  | O     |    I  |       |       |      0.61
8.250    0.40    0.08      0.095  | O     |    I  |       |       |      0.63
8.333    0.40    0.08      0.097  | O     |     I |       |       |      0.64
8.417    0.40    0.08      0.100  | O     |     I |       |       |      0.65
8.500    0.40    0.09      0.102  | O     |     I |       |       |      0.67
8.583    0.42    0.09      0.104  |  O    |     I |       |       |      0.68
8.667    0.43    0.09      0.106  |  O    |     I |       |       |      0.70
8.750    0.43    0.09      0.109  |  O    |     I |       |       |      0.71
8.833    0.44    0.09      0.111  |  O    |      I|       |       |      0.73
8.917    0.45    0.09      0.113  |  O    |      I|       |       |      0.75
9.000    0.46    0.09      0.116  |  O    |      I|       |       |      0.76
9.083    0.48    0.09      0.119  |  O    |       I       |       |      0.78
9.167    0.50    0.09      0.121  |  O    |       |I      |       |      0.80
9.250    0.51    0.10      0.124  |  O    |       |I      |       |      0.82
9.333    0.52    0.10      0.127  |  O    |       | I     |       |      0.84
9.417    0.53    0.10      0.130  |  O    |       | I     |       |      0.85
9.500    0.54    0.10      0.133  |  O    |       | I     |       |      0.87
9.583    0.55    0.10      0.136  |  O    |       |  I    |       |      0.89
9.667    0.56    0.10      0.139  |  O    |       |  I    |       |      0.91
9.750    0.56    0.10      0.142  |  O    |       |  I    |       |      0.94
9.833    0.58    0.11      0.145  |  O    |       |   I   |       |      0.96
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 9.917    0.59    0.11      0.149  |  O    |        |   I   |        |      0.98
10.000    0.59    0.11      0.152  |  O    |        |   I   |        |      1.00
10.083    0.51    0.11      0.155  |  O    |        |I      |        |      1.02
10.167    0.44    0.11      0.158  |  O    |      I |       |        |      1.04
10.250    0.43    0.11      0.160  |  O    |     I  |       |        |      1.05
10.333    0.41    0.11      0.162  |  O    |     I  |       |        |      1.07
10.417    0.40    0.11      0.164  |  O    |     I  |       |        |      1.08
10.500    0.40    0.11      0.166  |  O    |     I  |       |        |      1.10
10.583    0.46    0.11      0.168  |   O   |       I|       |        |      1.11
10.667    0.51    0.12      0.171  |   O   |        |I      |        |      1.13
10.750    0.52    0.12      0.174  |   O   |        | I     |        |      1.15
10.833    0.53    0.12      0.176  |   O   |        | I     |        |      1.17
10.917    0.54    0.12      0.179  |   O   |        | I     |        |      1.19
11.000    0.54    0.12      0.182  |   O   |        | I     |        |      1.21
11.083    0.53    0.12      0.185  |   O   |        | I     |        |      1.23
11.167    0.52    0.12      0.188  |   O   |        | I     |        |      1.25
11.250    0.52    0.12      0.190  |   O   |        |I      |        |      1.27
11.333    0.51    0.12      0.193  |   O   |        |I      |        |      1.29
11.417    0.51    0.12      0.196  |   O   |        |I      |        |      1.30
11.500    0.51    0.13      0.198  |   O   |        |I      |        |      1.32
11.583    0.49    0.13      0.201  |   O   |        |I      |        |      1.34
11.667    0.47    0.13      0.203  |   O   |        I       |        |      1.36
11.750    0.46    0.13      0.206  |   O   |        I       |        |      1.37
11.833    0.47    0.13      0.208  |   O   |        I       |        |      1.39
11.917    0.48    0.13      0.211  |   O   |        I       |        |      1.41
12.000    0.48    0.13      0.213  |   O   |        I       |        |      1.42
12.083    0.56    0.13      0.216  |   O   |        |  I    |        |      1.44
12.167    0.63    0.13      0.219  |   O   |        |     I |        |      1.46
12.250    0.65    0.13      0.222  |   O   |        |     I |        |      1.49
12.333    0.68    0.14      0.226  |   O   |        |      I|        |      1.51
12.417    0.70    0.14      0.230  |   O   |        |       I        |      1.54
12.500    0.70    0.14      0.234  |   O   |        |       I        |      1.57
12.583    0.72    0.14      0.238  |   O   |        |       |I       |      1.60
12.667    0.74    0.14      0.242  |   O   |        |       |I       |      1.63
12.750    0.75    0.14      0.246  |   O   |        |       | I      |      1.66
12.833    0.76    0.14      0.250  |    O  |        |       | I      |      1.69
12.917    0.78    0.14      0.254  |    O  |        |       |  I     |      1.72
13.000    0.78    0.15      0.259  |    O  |        |       |  I     |      1.75
13.083    0.84    0.15      0.263  |    O  |        |       |    I   |      1.78
13.167    0.89    0.15      0.268  |    O  |        |       |      I|      1.82
13.250    0.90    0.15      0.273  |    O  |        |       |      I|      1.85
13.333    0.91    0.15      0.279  |    O  |        |       |      I|      1.89
13.417    0.92    0.15      0.284  |    O  |        |       |       I      1.93
13.500    0.92    0.16      0.289  |    O  |        |       |       I      1.96
13.583    0.79    0.16      0.294  |    O  |        |       |  I    |      2.00
13.667    0.68    0.16      0.298  |    O  |        |      I|       |      2.03
13.750    0.65    0.16      0.301  |    O  |        |     I |       |      2.06
13.833    0.64    0.16      0.305  |    O  |        |     I |       |      2.08
13.917    0.62    0.16      0.308  |    O  |        |    I  |       |      2.11
14.000    0.62    0.16      0.311  |    O  |        |    I  |       |      2.13
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14.083	0.67	0.16	0.314	| O |	| |	| I|	|	2.16
14.167	0.71	0.17	0.318	| O |	| |	| I |	|	2.19
14.250	0.72	0.17	0.322	| O |	| |	| |I |	|	2.22
14.333	0.71	0.17	0.325	| O |	| |	| I |	|	2.25
14.417	0.71	0.17	0.329	| O |	| |	| I |	|	2.27
14.500	0.70	0.17	0.333	| O |	| |	| I |	|	2.30
14.583	0.70	0.17	0.337	| O |	| |	| I |	|	2.33
14.667	0.70	0.17	0.340	| O |	| |	| I |	|	2.36
14.750	0.70	0.17	0.344	| O |	| |	| I |	|	2.39
14.833	0.69	0.17	0.347	| O |	| |	| I |	|	2.42
14.917	0.68	0.17	0.351	| O |	| |	| I|	|	2.45
15.000	0.68	0.18	0.354	| O |	| |	| I|	|	2.47
15.083	0.66	0.18	0.358	| O |	| |	| I|	|	2.50
15.167	0.65	0.18	0.361	| O |	| |	| I |	|	2.53
15.250	0.65	0.18	0.364	| O |	| |	| I |	|	2.56
15.333	0.64	0.18	0.368	| O |	| |	| I |	|	2.58
15.417	0.63	0.18	0.371	| O |	| |	| I |	|	2.61
15.500	0.62	0.18	0.374	| O |	| |	| I |	|	2.64
15.583	0.58	0.18	0.377	| O |	| |	| I |	|	2.66
15.667	0.54	0.18	0.379	| O |	| |	| I |	|	2.69
15.750	0.52	0.18	0.382	| O |	| |	| I |	|	2.71
15.833	0.52	0.18	0.384	| O |	| |	| I |	|	2.73
15.917	0.51	0.19	0.386	| O |	| |	|I |	|	2.75
16.000	0.51	0.19	0.388	| O |	| |	|I |	|	2.77
16.083	0.34	0.19	0.390	| O |	| I |	| |	|	2.78
16.167	0.19	0.19	0.391	| O |	| |	| |	|	2.79
16.250	0.15	0.19	0.391	| IO |	| |	| |	|	2.79
16.333	0.13	0.19	0.390	| I O |	| |	| |	|	2.78
16.417	0.11	0.19	0.390	| I O |	| |	| |	|	2.78
16.500	0.11	0.19	0.389	| I O |	| |	| |	|	2.77
16.583	0.10	0.19	0.389	| I O |	| |	| |	|	2.77
16.667	0.09	0.19	0.388	| I O |	| |	| |	|	2.76
16.750	0.08	0.19	0.387	| I O |	| |	| |	|	2.76
16.833	0.08	0.19	0.387	| I O |	| |	| |	|	2.75
16.917	0.08	0.19	0.386	| I O |	| |	| |	|	2.74
17.000	0.08	0.19	0.385	| I O |	| |	| |	|	2.74
17.083	0.10	0.18	0.385	| I O |	| |	| |	|	2.73
17.167	0.12	0.18	0.384	| I O |	| |	| |	|	2.73
17.250	0.13	0.18	0.384	| I O |	| |	| |	|	2.72
17.333	0.13	0.18	0.383	| I O |	| |	| |	|	2.72
17.417	0.13	0.18	0.383	| I O |	| |	| |	|	2.72
17.500	0.13	0.18	0.383	| I O |	| |	| |	|	2.72
17.583	0.13	0.18	0.382	| I O |	| |	| |	|	2.71
17.667	0.13	0.18	0.382	| I O |	| |	| |	|	2.71
17.750	0.13	0.18	0.382	| I O |	| |	| |	|	2.71
17.833	0.12	0.18	0.381	| I O |	| |	| |	|	2.70
17.917	0.11	0.18	0.381	| I O |	| |	| |	|	2.70
18.000	0.11	0.18	0.380	| I O |	| |	| |	|	2.69
18.083	0.11	0.18	0.380	| I O |	| |	| |	|	2.69
18.167	0.11	0.18	0.379	| I O |	| |	| |	|	2.69

18.250	0.11	0.18	0.379	| I O |	|	|	|	2.68
18.333	0.11	0.18	0.378	| I O |	|	|	|	2.68
18.417	0.11	0.18	0.378	| I O |	|	|	|	2.67
18.500	0.11	0.18	0.377	| I O |	|	|	|	2.67
18.583	0.10	0.18	0.377	| I O |	|	|	|	2.66
18.667	0.09	0.18	0.376	| I O |	|	|	|	2.66
18.750	0.08	0.18	0.375	| I O |	|	|	|	2.65
18.833	0.07	0.18	0.375	| I O |	|	|	|	2.65
18.917	0.06	0.18	0.374	| I O |	|	|	|	2.64
19.000	0.06	0.18	0.373	|I O |	|	|	|	2.63
19.083	0.07	0.18	0.372	| I O |	|	|	|	2.62
19.167	0.08	0.18	0.371	| I O |	|	|	|	2.62
19.250	0.08	0.18	0.371	| I O |	|	|	|	2.61
19.333	0.09	0.18	0.370	| I O |	|	|	|	2.60
19.417	0.10	0.18	0.369	| I O |	|	|	|	2.60
19.500	0.10	0.18	0.369	| I O |	|	|	|	2.60
19.583	0.09	0.18	0.368	| I O |	|	|	|	2.59
19.667	0.09	0.18	0.368	| I O |	|	|	|	2.58
19.750	0.08	0.18	0.367	| I O |	|	|	|	2.58
19.833	0.07	0.18	0.366	| I O |	|	|	|	2.57
19.917	0.06	0.18	0.366	| I O |	|	|	|	2.57
20.000	0.06	0.18	0.365	|I O |	|	|	|	2.56
20.083	0.07	0.18	0.364	| I O |	|	|	|	2.55
20.167	0.08	0.18	0.363	| I O |	|	|	|	2.55
20.250	0.08	0.18	0.362	| I O |	|	|	|	2.54
20.333	0.08	0.18	0.362	| I O |	|	|	|	2.53
20.417	0.08	0.18	0.361	| I O |	|	|	|	2.53
20.500	0.08	0.18	0.360	| I O |	|	|	|	2.52
20.583	0.08	0.18	0.360	| I O |	|	|	|	2.52
20.667	0.08	0.18	0.359	| I O |	|	|	|	2.51
20.750	0.08	0.18	0.358	| I O |	|	|	|	2.50
20.833	0.07	0.18	0.358	| I O |	|	|	|	2.50
20.917	0.06	0.18	0.357	| I O |	|	|	|	2.49
21.000	0.06	0.18	0.356	|I O |	|	|	|	2.49
21.083	0.07	0.18	0.355	| I O |	|	|	|	2.48
21.167	0.08	0.18	0.355	| I O |	|	|	|	2.47
21.250	0.08	0.18	0.354	| I O |	|	|	|	2.47
21.333	0.07	0.18	0.353	| I O |	|	|	|	2.46
21.417	0.06	0.18	0.352	| I O |	|	|	|	2.46
21.500	0.06	0.18	0.352	|I O |	|	|	|	2.45
21.583	0.07	0.17	0.351	| I O |	|	|	|	2.44
21.667	0.08	0.17	0.350	| I O |	|	|	|	2.44
21.750	0.08	0.17	0.349	| I O |	|	|	|	2.43
21.833	0.07	0.17	0.349	| I O |	|	|	|	2.43
21.917	0.06	0.17	0.348	| I O |	|	|	|	2.42
22.000	0.06	0.17	0.347	|I O |	|	|	|	2.42
22.083	0.07	0.17	0.346	| I O |	|	|	|	2.41
22.167	0.08	0.17	0.346	| I O |	|	|	|	2.40
22.250	0.08	0.17	0.345	| I O |	|	|	|	2.40
22.333	0.07	0.17	0.344	| I O |	|	|	|	2.39

22.417	0.06	0.17	0.344	| I O |	|	|	|	2.39
22.500	0.06	0.17	0.343	|I O |	|	|	|	2.38
22.583	0.06	0.17	0.342	|I O |	|	|	|	2.38
22.667	0.05	0.17	0.341	|I O |	|	|	|	2.37
22.750	0.05	0.17	0.340	|I O |	|	|	|	2.36
22.833	0.05	0.17	0.340	|I O |	|	|	|	2.36
22.917	0.05	0.17	0.339	|I O |	|	|	|	2.35
23.000	0.05	0.17	0.338	|I O |	|	|	|	2.34
23.083	0.05	0.17	0.337	|I O |	|	|	|	2.34
23.167	0.05	0.17	0.336	|I O |	|	|	|	2.33
23.250	0.05	0.17	0.336	|I O |	|	|	|	2.33
23.333	0.05	0.17	0.335	|I O |	|	|	|	2.32
23.417	0.05	0.17	0.334	|I O |	|	|	|	2.31
23.500	0.05	0.17	0.333	|I O |	|	|	|	2.31
23.583	0.05	0.17	0.332	|I O |	|	|	|	2.30
23.667	0.05	0.17	0.332	|I O |	|	|	|	2.29
23.750	0.05	0.17	0.331	|I O |	|	|	|	2.29
23.833	0.05	0.17	0.330	|I O |	|	|	|	2.28
23.917	0.05	0.17	0.329	|I O |	|	|	|	2.28
24.000	0.05	0.17	0.328	|I O |	|	|	|	2.27
24.083	0.03	0.17	0.328	|I O |	|	|	|	2.26
24.167	0.01	0.17	0.327	I O |	|	|	|	2.25
24.250	0.01	0.17	0.325	I O |	|	|	|	2.25
24.333	0.00	0.17	0.324	I O |	|	|	|	2.24
24.417	0.00	0.17	0.323	I O |	|	|	|	2.23
24.500	0.00	0.17	0.322	I O |	|	|	|	2.22
24.583	0.00	0.17	0.321	I O |	|	|	|	2.21
24.667	0.00	0.17	0.320	I O |	|	|	|	2.20
24.750	0.00	0.17	0.319	I O |	|	|	|	2.19
24.833	0.00	0.16	0.318	I O |	|	|	|	2.18
24.917	0.00	0.16	0.316	I O |	|	|	|	2.17
25.000	0.00	0.16	0.315	I O |	|	|	|	2.17
25.083	0.00	0.16	0.314	I O |	|	|	|	2.16
25.167	0.00	0.16	0.313	I O |	|	|	|	2.15
25.250	0.00	0.16	0.312	I O |	|	|	|	2.14
25.333	0.00	0.16	0.311	I O |	|	|	|	2.13
25.417	0.00	0.16	0.310	I O |	|	|	|	2.12
25.500	0.00	0.16	0.308	I O |	|	|	|	2.11
25.583	0.00	0.16	0.307	I O |	|	|	|	2.10
25.667	0.00	0.16	0.306	I O |	|	|	|	2.10
25.750	0.00	0.16	0.305	I O |	|	|	|	2.09
25.833	0.00	0.16	0.304	I O |	|	|	|	2.08
25.917	0.00	0.16	0.303	I O |	|	|	|	2.07
26.000	0.00	0.16	0.302	I O |	|	|	|	2.06
26.083	0.00	0.16	0.301	I O |	|	|	|	2.05
26.167	0.00	0.16	0.300	I O |	|	|	|	2.04
26.250	0.00	0.16	0.299	I O |	|	|	|	2.04
26.333	0.00	0.16	0.297	I O |	|	|	|	2.03
26.417	0.00	0.16	0.296	I O |	|	|	|	2.02
26.500	0.00	0.16	0.295	I O |	|	|	|	2.01

26.583	0.00	0.16	0.294	I	O					2.00
26.667	0.00	0.16	0.293	I	O					1.99
26.750	0.00	0.16	0.292	I	O					1.99
26.833	0.00	0.16	0.291	I	O					1.98
26.917	0.00	0.16	0.290	I	O					1.97
27.000	0.00	0.16	0.289	I	O					1.96
27.083	0.00	0.16	0.288	I	O					1.95
27.167	0.00	0.16	0.287	I	O					1.95
27.250	0.00	0.16	0.286	I	O					1.94
27.333	0.00	0.15	0.284	I	O					1.93
27.417	0.00	0.15	0.283	I	O					1.92
27.500	0.00	0.15	0.282	I	O					1.92
27.583	0.00	0.15	0.281	I	O					1.91
27.667	0.00	0.15	0.280	I	O					1.90
27.750	0.00	0.15	0.279	I	O					1.89
27.833	0.00	0.15	0.278	I	O					1.89
27.917	0.00	0.15	0.277	I	O					1.88
28.000	0.00	0.15	0.276	I	O					1.87
28.083	0.00	0.15	0.275	I	O					1.86
28.167	0.00	0.15	0.274	I	O					1.86
28.250	0.00	0.15	0.273	I	O					1.85
28.333	0.00	0.15	0.272	I	O					1.84
28.417	0.00	0.15	0.271	I	O					1.83
28.500	0.00	0.15	0.270	I	O					1.83
28.583	0.00	0.15	0.269	I	O					1.82
28.667	0.00	0.15	0.268	I	O					1.81
28.750	0.00	0.15	0.267	I	O					1.80
28.833	0.00	0.15	0.266	I	O					1.80
28.917	0.00	0.15	0.265	I	O					1.79
29.000	0.00	0.15	0.264	I	O					1.78
29.083	0.00	0.15	0.263	I	O					1.78
29.167	0.00	0.15	0.262	I	O					1.77
29.250	0.00	0.15	0.261	I	O					1.76
29.333	0.00	0.15	0.260	I	O					1.75
29.417	0.00	0.15	0.259	I	O					1.75
29.500	0.00	0.15	0.258	I	O					1.74
29.583	0.00	0.15	0.257	I	O					1.73
29.667	0.00	0.15	0.256	I	O					1.73
29.750	0.00	0.15	0.255	I	O					1.72
29.833	0.00	0.14	0.254	I	O					1.71
29.917	0.00	0.14	0.253	I	O					1.70
30.000	0.00	0.14	0.252	I	O					1.70
30.083	0.00	0.14	0.251	I	O					1.69
30.167	0.00	0.14	0.250	I	O					1.68
30.250	0.00	0.14	0.249	I	O					1.68
30.333	0.00	0.14	0.248	I	O					1.67
30.417	0.00	0.14	0.247	I	O					1.66
30.500	0.00	0.14	0.246	I	O					1.65
30.583	0.00	0.14	0.245	I	O					1.65
30.667	0.00	0.14	0.244	I	O					1.64

30.750	0.00	0.14	0.243	I	O	|	|	|	|	1.63
30.833	0.00	0.14	0.242	I	O	|	|	|	|	1.63
30.917	0.00	0.14	0.241	I	O	|	|	|	|	1.62
31.000	0.00	0.14	0.240	I	O	|	|	|	|	1.61
31.083	0.00	0.14	0.239	I	O	|	|	|	|	1.61
31.167	0.00	0.14	0.238	I	O	|	|	|	|	1.60
31.250	0.00	0.14	0.237	I	O	|	|	|	|	1.59
31.333	0.00	0.14	0.236	I	O	|	|	|	|	1.59
31.417	0.00	0.14	0.235	I	O	|	|	|	|	1.58
31.500	0.00	0.14	0.234	I	O	|	|	|	|	1.57
31.583	0.00	0.14	0.233	I	O	|	|	|	|	1.56
31.667	0.00	0.14	0.232	I	O	|	|	|	|	1.56
31.750	0.00	0.14	0.231	I	O	|	|	|	|	1.55
31.833	0.00	0.14	0.230	I	O	|	|	|	|	1.54
31.917	0.00	0.14	0.229	I	O	|	|	|	|	1.54
32.000	0.00	0.14	0.228	I	O	|	|	|	|	1.53
32.083	0.00	0.14	0.227	I	O	|	|	|	|	1.52
32.167	0.00	0.14	0.226	I	O	|	|	|	|	1.52
32.250	0.00	0.14	0.226	I	O	|	|	|	|	1.51
32.333	0.00	0.14	0.225	I	O	|	|	|	|	1.50
32.417	0.00	0.13	0.224	I	O	|	|	|	|	1.50
32.500	0.00	0.13	0.223	I	O	|	|	|	|	1.49
32.583	0.00	0.13	0.222	I	O	|	|	|	|	1.48
32.667	0.00	0.13	0.221	I	O	|	|	|	|	1.48
32.750	0.00	0.13	0.220	I	O	|	|	|	|	1.47
32.833	0.00	0.13	0.219	I	O	|	|	|	|	1.47
32.917	0.00	0.13	0.218	I	O	|	|	|	|	1.46
33.000	0.00	0.13	0.217	I	O	|	|	|	|	1.45
33.083	0.00	0.13	0.216	I	O	|	|	|	|	1.45
33.167	0.00	0.13	0.215	I	O	|	|	|	|	1.44
33.250	0.00	0.13	0.215	I	O	|	|	|	|	1.43
33.333	0.00	0.13	0.214	I	O	|	|	|	|	1.43
33.417	0.00	0.13	0.213	I	O	|	|	|	|	1.42
33.500	0.00	0.13	0.212	I	O	|	|	|	|	1.42
33.583	0.00	0.13	0.211	I	O	|	|	|	|	1.41
33.667	0.00	0.13	0.210	I	O	|	|	|	|	1.40
33.750	0.00	0.13	0.209	I	O	|	|	|	|	1.40
33.833	0.00	0.13	0.208	I	O	|	|	|	|	1.39
33.917	0.00	0.13	0.207	I	O	|	|	|	|	1.38
34.000	0.00	0.13	0.206	I	O	|	|	|	|	1.38
34.083	0.00	0.13	0.206	I	O	|	|	|	|	1.37
34.167	0.00	0.13	0.205	I	O	|	|	|	|	1.37
34.250	0.00	0.13	0.204	I	O	|	|	|	|	1.36
34.333	0.00	0.13	0.203	I	O	|	|	|	|	1.35
34.417	0.00	0.13	0.202	I	O	|	|	|	|	1.35
34.500	0.00	0.13	0.201	I	O	|	|	|	|	1.34
34.583	0.00	0.13	0.200	I	O	|	|	|	|	1.34
34.667	0.00	0.13	0.199	I	O	|	|	|	|	1.33
34.750	0.00	0.13	0.199	I	O	|	|	|	|	1.32
34.833	0.00	0.13	0.198	I	O	|	|	|	|	1.32

34.917	0.00	0.13	0.197	I	O				1.31
35.000	0.00	0.12	0.196	I	O				1.31
35.083	0.00	0.12	0.195	I	O				1.30
35.167	0.00	0.12	0.194	I	O				1.29
35.250	0.00	0.12	0.193	I	O				1.29
35.333	0.00	0.12	0.193	I	O				1.28
35.417	0.00	0.12	0.192	I	O				1.28
35.500	0.00	0.12	0.191	I	O				1.27
35.583	0.00	0.12	0.190	I	O				1.26
35.667	0.00	0.12	0.189	I	O				1.26
35.750	0.00	0.12	0.188	I	O				1.25
35.833	0.00	0.12	0.187	I	O				1.25
35.917	0.00	0.12	0.187	I	O				1.24
36.000	0.00	0.12	0.186	I	O				1.23
36.083	0.00	0.12	0.185	I	O				1.23
36.167	0.00	0.12	0.184	I	O				1.22
36.250	0.00	0.12	0.183	I	O				1.22
36.333	0.00	0.12	0.182	I	O				1.21
36.417	0.00	0.12	0.182	I	O				1.21
36.500	0.00	0.12	0.181	I	O				1.20
36.583	0.00	0.12	0.180	I	O				1.19
36.667	0.00	0.12	0.179	I	O				1.19
36.750	0.00	0.12	0.178	I	O				1.18
36.833	0.00	0.12	0.178	I	O				1.18
36.917	0.00	0.12	0.177	I	O				1.17
37.000	0.00	0.12	0.176	I	O				1.17
37.083	0.00	0.12	0.175	I	O				1.16
37.167	0.00	0.12	0.174	I	O				1.16
37.250	0.00	0.12	0.174	I	O				1.15
37.333	0.00	0.12	0.173	I	O				1.14
37.417	0.00	0.12	0.172	I	O				1.14
37.500	0.00	0.12	0.171	I	O				1.13
37.583	0.00	0.12	0.170	I	O				1.13
37.667	0.00	0.12	0.170	I	O				1.12
37.750	0.00	0.12	0.169	I	O				1.12
37.833	0.00	0.11	0.168	I	O				1.11
37.917	0.00	0.11	0.167	I	O				1.11
38.000	0.00	0.11	0.166	I	O				1.10
38.083	0.00	0.11	0.166	I	O				1.09
38.167	0.00	0.11	0.165	I	O				1.09
38.250	0.00	0.11	0.164	I	O				1.08
38.333	0.00	0.11	0.163	I	O				1.08
38.417	0.00	0.11	0.162	I	O				1.07
38.500	0.00	0.11	0.162	I	O				1.07
38.583	0.00	0.11	0.161	I	O				1.06
38.667	0.00	0.11	0.160	I	O				1.06
38.750	0.00	0.11	0.159	I	O				1.05
38.833	0.00	0.11	0.159	I	O				1.05
38.917	0.00	0.11	0.158	I	O				1.04
39.000	0.00	0.11	0.157	I	O				1.04

39.083	0.00	0.11	0.156	I	O	|	|	|	|	1.03
39.167	0.00	0.11	0.156	I	O	|	|	|	|	1.02
39.250	0.00	0.11	0.155	I	O	|	|	|	|	1.02
39.333	0.00	0.11	0.154	I	O	|	|	|	|	1.01
39.417	0.00	0.11	0.153	I	O	|	|	|	|	1.01
39.500	0.00	0.11	0.153	I	O	|	|	|	|	1.00
39.583	0.00	0.11	0.152	I	O	|	|	|	|	1.00
39.667	0.00	0.11	0.151	I	O	|	|	|	|	0.99
39.750	0.00	0.11	0.150	I	O	|	|	|	|	0.99
39.833	0.00	0.11	0.150	I	O	|	|	|	|	0.98
39.917	0.00	0.11	0.149	I	O	|	|	|	|	0.98
40.000	0.00	0.11	0.148	I	O	|	|	|	|	0.97
40.083	0.00	0.11	0.147	I	O	|	|	|	|	0.97
40.167	0.00	0.11	0.147	I	O	|	|	|	|	0.96
40.250	0.00	0.11	0.146	I	O	|	|	|	|	0.96
40.333	0.00	0.11	0.145	I	O	|	|	|	|	0.95
40.417	0.00	0.11	0.144	I	O	|	|	|	|	0.95
40.500	0.00	0.11	0.144	I	O	|	|	|	|	0.95
40.583	0.00	0.10	0.143	I	O	|	|	|	|	0.94
40.667	0.00	0.10	0.142	I	O	|	|	|	|	0.94
40.750	0.00	0.10	0.142	I	O	|	|	|	|	0.93
40.833	0.00	0.10	0.141	I	O	|	|	|	|	0.93
40.917	0.00	0.10	0.140	I	O	|	|	|	|	0.92
41.000	0.00	0.10	0.139	I	O	|	|	|	|	0.92
41.083	0.00	0.10	0.139	I	O	|	|	|	|	0.91
41.167	0.00	0.10	0.138	I	O	|	|	|	|	0.91
41.250	0.00	0.10	0.137	I	O	|	|	|	|	0.90
41.333	0.00	0.10	0.137	I	O	|	|	|	|	0.90
41.417	0.00	0.10	0.136	I	O	|	|	|	|	0.89
41.500	0.00	0.10	0.135	I	O	|	|	|	|	0.89
41.583	0.00	0.10	0.134	I	O	|	|	|	|	0.88
41.667	0.00	0.10	0.134	I	O	|	|	|	|	0.88
41.750	0.00	0.10	0.133	I	O	|	|	|	|	0.88
41.833	0.00	0.10	0.132	I	O	|	|	|	|	0.87
41.917	0.00	0.10	0.132	I	O	|	|	|	|	0.87
42.000	0.00	0.10	0.131	I	O	|	|	|	|	0.86
42.083	0.00	0.10	0.130	I	O	|	|	|	|	0.86
42.167	0.00	0.10	0.130	I	O	|	|	|	|	0.85
42.250	0.00	0.10	0.129	I	O	|	|	|	|	0.85
42.333	0.00	0.10	0.128	I	O	|	|	|	|	0.84
42.417	0.00	0.10	0.128	I	O	|	|	|	|	0.84
42.500	0.00	0.10	0.127	I	O	|	|	|	|	0.84
42.583	0.00	0.10	0.126	I	O	|	|	|	|	0.83
42.667	0.00	0.10	0.126	I	O	|	|	|	|	0.83
42.750	0.00	0.10	0.125	I	O	|	|	|	|	0.82
42.833	0.00	0.10	0.124	I	O	|	|	|	|	0.82
42.917	0.00	0.10	0.124	I	O	|	|	|	|	0.81
43.000	0.00	0.10	0.123	I	O	|	|	|	|	0.81
43.083	0.00	0.09	0.122	I	O	|	|	|	|	0.80
43.167	0.00	0.09	0.122	I	O	|	|	|	|	0.80

43.250	0.00	0.09	0.121	I	O	|	|	|	0.80
43.333	0.00	0.09	0.120	I	O	|	|	|	0.79
43.417	0.00	0.09	0.120	I	O	|	|	|	0.79
43.500	0.00	0.09	0.119	I	O	|	|	|	0.78
43.583	0.00	0.09	0.118	I	O	|	|	|	0.78
43.667	0.00	0.09	0.118	I	O	|	|	|	0.78
43.750	0.00	0.09	0.117	I	O	|	|	|	0.77
43.833	0.00	0.09	0.117	I	O	|	|	|	0.77
43.917	0.00	0.09	0.116	I	O	|	|	|	0.76
44.000	0.00	0.09	0.115	I	O	|	|	|	0.76
44.083	0.00	0.09	0.115	I	O	|	|	|	0.75
44.167	0.00	0.09	0.114	I	O	|	|	|	0.75
44.250	0.00	0.09	0.113	I	O	|	|	|	0.75
44.333	0.00	0.09	0.113	I	O	|	|	|	0.74
44.417	0.00	0.09	0.112	I	O	|	|	|	0.74
44.500	0.00	0.09	0.112	I	O	|	|	|	0.73
44.583	0.00	0.09	0.111	I	O	|	|	|	0.73
44.667	0.00	0.09	0.110	I	O	|	|	|	0.73
44.750	0.00	0.09	0.110	I	O	|	|	|	0.72
44.833	0.00	0.09	0.109	I	O	|	|	|	0.72
44.917	0.00	0.09	0.108	I	O	|	|	|	0.71
45.000	0.00	0.09	0.108	I	O	|	|	|	0.71
45.083	0.00	0.09	0.107	I	O	|	|	|	0.71
45.167	0.00	0.09	0.107	I	O	|	|	|	0.70
45.250	0.00	0.09	0.106	I	O	|	|	|	0.70
45.333	0.00	0.09	0.105	I	O	|	|	|	0.69
45.417	0.00	0.09	0.105	I	O	|	|	|	0.69
45.500	0.00	0.09	0.104	I	O	|	|	|	0.69
45.583	0.00	0.09	0.104	I	O	|	|	|	0.68
45.667	0.00	0.09	0.103	I	O	|	|	|	0.68
45.750	0.00	0.09	0.102	I	O	|	|	|	0.67
45.833	0.00	0.09	0.102	I	O	|	|	|	0.67
45.917	0.00	0.08	0.101	I	O	|	|	|	0.67
46.000	0.00	0.08	0.101	I	O	|	|	|	0.66
46.083	0.00	0.08	0.100	I	O	|	|	|	0.66
46.167	0.00	0.08	0.100	I	O	|	|	|	0.65
46.250	0.00	0.08	0.099	I	O	|	|	|	0.65
46.333	0.00	0.08	0.098	I	O	|	|	|	0.65
46.417	0.00	0.08	0.098	I	O	|	|	|	0.64
46.500	0.00	0.08	0.097	I	O	|	|	|	0.64
46.583	0.00	0.08	0.097	I	O	|	|	|	0.64
46.667	0.00	0.08	0.096	I	O	|	|	|	0.63
46.750	0.00	0.08	0.096	I	O	|	|	|	0.63
46.833	0.00	0.08	0.095	I	O	|	|	|	0.62
46.917	0.00	0.08	0.094	I	O	|	|	|	0.62
47.000	0.00	0.08	0.094	I	O	|	|	|	0.62
47.083	0.00	0.08	0.093	I	O	|	|	|	0.61
47.167	0.00	0.08	0.093	I	O	|	|	|	0.61
47.250	0.00	0.08	0.092	I	O	|	|	|	0.61
47.333	0.00	0.08	0.092	I	O	|	|	|	0.60

47.417	0.00	0.08	0.091	I O	|	|	|	0.60
47.500	0.00	0.08	0.091	I O	|	|	|	0.60
47.583	0.00	0.08	0.090	I O	|	|	|	0.59
47.667	0.00	0.08	0.089	I O	|	|	|	0.59
47.750	0.00	0.08	0.089	I O	|	|	|	0.58
47.833	0.00	0.08	0.088	I O	|	|	|	0.58
47.917	0.00	0.08	0.088	I O	|	|	|	0.58
48.000	0.00	0.08	0.087	I O	|	|	|	0.57
48.083	0.00	0.08	0.087	I O	|	|	|	0.57
48.167	0.00	0.08	0.086	I O	|	|	|	0.57
48.250	0.00	0.08	0.086	I O	|	|	|	0.56
48.333	0.00	0.08	0.085	I O	|	|	|	0.56
48.417	0.00	0.08	0.085	I O	|	|	|	0.56
48.500	0.00	0.08	0.084	I O	|	|	|	0.55
48.583	0.00	0.08	0.084	I O	|	|	|	0.55
48.667	0.00	0.08	0.083	I O	|	|	|	0.55
48.750	0.00	0.08	0.082	I O	|	|	|	0.54
48.833	0.00	0.08	0.082	I O	|	|	|	0.54
48.917	0.00	0.08	0.081	I O	|	|	|	0.54
49.000	0.00	0.08	0.081	I O	|	|	|	0.53
49.083	0.00	0.08	0.080	I O	|	|	|	0.53
49.167	0.00	0.07	0.080	I O	|	|	|	0.53
49.250	0.00	0.07	0.079	I O	|	|	|	0.52
49.333	0.00	0.07	0.079	I O	|	|	|	0.52
49.417	0.00	0.07	0.078	I O	|	|	|	0.52
49.500	0.00	0.07	0.078	I O	|	|	|	0.51
49.583	0.00	0.07	0.077	I O	|	|	|	0.51
49.667	0.00	0.07	0.077	I O	|	|	|	0.51
49.750	0.00	0.07	0.076	I O	|	|	|	0.50
49.833	0.00	0.07	0.076	I O	|	|	|	0.50
49.917	0.00	0.07	0.075	I O	|	|	|	0.50
50.000	0.00	0.07	0.075	I O	|	|	|	0.49
50.083	0.00	0.07	0.074	I O	|	|	|	0.49
50.167	0.00	0.07	0.074	I O	|	|	|	0.49
50.250	0.00	0.07	0.073	I O	|	|	|	0.48
50.333	0.00	0.07	0.073	I O	|	|	|	0.48
50.417	0.00	0.07	0.072	I O	|	|	|	0.48
50.500	0.00	0.07	0.072	I O	|	|	|	0.47
50.583	0.00	0.07	0.071	I O	|	|	|	0.47
50.667	0.00	0.07	0.071	I O	|	|	|	0.47
50.750	0.00	0.07	0.070	I O	|	|	|	0.46
50.833	0.00	0.07	0.070	I O	|	|	|	0.46
50.917	0.00	0.07	0.070	I O	|	|	|	0.46
51.000	0.00	0.07	0.069	I O	|	|	|	0.45
51.083	0.00	0.07	0.069	I O	|	|	|	0.45
51.167	0.00	0.07	0.068	I O	|	|	|	0.45
51.250	0.00	0.07	0.068	I O	|	|	|	0.45
51.333	0.00	0.06	0.067	I O	|	|	|	0.44
51.417	0.00	0.06	0.067	I O	|	|	|	0.44
51.500	0.00	0.06	0.066	I O	|	|	|	0.44

51.583	0.00	0.06	0.066	I O				0.43
51.667	0.00	0.06	0.066	I O				0.43
51.750	0.00	0.06	0.065	I O				0.43
51.833	0.00	0.06	0.065	I O				0.43
51.917	0.00	0.06	0.064	I O				0.42
52.000	0.00	0.06	0.064	I O				0.42
52.083	0.00	0.06	0.063	I O				0.42
52.167	0.00	0.06	0.063	I O				0.41
52.250	0.00	0.06	0.063	I O				0.41
52.333	0.00	0.06	0.062	I O				0.41
52.417	0.00	0.06	0.062	I O				0.41
52.500	0.00	0.06	0.061	I O				0.40
52.583	0.00	0.06	0.061	I O				0.40
52.667	0.00	0.06	0.061	I O				0.40
52.750	0.00	0.06	0.060	I O				0.40
52.833	0.00	0.06	0.060	I O				0.39
52.917	0.00	0.06	0.059	IO				0.39
53.000	0.00	0.06	0.059	IO				0.39
53.083	0.00	0.06	0.059	IO				0.39
53.167	0.00	0.06	0.058	IO				0.38
53.250	0.00	0.06	0.058	IO				0.38
53.333	0.00	0.06	0.057	IO				0.38
53.417	0.00	0.05	0.057	IO				0.38
53.500	0.00	0.05	0.057	IO				0.37
53.583	0.00	0.05	0.056	IO				0.37
53.667	0.00	0.05	0.056	IO				0.37
53.750	0.00	0.05	0.056	IO				0.37
53.833	0.00	0.05	0.055	IO				0.36
53.917	0.00	0.05	0.055	IO				0.36
54.000	0.00	0.05	0.054	IO				0.36
54.083	0.00	0.05	0.054	IO				0.36
54.167	0.00	0.05	0.054	IO				0.35
54.250	0.00	0.05	0.053	IO				0.35
54.333	0.00	0.05	0.053	IO				0.35
54.417	0.00	0.05	0.053	IO				0.35
54.500	0.00	0.05	0.052	IO				0.34
54.583	0.00	0.05	0.052	IO				0.34
54.667	0.00	0.05	0.052	IO				0.34
54.750	0.00	0.05	0.051	IO				0.34
54.833	0.00	0.05	0.051	IO				0.34
54.917	0.00	0.05	0.051	IO				0.33
55.000	0.00	0.05	0.050	IO				0.33
55.083	0.00	0.05	0.050	IO				0.33
55.167	0.00	0.05	0.050	IO				0.33
55.250	0.00	0.05	0.049	IO				0.32
55.333	0.00	0.05	0.049	IO				0.32
55.417	0.00	0.05	0.049	IO				0.32
55.500	0.00	0.05	0.048	IO				0.32
55.583	0.00	0.05	0.048	IO				0.32
55.667	0.00	0.05	0.048	IO				0.31

55.750	0.00	0.05	0.047	IO				0.31
55.833	0.00	0.05	0.047	IO				0.31
55.917	0.00	0.04	0.047	IO				0.31
56.000	0.00	0.04	0.046	IO				0.31
56.083	0.00	0.04	0.046	IO				0.30
56.167	0.00	0.04	0.046	IO				0.30
56.250	0.00	0.04	0.046	IO				0.30
56.333	0.00	0.04	0.045	IO				0.30
56.417	0.00	0.04	0.045	IO				0.30
56.500	0.00	0.04	0.045	IO				0.29
56.583	0.00	0.04	0.044	IO				0.29
56.667	0.00	0.04	0.044	IO				0.29
56.750	0.00	0.04	0.044	IO				0.29
56.833	0.00	0.04	0.043	IO				0.29
56.917	0.00	0.04	0.043	IO				0.28
57.000	0.00	0.04	0.043	IO				0.28
57.083	0.00	0.04	0.043	IO				0.28
57.167	0.00	0.04	0.042	IO				0.28
57.250	0.00	0.04	0.042	IO				0.28
57.333	0.00	0.04	0.042	IO				0.27
57.417	0.00	0.04	0.042	IO				0.27
57.500	0.00	0.04	0.041	IO				0.27
57.583	0.00	0.04	0.041	IO				0.27
57.667	0.00	0.04	0.041	IO				0.27
57.750	0.00	0.04	0.040	IO				0.27
57.833	0.00	0.04	0.040	IO				0.26
57.917	0.00	0.04	0.040	IO				0.26
58.000	0.00	0.04	0.040	IO				0.26
58.083	0.00	0.04	0.039	IO				0.26
58.167	0.00	0.04	0.039	IO				0.26
58.250	0.00	0.04	0.039	IO				0.26
58.333	0.00	0.04	0.039	IO				0.25
58.417	0.00	0.04	0.038	IO				0.25
58.500	0.00	0.04	0.038	IO				0.25
58.583	0.00	0.04	0.038	IO				0.25
58.667	0.00	0.04	0.038	IO				0.25
58.750	0.00	0.04	0.037	IO				0.25
58.833	0.00	0.04	0.037	IO				0.24
58.917	0.00	0.04	0.037	IO				0.24
59.000	0.00	0.04	0.037	IO				0.24
59.083	0.00	0.03	0.036	IO				0.24
59.167	0.00	0.03	0.036	IO				0.24
59.250	0.00	0.03	0.036	IO				0.24
59.333	0.00	0.03	0.036	IO				0.23
59.417	0.00	0.03	0.035	IO				0.23
59.500	0.00	0.03	0.035	IO				0.23
59.583	0.00	0.03	0.035	IO				0.23
59.667	0.00	0.03	0.035	IO				0.23
59.750	0.00	0.03	0.034	IO				0.23
59.833	0.00	0.03	0.034	IO				0.23

59.917	0.00	0.03	0.034	IO				0.22
60.000	0.00	0.03	0.034	IO				0.22
60.083	0.00	0.03	0.034	IO				0.22
60.167	0.00	0.03	0.033	IO				0.22
60.250	0.00	0.03	0.033	IO				0.22
60.333	0.00	0.03	0.033	IO				0.22
60.417	0.00	0.03	0.033	IO				0.22
60.500	0.00	0.03	0.032	IO				0.21
60.583	0.00	0.03	0.032	IO				0.21
60.667	0.00	0.03	0.032	IO				0.21
60.750	0.00	0.03	0.032	IO				0.21
60.833	0.00	0.03	0.032	IO				0.21
60.917	0.00	0.03	0.031	IO				0.21
61.000	0.00	0.03	0.031	IO				0.21
61.083	0.00	0.03	0.031	IO				0.20
61.167	0.00	0.03	0.031	IO				0.20
61.250	0.00	0.03	0.031	IO				0.20
61.333	0.00	0.03	0.030	IO				0.20
61.417	0.00	0.03	0.030	IO				0.20
61.500	0.00	0.03	0.030	IO				0.20
61.583	0.00	0.03	0.030	O				0.20
61.667	0.00	0.03	0.030	O				0.19
61.750	0.00	0.03	0.029	O				0.19
61.833	0.00	0.03	0.029	O				0.19
61.917	0.00	0.03	0.029	O				0.19
62.000	0.00	0.03	0.029	O				0.19
62.083	0.00	0.03	0.029	O				0.19
62.167	0.00	0.03	0.028	O				0.19
62.250	0.00	0.03	0.028	O				0.19
62.333	0.00	0.03	0.028	O				0.18
62.417	0.00	0.03	0.028	O				0.18
62.500	0.00	0.03	0.028	O				0.18
62.583	0.00	0.03	0.028	O				0.18
62.667	0.00	0.03	0.027	O				0.18
62.750	0.00	0.03	0.027	O				0.18
62.833	0.00	0.03	0.027	O				0.18
62.917	0.00	0.03	0.027	O				0.18
63.000	0.00	0.03	0.027	O				0.18
63.083	0.00	0.03	0.026	O				0.17
63.167	0.00	0.03	0.026	O				0.17
63.250	0.00	0.03	0.026	O				0.17
63.333	0.00	0.02	0.026	O				0.17
63.417	0.00	0.02	0.026	O				0.17
63.500	0.00	0.02	0.026	O				0.17
63.583	0.00	0.02	0.025	O				0.17
63.667	0.00	0.02	0.025	O				0.17
63.750	0.00	0.02	0.025	O				0.17
63.833	0.00	0.02	0.025	O				0.16
63.917	0.00	0.02	0.025	O				0.16
64.000	0.00	0.02	0.025	O				0.16

64.083	0.00	0.02	0.024	O	|	|	|	0.16
64.167	0.00	0.02	0.024	O	|	|	|	0.16
64.250	0.00	0.02	0.024	O	|	|	|	0.16
64.333	0.00	0.02	0.024	O	|	|	|	0.16
64.417	0.00	0.02	0.024	O	|	|	|	0.16
64.500	0.00	0.02	0.024	O	|	|	|	0.16
64.583	0.00	0.02	0.024	O	|	|	|	0.15
64.667	0.00	0.02	0.023	O	|	|	|	0.15
64.750	0.00	0.02	0.023	O	|	|	|	0.15
64.833	0.00	0.02	0.023	O	|	|	|	0.15
64.917	0.00	0.02	0.023	O	|	|	|	0.15
65.000	0.00	0.02	0.023	O	|	|	|	0.15
65.083	0.00	0.02	0.023	O	|	|	|	0.15
65.167	0.00	0.02	0.022	O	|	|	|	0.15
65.250	0.00	0.02	0.022	O	|	|	|	0.15
65.333	0.00	0.02	0.022	O	|	|	|	0.15
65.417	0.00	0.02	0.022	O	|	|	|	0.14
65.500	0.00	0.02	0.022	O	|	|	|	0.14
65.583	0.00	0.02	0.022	O	|	|	|	0.14
65.667	0.00	0.02	0.022	O	|	|	|	0.14
65.750	0.00	0.02	0.021	O	|	|	|	0.14
65.833	0.00	0.02	0.021	O	|	|	|	0.14
65.917	0.00	0.02	0.021	O	|	|	|	0.14
66.000	0.00	0.02	0.021	O	|	|	|	0.14
66.083	0.00	0.02	0.021	O	|	|	|	0.14
66.167	0.00	0.02	0.021	O	|	|	|	0.14
66.250	0.00	0.02	0.021	O	|	|	|	0.14
66.333	0.00	0.02	0.020	O	|	|	|	0.13
66.417	0.00	0.02	0.020	O	|	|	|	0.13
66.500	0.00	0.02	0.020	O	|	|	|	0.13
66.583	0.00	0.02	0.020	O	|	|	|	0.13
66.667	0.00	0.02	0.020	O	|	|	|	0.13
66.750	0.00	0.02	0.020	O	|	|	|	0.13
66.833	0.00	0.02	0.020	O	|	|	|	0.13
66.917	0.00	0.02	0.020	O	|	|	|	0.13
67.000	0.00	0.02	0.019	O	|	|	|	0.13
67.083	0.00	0.02	0.019	O	|	|	|	0.13
67.167	0.00	0.02	0.019	O	|	|	|	0.13
67.250	0.00	0.02	0.019	O	|	|	|	0.13
67.333	0.00	0.02	0.019	O	|	|	|	0.12
67.417	0.00	0.02	0.019	O	|	|	|	0.12
67.500	0.00	0.02	0.019	O	|	|	|	0.12
67.583	0.00	0.02	0.019	O	|	|	|	0.12
67.667	0.00	0.02	0.018	O	|	|	|	0.12
67.750	0.00	0.02	0.018	O	|	|	|	0.12
67.833	0.00	0.02	0.018	O	|	|	|	0.12
67.917	0.00	0.02	0.018	O	|	|	|	0.12
68.000	0.00	0.02	0.018	O	|	|	|	0.12
68.083	0.00	0.02	0.018	O	|	|	|	0.12
68.167	0.00	0.02	0.018	O	|	|	|	0.12

68.250	0.00	0.02	0.018	O	|	|	|	0.12
68.333	0.00	0.02	0.017	O	|	|	|	0.11
68.417	0.00	0.02	0.017	O	|	|	|	0.11
68.500	0.00	0.02	0.017	O	|	|	|	0.11
68.583	0.00	0.02	0.017	O	|	|	|	0.11
68.667	0.00	0.02	0.017	O	|	|	|	0.11
68.750	0.00	0.02	0.017	O	|	|	|	0.11
68.833	0.00	0.02	0.017	O	|	|	|	0.11
68.917	0.00	0.02	0.017	O	|	|	|	0.11
69.000	0.00	0.02	0.017	O	|	|	|	0.11
69.083	0.00	0.02	0.016	O	|	|	|	0.11
69.167	0.00	0.02	0.016	O	|	|	|	0.11
69.250	0.00	0.02	0.016	O	|	|	|	0.11
69.333	0.00	0.02	0.016	O	|	|	|	0.11
69.417	0.00	0.02	0.016	O	|	|	|	0.11
69.500	0.00	0.02	0.016	O	|	|	|	0.10
69.583	0.00	0.02	0.016	O	|	|	|	0.10
69.667	0.00	0.02	0.016	O	|	|	|	0.10
69.750	0.00	0.01	0.016	O	|	|	|	0.10
69.833	0.00	0.01	0.015	O	|	|	|	0.10
69.917	0.00	0.01	0.015	O	|	|	|	0.10
70.000	0.00	0.01	0.015	O	|	|	|	0.10
70.083	0.00	0.01	0.015	O	|	|	|	0.10
70.167	0.00	0.01	0.015	O	|	|	|	0.10
70.250	0.00	0.01	0.015	O	|	|	|	0.10
70.333	0.00	0.01	0.015	O	|	|	|	0.10
70.417	0.00	0.01	0.015	O	|	|	|	0.10
70.500	0.00	0.01	0.015	O	|	|	|	0.10
70.583	0.00	0.01	0.015	O	|	|	|	0.10
70.667	0.00	0.01	0.014	O	|	|	|	0.10
70.750	0.00	0.01	0.014	O	|	|	|	0.09
70.833	0.00	0.01	0.014	O	|	|	|	0.09
70.917	0.00	0.01	0.014	O	|	|	|	0.09
71.000	0.00	0.01	0.014	O	|	|	|	0.09
71.083	0.00	0.01	0.014	O	|	|	|	0.09
71.167	0.00	0.01	0.014	O	|	|	|	0.09
71.250	0.00	0.01	0.014	O	|	|	|	0.09
71.333	0.00	0.01	0.014	O	|	|	|	0.09
71.417	0.00	0.01	0.014	O	|	|	|	0.09
71.500	0.00	0.01	0.014	O	|	|	|	0.09
71.583	0.00	0.01	0.013	O	|	|	|	0.09
71.667	0.00	0.01	0.013	O	|	|	|	0.09
71.750	0.00	0.01	0.013	O	|	|	|	0.09
71.833	0.00	0.01	0.013	O	|	|	|	0.09
71.917	0.00	0.01	0.013	O	|	|	|	0.09
72.000	0.00	0.01	0.013	O	|	|	|	0.09
72.083	0.00	0.01	0.013	O	|	|	|	0.09
72.167	0.00	0.01	0.013	O	|	|	|	0.08
72.250	0.00	0.01	0.013	O	|	|	|	0.08
72.333	0.00	0.01	0.013	O	|	|	|	0.08

72.417	0.00	0.01	0.013	O	|	|	|	0.08
72.500	0.00	0.01	0.013	O	|	|	|	0.08
72.583	0.00	0.01	0.012	O	|	|	|	0.08
72.667	0.00	0.01	0.012	O	|	|	|	0.08
72.750	0.00	0.01	0.012	O	|	|	|	0.08
72.833	0.00	0.01	0.012	O	|	|	|	0.08
72.917	0.00	0.01	0.012	O	|	|	|	0.08
73.000	0.00	0.01	0.012	O	|	|	|	0.08
73.083	0.00	0.01	0.012	O	|	|	|	0.08
73.167	0.00	0.01	0.012	O	|	|	|	0.08
73.250	0.00	0.01	0.012	O	|	|	|	0.08
73.333	0.00	0.01	0.012	O	|	|	|	0.08
73.417	0.00	0.01	0.012	O	|	|	|	0.08
73.500	0.00	0.01	0.012	O	|	|	|	0.08
73.583	0.00	0.01	0.012	O	|	|	|	0.08
73.667	0.00	0.01	0.011	O	|	|	|	0.08
73.750	0.00	0.01	0.011	O	|	|	|	0.07
73.833	0.00	0.01	0.011	O	|	|	|	0.07
73.917	0.00	0.01	0.011	O	|	|	|	0.07
74.000	0.00	0.01	0.011	O	|	|	|	0.07
74.083	0.00	0.01	0.011	O	|	|	|	0.07
74.167	0.00	0.01	0.011	O	|	|	|	0.07
74.250	0.00	0.01	0.011	O	|	|	|	0.07
74.333	0.00	0.01	0.011	O	|	|	|	0.07
74.417	0.00	0.01	0.011	O	|	|	|	0.07
74.500	0.00	0.01	0.011	O	|	|	|	0.07
74.583	0.00	0.01	0.011	O	|	|	|	0.07
74.667	0.00	0.01	0.011	O	|	|	|	0.07
74.750	0.00	0.01	0.010	O	|	|	|	0.07
74.833	0.00	0.01	0.010	O	|	|	|	0.07
74.917	0.00	0.01	0.010	O	|	|	|	0.07
75.000	0.00	0.01	0.010	O	|	|	|	0.07
75.083	0.00	0.01	0.010	O	|	|	|	0.07
75.167	0.00	0.01	0.010	O	|	|	|	0.07
75.250	0.00	0.01	0.010	O	|	|	|	0.07
75.333	0.00	0.01	0.010	O	|	|	|	0.07
75.417	0.00	0.01	0.010	O	|	|	|	0.07
75.500	0.00	0.01	0.010	O	|	|	|	0.06
75.583	0.00	0.01	0.010	O	|	|	|	0.06
75.667	0.00	0.01	0.010	O	|	|	|	0.06
75.750	0.00	0.01	0.010	O	|	|	|	0.06
75.833	0.00	0.01	0.010	O	|	|	|	0.06
75.917	0.00	0.01	0.010	O	|	|	|	0.06
76.000	0.00	0.01	0.009	O	|	|	|	0.06
76.083	0.00	0.01	0.009	O	|	|	|	0.06
76.167	0.00	0.01	0.009	O	|	|	|	0.06
76.250	0.00	0.01	0.009	O	|	|	|	0.06
76.333	0.00	0.01	0.009	O	|	|	|	0.06
76.417	0.00	0.01	0.009	O	|	|	|	0.06
76.500	0.00	0.01	0.009	O	|	|	|	0.06

76.583	0.00	0.01	0.009	O	|	|	|	0.06
76.667	0.00	0.01	0.009	O	|	|	|	0.06
76.750	0.00	0.01	0.009	O	|	|	|	0.06
76.833	0.00	0.01	0.009	O	|	|	|	0.06
76.917	0.00	0.01	0.009	O	|	|	|	0.06
77.000	0.00	0.01	0.009	O	|	|	|	0.06
77.083	0.00	0.01	0.009	O	|	|	|	0.06
77.167	0.00	0.01	0.009	O	|	|	|	0.06
77.250	0.00	0.01	0.009	O	|	|	|	0.06
77.333	0.00	0.01	0.009	O	|	|	|	0.06
77.417	0.00	0.01	0.008	O	|	|	|	0.06
77.500	0.00	0.01	0.008	O	|	|	|	0.06
77.583	0.00	0.01	0.008	O	|	|	|	0.06
77.667	0.00	0.01	0.008	O	|	|	|	0.05
77.750	0.00	0.01	0.008	O	|	|	|	0.05
77.833	0.00	0.01	0.008	O	|	|	|	0.05
77.917	0.00	0.01	0.008	O	|	|	|	0.05
78.000	0.00	0.01	0.008	O	|	|	|	0.05
78.083	0.00	0.01	0.008	O	|	|	|	0.05
78.167	0.00	0.01	0.008	O	|	|	|	0.05
78.250	0.00	0.01	0.008	O	|	|	|	0.05
78.333	0.00	0.01	0.008	O	|	|	|	0.05
78.417	0.00	0.01	0.008	O	|	|	|	0.05
78.500	0.00	0.01	0.008	O	|	|	|	0.05
78.583	0.00	0.01	0.008	O	|	|	|	0.05
78.667	0.00	0.01	0.008	O	|	|	|	0.05
78.750	0.00	0.01	0.008	O	|	|	|	0.05
78.833	0.00	0.01	0.008	O	|	|	|	0.05
78.917	0.00	0.01	0.008	O	|	|	|	0.05
79.000	0.00	0.01	0.007	O	|	|	|	0.05
79.083	0.00	0.01	0.007	O	|	|	|	0.05
79.167	0.00	0.01	0.007	O	|	|	|	0.05
79.250	0.00	0.01	0.007	O	|	|	|	0.05
79.333	0.00	0.01	0.007	O	|	|	|	0.05
79.417	0.00	0.01	0.007	O	|	|	|	0.05
79.500	0.00	0.01	0.007	O	|	|	|	0.05
79.583	0.00	0.01	0.007	O	|	|	|	0.05
79.667	0.00	0.01	0.007	O	|	|	|	0.05
79.750	0.00	0.01	0.007	O	|	|	|	0.05
79.833	0.00	0.01	0.007	O	|	|	|	0.05
79.917	0.00	0.01	0.007	O	|	|	|	0.05
80.000	0.00	0.01	0.007	O	|	|	|	0.05
80.083	0.00	0.01	0.007	O	|	|	|	0.05
80.167	0.00	0.01	0.007	O	|	|	|	0.04
80.250	0.00	0.01	0.007	O	|	|	|	0.04
80.333	0.00	0.01	0.007	O	|	|	|	0.04
80.417	0.00	0.01	0.007	O	|	|	|	0.04
80.500	0.00	0.01	0.007	O	|	|	|	0.04
80.583	0.00	0.01	0.007	O	|	|	|	0.04
80.667	0.00	0.01	0.007	O	|	|	|	0.04

80.750	0.00	0.01	0.007	O	|	|	|	0.04
80.833	0.00	0.01	0.006	O	|	|	|	0.04
80.917	0.00	0.01	0.006	O	|	|	|	0.04
81.000	0.00	0.01	0.006	O	|	|	|	0.04
81.083	0.00	0.01	0.006	O	|	|	|	0.04
81.167	0.00	0.01	0.006	O	|	|	|	0.04
81.250	0.00	0.01	0.006	O	|	|	|	0.04
81.333	0.00	0.01	0.006	O	|	|	|	0.04
81.417	0.00	0.01	0.006	O	|	|	|	0.04
81.500	0.00	0.01	0.006	O	|	|	|	0.04
81.583	0.00	0.01	0.006	O	|	|	|	0.04
81.667	0.00	0.01	0.006	O	|	|	|	0.04
81.750	0.00	0.01	0.006	O	|	|	|	0.04
81.833	0.00	0.01	0.006	O	|	|	|	0.04
81.917	0.00	0.01	0.006	O	|	|	|	0.04
82.000	0.00	0.01	0.006	O	|	|	|	0.04
82.083	0.00	0.01	0.006	O	|	|	|	0.04
82.167	0.00	0.01	0.006	O	|	|	|	0.04
82.250	0.00	0.01	0.006	O	|	|	|	0.04
82.333	0.00	0.01	0.006	O	|	|	|	0.04
82.417	0.00	0.01	0.006	O	|	|	|	0.04
82.500	0.00	0.01	0.006	O	|	|	|	0.04
82.583	0.00	0.01	0.006	O	|	|	|	0.04
82.667	0.00	0.01	0.006	O	|	|	|	0.04
82.750	0.00	0.01	0.006	O	|	|	|	0.04
82.833	0.00	0.01	0.006	O	|	|	|	0.04
82.917	0.00	0.01	0.005	O	|	|	|	0.04
83.000	0.00	0.01	0.005	O	|	|	|	0.04
83.083	0.00	0.01	0.005	O	|	|	|	0.04
83.167	0.00	0.01	0.005	O	|	|	|	0.04
83.250	0.00	0.01	0.005	O	|	|	|	0.04
83.333	0.00	0.01	0.005	O	|	|	|	0.03
83.417	0.00	0.01	0.005	O	|	|	|	0.03
83.500	0.00	0.01	0.005	O	|	|	|	0.03
83.583	0.00	0.00	0.005	O	|	|	|	0.03
83.667	0.00	0.00	0.005	O	|	|	|	0.03
83.750	0.00	0.00	0.005	O	|	|	|	0.03
83.833	0.00	0.00	0.005	O	|	|	|	0.03
83.917	0.00	0.00	0.005	O	|	|	|	0.03
84.000	0.00	0.00	0.005	O	|	|	|	0.03
84.083	0.00	0.00	0.005	O	|	|	|	0.03
84.167	0.00	0.00	0.005	O	|	|	|	0.03
84.250	0.00	0.00	0.005	O	|	|	|	0.03
84.333	0.00	0.00	0.005	O	|	|	|	0.03
84.417	0.00	0.00	0.005	O	|	|	|	0.03
84.500	0.00	0.00	0.005	O	|	|	|	0.03
84.583	0.00	0.00	0.005	O	|	|	|	0.03
84.667	0.00	0.00	0.005	O	|	|	|	0.03
84.750	0.00	0.00	0.005	O	|	|	|	0.03
84.833	0.00	0.00	0.005	O	|	|	|	0.03

84.917	0.00	0.00	0.005	O	|	|	|	|	0.03
85.000	0.00	0.00	0.005	O	|	|	|	|	0.03
85.083	0.00	0.00	0.005	O	|	|	|	|	0.03
85.167	0.00	0.00	0.005	O	|	|	|	|	0.03
85.250	0.00	0.00	0.005	O	|	|	|	|	0.03
85.333	0.00	0.00	0.005	O	|	|	|	|	0.03
85.417	0.00	0.00	0.004	O	|	|	|	|	0.03
85.500	0.00	0.00	0.004	O	|	|	|	|	0.03
85.583	0.00	0.00	0.004	O	|	|	|	|	0.03
85.667	0.00	0.00	0.004	O	|	|	|	|	0.03
85.750	0.00	0.00	0.004	O	|	|	|	|	0.03
85.833	0.00	0.00	0.004	O	|	|	|	|	0.03
85.917	0.00	0.00	0.004	O	|	|	|	|	0.03
86.000	0.00	0.00	0.004	O	|	|	|	|	0.03
86.083	0.00	0.00	0.004	O	|	|	|	|	0.03
86.167	0.00	0.00	0.004	O	|	|	|	|	0.03
86.250	0.00	0.00	0.004	O	|	|	|	|	0.03
86.333	0.00	0.00	0.004	O	|	|	|	|	0.03
86.417	0.00	0.00	0.004	O	|	|	|	|	0.03
86.500	0.00	0.00	0.004	O	|	|	|	|	0.03
86.583	0.00	0.00	0.004	O	|	|	|	|	0.03
86.667	0.00	0.00	0.004	O	|	|	|	|	0.03
86.750	0.00	0.00	0.004	O	|	|	|	|	0.03
86.833	0.00	0.00	0.004	O	|	|	|	|	0.03
86.917	0.00	0.00	0.004	O	|	|	|	|	0.03
87.000	0.00	0.00	0.004	O	|	|	|	|	0.03
87.083	0.00	0.00	0.004	O	|	|	|	|	0.03
87.167	0.00	0.00	0.004	O	|	|	|	|	0.03
87.250	0.00	0.00	0.004	O	|	|	|	|	0.03
87.333	0.00	0.00	0.004	O	|	|	|	|	0.03
87.417	0.00	0.00	0.004	O	|	|	|	|	0.03
87.500	0.00	0.00	0.004	O	|	|	|	|	0.03
87.583	0.00	0.00	0.004	O	|	|	|	|	0.02
87.667	0.00	0.00	0.004	O	|	|	|	|	0.02
87.750	0.00	0.00	0.004	O	|	|	|	|	0.02
87.833	0.00	0.00	0.004	O	|	|	|	|	0.02
87.917	0.00	0.00	0.004	O	|	|	|	|	0.02
88.000	0.00	0.00	0.004	O	|	|	|	|	0.02
88.083	0.00	0.00	0.004	O	|	|	|	|	0.02
88.167	0.00	0.00	0.004	O	|	|	|	|	0.02
88.250	0.00	0.00	0.004	O	|	|	|	|	0.02
88.333	0.00	0.00	0.004	O	|	|	|	|	0.02
88.417	0.00	0.00	0.004	O	|	|	|	|	0.02
88.500	0.00	0.00	0.004	O	|	|	|	|	0.02
88.583	0.00	0.00	0.003	O	|	|	|	|	0.02
88.667	0.00	0.00	0.003	O	|	|	|	|	0.02
88.750	0.00	0.00	0.003	O	|	|	|	|	0.02
88.833	0.00	0.00	0.003	O	|	|	|	|	0.02
88.917	0.00	0.00	0.003	O	|	|	|	|	0.02
89.000	0.00	0.00	0.003	O	|	|	|	|	0.02

89.083	0.00	0.00	0.003	O	|	|	|	0.02
89.167	0.00	0.00	0.003	O	|	|	|	0.02
89.250	0.00	0.00	0.003	O	|	|	|	0.02
89.333	0.00	0.00	0.003	O	|	|	|	0.02
89.417	0.00	0.00	0.003	O	|	|	|	0.02
89.500	0.00	0.00	0.003	O	|	|	|	0.02
89.583	0.00	0.00	0.003	O	|	|	|	0.02
89.667	0.00	0.00	0.003	O	|	|	|	0.02
89.750	0.00	0.00	0.003	O	|	|	|	0.02
89.833	0.00	0.00	0.003	O	|	|	|	0.02
89.917	0.00	0.00	0.003	O	|	|	|	0.02
90.000	0.00	0.00	0.003	O	|	|	|	0.02
90.083	0.00	0.00	0.003	O	|	|	|	0.02
90.167	0.00	0.00	0.003	O	|	|	|	0.02
90.250	0.00	0.00	0.003	O	|	|	|	0.02
90.333	0.00	0.00	0.003	O	|	|	|	0.02
90.417	0.00	0.00	0.003	O	|	|	|	0.02
90.500	0.00	0.00	0.003	O	|	|	|	0.02
90.583	0.00	0.00	0.003	O	|	|	|	0.02
90.667	0.00	0.00	0.003	O	|	|	|	0.02
90.750	0.00	0.00	0.003	O	|	|	|	0.02
90.833	0.00	0.00	0.003	O	|	|	|	0.02
90.917	0.00	0.00	0.003	O	|	|	|	0.02
91.000	0.00	0.00	0.003	O	|	|	|	0.02
91.083	0.00	0.00	0.003	O	|	|	|	0.02
91.167	0.00	0.00	0.003	O	|	|	|	0.02
91.250	0.00	0.00	0.003	O	|	|	|	0.02
91.333	0.00	0.00	0.003	O	|	|	|	0.02
91.417	0.00	0.00	0.003	O	|	|	|	0.02
91.500	0.00	0.00	0.003	O	|	|	|	0.02
91.583	0.00	0.00	0.003	O	|	|	|	0.02
91.667	0.00	0.00	0.003	O	|	|	|	0.02
91.750	0.00	0.00	0.003	O	|	|	|	0.02
91.833	0.00	0.00	0.003	O	|	|	|	0.02
91.917	0.00	0.00	0.003	O	|	|	|	0.02
92.000	0.00	0.00	0.003	O	|	|	|	0.02
92.083	0.00	0.00	0.003	O	|	|	|	0.02
92.167	0.00	0.00	0.003	O	|	|	|	0.02
92.250	0.00	0.00	0.003	O	|	|	|	0.02
92.333	0.00	0.00	0.003	O	|	|	|	0.02
92.417	0.00	0.00	0.003	O	|	|	|	0.02
92.500	0.00	0.00	0.003	O	|	|	|	0.02
92.583	0.00	0.00	0.003	O	|	|	|	0.02
92.667	0.00	0.00	0.003	O	|	|	|	0.02
92.750	0.00	0.00	0.003	O	|	|	|	0.02
92.833	0.00	0.00	0.002	O	|	|	|	0.02
92.917	0.00	0.00	0.002	O	|	|	|	0.02
93.000	0.00	0.00	0.002	O	|	|	|	0.02
93.083	0.00	0.00	0.002	O	|	|	|	0.02
93.167	0.00	0.00	0.002	O	|	|	|	0.02

93.250	0.00	0.00	0.002	O	|	|	|	0.02
93.333	0.00	0.00	0.002	O	|	|	|	0.02
93.417	0.00	0.00	0.002	O	|	|	|	0.02
93.500	0.00	0.00	0.002	O	|	|	|	0.02
93.583	0.00	0.00	0.002	O	|	|	|	0.02
93.667	0.00	0.00	0.002	O	|	|	|	0.02
93.750	0.00	0.00	0.002	O	|	|	|	0.02
93.833	0.00	0.00	0.002	O	|	|	|	0.02
93.917	0.00	0.00	0.002	O	|	|	|	0.02
94.000	0.00	0.00	0.002	O	|	|	|	0.01
94.083	0.00	0.00	0.002	O	|	|	|	0.01
94.167	0.00	0.00	0.002	O	|	|	|	0.01
94.250	0.00	0.00	0.002	O	|	|	|	0.01
94.333	0.00	0.00	0.002	O	|	|	|	0.01
94.417	0.00	0.00	0.002	O	|	|	|	0.01
94.500	0.00	0.00	0.002	O	|	|	|	0.01
94.583	0.00	0.00	0.002	O	|	|	|	0.01
94.667	0.00	0.00	0.002	O	|	|	|	0.01
94.750	0.00	0.00	0.002	O	|	|	|	0.01
94.833	0.00	0.00	0.002	O	|	|	|	0.01
94.917	0.00	0.00	0.002	O	|	|	|	0.01
95.000	0.00	0.00	0.002	O	|	|	|	0.01
95.083	0.00	0.00	0.002	O	|	|	|	0.01
95.167	0.00	0.00	0.002	O	|	|	|	0.01
95.250	0.00	0.00	0.002	O	|	|	|	0.01
95.333	0.00	0.00	0.002	O	|	|	|	0.01
95.417	0.00	0.00	0.002	O	|	|	|	0.01
95.500	0.00	0.00	0.002	O	|	|	|	0.01
95.583	0.00	0.00	0.002	O	|	|	|	0.01
95.667	0.00	0.00	0.002	O	|	|	|	0.01
95.750	0.00	0.00	0.002	O	|	|	|	0.01
95.833	0.00	0.00	0.002	O	|	|	|	0.01
95.917	0.00	0.00	0.002	O	|	|	|	0.01
96.000	0.00	0.00	0.002	O	|	|	|	0.01
96.083	0.00	0.00	0.002	O	|	|	|	0.01
96.167	0.00	0.00	0.002	O	|	|	|	0.01
96.250	0.00	0.00	0.002	O	|	|	|	0.01
96.333	0.00	0.00	0.002	O	|	|	|	0.01
96.417	0.00	0.00	0.002	O	|	|	|	0.01
96.500	0.00	0.00	0.002	O	|	|	|	0.01
96.583	0.00	0.00	0.002	O	|	|	|	0.01
96.667	0.00	0.00	0.002	O	|	|	|	0.01
96.750	0.00	0.00	0.002	O	|	|	|	0.01
96.833	0.00	0.00	0.002	O	|	|	|	0.01
96.917	0.00	0.00	0.002	O	|	|	|	0.01
97.000	0.00	0.00	0.002	O	|	|	|	0.01
97.083	0.00	0.00	0.002	O	|	|	|	0.01
97.167	0.00	0.00	0.002	O	|	|	|	0.01
97.250	0.00	0.00	0.002	O	|	|	|	0.01
97.333	0.00	0.00	0.002	O	|	|	|	0.01

97.417	0.00	0.00	0.002	O	|	|	|	0.01
97.500	0.00	0.00	0.002	O	|	|	|	0.01
97.583	0.00	0.00	0.002	O	|	|	|	0.01
97.667	0.00	0.00	0.002	O	|	|	|	0.01
97.750	0.00	0.00	0.002	O	|	|	|	0.01
97.833	0.00	0.00	0.002	O	|	|	|	0.01
97.917	0.00	0.00	0.002	O	|	|	|	0.01
98.000	0.00	0.00	0.002	O	|	|	|	0.01
98.083	0.00	0.00	0.002	O	|	|	|	0.01
98.167	0.00	0.00	0.002	O	|	|	|	0.01
98.250	0.00	0.00	0.002	O	|	|	|	0.01
98.333	0.00	0.00	0.002	O	|	|	|	0.01
98.417	0.00	0.00	0.002	O	|	|	|	0.01
98.500	0.00	0.00	0.002	O	|	|	|	0.01
98.583	0.00	0.00	0.002	O	|	|	|	0.01
98.667	0.00	0.00	0.002	O	|	|	|	0.01
98.750	0.00	0.00	0.002	O	|	|	|	0.01
98.833	0.00	0.00	0.002	O	|	|	|	0.01
98.917	0.00	0.00	0.002	O	|	|	|	0.01
99.000	0.00	0.00	0.002	O	|	|	|	0.01
99.083	0.00	0.00	0.002	O	|	|	|	0.01
99.167	0.00	0.00	0.002	O	|	|	|	0.01
99.250	0.00	0.00	0.001	O	|	|	|	0.01
99.333	0.00	0.00	0.001	O	|	|	|	0.01
99.417	0.00	0.00	0.001	O	|	|	|	0.01
99.500	0.00	0.00	0.001	O	|	|	|	0.01
99.583	0.00	0.00	0.001	O	|	|	|	0.01
99.667	0.00	0.00	0.001	O	|	|	|	0.01
99.750	0.00	0.00	0.001	O	|	|	|	0.01
99.833	0.00	0.00	0.001	O	|	|	|	0.01
99.917	0.00	0.00	0.001	O	|	|	|	0.01
100.000	0.00	0.00	0.001	O	|	|	|	0.01
100.083	0.00	0.00	0.001	O	|	|	|	0.01
100.167	0.00	0.00	0.001	O	|	|	|	0.01
100.250	0.00	0.00	0.001	O	|	|	|	0.01
100.333	0.00	0.00	0.001	O	|	|	|	0.01
100.417	0.00	0.00	0.001	O	|	|	|	0.01
100.500	0.00	0.00	0.001	O	|	|	|	0.01
100.583	0.00	0.00	0.001	O	|	|	|	0.01
100.667	0.00	0.00	0.001	O	|	|	|	0.01
100.750	0.00	0.00	0.001	O	|	|	|	0.01
100.833	0.00	0.00	0.001	O	|	|	|	0.01
100.917	0.00	0.00	0.001	O	|	|	|	0.01
101.000	0.00	0.00	0.001	O	|	|	|	0.01
101.083	0.00	0.00	0.001	O	|	|	|	0.01
101.167	0.00	0.00	0.001	O	|	|	|	0.01
101.250	0.00	0.00	0.001	O	|	|	|	0.01
101.333	0.00	0.00	0.001	O	|	|	|	0.01
101.417	0.00	0.00	0.001	O	|	|	|	0.01
101.500	0.00	0.00	0.001	O	|	|	|	0.01

101.583	0.00	0.00	0.001	O	|	|	|	|	0.01
101.667	0.00	0.00	0.001	O	|	|	|	|	0.01
101.750	0.00	0.00	0.001	O	|	|	|	|	0.01
101.833	0.00	0.00	0.001	O	|	|	|	|	0.01
101.917	0.00	0.00	0.001	O	|	|	|	|	0.01
102.000	0.00	0.00	0.001	O	|	|	|	|	0.01
102.083	0.00	0.00	0.001	O	|	|	|	|	0.01
102.167	0.00	0.00	0.001	O	|	|	|	|	0.01
102.250	0.00	0.00	0.001	O	|	|	|	|	0.01
102.333	0.00	0.00	0.001	O	|	|	|	|	0.01
102.417	0.00	0.00	0.001	O	|	|	|	|	0.01
102.500	0.00	0.00	0.001	O	|	|	|	|	0.01
102.583	0.00	0.00	0.001	O	|	|	|	|	0.01
102.667	0.00	0.00	0.001	O	|	|	|	|	0.01
102.750	0.00	0.00	0.001	O	|	|	|	|	0.01
102.833	0.00	0.00	0.001	O	|	|	|	|	0.01
102.917	0.00	0.00	0.001	O	|	|	|	|	0.01
103.000	0.00	0.00	0.001	O	|	|	|	|	0.01
103.083	0.00	0.00	0.001	O	|	|	|	|	0.01
103.167	0.00	0.00	0.001	O	|	|	|	|	0.01
103.250	0.00	0.00	0.001	O	|	|	|	|	0.01
103.333	0.00	0.00	0.001	O	|	|	|	|	0.01
103.417	0.00	0.00	0.001	O	|	|	|	|	0.01
103.500	0.00	0.00	0.001	O	|	|	|	|	0.01
103.583	0.00	0.00	0.001	O	|	|	|	|	0.01
103.667	0.00	0.00	0.001	O	|	|	|	|	0.01
103.750	0.00	0.00	0.001	O	|	|	|	|	0.01
103.833	0.00	0.00	0.001	O	|	|	|	|	0.01
103.917	0.00	0.00	0.001	O	|	|	|	|	0.01

Remaining water in basin = 0.00 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 1247
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.187 (CFS)
Total volume = 0.556 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

Basin B

Depth	Storage	Orifice #1 Outflow	Orifice #2 Outflow	Weir Outflow	Total Outflow
1664.0	0	0	0	0	0
1664.5	0.0762	0.0735			0.0735
1665.0	0.1515	0.1090			0.1090
1665.5	0.2244	0.1354			0.1354
1666.0	0.2938	0.1575			0.1575
1666.5	0.3581	0.1769			0.1769
1667.0	0.4154	0.1944			0.1944
1667.5	0.4630	0.2104			0.2104
1668.0	0.4957	0.2252			0.2252
1668.5	0.5005	0.2392			0.2392
1669.0	0.5329	0.2523	0.8213		1.0736
1669.5	0.5562	0.2649	2.1729		2.4378
1670.0	0.5796	0.2768	2.9612		3.2380
1670.5	0.6029	0.2883	3.5799		3.8682
1671.0	0.6263	0.2993	4.1064		4.4057
1671.5	0.6496	0.3099	4.5727		4.8826
1672.0	0.6729	0.3202	4.9957	9.4190	14.7349
1672.5	0.6963	0.3302	5.3855	26.6400	32.3557

	Size	Elev.
Bio-Retention /Detention	800 LF	1664.0
Orifice #1	2" dia	1664.0
Orifice #2	10" dia	1668.5
Weir	8' length	1671.5

U n i t H y d r o g r a p h A n a l y s i s

Study date 02/22/21 File: CC02XHYDB242.out

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

Program License Serial Number 6473

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

English Units used in output format

KRAMERIA AVENUE PROJECT
TTM NO. 38094
EXISTING CONDITION - DMA B
2YR, 24-HOUR STORM

Drainage Area = 8.73(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 8.73(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 1076.00(Ft.)
Length along longest watercourse measured to centroid = 538.00(Ft.)
Length along longest watercourse = 0.204 Mi.
Length along longest watercourse measured to centroid = 0.102 Mi.
Difference in elevation = 14.10(Ft.)
Slope along watercourse = 69.1896 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time = 0.098 Hr.
Lag time = 5.91 Min.
25% of lag time = 1.48 Min.
40% of lag time = 2.36 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]
        8.73            1.60                  13.97

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        8.73            4.30                  37.54

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.600(In)
Area Averaged 100-Year Rainfall =    4.300(In)

Point rain (area averaged) =    1.600(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.600(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     8.730           74.00         0.000
 Total Area Entered =      8.73(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
74.0  55.8      0.513     0.000        0.513       1.000      0.513
                                                 Sum (F) =   0.513
Area averaged mean soil loss (F) (In/Hr) =  0.513
Minimum soil loss rate ((In/Hr)) =  0.256
(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
                       MOUNTAIN S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %            (CFS)
------------------------------------------------------------------------
    1   0.083         84.639         18.434              1.622
    2   0.167        169.278         37.827              3.328
    3   0.250        253.917         14.156              1.246
    4   0.333        338.556          8.146              0.717
    5   0.417        423.196          5.204              0.458
    6   0.500        507.835          3.742              0.329
    7   0.583        592.474          2.974              0.262
    8   0.667        677.113          2.411              0.212
```

9	0.750	761.752	1.980	0.174
10	0.833	846.391	1.599	0.141
11	0.917	931.030	1.524	0.134
12	1.000	1015.669	2.003	0.176
			Sum = 100.000	Sum= 8.798

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	0.013	(0.909)	0.012	0.001
2	0.17	0.07	0.013	(0.906)	0.012	0.001
3	0.25	0.07	0.013	(0.902)	0.012	0.001
4	0.33	0.10	0.019	(0.899)	0.017	0.002
5	0.42	0.10	0.019	(0.895)	0.017	0.002
6	0.50	0.10	0.019	(0.892)	0.017	0.002
7	0.58	0.10	0.019	(0.888)	0.017	0.002
8	0.67	0.10	0.019	(0.885)	0.017	0.002
9	0.75	0.10	0.019	(0.881)	0.017	0.002
10	0.83	0.13	0.026	(0.878)	0.023	0.003
11	0.92	0.13	0.026	(0.874)	0.023	0.003
12	1.00	0.13	0.026	(0.871)	0.023	0.003
13	1.08	0.10	0.019	(0.867)	0.017	0.002
14	1.17	0.10	0.019	(0.864)	0.017	0.002
15	1.25	0.10	0.019	(0.861)	0.017	0.002
16	1.33	0.10	0.019	(0.857)	0.017	0.002
17	1.42	0.10	0.019	(0.854)	0.017	0.002
18	1.50	0.10	0.019	(0.850)	0.017	0.002
19	1.58	0.10	0.019	(0.847)	0.017	0.002
20	1.67	0.10	0.019	(0.843)	0.017	0.002
21	1.75	0.10	0.019	(0.840)	0.017	0.002
22	1.83	0.13	0.026	(0.837)	0.023	0.003
23	1.92	0.13	0.026	(0.833)	0.023	0.003
24	2.00	0.13	0.026	(0.830)	0.023	0.003
25	2.08	0.13	0.026	(0.827)	0.023	0.003
26	2.17	0.13	0.026	(0.823)	0.023	0.003
27	2.25	0.13	0.026	(0.820)	0.023	0.003
28	2.33	0.13	0.026	(0.817)	0.023	0.003
29	2.42	0.13	0.026	(0.813)	0.023	0.003
30	2.50	0.13	0.026	(0.810)	0.023	0.003
31	2.58	0.17	0.032	(0.807)	0.029	0.003
32	2.67	0.17	0.032	(0.803)	0.029	0.003
33	2.75	0.17	0.032	(0.800)	0.029	0.003
34	2.83	0.17	0.032	(0.797)	0.029	0.003
35	2.92	0.17	0.032	(0.793)	0.029	0.003
36	3.00	0.17	0.032	(0.790)	0.029	0.003
37	3.08	0.17	0.032	(0.787)	0.029	0.003

38	3.17	0.17	0.032	(0.784)	0.029	0.003
39	3.25	0.17	0.032	(0.780)	0.029	0.003
40	3.33	0.17	0.032	(0.777)	0.029	0.003
41	3.42	0.17	0.032	(0.774)	0.029	0.003
42	3.50	0.17	0.032	(0.771)	0.029	0.003
43	3.58	0.17	0.032	(0.767)	0.029	0.003
44	3.67	0.17	0.032	(0.764)	0.029	0.003
45	3.75	0.17	0.032	(0.761)	0.029	0.003
46	3.83	0.20	0.038	(0.758)	0.035	0.004
47	3.92	0.20	0.038	(0.755)	0.035	0.004
48	4.00	0.20	0.038	(0.751)	0.035	0.004
49	4.08	0.20	0.038	(0.748)	0.035	0.004
50	4.17	0.20	0.038	(0.745)	0.035	0.004
51	4.25	0.20	0.038	(0.742)	0.035	0.004
52	4.33	0.23	0.045	(0.739)	0.040	0.004
53	4.42	0.23	0.045	(0.736)	0.040	0.004
54	4.50	0.23	0.045	(0.732)	0.040	0.004
55	4.58	0.23	0.045	(0.729)	0.040	0.004
56	4.67	0.23	0.045	(0.726)	0.040	0.004
57	4.75	0.23	0.045	(0.723)	0.040	0.004
58	4.83	0.27	0.051	(0.720)	0.046	0.005
59	4.92	0.27	0.051	(0.717)	0.046	0.005
60	5.00	0.27	0.051	(0.714)	0.046	0.005
61	5.08	0.20	0.038	(0.711)	0.035	0.004
62	5.17	0.20	0.038	(0.707)	0.035	0.004
63	5.25	0.20	0.038	(0.704)	0.035	0.004
64	5.33	0.23	0.045	(0.701)	0.040	0.004
65	5.42	0.23	0.045	(0.698)	0.040	0.004
66	5.50	0.23	0.045	(0.695)	0.040	0.004
67	5.58	0.27	0.051	(0.692)	0.046	0.005
68	5.67	0.27	0.051	(0.689)	0.046	0.005
69	5.75	0.27	0.051	(0.686)	0.046	0.005
70	5.83	0.27	0.051	(0.683)	0.046	0.005
71	5.92	0.27	0.051	(0.680)	0.046	0.005
72	6.00	0.27	0.051	(0.677)	0.046	0.005
73	6.08	0.30	0.058	(0.674)	0.052	0.006
74	6.17	0.30	0.058	(0.671)	0.052	0.006
75	6.25	0.30	0.058	(0.668)	0.052	0.006
76	6.33	0.30	0.058	(0.665)	0.052	0.006
77	6.42	0.30	0.058	(0.662)	0.052	0.006
78	6.50	0.30	0.058	(0.659)	0.052	0.006
79	6.58	0.33	0.064	(0.656)	0.058	0.006
80	6.67	0.33	0.064	(0.653)	0.058	0.006
81	6.75	0.33	0.064	(0.650)	0.058	0.006
82	6.83	0.33	0.064	(0.647)	0.058	0.006
83	6.92	0.33	0.064	(0.644)	0.058	0.006
84	7.00	0.33	0.064	(0.641)	0.058	0.006
85	7.08	0.33	0.064	(0.638)	0.058	0.006
86	7.17	0.33	0.064	(0.636)	0.058	0.006
87	7.25	0.33	0.064	(0.633)	0.058	0.006

88	7.33	0.37	0.070	(0.630)	0.063	0.007
89	7.42	0.37	0.070	(0.627)	0.063	0.007
90	7.50	0.37	0.070	(0.624)	0.063	0.007
91	7.58	0.40	0.077	(0.621)	0.069	0.008
92	7.67	0.40	0.077	(0.618)	0.069	0.008
93	7.75	0.40	0.077	(0.615)	0.069	0.008
94	7.83	0.43	0.083	(0.613)	0.075	0.008
95	7.92	0.43	0.083	(0.610)	0.075	0.008
96	8.00	0.43	0.083	(0.607)	0.075	0.008
97	8.08	0.50	0.096	(0.604)	0.086	0.010
98	8.17	0.50	0.096	(0.601)	0.086	0.010
99	8.25	0.50	0.096	(0.598)	0.086	0.010
100	8.33	0.50	0.096	(0.596)	0.086	0.010
101	8.42	0.50	0.096	(0.593)	0.086	0.010
102	8.50	0.50	0.096	(0.590)	0.086	0.010
103	8.58	0.53	0.102	(0.587)	0.092	0.010
104	8.67	0.53	0.102	(0.585)	0.092	0.010
105	8.75	0.53	0.102	(0.582)	0.092	0.010
106	8.83	0.57	0.109	(0.579)	0.098	0.011
107	8.92	0.57	0.109	(0.576)	0.098	0.011
108	9.00	0.57	0.109	(0.574)	0.098	0.011
109	9.08	0.63	0.122	(0.571)	0.109	0.012
110	9.17	0.63	0.122	(0.568)	0.109	0.012
111	9.25	0.63	0.122	(0.566)	0.109	0.012
112	9.33	0.67	0.128	(0.563)	0.115	0.013
113	9.42	0.67	0.128	(0.560)	0.115	0.013
114	9.50	0.67	0.128	(0.557)	0.115	0.013
115	9.58	0.70	0.134	(0.555)	0.121	0.013
116	9.67	0.70	0.134	(0.552)	0.121	0.013
117	9.75	0.70	0.134	(0.549)	0.121	0.013
118	9.83	0.73	0.141	(0.547)	0.127	0.014
119	9.92	0.73	0.141	(0.544)	0.127	0.014
120	10.00	0.73	0.141	(0.542)	0.127	0.014
121	10.08	0.50	0.096	(0.539)	0.086	0.010
122	10.17	0.50	0.096	(0.536)	0.086	0.010
123	10.25	0.50	0.096	(0.534)	0.086	0.010
124	10.33	0.50	0.096	(0.531)	0.086	0.010
125	10.42	0.50	0.096	(0.529)	0.086	0.010
126	10.50	0.50	0.096	(0.526)	0.086	0.010
127	10.58	0.67	0.128	(0.523)	0.115	0.013
128	10.67	0.67	0.128	(0.521)	0.115	0.013
129	10.75	0.67	0.128	(0.518)	0.115	0.013
130	10.83	0.67	0.128	(0.516)	0.115	0.013
131	10.92	0.67	0.128	(0.513)	0.115	0.013
132	11.00	0.67	0.128	(0.511)	0.115	0.013
133	11.08	0.63	0.122	(0.508)	0.109	0.012
134	11.17	0.63	0.122	(0.506)	0.109	0.012
135	11.25	0.63	0.122	(0.503)	0.109	0.012
136	11.33	0.63	0.122	(0.501)	0.109	0.012
137	11.42	0.63	0.122	(0.498)	0.109	0.012

138	11.50	0.63	0.122	(0.496)	0.109	0.012
139	11.58	0.57	0.109	(0.493)	0.098	0.011
140	11.67	0.57	0.109	(0.491)	0.098	0.011
141	11.75	0.57	0.109	(0.488)	0.098	0.011
142	11.83	0.60	0.115	(0.486)	0.104	0.012
143	11.92	0.60	0.115	(0.484)	0.104	0.012
144	12.00	0.60	0.115	(0.481)	0.104	0.012
145	12.08	0.83	0.160	(0.479)	0.144	0.016
146	12.17	0.83	0.160	(0.476)	0.144	0.016
147	12.25	0.83	0.160	(0.474)	0.144	0.016
148	12.33	0.87	0.166	(0.472)	0.150	0.017
149	12.42	0.87	0.166	(0.469)	0.150	0.017
150	12.50	0.87	0.166	(0.467)	0.150	0.017
151	12.58	0.93	0.179	(0.464)	0.161	0.018
152	12.67	0.93	0.179	(0.462)	0.161	0.018
153	12.75	0.93	0.179	(0.460)	0.161	0.018
154	12.83	0.97	0.186	(0.457)	0.167	0.019
155	12.92	0.97	0.186	(0.455)	0.167	0.019
156	13.00	0.97	0.186	(0.453)	0.167	0.019
157	13.08	1.13	0.218	(0.451)	0.196	0.022
158	13.17	1.13	0.218	(0.448)	0.196	0.022
159	13.25	1.13	0.218	(0.446)	0.196	0.022
160	13.33	1.13	0.218	(0.444)	0.196	0.022
161	13.42	1.13	0.218	(0.442)	0.196	0.022
162	13.50	1.13	0.218	(0.439)	0.196	0.022
163	13.58	0.77	0.147	(0.437)	0.132	0.015
164	13.67	0.77	0.147	(0.435)	0.132	0.015
165	13.75	0.77	0.147	(0.433)	0.132	0.015
166	13.83	0.77	0.147	(0.430)	0.132	0.015
167	13.92	0.77	0.147	(0.428)	0.132	0.015
168	14.00	0.77	0.147	(0.426)	0.132	0.015
169	14.08	0.90	0.173	(0.424)	0.156	0.017
170	14.17	0.90	0.173	(0.422)	0.156	0.017
171	14.25	0.90	0.173	(0.419)	0.156	0.017
172	14.33	0.87	0.166	(0.417)	0.150	0.017
173	14.42	0.87	0.166	(0.415)	0.150	0.017
174	14.50	0.87	0.166	(0.413)	0.150	0.017
175	14.58	0.87	0.166	(0.411)	0.150	0.017
176	14.67	0.87	0.166	(0.409)	0.150	0.017
177	14.75	0.87	0.166	(0.407)	0.150	0.017
178	14.83	0.83	0.160	(0.405)	0.144	0.016
179	14.92	0.83	0.160	(0.403)	0.144	0.016
180	15.00	0.83	0.160	(0.401)	0.144	0.016
181	15.08	0.80	0.154	(0.398)	0.138	0.015
182	15.17	0.80	0.154	(0.396)	0.138	0.015
183	15.25	0.80	0.154	(0.394)	0.138	0.015
184	15.33	0.77	0.147	(0.392)	0.132	0.015
185	15.42	0.77	0.147	(0.390)	0.132	0.015
186	15.50	0.77	0.147	(0.388)	0.132	0.015
187	15.58	0.63	0.122	(0.386)	0.109	0.012

188	15.67	0.63	0.122	(0.384)	0.109	0.012
189	15.75	0.63	0.122	(0.382)	0.109	0.012
190	15.83	0.63	0.122	(0.380)	0.109	0.012
191	15.92	0.63	0.122	(0.379)	0.109	0.012
192	16.00	0.63	0.122	(0.377)	0.109	0.012
193	16.08	0.13	0.026	(0.375)	0.023	0.003
194	16.17	0.13	0.026	(0.373)	0.023	0.003
195	16.25	0.13	0.026	(0.371)	0.023	0.003
196	16.33	0.13	0.026	(0.369)	0.023	0.003
197	16.42	0.13	0.026	(0.367)	0.023	0.003
198	16.50	0.13	0.026	(0.365)	0.023	0.003
199	16.58	0.10	0.019	(0.363)	0.017	0.002
200	16.67	0.10	0.019	(0.362)	0.017	0.002
201	16.75	0.10	0.019	(0.360)	0.017	0.002
202	16.83	0.10	0.019	(0.358)	0.017	0.002
203	16.92	0.10	0.019	(0.356)	0.017	0.002
204	17.00	0.10	0.019	(0.354)	0.017	0.002
205	17.08	0.17	0.032	(0.352)	0.029	0.003
206	17.17	0.17	0.032	(0.351)	0.029	0.003
207	17.25	0.17	0.032	(0.349)	0.029	0.003
208	17.33	0.17	0.032	(0.347)	0.029	0.003
209	17.42	0.17	0.032	(0.345)	0.029	0.003
210	17.50	0.17	0.032	(0.344)	0.029	0.003
211	17.58	0.17	0.032	(0.342)	0.029	0.003
212	17.67	0.17	0.032	(0.340)	0.029	0.003
213	17.75	0.17	0.032	(0.339)	0.029	0.003
214	17.83	0.13	0.026	(0.337)	0.023	0.003
215	17.92	0.13	0.026	(0.335)	0.023	0.003
216	18.00	0.13	0.026	(0.334)	0.023	0.003
217	18.08	0.13	0.026	(0.332)	0.023	0.003
218	18.17	0.13	0.026	(0.330)	0.023	0.003
219	18.25	0.13	0.026	(0.329)	0.023	0.003
220	18.33	0.13	0.026	(0.327)	0.023	0.003
221	18.42	0.13	0.026	(0.325)	0.023	0.003
222	18.50	0.13	0.026	(0.324)	0.023	0.003
223	18.58	0.10	0.019	(0.322)	0.017	0.002
224	18.67	0.10	0.019	(0.321)	0.017	0.002
225	18.75	0.10	0.019	(0.319)	0.017	0.002
226	18.83	0.07	0.013	(0.318)	0.012	0.001
227	18.92	0.07	0.013	(0.316)	0.012	0.001
228	19.00	0.07	0.013	(0.315)	0.012	0.001
229	19.08	0.10	0.019	(0.313)	0.017	0.002
230	19.17	0.10	0.019	(0.312)	0.017	0.002
231	19.25	0.10	0.019	(0.310)	0.017	0.002
232	19.33	0.13	0.026	(0.309)	0.023	0.003
233	19.42	0.13	0.026	(0.307)	0.023	0.003
234	19.50	0.13	0.026	(0.306)	0.023	0.003
235	19.58	0.10	0.019	(0.305)	0.017	0.002
236	19.67	0.10	0.019	(0.303)	0.017	0.002
237	19.75	0.10	0.019	(0.302)	0.017	0.002

238	19.83	0.07	0.013	(0.300)	0.012	0.001
239	19.92	0.07	0.013	(0.299)	0.012	0.001
240	20.00	0.07	0.013	(0.298)	0.012	0.001
241	20.08	0.10	0.019	(0.296)	0.017	0.002
242	20.17	0.10	0.019	(0.295)	0.017	0.002
243	20.25	0.10	0.019	(0.294)	0.017	0.002
244	20.33	0.10	0.019	(0.293)	0.017	0.002
245	20.42	0.10	0.019	(0.291)	0.017	0.002
246	20.50	0.10	0.019	(0.290)	0.017	0.002
247	20.58	0.10	0.019	(0.289)	0.017	0.002
248	20.67	0.10	0.019	(0.288)	0.017	0.002
249	20.75	0.10	0.019	(0.287)	0.017	0.002
250	20.83	0.07	0.013	(0.285)	0.012	0.001
251	20.92	0.07	0.013	(0.284)	0.012	0.001
252	21.00	0.07	0.013	(0.283)	0.012	0.001
253	21.08	0.10	0.019	(0.282)	0.017	0.002
254	21.17	0.10	0.019	(0.281)	0.017	0.002
255	21.25	0.10	0.019	(0.280)	0.017	0.002
256	21.33	0.07	0.013	(0.279)	0.012	0.001
257	21.42	0.07	0.013	(0.278)	0.012	0.001
258	21.50	0.07	0.013	(0.277)	0.012	0.001
259	21.58	0.10	0.019	(0.276)	0.017	0.002
260	21.67	0.10	0.019	(0.275)	0.017	0.002
261	21.75	0.10	0.019	(0.274)	0.017	0.002
262	21.83	0.07	0.013	(0.273)	0.012	0.001
263	21.92	0.07	0.013	(0.272)	0.012	0.001
264	22.00	0.07	0.013	(0.271)	0.012	0.001
265	22.08	0.10	0.019	(0.270)	0.017	0.002
266	22.17	0.10	0.019	(0.269)	0.017	0.002
267	22.25	0.10	0.019	(0.268)	0.017	0.002
268	22.33	0.07	0.013	(0.267)	0.012	0.001
269	22.42	0.07	0.013	(0.266)	0.012	0.001
270	22.50	0.07	0.013	(0.266)	0.012	0.001
271	22.58	0.07	0.013	(0.265)	0.012	0.001
272	22.67	0.07	0.013	(0.264)	0.012	0.001
273	22.75	0.07	0.013	(0.263)	0.012	0.001
274	22.83	0.07	0.013	(0.263)	0.012	0.001
275	22.92	0.07	0.013	(0.262)	0.012	0.001
276	23.00	0.07	0.013	(0.261)	0.012	0.001
277	23.08	0.07	0.013	(0.261)	0.012	0.001
278	23.17	0.07	0.013	(0.260)	0.012	0.001
279	23.25	0.07	0.013	(0.260)	0.012	0.001
280	23.33	0.07	0.013	(0.259)	0.012	0.001
281	23.42	0.07	0.013	(0.259)	0.012	0.001
282	23.50	0.07	0.013	(0.258)	0.012	0.001
283	23.58	0.07	0.013	(0.258)	0.012	0.001
284	23.67	0.07	0.013	(0.257)	0.012	0.001
285	23.75	0.07	0.013	(0.257)	0.012	0.001
286	23.83	0.07	0.013	(0.257)	0.012	0.001
287	23.92	0.07	0.013	(0.257)	0.012	0.001

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288  24.00     0.07      0.013       (  0.256)       0.012        0.001
               (Loss Rate Not Used)
    Sum =     100.0                                   Sum =     1.9
       Flood volume = Effective rainfall      0.16(In)
        times area       8.7(Ac.)/[(In)/(Ft.)] =       0.1(Ac.Ft)
       Total soil loss =      1.44(In)
       Total soil loss =     1.048(Ac.Ft)
       Total rainfall =      1.60(In)
       Flood volume =        5070.3 Cubic Feet
       Total soil loss =       45632.7 Cubic Feet
       ---------------------------------------------------------------------
        Peak flow rate of this hydrograph =      0.188(CFS)
       ---------------------------------------------------------------------
       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                           24 - H O U R    S T O R M
                        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       0.0001      0.01  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      0.01  Q         |         |         |         |
   0+35       0.0005      0.01  Q         |         |         |         |
   0+40       0.0006      0.02  Q         |         |         |         |
   0+45       0.0007      0.02  Q         |         |         |         |
   0+50       0.0008      0.02  Q         |         |         |         |
   0+55       0.0009      0.02  Q         |         |         |         |
   1+ 0       0.0011      0.02  Q         |         |         |         |
   1+ 5       0.0012      0.02  Q         |         |         |         |
   1+10       0.0013      0.02  Q         |         |         |         |
   1+15       0.0015      0.02  Q         |         |         |         |
   1+20       0.0016      0.02  Q         |         |         |         |
   1+25       0.0017      0.02  Q         |         |         |         |
   1+30       0.0018      0.02  Q         |         |         |         |
   1+35       0.0019      0.02  Q         |         |         |         |
   1+40       0.0021      0.02  Q         |         |         |         |
   1+45       0.0022      0.02  Q         |         |         |         |
   1+50       0.0023      0.02  Q         |         |         |         |
   1+55       0.0024      0.02  Q         |         |         |         |
   2+ 0       0.0026      0.02  Q         |         |         |         |
   2+ 5       0.0027      0.02  Q         |         |         |         |
   2+10       0.0029      0.02  Q         |         |         |         |
   2+15       0.0030      0.02  QV        |         |         |         |
   2+20       0.0032      0.02  QV        |         |         |         |
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2+25	0.0033	0.02	QV	|	|	|	|
2+30	0.0035	0.02	QV	|	|	|	|
2+35	0.0036	0.02	QV	|	|	|	|
2+40	0.0038	0.03	QV	|	|	|	|
2+45	0.0040	0.03	QV	|	|	|	|
2+50	0.0042	0.03	QV	|	|	|	|
2+55	0.0044	0.03	QV	|	|	|	|
3+ 0	0.0046	0.03	QV	|	|	|	|
3+ 5	0.0048	0.03	QV	|	|	|	|
3+10	0.0049	0.03	QV	|	|	|	|
3+15	0.0051	0.03	QV	|	|	|	|
3+20	0.0053	0.03	QV	|	|	|	|
3+25	0.0055	0.03	QV	|	|	|	|
3+30	0.0057	0.03	QV	|	|	|	|
3+35	0.0059	0.03	Q V	|	|	|	|
3+40	0.0061	0.03	Q V	|	|	|	|
3+45	0.0063	0.03	Q V	|	|	|	|
3+50	0.0065	0.03	Q V	|	|	|	|
3+55	0.0067	0.03	Q V	|	|	|	|
4+ 0	0.0069	0.03	Q V	|	|	|	|
4+ 5	0.0072	0.03	Q V	|	|	|	|
4+10	0.0074	0.03	Q V	|	|	|	|
4+15	0.0076	0.03	Q V	|	|	|	|
4+20	0.0079	0.03	Q V	|	|	|	|
4+25	0.0081	0.04	Q V	|	|	|	|
4+30	0.0084	0.04	Q V	|	|	|	|
4+35	0.0086	0.04	Q V	|	|	|	|
4+40	0.0089	0.04	Q V	|	|	|	|
4+45	0.0092	0.04	Q V	|	|	|	|
4+50	0.0094	0.04	Q V	|	|	|	|
4+55	0.0097	0.04	Q V	|	|	|	|
5+ 0	0.0100	0.04	Q V	|	|	|	|
5+ 5	0.0103	0.04	Q V	|	|	|	|
5+10	0.0106	0.04	Q V	|	|	|	|
5+15	0.0108	0.04	Q V	|	|	|	|
5+20	0.0111	0.04	Q V	|	|	|	|
5+25	0.0113	0.04	Q V	|	|	|	|
5+30	0.0116	0.04	Q V	|	|	|	|
5+35	0.0119	0.04	Q V	|	|	|	|
5+40	0.0122	0.04	Q V	|	|	|	|
5+45	0.0125	0.04	Q V	|	|	|	|
5+50	0.0128	0.04	Q V	|	|	|	|
5+55	0.0131	0.04	Q V	|	|	|	|
6+ 0	0.0134	0.04	Q V	|	|	|	|
6+ 5	0.0137	0.05	Q V	|	|	|	|
6+10	0.0140	0.05	Q V	|	|	|	|
6+15	0.0144	0.05	Q V	|	|	|	|
6+20	0.0147	0.05	Q V	|	|	|	|
6+25	0.0150	0.05	Q V	|	|	|	|
6+30	0.0154	0.05	Q V	|	|	|	|

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 6+35       0.0157      0.05  Q    V    |          |          |          |
 6+40       0.0161      0.05  Q    V    |          |          |          |
 6+45       0.0165      0.05  Q    V    |          |          |          |
 6+50       0.0169      0.05  Q    V    |          |          |          |
 6+55       0.0172      0.06  Q    V    |          |          |          |
 7+ 0       0.0176      0.06  Q     V   |          |          |          |
 7+ 5       0.0180      0.06  Q     V   |          |          |          |
 7+10       0.0184      0.06  Q     V   |          |          |          |
 7+15       0.0188      0.06  Q     V   |          |          |          |
 7+20       0.0192      0.06  Q     V   |          |          |          |
 7+25       0.0196      0.06  Q     V   |          |          |          |
 7+30       0.0200      0.06  Q     V   |          |          |          |
 7+35       0.0204      0.06  Q      V  |          |          |          |
 7+40       0.0209      0.06  Q      V  |          |          |          |
 7+45       0.0213      0.07  Q      V  |          |          |          |
 7+50       0.0218      0.07  Q      V  |          |          |          |
 7+55       0.0222      0.07  Q      V  |          |          |          |
 8+ 0       0.0227      0.07  Q      V  |          |          |          |
 8+ 5       0.0232      0.07  Q      V  |          |          |          |
 8+10       0.0238      0.08  Q       V |          |          |          |
 8+15       0.0243      0.08  Q       V |          |          |          |
 8+20       0.0249      0.08  Q       V |          |          |          |
 8+25       0.0255      0.08  Q       V |          |          |          |
 8+30       0.0260      0.08  Q       V |          |          |          |
 8+35       0.0266      0.08  Q        V|          |          |          |
 8+40       0.0272      0.09  Q        V|          |          |          |
 8+45       0.0278      0.09  Q        V|          |          |          |
 8+50       0.0284      0.09  Q        V|          |          |          |
 8+55       0.0291      0.09  Q        V|          |          |          |
 9+ 0       0.0297      0.09  Q         V          |          |          |
 9+ 5       0.0304      0.10  Q         V          |          |          |
 9+10       0.0311      0.10  Q         V          |          |          |
 9+15       0.0318      0.10  Q         V          |          |          |
 9+20       0.0325      0.10  Q         |V         |          |          |
 9+25       0.0332      0.11  Q         |V         |          |          |
 9+30       0.0340      0.11  Q         |V         |          |          |
 9+35       0.0348      0.11  Q         |V         |          |          |
 9+40       0.0355      0.11  Q         | V        |          |          |
 9+45       0.0363      0.12  Q         | V        |          |          |
 9+50       0.0371      0.12  Q         | V        |          |          |
 9+55       0.0380      0.12  Q         |  V       |          |          |
10+ 0       0.0388      0.12  Q         |  V       |          |          |
10+ 5       0.0396      0.11  Q         |  V       |          |          |
10+10       0.0403      0.10  Q         |  V       |          |          |
10+15       0.0409      0.10  Q         |   V      |          |          |
10+20       0.0416      0.09  Q         |   V      |          |          |
10+25       0.0422      0.09  Q         |   V      |          |          |
10+30       0.0428      0.09  Q         |   V      |          |          |
10+35       0.0434      0.09  Q         |   V      |          |          |
10+40       0.0442      0.10  Q         |    V     |          |          |
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10+45       0.0449      0.11  Q         |    V    |         |         |
10+50       0.0456      0.11  Q         |    V    |         |         |
10+55       0.0464      0.11  Q         |    V    |         |         |
11+ 0       0.0471      0.11  Q         |     V   |         |         |
11+ 5       0.0479      0.11  Q         |     V   |         |         |
11+10       0.0486      0.11  Q         |     V   |         |         |
11+15       0.0494      0.11  Q         |     V   |         |         |
11+20       0.0501      0.11  Q         |      V  |         |         |
11+25       0.0508      0.11  Q         |      V  |         |         |
11+30       0.0516      0.11  Q         |      V  |         |         |
11+35       0.0523      0.11  Q         |      V  |         |         |
11+40       0.0530      0.10  Q         |       V |         |         |
11+45       0.0537      0.10  Q         |       V |         |         |
11+50       0.0544      0.10  Q         |       V |         |         |
11+55       0.0551      0.10  Q         |       V |         |         |
12+ 0       0.0558      0.10  Q         |        V|         |         |
12+ 5       0.0565      0.11  Q         |        V|         |         |
12+10       0.0574      0.12  Q         |        V|         |         |
12+15       0.0583      0.13  Q         |         V         |         |
12+20       0.0592      0.13  Q         |         V         |         |
12+25       0.0601      0.14  Q         |         V         |         |
12+30       0.0611      0.14  Q         |         V         |         |
12+35       0.0621      0.14  Q         |         |V        |         |
12+40       0.0631      0.15  Q         |         |V        |         |
12+45       0.0641      0.15  Q         |         | V       |         |
12+50       0.0652      0.15  Q         |         | V       |         |
12+55       0.0663      0.16  Q         |         | V       |         |
13+ 0       0.0674      0.16  Q         |         |  V      |         |
13+ 5       0.0685      0.17  Q         |         |  V      |         |
13+10       0.0698      0.18  Q         |         |  V      |         |
13+15       0.0710      0.18  Q         |         |   V     |         |
13+20       0.0723      0.18  Q         |         |   V     |         |
13+25       0.0736      0.19  Q         |         |    V    |         |
13+30       0.0749      0.19  Q         |         |    V    |         |
13+35       0.0761      0.18  Q         |         |     V   |         |
13+40       0.0771      0.15  Q         |         |     V   |         |
13+45       0.0782      0.15  Q         |         |     V   |         |
13+50       0.0791      0.14  Q         |         |      V  |         |
13+55       0.0801      0.14  Q         |         |      V  |         |
14+ 0       0.0810      0.14  Q         |         |      V  |         |
14+ 5       0.0820      0.14  Q         |         |       V |         |
14+10       0.0830      0.15  Q         |         |       V |         |
14+15       0.0840      0.15  Q         |         |       V |         |
14+20       0.0851      0.15  Q         |         |        V|         |
14+25       0.0861      0.15  Q         |         |        V|         |
14+30       0.0871      0.15  Q         |         |        V|         |
14+35       0.0881      0.15  Q         |         |         V         |
14+40       0.0891      0.15  Q         |         |         V         |
14+45       0.0901      0.15  Q         |         |         V         |
14+50       0.0911      0.15  Q         |         |         |V        |
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14+55       0.0921      0.14  Q        |          |          |V         |
15+ 0       0.0930      0.14  Q        |          |          |V         |
15+ 5       0.0940      0.14  Q        |          |          | V        |
15+10       0.0950      0.14  Q        |          |          | V        |
15+15       0.0959      0.14  Q        |          |          | V        |
15+20       0.0969      0.14  Q        |          |          |  V       |
15+25       0.0978      0.13  Q        |          |          |  V       |
15+30       0.0987      0.13  Q        |          |          |  V       |
15+35       0.0996      0.13  Q        |          |          |   V      |
15+40       0.1004      0.12  Q        |          |          |   V      |
15+45       0.1012      0.11  Q        |          |          |   V      |
15+50       0.1019      0.11  Q        |          |          |    V     |
15+55       0.1027      0.11  Q        |          |          |    V     |
16+ 0       0.1035      0.11  Q        |          |          |    V     |
16+ 5       0.1041      0.09  Q        |          |          |    V     |
16+10       0.1045      0.06  Q        |          |          |    V     |
16+15       0.1049      0.05  Q        |          |          |     V    |
16+20       0.1052      0.04  Q        |          |          |     V    |
16+25       0.1054      0.04  Q        |          |          |     V    |
16+30       0.1056      0.03  Q        |          |          |     V    |
16+35       0.1058      0.03  Q        |          |          |     V    |
16+40       0.1060      0.03  Q        |          |          |     V    |
16+45       0.1062      0.02  Q        |          |          |     V    |
16+50       0.1063      0.02  Q        |          |          |     V    |
16+55       0.1065      0.02  Q        |          |          |     V    |
17+ 0       0.1066      0.02  Q        |          |          |     V    |
17+ 5       0.1067      0.02  Q        |          |          |     V    |
17+10       0.1069      0.02  Q        |          |          |     V    |
17+15       0.1070      0.03  Q        |          |          |     V    |
17+20       0.1072      0.03  Q        |          |          |     V    |
17+25       0.1074      0.03  Q        |          |          |     V    |
17+30       0.1076      0.03  Q        |          |          |     V    |
17+35       0.1078      0.03  Q        |          |          |      V   |
17+40       0.1080      0.03  Q        |          |          |      V   |
17+45       0.1082      0.03  Q        |          |          |      V   |
17+50       0.1083      0.03  Q        |          |          |      V   |
17+55       0.1085      0.02  Q        |          |          |      V   |
18+ 0       0.1087      0.02  Q        |          |          |      V   |
18+ 5       0.1088      0.02  Q        |          |          |      V   |
18+10       0.1090      0.02  Q        |          |          |      V   |
18+15       0.1092      0.02  Q        |          |          |      V   |
18+20       0.1093      0.02  Q        |          |          |      V   |
18+25       0.1095      0.02  Q        |          |          |      V   |
18+30       0.1096      0.02  Q        |          |          |      V   |
18+35       0.1098      0.02  Q        |          |          |      V   |
18+40       0.1099      0.02  Q        |          |          |      V   |
18+45       0.1100      0.02  Q        |          |          |      V   |
18+50       0.1102      0.02  Q        |          |          |      V   |
18+55       0.1103      0.01  Q        |          |          |      V   |
19+ 0       0.1104      0.01  Q        |          |          |      V   |
```

19+ 5	0.1105	0.01	Q	|	|	|	V |
19+10	0.1106	0.02	Q	|	|	|	V |
19+15	0.1107	0.02	Q	|	|	|	V |
19+20	0.1108	0.02	Q	|	|	|	V |
19+25	0.1109	0.02	Q	|	|	|	V |
19+30	0.1111	0.02	Q	|	|	|	V |
19+35	0.1112	0.02	Q	|	|	|	V |
19+40	0.1113	0.02	Q	|	|	|	V |
19+45	0.1115	0.02	Q	|	|	|	V |
19+50	0.1116	0.02	Q	|	|	|	V |
19+55	0.1117	0.01	Q	|	|	|	V |
20+ 0	0.1118	0.01	Q	|	|	|	V |
20+ 5	0.1119	0.01	Q	|	|	|	V |
20+10	0.1120	0.02	Q	|	|	|	V |
20+15	0.1121	0.02	Q	|	|	|	V |
20+20	0.1122	0.02	Q	|	|	|	V |
20+25	0.1123	0.02	Q	|	|	|	V |
20+30	0.1124	0.02	Q	|	|	|	V |
20+35	0.1125	0.02	Q	|	|	|	V |
20+40	0.1126	0.02	Q	|	|	|	V |
20+45	0.1128	0.02	Q	|	|	|	V |
20+50	0.1129	0.02	Q	|	|	|	V |
20+55	0.1130	0.01	Q	|	|	|	V |
21+ 0	0.1130	0.01	Q	|	|	|	V |
21+ 5	0.1131	0.01	Q	|	|	|	V |
21+10	0.1132	0.02	Q	|	|	|	V |
21+15	0.1134	0.02	Q	|	|	|	V |
21+20	0.1135	0.02	Q	|	|	|	V |
21+25	0.1135	0.01	Q	|	|	|	V|
21+30	0.1136	0.01	Q	|	|	|	V|
21+35	0.1137	0.01	Q	|	|	|	V|
21+40	0.1138	0.02	Q	|	|	|	V|
21+45	0.1139	0.02	Q	|	|	|	V|
21+50	0.1140	0.01	Q	|	|	|	V|
21+55	0.1141	0.01	Q	|	|	|	V|
22+ 0	0.1142	0.01	Q	|	|	|	V|
22+ 5	0.1143	0.01	Q	|	|	|	V|
22+10	0.1144	0.02	Q	|	|	|	V|
22+15	0.1145	0.02	Q	|	|	|	V|
22+20	0.1146	0.01	Q	|	|	|	V|
22+25	0.1147	0.01	Q	|	|	|	V|
22+30	0.1148	0.01	Q	|	|	|	V|
22+35	0.1149	0.01	Q	|	|	|	V|
22+40	0.1150	0.01	Q	|	|	|	V|
22+45	0.1150	0.01	Q	|	|	|	V|
22+50	0.1151	0.01	Q	|	|	|	V|
22+55	0.1152	0.01	Q	|	|	|	V|
23+ 0	0.1153	0.01	Q	|	|	|	V|
23+ 5	0.1154	0.01	Q	|	|	|	V|
23+10	0.1154	0.01	Q	|	|	|	V|

```
   23+15       0.1155      0.01  Q          |          |          |         V|
   23+20       0.1156      0.01  Q          |          |          |         V|
   23+25       0.1157      0.01  Q          |          |          |         V|
   23+30       0.1158      0.01  Q          |          |          |         V|
   23+35       0.1158      0.01  Q          |          |          |         V|
   23+40       0.1159      0.01  Q          |          |          |         V|
   23+45       0.1160      0.01  Q          |          |          |         V|
   23+50       0.1161      0.01  Q          |          |          |         V|
   23+55       0.1161      0.01  Q          |          |          |         V|
   24+ 0       0.1162      0.01  Q          |          |          |         V|
   24+ 5       0.1163      0.01  Q          |          |          |         V|
   24+10       0.1163      0.00  Q          |          |          |         V|
   24+15       0.1163      0.00  Q          |          |          |         V|
   24+20       0.1164      0.00  Q          |          |          |         V|
   24+25       0.1164      0.00  Q          |          |          |         V|
   24+30       0.1164      0.00  Q          |          |          |         V|
   24+35       0.1164      0.00  Q          |          |          |         V|
   24+40       0.1164      0.00  Q          |          |          |         V|
   24+45       0.1164      0.00  Q          |          |          |         V|
   24+50       0.1164      0.00  Q          |          |          |         V|
   24+55       0.1164      0.00  Q          |          |          |          V
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U n i t H y d r o g r a p h A n a l y s i s

Study date 02/22/21 File: CC02PHYDB242.out

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

Program License Serial Number 6473

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

English Units used in output format

KRAMERIA AVENUE PROJECT
TTM NO. 38094
PROPOSED CONDITION - DMA B
2YR, 24-HOUR STORM

Drainage Area = 8.73(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 8.73(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 930.00(Ft.)
Length along longest watercourse measured to centroid = 465.00(Ft.)
Length along longest watercourse = 0.176 Mi.
Length along longest watercourse measured to centroid = 0.088 Mi.
Difference in elevation = 14.00(Ft.)
Slope along watercourse = 79.4839 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.032 Hr.
Lag time = 1.93 Min.
25% of lag time = 0.48 Min.
40% of lag time = 0.77 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]
        8.73            1.60                  13.97

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        8.73            4.30                  37.54

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.600(In)
Area Averaged 100-Year Rainfall =    4.300(In)

Point rain (area averaged) =    1.600(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.600(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     8.730           69.00         0.500
 Total Area Entered =      8.73(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
69.0  49.8      0.574     0.500        0.316       1.000      0.316
                                                 Sum (F) =   0.316
Area averaged mean soil loss (F) (In/Hr) =  0.316
Minimum soil loss rate ((In/Hr)) =  0.158
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                       MOUNTAIN S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %            (CFS)
------------------------------------------------------------------------
    1   0.083        258.890         48.889              4.301
    2   0.167        517.780         34.775              3.060
    3   0.250        776.670          9.398              0.827
    4   0.333       1035.560          6.939              0.610
                               Sum = 100.000   Sum=       8.798
------------------------------------------------------------------------
```

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	0.013	(0.560)	0.006	0.006
2	0.17	0.07	0.013	(0.557)	0.006	0.006
3	0.25	0.07	0.013	(0.555)	0.006	0.006
4	0.33	0.10	0.019	(0.553)	0.010	0.010
5	0.42	0.10	0.019	(0.551)	0.010	0.010
6	0.50	0.10	0.019	(0.549)	0.010	0.010
7	0.58	0.10	0.019	(0.547)	0.010	0.010
8	0.67	0.10	0.019	(0.545)	0.010	0.010
9	0.75	0.10	0.019	(0.542)	0.010	0.010
10	0.83	0.13	0.026	(0.540)	0.013	0.013
11	0.92	0.13	0.026	(0.538)	0.013	0.013
12	1.00	0.13	0.026	(0.536)	0.013	0.013
13	1.08	0.10	0.019	(0.534)	0.010	0.010
14	1.17	0.10	0.019	(0.532)	0.010	0.010
15	1.25	0.10	0.019	(0.530)	0.010	0.010
16	1.33	0.10	0.019	(0.528)	0.010	0.010
17	1.42	0.10	0.019	(0.525)	0.010	0.010
18	1.50	0.10	0.019	(0.523)	0.010	0.010
19	1.58	0.10	0.019	(0.521)	0.010	0.010
20	1.67	0.10	0.019	(0.519)	0.010	0.010
21	1.75	0.10	0.019	(0.517)	0.010	0.010
22	1.83	0.13	0.026	(0.515)	0.013	0.013
23	1.92	0.13	0.026	(0.513)	0.013	0.013
24	2.00	0.13	0.026	(0.511)	0.013	0.013
25	2.08	0.13	0.026	(0.509)	0.013	0.013
26	2.17	0.13	0.026	(0.507)	0.013	0.013
27	2.25	0.13	0.026	(0.505)	0.013	0.013
28	2.33	0.13	0.026	(0.503)	0.013	0.013
29	2.42	0.13	0.026	(0.501)	0.013	0.013
30	2.50	0.13	0.026	(0.499)	0.013	0.013
31	2.58	0.17	0.032	(0.497)	0.016	0.016
32	2.67	0.17	0.032	(0.494)	0.016	0.016
33	2.75	0.17	0.032	(0.492)	0.016	0.016
34	2.83	0.17	0.032	(0.490)	0.016	0.016
35	2.92	0.17	0.032	(0.488)	0.016	0.016
36	3.00	0.17	0.032	(0.486)	0.016	0.016
37	3.08	0.17	0.032	(0.484)	0.016	0.016
38	3.17	0.17	0.032	(0.482)	0.016	0.016
39	3.25	0.17	0.032	(0.480)	0.016	0.016
40	3.33	0.17	0.032	(0.478)	0.016	0.016
41	3.42	0.17	0.032	(0.476)	0.016	0.016
42	3.50	0.17	0.032	(0.474)	0.016	0.016
43	3.58	0.17	0.032	(0.472)	0.016	0.016
44	3.67	0.17	0.032	(0.470)	0.016	0.016
45	3.75	0.17	0.032	(0.468)	0.016	0.016

46	3.83	0.20	0.038	(0.466)	0.019	0.019
47	3.92	0.20	0.038	(0.464)	0.019	0.019
48	4.00	0.20	0.038	(0.463)	0.019	0.019
49	4.08	0.20	0.038	(0.461)	0.019	0.019
50	4.17	0.20	0.038	(0.459)	0.019	0.019
51	4.25	0.20	0.038	(0.457)	0.019	0.019
52	4.33	0.23	0.045	(0.455)	0.022	0.022
53	4.42	0.23	0.045	(0.453)	0.022	0.022
54	4.50	0.23	0.045	(0.451)	0.022	0.022
55	4.58	0.23	0.045	(0.449)	0.022	0.022
56	4.67	0.23	0.045	(0.447)	0.022	0.022
57	4.75	0.23	0.045	(0.445)	0.022	0.022
58	4.83	0.27	0.051	(0.443)	0.026	0.026
59	4.92	0.27	0.051	(0.441)	0.026	0.026
60	5.00	0.27	0.051	(0.439)	0.026	0.026
61	5.08	0.20	0.038	(0.437)	0.019	0.019
62	5.17	0.20	0.038	(0.435)	0.019	0.019
63	5.25	0.20	0.038	(0.434)	0.019	0.019
64	5.33	0.23	0.045	(0.432)	0.022	0.022
65	5.42	0.23	0.045	(0.430)	0.022	0.022
66	5.50	0.23	0.045	(0.428)	0.022	0.022
67	5.58	0.27	0.051	(0.426)	0.026	0.026
68	5.67	0.27	0.051	(0.424)	0.026	0.026
69	5.75	0.27	0.051	(0.422)	0.026	0.026
70	5.83	0.27	0.051	(0.420)	0.026	0.026
71	5.92	0.27	0.051	(0.419)	0.026	0.026
72	6.00	0.27	0.051	(0.417)	0.026	0.026
73	6.08	0.30	0.058	(0.415)	0.029	0.029
74	6.17	0.30	0.058	(0.413)	0.029	0.029
75	6.25	0.30	0.058	(0.411)	0.029	0.029
76	6.33	0.30	0.058	(0.409)	0.029	0.029
77	6.42	0.30	0.058	(0.407)	0.029	0.029
78	6.50	0.30	0.058	(0.406)	0.029	0.029
79	6.58	0.33	0.064	(0.404)	0.032	0.032
80	6.67	0.33	0.064	(0.402)	0.032	0.032
81	6.75	0.33	0.064	(0.400)	0.032	0.032
82	6.83	0.33	0.064	(0.398)	0.032	0.032
83	6.92	0.33	0.064	(0.397)	0.032	0.032
84	7.00	0.33	0.064	(0.395)	0.032	0.032
85	7.08	0.33	0.064	(0.393)	0.032	0.032
86	7.17	0.33	0.064	(0.391)	0.032	0.032
87	7.25	0.33	0.064	(0.389)	0.032	0.032
88	7.33	0.37	0.070	(0.388)	0.035	0.035
89	7.42	0.37	0.070	(0.386)	0.035	0.035
90	7.50	0.37	0.070	(0.384)	0.035	0.035
91	7.58	0.40	0.077	(0.382)	0.038	0.038
92	7.67	0.40	0.077	(0.381)	0.038	0.038
93	7.75	0.40	0.077	(0.379)	0.038	0.038
94	7.83	0.43	0.083	(0.377)	0.042	0.042
95	7.92	0.43	0.083	(0.375)	0.042	0.042

96	8.00	0.43	0.083	(0.374)	0.042	0.042
97	8.08	0.50	0.096	(0.372)	0.048	0.048
98	8.17	0.50	0.096	(0.370)	0.048	0.048
99	8.25	0.50	0.096	(0.368)	0.048	0.048
100	8.33	0.50	0.096	(0.367)	0.048	0.048
101	8.42	0.50	0.096	(0.365)	0.048	0.048
102	8.50	0.50	0.096	(0.363)	0.048	0.048
103	8.58	0.53	0.102	(0.362)	0.051	0.051
104	8.67	0.53	0.102	(0.360)	0.051	0.051
105	8.75	0.53	0.102	(0.358)	0.051	0.051
106	8.83	0.57	0.109	(0.356)	0.054	0.054
107	8.92	0.57	0.109	(0.355)	0.054	0.054
108	9.00	0.57	0.109	(0.353)	0.054	0.054
109	9.08	0.63	0.122	(0.351)	0.061	0.061
110	9.17	0.63	0.122	(0.350)	0.061	0.061
111	9.25	0.63	0.122	(0.348)	0.061	0.061
112	9.33	0.67	0.128	(0.346)	0.064	0.064
113	9.42	0.67	0.128	(0.345)	0.064	0.064
114	9.50	0.67	0.128	(0.343)	0.064	0.064
115	9.58	0.70	0.134	(0.341)	0.067	0.067
116	9.67	0.70	0.134	(0.340)	0.067	0.067
117	9.75	0.70	0.134	(0.338)	0.067	0.067
118	9.83	0.73	0.141	(0.337)	0.070	0.070
119	9.92	0.73	0.141	(0.335)	0.070	0.070
120	10.00	0.73	0.141	(0.333)	0.070	0.070
121	10.08	0.50	0.096	(0.332)	0.048	0.048
122	10.17	0.50	0.096	(0.330)	0.048	0.048
123	10.25	0.50	0.096	(0.329)	0.048	0.048
124	10.33	0.50	0.096	(0.327)	0.048	0.048
125	10.42	0.50	0.096	(0.325)	0.048	0.048
126	10.50	0.50	0.096	(0.324)	0.048	0.048
127	10.58	0.67	0.128	(0.322)	0.064	0.064
128	10.67	0.67	0.128	(0.321)	0.064	0.064
129	10.75	0.67	0.128	(0.319)	0.064	0.064
130	10.83	0.67	0.128	(0.317)	0.064	0.064
131	10.92	0.67	0.128	(0.316)	0.064	0.064
132	11.00	0.67	0.128	(0.314)	0.064	0.064
133	11.08	0.63	0.122	(0.313)	0.061	0.061
134	11.17	0.63	0.122	(0.311)	0.061	0.061
135	11.25	0.63	0.122	(0.310)	0.061	0.061
136	11.33	0.63	0.122	(0.308)	0.061	0.061
137	11.42	0.63	0.122	(0.307)	0.061	0.061
138	11.50	0.63	0.122	(0.305)	0.061	0.061
139	11.58	0.57	0.109	(0.304)	0.054	0.054
140	11.67	0.57	0.109	(0.302)	0.054	0.054
141	11.75	0.57	0.109	(0.301)	0.054	0.054
142	11.83	0.60	0.115	(0.299)	0.058	0.058
143	11.92	0.60	0.115	(0.298)	0.058	0.058
144	12.00	0.60	0.115	(0.296)	0.058	0.058
145	12.08	0.83	0.160	(0.295)	0.080	0.080

146	12.17	0.83	0.160	(0.293)	0.080	0.080
147	12.25	0.83	0.160	(0.292)	0.080	0.080
148	12.33	0.87	0.166	(0.290)	0.083	0.083
149	12.42	0.87	0.166	(0.289)	0.083	0.083
150	12.50	0.87	0.166	(0.287)	0.083	0.083
151	12.58	0.93	0.179	(0.286)	0.090	0.090
152	12.67	0.93	0.179	(0.284)	0.090	0.090
153	12.75	0.93	0.179	(0.283)	0.090	0.090
154	12.83	0.97	0.186	(0.282)	0.093	0.093
155	12.92	0.97	0.186	(0.280)	0.093	0.093
156	13.00	0.97	0.186	(0.279)	0.093	0.093
157	13.08	1.13	0.218	(0.277)	0.109	0.109
158	13.17	1.13	0.218	(0.276)	0.109	0.109
159	13.25	1.13	0.218	(0.275)	0.109	0.109
160	13.33	1.13	0.218	(0.273)	0.109	0.109
161	13.42	1.13	0.218	(0.272)	0.109	0.109
162	13.50	1.13	0.218	(0.270)	0.109	0.109
163	13.58	0.77	0.147	(0.269)	0.074	0.074
164	13.67	0.77	0.147	(0.268)	0.074	0.074
165	13.75	0.77	0.147	(0.266)	0.074	0.074
166	13.83	0.77	0.147	(0.265)	0.074	0.074
167	13.92	0.77	0.147	(0.264)	0.074	0.074
168	14.00	0.77	0.147	(0.262)	0.074	0.074
169	14.08	0.90	0.173	(0.261)	0.086	0.086
170	14.17	0.90	0.173	(0.260)	0.086	0.086
171	14.25	0.90	0.173	(0.258)	0.086	0.086
172	14.33	0.87	0.166	(0.257)	0.083	0.083
173	14.42	0.87	0.166	(0.256)	0.083	0.083
174	14.50	0.87	0.166	(0.254)	0.083	0.083
175	14.58	0.87	0.166	(0.253)	0.083	0.083
176	14.67	0.87	0.166	(0.252)	0.083	0.083
177	14.75	0.87	0.166	(0.250)	0.083	0.083
178	14.83	0.83	0.160	(0.249)	0.080	0.080
179	14.92	0.83	0.160	(0.248)	0.080	0.080
180	15.00	0.83	0.160	(0.247)	0.080	0.080
181	15.08	0.80	0.154	(0.245)	0.077	0.077
182	15.17	0.80	0.154	(0.244)	0.077	0.077
183	15.25	0.80	0.154	(0.243)	0.077	0.077
184	15.33	0.77	0.147	(0.242)	0.074	0.074
185	15.42	0.77	0.147	(0.240)	0.074	0.074
186	15.50	0.77	0.147	(0.239)	0.074	0.074
187	15.58	0.63	0.122	(0.238)	0.061	0.061
188	15.67	0.63	0.122	(0.237)	0.061	0.061
189	15.75	0.63	0.122	(0.235)	0.061	0.061
190	15.83	0.63	0.122	(0.234)	0.061	0.061
191	15.92	0.63	0.122	(0.233)	0.061	0.061
192	16.00	0.63	0.122	(0.232)	0.061	0.061
193	16.08	0.13	0.026	(0.231)	0.013	0.013
194	16.17	0.13	0.026	(0.229)	0.013	0.013
195	16.25	0.13	0.026	(0.228)	0.013	0.013

196	16.33	0.13	0.026	(0.227)	0.013	0.013
197	16.42	0.13	0.026	(0.226)	0.013	0.013
198	16.50	0.13	0.026	(0.225)	0.013	0.013
199	16.58	0.10	0.019	(0.224)	0.010	0.010
200	16.67	0.10	0.019	(0.223)	0.010	0.010
201	16.75	0.10	0.019	(0.221)	0.010	0.010
202	16.83	0.10	0.019	(0.220)	0.010	0.010
203	16.92	0.10	0.019	(0.219)	0.010	0.010
204	17.00	0.10	0.019	(0.218)	0.010	0.010
205	17.08	0.17	0.032	(0.217)	0.016	0.016
206	17.17	0.17	0.032	(0.216)	0.016	0.016
207	17.25	0.17	0.032	(0.215)	0.016	0.016
208	17.33	0.17	0.032	(0.214)	0.016	0.016
209	17.42	0.17	0.032	(0.213)	0.016	0.016
210	17.50	0.17	0.032	(0.212)	0.016	0.016
211	17.58	0.17	0.032	(0.211)	0.016	0.016
212	17.67	0.17	0.032	(0.209)	0.016	0.016
213	17.75	0.17	0.032	(0.208)	0.016	0.016
214	17.83	0.13	0.026	(0.207)	0.013	0.013
215	17.92	0.13	0.026	(0.206)	0.013	0.013
216	18.00	0.13	0.026	(0.205)	0.013	0.013
217	18.08	0.13	0.026	(0.204)	0.013	0.013
218	18.17	0.13	0.026	(0.203)	0.013	0.013
219	18.25	0.13	0.026	(0.202)	0.013	0.013
220	18.33	0.13	0.026	(0.201)	0.013	0.013
221	18.42	0.13	0.026	(0.200)	0.013	0.013
222	18.50	0.13	0.026	(0.199)	0.013	0.013
223	18.58	0.10	0.019	(0.198)	0.010	0.010
224	18.67	0.10	0.019	(0.197)	0.010	0.010
225	18.75	0.10	0.019	(0.197)	0.010	0.010
226	18.83	0.07	0.013	(0.196)	0.006	0.006
227	18.92	0.07	0.013	(0.195)	0.006	0.006
228	19.00	0.07	0.013	(0.194)	0.006	0.006
229	19.08	0.10	0.019	(0.193)	0.010	0.010
230	19.17	0.10	0.019	(0.192)	0.010	0.010
231	19.25	0.10	0.019	(0.191)	0.010	0.010
232	19.33	0.13	0.026	(0.190)	0.013	0.013
233	19.42	0.13	0.026	(0.189)	0.013	0.013
234	19.50	0.13	0.026	(0.188)	0.013	0.013
235	19.58	0.10	0.019	(0.187)	0.010	0.010
236	19.67	0.10	0.019	(0.187)	0.010	0.010
237	19.75	0.10	0.019	(0.186)	0.010	0.010
238	19.83	0.07	0.013	(0.185)	0.006	0.006
239	19.92	0.07	0.013	(0.184)	0.006	0.006
240	20.00	0.07	0.013	(0.183)	0.006	0.006
241	20.08	0.10	0.019	(0.182)	0.010	0.010
242	20.17	0.10	0.019	(0.182)	0.010	0.010
243	20.25	0.10	0.019	(0.181)	0.010	0.010
244	20.33	0.10	0.019	(0.180)	0.010	0.010
245	20.42	0.10	0.019	(0.179)	0.010	0.010

246	20.50	0.10	0.019	(0.179)	0.010	0.010
247	20.58	0.10	0.019	(0.178)	0.010	0.010
248	20.67	0.10	0.019	(0.177)	0.010	0.010
249	20.75	0.10	0.019	(0.176)	0.010	0.010
250	20.83	0.07	0.013	(0.176)	0.006	0.006
251	20.92	0.07	0.013	(0.175)	0.006	0.006
252	21.00	0.07	0.013	(0.174)	0.006	0.006
253	21.08	0.10	0.019	(0.174)	0.010	0.010
254	21.17	0.10	0.019	(0.173)	0.010	0.010
255	21.25	0.10	0.019	(0.172)	0.010	0.010
256	21.33	0.07	0.013	(0.172)	0.006	0.006
257	21.42	0.07	0.013	(0.171)	0.006	0.006
258	21.50	0.07	0.013	(0.170)	0.006	0.006
259	21.58	0.10	0.019	(0.170)	0.010	0.010
260	21.67	0.10	0.019	(0.169)	0.010	0.010
261	21.75	0.10	0.019	(0.168)	0.010	0.010
262	21.83	0.07	0.013	(0.168)	0.006	0.006
263	21.92	0.07	0.013	(0.167)	0.006	0.006
264	22.00	0.07	0.013	(0.167)	0.006	0.006
265	22.08	0.10	0.019	(0.166)	0.010	0.010
266	22.17	0.10	0.019	(0.166)	0.010	0.010
267	22.25	0.10	0.019	(0.165)	0.010	0.010
268	22.33	0.07	0.013	(0.165)	0.006	0.006
269	22.42	0.07	0.013	(0.164)	0.006	0.006
270	22.50	0.07	0.013	(0.164)	0.006	0.006
271	22.58	0.07	0.013	(0.163)	0.006	0.006
272	22.67	0.07	0.013	(0.163)	0.006	0.006
273	22.75	0.07	0.013	(0.162)	0.006	0.006
274	22.83	0.07	0.013	(0.162)	0.006	0.006
275	22.92	0.07	0.013	(0.161)	0.006	0.006
276	23.00	0.07	0.013	(0.161)	0.006	0.006
277	23.08	0.07	0.013	(0.161)	0.006	0.006
278	23.17	0.07	0.013	(0.160)	0.006	0.006
279	23.25	0.07	0.013	(0.160)	0.006	0.006
280	23.33	0.07	0.013	(0.160)	0.006	0.006
281	23.42	0.07	0.013	(0.159)	0.006	0.006
282	23.50	0.07	0.013	(0.159)	0.006	0.006
283	23.58	0.07	0.013	(0.159)	0.006	0.006
284	23.67	0.07	0.013	(0.158)	0.006	0.006
285	23.75	0.07	0.013	(0.158)	0.006	0.006
286	23.83	0.07	0.013	(0.158)	0.006	0.006
287	23.92	0.07	0.013	(0.158)	0.006	0.006
288	24.00	0.07	0.013	(0.158)	0.006	0.006
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	9.6

Flood volume = Effective rainfall 0.80(In)
times area 8.7(Ac.)/[(In)/(Ft.)] = 0.6(Ac.Ft)
Total soil loss = 0.80(In)
Total soil loss = 0.582(Ac.Ft)
Total rainfall = 1.60(In)

Flood volume = 25351.5 Cubic Feet
Total soil loss = 25351.5 Cubic Feet

Peak flow rate of this hydrograph = 0.958(CFS)

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24 - H O U R S T O R M
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	0.0002	0.03	Q				
0+10	0.0005	0.05	Q				
0+15	0.0009	0.05	Q				
0+20	0.0014	0.07	Q				
0+25	0.0019	0.08	Q				
0+30	0.0025	0.08	Q				
0+35	0.0031	0.08	Q				
0+40	0.0036	0.08	Q				
0+45	0.0042	0.08	Q				
0+50	0.0049	0.10	Q				
0+55	0.0056	0.11	Q				
1+ 0	0.0064	0.11	Q				
1+ 5	0.0071	0.10	Q				
1+10	0.0077	0.09	Q				
1+15	0.0083	0.09	Q				
1+20	0.0089	0.08	Q				
1+25	0.0095	0.08	Q				
1+30	0.0100	0.08	Q				
1+35	0.0106	0.08	Q				
1+40	0.0112	0.08	Q				
1+45	0.0118	0.08	Q				
1+50	0.0125	0.10	Q				
1+55	0.0132	0.11	Q				
2+ 0	0.0140	0.11	Q				
2+ 5	0.0147	0.11	QV				
2+10	0.0155	0.11	QV				
2+15	0.0163	0.11	QV				
2+20	0.0171	0.11	QV				
2+25	0.0179	0.11	QV				
2+30	0.0186	0.11	QV				
2+35	0.0195	0.13	QV				
2+40	0.0204	0.14	QV				
2+45	0.0214	0.14	QV				
2+50	0.0224	0.14	QV				
2+55	0.0233	0.14	QV				
3+ 0	0.0243	0.14	QV				

3+ 5	0.0253	0.14	QV	|	|	|	|
3+10	0.0262	0.14	QV	|	|	|	|
3+15	0.0272	0.14	QV	|	|	|	|
3+20	0.0282	0.14	QV	|	|	|	|
3+25	0.0292	0.14	Q V	|	|	|	|
3+30	0.0301	0.14	Q V	|	|	|	|
3+35	0.0311	0.14	Q V	|	|	|	|
3+40	0.0321	0.14	Q V	|	|	|	|
3+45	0.0330	0.14	Q V	|	|	|	|
3+50	0.0341	0.15	Q V	|	|	|	|
3+55	0.0352	0.16	Q V	|	|	|	|
4+ 0	0.0364	0.17	Q V	|	|	|	|
4+ 5	0.0375	0.17	Q V	|	|	|	|
4+10	0.0387	0.17	Q V	|	|	|	|
4+15	0.0399	0.17	Q V	|	|	|	|
4+20	0.0411	0.18	Q V	|	|	|	|
4+25	0.0425	0.19	Q V	|	|	|	|
4+30	0.0438	0.20	Q V	|	|	|	|
4+35	0.0452	0.20	Q V	|	|	|	|
4+40	0.0465	0.20	Q V	|	|	|	|
4+45	0.0479	0.20	Q V	|	|	|	|
4+50	0.0493	0.21	Q V	|	|	|	|
4+55	0.0509	0.22	Q V	|	|	|	|
5+ 0	0.0524	0.22	Q V	|	|	|	|
5+ 5	0.0538	0.20	Q V	|	|	|	|
5+10	0.0550	0.18	Q V	|	|	|	|
5+15	0.0562	0.17	Q V	|	|	|	|
5+20	0.0574	0.18	Q V	|	|	|	|
5+25	0.0588	0.19	Q V	|	|	|	|
5+30	0.0601	0.20	Q V	|	|	|	|
5+35	0.0616	0.21	Q V	|	|	|	|
5+40	0.0631	0.22	Q V	|	|	|	|
5+45	0.0646	0.22	Q V	|	|	|	|
5+50	0.0662	0.23	Q V	|	|	|	|
5+55	0.0677	0.23	Q V	|	|	|	|
6+ 0	0.0693	0.23	Q V	|	|	|	|
6+ 5	0.0709	0.24	Q V	|	|	|	|
6+10	0.0726	0.25	Q V	|	|	|	|
6+15	0.0744	0.25	|Q V	|	|	|	|
6+20	0.0761	0.25	|Q V	|	|	|	|
6+25	0.0779	0.25	|Q V	|	|	|	|
6+30	0.0796	0.25	|Q V	|	|	|	|
6+35	0.0814	0.27	|Q V	|	|	|	|
6+40	0.0833	0.28	|Q V	|	|	|	|
6+45	0.0853	0.28	|Q V	|	|	|	|
6+50	0.0872	0.28	|Q V	|	|	|	|
6+55	0.0892	0.28	|Q V	|	|	|	|
7+ 0	0.0911	0.28	|Q V	|	|	|	|
7+ 5	0.0930	0.28	|Q V	|	|	|	|
7+10	0.0950	0.28	|Q V	|	|	|	|

7+15	0.0969	0.28	Q V				
7+20	0.0989	0.30	Q V				
7+25	0.1011	0.31	Q V				
7+30	0.1032	0.31	Q V				
7+35	0.1054	0.32	Q V				
7+40	0.1077	0.33	Q V				
7+45	0.1100	0.34	Q V				
7+50	0.1124	0.35	Q V				
7+55	0.1149	0.36	Q V				
8+ 0	0.1174	0.36	Q V				
8+ 5	0.1201	0.39	Q V				
8+10	0.1230	0.41	Q V				
8+15	0.1259	0.42	Q V				
8+20	0.1288	0.42	Q V				
8+25	0.1317	0.42	Q V				
8+30	0.1346	0.42	Q V				
8+35	0.1376	0.44	Q V				
8+40	0.1407	0.45	Q V				
8+45	0.1438	0.45	Q V				
8+50	0.1470	0.46	Q V				
8+55	0.1502	0.47	Q V				
9+ 0	0.1535	0.48	Q V				
9+ 5	0.1570	0.51	Q V				
9+10	0.1606	0.53	Q V				
9+15	0.1643	0.53	Q V				
9+20	0.1681	0.55	Q V				
9+25	0.1719	0.56	Q V				
9+30	0.1758	0.56	Q V				
9+35	0.1798	0.58	Q V				
9+40	0.1838	0.59	Q V				
9+45	0.1879	0.59	Q V				
9+50	0.1920	0.61	Q V				
9+55	0.1963	0.62	Q V				
10+ 0	0.2005	0.62	Q V				
10+ 5	0.2041	0.52	Q V				
10+10	0.2073	0.45	Q V				
10+15	0.2103	0.44	Q V				
10+20	0.2132	0.42	Q V				
10+25	0.2161	0.42	Q V				
10+30	0.2190	0.42	Q V				
10+35	0.2224	0.49	Q V				
10+40	0.2261	0.54	Q V				
10+45	0.2299	0.55	Q V				
10+50	0.2338	0.56	Q V				
10+55	0.2377	0.56	Q V				
11+ 0	0.2415	0.56	Q V				
11+ 5	0.2453	0.55	Q V				
11+10	0.2491	0.54	Q V				
11+15	0.2528	0.54	Q V				
11+20	0.2564	0.54	Q V				

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11+25       0.2601      0.54  | Q       |      V  |         |         |
11+30       0.2638      0.54  | Q       |       V |         |         |
11+35       0.2673      0.51  | Q       |       V |         |         |
11+40       0.2707      0.49  |Q        |       V |         |         |
11+45       0.2740      0.48  |Q        |       V |         |         |
11+50       0.2774      0.49  |Q        |        V|         |         |
11+55       0.2808      0.50  | Q       |        V|         |         |
12+ 0       0.2843      0.51  | Q       |        V|         |         |
12+ 5       0.2885      0.60  | Q       |        V|         |         |
12+10       0.2931      0.67  | Q       |         V         |         |
12+15       0.2979      0.69  | Q       |         V         |         |
12+20       0.3028      0.72  | Q       |         V         |         |
12+25       0.3078      0.73  | Q       |         |V        |         |
12+30       0.3129      0.73  | Q       |         |V        |         |
12+35       0.3181      0.76  |  Q      |         |V        |         |
12+40       0.3235      0.78  |  Q      |         | V       |         |
12+45       0.3289      0.78  |  Q      |         | V       |         |
12+50       0.3344      0.80  |  Q      |         | V       |         |
12+55       0.3400      0.81  |  Q      |         |  V      |         |
13+ 0       0.3456      0.81  |  Q      |         |  V      |         |
13+ 5       0.3517      0.89  |  Q      |         |   V     |         |
13+10       0.3581      0.93  |  Q      |         |   V     |         |
13+15       0.3647      0.95  |  Q      |         |    V    |         |
13+20       0.3713      0.96  |  Q      |         |    V    |         |
13+25       0.3778      0.96  |  Q      |         |    V    |         |
13+30       0.3844      0.96  |  Q      |         |     V   |         |
13+35       0.3900      0.81  |  Q      |         |     V   |         |
13+40       0.3948      0.70  | Q       |         |      V  |         |
13+45       0.3994      0.67  | Q       |         |      V  |         |
13+50       0.4039      0.65  | Q       |         |      V  |         |
13+55       0.4083      0.65  | Q       |         |       V |         |
14+ 0       0.4128      0.65  | Q       |         |       V |         |
14+ 5       0.4176      0.70  | Q       |         |       V |         |
14+10       0.4228      0.74  | Q       |         |        V|         |
14+15       0.4279      0.75  |  Q      |         |        V|         |
14+20       0.4331      0.75  | Q       |         |        V|         |
14+25       0.4382      0.74  | Q       |         |         V         |
14+30       0.4432      0.73  | Q       |         |         V         |
14+35       0.4483      0.73  | Q       |         |         V         |
14+40       0.4533      0.73  | Q       |         |         |V        |
14+45       0.4583      0.73  | Q       |         |         |V        |
14+50       0.4633      0.72  | Q       |         |         |V        |
14+55       0.4682      0.71  | Q       |         |         | V       |
15+ 0       0.4730      0.71  | Q       |         |         | V       |
15+ 5       0.4778      0.69  | Q       |         |         | V       |
15+10       0.4825      0.68  | Q       |         |         |  V      |
15+15       0.4872      0.68  | Q       |         |         |  V      |
15+20       0.4917      0.66  | Q       |         |         |  V      |
15+25       0.4962      0.65  | Q       |         |         |   V     |
15+30       0.5007      0.65  | Q       |         |         |   V     |
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15+35	0.5048	0.59	| Q	|	|	| V	|
15+40	0.5086	0.55	| Q	|	|	| V	|
15+45	0.5123	0.54	| Q	|	|	| V	|
15+50	0.5160	0.54	| Q	|	|	| V	|
15+55	0.5197	0.54	| Q	|	|	| V	|
16+ 0	0.5234	0.54	| Q	|	|	| V	|
16+ 5	0.5256	0.33	|Q	|	|	| V	|
16+10	0.5269	0.18	Q	|	|	| V	|
16+15	0.5279	0.14	Q	|	|	| V	|
16+20	0.5286	0.11	Q	|	|	| V	|
16+25	0.5294	0.11	Q	|	|	| V	|
16+30	0.5302	0.11	Q	|	|	| V	|
16+35	0.5309	0.10	Q	|	|	| V	|
16+40	0.5315	0.09	Q	|	|	| V	|
16+45	0.5321	0.09	Q	|	|	| V	|
16+50	0.5327	0.08	Q	|	|	| V	|
16+55	0.5333	0.08	Q	|	|	| V	|
17+ 0	0.5338	0.08	Q	|	|	| V	|
17+ 5	0.5346	0.11	Q	|	|	| V	|
17+10	0.5355	0.13	Q	|	|	| V	|
17+15	0.5365	0.14	Q	|	|	| V	|
17+20	0.5374	0.14	Q	|	|	| V	|
17+25	0.5384	0.14	Q	|	|	| V	|
17+30	0.5394	0.14	Q	|	|	| V	|
17+35	0.5403	0.14	Q	|	|	| V	|
17+40	0.5413	0.14	Q	|	|	| V	|
17+45	0.5423	0.14	Q	|	|	| V	|
17+50	0.5432	0.13	Q	|	|	| V	|
17+55	0.5440	0.12	Q	|	|	| V	|
18+ 0	0.5447	0.11	Q	|	|	| V	|
18+ 5	0.5455	0.11	Q	|	|	| V	|
18+10	0.5463	0.11	Q	|	|	| V	|
18+15	0.5471	0.11	Q	|	|	| V	|
18+20	0.5479	0.11	Q	|	|	| V	|
18+25	0.5486	0.11	Q	|	|	| V	|
18+30	0.5494	0.11	Q	|	|	| V	|
18+35	0.5501	0.10	Q	|	|	| V	|
18+40	0.5507	0.09	Q	|	|	| V	|
18+45	0.5513	0.09	Q	|	|	| V	|
18+50	0.5518	0.07	Q	|	|	| V	|
18+55	0.5522	0.06	Q	|	|	| V	|
19+ 0	0.5526	0.06	Q	|	|	| V	|
19+ 5	0.5531	0.07	Q	|	|	| V	|
19+10	0.5536	0.08	Q	|	|	| V	|
19+15	0.5542	0.08	Q	|	|	| V	|
19+20	0.5549	0.10	Q	|	|	| V	|
19+25	0.5556	0.11	Q	|	|	| V	|
19+30	0.5564	0.11	Q	|	|	| V	|
19+35	0.5571	0.10	Q	|	|	| V	|
19+40	0.5577	0.09	Q	|	|	| V	|

19+45	0.5583	0.09	Q	|	|	|	V |
19+50	0.5588	0.07	Q	|	|	|	V |
19+55	0.5592	0.06	Q	|	|	|	V |
20+ 0	0.5596	0.06	Q	|	|	|	V |
20+ 5	0.5601	0.07	Q	|	|	|	V |
20+10	0.5606	0.08	Q	|	|	|	V |
20+15	0.5612	0.08	Q	|	|	|	V |
20+20	0.5618	0.08	Q	|	|	|	V |
20+25	0.5624	0.08	Q	|	|	|	V |
20+30	0.5629	0.08	Q	|	|	|	V |
20+35	0.5635	0.08	Q	|	|	|	V |
20+40	0.5641	0.08	Q	|	|	|	V |
20+45	0.5647	0.08	Q	|	|	|	V |
20+50	0.5652	0.07	Q	|	|	|	V |
20+55	0.5656	0.06	Q	|	|	|	V |
21+ 0	0.5660	0.06	Q	|	|	|	V |
21+ 5	0.5665	0.07	Q	|	|	|	V |
21+10	0.5670	0.08	Q	|	|	|	V |
21+15	0.5676	0.08	Q	|	|	|	V|
21+20	0.5681	0.07	Q	|	|	|	V|
21+25	0.5685	0.06	Q	|	|	|	V|
21+30	0.5689	0.06	Q	|	|	|	V|
21+35	0.5694	0.07	Q	|	|	|	V|
21+40	0.5699	0.08	Q	|	|	|	V|
21+45	0.5705	0.08	Q	|	|	|	V|
21+50	0.5710	0.07	Q	|	|	|	V|
21+55	0.5714	0.06	Q	|	|	|	V|
22+ 0	0.5718	0.06	Q	|	|	|	V|
22+ 5	0.5723	0.07	Q	|	|	|	V|
22+10	0.5728	0.08	Q	|	|	|	V|
22+15	0.5734	0.08	Q	|	|	|	V|
22+20	0.5739	0.07	Q	|	|	|	V|
22+25	0.5743	0.06	Q	|	|	|	V|
22+30	0.5747	0.06	Q	|	|	|	V|
22+35	0.5751	0.06	Q	|	|	|	V|
22+40	0.5755	0.06	Q	|	|	|	V|
22+45	0.5759	0.06	Q	|	|	|	V|
22+50	0.5763	0.06	Q	|	|	|	V|
22+55	0.5767	0.06	Q	|	|	|	V|
23+ 0	0.5770	0.06	Q	|	|	|	V|
23+ 5	0.5774	0.06	Q	|	|	|	V|
23+10	0.5778	0.06	Q	|	|	|	V|
23+15	0.5782	0.06	Q	|	|	|	V|
23+20	0.5786	0.06	Q	|	|	|	V|
23+25	0.5790	0.06	Q	|	|	|	V|
23+30	0.5794	0.06	Q	|	|	|	V|
23+35	0.5798	0.06	Q	|	|	|	V|
23+40	0.5801	0.06	Q	|	|	|	V|
23+45	0.5805	0.06	Q	|	|	|	V|
23+50	0.5809	0.06	Q	|	|	|	V|

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   23+55       0.5813      0.06  Q         |         |         |        V|
   24+ 0       0.5817      0.06  Q         |         |         |        V|
   24+ 5       0.5819      0.03  Q         |         |         |        V|
   24+10       0.5820      0.01  Q         |         |         |        V|
   24+15       0.5820      0.00  Q         |         |         |        V|
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FLOOD HYDROGRAPH ROUTING PROGRAM

Study date: 02/23/21

KRAMERIA AVENUE PROJECT
TTM NO. 38094
ROUTING BASIN B
2YR, 24-HOUR STORM

Program License Serial Number 6473

********** HYDROGRAPH INFORMATION **********

From study/file name: CC02PHYDB242.rte
**********HYDROGRAPH DATA**********
Number of intervals = 291
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.958 (CFS)
Total volume = 0.582 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 1.000 to Point/Station 2.000
**** RETARDING BASIN ROUTING ****
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User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 291
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.500	0.076	0.073	0.076	0.076
1.000	0.152	0.109	0.152	0.152
1.500	0.224	0.135	0.224	0.224
2.000	0.294	0.158	0.293	0.295
2.500	0.358	0.177	0.357	0.359
3.000	0.415	0.194	0.414	0.416
3.500	0.463	0.210	0.462	0.464
4.000	0.496	0.225	0.495	0.497
4.500	0.500	0.239	0.499	0.501
5.000	0.533	1.074	0.529	0.537
5.500	0.556	2.438	0.548	0.564
6.000	0.580	3.238	0.569	0.591
6.500	0.603	3.868	0.590	0.616
7.000	0.626	4.406	0.611	0.641
7.500	0.650	4.883	0.633	0.667
8.000	0.673	14.735	0.622	0.724
8.500	0.696	32.356	0.585	0.807

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	0.2	0.48	0.72	0.96	Depth (Ft.)
0.083	0.03	0.00	0.000	O	|	|	|	|	0.00
0.167	0.05	0.00	0.000	OI	|	|	|	|	0.00
0.250	0.05	0.00	0.001	OI	|	|	|	|	0.00
0.333	0.07	0.00	0.001	O I	|	|	|	|	0.01
0.417	0.08	0.00	0.002	O I	|	|	|	|	0.01
0.500	0.08	0.00	0.002	O I	|	|	|	|	0.01
0.583	0.08	0.00	0.003	O I	|	|	|	|	0.02
0.667	0.08	0.00	0.003	O I	|	|	|	|	0.02
0.750	0.08	0.00	0.004	O I	|	|	|	|	0.03
0.833	0.10	0.00	0.004	O I	|	|	|	|	0.03
0.917	0.11	0.00	0.005	O I	|	|	|	|	0.03
1.000	0.11	0.01	0.006	O I	|	|	|	|	0.04
1.083	0.10	0.01	0.007	O I	|	|	|	|	0.04
1.167	0.09	0.01	0.007	O I	|	|	|	|	0.05
1.250	0.09	0.01	0.008	O I	|	|	|	|	0.05
1.333	0.08	0.01	0.008	O I	|	|	|	|	0.05
1.417	0.08	0.01	0.009	O I	|	|	|	|	0.06
1.500	0.08	0.01	0.009	O I	|	|	|	|	0.06

1.583	0.08	0.01	0.010	O I	|	|	|	0.06
1.667	0.08	0.01	0.010	O I	|	|	|	0.07
1.750	0.08	0.01	0.011	O I	|	|	|	0.07
1.833	0.10	0.01	0.011	O I	|	|	|	0.07
1.917	0.11	0.01	0.012	O I	|	|	|	0.08
2.000	0.11	0.01	0.013	O I	|	|	|	0.08
2.083	0.11	0.01	0.013	O I	|	|	|	0.09
2.167	0.11	0.01	0.014	O I	|	|	|	0.09
2.250	0.11	0.01	0.015	O I	|	|	|	0.10
2.333	0.11	0.01	0.015	O I	|	|	|	0.10
2.417	0.11	0.02	0.016	O I	|	|	|	0.11
2.500	0.11	0.02	0.017	O I	|	|	|	0.11
2.583	0.13	0.02	0.017	O I	|	|	|	0.11
2.667	0.14	0.02	0.018	O I	|	|	|	0.12
2.750	0.14	0.02	0.019	O I	|	|	|	0.13
2.833	0.14	0.02	0.020	O I	|	|	|	0.13
2.917	0.14	0.02	0.021	O I	|	|	|	0.14
3.000	0.14	0.02	0.022	O I	|	|	|	0.14
3.083	0.14	0.02	0.022	O I	|	|	|	0.15
3.167	0.14	0.02	0.023	O I	|	|	|	0.15
3.250	0.14	0.02	0.024	O I	|	|	|	0.16
3.333	0.14	0.02	0.025	O I	|	|	|	0.16
3.417	0.14	0.02	0.026	O I	|	|	|	0.17
3.500	0.14	0.03	0.026	O I	|	|	|	0.17
3.583	0.14	0.03	0.027	O I	|	|	|	0.18
3.667	0.14	0.03	0.028	O I	|	|	|	0.18
3.750	0.14	0.03	0.029	O I	|	|	|	0.19
3.833	0.15	0.03	0.030	O I	|	|	|	0.19
3.917	0.16	0.03	0.031	O I	|	|	|	0.20
4.000	0.17	0.03	0.031	|O I	|	|	|	0.21
4.083	0.17	0.03	0.032	|O I	|	|	|	0.21
4.167	0.17	0.03	0.033	|O I	|	|	|	0.22
4.250	0.17	0.03	0.034	|O I	|	|	|	0.23
4.333	0.18	0.03	0.035	|O I	|	|	|	0.23
4.417	0.19	0.03	0.036	|O I	|	|	|	0.24
4.500	0.20	0.04	0.037	|O I	|	|	|	0.25
4.583	0.20	0.04	0.039	|O I	|	|	|	0.25
4.667	0.20	0.04	0.040	|O I	|	|	|	0.26
4.750	0.20	0.04	0.041	|O I	|	|	|	0.27
4.833	0.21	0.04	0.042	|O I|	|	|	|	0.28
4.917	0.22	0.04	0.043	|O I|	|	|	|	0.28
5.000	0.22	0.04	0.044	|O I|	|	|	|	0.29
5.083	0.20	0.04	0.045	|O I	|	|	|	0.30
5.167	0.18	0.04	0.046	|O I	|	|	|	0.31
5.250	0.17	0.05	0.047	|O I	|	|	|	0.31
5.333	0.18	0.05	0.048	|O I	|	|	|	0.32
5.417	0.19	0.05	0.049	|O I	|	|	|	0.32
5.500	0.20	0.05	0.050	|O I	|	|	|	0.33
5.583	0.21	0.05	0.051	|O I|	|	|	|	0.34
5.667	0.22	0.05	0.052	|O I|	|	|	|	0.34

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5.750    0.22    0.05      0.054  |O     I|       |       |       |      0.35
5.833    0.23    0.05      0.055  |O     I|       |       |       |      0.36
5.917    0.23    0.05      0.056  |O     I|       |       |       |      0.37
6.000    0.23    0.05      0.057  |O     I|       |       |       |      0.38
6.083    0.24    0.06      0.058  |O     I|       |       |       |      0.38
6.167    0.25    0.06      0.060  |O      I       |       |       |      0.39
6.250    0.25    0.06      0.061  |O      I       |       |       |      0.40
6.333    0.25    0.06      0.062  |O      I       |       |       |      0.41
6.417    0.25    0.06      0.064  | O     I       |       |       |      0.42
6.500    0.25    0.06      0.065  | O     I       |       |       |      0.43
6.583    0.27    0.06      0.066  | O     I       |       |       |      0.44
6.667    0.28    0.07      0.068  | O     |I      |       |       |      0.45
6.750    0.28    0.07      0.069  | O     |I      |       |       |      0.46
6.833    0.28    0.07      0.071  | O     |I      |       |       |      0.47
6.917    0.28    0.07      0.072  | O     |I      |       |       |      0.47
7.000    0.28    0.07      0.074  | O     |I      |       |       |      0.48
7.083    0.28    0.07      0.075  | O     |I      |       |       |      0.49
7.167    0.28    0.07      0.076  | O     |I      |       |       |      0.50
7.250    0.28    0.07      0.078  | O     |I      |       |       |      0.51
7.333    0.30    0.07      0.079  | O     |I      |       |       |      0.52
7.417    0.31    0.08      0.081  | O     | I     |       |       |      0.53
7.500    0.31    0.08      0.083  | O     | I     |       |       |      0.54
7.583    0.32    0.08      0.084  | O     | I     |       |       |      0.55
7.667    0.33    0.08      0.086  | O     |  I    |       |       |      0.57
7.750    0.34    0.08      0.088  | O     |  I    |       |       |      0.58
7.833    0.35    0.08      0.090  | O     |  I    |       |       |      0.59
7.917    0.36    0.08      0.091  | O     |   I   |       |       |      0.60
8.000    0.36    0.08      0.093  | O     |   I   |       |       |      0.61
8.083    0.39    0.08      0.095  | O     |    I  |       |       |      0.63
8.167    0.41    0.08      0.098  | O     |    I  |       |       |      0.64
8.250    0.42    0.08      0.100  | O     |    I  |       |       |      0.66
8.333    0.42    0.09      0.102  | O     |     I |       |       |      0.67
8.417    0.42    0.09      0.105  | O     |     I |       |       |      0.69
8.500    0.42    0.09      0.107  | O     |     I |       |       |      0.70
8.583    0.44    0.09      0.109  | O     |     I |       |       |      0.72
8.667    0.45    0.09      0.112  |  O    |     I |       |       |      0.73
8.750    0.45    0.09      0.114  |  O    |     I |       |       |      0.75
8.833    0.46    0.09      0.117  |  O    |      I|       |       |      0.77
8.917    0.47    0.09      0.119  |  O    |      I|       |       |      0.78
9.000    0.48    0.09      0.122  |  O    |      I|       |       |      0.80
9.083    0.51    0.10      0.125  |  O    |       I       |       |      0.82
9.167    0.53    0.10      0.127  |  O    |       |I      |       |      0.84
9.250    0.53    0.10      0.130  |  O    |       |I      |       |      0.86
9.333    0.55    0.10      0.133  |  O    |       | I     |       |      0.88
9.417    0.56    0.10      0.137  |  O    |       | I     |       |      0.90
9.500    0.56    0.10      0.140  |  O    |       | I     |       |      0.92
9.583    0.58    0.10      0.143  |  O    |       |  I    |       |      0.94
9.667    0.59    0.11      0.146  |  O    |       |  I    |       |      0.96
9.750    0.59    0.11      0.150  |  O    |       |  I    |       |      0.98
9.833    0.61    0.11      0.153  |  O    |       |   I   |       |      1.01
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9.917	0.62	0.11	0.156	O		I		1.03
10.000	0.62	0.11	0.160	O		I		1.05
10.083	0.52	0.11	0.163	O	I			1.08
10.167	0.45	0.11	0.166	O	I			1.09
10.250	0.44	0.11	0.168	O	I			1.11
10.333	0.42	0.12	0.170	O	I			1.12
10.417	0.42	0.12	0.172	O	I			1.14
10.500	0.42	0.12	0.174	O	I			1.15
10.583	0.49	0.12	0.177	O	I			1.17
10.667	0.54	0.12	0.179	O	I			1.19
10.750	0.55	0.12	0.182	O	I			1.21
10.833	0.56	0.12	0.185	O	I			1.23
10.917	0.56	0.12	0.188	O	I			1.25
11.000	0.56	0.12	0.191	O	I			1.27
11.083	0.55	0.12	0.194	O	I			1.29
11.167	0.54	0.13	0.197	O	I			1.31
11.250	0.54	0.13	0.200	O	I			1.33
11.333	0.54	0.13	0.203	O	I			1.35
11.417	0.54	0.13	0.206	O	I			1.37
11.500	0.54	0.13	0.208	O	I			1.39
11.583	0.51	0.13	0.211	O	I			1.41
11.667	0.49	0.13	0.214	O	I			1.43
11.750	0.48	0.13	0.216	O	I			1.45
11.833	0.49	0.13	0.219	O	I			1.46
11.917	0.50	0.13	0.221	O	I			1.48
12.000	0.51	0.13	0.224	O	I			1.50
12.083	0.60	0.14	0.226	O		I		1.52
12.167	0.67	0.14	0.230	O		I		1.54
12.250	0.69	0.14	0.234	O		I		1.57
12.333	0.72	0.14	0.238	O		I		1.60
12.417	0.73	0.14	0.242	O		I		1.63
12.500	0.73	0.14	0.246	O		I		1.65
12.583	0.76	0.14	0.250	O		I		1.68
12.667	0.78	0.14	0.254	O		I		1.72
12.750	0.78	0.15	0.258	O		I		1.75
12.833	0.80	0.15	0.263	O		I		1.78
12.917	0.81	0.15	0.267	O		I		1.81
13.000	0.81	0.15	0.272	O		I		1.84
13.083	0.89	0.15	0.277	O		I		1.88
13.167	0.93	0.15	0.282	O		I		1.91
13.250	0.95	0.16	0.287	O		I		1.95
13.333	0.96	0.16	0.293	O		I		1.99
13.417	0.96	0.16	0.298	O		I		2.04
13.500	0.96	0.16	0.304	O		I		2.08
13.583	0.81	0.16	0.309	O		I		2.12
13.667	0.70	0.16	0.313	O		I		2.15
13.750	0.67	0.16	0.317	O		I		2.18
13.833	0.65	0.17	0.320	O		I		2.20
13.917	0.65	0.17	0.323	O		I		2.23
14.000	0.65	0.17	0.327	O		I		2.25

14.083	0.70	0.17	0.330	| O |	| |	| I|	|	2.28
14.167	0.74	0.17	0.334	| O |	| |	| I |	|	2.31
14.250	0.75	0.17	0.338	| O |	| |	| |I |	|	2.34
14.333	0.75	0.17	0.342	| O |	| |	| I |	|	2.37
14.417	0.74	0.17	0.346	| O |	| |	| I |	|	2.40
14.500	0.73	0.17	0.350	| O |	| |	| I |	|	2.43
14.583	0.73	0.18	0.353	| O |	| |	| I |	|	2.46
14.667	0.73	0.18	0.357	| O |	| |	| I |	|	2.49
14.750	0.73	0.18	0.361	| O |	| |	| I |	|	2.53
14.833	0.72	0.18	0.365	| O |	| |	| I |	|	2.56
14.917	0.71	0.18	0.369	| O |	| |	| I|	|	2.59
15.000	0.71	0.18	0.372	| O |	| |	| I|	|	2.62
15.083	0.69	0.18	0.376	| O |	| |	| I|	|	2.66
15.167	0.68	0.18	0.379	| O |	| |	| I |	|	2.69
15.250	0.68	0.18	0.383	| O |	| |	| I |	|	2.72
15.333	0.66	0.19	0.386	| O |	| |	| I |	|	2.75
15.417	0.65	0.19	0.389	| O |	| |	| I |	|	2.77
15.500	0.65	0.19	0.392	| O |	| |	| I |	|	2.80
15.583	0.59	0.19	0.395	| O |	| |	| I |	|	2.83
15.667	0.55	0.19	0.398	| O |	| |	| I |	|	2.85
15.750	0.54	0.19	0.401	| O |	| |	| I |	|	2.87
15.833	0.54	0.19	0.403	| O |	| |	|I |	|	2.89
15.917	0.54	0.19	0.405	| O |	| |	|I |	|	2.92
16.000	0.54	0.19	0.408	| O |	| |	|I |	|	2.94
16.083	0.33	0.19	0.409	| O |	| I |	|	|	2.95
16.167	0.18	0.19	0.410	| O |	| |	|	|	2.95
16.250	0.14	0.19	0.410	| I O |	| |	|	|	2.95
16.333	0.11	0.19	0.409	| I O |	| |	|	|	2.95
16.417	0.11	0.19	0.409	| I O |	| |	|	|	2.94
16.500	0.11	0.19	0.408	| I O |	| |	|	|	2.94
16.583	0.10	0.19	0.407	| I O |	| |	|	|	2.93
16.667	0.09	0.19	0.407	| I O |	| |	|	|	2.93
16.750	0.09	0.19	0.406	| I O |	| |	|	|	2.92
16.833	0.08	0.19	0.405	| I O |	| |	|	|	2.92
16.917	0.08	0.19	0.405	| I O |	| |	|	|	2.91
17.000	0.08	0.19	0.404	| I O |	| |	|	|	2.90
17.083	0.11	0.19	0.403	| I O |	| |	|	|	2.90
17.167	0.13	0.19	0.403	| I O |	| |	|	|	2.89
17.250	0.14	0.19	0.402	| I O |	| |	|	|	2.89
17.333	0.14	0.19	0.402	| I O |	| |	|	|	2.89
17.417	0.14	0.19	0.402	| I O |	| |	|	|	2.88
17.500	0.14	0.19	0.401	| I O |	| |	|	|	2.88
17.583	0.14	0.19	0.401	| I O |	| |	|	|	2.88
17.667	0.14	0.19	0.401	| I O |	| |	|	|	2.87
17.750	0.14	0.19	0.400	| I O |	| |	|	|	2.87
17.833	0.13	0.19	0.400	| I O |	| |	|	|	2.87
17.917	0.12	0.19	0.399	| I O |	| |	|	|	2.86
18.000	0.11	0.19	0.399	| I O |	| |	|	|	2.86
18.083	0.11	0.19	0.398	| I O |	| |	|	|	2.85
18.167	0.11	0.19	0.398	| I O |	| |	|	|	2.85

18.250	0.11	0.19	0.397	| I O |				2.85
18.333	0.11	0.19	0.397	| I O |				2.84
18.417	0.11	0.19	0.396	| I O |				2.84
18.500	0.11	0.19	0.396	| I O |				2.83
18.583	0.10	0.19	0.395	| I O |				2.83
18.667	0.09	0.19	0.395	| I O |				2.82
18.750	0.09	0.19	0.394	| I O |				2.82
18.833	0.07	0.19	0.393	| I O |				2.81
18.917	0.06	0.19	0.392	| I O |				2.80
19.000	0.06	0.19	0.391	|I O |				2.79
19.083	0.07	0.19	0.391	| I O |				2.79
19.167	0.08	0.19	0.390	| I O |				2.78
19.250	0.08	0.19	0.389	| I O |				2.77
19.333	0.10	0.19	0.388	| I O |				2.77
19.417	0.11	0.19	0.388	| I O |				2.76
19.500	0.11	0.19	0.387	| I O |				2.76
19.583	0.10	0.19	0.387	| I O |				2.75
19.667	0.09	0.19	0.386	| I O |				2.75
19.750	0.09	0.19	0.386	| I O |				2.74
19.833	0.07	0.18	0.385	| I O |				2.73
19.917	0.06	0.18	0.384	| I O |				2.73
20.000	0.06	0.18	0.383	|I O |				2.72
20.083	0.07	0.18	0.382	| I O |				2.71
20.167	0.08	0.18	0.382	| I O |				2.71
20.250	0.08	0.18	0.381	| I O |				2.70
20.333	0.08	0.18	0.380	| I O |				2.69
20.417	0.08	0.18	0.379	| I O |				2.69
20.500	0.08	0.18	0.379	| I O |				2.68
20.583	0.08	0.18	0.378	| I O |				2.68
20.667	0.08	0.18	0.377	| I O |				2.67
20.750	0.08	0.18	0.377	| I O |				2.66
20.833	0.07	0.18	0.376	| I O |				2.66
20.917	0.06	0.18	0.375	| I O |				2.65
21.000	0.06	0.18	0.374	|I O |				2.64
21.083	0.07	0.18	0.374	| I O |				2.64
21.167	0.08	0.18	0.373	| I O |				2.63
21.250	0.08	0.18	0.372	| I O |				2.62
21.333	0.07	0.18	0.371	| I O |				2.62
21.417	0.06	0.18	0.371	| I O |				2.61
21.500	0.06	0.18	0.370	|I O |				2.60
21.583	0.07	0.18	0.369	| I O |				2.60
21.667	0.08	0.18	0.368	| I O |				2.59
21.750	0.08	0.18	0.368	| I O |				2.58
21.833	0.07	0.18	0.367	| I O |				2.58
21.917	0.06	0.18	0.366	| I O |				2.57
22.000	0.06	0.18	0.365	|I O |				2.56
22.083	0.07	0.18	0.364	| I O |				2.56
22.167	0.08	0.18	0.364	| I O |				2.55
22.250	0.08	0.18	0.363	| I O |				2.54
22.333	0.07	0.18	0.362	| I O |				2.54

22.417	0.06	0.18	0.362	| I	O |	|	|	|	2.53
22.500	0.06	0.18	0.361	|I	O |	|	|	|	2.52
22.583	0.06	0.18	0.360	|I	O |	|	|	|	2.52
22.667	0.06	0.18	0.359	|I	O |	|	|	|	2.51
22.750	0.06	0.18	0.358	|I	O |	|	|	|	2.50
22.833	0.06	0.18	0.357	|I	O |	|	|	|	2.50
22.917	0.06	0.18	0.357	|I	O |	|	|	|	2.49
23.000	0.06	0.18	0.356	|I	O |	|	|	|	2.48
23.083	0.06	0.18	0.355	|I	O |	|	|	|	2.48
23.167	0.06	0.18	0.354	|I	O |	|	|	|	2.47
23.250	0.06	0.18	0.353	|I	O |	|	|	|	2.46
23.333	0.06	0.18	0.353	|I	O |	|	|	|	2.46
23.417	0.06	0.18	0.352	|I	O |	|	|	|	2.45
23.500	0.06	0.17	0.351	|I	O |	|	|	|	2.44
23.583	0.06	0.17	0.350	|I	O |	|	|	|	2.44
23.667	0.06	0.17	0.349	|I	O |	|	|	|	2.43
23.750	0.06	0.17	0.348	|I	O |	|	|	|	2.43
23.833	0.06	0.17	0.348	|I	O |	|	|	|	2.42
23.917	0.06	0.17	0.347	|I	O |	|	|	|	2.41
24.000	0.06	0.17	0.346	|I	O |	|	|	|	2.41
24.083	0.03	0.17	0.345	I	O |	|	|	|	2.40
24.167	0.01	0.17	0.344	I	O |	|	|	|	2.39
24.250	0.00	0.17	0.343	I	O |	|	|	|	2.38
24.333	0.00	0.17	0.342	I	O |	|	|	|	2.37
24.417	0.00	0.17	0.341	I	O |	|	|	|	2.36
24.500	0.00	0.17	0.339	I	O |	|	|	|	2.35
24.583	0.00	0.17	0.338	I	O |	|	|	|	2.35
24.667	0.00	0.17	0.337	I	O |	|	|	|	2.34
24.750	0.00	0.17	0.336	I	O |	|	|	|	2.33
24.833	0.00	0.17	0.335	I	O |	|	|	|	2.32
24.917	0.00	0.17	0.333	I	O |	|	|	|	2.31
25.000	0.00	0.17	0.332	I	O |	|	|	|	2.30
25.083	0.00	0.17	0.331	I	O |	|	|	|	2.29
25.167	0.00	0.17	0.330	I	O |	|	|	|	2.28
25.250	0.00	0.17	0.329	I	O |	|	|	|	2.27
25.333	0.00	0.17	0.328	I	O |	|	|	|	2.26
25.417	0.00	0.17	0.327	I	O |	|	|	|	2.25
25.500	0.00	0.17	0.325	I	O |	|	|	|	2.25
25.583	0.00	0.17	0.324	I	O |	|	|	|	2.24
25.667	0.00	0.17	0.323	I	O |	|	|	|	2.23
25.750	0.00	0.17	0.322	I	O |	|	|	|	2.22
25.833	0.00	0.17	0.321	I	O |	|	|	|	2.21
25.917	0.00	0.17	0.320	I	O |	|	|	|	2.20
26.000	0.00	0.17	0.318	I	O |	|	|	|	2.19
26.083	0.00	0.16	0.317	I	O |	|	|	|	2.18
26.167	0.00	0.16	0.316	I	O |	|	|	|	2.17
26.250	0.00	0.16	0.315	I	O |	|	|	|	2.16
26.333	0.00	0.16	0.314	I	O |	|	|	|	2.16
26.417	0.00	0.16	0.313	I	O |	|	|	|	2.15
26.500	0.00	0.16	0.312	I	O |	|	|	|	2.14

26.583	0.00	0.16	0.311	I	O				2.13
26.667	0.00	0.16	0.309	I	O				2.12
26.750	0.00	0.16	0.308	I	O				2.11
26.833	0.00	0.16	0.307	I	O				2.10
26.917	0.00	0.16	0.306	I	O				2.09
27.000	0.00	0.16	0.305	I	O				2.09
27.083	0.00	0.16	0.304	I	O				2.08
27.167	0.00	0.16	0.303	I	O				2.07
27.250	0.00	0.16	0.302	I	O				2.06
27.333	0.00	0.16	0.301	I	O				2.05
27.417	0.00	0.16	0.299	I	O				2.04
27.500	0.00	0.16	0.298	I	O				2.03
27.583	0.00	0.16	0.297	I	O				2.03
27.667	0.00	0.16	0.296	I	O				2.02
27.750	0.00	0.16	0.295	I	O				2.01
27.833	0.00	0.16	0.294	I	O				2.00
27.917	0.00	0.16	0.293	I	O				1.99
28.000	0.00	0.16	0.292	I	O				1.98
28.083	0.00	0.16	0.291	I	O				1.98
28.167	0.00	0.16	0.290	I	O				1.97
28.250	0.00	0.16	0.289	I	O				1.96
28.333	0.00	0.16	0.288	I	O				1.95
28.417	0.00	0.16	0.286	I	O				1.95
28.500	0.00	0.16	0.285	I	O				1.94
28.583	0.00	0.15	0.284	I	O				1.93
28.667	0.00	0.15	0.283	I	O				1.92
28.750	0.00	0.15	0.282	I	O				1.92
28.833	0.00	0.15	0.281	I	O				1.91
28.917	0.00	0.15	0.280	I	O				1.90
29.000	0.00	0.15	0.279	I	O				1.89
29.083	0.00	0.15	0.278	I	O				1.89
29.167	0.00	0.15	0.277	I	O				1.88
29.250	0.00	0.15	0.276	I	O				1.87
29.333	0.00	0.15	0.275	I	O				1.86
29.417	0.00	0.15	0.274	I	O				1.86
29.500	0.00	0.15	0.273	I	O				1.85
29.583	0.00	0.15	0.272	I	O				1.84
29.667	0.00	0.15	0.271	I	O				1.83
29.750	0.00	0.15	0.270	I	O				1.83
29.833	0.00	0.15	0.269	I	O				1.82
29.917	0.00	0.15	0.268	I	O				1.81
30.000	0.00	0.15	0.267	I	O				1.80
30.083	0.00	0.15	0.266	I	O				1.80
30.167	0.00	0.15	0.264	I	O				1.79
30.250	0.00	0.15	0.263	I	O				1.78
30.333	0.00	0.15	0.262	I	O				1.77
30.417	0.00	0.15	0.261	I	O				1.77
30.500	0.00	0.15	0.260	I	O				1.76
30.583	0.00	0.15	0.259	I	O				1.75
30.667	0.00	0.15	0.258	I	O				1.75

30.750	0.00	0.15	0.257	I	O					1.74
30.833	0.00	0.15	0.256	I	O					1.73
30.917	0.00	0.15	0.255	I	O					1.72
31.000	0.00	0.14	0.254	I	O					1.72
31.083	0.00	0.14	0.253	I	O					1.71
31.167	0.00	0.14	0.252	I	O					1.70
31.250	0.00	0.14	0.251	I	O					1.70
31.333	0.00	0.14	0.250	I	O					1.69
31.417	0.00	0.14	0.249	I	O					1.68
31.500	0.00	0.14	0.248	I	O					1.67
31.583	0.00	0.14	0.247	I	O					1.67
31.667	0.00	0.14	0.246	I	O					1.66
31.750	0.00	0.14	0.245	I	O					1.65
31.833	0.00	0.14	0.245	I	O					1.65
31.917	0.00	0.14	0.244	I	O					1.64
32.000	0.00	0.14	0.243	I	O					1.63
32.083	0.00	0.14	0.242	I	O					1.63
32.167	0.00	0.14	0.241	I	O					1.62
32.250	0.00	0.14	0.240	I	O					1.61
32.333	0.00	0.14	0.239	I	O					1.60
32.417	0.00	0.14	0.238	I	O					1.60
32.500	0.00	0.14	0.237	I	O					1.59
32.583	0.00	0.14	0.236	I	O					1.58
32.667	0.00	0.14	0.235	I	O					1.58
32.750	0.00	0.14	0.234	I	O					1.57
32.833	0.00	0.14	0.233	I	O					1.56
32.917	0.00	0.14	0.232	I	O					1.56
33.000	0.00	0.14	0.231	I	O					1.55
33.083	0.00	0.14	0.230	I	O					1.54
33.167	0.00	0.14	0.229	I	O					1.54
33.250	0.00	0.14	0.228	I	O					1.53
33.333	0.00	0.14	0.227	I	O					1.52
33.417	0.00	0.14	0.226	I	O					1.52
33.500	0.00	0.14	0.225	I	O					1.51
33.583	0.00	0.14	0.224	I	O					1.50
33.667	0.00	0.13	0.224	I	O					1.50
33.750	0.00	0.13	0.223	I	O					1.49
33.833	0.00	0.13	0.222	I	O					1.48
33.917	0.00	0.13	0.221	I	O					1.48
34.000	0.00	0.13	0.220	I	O					1.47
34.083	0.00	0.13	0.219	I	O					1.46
34.167	0.00	0.13	0.218	I	O					1.46
34.250	0.00	0.13	0.217	I	O					1.45
34.333	0.00	0.13	0.216	I	O					1.45
34.417	0.00	0.13	0.215	I	O					1.44
34.500	0.00	0.13	0.214	I	O					1.43
34.583	0.00	0.13	0.213	I	O					1.43
34.667	0.00	0.13	0.213	I	O					1.42
34.750	0.00	0.13	0.212	I	O					1.41
34.833	0.00	0.13	0.211	I	O					1.41

34.917	0.00	0.13	0.210	I	O				1.40
35.000	0.00	0.13	0.209	I	O				1.40
35.083	0.00	0.13	0.208	I	O				1.39
35.167	0.00	0.13	0.207	I	O				1.38
35.250	0.00	0.13	0.206	I	O				1.38
35.333	0.00	0.13	0.205	I	O				1.37
35.417	0.00	0.13	0.205	I	O				1.36
35.500	0.00	0.13	0.204	I	O				1.36
35.583	0.00	0.13	0.203	I	O				1.35
35.667	0.00	0.13	0.202	I	O				1.35
35.750	0.00	0.13	0.201	I	O				1.34
35.833	0.00	0.13	0.200	I	O				1.33
35.917	0.00	0.13	0.199	I	O				1.33
36.000	0.00	0.13	0.198	I	O				1.32
36.083	0.00	0.13	0.198	I	O				1.32
36.167	0.00	0.13	0.197	I	O				1.31
36.250	0.00	0.12	0.196	I	O				1.30
36.333	0.00	0.12	0.195	I	O				1.30
36.417	0.00	0.12	0.194	I	O				1.29
36.500	0.00	0.12	0.193	I	O				1.29
36.583	0.00	0.12	0.192	I	O				1.28
36.667	0.00	0.12	0.192	I	O				1.27
36.750	0.00	0.12	0.191	I	O				1.27
36.833	0.00	0.12	0.190	I	O				1.26
36.917	0.00	0.12	0.189	I	O				1.26
37.000	0.00	0.12	0.188	I	O				1.25
37.083	0.00	0.12	0.187	I	O				1.25
37.167	0.00	0.12	0.187	I	O				1.24
37.250	0.00	0.12	0.186	I	O				1.23
37.333	0.00	0.12	0.185	I	O				1.23
37.417	0.00	0.12	0.184	I	O				1.22
37.500	0.00	0.12	0.183	I	O				1.22
37.583	0.00	0.12	0.182	I	O				1.21
37.667	0.00	0.12	0.182	I	O				1.21
37.750	0.00	0.12	0.181	I	O				1.20
37.833	0.00	0.12	0.180	I	O				1.19
37.917	0.00	0.12	0.179	I	O				1.19
38.000	0.00	0.12	0.178	I	O				1.18
38.083	0.00	0.12	0.177	I	O				1.18
38.167	0.00	0.12	0.177	I	O				1.17
38.250	0.00	0.12	0.176	I	O				1.17
38.333	0.00	0.12	0.175	I	O				1.16
38.417	0.00	0.12	0.174	I	O				1.15
38.500	0.00	0.12	0.173	I	O				1.15
38.583	0.00	0.12	0.173	I	O				1.14
38.667	0.00	0.12	0.172	I	O				1.14
38.750	0.00	0.12	0.171	I	O				1.13
38.833	0.00	0.12	0.170	I	O				1.13
38.917	0.00	0.12	0.169	I	O				1.12
39.000	0.00	0.11	0.169	I	O				1.12

39.083	0.00	0.11	0.168	I	O	|	|	|	|	1.11
39.167	0.00	0.11	0.167	I	O	|	|	|	|	1.10
39.250	0.00	0.11	0.166	I	O	|	|	|	|	1.10
39.333	0.00	0.11	0.165	I	O	|	|	|	|	1.09
39.417	0.00	0.11	0.165	I	O	|	|	|	|	1.09
39.500	0.00	0.11	0.164	I	O	|	|	|	|	1.08
39.583	0.00	0.11	0.163	I	O	|	|	|	|	1.08
39.667	0.00	0.11	0.162	I	O	|	|	|	|	1.07
39.750	0.00	0.11	0.162	I	O	|	|	|	|	1.07
39.833	0.00	0.11	0.161	I	O	|	|	|	|	1.06
39.917	0.00	0.11	0.160	I	O	|	|	|	|	1.06
40.000	0.00	0.11	0.159	I	O	|	|	|	|	1.05
40.083	0.00	0.11	0.158	I	O	|	|	|	|	1.05
40.167	0.00	0.11	0.158	I	O	|	|	|	|	1.04
40.250	0.00	0.11	0.157	I	O	|	|	|	|	1.03
40.333	0.00	0.11	0.156	I	O	|	|	|	|	1.03
40.417	0.00	0.11	0.155	I	O	|	|	|	|	1.02
40.500	0.00	0.11	0.155	I	O	|	|	|	|	1.02
40.583	0.00	0.11	0.154	I	O	|	|	|	|	1.01
40.667	0.00	0.11	0.153	I	O	|	|	|	|	1.01
40.750	0.00	0.11	0.152	I	O	|	|	|	|	1.00
40.833	0.00	0.11	0.152	I	O	|	|	|	|	1.00
40.917	0.00	0.11	0.151	I	O	|	|	|	|	0.99
41.000	0.00	0.11	0.150	I	O	|	|	|	|	0.99
41.083	0.00	0.11	0.149	I	O	|	|	|	|	0.98
41.167	0.00	0.11	0.149	I	O	|	|	|	|	0.98
41.250	0.00	0.11	0.148	I	O	|	|	|	|	0.97
41.333	0.00	0.11	0.147	I	O	|	|	|	|	0.97
41.417	0.00	0.11	0.146	I	O	|	|	|	|	0.96
41.500	0.00	0.11	0.146	I	O	|	|	|	|	0.96
41.583	0.00	0.11	0.145	I	O	|	|	|	|	0.95
41.667	0.00	0.11	0.144	I	O	|	|	|	|	0.95
41.750	0.00	0.11	0.144	I	O	|	|	|	|	0.94
41.833	0.00	0.10	0.143	I	O	|	|	|	|	0.94
41.917	0.00	0.10	0.142	I	O	|	|	|	|	0.93
42.000	0.00	0.10	0.141	I	O	|	|	|	|	0.93
42.083	0.00	0.10	0.141	I	O	|	|	|	|	0.93
42.167	0.00	0.10	0.140	I	O	|	|	|	|	0.92
42.250	0.00	0.10	0.139	I	O	|	|	|	|	0.92
42.333	0.00	0.10	0.139	I	O	|	|	|	|	0.91
42.417	0.00	0.10	0.138	I	O	|	|	|	|	0.91
42.500	0.00	0.10	0.137	I	O	|	|	|	|	0.90
42.583	0.00	0.10	0.136	I	O	|	|	|	|	0.90
42.667	0.00	0.10	0.136	I	O	|	|	|	|	0.89
42.750	0.00	0.10	0.135	I	O	|	|	|	|	0.89
42.833	0.00	0.10	0.134	I	O	|	|	|	|	0.88
42.917	0.00	0.10	0.134	I	O	|	|	|	|	0.88
43.000	0.00	0.10	0.133	I	O	|	|	|	|	0.87
43.083	0.00	0.10	0.132	I	O	|	|	|	|	0.87
43.167	0.00	0.10	0.132	I	O	|	|	|	|	0.87

43.250	0.00	0.10	0.131	I	O	|	|	|	0.86
43.333	0.00	0.10	0.130	I	O	|	|	|	0.86
43.417	0.00	0.10	0.130	I	O	|	|	|	0.85
43.500	0.00	0.10	0.129	I	O	|	|	|	0.85
43.583	0.00	0.10	0.128	I	O	|	|	|	0.84
43.667	0.00	0.10	0.128	I	O	|	|	|	0.84
43.750	0.00	0.10	0.127	I	O	|	|	|	0.83
43.833	0.00	0.10	0.126	I	O	|	|	|	0.83
43.917	0.00	0.10	0.126	I	O	|	|	|	0.83
44.000	0.00	0.10	0.125	I	O	|	|	|	0.82
44.083	0.00	0.10	0.124	I	O	|	|	|	0.82
44.167	0.00	0.10	0.124	I	O	|	|	|	0.81
44.250	0.00	0.10	0.123	I	O	|	|	|	0.81
44.333	0.00	0.09	0.122	I	O	|	|	|	0.80
44.417	0.00	0.09	0.122	I	O	|	|	|	0.80
44.500	0.00	0.09	0.121	I	O	|	|	|	0.80
44.583	0.00	0.09	0.120	I	O	|	|	|	0.79
44.667	0.00	0.09	0.120	I	O	|	|	|	0.79
44.750	0.00	0.09	0.119	I	O	|	|	|	0.78
44.833	0.00	0.09	0.118	I	O	|	|	|	0.78
44.917	0.00	0.09	0.118	I	O	|	|	|	0.77
45.000	0.00	0.09	0.117	I	O	|	|	|	0.77
45.083	0.00	0.09	0.116	I	O	|	|	|	0.77
45.167	0.00	0.09	0.116	I	O	|	|	|	0.76
45.250	0.00	0.09	0.115	I	O	|	|	|	0.76
45.333	0.00	0.09	0.115	I	O	|	|	|	0.75
45.417	0.00	0.09	0.114	I	O	|	|	|	0.75
45.500	0.00	0.09	0.113	I	O	|	|	|	0.75
45.583	0.00	0.09	0.113	I	O	|	|	|	0.74
45.667	0.00	0.09	0.112	I	O	|	|	|	0.74
45.750	0.00	0.09	0.111	I	O	|	|	|	0.73
45.833	0.00	0.09	0.111	I	O	|	|	|	0.73
45.917	0.00	0.09	0.110	I	O	|	|	|	0.72
46.000	0.00	0.09	0.110	I	O	|	|	|	0.72
46.083	0.00	0.09	0.109	I	O	|	|	|	0.72
46.167	0.00	0.09	0.108	I	O	|	|	|	0.71
46.250	0.00	0.09	0.108	I	O	|	|	|	0.71
46.333	0.00	0.09	0.107	I	O	|	|	|	0.70
46.417	0.00	0.09	0.107	I	O	|	|	|	0.70
46.500	0.00	0.09	0.106	I	O	|	|	|	0.70
46.583	0.00	0.09	0.105	I	O	|	|	|	0.69
46.667	0.00	0.09	0.105	I	O	|	|	|	0.69
46.750	0.00	0.09	0.104	I	O	|	|	|	0.69
46.833	0.00	0.09	0.104	I	O	|	|	|	0.68
46.917	0.00	0.09	0.103	I	O	|	|	|	0.68
47.000	0.00	0.09	0.102	I	O	|	|	|	0.67
47.083	0.00	0.09	0.102	I	O	|	|	|	0.67
47.167	0.00	0.08	0.101	I	O	|	|	|	0.67
47.250	0.00	0.08	0.101	I	O	|	|	|	0.66
47.333	0.00	0.08	0.100	I	O	|	|	|	0.66

47.417	0.00	0.08	0.099	I O	|	|	|	0.65
47.500	0.00	0.08	0.099	I O	|	|	|	0.65
47.583	0.00	0.08	0.098	I O	|	|	|	0.65
47.667	0.00	0.08	0.098	I O	|	|	|	0.64
47.750	0.00	0.08	0.097	I O	|	|	|	0.64
47.833	0.00	0.08	0.097	I O	|	|	|	0.64
47.917	0.00	0.08	0.096	I O	|	|	|	0.63
48.000	0.00	0.08	0.095	I O	|	|	|	0.63
48.083	0.00	0.08	0.095	I O	|	|	|	0.62
48.167	0.00	0.08	0.094	I O	|	|	|	0.62
48.250	0.00	0.08	0.094	I O	|	|	|	0.62
48.333	0.00	0.08	0.093	I O	|	|	|	0.61
48.417	0.00	0.08	0.093	I O	|	|	|	0.61
48.500	0.00	0.08	0.092	I O	|	|	|	0.61
48.583	0.00	0.08	0.092	I O	|	|	|	0.60
48.667	0.00	0.08	0.091	I O	|	|	|	0.60
48.750	0.00	0.08	0.090	I O	|	|	|	0.59
48.833	0.00	0.08	0.090	I O	|	|	|	0.59
48.917	0.00	0.08	0.089	I O	|	|	|	0.59
49.000	0.00	0.08	0.089	I O	|	|	|	0.58
49.083	0.00	0.08	0.088	I O	|	|	|	0.58
49.167	0.00	0.08	0.088	I O	|	|	|	0.58
49.250	0.00	0.08	0.087	I O	|	|	|	0.57
49.333	0.00	0.08	0.087	I O	|	|	|	0.57
49.417	0.00	0.08	0.086	I O	|	|	|	0.57
49.500	0.00	0.08	0.086	I O	|	|	|	0.56
49.583	0.00	0.08	0.085	I O	|	|	|	0.56
49.667	0.00	0.08	0.084	I O	|	|	|	0.56
49.750	0.00	0.08	0.084	I O	|	|	|	0.55
49.833	0.00	0.08	0.083	I O	|	|	|	0.55
49.917	0.00	0.08	0.083	I O	|	|	|	0.55
50.000	0.00	0.08	0.082	I O	|	|	|	0.54
50.083	0.00	0.08	0.082	I O	|	|	|	0.54
50.167	0.00	0.08	0.081	I O	|	|	|	0.54
50.250	0.00	0.08	0.081	I O	|	|	|	0.53
50.333	0.00	0.08	0.080	I O	|	|	|	0.53
50.417	0.00	0.07	0.080	I O	|	|	|	0.52
50.500	0.00	0.07	0.079	I O	|	|	|	0.52
50.583	0.00	0.07	0.079	I O	|	|	|	0.52
50.667	0.00	0.07	0.078	I O	|	|	|	0.51
50.750	0.00	0.07	0.078	I O	|	|	|	0.51
50.833	0.00	0.07	0.077	I O	|	|	|	0.51
50.917	0.00	0.07	0.077	I O	|	|	|	0.50
51.000	0.00	0.07	0.076	I O	|	|	|	0.50
51.083	0.00	0.07	0.076	I O	|	|	|	0.50
51.167	0.00	0.07	0.075	I O	|	|	|	0.49
51.250	0.00	0.07	0.075	I O	|	|	|	0.49
51.333	0.00	0.07	0.074	I O	|	|	|	0.49
51.417	0.00	0.07	0.074	I O	|	|	|	0.49
51.500	0.00	0.07	0.073	I O	|	|	|	0.48

51.583	0.00	0.07	0.073	I O				0.48
51.667	0.00	0.07	0.072	I O				0.48
51.750	0.00	0.07	0.072	I O				0.47
51.833	0.00	0.07	0.071	I O				0.47
51.917	0.00	0.07	0.071	I O				0.47
52.000	0.00	0.07	0.070	I O				0.46
52.083	0.00	0.07	0.070	I O				0.46
52.167	0.00	0.07	0.069	I O				0.46
52.250	0.00	0.07	0.069	I O				0.45
52.333	0.00	0.07	0.069	I O				0.45
52.417	0.00	0.07	0.068	I O				0.45
52.500	0.00	0.06	0.068	I O				0.45
52.583	0.00	0.06	0.067	I O				0.44
52.667	0.00	0.06	0.067	I O				0.44
52.750	0.00	0.06	0.066	I O				0.44
52.833	0.00	0.06	0.066	I O				0.43
52.917	0.00	0.06	0.065	I O				0.43
53.000	0.00	0.06	0.065	I O				0.43
53.083	0.00	0.06	0.065	I O				0.42
53.167	0.00	0.06	0.064	I O				0.42
53.250	0.00	0.06	0.064	I O				0.42
53.333	0.00	0.06	0.063	I O				0.42
53.417	0.00	0.06	0.063	I O				0.41
53.500	0.00	0.06	0.062	I O				0.41
53.583	0.00	0.06	0.062	IO				0.41
53.667	0.00	0.06	0.062	IO				0.41
53.750	0.00	0.06	0.061	IO				0.40
53.833	0.00	0.06	0.061	IO				0.40
53.917	0.00	0.06	0.060	IO				0.40
54.000	0.00	0.06	0.060	IO				0.40
54.083	0.00	0.06	0.060	IO				0.39
54.167	0.00	0.06	0.059	IO				0.39
54.250	0.00	0.06	0.059	IO				0.39
54.333	0.00	0.06	0.058	IO				0.38
54.417	0.00	0.06	0.058	IO				0.38
54.500	0.00	0.06	0.058	IO				0.38
54.583	0.00	0.06	0.057	IO				0.38
54.667	0.00	0.05	0.057	IO				0.37
54.750	0.00	0.05	0.057	IO				0.37
54.833	0.00	0.05	0.056	IO				0.37
54.917	0.00	0.05	0.056	IO				0.37
55.000	0.00	0.05	0.055	IO				0.37
55.083	0.00	0.05	0.055	IO				0.36
55.167	0.00	0.05	0.055	IO				0.36
55.250	0.00	0.05	0.054	IO				0.36
55.333	0.00	0.05	0.054	IO				0.36
55.417	0.00	0.05	0.054	IO				0.35
55.500	0.00	0.05	0.053	IO				0.35
55.583	0.00	0.05	0.053	IO				0.35
55.667	0.00	0.05	0.053	IO				0.35

55.750	0.00	0.05	0.052	IO				0.34
55.833	0.00	0.05	0.052	IO				0.34
55.917	0.00	0.05	0.052	IO				0.34
56.000	0.00	0.05	0.051	IO				0.34
56.083	0.00	0.05	0.051	IO				0.33
56.167	0.00	0.05	0.051	IO				0.33
56.250	0.00	0.05	0.050	IO				0.33
56.333	0.00	0.05	0.050	IO				0.33
56.417	0.00	0.05	0.050	IO				0.33
56.500	0.00	0.05	0.049	IO				0.32
56.583	0.00	0.05	0.049	IO				0.32
56.667	0.00	0.05	0.049	IO				0.32
56.750	0.00	0.05	0.048	IO				0.32
56.833	0.00	0.05	0.048	IO				0.32
56.917	0.00	0.05	0.048	IO				0.31
57.000	0.00	0.05	0.047	IO				0.31
57.083	0.00	0.05	0.047	IO				0.31
57.167	0.00	0.04	0.047	IO				0.31
57.250	0.00	0.04	0.046	IO				0.31
57.333	0.00	0.04	0.046	IO				0.30
57.417	0.00	0.04	0.046	IO				0.30
57.500	0.00	0.04	0.045	IO				0.30
57.583	0.00	0.04	0.045	IO				0.30
57.667	0.00	0.04	0.045	IO				0.30
57.750	0.00	0.04	0.045	IO				0.29
57.833	0.00	0.04	0.044	IO				0.29
57.917	0.00	0.04	0.044	IO				0.29
58.000	0.00	0.04	0.044	IO				0.29
58.083	0.00	0.04	0.043	IO				0.29
58.167	0.00	0.04	0.043	IO				0.28
58.250	0.00	0.04	0.043	IO				0.28
58.333	0.00	0.04	0.043	IO				0.28
58.417	0.00	0.04	0.042	IO				0.28
58.500	0.00	0.04	0.042	IO				0.28
58.583	0.00	0.04	0.042	IO				0.27
58.667	0.00	0.04	0.041	IO				0.27
58.750	0.00	0.04	0.041	IO				0.27
58.833	0.00	0.04	0.041	IO				0.27
58.917	0.00	0.04	0.041	IO				0.27
59.000	0.00	0.04	0.040	IO				0.27
59.083	0.00	0.04	0.040	IO				0.26
59.167	0.00	0.04	0.040	IO				0.26
59.250	0.00	0.04	0.040	IO				0.26
59.333	0.00	0.04	0.039	IO				0.26
59.417	0.00	0.04	0.039	IO				0.26
59.500	0.00	0.04	0.039	IO				0.26
59.583	0.00	0.04	0.039	IO				0.25
59.667	0.00	0.04	0.038	IO				0.25
59.750	0.00	0.04	0.038	IO				0.25
59.833	0.00	0.04	0.038	IO				0.25

59.917	0.00	0.04	0.038	IO				0.25
60.000	0.00	0.04	0.037	IO				0.25
60.083	0.00	0.04	0.037	IO				0.24
60.167	0.00	0.04	0.037	IO				0.24
60.250	0.00	0.04	0.037	IO				0.24
60.333	0.00	0.03	0.036	IO				0.24
60.417	0.00	0.03	0.036	IO				0.24
60.500	0.00	0.03	0.036	IO				0.24
60.583	0.00	0.03	0.036	IO				0.23
60.667	0.00	0.03	0.035	IO				0.23
60.750	0.00	0.03	0.035	IO				0.23
60.833	0.00	0.03	0.035	IO				0.23
60.917	0.00	0.03	0.035	IO				0.23
61.000	0.00	0.03	0.034	IO				0.23
61.083	0.00	0.03	0.034	IO				0.23
61.167	0.00	0.03	0.034	IO				0.22
61.250	0.00	0.03	0.034	IO				0.22
61.333	0.00	0.03	0.034	IO				0.22
61.417	0.00	0.03	0.033	IO				0.22
61.500	0.00	0.03	0.033	IO				0.22
61.583	0.00	0.03	0.033	IO				0.22
61.667	0.00	0.03	0.033	IO				0.22
61.750	0.00	0.03	0.032	IO				0.21
61.833	0.00	0.03	0.032	IO				0.21
61.917	0.00	0.03	0.032	IO				0.21
62.000	0.00	0.03	0.032	IO				0.21
62.083	0.00	0.03	0.032	IO				0.21
62.167	0.00	0.03	0.031	IO				0.21
62.250	0.00	0.03	0.031	IO				0.21
62.333	0.00	0.03	0.031	O				0.20
62.417	0.00	0.03	0.031	O				0.20
62.500	0.00	0.03	0.031	O				0.20
62.583	0.00	0.03	0.030	O				0.20
62.667	0.00	0.03	0.030	O				0.20
62.750	0.00	0.03	0.030	O				0.20
62.833	0.00	0.03	0.030	O				0.20
62.917	0.00	0.03	0.030	O				0.19
63.000	0.00	0.03	0.029	O				0.19
63.083	0.00	0.03	0.029	O				0.19
63.167	0.00	0.03	0.029	O				0.19
63.250	0.00	0.03	0.029	O				0.19
63.333	0.00	0.03	0.029	O				0.19
63.417	0.00	0.03	0.028	O				0.19
63.500	0.00	0.03	0.028	O				0.19
63.583	0.00	0.03	0.028	O				0.18
63.667	0.00	0.03	0.028	O				0.18
63.750	0.00	0.03	0.028	O				0.18
63.833	0.00	0.03	0.028	O				0.18
63.917	0.00	0.03	0.027	O				0.18
64.000	0.00	0.03	0.027	O				0.18

64.083	0.00	0.03	0.027	O	|	|	|	0.18
64.167	0.00	0.03	0.027	O	|	|	|	0.18
64.250	0.00	0.03	0.027	O	|	|	|	0.18
64.333	0.00	0.03	0.026	O	|	|	|	0.17
64.417	0.00	0.03	0.026	O	|	|	|	0.17
64.500	0.00	0.03	0.026	O	|	|	|	0.17
64.583	0.00	0.02	0.026	O	|	|	|	0.17
64.667	0.00	0.02	0.026	O	|	|	|	0.17
64.750	0.00	0.02	0.026	O	|	|	|	0.17
64.833	0.00	0.02	0.025	O	|	|	|	0.17
64.917	0.00	0.02	0.025	O	|	|	|	0.17
65.000	0.00	0.02	0.025	O	|	|	|	0.17
65.083	0.00	0.02	0.025	O	|	|	|	0.16
65.167	0.00	0.02	0.025	O	|	|	|	0.16
65.250	0.00	0.02	0.025	O	|	|	|	0.16
65.333	0.00	0.02	0.024	O	|	|	|	0.16
65.417	0.00	0.02	0.024	O	|	|	|	0.16
65.500	0.00	0.02	0.024	O	|	|	|	0.16
65.583	0.00	0.02	0.024	O	|	|	|	0.16
65.667	0.00	0.02	0.024	O	|	|	|	0.16
65.750	0.00	0.02	0.024	O	|	|	|	0.16
65.833	0.00	0.02	0.023	O	|	|	|	0.15
65.917	0.00	0.02	0.023	O	|	|	|	0.15
66.000	0.00	0.02	0.023	O	|	|	|	0.15
66.083	0.00	0.02	0.023	O	|	|	|	0.15
66.167	0.00	0.02	0.023	O	|	|	|	0.15
66.250	0.00	0.02	0.023	O	|	|	|	0.15
66.333	0.00	0.02	0.023	O	|	|	|	0.15
66.417	0.00	0.02	0.022	O	|	|	|	0.15
66.500	0.00	0.02	0.022	O	|	|	|	0.15
66.583	0.00	0.02	0.022	O	|	|	|	0.15
66.667	0.00	0.02	0.022	O	|	|	|	0.14
66.750	0.00	0.02	0.022	O	|	|	|	0.14
66.833	0.00	0.02	0.022	O	|	|	|	0.14
66.917	0.00	0.02	0.022	O	|	|	|	0.14
67.000	0.00	0.02	0.021	O	|	|	|	0.14
67.083	0.00	0.02	0.021	O	|	|	|	0.14
67.167	0.00	0.02	0.021	O	|	|	|	0.14
67.250	0.00	0.02	0.021	O	|	|	|	0.14
67.333	0.00	0.02	0.021	O	|	|	|	0.14
67.417	0.00	0.02	0.021	O	|	|	|	0.14
67.500	0.00	0.02	0.021	O	|	|	|	0.14
67.583	0.00	0.02	0.020	O	|	|	|	0.13
67.667	0.00	0.02	0.020	O	|	|	|	0.13
67.750	0.00	0.02	0.020	O	|	|	|	0.13
67.833	0.00	0.02	0.020	O	|	|	|	0.13
67.917	0.00	0.02	0.020	O	|	|	|	0.13
68.000	0.00	0.02	0.020	O	|	|	|	0.13
68.083	0.00	0.02	0.020	O	|	|	|	0.13
68.167	0.00	0.02	0.020	O	|	|	|	0.13

68.250	0.00	0.02	0.019	O	|	|	|	0.13
68.333	0.00	0.02	0.019	O	|	|	|	0.13
68.417	0.00	0.02	0.019	O	|	|	|	0.13
68.500	0.00	0.02	0.019	O	|	|	|	0.12
68.583	0.00	0.02	0.019	O	|	|	|	0.12
68.667	0.00	0.02	0.019	O	|	|	|	0.12
68.750	0.00	0.02	0.019	O	|	|	|	0.12
68.833	0.00	0.02	0.019	O	|	|	|	0.12
68.917	0.00	0.02	0.018	O	|	|	|	0.12
69.000	0.00	0.02	0.018	O	|	|	|	0.12
69.083	0.00	0.02	0.018	O	|	|	|	0.12
69.167	0.00	0.02	0.018	O	|	|	|	0.12
69.250	0.00	0.02	0.018	O	|	|	|	0.12
69.333	0.00	0.02	0.018	O	|	|	|	0.12
69.417	0.00	0.02	0.018	O	|	|	|	0.12
69.500	0.00	0.02	0.018	O	|	|	|	0.12
69.583	0.00	0.02	0.017	O	|	|	|	0.11
69.667	0.00	0.02	0.017	O	|	|	|	0.11
69.750	0.00	0.02	0.017	O	|	|	|	0.11
69.833	0.00	0.02	0.017	O	|	|	|	0.11
69.917	0.00	0.02	0.017	O	|	|	|	0.11
70.000	0.00	0.02	0.017	O	|	|	|	0.11
70.083	0.00	0.02	0.017	O	|	|	|	0.11
70.167	0.00	0.02	0.017	O	|	|	|	0.11
70.250	0.00	0.02	0.017	O	|	|	|	0.11
70.333	0.00	0.02	0.016	O	|	|	|	0.11
70.417	0.00	0.02	0.016	O	|	|	|	0.11
70.500	0.00	0.02	0.016	O	|	|	|	0.11
70.583	0.00	0.02	0.016	O	|	|	|	0.11
70.667	0.00	0.02	0.016	O	|	|	|	0.11
70.750	0.00	0.02	0.016	O	|	|	|	0.10
70.833	0.00	0.02	0.016	O	|	|	|	0.10
70.917	0.00	0.02	0.016	O	|	|	|	0.10
71.000	0.00	0.01	0.016	O	|	|	|	0.10
71.083	0.00	0.01	0.015	O	|	|	|	0.10
71.167	0.00	0.01	0.015	O	|	|	|	0.10
71.250	0.00	0.01	0.015	O	|	|	|	0.10
71.333	0.00	0.01	0.015	O	|	|	|	0.10
71.417	0.00	0.01	0.015	O	|	|	|	0.10
71.500	0.00	0.01	0.015	O	|	|	|	0.10
71.583	0.00	0.01	0.015	O	|	|	|	0.10
71.667	0.00	0.01	0.015	O	|	|	|	0.10
71.750	0.00	0.01	0.015	O	|	|	|	0.10
71.833	0.00	0.01	0.015	O	|	|	|	0.10
71.917	0.00	0.01	0.014	O	|	|	|	0.10
72.000	0.00	0.01	0.014	O	|	|	|	0.09
72.083	0.00	0.01	0.014	O	|	|	|	0.09
72.167	0.00	0.01	0.014	O	|	|	|	0.09
72.250	0.00	0.01	0.014	O	|	|	|	0.09
72.333	0.00	0.01	0.014	O	|	|	|	0.09

72.417	0.00	0.01	0.014	O	|	|	|	0.09
72.500	0.00	0.01	0.014	O	|	|	|	0.09
72.583	0.00	0.01	0.014	O	|	|	|	0.09
72.667	0.00	0.01	0.014	O	|	|	|	0.09
72.750	0.00	0.01	0.014	O	|	|	|	0.09
72.833	0.00	0.01	0.013	O	|	|	|	0.09
72.917	0.00	0.01	0.013	O	|	|	|	0.09
73.000	0.00	0.01	0.013	O	|	|	|	0.09
73.083	0.00	0.01	0.013	O	|	|	|	0.09
73.167	0.00	0.01	0.013	O	|	|	|	0.09
73.250	0.00	0.01	0.013	O	|	|	|	0.09
73.333	0.00	0.01	0.013	O	|	|	|	0.09
73.417	0.00	0.01	0.013	O	|	|	|	0.08
73.500	0.00	0.01	0.013	O	|	|	|	0.08
73.583	0.00	0.01	0.013	O	|	|	|	0.08
73.667	0.00	0.01	0.013	O	|	|	|	0.08
73.750	0.00	0.01	0.013	O	|	|	|	0.08
73.833	0.00	0.01	0.012	O	|	|	|	0.08
73.917	0.00	0.01	0.012	O	|	|	|	0.08
74.000	0.00	0.01	0.012	O	|	|	|	0.08
74.083	0.00	0.01	0.012	O	|	|	|	0.08
74.167	0.00	0.01	0.012	O	|	|	|	0.08
74.250	0.00	0.01	0.012	O	|	|	|	0.08
74.333	0.00	0.01	0.012	O	|	|	|	0.08
74.417	0.00	0.01	0.012	O	|	|	|	0.08
74.500	0.00	0.01	0.012	O	|	|	|	0.08
74.583	0.00	0.01	0.012	O	|	|	|	0.08
74.667	0.00	0.01	0.012	O	|	|	|	0.08
74.750	0.00	0.01	0.012	O	|	|	|	0.08
74.833	0.00	0.01	0.011	O	|	|	|	0.08
74.917	0.00	0.01	0.011	O	|	|	|	0.08
75.000	0.00	0.01	0.011	O	|	|	|	0.07
75.083	0.00	0.01	0.011	O	|	|	|	0.07
75.167	0.00	0.01	0.011	O	|	|	|	0.07
75.250	0.00	0.01	0.011	O	|	|	|	0.07
75.333	0.00	0.01	0.011	O	|	|	|	0.07
75.417	0.00	0.01	0.011	O	|	|	|	0.07
75.500	0.00	0.01	0.011	O	|	|	|	0.07
75.583	0.00	0.01	0.011	O	|	|	|	0.07
75.667	0.00	0.01	0.011	O	|	|	|	0.07
75.750	0.00	0.01	0.011	O	|	|	|	0.07
75.833	0.00	0.01	0.011	O	|	|	|	0.07
75.917	0.00	0.01	0.011	O	|	|	|	0.07
76.000	0.00	0.01	0.010	O	|	|	|	0.07
76.083	0.00	0.01	0.010	O	|	|	|	0.07
76.167	0.00	0.01	0.010	O	|	|	|	0.07
76.250	0.00	0.01	0.010	O	|	|	|	0.07
76.333	0.00	0.01	0.010	O	|	|	|	0.07
76.417	0.00	0.01	0.010	O	|	|	|	0.07
76.500	0.00	0.01	0.010	O	|	|	|	0.07

76.583	0.00	0.01	0.010	O	|	|	|	0.07
76.667	0.00	0.01	0.010	O	|	|	|	0.07
76.750	0.00	0.01	0.010	O	|	|	|	0.06
76.833	0.00	0.01	0.010	O	|	|	|	0.06
76.917	0.00	0.01	0.010	O	|	|	|	0.06
77.000	0.00	0.01	0.010	O	|	|	|	0.06
77.083	0.00	0.01	0.010	O	|	|	|	0.06
77.167	0.00	0.01	0.010	O	|	|	|	0.06
77.250	0.00	0.01	0.009	O	|	|	|	0.06
77.333	0.00	0.01	0.009	O	|	|	|	0.06
77.417	0.00	0.01	0.009	O	|	|	|	0.06
77.500	0.00	0.01	0.009	O	|	|	|	0.06
77.583	0.00	0.01	0.009	O	|	|	|	0.06
77.667	0.00	0.01	0.009	O	|	|	|	0.06
77.750	0.00	0.01	0.009	O	|	|	|	0.06
77.833	0.00	0.01	0.009	O	|	|	|	0.06
77.917	0.00	0.01	0.009	O	|	|	|	0.06
78.000	0.00	0.01	0.009	O	|	|	|	0.06
78.083	0.00	0.01	0.009	O	|	|	|	0.06
78.167	0.00	0.01	0.009	O	|	|	|	0.06
78.250	0.00	0.01	0.009	O	|	|	|	0.06
78.333	0.00	0.01	0.009	O	|	|	|	0.06
78.417	0.00	0.01	0.009	O	|	|	|	0.06
78.500	0.00	0.01	0.009	O	|	|	|	0.06
78.583	0.00	0.01	0.009	O	|	|	|	0.06
78.667	0.00	0.01	0.008	O	|	|	|	0.06
78.750	0.00	0.01	0.008	O	|	|	|	0.06
78.833	0.00	0.01	0.008	O	|	|	|	0.06
78.917	0.00	0.01	0.008	O	|	|	|	0.05
79.000	0.00	0.01	0.008	O	|	|	|	0.05
79.083	0.00	0.01	0.008	O	|	|	|	0.05
79.167	0.00	0.01	0.008	O	|	|	|	0.05
79.250	0.00	0.01	0.008	O	|	|	|	0.05
79.333	0.00	0.01	0.008	O	|	|	|	0.05
79.417	0.00	0.01	0.008	O	|	|	|	0.05
79.500	0.00	0.01	0.008	O	|	|	|	0.05
79.583	0.00	0.01	0.008	O	|	|	|	0.05
79.667	0.00	0.01	0.008	O	|	|	|	0.05
79.750	0.00	0.01	0.008	O	|	|	|	0.05
79.833	0.00	0.01	0.008	O	|	|	|	0.05
79.917	0.00	0.01	0.008	O	|	|	|	0.05
80.000	0.00	0.01	0.008	O	|	|	|	0.05
80.083	0.00	0.01	0.008	O	|	|	|	0.05
80.167	0.00	0.01	0.008	O	|	|	|	0.05
80.250	0.00	0.01	0.007	O	|	|	|	0.05
80.333	0.00	0.01	0.007	O	|	|	|	0.05
80.417	0.00	0.01	0.007	O	|	|	|	0.05
80.500	0.00	0.01	0.007	O	|	|	|	0.05
80.583	0.00	0.01	0.007	O	|	|	|	0.05
80.667	0.00	0.01	0.007	O	|	|	|	0.05

80.750	0.00	0.01	0.007	O	|	|	|	0.05
80.833	0.00	0.01	0.007	O	|	|	|	0.05
80.917	0.00	0.01	0.007	O	|	|	|	0.05
81.000	0.00	0.01	0.007	O	|	|	|	0.05
81.083	0.00	0.01	0.007	O	|	|	|	0.05
81.167	0.00	0.01	0.007	O	|	|	|	0.05
81.250	0.00	0.01	0.007	O	|	|	|	0.05
81.333	0.00	0.01	0.007	O	|	|	|	0.05
81.417	0.00	0.01	0.007	O	|	|	|	0.04
81.500	0.00	0.01	0.007	O	|	|	|	0.04
81.583	0.00	0.01	0.007	O	|	|	|	0.04
81.667	0.00	0.01	0.007	O	|	|	|	0.04
81.750	0.00	0.01	0.007	O	|	|	|	0.04
81.833	0.00	0.01	0.007	O	|	|	|	0.04
81.917	0.00	0.01	0.007	O	|	|	|	0.04
82.000	0.00	0.01	0.007	O	|	|	|	0.04
82.083	0.00	0.01	0.006	O	|	|	|	0.04
82.167	0.00	0.01	0.006	O	|	|	|	0.04
82.250	0.00	0.01	0.006	O	|	|	|	0.04
82.333	0.00	0.01	0.006	O	|	|	|	0.04
82.417	0.00	0.01	0.006	O	|	|	|	0.04
82.500	0.00	0.01	0.006	O	|	|	|	0.04
82.583	0.00	0.01	0.006	O	|	|	|	0.04
82.667	0.00	0.01	0.006	O	|	|	|	0.04
82.750	0.00	0.01	0.006	O	|	|	|	0.04
82.833	0.00	0.01	0.006	O	|	|	|	0.04
82.917	0.00	0.01	0.006	O	|	|	|	0.04
83.000	0.00	0.01	0.006	O	|	|	|	0.04
83.083	0.00	0.01	0.006	O	|	|	|	0.04
83.167	0.00	0.01	0.006	O	|	|	|	0.04
83.250	0.00	0.01	0.006	O	|	|	|	0.04
83.333	0.00	0.01	0.006	O	|	|	|	0.04
83.417	0.00	0.01	0.006	O	|	|	|	0.04
83.500	0.00	0.01	0.006	O	|	|	|	0.04
83.583	0.00	0.01	0.006	O	|	|	|	0.04
83.667	0.00	0.01	0.006	O	|	|	|	0.04
83.750	0.00	0.01	0.006	O	|	|	|	0.04
83.833	0.00	0.01	0.006	O	|	|	|	0.04
83.917	0.00	0.01	0.006	O	|	|	|	0.04
84.000	0.00	0.01	0.006	O	|	|	|	0.04
84.083	0.00	0.01	0.006	O	|	|	|	0.04
84.167	0.00	0.01	0.005	O	|	|	|	0.04
84.250	0.00	0.01	0.005	O	|	|	|	0.04
84.333	0.00	0.01	0.005	O	|	|	|	0.04
84.417	0.00	0.01	0.005	O	|	|	|	0.04
84.500	0.00	0.01	0.005	O	|	|	|	0.04
84.583	0.00	0.01	0.005	O	|	|	|	0.03
84.667	0.00	0.01	0.005	O	|	|	|	0.03
84.750	0.00	0.01	0.005	O	|	|	|	0.03
84.833	0.00	0.00	0.005	O	|	|	|	0.03

84.917	0.00	0.00	0.005	O	|	|	|	0.03
85.000	0.00	0.00	0.005	O	|	|	|	0.03
85.083	0.00	0.00	0.005	O	|	|	|	0.03
85.167	0.00	0.00	0.005	O	|	|	|	0.03
85.250	0.00	0.00	0.005	O	|	|	|	0.03
85.333	0.00	0.00	0.005	O	|	|	|	0.03
85.417	0.00	0.00	0.005	O	|	|	|	0.03
85.500	0.00	0.00	0.005	O	|	|	|	0.03
85.583	0.00	0.00	0.005	O	|	|	|	0.03
85.667	0.00	0.00	0.005	O	|	|	|	0.03
85.750	0.00	0.00	0.005	O	|	|	|	0.03
85.833	0.00	0.00	0.005	O	|	|	|	0.03
85.917	0.00	0.00	0.005	O	|	|	|	0.03
86.000	0.00	0.00	0.005	O	|	|	|	0.03
86.083	0.00	0.00	0.005	O	|	|	|	0.03
86.167	0.00	0.00	0.005	O	|	|	|	0.03
86.250	0.00	0.00	0.005	O	|	|	|	0.03
86.333	0.00	0.00	0.005	O	|	|	|	0.03
86.417	0.00	0.00	0.005	O	|	|	|	0.03
86.500	0.00	0.00	0.005	O	|	|	|	0.03
86.583	0.00	0.00	0.005	O	|	|	|	0.03
86.667	0.00	0.00	0.004	O	|	|	|	0.03
86.750	0.00	0.00	0.004	O	|	|	|	0.03
86.833	0.00	0.00	0.004	O	|	|	|	0.03
86.917	0.00	0.00	0.004	O	|	|	|	0.03
87.000	0.00	0.00	0.004	O	|	|	|	0.03
87.083	0.00	0.00	0.004	O	|	|	|	0.03
87.167	0.00	0.00	0.004	O	|	|	|	0.03
87.250	0.00	0.00	0.004	O	|	|	|	0.03
87.333	0.00	0.00	0.004	O	|	|	|	0.03
87.417	0.00	0.00	0.004	O	|	|	|	0.03
87.500	0.00	0.00	0.004	O	|	|	|	0.03
87.583	0.00	0.00	0.004	O	|	|	|	0.03
87.667	0.00	0.00	0.004	O	|	|	|	0.03
87.750	0.00	0.00	0.004	O	|	|	|	0.03
87.833	0.00	0.00	0.004	O	|	|	|	0.03
87.917	0.00	0.00	0.004	O	|	|	|	0.03
88.000	0.00	0.00	0.004	O	|	|	|	0.03
88.083	0.00	0.00	0.004	O	|	|	|	0.03
88.167	0.00	0.00	0.004	O	|	|	|	0.03
88.250	0.00	0.00	0.004	O	|	|	|	0.03
88.333	0.00	0.00	0.004	O	|	|	|	0.03
88.417	0.00	0.00	0.004	O	|	|	|	0.03
88.500	0.00	0.00	0.004	O	|	|	|	0.03
88.583	0.00	0.00	0.004	O	|	|	|	0.03
88.667	0.00	0.00	0.004	O	|	|	|	0.03
88.750	0.00	0.00	0.004	O	|	|	|	0.03
88.833	0.00	0.00	0.004	O	|	|	|	0.02
88.917	0.00	0.00	0.004	O	|	|	|	0.02
89.000	0.00	0.00	0.004	O	|	|	|	0.02

89.083	0.00	0.00	0.004	O	|	|	|	0.02
89.167	0.00	0.00	0.004	O	|	|	|	0.02
89.250	0.00	0.00	0.004	O	|	|	|	0.02
89.333	0.00	0.00	0.004	O	|	|	|	0.02
89.417	0.00	0.00	0.004	O	|	|	|	0.02
89.500	0.00	0.00	0.004	O	|	|	|	0.02
89.583	0.00	0.00	0.004	O	|	|	|	0.02
89.667	0.00	0.00	0.004	O	|	|	|	0.02
89.750	0.00	0.00	0.004	O	|	|	|	0.02
89.833	0.00	0.00	0.003	O	|	|	|	0.02
89.917	0.00	0.00	0.003	O	|	|	|	0.02
90.000	0.00	0.00	0.003	O	|	|	|	0.02
90.083	0.00	0.00	0.003	O	|	|	|	0.02
90.167	0.00	0.00	0.003	O	|	|	|	0.02
90.250	0.00	0.00	0.003	O	|	|	|	0.02
90.333	0.00	0.00	0.003	O	|	|	|	0.02
90.417	0.00	0.00	0.003	O	|	|	|	0.02
90.500	0.00	0.00	0.003	O	|	|	|	0.02
90.583	0.00	0.00	0.003	O	|	|	|	0.02
90.667	0.00	0.00	0.003	O	|	|	|	0.02
90.750	0.00	0.00	0.003	O	|	|	|	0.02
90.833	0.00	0.00	0.003	O	|	|	|	0.02
90.917	0.00	0.00	0.003	O	|	|	|	0.02
91.000	0.00	0.00	0.003	O	|	|	|	0.02
91.083	0.00	0.00	0.003	O	|	|	|	0.02
91.167	0.00	0.00	0.003	O	|	|	|	0.02
91.250	0.00	0.00	0.003	O	|	|	|	0.02
91.333	0.00	0.00	0.003	O	|	|	|	0.02
91.417	0.00	0.00	0.003	O	|	|	|	0.02
91.500	0.00	0.00	0.003	O	|	|	|	0.02
91.583	0.00	0.00	0.003	O	|	|	|	0.02
91.667	0.00	0.00	0.003	O	|	|	|	0.02
91.750	0.00	0.00	0.003	O	|	|	|	0.02
91.833	0.00	0.00	0.003	O	|	|	|	0.02
91.917	0.00	0.00	0.003	O	|	|	|	0.02
92.000	0.00	0.00	0.003	O	|	|	|	0.02
92.083	0.00	0.00	0.003	O	|	|	|	0.02
92.167	0.00	0.00	0.003	O	|	|	|	0.02
92.250	0.00	0.00	0.003	O	|	|	|	0.02
92.333	0.00	0.00	0.003	O	|	|	|	0.02
92.417	0.00	0.00	0.003	O	|	|	|	0.02
92.500	0.00	0.00	0.003	O	|	|	|	0.02
92.583	0.00	0.00	0.003	O	|	|	|	0.02
92.667	0.00	0.00	0.003	O	|	|	|	0.02
92.750	0.00	0.00	0.003	O	|	|	|	0.02
92.833	0.00	0.00	0.003	O	|	|	|	0.02
92.917	0.00	0.00	0.003	O	|	|	|	0.02
93.000	0.00	0.00	0.003	O	|	|	|	0.02
93.083	0.00	0.00	0.003	O	|	|	|	0.02
93.167	0.00	0.00	0.003	O	|	|	|	0.02

93.250	0.00	0.00	0.003	O	|	|	|	0.02
93.333	0.00	0.00	0.003	O	|	|	|	0.02
93.417	0.00	0.00	0.003	O	|	|	|	0.02
93.500	0.00	0.00	0.003	O	|	|	|	0.02
93.583	0.00	0.00	0.003	O	|	|	|	0.02
93.667	0.00	0.00	0.003	O	|	|	|	0.02
93.750	0.00	0.00	0.003	O	|	|	|	0.02
93.833	0.00	0.00	0.003	O	|	|	|	0.02
93.917	0.00	0.00	0.003	O	|	|	|	0.02
94.000	0.00	0.00	0.003	O	|	|	|	0.02
94.083	0.00	0.00	0.002	O	|	|	|	0.02
94.167	0.00	0.00	0.002	O	|	|	|	0.02
94.250	0.00	0.00	0.002	O	|	|	|	0.02
94.333	0.00	0.00	0.002	O	|	|	|	0.02
94.417	0.00	0.00	0.002	O	|	|	|	0.02
94.500	0.00	0.00	0.002	O	|	|	|	0.02
94.583	0.00	0.00	0.002	O	|	|	|	0.02
94.667	0.00	0.00	0.002	O	|	|	|	0.02
94.750	0.00	0.00	0.002	O	|	|	|	0.02
94.833	0.00	0.00	0.002	O	|	|	|	0.02
94.917	0.00	0.00	0.002	O	|	|	|	0.02
95.000	0.00	0.00	0.002	O	|	|	|	0.02
95.083	0.00	0.00	0.002	O	|	|	|	0.02
95.167	0.00	0.00	0.002	O	|	|	|	0.02
95.250	0.00	0.00	0.002	O	|	|	|	0.01
95.333	0.00	0.00	0.002	O	|	|	|	0.01
95.417	0.00	0.00	0.002	O	|	|	|	0.01
95.500	0.00	0.00	0.002	O	|	|	|	0.01
95.583	0.00	0.00	0.002	O	|	|	|	0.01
95.667	0.00	0.00	0.002	O	|	|	|	0.01
95.750	0.00	0.00	0.002	O	|	|	|	0.01
95.833	0.00	0.00	0.002	O	|	|	|	0.01
95.917	0.00	0.00	0.002	O	|	|	|	0.01
96.000	0.00	0.00	0.002	O	|	|	|	0.01
96.083	0.00	0.00	0.002	O	|	|	|	0.01
96.167	0.00	0.00	0.002	O	|	|	|	0.01
96.250	0.00	0.00	0.002	O	|	|	|	0.01
96.333	0.00	0.00	0.002	O	|	|	|	0.01
96.417	0.00	0.00	0.002	O	|	|	|	0.01
96.500	0.00	0.00	0.002	O	|	|	|	0.01
96.583	0.00	0.00	0.002	O	|	|	|	0.01
96.667	0.00	0.00	0.002	O	|	|	|	0.01
96.750	0.00	0.00	0.002	O	|	|	|	0.01
96.833	0.00	0.00	0.002	O	|	|	|	0.01
96.917	0.00	0.00	0.002	O	|	|	|	0.01
97.000	0.00	0.00	0.002	O	|	|	|	0.01
97.083	0.00	0.00	0.002	O	|	|	|	0.01
97.167	0.00	0.00	0.002	O	|	|	|	0.01
97.250	0.00	0.00	0.002	O	|	|	|	0.01
97.333	0.00	0.00	0.002	O	|	|	|	0.01

97.417	0.00	0.00	0.002	O	|	|	|	0.01
97.500	0.00	0.00	0.002	O	|	|	|	0.01
97.583	0.00	0.00	0.002	O	|	|	|	0.01
97.667	0.00	0.00	0.002	O	|	|	|	0.01
97.750	0.00	0.00	0.002	O	|	|	|	0.01
97.833	0.00	0.00	0.002	O	|	|	|	0.01
97.917	0.00	0.00	0.002	O	|	|	|	0.01
98.000	0.00	0.00	0.002	O	|	|	|	0.01
98.083	0.00	0.00	0.002	O	|	|	|	0.01
98.167	0.00	0.00	0.002	O	|	|	|	0.01
98.250	0.00	0.00	0.002	O	|	|	|	0.01
98.333	0.00	0.00	0.002	O	|	|	|	0.01
98.417	0.00	0.00	0.002	O	|	|	|	0.01
98.500	0.00	0.00	0.002	O	|	|	|	0.01
98.583	0.00	0.00	0.002	O	|	|	|	0.01
98.667	0.00	0.00	0.002	O	|	|	|	0.01
98.750	0.00	0.00	0.002	O	|	|	|	0.01
98.833	0.00	0.00	0.002	O	|	|	|	0.01
98.917	0.00	0.00	0.002	O	|	|	|	0.01
99.000	0.00	0.00	0.002	O	|	|	|	0.01
99.083	0.00	0.00	0.002	O	|	|	|	0.01
99.167	0.00	0.00	0.002	O	|	|	|	0.01
99.250	0.00	0.00	0.002	O	|	|	|	0.01
99.333	0.00	0.00	0.002	O	|	|	|	0.01
99.417	0.00	0.00	0.002	O	|	|	|	0.01
99.500	0.00	0.00	0.002	O	|	|	|	0.01
99.583	0.00	0.00	0.002	O	|	|	|	0.01
99.667	0.00	0.00	0.002	O	|	|	|	0.01
99.750	0.00	0.00	0.002	O	|	|	|	0.01
99.833	0.00	0.00	0.002	O	|	|	|	0.01
99.917	0.00	0.00	0.002	O	|	|	|	0.01
100.000	0.00	0.00	0.002	O	|	|	|	0.01
100.083	0.00	0.00	0.002	O	|	|	|	0.01
100.167	0.00	0.00	0.002	O	|	|	|	0.01
100.250	0.00	0.00	0.002	O	|	|	|	0.01
100.333	0.00	0.00	0.002	O	|	|	|	0.01
100.417	0.00	0.00	0.002	O	|	|	|	0.01
100.500	0.00	0.00	0.001	O	|	|	|	0.01
100.583	0.00	0.00	0.001	O	|	|	|	0.01
100.667	0.00	0.00	0.001	O	|	|	|	0.01
100.750	0.00	0.00	0.001	O	|	|	|	0.01
100.833	0.00	0.00	0.001	O	|	|	|	0.01
100.917	0.00	0.00	0.001	O	|	|	|	0.01
101.000	0.00	0.00	0.001	O	|	|	|	0.01
101.083	0.00	0.00	0.001	O	|	|	|	0.01
101.167	0.00	0.00	0.001	O	|	|	|	0.01
101.250	0.00	0.00	0.001	O	|	|	|	0.01
101.333	0.00	0.00	0.001	O	|	|	|	0.01
101.417	0.00	0.00	0.001	O	|	|	|	0.01
101.500	0.00	0.00	0.001	O	|	|	|	0.01

101.583	0.00	0.00	0.001	O	|	|	|	|	0.01
101.667	0.00	0.00	0.001	O	|	|	|	|	0.01
101.750	0.00	0.00	0.001	O	|	|	|	|	0.01
101.833	0.00	0.00	0.001	O	|	|	|	|	0.01
101.917	0.00	0.00	0.001	O	|	|	|	|	0.01
102.000	0.00	0.00	0.001	O	|	|	|	|	0.01
102.083	0.00	0.00	0.001	O	|	|	|	|	0.01
102.167	0.00	0.00	0.001	O	|	|	|	|	0.01
102.250	0.00	0.00	0.001	O	|	|	|	|	0.01
102.333	0.00	0.00	0.001	O	|	|	|	|	0.01
102.417	0.00	0.00	0.001	O	|	|	|	|	0.01
102.500	0.00	0.00	0.001	O	|	|	|	|	0.01
102.583	0.00	0.00	0.001	O	|	|	|	|	0.01
102.667	0.00	0.00	0.001	O	|	|	|	|	0.01
102.750	0.00	0.00	0.001	O	|	|	|	|	0.01
102.833	0.00	0.00	0.001	O	|	|	|	|	0.01
102.917	0.00	0.00	0.001	O	|	|	|	|	0.01
103.000	0.00	0.00	0.001	O	|	|	|	|	0.01
103.083	0.00	0.00	0.001	O	|	|	|	|	0.01
103.167	0.00	0.00	0.001	O	|	|	|	|	0.01
103.250	0.00	0.00	0.001	O	|	|	|	|	0.01
103.333	0.00	0.00	0.001	O	|	|	|	|	0.01
103.417	0.00	0.00	0.001	O	|	|	|	|	0.01
103.500	0.00	0.00	0.001	O	|	|	|	|	0.01
103.583	0.00	0.00	0.001	O	|	|	|	|	0.01
103.667	0.00	0.00	0.001	O	|	|	|	|	0.01
103.750	0.00	0.00	0.001	O	|	|	|	|	0.01
103.833	0.00	0.00	0.001	O	|	|	|	|	0.01
103.917	0.00	0.00	0.001	O	|	|	|	|	0.01
104.000	0.00	0.00	0.001	O	|	|	|	|	0.01
104.083	0.00	0.00	0.001	O	|	|	|	|	0.01
104.167	0.00	0.00	0.001	O	|	|	|	|	0.01
104.250	0.00	0.00	0.001	O	|	|	|	|	0.01
104.333	0.00	0.00	0.001	O	|	|	|	|	0.01
104.417	0.00	0.00	0.001	O	|	|	|	|	0.01
104.500	0.00	0.00	0.001	O	|	|	|	|	0.01
104.583	0.00	0.00	0.001	O	|	|	|	|	0.01
104.667	0.00	0.00	0.001	O	|	|	|	|	0.01
104.750	0.00	0.00	0.001	O	|	|	|	|	0.01
104.833	0.00	0.00	0.001	O	|	|	|	|	0.01
104.917	0.00	0.00	0.001	O	|	|	|	|	0.01
105.000	0.00	0.00	0.001	O	|	|	|	|	0.01
105.083	0.00	0.00	0.001	O	|	|	|	|	0.01
105.167	0.00	0.00	0.001	O	|	|	|	|	0.01

Remaining water in basin = 0.00 (Ac.Ft)

**********HYDROGRAPH DATA**********

```
                Number of intervals =  1262
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =        0.192 (CFS)
                Total volume =       0.581 (Ac.Ft)
        Status of hydrographs being held in storage
                   Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
****************************************************************************

----------------------------------------------------------------------
```

Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet (also see instructions in Section G of the WQMP Template):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your WQMP Exhibit.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in your WQMP. Use the format shown in Table G.1on page 23 of this WQMP Template. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs for those shown here.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☒ A. **On-site storm drain inlets**	☒ **Locations of inlets.**	☒ **Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.**	☒ **Maintain and periodically repaint or replace inlet markings.** ☒ **Provide stormwater pollution prevention information to new site owners, lessees, or operators.** ☒ **See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** ☒ **Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."**
☐ B. **Interior floor drains and elevator shaft sump pumps**		☐ **State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.**	☐ **Inspect and maintain drains to prevent blockages and overflow.**
☐ C. **Interior parking garages**		☐ **State that parking garage floor drains will be plumbed to the sanitary sewer.**	☐ **Inspect and maintain drains to prevent blockages and overflow.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☐ D1. **Need for future indoor & structural pest control**		☐ **Note building design features that discourage entry of pests.**	☐ **Provide Integrated Pest Management information to owners, lessees, and operators.**
☒ D2. **Landscape/ Outdoor Pesticide Use**	☐ **Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained.** ☐ **Show self-retaining landscape areas, if any.** ☐ **Show stormwater treatment and hydrograph modification management BMPs. (See instructions in Chapter 3, Step 5 and guidance in Chapter 5.)**	**State that final landscape plans will accomplish all of the following.** ☒ **Preserve existing native trees, shrubs, and ground cover to the maximum extent possible.** ☒ **Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.** ☒ **Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions.** ☒ **Consider using pest-resistant plants, especially adjacent to hardscape.** **To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.**	☒ **Maintain landscaping using minimum or no pesticides.** ☒ **See applicable operational BMPs in "What you should know for…..Landscape and Gardening"** at http://rcflood.org/stormwater/**Error! Hyperlink reference not valid.** ☒ **Provide IPM information to new owners, lessees and operators.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ E. **Pools, spas, ponds, decorative fountains, and other water features.**	❑ **Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet. (Exception: Public pools must be plumbed according to County Department of Environmental Health Guidelines.)**	**If the Co-Permittee requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.**	❑ **See applicable operational BMPs in "**Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain" at http://rcflood.org/stormwater/
❑ F. **Food service**	❑ **For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment.** ❑ **On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.**	❑ **Describe the location and features of the designated cleaning area.** ❑ **Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.**	❑ **See the brochure, "**The Food Service Industry Best Management Practices for: Restaurants, Grocery Stores, Delicatessens and Bakeries" at http://rcflood.org/stormwater/ **Provide this brochure to new site owners, lessees, and operators.**
❑ G. **Refuse areas**	❑ **Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas.** ❑ **If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area.** ❑ **Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.**	❑ **State how site refuse will be handled and provide supporting detail to what is shown on plans.** ❑ **State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.**	❑ **State how the following will be implemented:** **Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ H. **Industrial processes.**	❑ **Show process area.**	❑ **If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."**	❑ **See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** See the brochure "Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities" at http://rcflood.org/stormwater/

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ I. **Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)**	❑ **Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area.** ❑ **Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults.** ❑ **Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.**	**Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains.** **Where appropriate, reference documentation of compliance with the requirements of Hazardous Materials Programs for:** ▪ **Hazardous Waste Generation** ▪ **Hazardous Materials Release Response and Inventory** ▪ **California Accidental Release (CalARP)** ▪ **Aboveground Storage Tank** ▪ **Uniform Fire Code Article 80 Section 103(b) & (c) 1991** ▪ **Underground Storage Tank** **www.cchealth.org/groups/hazmat/**	❑ **See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ J. **Vehicle and Equipment Cleaning**	❑ **Show on drawings as appropriate:** **(1) Commercial/industrial facilities having vehicle/equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses.** **(2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use).** **(3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer.** **(4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.**	❑ **If a car wash area is not provided, describe any measures taken to discourage on-site car washing and explain how these will be enforced.**	**Describe operational measures to implement the following (if applicable):** ❑ **Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system.** Refer to "Outdoor Cleaning Activities and Professional Mobile Service Providers" for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/ ❑**Car dealerships and similar may rinse cars with water only.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ K. **Vehicle/Equipment Repair and Maintenance**	❑ **Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater.** ❑ **Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas.** ❑ **Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.**	❑ **State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area.** ❑ **State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.** ❑ **State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.**	**In the Stormwater Control Plan, note that all of the following restrictions apply to use the site:** ❑ **No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains.** ❑ **No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.** ❑ **No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.** Refer to "Automotive Maintenance & Car Care Best Management Practices for Auto Body Shops, Auto Repair Shops, Car Dealerships, Gas Stations and Fleet Service Operations". Brochure can be found at http://rcflood.org/stormwater/ Refer to Outdoor Cleaning Activities and Professional Mobile Service Providers for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ L. **Fuel Dispensing Areas**	❑ **Fueling areas[6] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable.** ❑ **Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.**		❑ **The property owner shall dry sweep the fueling area routinely.** ❑ **See the Fact Sheet SD-30 , "Fueling Areas" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**

[6] **The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ M. **Loading Docks**	❑ **Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer.** ❑ **Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation.** ❑ **Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.**		❑ **Move loaded and unloaded items indoors as soon as possible.** ❑ **See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☐ N. **Fire Sprinkler Test Water**		☐ **Provide a means to drain fire sprinkler test water to the sanitary sewer.**	☐ **See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**
O. **Miscellaneous Drain or Wash Water or Other Sources** ☐ **Boiler drain lines** ☐ **Condensate drain lines** ☐ **Rooftop equipment** ☐ **Drainage sumps** ☒ **Roofing, gutters, and trim.** ☐ **Other sources**		☐ **Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system.** ☐ **Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system.** ☐ **Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment.** ☐ **Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water.** ☒ **Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.** **Include controls for other sources as specified by local reviewer.**	

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☒ P. **Plazas, sidewalks, and parking lots.**			☒ **Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.**

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms

(To be provided in Final Engineering)

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

(To be provided in Final Engineering)