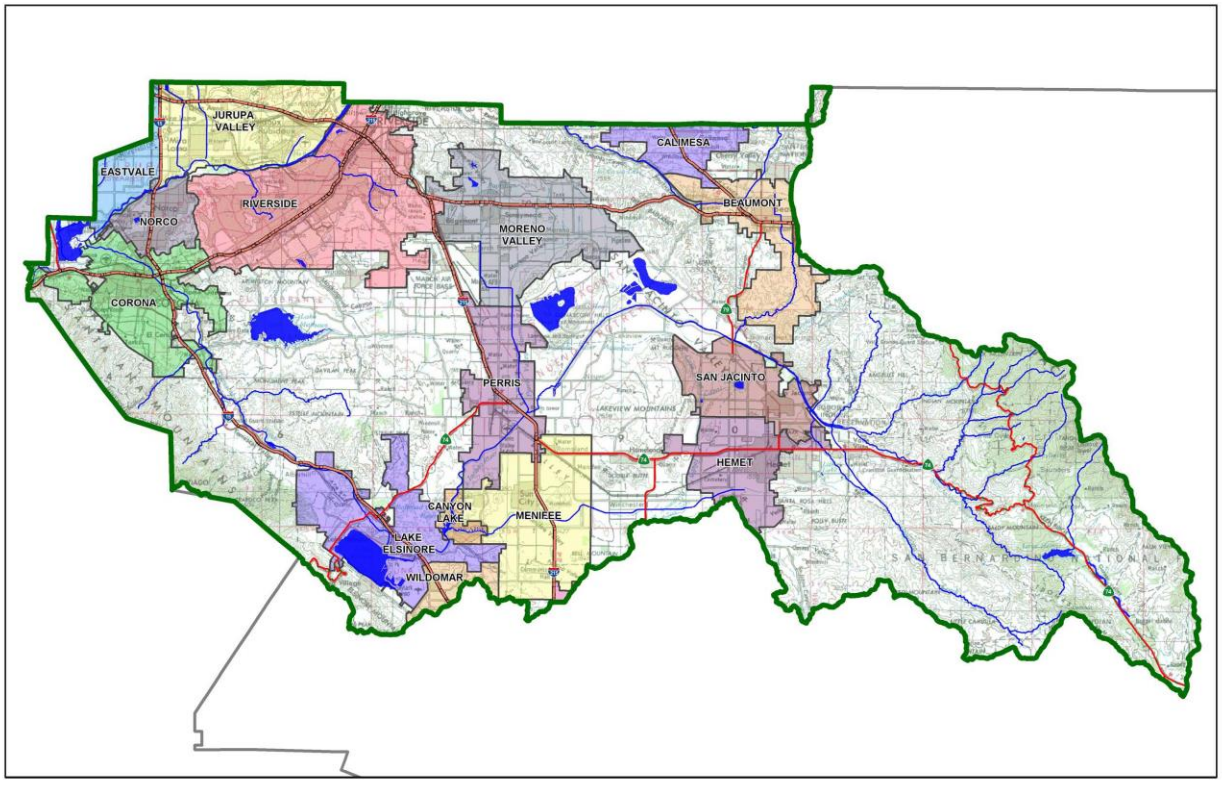
# Preliminary Project Specific Water Quality Management Plan

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

**Project Title:** Renaissance Ranch Commerce Center

**Development No:**

**Design Review/Case No:**




**JN. 280.894**

☒ **Preliminary**
☐ **Final**

**Original Date Prepared**: February 2022

**Revision Date(s)**:

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

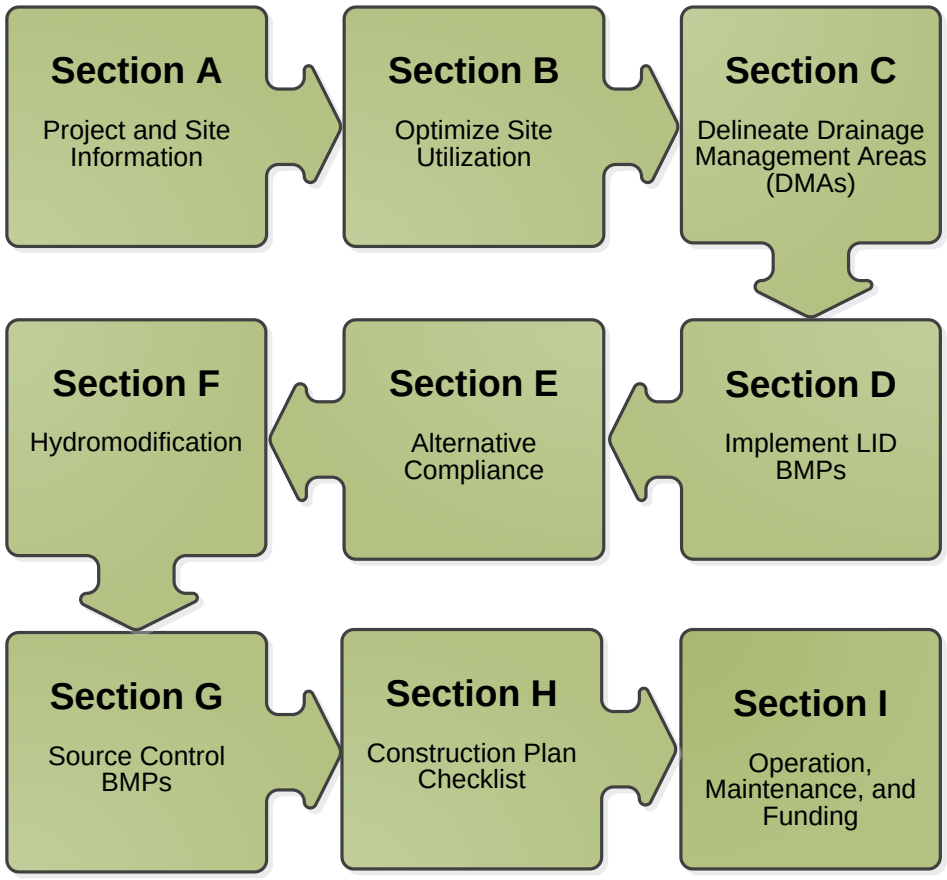
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## A Brief Introduction

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 **Richland Ventures, Inc. c/o Richland Communities** by **K&A Engineering, Inc.** for the **Renaissance Ranch Commerce Center Development** project.

This WQMP is intended to comply with the requirements of **County of Riverside** for Ordinance No. 754.2 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 under **County of Riverside** Water Quality Ordinance (Municipal Code Section 754.2).

"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 |
| Keith Osborn, P.E. | |
| 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: | Industrial and Business Park |
| Planning Area: | |
| Community Name: | Temescal Valley |
| Development Name: | Renaissance Ranch Commerce Center |
| **PROJECT LOCATION** | |
| Latitude & Longitude (DMS): N33°43'57.9468", W117°25'14.6604" (33.732763° & -117.420739°) | |
| Project Watershed and Sub-Watershed: Santa Ana River Watershed, Middle Santa Ana River Sub-Watershed. | |
| Gross Acres: 157.03 Acre | |
| APN(s): Recorded Tracts 31405, 31210-1, 31210-2 and 31210 | |
| Map Book and Page No.: | |
| **PROJECT CHARACTERISTICS** | |
| Proposed or Potential Land Use(s) | Industrial (PA-1)<br>Business Park (PA-2) |
| Proposed or Potential SIC Code(s) | N/A |
| Area of Impervious Project Footprint (SF) | Total Project: 157.03 ac<br>Industrial/business Park 91.0 ac<br>WQ/Detention basin: 5.3 ac |
| Total Area of proposed Impervious Surfaces within the Project Footprint (SF)/or Replacement | 3,567,564 sf – Roof, parking & street areas: (assume 90% impervious). |
| 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) | 0 |
| Is the project located within any MSHCP Criteria Cell? | ☒ Y ☐ N |
| If so, identify the Cell number: | 3748, 3647, 3648 |
| 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) | Majority Soil Type D |
| What is the Water Quality Design Storm Depth for the project? | D85 = 0.85 inches |

The project Renaissance Ranch Commerce Center is located in the vicinity of Horsethief Canyon Road in an unincorporated area of the County of Riverside. The project is located

along the south side of Interstate I-15 between Horsetheif Canyon Road and the Temescal Wash crossing of the I-15. The wash located to the north of I-15 is named Temescal Wash, and the southerly reach of this wash is named Alberhill Creek. The project is bounded on the south and much of the west by the existing residential development in the Horsethief Canyon Community. The proposed development will include the development of industrial pads and the business park as well as the associated roadway system, the associated parking areas, a detention basin, several mitigation basin areas and open space areas.
It should be noted that this property had previously been approved as a master planned residential community within the previously approved Renaissance Ranch Specific Plan. This previous residential development was actually taken to the point where grading plans, street plans, hydrologic/hydraulic studies, storm drain plans were all approved by the County and the actual residential final tract maps (31485, 31210-1, 31210-2 and 31210) were recorded. The development of the Renaissance Ranch Commerce Center will map over these previously approved and recorded maps and will provide new construction plans and documents.
The project is located at Latitude & Longitude N33°43'57.9468", W117°25'14.6604" (33.732763° & -117.420739°)

Proposed storm drains are to be maintained privately or in accordance with the cooperative agreement with the Riverside County Flood Control and Water Conservation District.

The POA shall maintain water quality basins, related landscaping, and open space drainage.

Water quality facilities that are constructed across lots shall be installed within a dedicated drainage easement.

The proposed project shall mitigate to prevent any flooding and/or erosion downstream caused by development of the site and/or diversion of drainage.

Proposed drainage facilities in this project shall be constructed to Riverside County Flood Control District Standards. Adequate and safe access for maintenance of detention/water quality basins shall be provided.

## Access

Access for construction activities will be located at entrance from Horsethief Canyon Road.
Following is a list of potential wastes/pollutants that may be generated on this site based upon the described use;

- Bacterial Indicators
- metals
- Nutrients
- Possible pesticides, fertilizers from landscape maintenance activities.
- Toxic Organic Compounds
- Sediments
- Trash and debris
- Oil and grease

Potential Pollutants by Land Use Type

| Priority Development | General Pollutant Categories |
|---|---|

| Project Categories and/or Project Features (check those that apply) | Bacterial Indicators | Metals | Nutrients | Pesticides | Toxic Organic Compounds | Sediments | Trash & Debris | Oil & Grease |
|---|---|---|---|---|---|---|---|---|
| ☐ Detached Residential Development | P | N | P | P | N | P | P | P |
| ☐ Attached Residential Development | P | N | P | P | N | P | P | P(2) |
| ☒ Commercial/Industrial Development | P(3) | P | P(1) | P(1) | P(5) | P(1) | P | P |
| ☐ Hillside Development (>5,000 ft²) | P | N | P | P | N | P | P | P |
| ☐ Parking Lots (>5,000 ft²) | P(6) | P | P(1) | P(1) | P(4) | P(1) | P | P |
| **Project Priority Pollutant(s) of Concern** | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ |

*P = Potential*

*N = Not Potential*

*(1) A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected*

*(2) A potential Pollutant if the project includes uncovered parking areas; otherwise not expected*

*(3) A potential Pollutant is land use involving animal waste*

*(4) Specifically petroleum hydrocarbons*

*(5) Specifically solvents*

*(6) Bacterial indicators are routinely detected in pavement runoff*

## A.1 Maps and Site Plans

When completing your Project-Specific WQMP, include a map of the local vicinity and existing site. In addition, include all grading, drainage, landscape/plant palette and other pertinent construction plans in Appendix 2. At a **minimum**, your WQMP Site Plan should include 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)

Use your discretion on whether or not you may need to create multiple sheets or can appropriately accommodate these features on one or two sheets. Keep in mind that the Co-Permittee plan reviewer must be able to easily analyze your project utilizing this template and its associated site plans and maps.

## 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 |
|---|---|---|---|
| Lee Lake | None | AGR, IND, GWR, REC1, REC2, WARM, WILD | Not a RARE water body |
| Temescal Creek Reach 2 | None | MUN, AGR, IND, GWR, REC1, REC2, WARM, WILD | Not a RARE water body |
| Temescal Creek Reach 1B | None | REC1, REC2, LWRM, WILD | Not a RARE water body |
| Temescal Creek Reach 1A | None | AGR, IND, GWR, REC1, REC2, WARM, WILD, RARE, SPWN | 17 miles |
| Temescal Creek | None | REC1, REC2, WARM, WILD, Intermittent-AGR, RARE, GWR, LWARM | 17 miles |
| Santa Ana River Reach 3 (HU# 801.21) | Copper, Lead, Pathogens | AGR, GWR, REC1, REC2, WARM, WILD, RARE, SPWN | 18 miles |
| Santa Ana River Reach 2 (HU# 801.13) | Indicator Bacteria | AGR, GWR, REC1, REC2, WARM, WILD, RARE, MUN, SPWN | 20 miles |
| | | | |

2014 and 2016 Integrated Report | Map | 303(d) List | References | Data Download | Contact Us

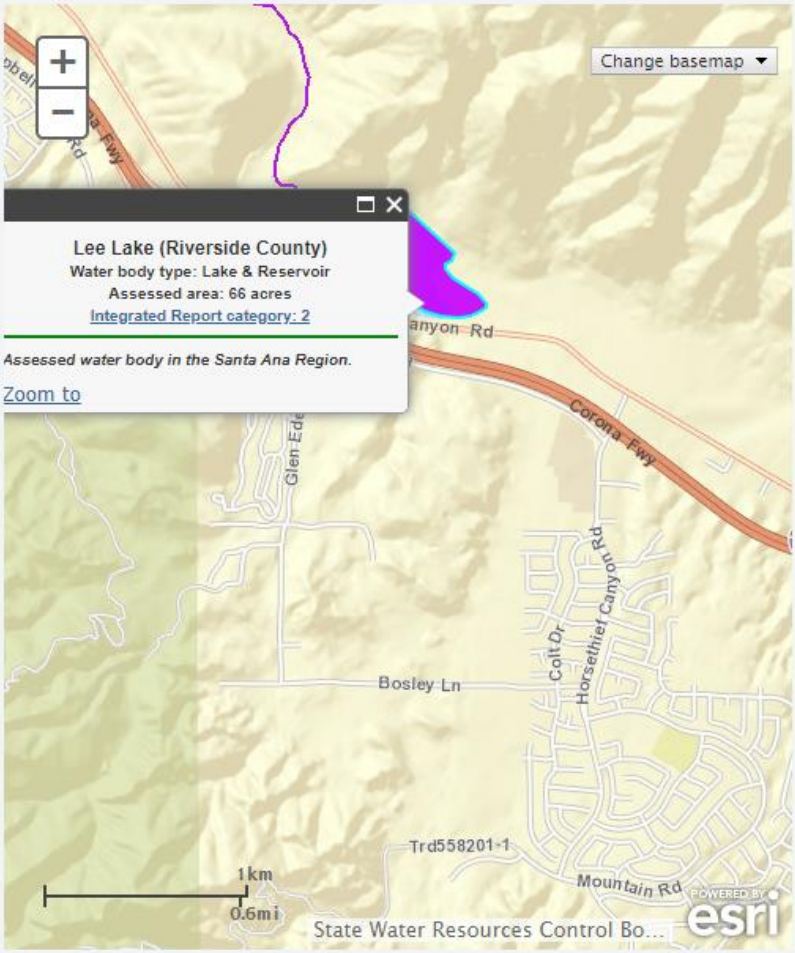
## 2014 AND 2016 INTEGRATED REPORT — ALL ASSESSED WATERS

Zoom to county: All
Show county

Zoom to Regional Board: All
Show Regional Board

Map Help

Zoom to water body: *(Filter: All)*
Filter list by: | Reset list




**Lee Lake (Riverside County)** Close
*Pollutant assessments*

| Pollutants | Listing Decision / Report Link / Potential Sources / Schedule / *Comments* |
|---|---|
| Aldrin | Do Not List on 303(d) list (TMDL required list)<br>62384<br>n/a |
| Chlordane | Do Not List on 303(d) list (TMDL required list)<br>62385<br>n/a |
| DDT (Dichlorodiphenyltrichloroethane) | Do Not List on 303(d) list (TMDL required list)<br>62397<br>n/a |
| Dieldrin | Do Not List on 303(d) list (TMDL required list)<br>62386<br>n/a |
| | Do Not List on 303(d) list (TMDL required list) |

## 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)*<br>Grading Permit, Building Permit, Caltrans encroachment, RCFC&WCD | ☒ 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.

**All applicable permits will be included in the Final WQMP when available.**

# Section B: Optimize Site Utilization (LID Principles)

Review of the information collected in Section 'A' will aid in identifying the principal constraints on site design and selection of LID BMPs as well as opportunities to reduce imperviousness and incorporate LID Principles into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, utility locations or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention BMPs), and differences in elevation (which can provide hydraulic head). Prepare a brief narrative for each of the site optimization strategies described below. This narrative will help you as you proceed with your LID design and explain your design decisions to others.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible. Therefore, it is important that your narrative identify and justify if there are any constraints that would prevent the use of those categories of LID BMPs. Similarly, you should also note opportunities that exist which will be utilized during project design. Upon completion of identifying Constraints and Opportunities, include these on your WQMP Site plan in Appendix 1.

Consideration of "highest and best use" of the discharge should also be considered. For example, Lake Elsinore is evaporating faster than runoff from natural precipitation can recharge it. Requiring infiltration of 85% of runoff events for projects tributary to Lake Elsinore would only exacerbate current water quality problems associated with Pollutant concentration due to lake water evaporation. In cases where rainfall events have low potential to recharge Lake Elsinore (i.e. no hydraulic connection between groundwater to Lake Elsinore, or other factors), requiring infiltration of Urban Runoff from projects is counterproductive to the overall watershed goals. Project proponents, in these cases, would be allowed to discharge Urban Runoff, provided they used equally effective filtration-based BMPs.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible

In addition to requiring implementation of LID BMPs, the MS4s Permit also prioritizes which LID BMPs should be used first.

1. Infiltrate,
2. Harvest and Use,
3. Evapotranspire,
4. Bio-Treatment and/or Bio-Retention

Within the permits it is recognized that LID principles are not universally applicable throughout Riverside County and that they are dependent on factors such as:

1. Soil conditions including soil compaction and permeability,
2. Groundwater levels,
3. Soil contaminants (Brownfield development),
4. Space restrictions (in-fill projects, redevelopment projects, high density development),
5. Highest and best use of Urban Runoff (to support downstream uses)

## 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?**

*The grading and drainage design of Renaissance Ranch project has been developed to maintain the natural discharge patterns as much as practical.*
*The project site is currently undeveloped areas. The entire project area is within the tributary of several Caltrans Culverts into Temescal Canyon Wash. These facilities intercept most of the surface flows from the south and have conveyed runoff from major storm flows.*

*The developed site will consist of buildings, dock areas, parking areas, detention basin areas, landscape areas and open space areas.*

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

*The terrain and natural drainage patterns were carefully considered in developing the design for Renaissance Ranch. The project is in undeveloped condition. There is no existing vegetation with respect to preservation of natural areas in this project which will be protected in place. However, the proposed design includes more than 10 percent landscape areas and open space areas.*

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

*Based on the finding of GeoSoils, Inc. in Supplemental Letter of Recommendations, Proposed Detention Basin and Response to RCFC&WCD Development Review for Supplement Slope Stability Analyses, proposed Biofilters and Detention Basins for previous Approved Tract 31210. And per Geotechnical update Report by Petra Geosciences, Inc. dated July 30, 2020.*

*The site does not present subsurface conditions favorable for infiltration of focused surface water. As such, they recommended that methods such as bio-treatment be utilized for WQMP purposed rather than active infiltration.*

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

*The project is proposed per Riverside County ordinances resulting in narrower streets and the option to minimize or eliminate sidewalks through most of the project.*

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

*The grading and drainage design of Renaissance Ranch has been developed to maintain the natural discharge patterns as much as practical. The proposed drainage plan will provide for construction of Extended Detention Basins as structural BMPs.*

*In the developed condition, runoff from impervious areas will be routed though pervious landscaping as best possible; 1. Runoff from rooftops will be routed to downspouts which outlet to landscaping as*

*opposed to outletting directly onto paved areas. 2. Landscaped will be used along some portions of parking areas to maximize pervious area on the site.*

*portions of sidewalk to maximize pervious area on the site. 3. Landscaped area within the residential layout will be used to disconnect paved areas as best possible.*

# Section C: Delineate Drainage Management Areas (DMAs)

Utilizing the procedure in Section 3.3 of the WQMP Guidance Document which discusses the methods of delineating and mapping your project site into individual DMAs, complete Table C.1 below to appropriately categorize the types of classification (e.g., Type A, Type B, etc.) per DMA for your project site. Upon completion of this table, this information will then be used to populate and tabulate the corresponding tables for their respective DMA classifications.

**Table C.1** DMA Classifications

| DMA Name or ID | Surface Type(s)[1][2] | Area (Sq. Ft.) | DMA Type |
|---|---|---|---|
| | | | |
| DMA Area A1 | Existing areas | 11.46 Ac | - |
| DMA Area A2 | Industrial use | 9.9 Ac (431,244 sqft) | "D" to BMP-A2 |
| DMA Area A3(B1b) | Industrial use | 9.12 Ac (397,267 sqft) | "D" to BMP-A3(B1b) |
| | | | |
| DMA Area B1a | Industrial use | 5.45 Ac (237,402 sqft) | "D" to BMP-B1a |
| DMA Area B2 | Industrial use | 42.59 Ac(1,855,220 sqft) | "D" to BMP-B2 |
| DMA Area B3 | Existing area | 1.59 Ac | - |
| DMA Area B4 | Industrial use | 25.28 Ac (1,101,197 sqft) | "D" to BMP-B4 |
| DMA Area B5/6 | Industrial use | 13.56 Ac (590,674 sqft) | "D" to BMP-B5/6 |
| | | | |

[1]*Reference Table 2-1 in the WQMP Guidance Document to populate this column*
[2]*If multi-surface provide back-up*

**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 'C' 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 | [C] from Table C.4 = [C] | Required Retention Depth (inches) [D] |
| N/A | | | | | | |
| | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |

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

**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 |
|---|---|
| DMA Area A2 | BMP-A2: WQ Extended Detention Basin |
| DMA Area A3 (B1b) | BMP-B1b: WQ Extended Detention Basin |
| | |
| DMA Area B1 | BMP-B1a: WQ Extended Detention Basin |
| DMA Area B2 | BMP-B2: WQ Extended Detention Basin |
| DMA Area B4 | BMP-B4: WQ Extended Detention Basin |
| DMA Area B5/6 | BMP-B5/6: WQ Extended Detention Basin |
| | |

*Note: More than one drainage management area can drain to a single LID BMP, however, one drainage management area may not drain to more than one BMP.*

# 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

If yes has been checked, Infiltration BMPs shall not be used for the site; proceed to section D.3

If no, continue working through this section to implement your LID BMPs. It is recommended that you contact your Co-Permittee to verify whether or not your project discharges to an approved downstream 'Highest and Best Use' feature.

### Geotechnical Report

A Geotechnical Report or Phase I Environmental Site Assessment may be required by the Copermittee to confirm present and past site characteristics that may affect the use of Infiltration BMPs. In addition, the Co-Permittee, at their discretion, may not require a geotechnical report for small projects as described in Chapter 2 of the WQMP Guidance Document. If a geotechnical report has been prepared, include it in Appendix 3. In addition, if a Phase I Environmental Site Assessment has been prepared, include it in Appendix 4.

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 below is meant to provide a simple means of assessing which DMAs on your site support Infiltration BMPs and is discussed in the WQMP Guidance Document in Chapter 2.4.5. Check the appropriate box for each question and then list affected DMAs as applicable. If additional space is needed, add a row below the corresponding answer.

**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 are in poor infiltration rate.*** | | |
| …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: Describe here: Based on the finding of GeoSoils, Inc. in Supplemental Letter of Recommendations, Proposed Detention Basin and Response to RCFC&WCD Development Review for Supplement Slope Stability Analyses, proposed Biofilters and Detention Basins for previous Approved Tract 31210 confirmed that the project site does not present subsurface conditions favorable for infiltration of focused surface water. As such, they recommended that methods such as bio-filtration be utilized for WQMP purposed rather than active | | |

| | | |
|---|---|---|
| infiltration. And per Geotechnical update Report by Petra Geosciences, Inc. dated July 30, 2020. | | |

If you answered “Yes” to any of the questions above for any DMA, Infiltration BMPs should not be used for those DMAs and you should proceed to the assessment for Harvest and Use below.

## 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.

If any of the above boxes have been checked, Harvest and Use BMPs need not be assessed for the site. If none of the above criteria applies, follow the steps below to assess the feasibility of irrigation use, toilet use and other non-potable uses (e.g., industrial use).

### Irrigation Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for Irrigation Use BMPs on your site:

Step 1: Identify the total area of irrigated landscape on the site, and the type of landscaping used.

*Total Area of Irrigated Landscape*: Insert Area (Acres)

*Type of Landscaping (Conservation Design or Active Turf)*: List Landscaping Type

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for irrigation use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

*Total Area of Impervious Surfaces:* Insert Area (Acres)

Step 3: Cross reference the Design Storm depth for the project site (see Exhibit A of the WQMP Guidance Document) with the left column of Table 2-3 in Chapter 2 to determine the minimum area of Effective Irrigated Area per Tributary Impervious Area (EIATIA).

*Enter your EIATIA factor*: EIATIA Factor

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum irrigated area that would be required.

*Minimum required irrigated area*: Insert Area (Acres)

Step 5: Determine if harvesting stormwater runoff for irrigation use is feasible for the project by comparing the total area of irrigated landscape (Step 1) to the minimum required irrigated area (Step 4).

| Minimum required irrigated area (Step 4) | Available Irrigated Landscape (Step 1) |
|---|---|
| Insert Area (Acres) | Insert Area (Acres) |

## Toilet Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for toilet flushing uses on your site:

Step 1: Identify the projected total number of daily toilet users during the wet season, and account for any periodic shut downs or other lapses in occupancy:

*Projected Number of Daily Toilet Users: Number of daily Toilet Users*

*Project Type: Enter 'Residential', 'Commercial', 'Industrial' or 'Schools'*

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for toilet use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

*Total Area of Impervious Surfaces: Insert Area (Acres)*

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-2 in Chapter 2 to determine the minimum number or toilet users per tributary impervious acre (TUTIA).

*Enter your TUTIA factor: TUTIA Factor*

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of toilet users that would be required.

*Minimum number of toilet users: Required number of toilet users*

Step 5: Determine if harvesting stormwater runoff for toilet flushing use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

| **Minimum required Toilet Users (Step 4)** | **Projected number of toilet users (Step 1)** |
|---|---|
| Insert Area (Acres) | Insert Area (Acres) |

## 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.

Insert narrative description here.

Step 1: Identify the projected average daily non-potable demand, in gallons per day, during the wet season and accounting for any periodic shut downs or other lapses in occupancy or operation.

*Average Daily Demand: Projected Average Daily Use (gpd)*

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for the identified non-potable use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

*Total Area of Impervious Surfaces: Insert Area (Acres)*

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-4 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

*Enter the factor from Table 2-4: Enter Value*

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of gallons per day of non-potable use that would be required.

*Minimum required use: Minimum use required (gpd)*

Step 5: Determine if harvesting stormwater runoff for other non-potable use is feasible for the project by comparing the projected average daily use (Step 1) to the minimum required non-potable use (Step 4).

| **Minimum required non-potable use (Step 4)** | **Projected average daily use (Step 1)** |
|---|---|
| Minimum use required (gpd) | Projected Average Daily Use (gpd) |

If Irrigation, Toilet and Other Use feasibility anticipated demands are less than the applicable minimum values, Harvest and Use BMPs are not required and you should proceed to utilize LID Bioretention and Biotreatment per Section 3.4.2 of the WQMP Guidance Document.

## 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.

The 2010 SAR MS4 Permit further requires that LID Retention BMPs (Infiltration or Harvest and Use) be used unless it can be shown that those BMPs are infeasible.

***Since project proposed BMPs, Extended Detention Basin to satisfy LID performance criteria, therefore Bio-retention and Bio-treatment control performance criteria is also fully satisfied as well.***

## D.4 Feasibility Assessment Summaries

From the Infiltration, Harvest and Use, Bioretention and Biotreatment Sections above, complete Table D.2 below to summarize which LID BMPs are technically feasible, and which are not, based upon the established hierarchy.

**Table D.2** LID Prioritization Summary Matrix

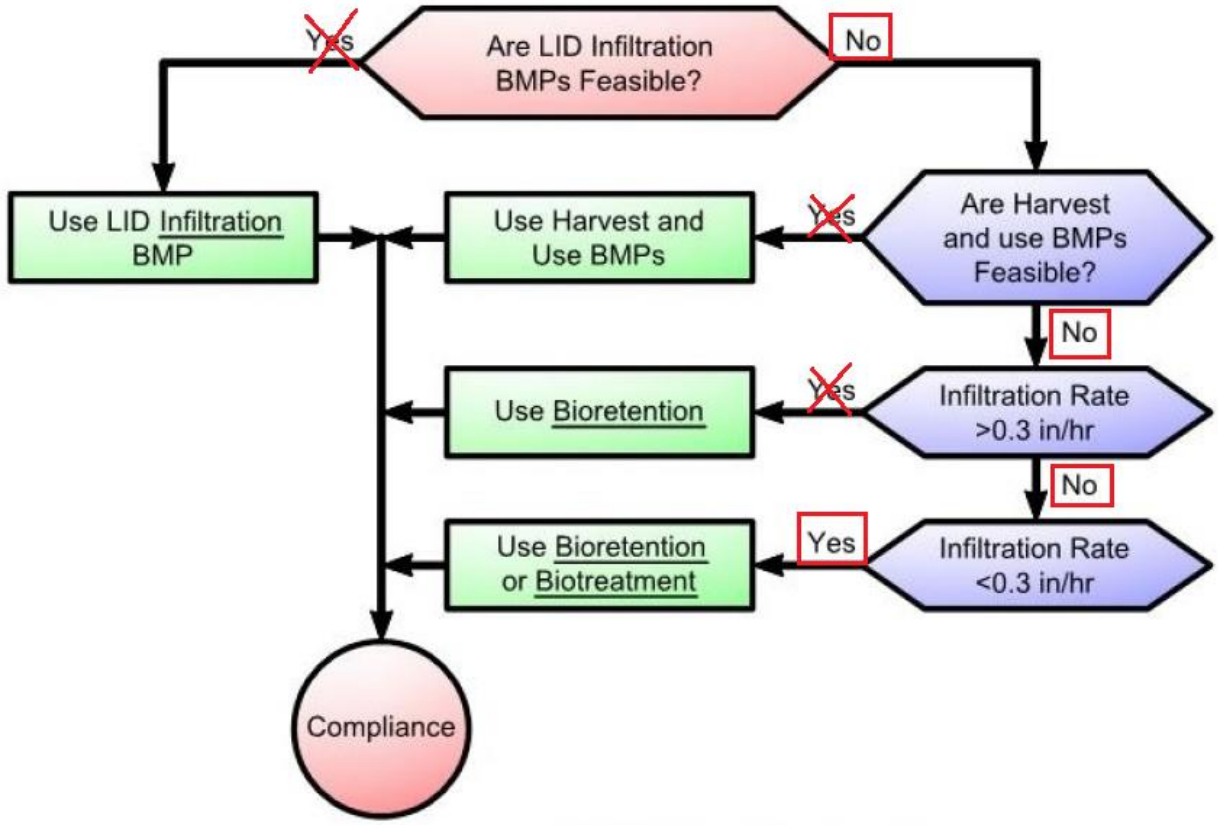
| DMA Name/ID | LID BMP Hierarchy | | | | No LID (Alternative Compliance) |
|---|---|---|---|---|---|
| | 1. Infiltration | 2. Harvest and use | 3. Bioretention | 4. Biotreatment | |
| DMA Area A2 | ☐ | ☐ | ☐ | ☒ | ☐ |
| DMA Area A3(B1b) | ☐ | ☐ | ☐ | ☒ | ☐ |
| | ☐ | ☐ | ☐ | ☐ | ☐ |
| DMA Area B1a | ☐ | ☐ | ☐ | ☒ | ☐ |
| DMA Area B2 | ☐ | ☐ | ☐ | ☒ | ☐ |
| DMA Area B4 | ☐ | ☐ | ☐ | ☒ | ☐ |
| DMA Area B5/6 | ☐ | ☐ | ☐ | ☒ | ☐ |
| | ☐ | ☐ | ☐ | ☐ | ☐ |

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.

*Based on the finding of GeoSoils, Inc. in Supplemental Letter of Recommendations, Proposed Detention Basin and Response to RCFC&WCD Development Review for Supplement Slope Stability Analyses, proposed Biofilters and Detention Basins for previous Approved Tract 31210.*

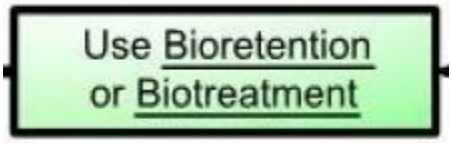
*The site does not present subsurface conditions favorable for infiltration of focused surface water. As such, they recommended that methods such as bio-treatment be utilized for WQMP purposed rather than active infiltration.*

*The Renaissance Ranch Commerce Center Water Quality Treatment Control BMP is Extended Detention Basins, surface storage and an earthen hole (or void) in the ground that capture, control and treat the required Design Capture Volume (DCV) for each LID BMP using the $V_{BMP}$ calculated in the WQMP prior outlet away from the project site. It functions by capturing, filtering and temporarily detaining surface runoff from storm events, non-storm events, and urban nuisance flows. With regular maintenance, these basins (surface or underground) should drain by natural gravity flow.*




LID BMP Feasibility Flow Chart

*Based on LID BMP Prioritization, for alternate BMPs situated in poor or no infiltration rate; Extended Detention Basin was selected as the most appropriate treatment BMPs.*




## D.5 LID BMP Sizing

Each LID BMP must be designed to ensure that the Design Capture Volume will be addressed by the selected BMPs. First**,** calculate the Design Capture Volume for each LID BMP using the $V_{BMP}$ worksheet in Appendix F of the LID BMP Design Handbook. Second**,** design the LID BMP to meet the required $V_{BMP}$ using a method approved by the Copermittee. Utilize the worksheets found in the LID BMP Design Handbook or consult with your Copermittee to assist you in correctly sizing your LID BMPs. Complete Table D.3 below to document the Design Capture Volume and the Proposed Volume for each LID BMP. Provide the completed design procedure sheets for each LID BMP in Appendix 6. You may add additional rows to the table below as needed.

**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 | *Enter BMP Name / Identifier Here* | | |
|---|---|---|---|---|---|---|---|---|
| | [A] | | [B] | [C] | [A] x [C] | | | |
| ***See*** | | | | | | *Design Storm Depth (in)* | *Design Capture Volume,* $\mathbf{V_{BMP}}$ *(cubic feet)* | *Proposed Volume on Plans (cubic feet)* |
| ***Appendix*** | | | | | | | | |
| ***6*** | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | $A_T = \Sigma[A]$ | | | | $\Sigma = [D]$ | [E] | $[F] = \frac{[D]x[E]}{12}$ | [G] |

[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

See complete calculations 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.

# E.1 Identify Pollutants of Concern

Utilizing Table A.1 from Section A above which noted your project's receiving waters and their associated EPA approved 303(d) listed impairments, cross reference this information with that of your selected Priority Development Project Category in Table E.1 below. If the identified General Pollutant Categories are the same as those listed for your receiving waters, then these will be your Pollutants of Concern and the appropriate box or boxes will be checked on the last row. The purpose of this is to document compliance and to help you appropriately plan for mitigating your Pollutants of Concern in lieu of implementing LID BMPs.

**Table E.1** Potential Pollutants by Land Use Type

| Priority Development Project Categories and/or Project Features (check those that apply) | General Pollutant Categories | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Bacterial Indicators | Metals | Nutrients | Pesticides | Toxic Organic Compounds | Sediments | Trash & Debris | Oil & Grease |
| ☐ Detached Residential Development | P | N | P | P | N | P | P | P |
| ☐ Attached Residential Development | P | N | P | P | N | P | P | P(2) |
| ☐ Commercial/Industrial Development | P(3) | P | P(1) | P(1) | P(5) | P(1) | P | P |
| ☐ Automotive Repair Shops | N | P | N | N | P(4, 5) | N | P | P |
| ☐ Restaurants (>5,000 ft$^2$) | P | N | N | N | N | N | P | P |
| ☐ Hillside Development (>5,000 ft$^2$) | P | N | P | P | N | P | P | P |
| ☐ Parking Lots (>5,000 ft$^2$) | P(6) | P | P(1) | P(1) | P(4) | P(1) | P | P |
| ☐ Retail Gasoline Outlets | N | P | N | N | P | N | P | P |
| **Project Priority Pollutant(s) of Concern** | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

*P = Potential*

*N = Not Potential*

*(1) A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected*

*(2) A potential Pollutant if the project includes uncovered parking areas; otherwise not expected*

*(3) A potential Pollutant is land use involving animal waste*

*(4) Specifically petroleum hydrocarbons*

*(5) Specifically solvents*

*(6) Bacterial indicators are routinely detected in pavement runoff*

## E.2 Stormwater Credits

Projects that cannot implement LID BMPs but nevertheless implement smart growth principles are potentially eligible for Stormwater Credits. Utilize Table 3-8 within the WQMP Guidance Document to identify your Project Category and its associated Water Quality Credit. If not applicable, write N/A.

**Table E.2** Water Quality Credits

| Qualifying Project Categories | Credit Percentage[2] |
|---|---|
| N/A | |
| | |
| | |
| *Total Credit Percentage*[1] | |

[1]*Cannot Exceed 50%*
[2]*Obtain corresponding data from Table 3-8 in the WQMP Guidance Document*

## E.3 Sizing Criteria

After you appropriately considered Stormwater Credits for your project, utilize Table E.3 below to appropriately size them to the DCV, or Design Flow Rate, as applicable. Please reference Chapter 3.5.2 of the WQMP Guidance Document for further information.

**Table E.3** Treatment Control BMP Sizing

| **DMA Type/ID** | **DMA Area (square feet)** | **Post-Project Surface Type** | **Effective Impervious Fraction, $I_f$** | **DMA Runoff Factor** | **DMA Area x Runoff Factor** | | ***Enter BMP Name / Identifier Here*** | | |
|---|---|---|---|---|---|---|---|---|---|
| | [A] | | [B] | [C] | [A] x [C] | | | | |
| N/A | | | | | | *Design Storm Depth (in)* | *Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)* | *Total Storm Water Credit % Reduction* | *Proposed Volume or Flow on Plans (cubic feet or cfs)* |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | $A_T$ = Σ[A] | | | | Σ= [D] | [E] | $[F] = \frac{[D]x[E]}{[G]}$ | [F] X (1-[H]) | [I] |

[B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document
[E] is for Flow-Based Treatment Control BMPs [E] = .2, for Volume-Based Control Treatment BMPs, [E] obtained from Exhibit A in the WQMP Guidance Document
[G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12
[H] is from the Total Credit Percentage as Calculated from Table E.2 above
[I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

## E.4 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High**: equal to or greater than 80% removal efficiency
- **Medium**: between 40% and 80% removal efficiency

Such removal efficiency documentation (e.g., studies, reports, etc.) as further discussed in Chapter 3.5.2 of the WQMP Guidance Document, must be included in Appendix 6. In addition, ensure that proposed Treatment Control BMPs are properly identified on the WQMP Site Plan in Appendix 1.

**Table E.4** Treatment Control BMP Selection

| Selected Treatment Control BMP Name or ID[1] | Priority Pollutant(s) of Concern to Mitigate[2] | Removal Efficiency Percentage[3] |
|---|---|---|
| N/A | | |
| | | |
| | | |
| | | |

*[1] Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.*

*[2] Cross Reference Table E.1 above to populate this column.*

*[3] As documented in a Co-Permittee Approved Study and provided in Appendix 6.*

# 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

| | 2 year – 24 hour | | |
|---|---|---|---|
| | **Pre-condition** | **Post-condition** | **% Difference** |
| **Time of Concentration** | INSERT VALUE | INSERT VALUE | INSERT VALUE |
| **Volume (Cubic Feet)** | INSERT VALUE | INSERT VALUE | INSERT VALUE |

[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.

Be sure to include all pertinent documentation used in your analysis of the items a, b or c in Appendix 7.

**The project site is within an Applicable Area with the downstream being a potentially Susceptible Stream Channel, therefore HCOC mitigation will be provided.**

**See below:**

**Summary of Hydrographs and Basin Routing for HCOC mitigation:**

**Drainage Area A-2a – existing (9.9 Ac), proposed (9.9 Ac)**

| **Storm Frequency** | **Existing** $Q_2$ (cfs) | **Proposed** $Q_2$ (cfs) | **Det. Basin Outlet** | **Different** **[2] – [1]** | **Different** **[2] – [1]** |
|---|---|---|---|---|---|

| | **[1]** | | $Q_2$ (cfs) **[2]** | (cfs) | (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.29 | 2.38 | 0.27 | -0.02 | -6.9% |

**Drainage Area B1a – existing (5.45 Ac), proposed (5.45 Ac)**

| **Storm Frequency** | **Existing** $Q_2$ (cfs) **[1]** | **Proposed** $Q_2$ (cfs) | **Det. Basin Outlet** $Q_2$ (cfs) **[2]** | **Different [2] – [1]** (cfs) | **Different [2] – [1]** (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.16 | 1.31 | 0.15 | -0.01 | -6.2% |

**Drainage Area B2a – existing (42.59 Ac), proposed (42.59 Ac)**

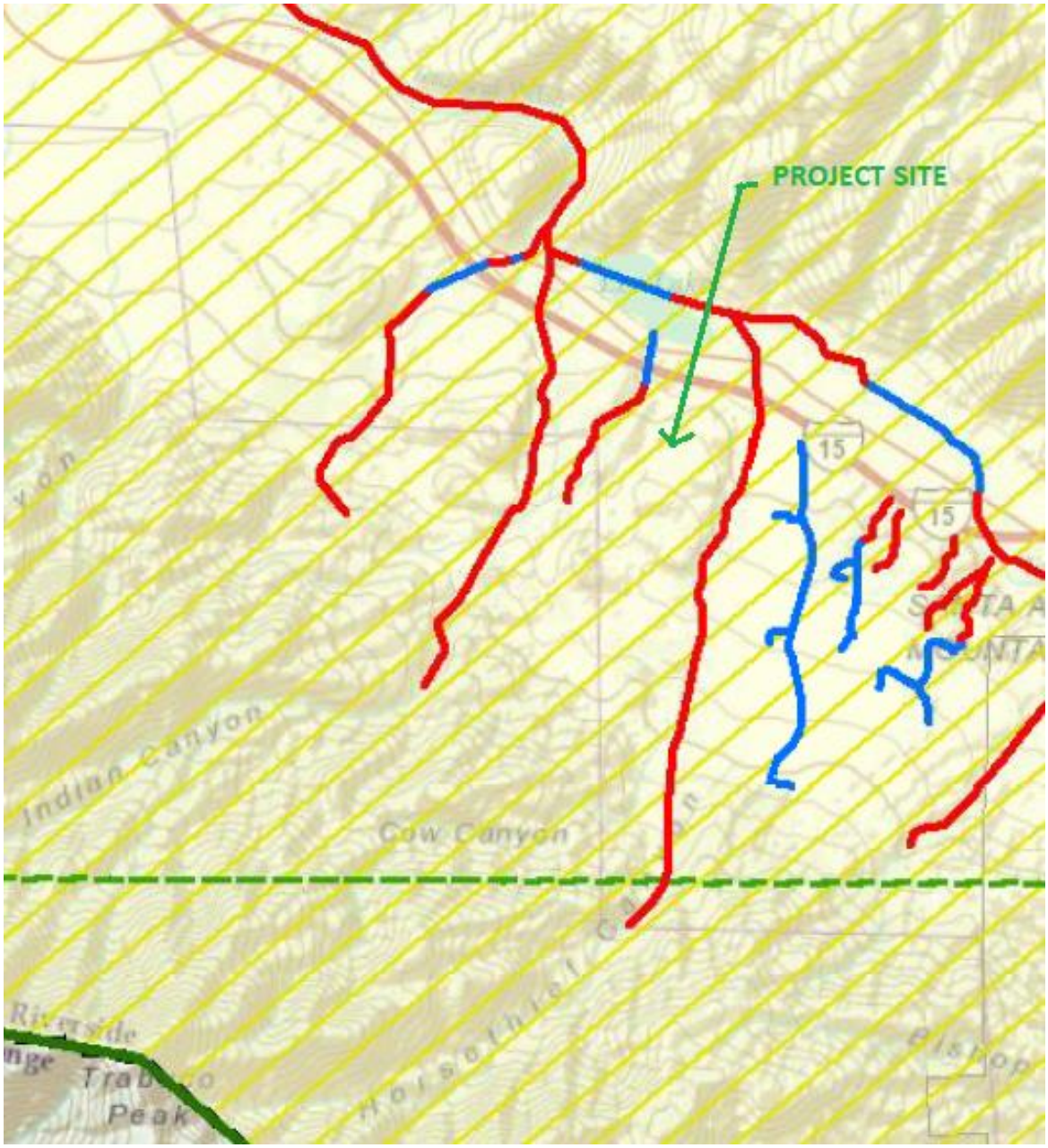
| **Storm Frequency** | **Existing** $Q_2$ (cfs) **[1]** | **Proposed** $Q_2$ (cfs) | **Det. Basin Outlet** $Q_2$ (cfs) **[2]** | **Different [2] – [1]** (cfs) | **Different [2] – [1]** (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 1.24 | 10.22 | 1.15 | -0.09 | -7.2% |

**Drainage Area B4a – existing (25.28 Ac), proposed (25.28 Ac)**

| **Storm Frequency** | **Existing** $Q_2$ (cfs) **[1]** | **Proposed** $Q_2$ (cfs) | **Det. Basin Outlet** $Q_2$ (cfs) **[2]** | **Different [2] – [1]** (cfs) | **Different [2] – [1]** (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.73 | 6.07 | 0.78 | 0.05 | 6.8% |

**Drainage Area B5a – existing (13.56 Ac), proposed (13.56 Ac)**

| **Storm Frequency** | **Existing** $Q_2$ (cfs) **[1]** | **Proposed** $Q_2$ (cfs) | **Det. Basin Outlet** $Q_2$ (cfs) **[2]** | **Different [2] – [1]** (cfs) | **Different [2] – [1]** (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.40 | 3.26 | 0.37 | -0.03 | -7.5% |




*Legend*

**Stream Type**
- Not Susceptible Stream Channels
- Potentially Susceptible Stream Channels
- Large River (Not Susceptible)
- Santa Ana River
- Adequate Sump

**Watershed Areas**
- Not Applicable Area
- Applicable Area
- Applicable Area Watershed Boundaries

- Flood Control and Water Conservation District Boundary
- Study Area
- County Boundary

# HCOC Applicability Map

Hydromodification Susceptibility Documentation Report and Mapping
Riverside County Flood Control and Water Conservation District

Based on the information provided above, this project meets the requirements of **Condition C** and **will not** create a hydrologic condition of concern in the proximate or downstream receiving waters. The post-development hydrograph for the 2-year, 24-hour rainfall event will be mitigated by the implementation of Site Design BMPs to limit discharges to a flow rate no greater than 110% of pre-development 2-year flow.

Project development and street improvements include local storm drain systems which convey developed flows and street runoff to a number of proposed Infiltration Basin. For Hydromodification, the proposed Infiltration Basin include sufficient volume above the proposed Infiltration Basin with Infiltration Basin, that will satisfy the requirement of post-development peak discharge, volume and time of concentration for the 2-year 24-hour storm that DOES NOT exceed the pre-development peak runoff by more than 10 percent.

The proposed project Infiltration Basin is capable of all of the following:

1. Releasing the post-development hydrograph for 2-year, 24-hour at flow rates less than or equal to the pre-development 2-year, 24-hour peak flow rates.
2. Passing the 100-year storm event without damage to the BMP.
3. Controlling outlet velocities such that downstream erosion and habitat loss are minimized.

**Supporting calculations can be found in the reference locations provided in Appendix 7 of this report.**

With proposed mitigation, this project **is not** potentially susceptible to hydromodification impacts, an HCOC does not exist and hydromodification **does not** need to be considered further.

# Section G: Source Control BMPs

Source control BMPs include permanent, structural features that may be required in your project plans — such as roofs over and berms around trash and recycling areas — and Operational BMPs, such as regular sweeping and "housekeeping", that must be implemented by the site's occupant or user. The MEP standard typically requires both types of BMPs. In general, Operational BMPs cannot be substituted for a feasible and effective permanent BMP. Using the Pollutant Sources/Source Control Checklist in Appendix 8, review the following procedure to specify Source Control BMPs for your site:

1. ***Identify Pollutant Sources*:** Review Column 1 in the Pollutant Sources/Source Control Checklist. Check off the potential sources of Pollutants that apply to your site.

2. ***Note Locations on Project-Specific WQMP Exhibit*:** Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist. Show the location of each Pollutant source and each permanent Source Control BMP in your Project-Specific WQMP Exhibit located in Appendix 1.

3. ***Prepare a Table and Narrative*:** Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist. In the left column of Table G.1 below, list each potential source of runoff Pollutants on your site (from those that you checked in the Pollutant Sources/Source Control Checklist). In the middle column, list the corresponding permanent, Structural Source Control BMPs (from Columns 2 and 3 of the Pollutant Sources/Source Control Checklist) used to prevent Pollutants from entering runoff. **Add additional narrative** in this column that explains any special features, materials or methods of construction that will be used to implement these permanent, Structural Source Control BMPs.

4. ***Identify Operational Source Control BMPs:*** To complete your table, refer once again to the Pollutant Sources/Source Control Checklist. List in the right column of your table the Operational BMPs that should be implemented as long as the anticipated activities continue at the site. Copermittee stormwater ordinances require that applicable Source Control BMPs be implemented; the same BMPs may also be required as a condition of a use permit or other revocable Discretionary Approval for use of the site.

**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 catch basins. Locations are shown on WQMP<br><br>BMPs Site Map | On-site storm drain signage will utilize language, "No Dumping Drains to River", or equally approved text that is consistent with the City' requirements. Landscape area drains surrounded by vegetation will not be signed. The signs will be located at storm drain inlets in impervious areas and will be either stenciled or placarded. | Inspect the signage once per year.<br>Repair or replace when the signage becomes unreadable.<br>The original owner or developer will be responsible for the first stenciling of the storm drain system.<br>Thereafter when the property is sold, the new owner will assume the responsibility for inspection, maintenance, and funding. |

| | | |
|---|---|---|
| | | See CASQA SD-13 BMP Fact Sheet in WQMP for additional information<br>Maintain and periodically repaint or replace inlet marking.<br>Provide stormwater pollution prevention information to new site owners, lessees, or operators.<br>See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com<br>Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials<br>so as to create a potential discharge to storm drains." |
| | On-site drainage facility inspection and maintenance.<br>On-site drainage structures, including all storm drain clean outs, area drains, inlets, catch basins, inlet & outlet structures, forebays, & water treatment control basins shall be inspected and maintained on a regular basis to insure their operational adequacy.<br>See CASQA SC-44 BMP Fact Sheet in WQMP for additional information. | Inspect at a minimum, once before the onset of the rainy season (Oct 1 to May 1), once during the rainy season, and once after the rainy season.<br>Maintenance should include removal of trash, debris, & sediment and the repair of any deficiencies or damage that may impact water quality.<br>The property owner will assume the responsibility for all on-site drainage facility inspection, maintenance, and funding. |
| Landscape / Outdoor Pesticide Use | Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained.<br>Proposed native trees or areas of shrubs and ground cover | Maintain landscaping using minimum or no pesticides<br>Irrigation System and Landscape Management (N3)<br>See applicable operational BMPs in "What you should know<br>for…..Landscape and Gardening" |
| Industrial Commerce Center<br>Roofing, gutters and trim<br>Condensate drain lines | Roofs designed to runoff into adjoining landscaping.<br>Avoid roofing, gutters and trim made of copper or other unprotected metals that may | Activity Restrictions (N2) |

| | | |
|---|---|---|
| | leach into runoff.<br>Condensate drain lines may discharge to landscape areas if the flow is small enough that runoff will not occur.<br>Driveways of minimal widths | |
| Man-made & irrigated slopes and landscaped areas | Protect slopes and channels (S5)<br>Hillside Landscaping (S12) | Irrigation System and Landscape Management (N3) |
| | Irrigation systems and landscape design should follow as a guide the specifications and recommendations of the Water Conservation Act of 2006, AB1881 (Laird) and conform to the standards and requirements of the County' landscape requirements.<br>Irrigation systems shall employ control systems and be designed to conserve water.<br>The landscape design shall incorporate native and drought tolerant vegetation with low irrigation requirements.<br>See CASQA SD-10 and SD-12 BMP Fact Sheets in and other landscape literature in WQMP for additional information. | Performed during design phase. |
| | Irrigation and landscape maintenance should be performed on a regular basis throughout the year.<br>See CASQA SC-41 or SD-10 and SD-12 BMP Fact Sheets in WQMP for additional information. | Inspect landscape areas twice annually (before and after the rainy season) and the irrigation system quarterly for proper functioning.<br>Maintenance should be performed every 2 weeks or as needed.<br>Landscape maintenance should include mowing, weeding, trimming, removal of trash & debris, repair of erosion, re-vegetation, and removal of cut & dead vegetation.<br>Irrigation maintenance should include the repair of leaky or broken sprinkler heads, the maintaining of timing apparatus accuracy, and the maintaining of shut off valves in |
| | | Common Area Litter Control (N4) |

| | | |
|---|---|---|
| Landscape Common areas | Efficient Irrigation (S4) | Street Sweeping (N5) |
| | | Drainage Facility Inspection and Maintenance (N6) |
| WQ/Detention Basin<br>With Pre-treatment Catch Basin Inserts | On-site drainage facility inspection and maintenance.<br>On-site drainage structures, including all storm drain clean outs, area drains, inlets, catch basins, inlet & outlet structures, forebays, & water treatment control basins shall be inspected and maintained on a regular basis to insure their operational adequacy.<br>See CASQA SC-44 BMP Fact Sheet in WQMP for additional information. | Inspect at a minimum, once before the onset of the rainy season (Oct 1 to May 1), once during the rainy season, and once after the rainy season.<br>Maintenance should include removal of trash, debris, & sediment and the repair of any deficiencies or damage that may impact water quality.<br>The property owner will assume the responsibility for all on-site drainage facility inspection, maintenance, and funding. |

# 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) |
|---|---|---|---|
| DMA Area A2 | BMP-A2: WQ Extended Detention Basin | BMP Site Plan (Construction Plan is included in the FWQMP) | In Final Design |
| DMA Area A3(B1b) | BMP-B1b: WQ Extended Detention Basin | BMP Site Plan (Construction Plan is included in the FWQMP) | In Final Design |
| DMA Area B1 | BMP-B1a: WQ Extended Detention Basin | BMP Site Plan (Construction Plan is included in the FWQMP) | In Final Design |
| DMA Area B2 | BMP-B2: WQ Extended Detention Basin | BMP Site Plan (Construction Plan is included in the FWQMP) | In Final Design |
| DMA Area B4 | BMP-B4: WQ Extended Detention Basin | BMP Site Plan (Construction Plan is included in the FWQMP) | In Final Design |
| DMA Areas B5/6 | BMP-B5/6: WQ Extended Detention Basin | BMP Site Plan (Construction Plan is included in the FWQMP) | In Final Design |
| | | | |
| | | | |

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:**

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

☒ Y*) ☐ N

Developer shall mitigate to prevent any flooding and/or erosion downstream caused by development of the site and/or diversion of drainage.

*) The proposed storm drain system includes the extension of the existing 66-inch Horsethief-Calendula storm drain from its current outlet, which is located approximately 100 feet south of the Specific Plan boundary in TR 24938 within an existing easement, to the Specific Plan's southern boundary then northerly approximately 450 feet to discharge directly into an existing wash. This facility will be maintained by the RCFC&WCD.

The proposed Primary Detention Basin, in the northwest portion of PA2, will mitigate most of the increased flows from the development. This basin and the two outlet storm drains to the Right of

Way of Street A will be maintained by the Master Property Owners Association (POA). The portion of the Primary Detention Basin outlet pipes within the right of way of Street A will be maintained by the Riverside County Transportation Department with manholes at each end of the two storm drains within the Street A right of way to separate maintenance responsibilities between the County and the POA. That portion of the two outlet drains located downstream of Street A shall be maintained by the POA.

The extension of the Horsethief-Calendula Storm Drain shall be maintained by the RCFC&WCD.

All storm drains within the public right of way of Street A shall be maintained by the Riverside County Transportation Department.

All other onsite drainage facilities shall be maintained by the POA. These facilities include the Primary Detention Basin, outlet drains that are not in Street A, water quality basins, other peak flow detention facilities, private storm drains, access roads and natural drainage courses outside of PA 5 and PA 6. At the time of development, the County Transportation Department may determine that a CFD/CSA should maintain detention/water quality basins that serve multiple properties within the development.

Project owner:

**WSI Land Holdings, LLC**
3161 Michelson Drive, Ste. 425
Irvine, CA. 92612

Telephone: (949) 698 -2191

Contact person: Brian Hardy

## TREATMENT CONTROL BMPS

### *WQ Extended/Detention Basin*

- Construction and Initial Funding until acceptance will be provided by the project Developer or Builder.
- After acceptance of the Renaissance Ranch commerce Center Development projects by County of Riverside it is anticipated that the Operation and Maintenance of the facilities as described above.

Project owner:

**Richland Ventures, Inc.**
3161 Michelson Drive, Suite 425
Irvine, CA 92612

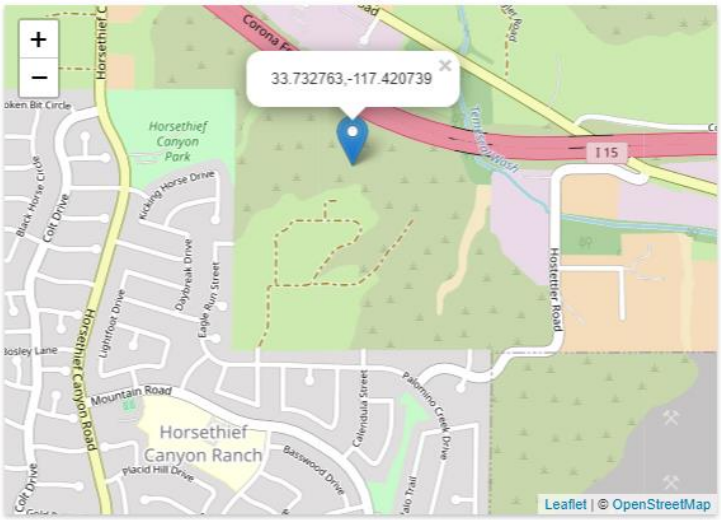
Attn: **Brian Hardy**
Telephone: (949) 698-2191

This builder will fund, construct, and maintain all of the Water Quality BMPs facilities until such time as they are handed over to the County or POA. All landscape areas, common areas and basins within Renaissance Ranch Commerce Center will be maintain by the POA.

See Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9 and 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*





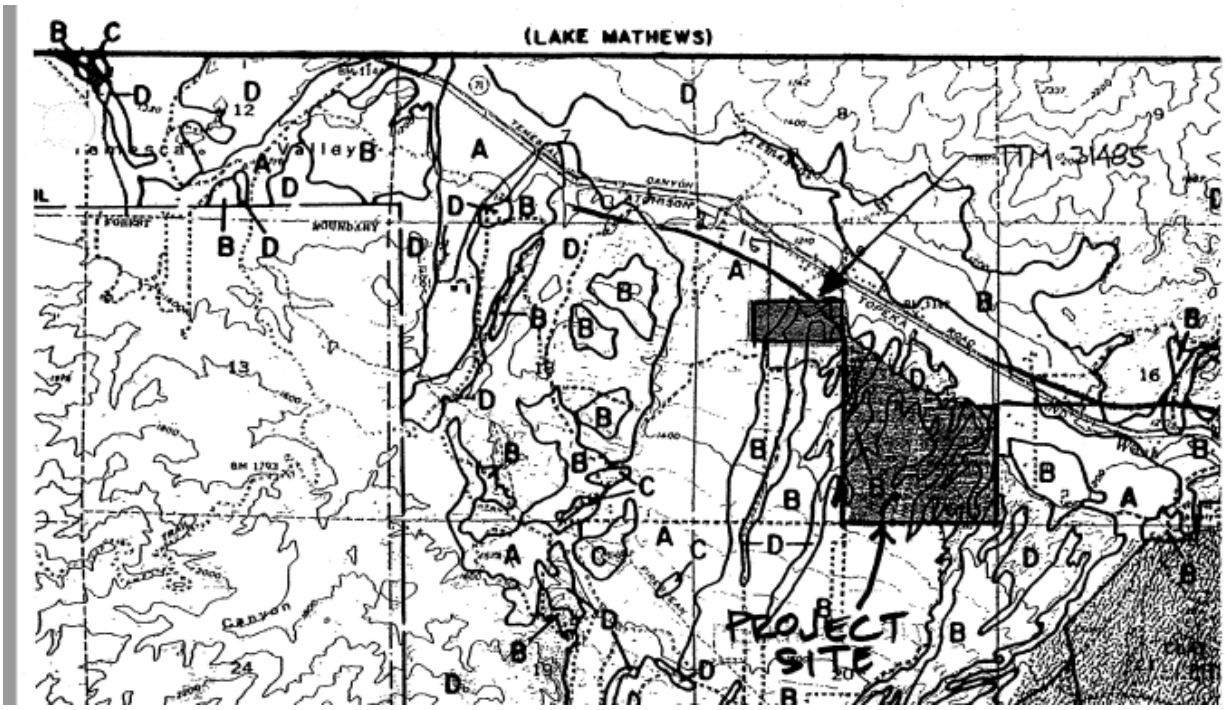


| Lat Long | GPS Coordinates |
|---|---|
| (33.732763, -117.420739) | 33° 43' 57.9468'' N<br>117° 25' 14.6604'' W |

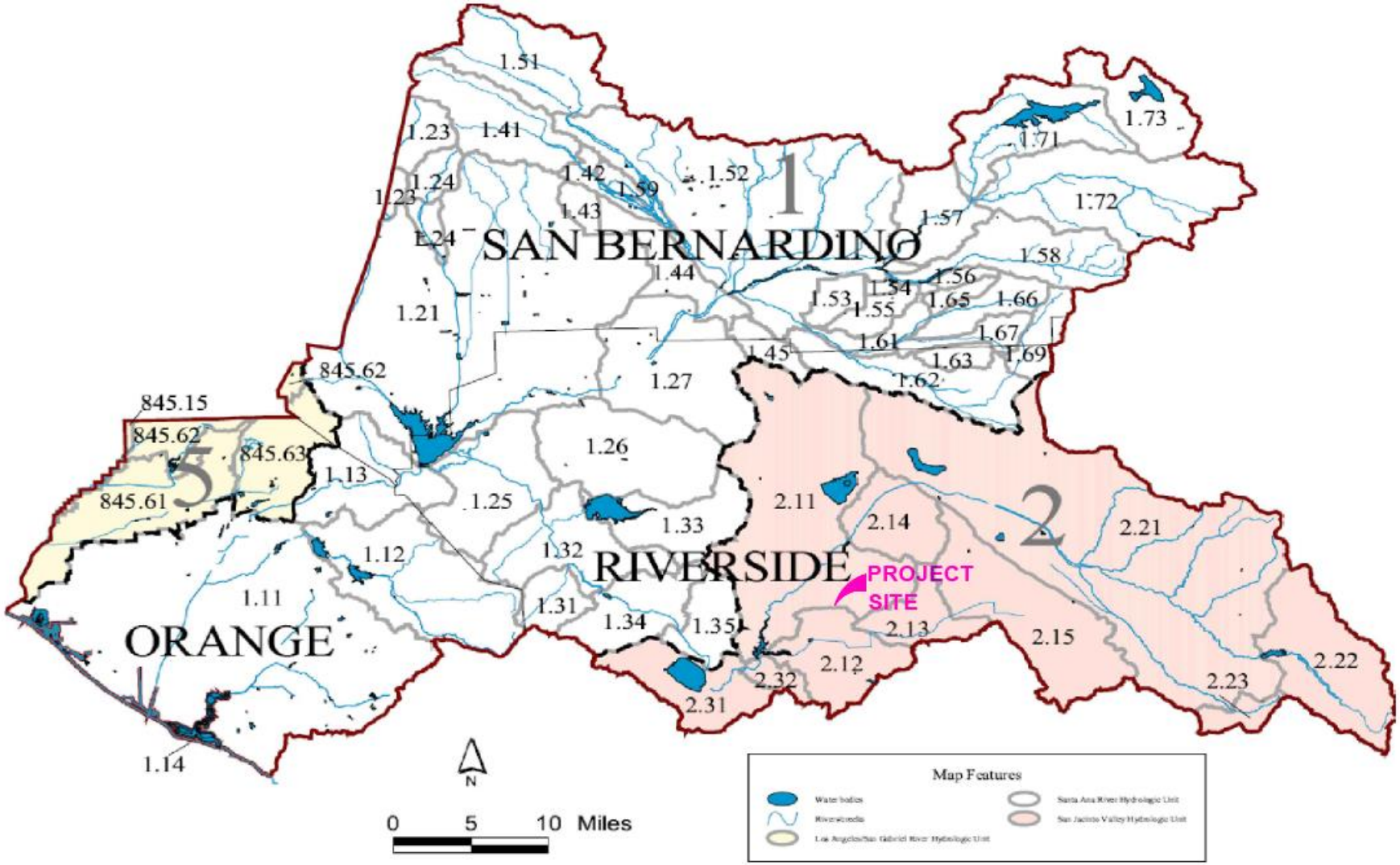
***Latitude & Longitude Map***



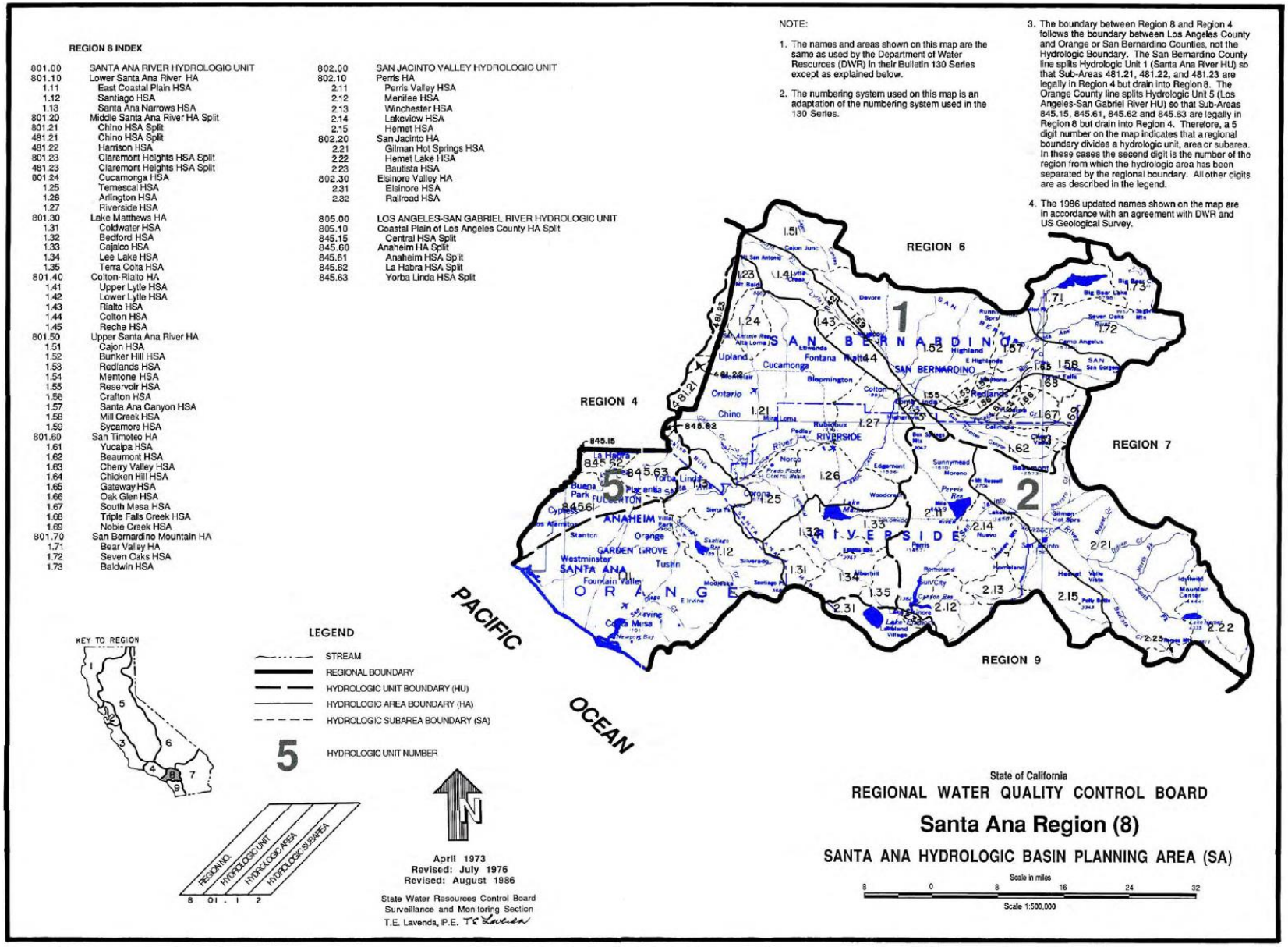

***Current Aerial Map***

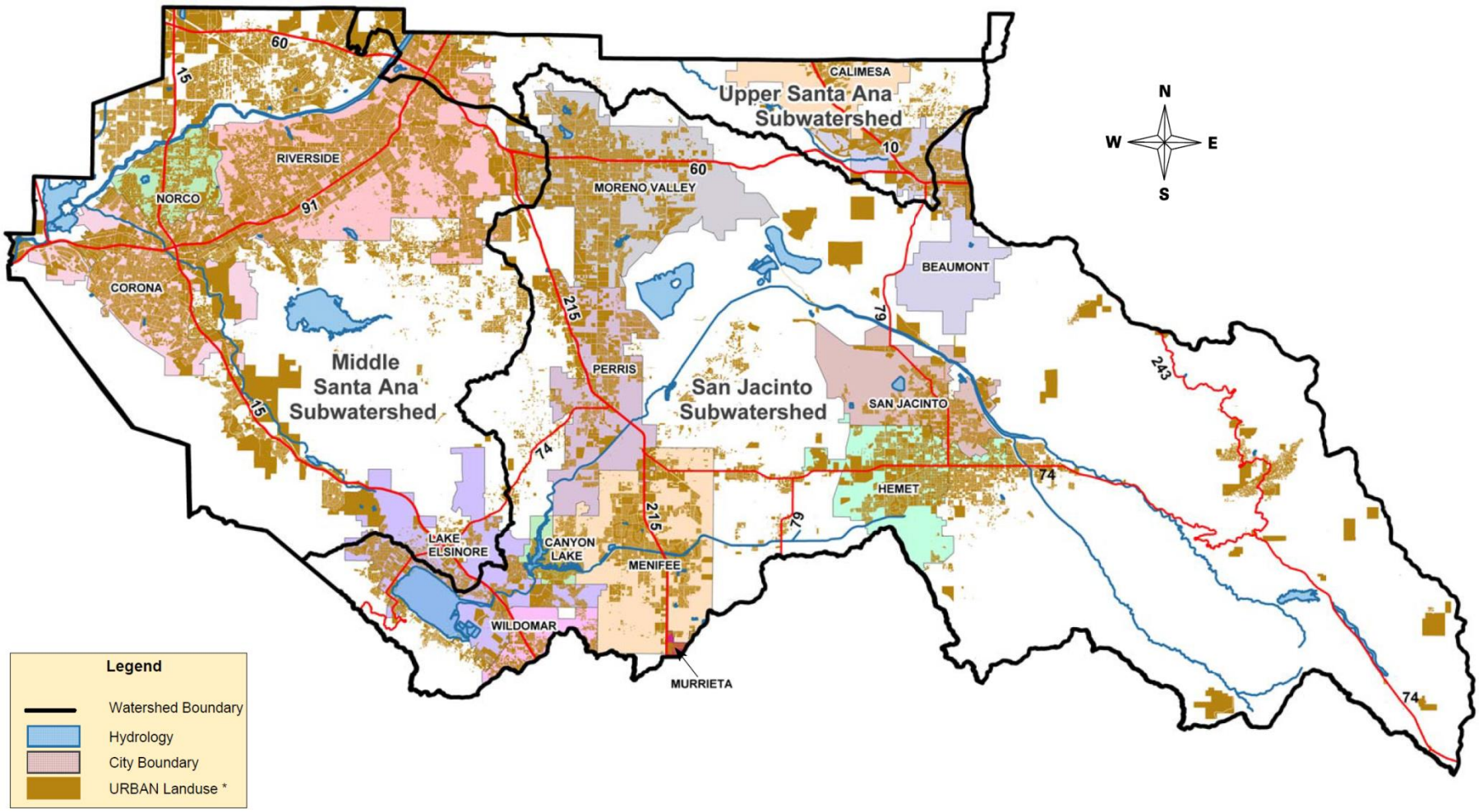



**Hydrologic Soils Group for the project site**




**Receiving Water Map**


REGION 8 INDEX
801.00 SANTA ANA RIVER HYDROLOGIC UNIT
801.10 Lower Santa Ana River HA
1.11 East Coastal Plain HSA
1.12 Santiago HSA
1.13 Santa Ana Narrows HSA
801.20 Middle Santa Ana River HA Split
801.21 Chino HSA Split
481.21 Chino HSA Split
481.22 Harrison HSA
801.23 Claremont Heights HSA Split
481.23 Claremont Heights HSA Split
801.24 Cucamonga HSA
1.25 Temescal HSA
1.26 Arlington HSA
1.27 Riverside HSA
801.30 Lake Matthews HA
1.31 Coldwater HSA
1.32 Bedford HSA
1.33 Cajalco HSA
1.34 Lee Lake HSA
1.35 Terra Cota HSA
801.40 Colton-Rialto HA
1.41 Upper Lytle HSA
1.42 Lower Lytle HSA
1.43 Rialto HSA
1.44 Colton HSA
1.45 Reche HSA
801.50 Upper Santa Ana River HA
1.51 Cajon HSA
1.52 Bunker Hill HSA
1.53 Redlands HSA
1.54 Mentone HSA
1.55 Reservoir HSA
1.56 Crafton HSA
1.57 Santa Ana Canyon HSA
1.58 Mill Creek HSA
1.59 Sycamore HSA
801.60 San Timoteo HA
1.61 Yucaipa HSA
1.62 Beaumont HSA
1.63 Cherry Valley HSA
1.64 Chicken Hill HSA
1.65 Gateway HSA
1.66 Oak Glen HSA
1.67 South Mesa HSA
1.68 Triple Falls Creek HSA
1.69 Noble Creek HSA
801.70 San Bernardino Mountain HA
1.71 Bear Valley HA
1.72 Seven Oaks HSA
1.73 Baldwin HSA
802.00 SAN JACINTO VALLEY HYDROLOGIC UNIT
802.10 Perris HA
2.11 Perris Valley HSA
2.12 Menifee HSA
2.13 Winchester HSA
2.14 Lakeview HSA
2.15 Hemet HSA
802.20 San Jacinto HA
2.21 Gilman Hot Springs HSA
2.22 Hemet Lake HSA
2.23 Bautista HSA
802.30 Elsinore Valley HA
2.31 Elsinore HSA
2.32 Railroad HSA
805.00 LOS ANGELES-SAN GABRIEL RIVER HYDROLOGIC UNIT
805.10 Coastal Plain of Los Angeles County HA Split
845.15 Central HSA Split
845.60 Anaheim HA Split
845.61 Anaheim HSA Split
845.62 La Habra HSA Split
845.63 Yorba Linda HSA Split
NOTE:
1. The names and areas shown on this map are the same as used by the Department of Water Resources (DWR) in their Bulletin 130 Series except as explained below.
2. The numbering system used on this map is an adaptation of the numbering system used in the 130 Series.
3. The boundary between Region 8 and Region 4 follows the boundary between Los Angeles County and Orange or San Bernardino Counties, not the Hydrologic Boundary. The San Bernardino County line splits Hydrologic Unit 1 (Santa Ana River HU) so that Sub-Areas 481.21, 481.22, and 481.23 are legally in Region 4 but drain into Region 8. The Orange County line splits Hydrologic Unit 5 (Los Angeles-San Gabriel River HU) so that Sub-Areas 845.15, 845.61, 845.62 and 845.63 are legally in Region 8 but drain into Region 4. Therefore, a 5 digit number on the map indicates that a regional boundary divides a hydrologic unit, area or subarea. In these cases the second digit is the number of the region from which the hydrologic area has been separated by the regional boundary. All other digits are as described in the legend.
4. The 1986 updated names shown on the map are in accordance with an agreement with DWR and US Geological Survey.
REGION 6
REGION 4
REGION 7
REGION 9
PACIFIC OCEAN
SAN BERNARDINO
RIVERSIDE
ORANGE
ANAHEIM
SANTA ANA
GARDEN GROVE
KEY TO REGION
LEGEND
STREAM
REGIONAL BOUNDARY
HYDROLOGIC UNIT BOUNDARY (HU)
HYDROLOGIC AREA BOUNDARY (HA)
HYDROLOGIC SUBAREA BOUNDARY (SA)
5 HYDROLOGIC UNIT NUMBER
REGION NO.
HYDROLOGIC UNIT
HYDROLOGIC AREA
HYDROLOGIC SUBAREA
8 01 . 1 2
April 1973
Revised: July 1976
Revised: August 1986
State Water Resources Control Board
Surveillance and Monitoring Section
T.E. Lavenda, P.E.
State of California
REGIONAL WATER QUALITY CONTROL BOARD
Santa Ana Region (8)
SANTA ANA HYDROLOGIC BASIN PLANNING AREA (SA)
Scale in miles
8 0 8 16 24 32
Scale 1:500,000




* Areas not in URBAN: Agricultural, State, Federal, Tribal, Preserves & Open Space, Rural-Residential, Highways/Freeways

**BMP sizing in the Santa Ana Watershed**
**HCOC Mitigation**
**2-year 24-hour storm I = 2.16 inches (Corona-Horsethief Area)**

| DMA ID. | DMA Area (Ac) | DMA Area (sqft) (A) | Project Surface Type | Effective Impervious Fraction (Ia) | DMA Runoff Factor Proposed (C) | DMA Runoff Factor Existing (B) | Design Storm Depth (in) (D) | Delta HCOC Volume (cuft) | Total Delta HCOC Volume (cuft) | BMP ID. |
|---|---|---|---|---|---|---|---|---|---|---|
| BMP-A1 | 11.46 | 499198 | Existing | | | | | | | |
| BMP-A2 | 9.9 | 431244 | Commercial | 0.9 | 0.73 | 0.00 | 2.16 | 56687 | | |
| BMP-A3 | 9.12 | 397267 | Commercial | 0.9 | 0.73 | 0.00 | 2.16 | 52221 | | |
| BMP-B1 | 5.45 | 237402 | Commercial | 0.9 | 0.73 | 0.00 | 2.16 | 31207 | | |
| BMP-B2 | 42.59 | 1855220 | Commercial | 0.9 | 0.73 | 0.00 | 2.16 | 243870 | | |
| BMP-B3 | 1.59 | 69260 | Existing | | | | | | | |
| BMP-B4 | 25.28 | 1101197 | Commercial | 0.9 | 0.73 | 0.00 | 2.16 | 144753 | | |
| BMP-B5/6 | 13.56 | 590674 | Commercial | 0.9 | 0.73 | 0.00 | 2.16 | 77644 | | |
| BMP-B7 | 1.21 | 52708 | Existing | | | | | | | |
| BMP-B8 | 0.52 | 22651 | Existing | | | | | | | |

$C = 0.858I^{4}-0.78I^{3}+2*0.774I^{2}+0.04$

$V_{DELTA} = [(A)x[(B)-(C)]x\ D)/12$ cu-ft

**BMP sizing in the Santa Ana Watershed**
**Design Capture Volume ($V_{BMP}$)**
**85th Percentile, 24-hour storm event, $D_{85}$ = 0.85 inches (Horsethief Canyon Area)**

Company: K&A Engineering, Inc.
Design by: JY
Project Name: **Renaissance Ranch**

| DMA ID. | DMA Area (Ac) | DMA Area (sqft) | Project Surface Type | Effective Impervious Fraction (Ia) | DMA Runoff Factor (C) | DMA Area x Runoff Factor (af) (A) | Design Storm Depth (in) (D) | Design Capture Volume $V_{BMP}$ (cuft) |
|---|---|---|---|---|---|---|---|---|
| BMP-A1 | 11.46 | 499198 | Existing | | | | | |
| BMP-A2 | 9.9 | 431244 | Commercial | 0.9 | 0.73 | 314930 | 0.85 | 22308 |
| BMP-A3 | 9.12 | 397267 | Commercial | 0.9 | 0.73 | 290117 | 0.85 | 20550 |
| BMP-B1 | 5.45 | 237402 | Commercial | 0.9 | 0.73 | 173370 | 0.85 | 12280 |
| BMP-B2 | 42.59 | 1855220 | Commercial | 0.9 | 0.73 | 1354634 | 0.85 | 95967 |
| BMP-B3 | 1.59 | 69260 | Existing | | | | | |
| BMP-B4 | 25.28 | 1101197 | Commercial | 0.9 | 0.73 | 804184 | 0.85 | 56963 |
| BMP-B5/6 | 13.56 | 590674 | Commercial | 0.9 | 0.73 | 431358 | 0.85 | 30555 |
| BMP-B7 | 1.21 | 52708 | Existing | | | | | |
| BMP-B8 | 0.52 | 22651 | Existing | | | | | |

$C = 0.858I^{4}-0.78I^{3}+2*0.774I^{2}+0.04$

$V_{BMP} = ((A)x[(B)])/12$ cu-ft



ROOF DRAIN DISCONNECT IMPERVIOUS AREAS




TYPICAL TRASH ENCLOSURE

**Extended Detention Basin Design Procedure**

BMP Subarea No. B2

Legend: Required Entries / Calculated Cells

Company Name: K&A Engineering
Designed by: JY
Date: 9/22/2020
County/City Case No.:

**Design Volume**

Tributary Area (BMP Subarea) — $A_T$ = 42.59 acres

Enter $V_{BMP}$ determined from Section 2.1 of this Handbook — $V_{BMP}$ = 95,968 ft³

**Basin Footprint**

**Overall Geometry**

Length at Basin Bottom Surface — Length = 200 ft

Width at Basin Bottom Surface — Width = 100 ft

Meets 1.5 : 1 requirement? ✓

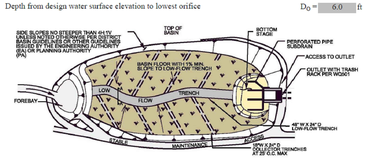
Side Slopes per "Basin Guidelines", Sect. 1.2 — z = 4 :1

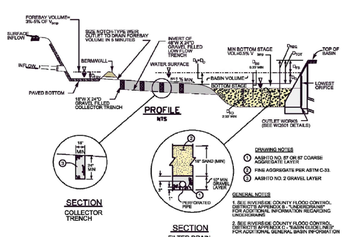
Proposed Basin Depth (with no freeboard) — $D_B$ = 6.00 ft

Depth of freeboard (if used) — $D_{FB}$ = 1.00 ft

Minimum Required Allowance for Total Depth (including proposed basin depth, freeboard, minimum depth of bottom stage ($D_{BS}$=0.33') and minimum filter depth ($D_{FD}$=2.33')) — $D_{FSO}$ = 9.7 ft

Depth from design water surface elevation to lowest orifice — $D_O$ = 6.0 ft




Extended Detention Basin

**BMPs LEGEND:**

- DMA A2 — BMP–A2, EDB/DETENTION BASIN
- DMA B1b — BMP–B1b, EDB/DETENTION BASIN
- DMA B1a — BMP–B1a, EDB/DETENTION BASIN
- DMA B2 — BMP–B2, EDB/DETENTION BASIN
- DMA B4 — BMP–B4, EDB/DETENTION BASIN
- DMA B5 — BMP–B5, EDB/DETENTION BASIN
- HCOC UNDERGROUND STORAGE PIPES

**OTHER PROJECT BMPs LIST:**

- RIPRAP OUTLET PIPE
- BASIN FOREBAY
- VEGETATION BUFFER ALONG BMP INLETS
- CATCH BASIN – MS4 STENCILING AND SIGNAGE
- LANDSCAPE AND IRRIGATION SYSTEM
- OPEN SPACE, REFUSE AREAS
- ROOFED TRASH ENCLOSURE
- STREET TREES AND PARKWAY

LID PRACTICES TO BE IMPLEMENTED FOR THIS PROJECT:
- CONSERVATION DESIGN
- RUNOFF CONVEYANCE
- ROOF DOWNSPOUT DISCONNECTION
- EFFICIENT / LOW IMPACT LANDSCAPING
- NON STORMWATER DISCHARGES


K&A Engineering, Inc.
ENGINEERING
LAND PLANNING
SURVEYING
357 N. SHERIDAN STREET
SUITE 117
CORONA, CALIFORNIA 92880
TEL (951) 279–1800
FAX (951) 279–4380


**RENAISSANCE RANCH**
**WQMP - SITEPLAN**
**FIGURE 3**


Drawing: R:\JB0004\Preliminary\Water Quality\1st 2022\SW-WQMP-Siteplan-Feb 2022.dwg Layout: 36x60 L Saved: 2/2/2022 10:25 AM Plotted: 2/2/2022 10:29 AM Plot Scale: 1:1 By: Johannes Hostanto

# Appendix 2:  Construction Plans

*Grading and Drainage Plans*

# Appendix 3: Soils Information

*Geotechnical Study and Other Infiltration Testing Data*

# TENTATIVE TRACT NO. 31210

IN THE COUNTY OF RIVERSIDE




## LEGEND

- Afu — Artificial fill - undocumented
- Afe — Artificial fill - engineered, placed by others
- Qal — Quaternary alluvium - younger
- Qf — Quaternary fan deposits (Pleistocene-age fans)
- TP-30 — Approximate location of exploratory test pit (GSI, 2003b)
- B-3 — Approximate location of exploratory boring (GSI, 2003b)
- Approximate location of geologic contact
- Approximate location of proposed subdrainage system
- C — C' — Location of gelogic cross-section

All locations are approximate

GeoSoils, Inc. — RIVERSIDE CO. ORANGE CO. SAN DIEGO CO.

**GEOTECHNICAL MAP**

Plate 1

W.O. 3441-A1-SC DATE 9/04 SCALE 1"=100'

**PREPARED FOR:**

RENAISSANCE RANCH LLC

**PREPARED BY:**


Hall & Foreman, Inc.
Civil Engineering • Planning • Surveying • Public Works
420 Exchange, Suite 100 • Irvine, CA 92602-1301 • 714/665-4500
H. Prestinary
HUGH H. PRESTINARY R.C.E. 29229 EXP. 3/31/2007
8-11-05
DATE


## TENTATIVE TRACT MAP NO. 31210

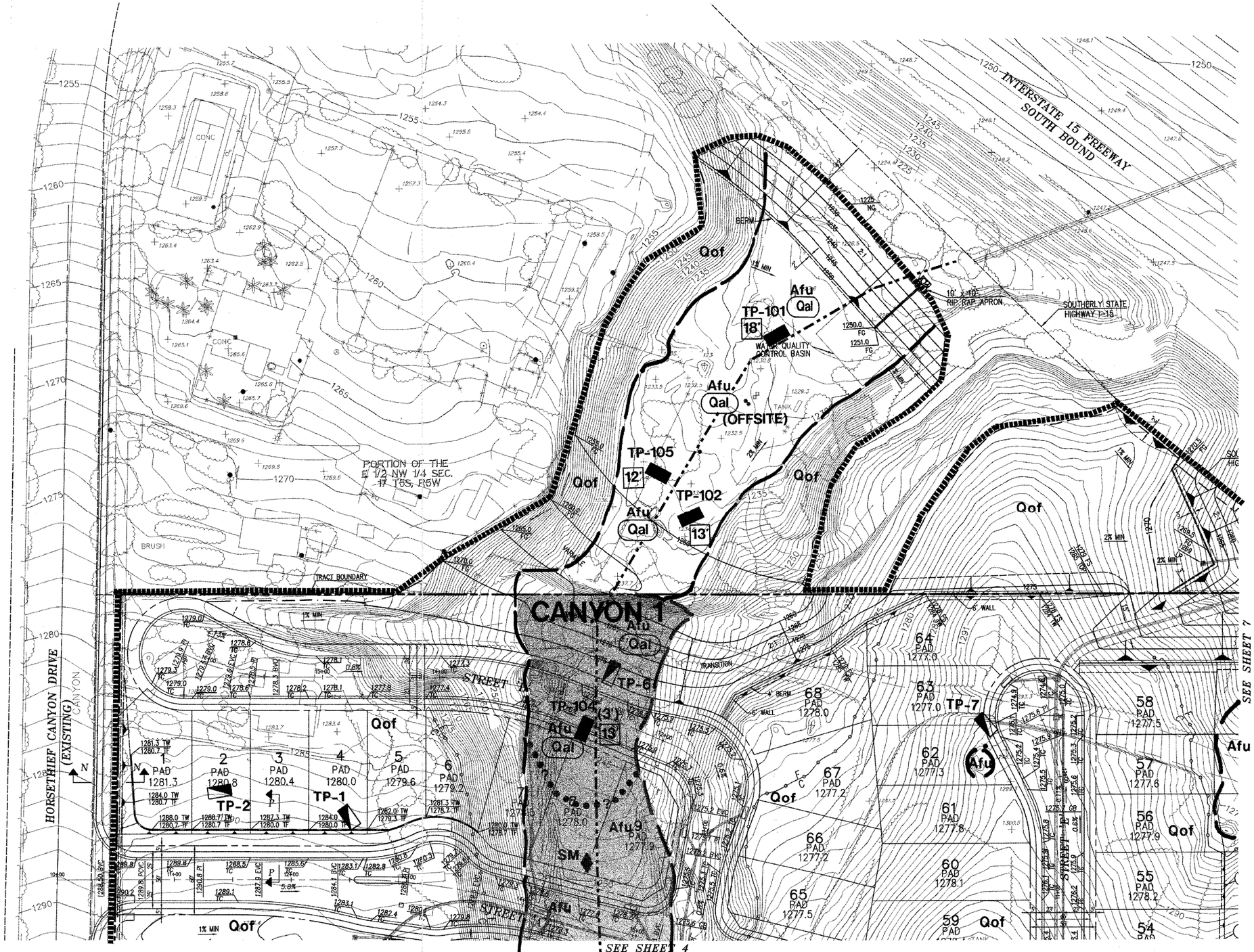
| REVISIONS | | | SHEET |
|---|---|---|---|
| REV | DATE | DESCRIPTION | 2 |
| 1 | 01/07/04 | ADD PARCEL 4, REVISE LINE B/W PCLS 2 AND 3 | OF |
| | | AUGUST 2003 DRT CORRECTIONS | 2 |
| 2 | AUG 2004 | MARCH 2004 DRT CORRECTIONS | JOB NO. 03008 |

GeoSoils, Inc. — RIVERSIDE CO. · ORANGE CO. · SAN DIEGO CO.

# GEOTECHNICAL MAP

Plate 3

W.O. 4800-A-SC DATE 12-14-05 SCALE 1"=40'




Underground Service Alert

DIAL TOLL FREE 1-800-227-2600 AT LEAST TWO DAYS BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

PERMIT NOTE: WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS been ISSUED.

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| DATE | BY | MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|---|---|
| ENGINEER | | | | COUNTY | |
| DESIGNED BY | | | DRAWN BY | CHECKED BY | |

SEAL–COUNTY

COUNTY OF RIVERSIDE
BUILDING AND SAFETY DEPARTMENT
APPROVED BY:

_____ DATE

RECOMMENDED _____ DATE

BENCHMARK:
STD. BRASS DISK IN CONC. STAMPED "E HOST. R. P.I. R=100' " PER CALTRANS MON. MAP 204–975
ELEV.=1180.61'

DATE:

REGISTERED PROFESSIONAL ENGINEER — RABI H. F. MAHMOUD — 60421 — EXPIRES 6/30/08 — CIVIL — STATE OF CALIFORNIA

Hall & Foreman, Inc.
Engineering • Surveying • Planning • Landscape Architecture
420 EXCHANGE, SUITE 100 • IRVINE, CA 92602 • 714–665–4500

_____, P.E. R.C.E. _____ DATE: _____

TRACT 30297
ROUGH GRADING PLAN

CLIENT: RENAISSANCE RANCH, LLC

SHEET NO. 6 OF 8

FILE NUMBER XXXXX

Drawing Name: S:\030709_31483\Eng\Final Plots\90106-RGr-Sht1.dwg
Last Opened: Jun 02, 2006 - 4:59pm by SPinhas

JACHZ

SEE SHEET 7

SEE SHEET 4

# GEOTECHNICAL MAP

GeoSoils, Inc. — RIVERSIDE CO. ORANGE CO. SAN DIEGO CO.

Plate 2

W.O. 4800-A-SC DATE 12-14-05 SCALE 1"=40'

CANYON 2

STREET 'A'

INTERSTATE 15 FREEWAY NORTH BOUND

INTERSTATE 15 FREEWAY SOUTH BOUND

CONNECT TO EXISTING PIPE

"Y" DRAIN

ENCROACHMENT PERMIT TO BE OBTAINED FROM CALTRANS

TRACT BOUNDARY

RETAINING WALL

PROPOSED WALL

EXISTING WALL

SAWCUT & JOIN

EX. DRAIN TO REMAIN

EXISTING TREATMENT PLANT

BROW DITCH

ROCK RIP RAP

SE 1/4 SEC 17 T6S, R5W SBM

ROUGH GRADING PER TRACT 31210

WATER LEVEL 1298.3

TP-9 TP-10 TP-11 TP-109 TP-108 TP-14 TP-15 TP-12 TP-13 TP-110 TP-111

Afu Qof Qal SM

## CONSTRUCTION NOTES:

1. CONSTRUCT TOP OF SLOPE BERM PER DETAIL "A" ON SHT. 2
2. CONSTRUCT 18"WIDE CONCRETE "V" DRAIN PER DETAIL "B" ON SHT. 2
3. CONSTRUCT 5' WIDE CONCRETE TERRACE DRAIN PER DETAIL "K" ON SHT 2
4. CONSTRUCT 18"x 18" GRATE INLET AT CONCRETE DITCH PER DETAIL "L" ON SHT 2
5. INSTALL 4" NDS PIPE SDR 35
6. INSTALL 6" NDS PIPE SDR 35

scale 1"= 40' feet

Underground Service Alert

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UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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DATE BY MARK REVISIONS APPR. DATE

ENGINEER COUNTY

DESIGNED BY DRAWN BY CHECKED BY

SEAL—COUNTY

COUNTY OF RIVERSIDE
BUILDING AND SAFETY DEPARTMENT
APPROVED BY:

DATE

RECOMMENDED DATE

BENCHMARK:
STD. BRASS DISK IN CONC. STAMPED "℄ HOST. R. P.I. R=100' " PER CALTRANS MON. MAP 204-975 ELEV.=1180.61'

DATE:

REGISTERED PROFESSIONAL ENGINEER RARIF F. MAHMOUD 60421 EXPIRES 6/30/08 CIVIL STATE OF CALIFORNIA

Hall & Foreman, Inc.
Engineering • Surveying • Planning • Landscape Architecture
420 EXCHANGE, SUITE 100 • IRVINE, CA 92602 • 714-665-4500

P.E. R.C.E. DATE:

CLIENT: RENAISSANCE RANCH, LLC

TRACT 30297
ROUGH GRADING PLAN

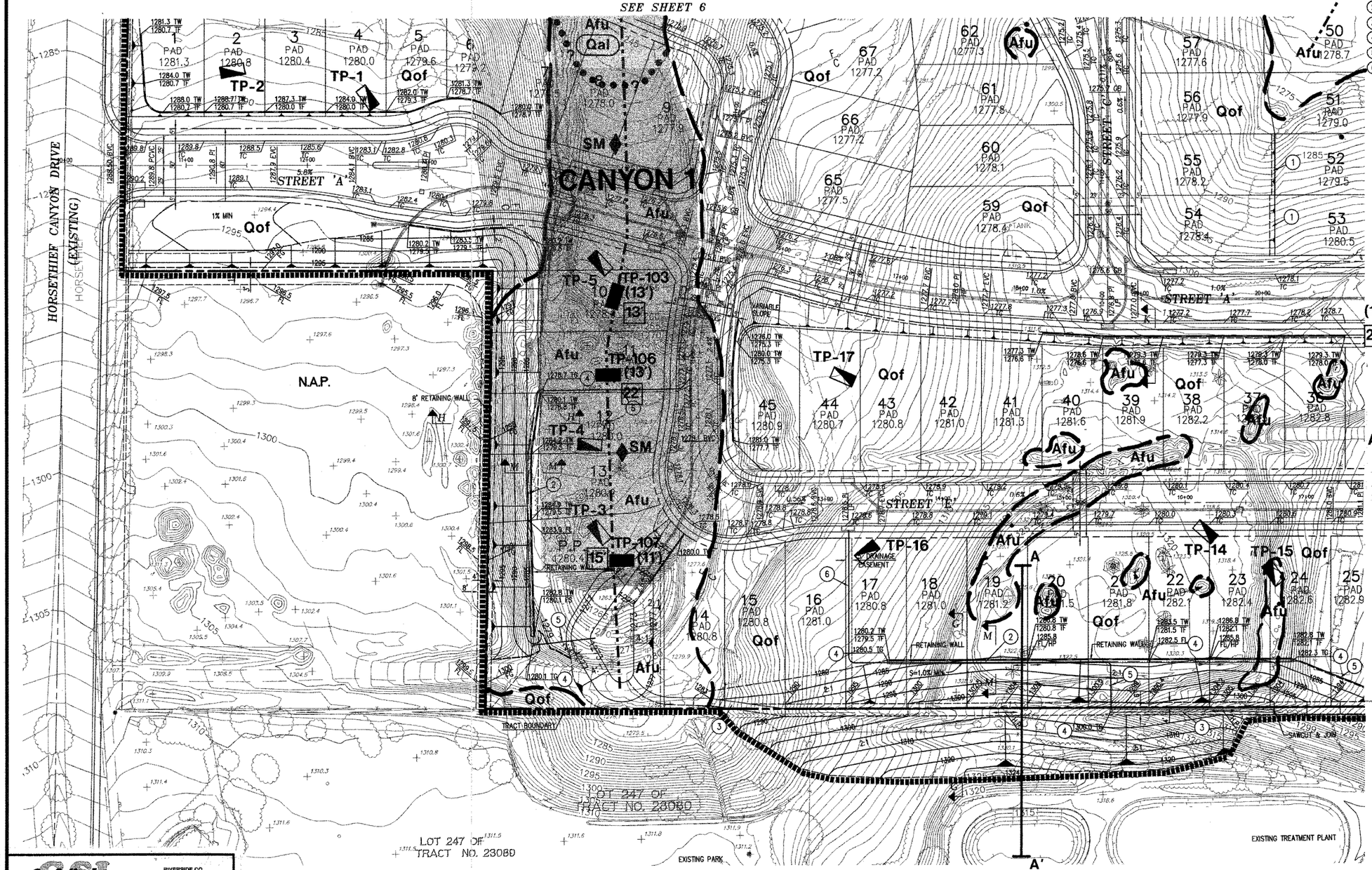
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FILE NUMBER XXXXX

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Last Opened: Jun 02, 2005 - 4:56pm by SPithwa

SEE SHEET 6




## CONSTRUCTION NOTES:

2. CONSTRUCT 18"WIDE CONCRETE "V" DRAIN PER DETAIL "B" ON SHT. 2
3. CONSTRUCT 5' WIDE CONCRETE TERRACE DRAIN PER DETAIL "K" ON SHT 2
4. CONSTRUCT 18" x 18" GRATE INLET AT CONCRETE DITCH PER DETAIL "L" ON SHT 2
5. INSTALL 4" NDS PIPE SDR 35
6. INSTALL 6" NDS PIPE SDR 35

## LEGEND

- **Afu** — Artificial fill - undocumented
- **Qal** — Quaternary alluvium - younger, circled where buried
- **Qof** — Quaternary fan deposits - older (Pleistocene-age fans)
- **TP-17** — Approximate location of exploratory test pit (GSI, 2003)
- **(15') TP-111** — Approximate location of exploratory test pit (this investigation) (Approximate depth of trash and deleterious debris)
- **22'** — Approximate total depth of remedial grading
- Approximate Areal Limit of Trash and Debris
- Approximate location of geologic contact
- Approximate location of buried geologic contact, queried where uncertain
- Area under the purview of this report
- **A — A'** — Location of geologic cross-section
- Approximate location of proposed subdrainage system
- **SM** — Tentative location of settlement monument, if necessary

**All locations are approximate**

scale 1"= 40' (40 0 40 80 feet)

GeoSoils, Inc. — RIVERSIDE CO. · ORANGE CO. · SAN DIEGO CO.

# GEOTECHNICAL MAP

Plate 1

W.O. 4800-A-SC DATE 12-14-05 SCALE 1"=40'

Underground Service Alert — DIAL TOLL FREE 1-800-227-2600 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

PERMIT NOTE: WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

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| DATE | BY | MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|---|---|
| | ENGINEER | | | COUNTY | |

DESIGNED BY — DRAWN BY — CHECKED BY

SEAL—COUNTY

COUNTY OF RIVERSIDE
BUILDING AND SAFETY DEPARTMENT
APPROVED BY:

DATE

RECOMMENDED — DATE

BENCHMARK:
STD. BRASS DISK IN CONC. STAMPED "E HOST. R. P.I. R=100' " PER CALTRANS MON. MAP 204-975
ELEV.=1180.61'

DATE:

REGISTERED PROFESSIONAL ENGINEER — RAB M F. MAHMOUD — 60421 EXPIRES 6/30/08 — CIVIL — STATE OF CALIFORNIA

Hall & Foreman, Inc.
Engineering • Surveying • Planning • Landscape Architecture
420 EXCHANGE, SUITE 100 • IRVINE, CA 92602 • 714-685-4500

P.E. R.C.E. DATE:

*TRACT 30297*
*ROUGH GRADING PLAN*

CLIENT: RENAISSANCE RANCH, LLC

SHEET NO. 4 OF 8

FILE NUMBER XXXXX

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Last Opened: Jun 02, 2005 - 4:35pm by SPitthwa

JACH7

GeoSoils, Inc.

RIVERSIDE CO.
ORANGE CO.
SAN DIEGO CO.

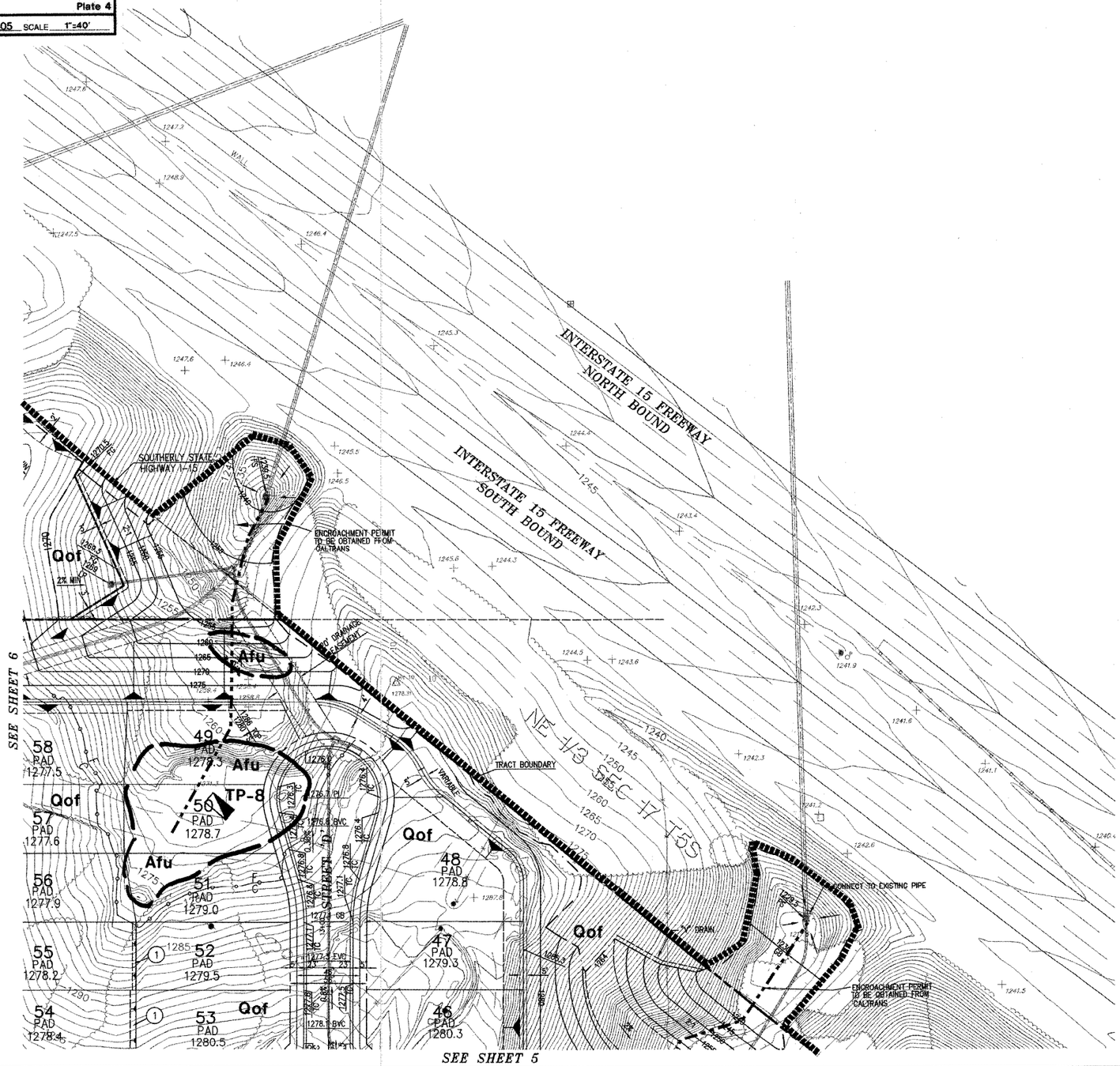
# GEOTECHNICAL MAP

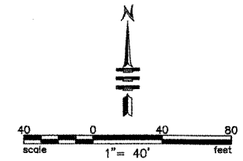
Plate 4

W.O. 4800-A-SC DATE 12-14-05 SCALE 1"=40'

## CONSTRUCTION NOTES:

(1)– CONSTRUCT TOP OF SLOPE BERM PER DETAIL "A" ON SHT. 2




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1-800-227-2600
AT LEAST TWO DAYS
BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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| DATE | BY | MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|---|---|
| | | | | | |

ENGINEER

DESIGNED BY | DRAWN BY | CHECKED BY

COUNTY

SEAL–COUNTY

COUNTY OF RIVERSIDE
BUILDING AND SAFETY DEPARTMENT
APPROVED BY:

DATE

RECOMMENDED DATE

BENCHMARK:
STD. BRASS DISK IN CONC. STAMPED "E HOST. R. P.I. R=100' " PER CALTRANS MON. MAP 204–975 ELEV.=1180.61'

DATE:

REGISTERED PROFESSIONAL ENGINEER RAB H. F. MAHMOUD 60421 EXPIRES 6/30/08 CIVIL STATE OF CALIFORNIA

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420 EXCHANGE, SUITE 100 • IRVINE, CA 92602 • 714–665–4500

P.E. R.C.E. DATE:

*TRACT 30297*
*ROUGH GRADING PLAN*

CLIENT: RENAISSANCE RANCH, LLC

SHEET NO. 7 OF 8

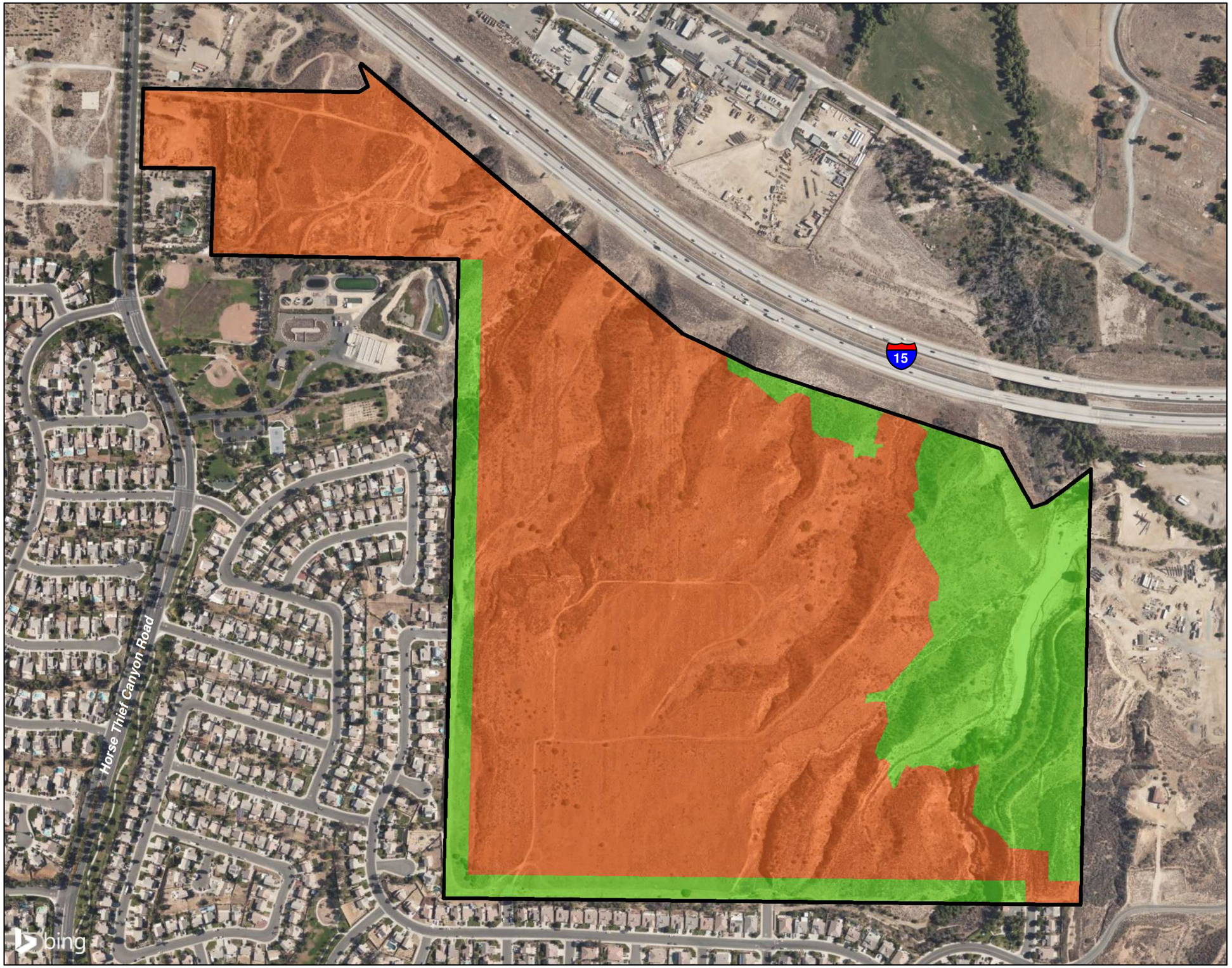
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# Appendix 4:  Historical Site Conditions

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




Project Site

Permanent Impacts

Avoided
Open Space Conservation

N

0 200 400 800
Feet

**1 inch = 400 feet**

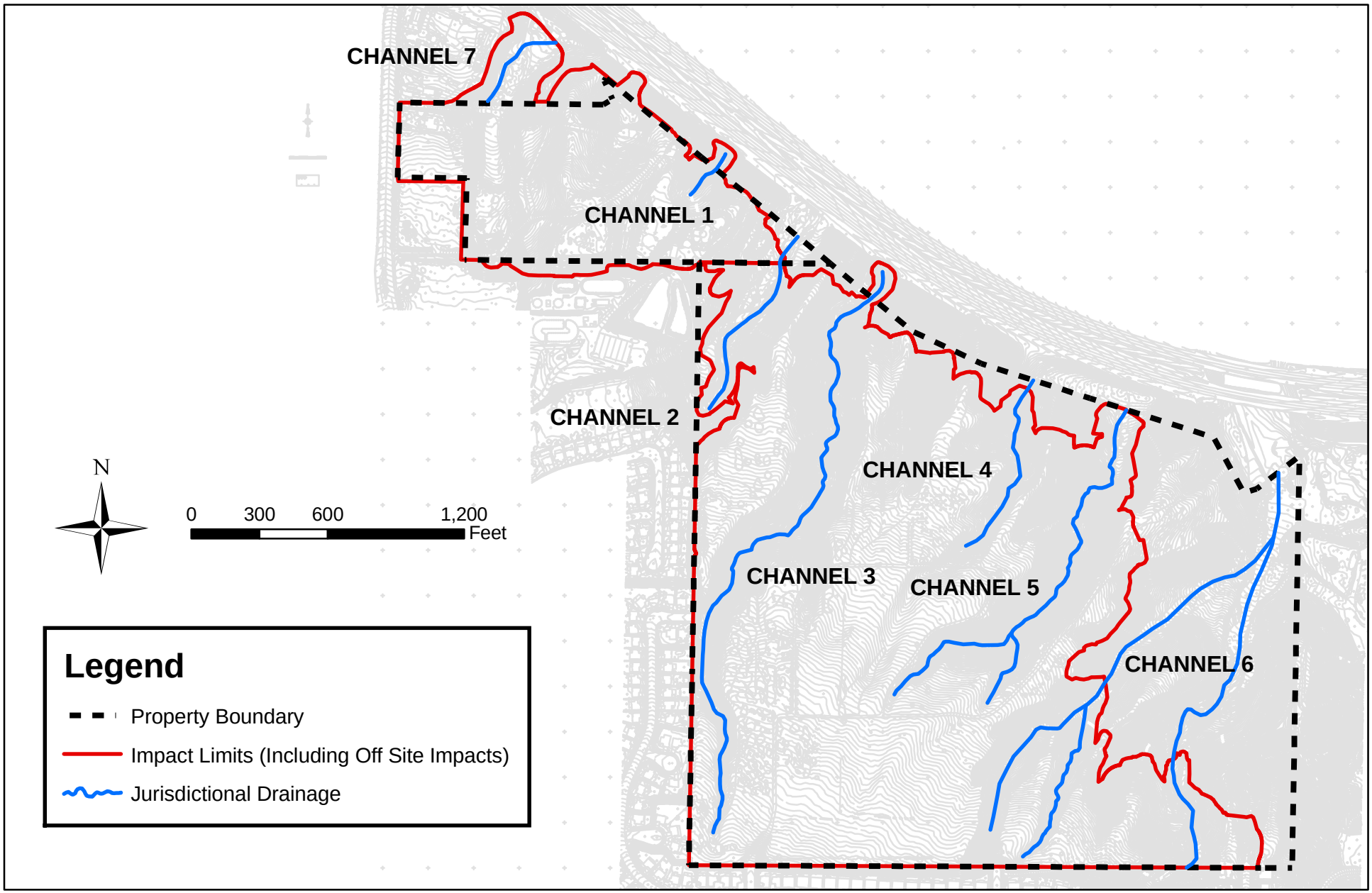
Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: B. Gale, GLA
Date Prepared: October 5, 2020

# RENAISSANCE RANCH DEVELOPMENT PROJECT

Impact Map

GLENN LUKOS ASSOCIATES

X:\00 - 0362 ONLY\0188-16RENA\188-16_GIS\ImpactsGIS\188-16_Impacts.mxd




# RENAISSANCE RANCH

Delineation Key Map

GLENN LUKOS ASSOCIATES

EXHIBIT 3

# Appendix 5: LID Infeasibility

*LID Technical Infeasibility Analysis*

The 2010 SAR MS4 Permit further requires that LID Retention BMPs (Infiltration or Harvest and Use) be used unless it can be shown that those BMPs are infeasible.

***Based on LID BMP Prioritization, for alternate BMPs situated in poor infiltration rate; Extended Detention Basin was selected as the most appropriate treatment BMP along and at downstream ends of project.***

***The total project Design Capture Volume will be addressed using Extended Detention Basin, therefore Harvest and Use need not be assessed.***

***Since project proposed BMPs, Extended Detention Basin to satisfy LID performance criteria, therefore Bio-retention and Bio-treatment control performance criteria is also fully satisfied as well.***

# Appendix 6: BMP Design Details

*BMP Sizing, Design Details and other Supporting Documentation*

**Tabulation and Sizing Calculations**

BMPs Sizing Calculation:

These calculations are based on approved methodologies within the currently active Municipal Separate Storm Sewer System (MS4) permits for Santa Ana River Watershed regions of Riverside County. All BMP designs are sized based on the design capture volume, $V_{BMP}$. However, there may be circumstances when flow based Treatment Control BMPs are utilized and therefore this section also includes method for calculating the design flow rate, $Q_{BMP}$.

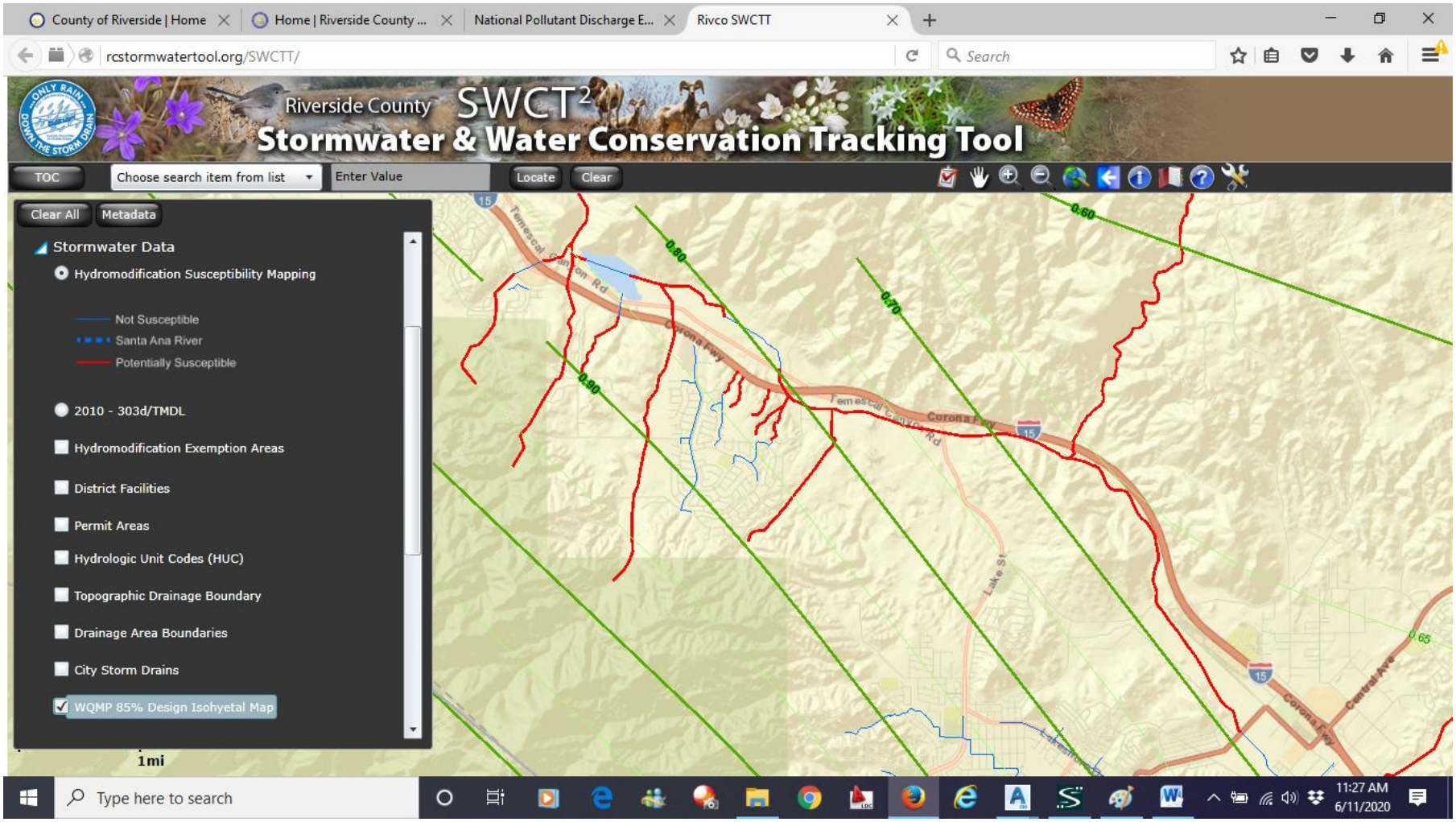
**Calculating $V_{BMP}$:**

Volume based BMPs, including all of the BMPs in this report, are sized to capture and treat the design capture volume, $V_{BMP}$. As the method for calculating and documenting the design capture volume varies by watershed, the designer must first know which watershed the proposed project is within, and then follow the corresponding guidelines below. The watershed a particular project is within can be determined from the 'Locate my Watershed' tool available at: www.rcflood.org/npdes/

In order to meet Regional Water Quality Control Board (RWQCB) requirements, in the Santa Ana River Watershed the design capture volume ($V_{BMP}$) is based on capturing the volume of runoff generated from an 85th percentile, 24-hour storm event. Follow the steps using worksheet provided in the Handbook to calculate $V_{BMP}$ in the Santa Ana River Watershed.

The Design Storm Depth ($D_{85}$) by locating the project site on the Isohyetal Map for the 85th Percentile 24-hour Storm Event is 0.85 inches.

See below Isohyetal Map.


County of Riverside | Home
Home | Riverside County ...
National Pollutant Discharge E...
Rivco SWCTT
rcstormwatertool.org/SWCTT/
Search
Riverside County SWCT²
Stormwater & Water Conservation Tracking Tool
TOC
Choose search item from list
Enter Value
Locate
Clear
Clear All
Metadata
Stormwater Data
Hydromodification Susceptibility Mapping
Not Susceptible
Santa Ana River
Potentially Susceptible
2010 - 303d/TMDL
Hydromodification Exemption Areas
District Facilities
Permit Areas
Hydrologic Unit Codes (HUC)
Topographic Drainage Boundary
Drainage Area Boundaries
City Storm Drains
WQMP 85% Design Isohyetal Map
1mi
0.60
0.80
0.70
0.90
0.65
Corona Fwy
Central Ave
Lake St
Type here to search
11:27 AM
6/11/2020

# Santa Ana Watershed

$V_{BMP}$ and $Q_{BMP}$ worksheets

These worksheets are to be used to determine the required

Design Capture Volume ($V_{BMP}$)
or the
Design Flow Rate ($Q_{BMP}$)

for BMPs in the Santa Ana Watershed

To verify which watershed your project is located within, visit

www.rcflood.org/npdes

and use the 'Locate my Watershed' tool

**If your project is not located in the Santa Ana Watershed,**

Do not use these worksheets! Instead visit

www.rcflood.org/npdes/developers.aspx

To access worksheets applicable to your watershed

**Use the tabs across the bottom**
**to access the worksheets for the Santa Ana Watershed**

Table 2-1: Impervious Fraction Based on Various Land Use Covers

| Surface Type | Effective Impervious Fraction, $I_f$ |
|---|---|
| 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 |

## ACTUAL IMPERVIOUS COVER

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

Notes:

1. Land use should be based on ultimate development of the watershed. Long range master plans for the County and incorporated cities should be reviewed to insure reasonable land use assumptions.

2. Recommended values are based on average conditions which may not apply to a particular study area. The percentage impervious may vary greatly even on comparable sized lots due to differences in dwelling size, improvements, etc. Landscape practices should also be considered as it is common in some areas to use ornamental gravels underlain by impervious plastic materials in place of lawns and shrubs. A field investigation of a study area should always be made, and a review of aerial photos, where available may assist in estimating the percentage of impervious cover in developed areas.

3. For typical horse ranch subdivisions increase impervious area 5 percent over the values recommended in the table above.

**RCFC & WCD**
HYDROLOGY MANUAL

IMPERVIOUS COVER FOR DEVELOPED AREAS

PLATE D-5.6

---

For conservative Commercial Renaissance Ranch Project, I = 0.9 ➔ use 0.9 in preliminary

## 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 | K&A Engineering, Inc. | Date | 9/22/2020 |
| Designed by | JY | Case No | |
| Company Project Number/Name | 280.894 Renaissance Ranch | | |

### BMP Identification

BMP NAME / ID: BMP Area A2 = 9.90 Ac (Street & Commercial)

*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

$D_{85}$= 0.85 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) |
|---|---|---|---|---|---|---|---|---|
| 9.90 Ac | 431244 | Mixed Surface Types | 0.9 | 0.73 | 314929.7 | | | |
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| | 431244 | | Total | | 314929.7 | 0.85 | 22307.5 | 22308 |

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 | K&A Engineering, Inc. | Date | 9/22/2020 |
| Designed by | JY | Case No | |
| Company Project Number/Name | 280.894 Renaissance Ranch | | |

### BMP Identification

BMP NAME / ID: BMP Area A3 (B1b) = 9.12 Ac (Commercial)

*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

$D_{85}$= 0.85 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) |
|---|---|---|---|---|---|---|---|---|
| 9.12 Ac | 397267 | Mixed Surface Types | 0.9 | 0.73 | 290116.9 | | | |
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| | 397267 | Total | | | 290116.9 | 0.85 | 20549.9 | 20550 |

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 | K&A Engineering, Inc. | Date | 9/22/2020 |
| Designed by | JY | Case No | |
| Company Project Number/Name | 280.894 Renaissance Ranch | | |

### BMP Identification

BMP NAME / ID: BMP Area B1a = 5.45 Ac (Commercial)

*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

$D_{85}$= 0.85 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) |
|---|---|---|---|---|---|---|---|---|
| 5.45 Ac | 237402 | Mixed Surface Types | 0.9 | 0.73 | 173370.4 | | | |
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| | 237402 | Total | | | 173370.4 | 0.85 | 12280.4 | 12281 |

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 | K&A Engineering, Inc. | Date | 9/22/2020 |
| Designed by | JY | Case No | |
| Company Project Number/Name | 280.894 Renaissance Ranch | | |

### BMP Identification

BMP NAME / ID: BMP Area B2 = 42.59 Ac (Street & Commercial)

*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

$D_{85}$= 0.85 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) |
|---|---|---|---|---|---|---|---|---|
| 42.59 Ac | 1855220 | Mixed Surface Types | 0.9 | 0.73 | 1354833.8 | | | |
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| | 1855220 | Total | | | 1354833.8 | 0.85 | 95967.4 | 95968 |

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 K&A Engineering, Inc. Date 9/22/2020

Designed by JY Case No

Company Project Number/Name 280.894 Renaissance Ranch

### BMP Identification

BMP NAME / ID BMP Area B4 = 25.28 Ac (Commercial)

*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 $D_{85}$= 0.85 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)* |
|---|---|---|---|---|---|---|---|---|
| *25.28 Ac* | *1101196* | *Mixed Surface Types* | *0.9* | *0.73* | *804183.6* | | | |
| | *1101196* | *Total* | | | 804183.6 | 0.85 | *56963* | *56963* |

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: K&A Engineering, Inc. — Date: 9/22/2020

Designed by: JY — Case No:

Company Project Number/Name: 280.894 Renaissance Ranch

### BMP Identification

BMP NAME / ID: BMP Area B5/6 = 13.56 Ac (Street & Commercial)

*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

$D_{85}$= 0.85 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) |
|---|---|---|---|---|---|---|---|---|
| 13.56 Ac | 590674 | Mixed Surface Types | 0.9 | 0.73 | 431358.6 | | | |
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| | 590674 | Total | | | 431358.6 | 0.85 | 30554.6 | 30555 |

Notes:

## Proposed BMPs: Extended Detention Basin

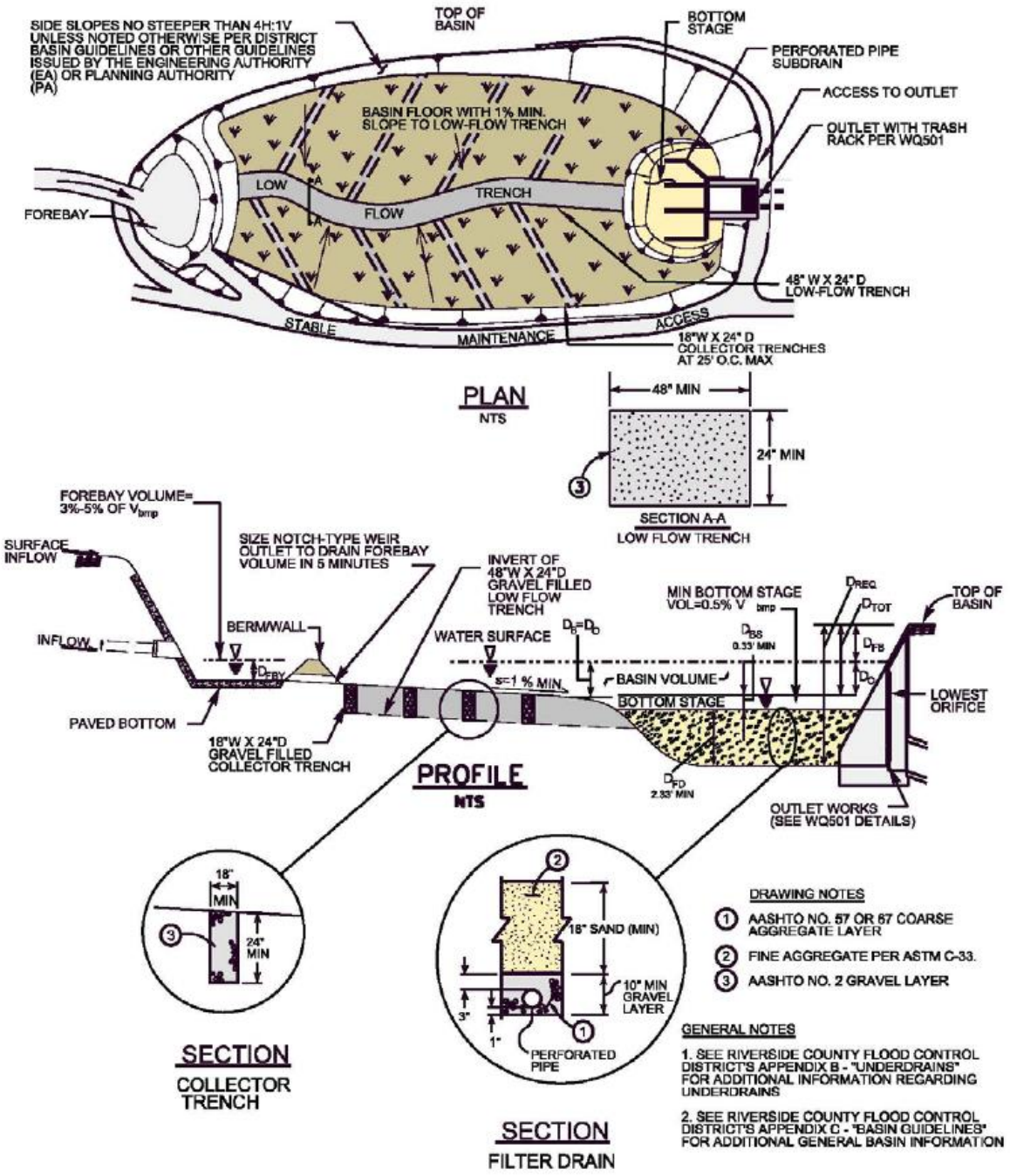



**Figure 1 – Extended Detention Basin**

## Basin Outlet Design

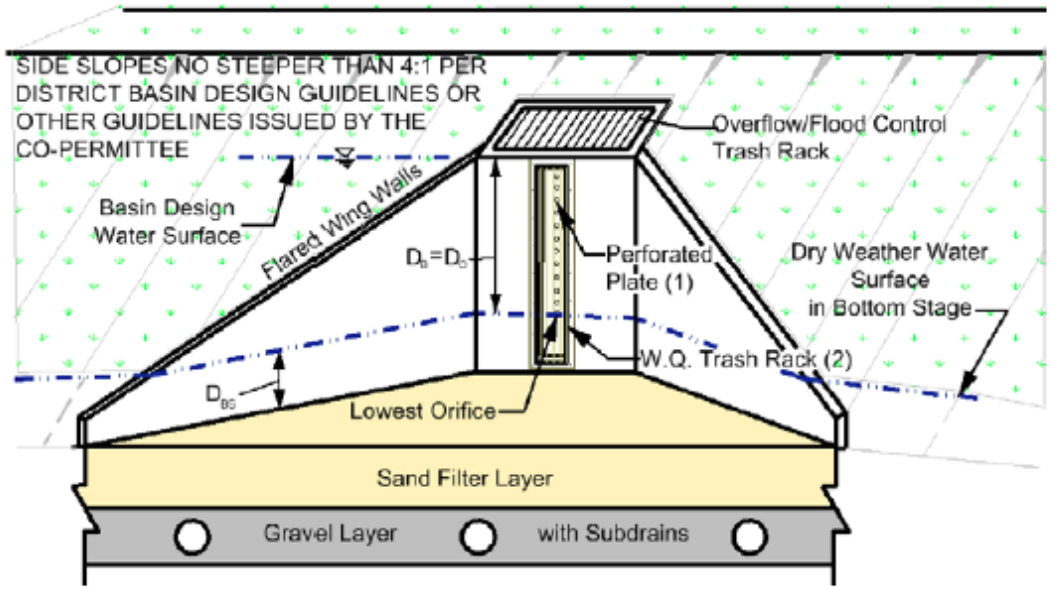



Figure 4: Basin Outlet Structure with Bottom Stage Shown

| Extended Detention Basin Design Procedure | BMP Subarea No. A2 | Legend: | Required Entries / Calculated Cells |
|---|---|---|---|
| Company Name: K&A Engineering | | | Date: 9/22/2020 |
| Designed by: JY | | | County/City Case No.: |

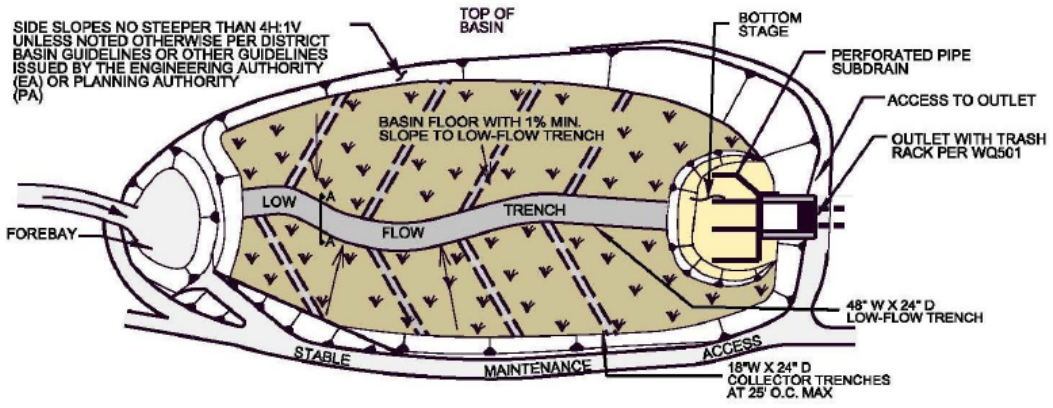
## Design Volume

| | | | |
|---|---|---|---|
| Tributary Area (BMP Subarea) | $A_T$ = | 9.9 | acres |
| Enter $V_{BMP}$, determined from Section 2.1 of this Handbook | $V_{BMP}$= | 22,308 | $ft^3$ |

## Basin Footprint

**Overall Geometry**

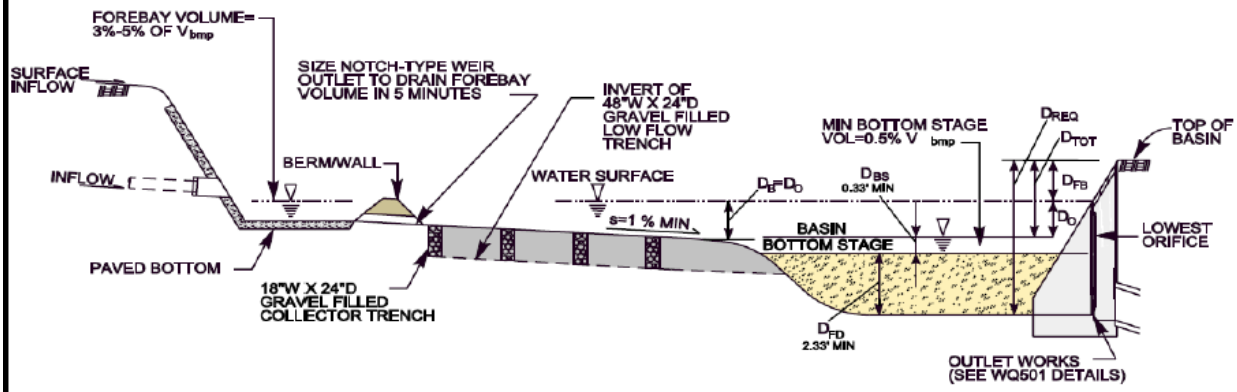
| | | | |
|---|---|---|---|
| Length at Basin Bottom Surface | Length = | 150 | ft |
| Width at Basin Bottom Surface | Width = | 80 | ft |
| | Meets 1.5 : 1 requirement? | ✓ | |
| Side Slopes per "Basin Guidelines", Sect. 1.2 | z = | 4 | :1 |
| Proposed Basin Depth (with no freeboard) | $D_B$ = | 6.00 | ft |
| Depth of freeboard (if used) | $D_{FB}$ = | 1.00 | ft |
| Minimum Required Allowance for Total Depth (including proposed basin depth, freeboard, minimum depth of bottom stage ($D_{BS}$=0.33') and minimum filter depth ($D_{FD}$=2.33')) | $D_{REQ}$ = | 9.7 | ft |
| Depth from design water surface elevation to lowest orifice | $D_O$ = | 6.0 | ft |



## Basin Design

**Basin Design**

| | | | |
|---|---|---|---|
| Proposed Total Basin Depth (proposed depth plus freeboard) | $D_{TOT}$ = | 7.00 | ft |
| Basin Invert Longitudinal Slope | Slope = | 1.00 | % |
| Basin Invert Transverse Slope (1% min) | Slope = | 1 | % |
| Basin Volume | $V_{Basin}$ = | 23500 | $ft^3$ |




## Forebay Design

| | | | |
|---|---|---|---|
| Forebay Volume (3 - 5% $V_{BMP}$) | $V_{FB}$ = | 780 | $ft^3$ |
| Forebay Depth (height of berm) | $D_{FBY}$ = | 2 | ft |
| Minimum Forebay Surface Area | $A_{FB}$ = | 390 | $ft^2$ |
| Rectangular weir (notch) | W = | 2.00 | in |

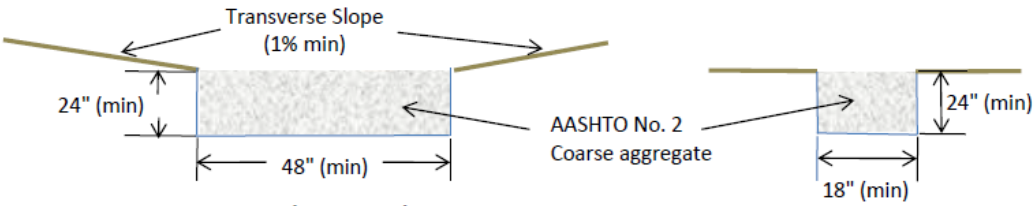
## Dry Weather and Low-Flow Management

**Low-Flow Trench** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum, gravel filled) | Depth = | 24 | inches |
| Width (48 inches minimum) | Width = | 48 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |

**Collector Trenches** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum) | Depth = | 24 | inches |
| Width (18 inches minimum) | Width = | 18 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |
| Spacing (25 feet on center maximum) | S = | 25 | feet |




Low-Flow Trench | Collector Trench

**Bottom Stage (Sand Filter) Design**

| | | | |
|---|---|---|---|
| Depth of the Bottom Stage (4" minimum ponding) | $D_{BS}$ = | 4 | in |
| Surface Area of Bottom Stage | $A_{BS}$ = | 100 | $ft^2$ |
| Dry Weather Ponded Volume (above sand layer) | $V_{BS}$ = | 33 | $ft^3$ |

Is $V_{BS}$ no less than 0.5% $V_{BMP}$? OK

Depth of ASTM-C33 sand (18 inch minimum)

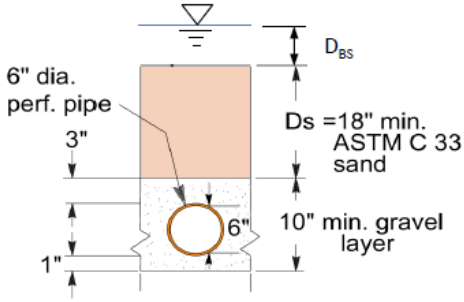
Ds = 18 inches

Diameter of Subdrains

$\phi$ = 6 in

Subdrain Spacing

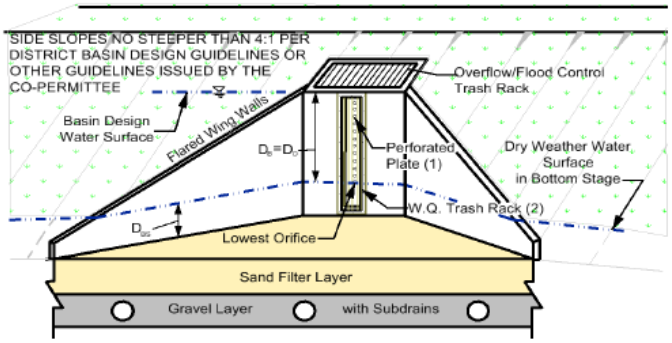
s = 10 ft. on center



## Basin Outlet Design

### Outlet Design

Assume an orifice area. Based on the information provided above, the spreadsheet provides discharge vs. stage data. Enter the volume vs. stage data for each interval. This information is used to route the volume through the basin. The size of the orifice is acceptable when the data shows that less than 50% of $V_{BMP}$ has drained in 24 hours, and that 100% drawdown occurs within 72 hours.




**Flow Rate, Q (cfs)**

$$Q=CA[2g(H-H_o)]^{0.5}$$

Discharge Coefficient,

Default, C = 0.66

Other, C =

**Orifice Area ($ft^2$)**

Orifice Diameter, d; number of orifices per row, n; and number of orifice rows, N (from the bottom up).

d = 1.14 inches

n = 2 per row

N = 1 rows

Aeff = 0.014 $ft^2$ per row

or

Aeff = 2.040 $in^2$ per row

From outflow hydrograph, the time where 50% of $V_{BMP}$ has drained from the basin (24 hour minimum):

Time (50%) = 24.20 hrs

OK

From outflow hydrograph, the time where 100% $V_{BMP}$ has drained from the basin(within 72 hours):

Time (100 %) = 70.19 hrs

OK

| Headwater Elev. / Stage (ft) | Discharge (cfs) | Volume (acre-ft) | Δt (hrs.) |
|---|---|---|---|
| 0 | 0.0000 | 0.0000 | |
| 0.33 | 0.0433 | 0.020 | 11.18 |
| 0.67 | 0.0613 | 0.060 | 9.25 |
| 1.00 | 0.0750 | 0.100 | 7.10 |
| 1.33 | 0.0866 | 0.120 | 2.99 |
| 1.67 | 0.0969 | 0.140 | 2.64 |
| 2.00 | 0.1061 | 0.180 | 4.77 |
| 2.33 | 0.1146 | 0.220 | 4.38 |
| 2.67 | 0.1226 | 0.260 | 4.08 |
| 3.00 | 0.1300 | 0.300 | 3.83 |
| 3.33 | 0.1370 | 0.360 | 5.44 |
| 3.67 | 0.1437 | 0.400 | 3.45 |
| 4.00 | 0.1501 | 0.450 | 4.12 |
| 4.33 | 0.1562 | 0.490 | 3.16 |
| 4.67 | 0.1621 | 0.540 | 3.80 |
| 5.00 | *0.1678* | *0.600* | |
| 5.33 | *0.1733* | *0.700* | |
| 5.67 | *0.1787* | *0.800* | |
| 6.00 | *0.1838* | *0.900* | |
| 6.33 | | | |
| 6.67 | | | |
| 7.00 | | | |
| 7.33 | | | |
| 7.67 | | | |
| 8.00 | | | |
| 8.33 | | | |
| 8.67 | | | |
| 9.00 | | | |
| 9.33 | | | |
| 9.67 | | | |
| 10.00 | | | |
| | | ∑ = | 70.19 |

Notes:

| Extended Detention Basin Design Procedure | | BMP Subarea No. A3(B1b) | Legend: | Required Entries / Calculated Cells |
|---|---|---|---|---|
| Company Name: | K&A Engineering | | | Date: 9/22/2020 |
| Designed by: | JY | | | County/City Case No.: |

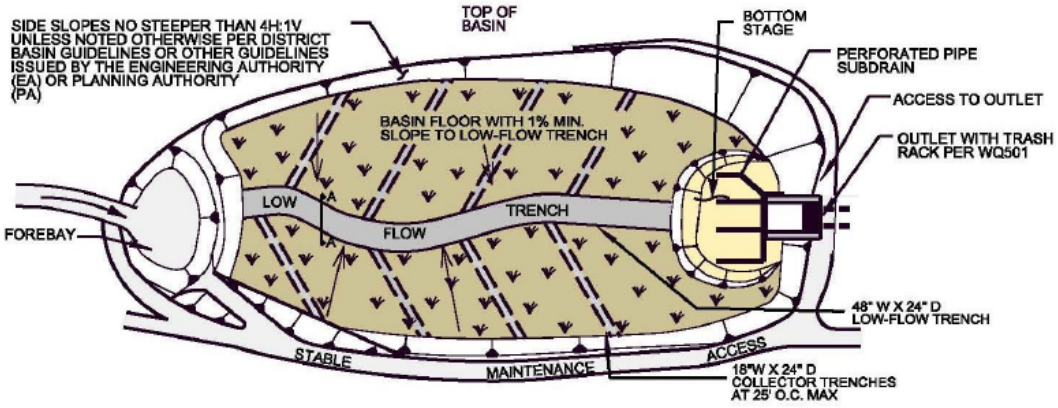
## Design Volume

| | | | |
|---|---|---|---|
| Tributary Area (BMP Subarea) | $A_T$ = | 9.12 | acres |
| Enter $V_{BMP}$, determined from Section 2.1 of this Handbook | $V_{BMP}$= | 20,550 | $ft^3$ |

## Basin Footprint

**Overall Geometry**

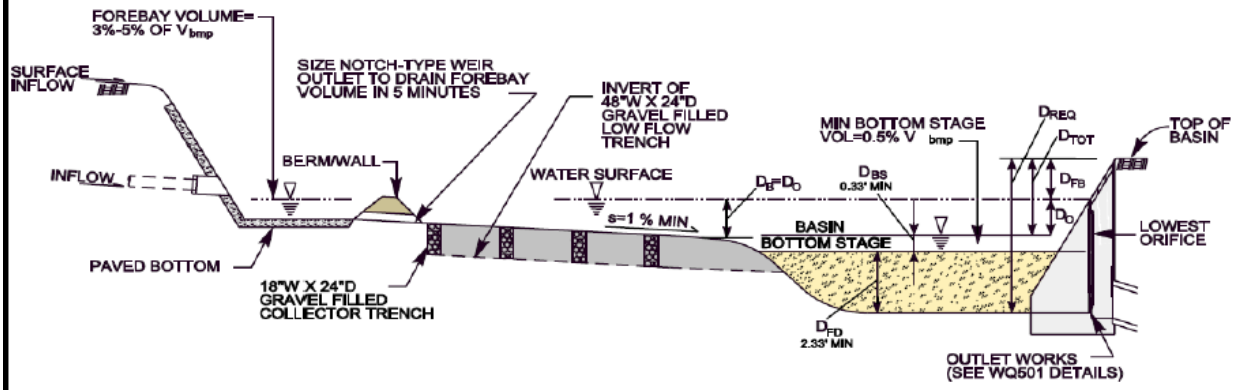
| | | | |
|---|---|---|---|
| Length at Basin Bottom Surface | Length = | 120 | ft |
| Width at Basin Bottom Surface | Width = | 70 | ft |
| | Meets 1.5 : 1 requirement? | ✓ | |
| Side Slopes per "Basin Guidelines", Sect. 1.2 | z = | 4 | :1 |
| Proposed Basin Depth (with no freeboard) | $D_B$ = | 6.00 | ft |
| Depth of freeboard (if used) | $D_{FB}$ = | 1.00 | ft |
| Minimum Required Allowance for Total Depth (including proposed basin depth, freeboard, minimum depth of bottom stage ($D_{BS}$=0.33') and minimum filter depth ($D_{FD}$=2.33')) | $D_{REQ}$ = | 9.7 | ft |
| Depth from design water surface elevation to lowest orifice | $D_O$ = | 6.0 | ft |



## Basin Design

**Basin Design**

| | | | |
|---|---|---|---|
| Proposed Total Basin Depth (proposed depth plus freeboard) | $D_{TOT}$ = | 7.00 | ft |
| Basin Invert Longitudinal Slope | Slope = | 1.00 | % |
| Basin Invert Transverse Slope (1% min) | Slope = | 1 | % |
| Basin Volume | $V_{Basin}$ = | 21000 | $ft^3$ |




## Forebay Design

| | | | |
|---|---|---|---|
| Forebay Volume (3 - 5% $V_{BMP}$) | $V_{FB}$ = | 1000 | $ft^3$ |
| Forebay Depth (height of berm) | $D_{FBY}$ = | 2 | ft |
| Minimum Forebay Surface Area | $A_{FB}$ = | 500 | $ft^2$ |
| Rectangular weir (notch) | W = | 2.00 | in |

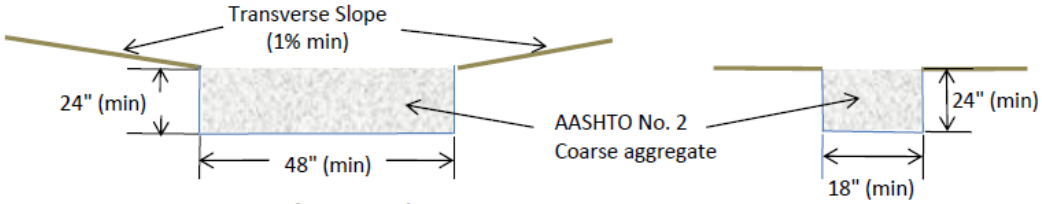
## Dry Weather and Low-Flow Management

**Low-Flow Trench** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum, gravel filled) | Depth = | 24 | inches |
| Width (48 inches minimum) | Width = | 48 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |

**Collector Trenches** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum) | Depth = | 24 | inches |
| Width (18 inches minimum) | Width = | 18 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |
| Spacing (25 feet on center maximum) | S = | 25 | feet |




Low-Flow Trench | Collector Trench

**Bottom Stage (Sand Filter) Design**

| | | | |
|---|---|---|---|
| Depth of the Bottom Stage (4" minimum ponding) | $D_{BS}$ = | 4 | in |
| Surface Area of Bottom Stage | $A_{BS}$ = | 100 | $ft^2$ |
| Dry Weather Ponded Volume (above sand layer) | $V_{BS}$ = | 33 | $ft^3$ |

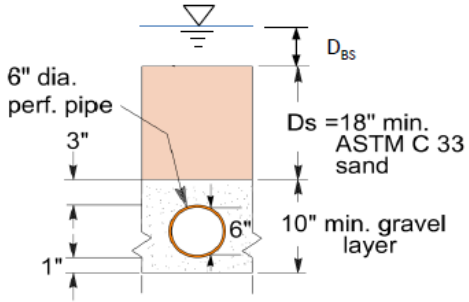
Is $V_{BS}$ no less than 0.5% $V_{BMP}$? OK

Depth of ASTM-C33 sand (18 inch minimum)

Ds = 18 inches

Diameter of Subdrains: $\phi$ = 6 in

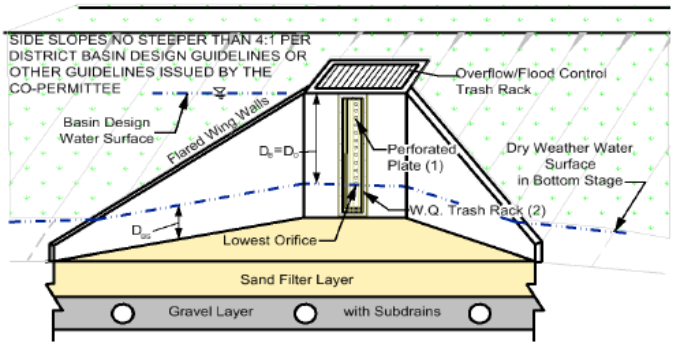
Subdrain Spacing: s = 10 ft. on center



## Basin Outlet Design

### Outlet Design

Assume an orifice area. Based on the information provided above, the spreadsheet provides discharge vs. stage data. Enter the volume vs. stage data for each interval. This information is used to route the volume through the basin. The size of the orifice is acceptable when the data shows that less than 50% of $V_{BMP}$ has drained in 24 hours, and that 100% drawdown occurs within 72 hours.




**Flow Rate, Q (cfs)**

$$Q=CA[2g(H-H_o)]^{0.5}$$

Discharge Coefficient,

Default, C = 0.66

Other, C =

**Orifice Area ($ft^2$)**

Orifice Diameter, d; number of orifices per row, n; and number of orifice rows, N (from the bottom up).

d = 1.01 inches

n = 2 per row

N = 1 rows

Aeff = 0.011 $ft^2$ per row

or

Aeff = 1.602 $in^2$ per row

From outflow hydrograph, the time where 50% of $V_{BMP}$ has drained from the basin (24 hour minimum):

Time (50%) = 25.63 hrs

OK

From outflow hydrograph, the time where 100% $V_{BMP}$ has drained from the basin(within 72 hours):

Time (100 %) = 71.58 hrs

OK

| Headwater Elev. / Stage (ft) | Discharge (cfs) | Volume (acre-ft) | Δt (hrs.) |
|---|---|---|---|
| 0 | 0.0000 | 0.0000 | |
| 0.33 | 0.0340 | 0.010 | 7.12 |
| 0.67 | 0.0481 | 0.030 | 5.90 |
| 1.00 | 0.0589 | 0.050 | 4.52 |
| 1.33 | 0.0680 | 0.090 | 7.63 |
| 1.67 | 0.0761 | 0.130 | 6.72 |
| 2.00 | 0.0833 | 0.150 | 3.04 |
| 2.33 | 0.0900 | 0.170 | 2.79 |
| 2.67 | 0.0962 | 0.200 | 3.90 |
| 3.00 | 0.1020 | 0.230 | 3.66 |
| 3.33 | 0.1075 | 0.250 | 2.31 |
| 3.67 | 0.1128 | 0.270 | 2.20 |
| 4.00 | 0.1178 | 0.300 | 3.15 |
| 4.33 | 0.1226 | 0.330 | 3.02 |
| 4.67 | 0.1273 | 0.370 | 3.87 |
| 5.00 | 0.1317 | 0.410 | 3.74 |
| 5.33 | 0.1360 | 0.460 | 4.52 |
| 5.67 | 0.1402 | 0.500 | 3.50 |
| 6.00 | *0.1443* | *0.550* | |
| 6.33 | | | |
| 6.67 | | | |
| 7.00 | | | |
| 7.33 | | | |
| 7.67 | | | |
| 8.00 | | | |
| 8.33 | | | |
| 8.67 | | | |
| 9.00 | | | |
| 9.33 | | | |
| 9.67 | | | |
| 10.00 | | | |
| | | ∑ = | 71.58 |

Notes:

| Extended Detention Basin Design Procedure | | BMP Subarea No. | | Legend: | Required Entries / Calculated Cells |
|---|---|---|---|---|---|
| Company Name: | K&A Engineering | | | Date: | 9/22/2020 |
| Designed by: | JY | | | County/City Case No.: | |

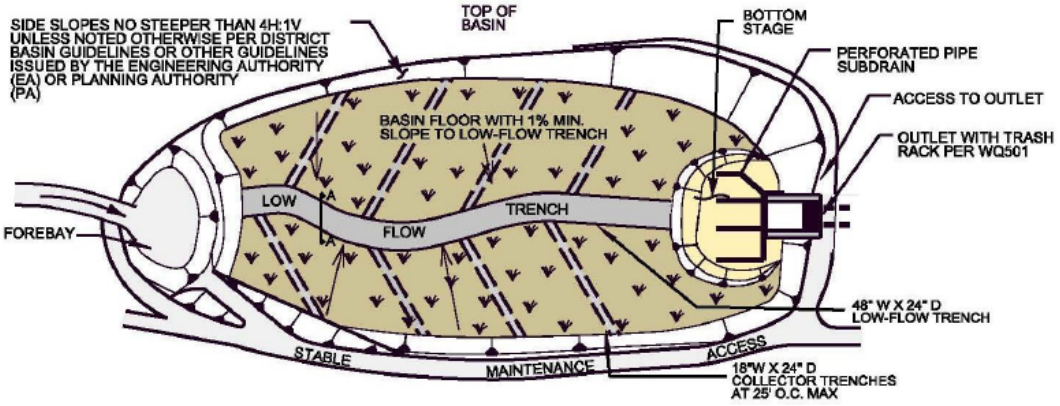
## Design Volume

| | | | |
|---|---|---|---|
| Tributary Area (BMP Subarea) | $A_T$ = | 5.45 | acres |
| Enter $V_{BMP}$, determined from Section 2.1 of this Handbook | $V_{BMP}$= | 12,281 | $ft^3$ |

## Basin Footprint

**Overall Geometry**

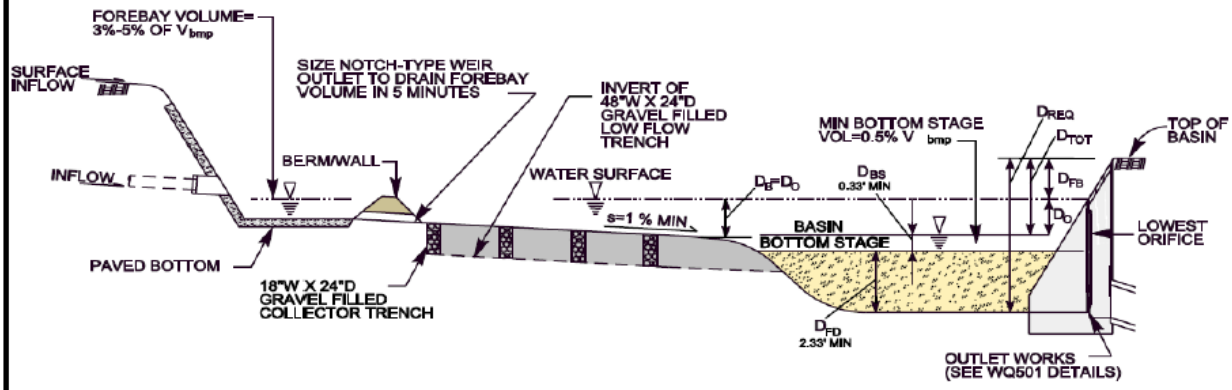
| | | | |
|---|---|---|---|
| Length at Basin Bottom Surface | Length = | 90 | ft |
| Width at Basin Bottom Surface | Width = | 50 | ft |
| | Meets 1.5 : 1 requirement? | ✓ | |
| Side Slopes per "Basin Guidelines", Sect. 1.2 | z = | 4 | :1 |
| Proposed Basin Depth (with no freeboard) | $D_B$ = | 6.00 | ft |
| Depth of freeboard (if used) | $D_{FB}$ = | 1.00 | ft |
| Minimum Required Allowance for Total Depth (including proposed basin depth, freeboard, minimum depth of bottom stage ($D_{BS}$=0.33') and minimum filter depth ($D_{FD}$=2.33')) | $D_{REQ}$ = | 9.7 | ft |
| Depth from design water surface elevation to lowest orifice | $D_O$ = | 6.0 | ft |



## Basin Design

**Basin Design**

| | | | |
|---|---|---|---|
| Proposed Total Basin Depth (proposed depth plus freeboard) | $D_{TOT}$ = | 7.00 | ft |
| Basin Invert Longitudinal Slope | Slope = | 1.00 | % |
| Basin Invert Transverse Slope (1% min) | Slope = | 1 | % |
| Basin Volume | $V_{Basin}$ = | 13000 | $ft^3$ |




## Forebay Design

| | | | |
|---|---|---|---|
| Forebay Volume (3 - 5% $V_{BMP}$) | $V_{FB}$ = | 600 | $ft^3$ |
| Forebay Depth (height of berm) | $D_{FBY}$ = | 2 | ft |
| Minimum Forebay Surface Area | $A_{FB}$ = | 300 | $ft^2$ |
| Rectangular weir (notch) | W = | 2.00 | in |

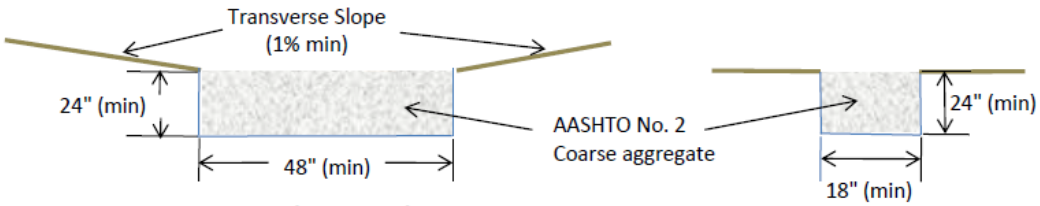
## Dry Weather and Low-Flow Management

**Low-Flow Trench** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum, gravel filled) | Depth = | 24 | inches |
| Width (48 inches minimum) | Width = | 48 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |

**Collector Trenches** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum) | Depth = | 24 | inches |
| Width (18 inches minimum) | Width = | 18 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |
| Spacing (25 feet on center maximum) | S = | 25 | feet |




Low-Flow Trench  Collector Trench

**Bottom Stage (Sand Filter) Design**

| | | | |
|---|---|---|---|
| Depth of the Bottom Stage (4" minimum ponding) | $D_{BS}$ = | 4 | in |
| Surface Area of Bottom Stage | $A_{BS}$ = | 100 | $ft^2$ |
| Dry Weather Ponded Volume (above sand layer) | $V_{BS}$ = | 33 | $ft^3$ |

Is $V_{BS}$ no less than 0.5% $V_{BMP}$? OK

Depth of ASTM-C33 sand (18 inch minimum)

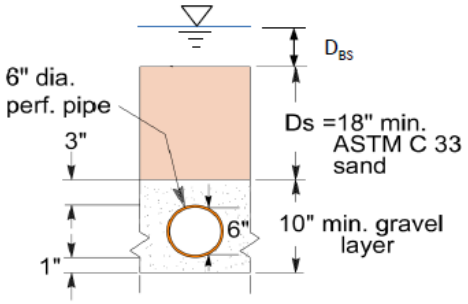
Ds = 18 inches

Diameter of Subdrains

$\phi$ = 6 in

Subdrain Spacing

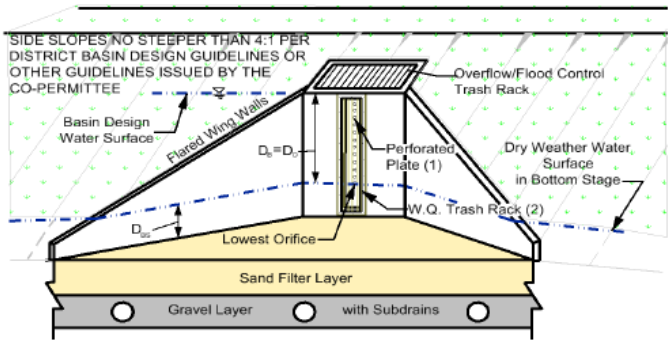
s = 10 ft. on center



## Basin Outlet Design

### Outlet Design

Assume an orifice area. Based on the information provided above, the spreadsheet provides discharge vs. stage data. Enter the volume vs. stage data for each interval. This information is used to route the volume through the basin. The size of the orifice is acceptable when the data shows that less than 50% of $V_{BMP}$ has drained in 24 hours, and that 100% drawdown occurs within 72 hours.




**Flow Rate, Q (cfs)**

$$Q=CA[2g(H-H_o)]^{0.5}$$

Discharge Coefficient,

Default, C = 0.66

Other, C =

**Orifice Area ($ft^2$)**

Orifice Diameter, d; number of orifices per row, n; and number of orifice rows, N (from the bottom up).

d = 0.9 inches

n = 2 per row

N = 1 rows

Aeff = 0.009 $ft^2$ per row

or

Aeff = 1.272 $in^2$ per row

From outflow hydrograph, the time where 50% of $V_{BMP}$ has drained from the basin (24 hour minimum):

Time (50%) = 24.41 hrs

OK

From outflow hydrograph, the time where 100% $V_{BMP}$ has drained from the basin(within 72 hours):

Time (100 %) = 66.66 hrs

OK

| Headwater Elev. / Stage (ft) | Discharge (cfs) | Volume (acre-ft) | Δt (hrs.) |
|---|---|---|---|
| 0 | 0.0000 | 0.0000 | |
| 0.33 | 0.0270 | 0.010 | 8.97 |
| 0.67 | 0.0382 | 0.030 | 7.42 |
| 1.00 | 0.0468 | 0.050 | 5.70 |
| 1.33 | 0.0540 | 0.090 | 9.61 |
| 1.67 | 0.0604 | 0.130 | 8.46 |
| 2.00 | 0.0661 | 0.150 | 3.82 |
| 2.33 | 0.0714 | 0.170 | 3.52 |
| 2.67 | 0.0764 | 0.200 | 4.91 |
| 3.00 | 0.0810 | 0.230 | 4.61 |
| 3.33 | 0.0854 | 0.250 | 2.91 |
| 3.67 | 0.0896 | 0.270 | 2.77 |
| 4.00 | 0.0935 | 0.300 | 3.96 |
| 4.33 | *0.0974* | *0.330* | |
| 4.67 | *0.1010* | *0.370* | |
| 5.00 | *0.1046* | *0.410* | |
| 5.33 | *0.1080* | *0.460* | |
| 5.67 | *0.1113* | *0.500* | |
| 6.00 | *0.1146* | *0.550* | |
| 6.33 | | | |
| 6.67 | | | |
| 7.00 | | | |
| 7.33 | | | |
| 7.67 | | | |
| 8.00 | | | |
| 8.33 | | | |
| 8.67 | | | |
| 9.00 | | | |
| 9.33 | | | |
| 9.67 | | | |
| 10.00 | | | |
| | | ∑ = | 66.66 |

Notes:

| Extended Detention Basin Design Procedure | BMP Subarea No. B2 | Legend: | Required Entries / Calculated Cells |
|---|---|---|---|
| Company Name: K&A Engineering | | | Date: 9/22/2020 |
| Designed by: JY | | | County/City Case No.: |

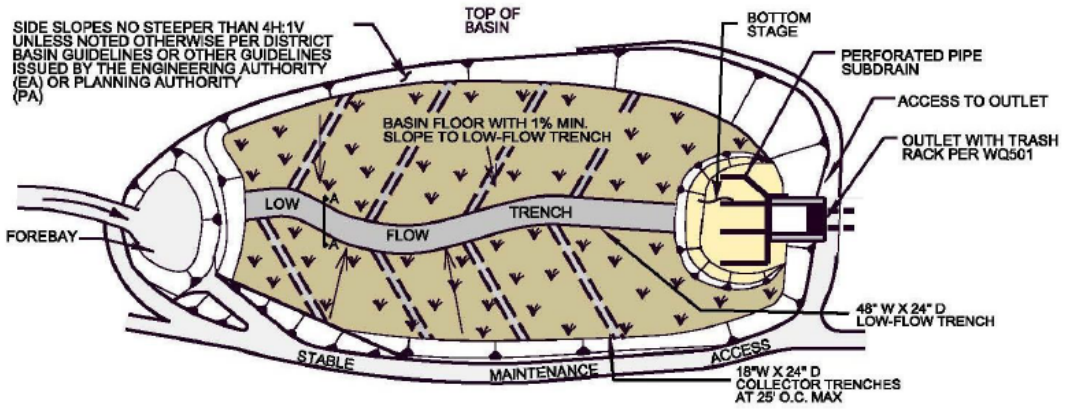
## Design Volume

| | | | |
|---|---|---|---|
| Tributary Area (BMP Subarea) | $A_T$ = | 42.59 | acres |
| Enter $V_{BMP}$, determined from Section 2.1 of this Handbook | $V_{BMP}$= | 95,968 | $ft^3$ |

## Basin Footprint

**Overall Geometry**

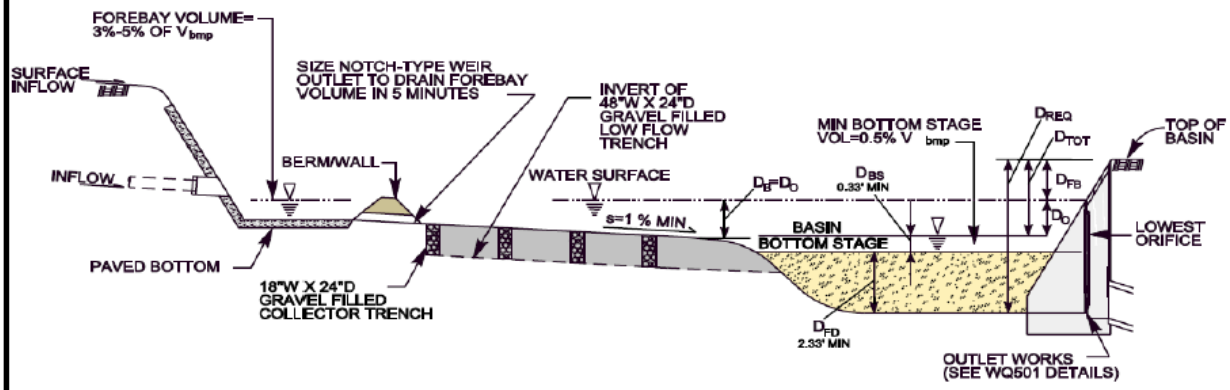
| | | | |
|---|---|---|---|
| Length at Basin Bottom Surface | Length = | 200 | ft |
| Width at Basin Bottom Surface | Width = | 100 | ft |
| | Meets 1.5 : 1 requirement? | ✓ | |
| Side Slopes per "Basin Guidelines", Sect. 1.2 | z = | 4 | :1 |
| Proposed Basin Depth (with no freeboard) | $D_B$ = | 6.00 | ft |
| Depth of freeboard (if used) | $D_{FB}$ = | 1.00 | ft |
| Minimum Required Allowance for Total Depth (including proposed basin depth, freeboard, minimum depth of bottom stage ($D_{BS}$=0.33') and minimum filter depth ($D_{FD}$=2.33')) | $D_{REQ}$ = | 9.7 | ft |
| Depth from design water surface elevation to lowest orifice | $D_O$ = | 6.0 | ft |



## Basin Design

**Basin Design**

| | | | |
|---|---|---|---|
| Proposed Total Basin Depth (proposed depth plus freeboard) | $D_{TOT}$ = | 7.00 | ft |
| Basin Invert Longitudinal Slope | Slope = | 1.00 | % |
| Basin Invert Transverse Slope (1% min) | Slope = | 1 | % |
| Basin Volume | $V_{Basin}$ = | 96000 | $ft^3$ |




## Forebay Design

| | | | |
|---|---|---|---|
| Forebay Volume (3 - 5% $V_{BMP}$) | $V_{FB}$ = | 3200 | $ft^3$ |
| Forebay Depth (height of berm) | $D_{FBY}$ = | 2 | ft |
| Minimum Forebay Surface Area | $A_{FB}$ = | 1600 | $ft^2$ |
| Rectangular weir (notch) | W = | 2.00 | in |

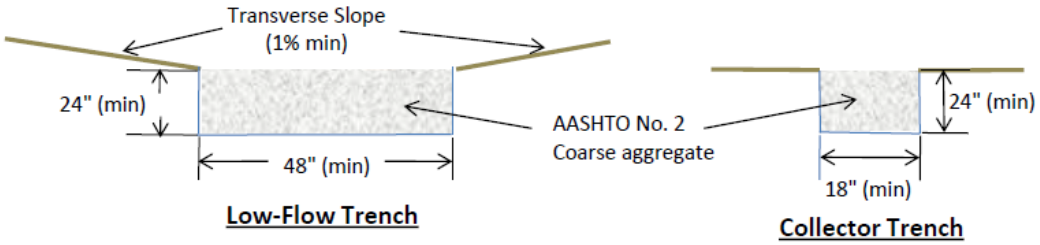
## Dry Weather and Low-Flow Management

**Low-Flow Trench** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum, gravel filled) | Depth = | 24 | inches |
| Width (48 inches minimum) | Width = | 48 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |

**Collector Trenches** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum) | Depth = | 24 | inches |
| Width (18 inches minimum) | Width = | 18 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |
| Spacing (25 feet on center maximum) | S = | 25 | feet |




Low-Flow Trench | Collector Trench

**Bottom Stage (Sand Filter) Design**

| | | | |
|---|---|---|---|
| Depth of the Bottom Stage (4" minimum ponding) | $D_{BS}$ = | 4 | in |
| Surface Area of Bottom Stage | $A_{BS}$ = | 3500 | $ft^2$ |
| Dry Weather Ponded Volume (above sand layer) | $V_{BS}$ = | 1167 | $ft^3$ |

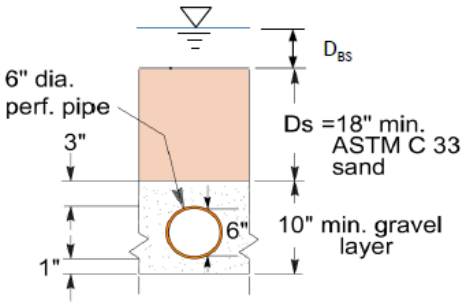
Is $V_{BS}$ no less than 0.5% $V_{BMP}$? OK

Depth of ASTM-C33 sand (18 inch minimum)

Ds = 18 inches

Diameter of Subdrains: $\phi$ = 6 in

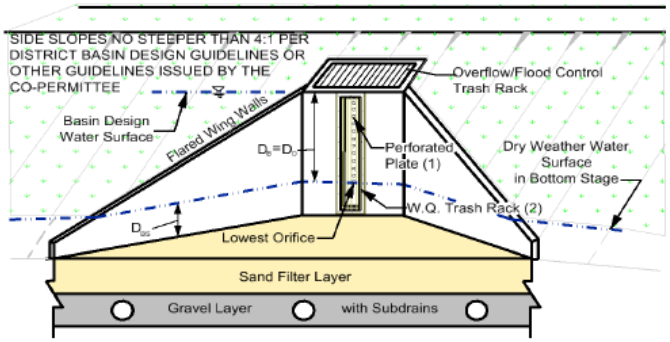
Subdrain Spacing: s = 10 ft. on center



## Basin Outlet Design

### Outlet Design

Assume an orifice area. Based on the information provided above, the spreadsheet provides discharge vs. stage data. Enter the volume vs. stage data for each interval. This information is used to route the volume through the basin. The size of the orifice is acceptable when the data shows that less than 50% of $V_{BMP}$ has drained in 24 hours, and that 100% drawdown occurs within 72 hours.




**Flow Rate, Q (cfs)**

$$Q=CA[2g(H-H_o)]^{0.5}$$

Discharge Coefficient,

Default, C = 0.66

Other, C =

**Orifice Area ($ft^2$)**

Orifice Diameter, d; number of orifices per row, n; and number of orifice rows, N (from the bottom up).

d = 2.4 inches

n = 2 per row

N = 1 rows

Aeff = 0.063 $ft^2$ per row

or

Aeff = 9.043 $in^2$ per row

From outflow hydrograph, the time where 50% of $V_{BMP}$ has drained from the basin (24 hour minimum):

Time (50%) = 28.58 hrs

OK

From outflow hydrograph, the time where 100% $V_{BMP}$ has drained from the basin(within 72 hours):

Time (100 %) = 67.64 hrs

OK

| Headwater Elev. / Stage (ft) | Discharge (cfs) | Volume (acre-ft) | Δt (hrs.) |
|---|---|---|---|
| 0 | 0.0000 | 0.0000 | |
| 0.33 | 0.1919 | 0.066 | 8.32 |
| 0.67 | 0.2716 | 0.154 | 4.59 |
| 1.00 | 0.3326 | 0.242 | 3.52 |
| 1.33 | 0.3840 | 0.308 | 2.23 |
| 1.67 | 0.4295 | 0.385 | 2.29 |
| 2.00 | 0.4704 | 0.693 | 8.28 |
| 2.33 | 0.5080 | 0.935 | 5.99 |
| 2.67 | 0.5432 | 1.160 | 5.18 |
| 3.00 | 0.5761 | 1.360 | 4.32 |
| 3.33 | 0.6072 | 1.520 | 3.27 |
| 3.67 | 0.6369 | 1.670 | 2.92 |
| 4.00 | 0.6652 | 1.830 | 2.97 |
| 4.33 | 0.6924 | 2.010 | 3.21 |
| 4.67 | 0.7186 | 2.200 | 3.26 |
| 5.00 | 0.7438 | 2.640 | 7.28 |
| 5.33 | *0.7681* | *2.650* | |
| 5.67 | *0.7918* | *2.890* | |
| 6.00 | *0.8147* | *3.150* | |
| 6.33 | | | |
| 6.67 | | | |
| 7.00 | | | |
| 7.33 | | | |
| 7.67 | | | |
| 8.00 | | | |
| 8.33 | | | |
| 8.67 | | | |
| 9.00 | | | |
| 9.33 | | | |
| 9.67 | | | |
| 10.00 | | | |
| | | ∑ = | 67.64 |

Notes:

| Extended Detention Basin Design Procedure | | BMP Subarea No. Area B4 | Legend: | Required Entries / Calculated Cells |
|---|---|---|---|---|
| Company Name: | K&A Engineering | | | Date: 9/22/2020 |
| Designed by: | JY | | | County/City Case No.: |

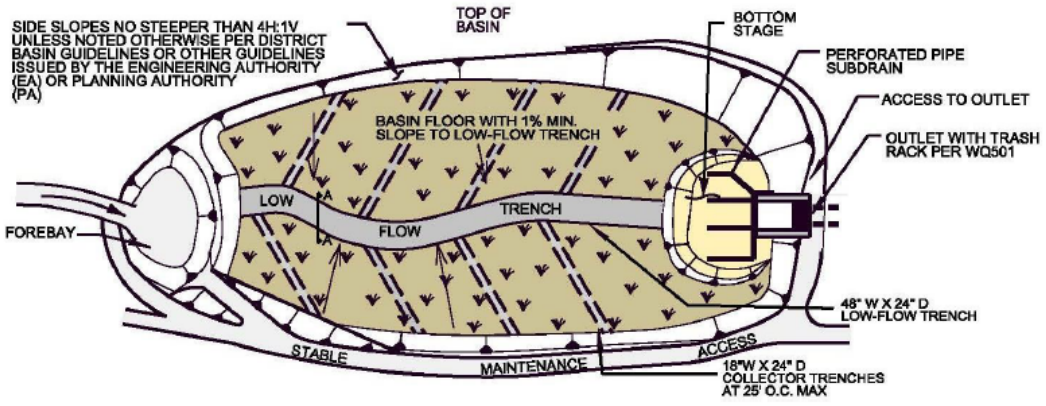
## Design Volume

| | | | |
|---|---|---|---|
| Tributary Area (BMP Subarea) | $A_T$ = | 25.28 | acres |
| Enter $V_{BMP}$, determined from Section 2.1 of this Handbook | $V_{BMP}$= | 56,963 | $ft^3$ |

## Basin Footprint

**Overall Geometry**

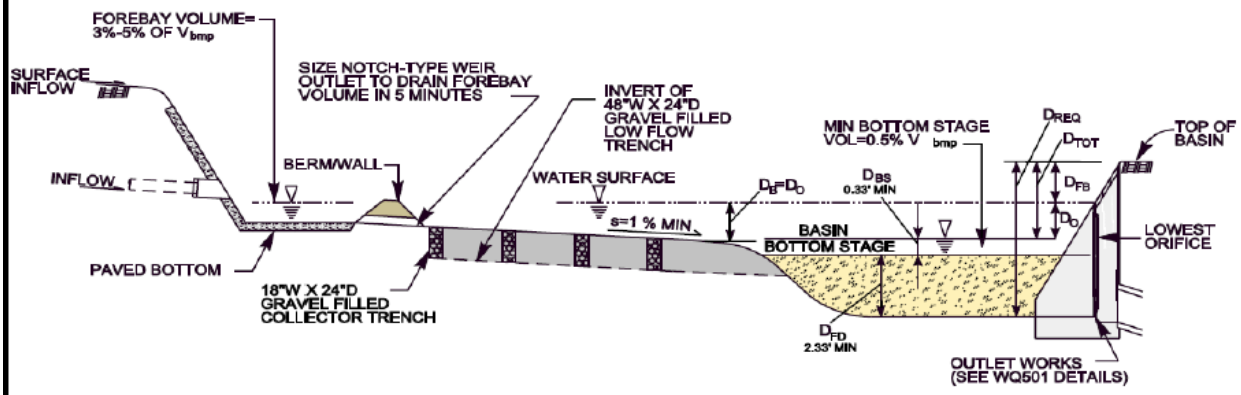
| | | | |
|---|---|---|---|
| Length at Basin Bottom Surface | Length = | 130 | ft |
| Width at Basin Bottom Surface | Width = | 65 | ft |
| | Meets 1.5 : 1 requirement? | ✓ | |
| Side Slopes per "Basin Guidelines", Sect. 1.2 | z = | 4 | :1 |
| Proposed Basin Depth (with no freeboard) | $D_B$ = | 6.00 | ft |
| Depth of freeboard (if used) | $D_{FB}$ = | 1.00 | ft |
| Minimum Required Allowance for Total Depth (including proposed basin depth, freeboard, minimum depth of bottom stage ($D_{BS}$=0.33') and minimum filter depth ($D_{FD}$=2.33')) | $D_{REQ}$ = | 9.7 | ft |
| Depth from design water surface elevation to lowest orifice | $D_O$ = | 6.0 | ft |



## Basin Design

**Basin Design**

| | | | |
|---|---|---|---|
| Proposed Total Basin Depth (proposed depth plus freeboard) | $D_{TOT}$ = | 7.00 | ft |
| Basin Invert Longitudinal Slope | Slope = | 1.00 | % |
| Basin Invert Transverse Slope (1% min) | Slope = | 1 | % |
| Basin Volume | $V_{Basin}$ = | 84500 | $ft^3$ |




## Forebay Design

| | | | |
|---|---|---|---|
| Forebay Volume (3 - 5% $V_{BMP}$) | $V_{FB}$ = | 2400 | $ft^3$ |
| Forebay Depth (height of berm) | $D_{FBY}$ = | 2 | ft |
| Minimum Forebay Surface Area | $A_{FB}$ = | 1200 | $ft^2$ |
| Rectangular weir (notch) | W = | 2.00 | in |

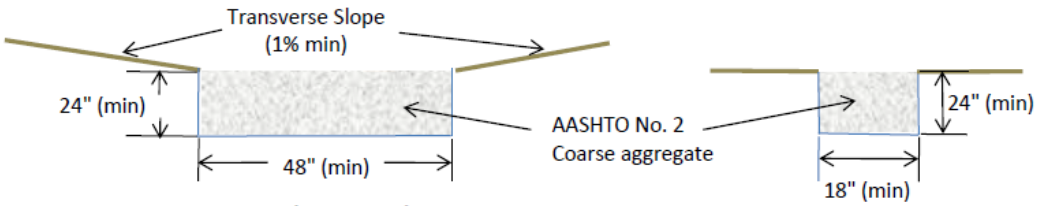
## Dry Weather and Low-Flow Management

**Low-Flow Trench** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum, gravel filled) | Depth = | 24 | inches |
| Width (48 inches minimum) | Width = | 48 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |

**Collector Trenches** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum) | Depth = | 24 | inches |
| Width (18 inches minimum) | Width = | 18 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |
| Spacing (25 feet on center maximum) | S = | 25 | feet |




Low-Flow Trench | Collector Trench

**Bottom Stage (Sand Filter) Design**

| | | | |
|---|---|---|---|
| Depth of the Bottom Stage (4" minimum ponding) | $D_{BS}$ = | 4 | in |
| Surface Area of Bottom Stage | $A_{BS}$ = | 2500 | $ft^2$ |
| Dry Weather Ponded Volume (above sand layer) | $V_{BS}$ = | 833 | $ft^3$ |

Is $V_{BS}$ no less than 0.5% $V_{BMP}$? OK

Depth of ASTM-C33 sand (18 inch minimum)

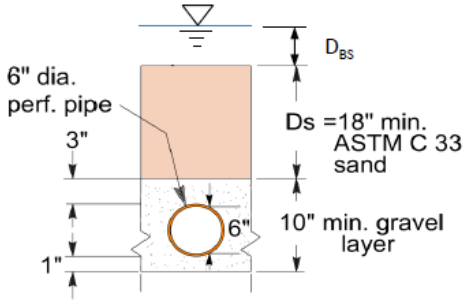
Ds = 18 inches

Diameter of Subdrains

$\phi$ = 6 in

Subdrain Spacing

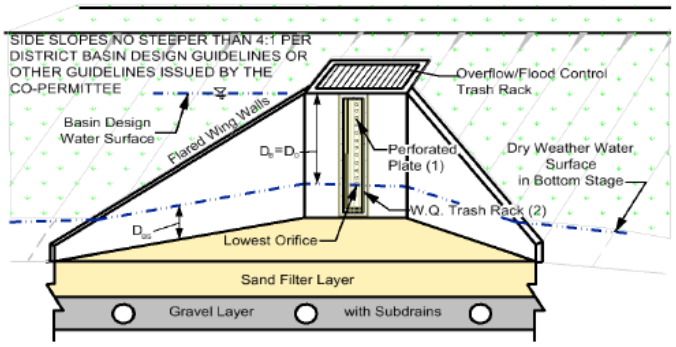
s = 10 ft. on center



## Basin Outlet Design

### Outlet Design

Assume an orifice area. Based on the information provided above, the spreadsheet provides discharge vs. stage data. Enter the volume vs. stage data for each interval. This information is used to route the volume through the basin. The size of the orifice is acceptable when the data shows that less than 50% of $V_{BMP}$ has drained in 24 hours, and that 100% drawdown occurs within 72 hours.




**Flow Rate, Q (cfs)**

$$Q=CA[2g(H-H_o)]^{0.5}$$

Discharge Coefficient,

Default, C = 0.66

Other, C =

**Orifice Area ($ft^2$)**

Orifice Diameter, d; number of orifices per row, n; and number of orifice rows, N (from the bottom up).

d = 2.1 inches

n = 2 per row

N = 1 rows

Aeff = 0.048 $ft^2$ per row

or

Aeff = 6.924 $in^2$ per row

From outflow hydrograph, the time where 50% of $V_{BMP}$ has drained from the basin (24 hour minimum):

Time (50%) = 21.46 hrs

Redesign. 24 hour minimum

From outflow hydrograph, the time where 100% $V_{BMP}$ has drained from the basin(within 72 hours):

Time (100 %) = 56.95 hrs

OK

| Headwater Elev. / Stage (ft) | Discharge (cfs) | Volume (acre-ft) | Δt (hrs.) |
|---|---|---|---|
| 0 | 0.0000 | 0.0000 | |
| 0.33 | 0.1470 | 0.060 | 9.88 |
| 0.67 | 0.2080 | 0.140 | 5.45 |
| 1.00 | 0.2547 | 0.220 | 4.18 |
| 1.33 | 0.2940 | 0.280 | 2.65 |
| 1.67 | 0.3288 | 0.350 | 2.72 |
| 2.00 | 0.3601 | 0.630 | 9.84 |
| 2.33 | 0.3890 | 0.850 | 7.11 |
| 2.67 | 0.4159 | 1.050 | 6.01 |
| 3.00 | 0.4411 | 1.240 | 5.37 |
| 3.33 | 0.4649 | 1.380 | 3.74 |
| 3.67 | *0.4877* | *1.520* | |
| 4.00 | *0.5093* | *1.660* | |
| 4.33 | *0.5301* | *1.830* | |
| 4.67 | *0.5502* | *2.000* | |
| 5.00 | *0.5694* | *2.180* | |
| 5.33 | *0.5881* | *2.410* | |
| 5.67 | *0.6062* | *2.630* | |
| 6.00 | *0.6238* | *2.860* | |
| 6.33 | | | |
| 6.67 | | | |
| 7.00 | | | |
| 7.33 | | | |
| 7.67 | | | |
| 8.00 | | | |
| 8.33 | | | |
| 8.67 | | | |
| 9.00 | | | |
| 9.33 | | | |
| 9.67 | | | |
| 10.00 | | | |
| | | ∑ = | 56.95 |

Notes:

| Extended Detention Basin Design Procedure | | BMP Subarea No. B5/6 | Legend: | Required Entries / Calculated Cells |
|---|---|---|---|---|
| Company Name: | K&A Engineering | | | Date: 9/22/2020 |
| Designed by: | JY | | | County/City Case No.: |

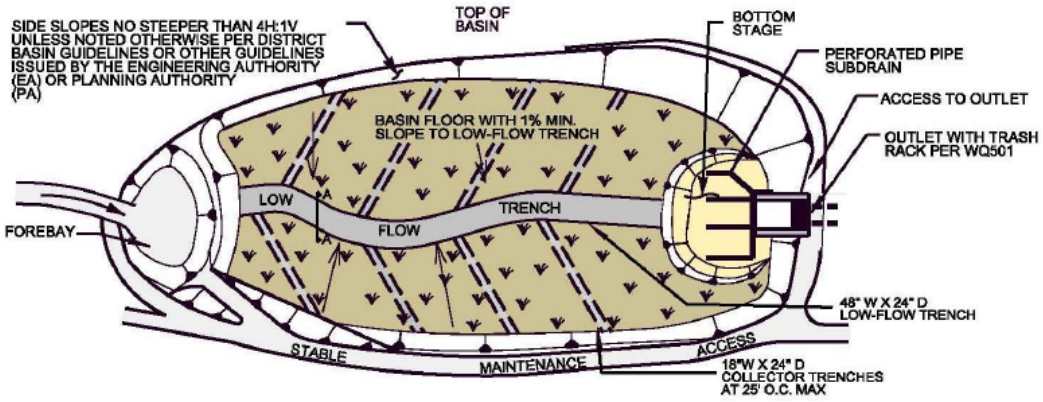
## Design Volume

| | | | |
|---|---|---|---|
| Tributary Area (BMP Subarea) | $A_T$ = | 13.56 | acres |
| Enter $V_{BMP}$, determined from Section 2.1 of this Handbook | $V_{BMP}$= | 30,555 | $ft^3$ |

## Basin Footprint

**Overall Geometry**

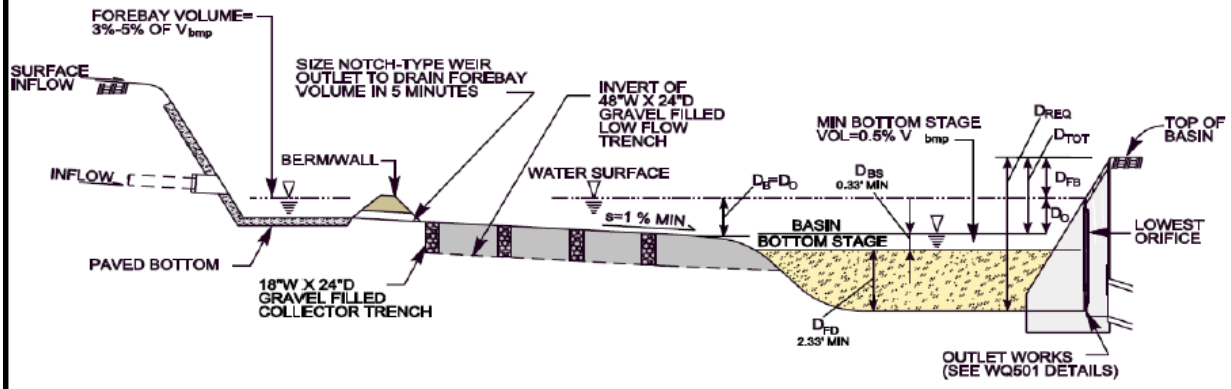
| | | | |
|---|---|---|---|
| Length at Basin Bottom Surface | Length = | 100 | ft |
| Width at Basin Bottom Surface | Width = | 60 | ft |
| | Meets 1.5 : 1 requirement? | ✓ | |
| Side Slopes per "Basin Guidelines", Sect. 1.2 | z = | 4 | :1 |
| Proposed Basin Depth (with no freeboard) | $D_B$ = | 6.00 | ft |
| Depth of freeboard (if used) | $D_{FB}$ = | 1.00 | ft |
| Minimum Required Allowance for Total Depth (including proposed basin depth, freeboard, minimum depth of bottom stage ($D_{BS}$=0.33') and minimum filter depth ($D_{FD}$=2.33')) | $D_{REQ}$ = | 9.7 | ft |
| Depth from design water surface elevation to lowest orifice | $D_O$ = | 6.0 | ft |



## Basin Design

**Basin Design**

| | | | |
|---|---|---|---|
| Proposed Total Basin Depth (proposed depth plus freeboard) | $D_{TOT}$ = | 7.00 | ft |
| Basin Invert Longitudinal Slope | Slope = | 1.00 | % |
| Basin Invert Transverse Slope (1% min) | Slope = | 1 | % |
| Basin Volume | $V_{Basin}$ = | 31000 | $ft^3$ |




## Forebay Design

| | | | |
|---|---|---|---|
| Forebay Volume (3 - 5% $V_{BMP}$) | $V_{FB}$ = | 1500 | $ft^3$ |
| Forebay Depth (height of berm) | $D_{FBY}$ = | 2 | ft |
| Minimum Forebay Surface Area | $A_{FB}$ = | 750 | $ft^2$ |
| Rectangular weir (notch) | W = | 2.00 | in |

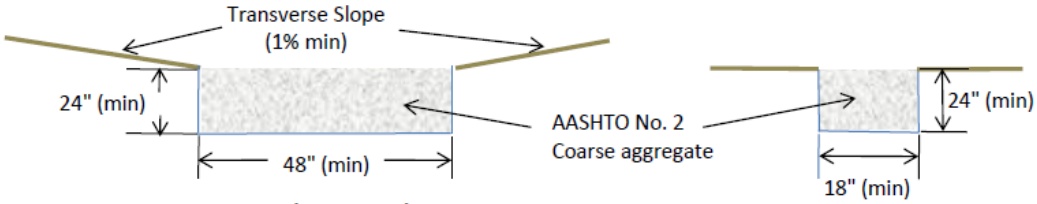
## Dry Weather and Low-Flow Management

**Low-Flow Trench** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum, gravel filled) | Depth = | 24 | inches |
| Width (48 inches minimum) | Width = | 48 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |

**Collector Trenches** (see graphic below)

| | | | |
|---|---|---|---|
| Depth (24 inches minimum) | Depth = | 24 | inches |
| Width (18 inches minimum) | Width = | 18 | inches |
| Trench Invert Longitudinal Slope | Slope = | 1 | % |
| Spacing (25 feet on center maximum) | S = | 25 | feet |




Low-Flow Trench | Collector Trench

**Bottom Stage (Sand Filter) Design**

| | | | |
|---|---|---|---|
| Depth of the Bottom Stage (4" minimum ponding) | $D_{BS}$ = | 4 | in |
| Surface Area of Bottom Stage | $A_{BS}$ = | 100 | $ft^2$ |
| Dry Weather Ponded Volume (above sand layer) | $V_{BS}$ = | 33 | $ft^3$ |

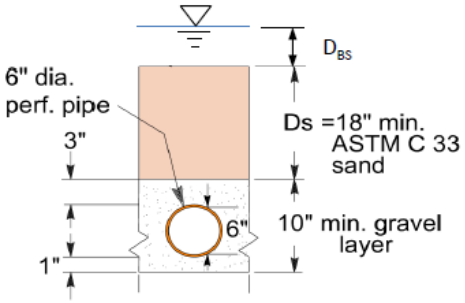
Is $V_{BS}$ no less than 0.5% $V_{BMP}$? OK

Depth of ASTM-C33 sand (18 inch minimum)

Ds = 18 inches

Diameter of Subdrains: $\phi$ = 6 in

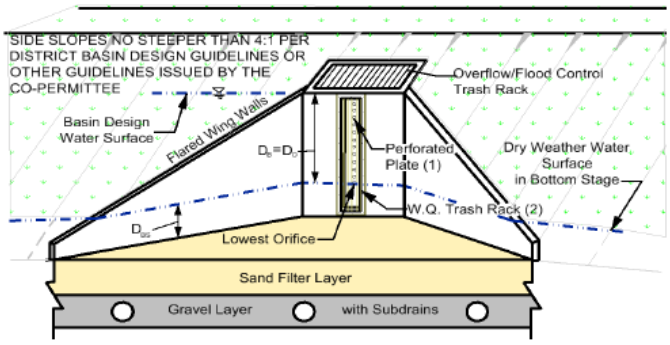
Subdrain Spacing: s = 10 ft. on center



## Basin Outlet Design

### Outlet Design

Assume an orifice area. Based on the information provided above, the spreadsheet provides discharge vs. stage data. Enter the volume vs. stage data for each interval. This information is used to route the volume through the basin. The size of the orifice is acceptable when the data shows that less than 50% of $V_{BMP}$ has drained in 24 hours, and that 100% drawdown occurs within 72 hours.




**Flow Rate, Q (cfs)**

$$Q=CA[2g(H-H_o)]^{0.5}$$

Discharge Coefficient,

Default, C = 0.66

Other, C =

**Orifice Area ($ft^2$)**

Orifice Diameter, d; number of orifices per row, n; and number of orifice rows, N (from the bottom up).

d = 1.25 inches

n = 2 per row

N = 1 rows

Aeff = 0.017 $ft^2$ per row

or

Aeff = 2.453 $in^2$ per row

From outflow hydrograph, the time where 50% of $V_{BMP}$ has drained from the basin (24 hour minimum):

Time (50%) = 29.72 hrs

OK

From outflow hydrograph, the time where 100% $V_{BMP}$ has drained from the basin(within 72 hours):

Time (100 %) = 70.45 hrs

OK

| Headwater Elev. / Stage (ft) | Discharge (cfs) | Volume (acre-ft) | Δt (hrs.) |
|---|---|---|---|
| 0 | 0.0000 | 0.0000 | |
| 0.33 | 0.0521 | 0.005 | 2.32 |
| 0.67 | 0.0737 | 0.025 | 3.85 |
| 1.00 | 0.0902 | 0.050 | 3.69 |
| 1.33 | 0.1042 | 0.120 | 8.71 |
| 1.67 | 0.1165 | 0.190 | 7.68 |
| 2.00 | 0.1276 | 0.250 | 5.95 |
| 2.33 | 0.1378 | 0.280 | 2.74 |
| 2.67 | 0.1474 | 0.310 | 2.55 |
| 3.00 | 0.1563 | 0.350 | 3.19 |
| 3.33 | 0.1647 | 0.400 | 3.77 |
| 3.67 | 0.1728 | 0.450 | 3.59 |
| 4.00 | 0.1805 | 0.500 | 3.43 |
| 4.33 | 0.1878 | 0.600 | 6.57 |
| 4.67 | 0.1949 | 0.700 | 6.32 |
| 5.00 | 0.2018 | 0.800 | 6.10 |
| 5.33 | *0.2084* | *0.920* | |
| 5.67 | *0.2148* | *1.040* | |
| 6.00 | *0.2210* | *1.200* | |
| 6.33 | | | |
| 6.67 | | | |
| 7.00 | | | |
| 7.33 | | | |
| 7.67 | | | |
| 8.00 | | | |
| 8.33 | | | |
| 8.67 | | | |
| 9.00 | | | |
| 9.33 | | | |
| 9.67 | | | |
| 10.00 | | | |
| | | ∑ = | 70.45 |

Notes:

**Trash Capture BMPs will be provided, Catch Basin insert per County of Transportation Standard 300A.**

# Appendix 7: Hydromodification

*Supporting Detail Relating to Hydrologic Conditions of Concern*

**HCOC EXEMPTION 3**: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Menifee, 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 Sensitivity 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:

<u>The proposed project Water Quality/Detention Basins are capable of all of the following:</u>

1. Releasing the post-development hydrograph for 2-year, 24-hour at flow rates no greater than 110% of pre-development 2-year flow, 24-hour peak flow rates.

2. By-passing the 100-year storm event without damage to the BMP.
3. Control outlet velocities such that downstream erosion potential is minimized and outlet flows are released in a safe manner.

**Detention Basin Routing Calculations**

The Detention Basin Routing Calculations were conducted using the CivilCADD/Design software and the Riverside County Hydrology Manual. In this analysis, the goal was to estimate the quantity of storm water to be detained onsite to mitigate the increase in storm water peak discharge and volume resulting from this development for the 2- and 100-year 1-hour, 3-hour, 6-hour, 24-hour storms.

**HCOC** criteria is **considered mitigated** by 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.

Based on the information provided above, **this project meets the requirements of Condition C** and will not create a hydrologic condition of concern in the proximate or downstream receiving waters.

Project development and other improvements include local storm drain systems which convey developed flows and street areas runoff to proposed Extended Detention Basins with additional Detention Basins to mitigate HCOC and peak flow 100-year storm. For Hydromodification, the proposed Detention Basins include sufficient volume above the proposed water quality volume that will satisfy the requirement of post-development peak discharge, volume and time of concentration for the 2-year 24-hour storm that DOES NOT exceed the pre-development peak runoff by more than 10 percent.

**Detention Basin Routing Calculations**

The Detention Basin Routing Calculations were conducted using the CivilCADD/Design software and the Riverside County Hydrology Manual. In this analysis, the goal was to estimate the quantity of storm water to be detained onsite to mitigate the increase in storm water peak discharge and volume resulting from this development for 2-, and 100-year 1-hour, 3-hour, 6-hour, 24-hour storms by proposing six (6) Detention Basins A2, B1b, B1a, B2, B4 and B5.

The results of these calculations are displayed in the table below and show no increase over 10% in discharge due to development in 2-year 24-hour storm frequency (HCOC mitigation) and below the previously approved existing or proposed condition in 100-year storm frequency.

**Drainage Area A2a – existing (9.9 Ac), proposed (9.9 Ac)**

| Storm Frequency | Existing $Q_2$ (cfs) [1] | Proposed $Q_2$ (cfs) | Det. Basin Outlet $Q_2$ (cfs) [2] | Different [2] – [1] (cfs) | Different [2] – [1] (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.29 | 2.38 | 0.27 | -0.02 | -6.9% |

**Drainage Area A-3/B1b – existing (9.12 Ac), proposed (9.12 Ac)**

| Storm Frequency | Existing $Q_2$ (cfs) [1] | Proposed $Q_2$ (cfs) | Det. Basin Outlet $Q_2$ (cfs) [2] | Different [2] – [1] (cfs) | Different [2] – [1] (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.26 | 2.19 | 0.25 | -0.01 | -6.2% |

**Drainage Area B1a – existing (5.45 Ac), proposed (5.45 Ac)**

| Storm Frequency | Existing $Q_2$ (cfs) [1] | Proposed $Q_2$ (cfs) | Det. Basin Outlet $Q_2$ (cfs) [2] | Different [2] – [1] (cfs) | Different [2] – [1] (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.16 | 1.31 | 0.15 | -0.01 | -6.2% |

**Drainage Area B2a – existing (42.59 Ac), proposed (42.59 Ac)**

| Storm Frequency | Existing $Q_2$ (cfs) [1] | Proposed $Q_2$ (cfs) | Det. Basin Outlet $Q_2$ (cfs) [2] | Different [2] – [1] (cfs) | Different [2] – [1] (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 1.24 | 10.22 | 1.15 | -0.09 | -7.2% |

**Drainage Area B4a – existing (25.28 Ac), proposed (25.28 Ac)**

| Storm Frequency | Existing $Q_2$ (cfs) [1] | Proposed $Q_2$ (cfs) | Det. Basin Outlet $Q_2$ (cfs) [2] | Different [2] – [1] (cfs) | Different [2] – [1] (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.73 | 6.07 | 0.78 | -0.05 | -6.8% |

**Drainage Area B5/6a – existing (13.56 Ac), proposed (13.56 Ac)**

| Storm Frequency | Existing $Q_2$ (cfs) [1] | Proposed $Q_2$ (cfs) | Det. Basin Outlet $Q_2$ (cfs) [2] | Different [2] – [1] (cfs) | Different [2] – [1] (%) |
|---|---|---|---|---|---|
| 2-year 24-hour | 0.40 | 3.26 | 0.37 | -0.03 | -7.5% |

# Inflow Hydrographs

**Unit Hydrograph Analysis**

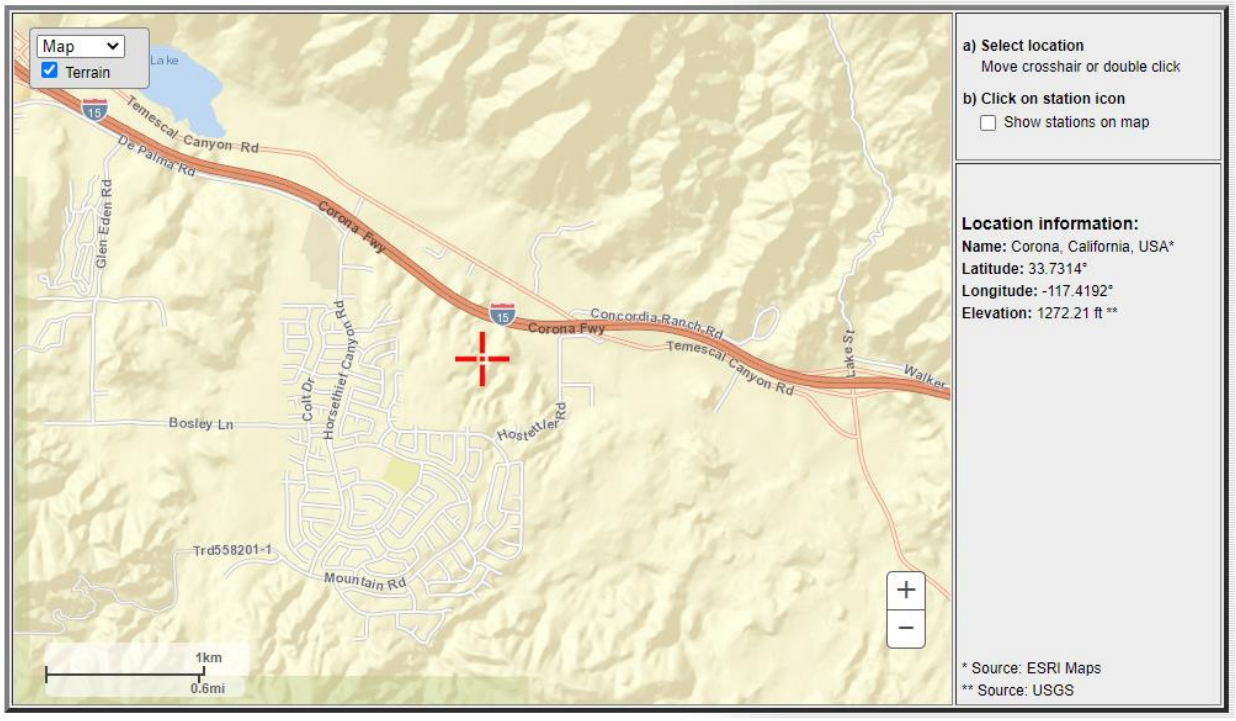
The unit hydrograph analysis was conducted using the CivilDesign Corporation Unit Hydrograph software and the Riverside County Hydrology Manual. In this study analysis, the goal was to estimate the quantity of storm water to be detained onsite to mitigate the increase in storm water peak discharge and volume resulting from this development. The 1-hour, 3-hour, 6-hour and 24-hour 2-year, and 100-year storm hydrographs were computed to evaluate that the project peak runoff discharge originating from the site for ultimate/proposed conditions. The ultimate condition-project hydrographs will be used as inflow hydrograph in detention basin routing with restricted outlet structure works.

**Below are the calculations for Drainage Area B1 and Drainage Area B2:**
**Inflow Hydrograph for Proposed Condition, Inflow Hydrograph for Existing Condition (for comparison) and Detention Basin Routing for 2-year 24-hour for mitigation.**

**For other Drainage Areas in this preliminary WQMP, the calculations are based on area proportion to Drainage Area B1.**

**Summary of Precipitation – Intensity Pattern per Hydrology Manual (NOAA Atlas 14)**:

| ***Storm Event*** | ***1-hour*** | ***3-hour*** | ***6-hour*** | ***24-hour*** |
|---|---|---|---|---|
| | | | | |
| 2-year | 0.494 | 0.858 | 1.20 | 2.16 |
| | | | | |
| 100-year | 1.38 | 2.19 | 3.00 | 5.73 |
| | | | | |



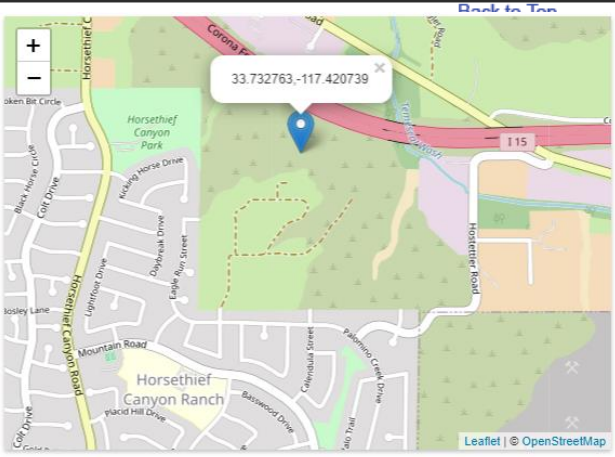
| PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Duration | Average recurrence interval (years) | | | | | | | | | |
| | 1 | 2 | 5 | 10 | 25 | 50 | 100 | 200 | 500 | 1000 |
| 5-min | 0.092 (0.077-0.111) | 0.128 (0.107-0.154) | 0.175 (0.146-0.211) | 0.214 (0.177-0.261) | 0.268 (0.214-0.340) | 0.312 (0.243-0.403) | 0.356 (0.271-0.473) | 0.403 (0.298-0.552) | 0.469 (0.331-0.670) | 0.521 (0.355-0.771) |
| 10-min | 0.133 (0.111-0.160) | 0.183 (0.153-0.221) | 0.250 (0.209-0.303) | 0.307 (0.254-0.374) | 0.385 (0.307-0.487) | 0.447 (0.349-0.578) | 0.511 (0.389-0.678) | 0.578 (0.427-0.791) | 0.672 (0.475-0.960) | 0.746 (0.509-1.11) |
| 15-min | 0.160 (0.134-0.193) | 0.221 (0.185-0.267) | 0.303 (0.253-0.367) | 0.371 (0.307-0.453) | 0.465 (0.372-0.589) | 0.540 (0.422-0.699) | 0.618 (0.470-0.820) | 0.699 (0.517-0.956) | 0.813 (0.575-1.16) | 0.903 (0.615-1.34) |
| 30-min | 0.243 (0.204-0.293) | 0.336 (0.281-0.405) | 0.460 (0.383-0.556) | 0.563 (0.465-0.687) | 0.707 (0.564-0.894) | 0.820 (0.640-1.06) | 0.938 (0.713-1.25) | 1.06 (0.784-1.45) | 1.23 (0.872-1.76) | 1.37 (0.934-2.03) |
| 60-min | 0.358 (0.300-0.432) | 0.494 (0.414-0.597) | 0.677 (0.565-0.819) | 0.829 (0.685-1.01) | 1.04 (0.831-1.32) | 1.21 (0.943-1.56) | 1.38 (1.05-1.83) | 1.56 (1.16-2.14) | 1.82 (1.28-2.60) | 2.02 (1.38-2.99) |
| 2-hr | 0.535 (0.449-0.645) | 0.704 (0.589-0.850) | 0.934 (0.779-1.13) | 1.13 (0.932-1.38) | 1.40 (1.12-1.77) | 1.62 (1.26-2.09) | 1.84 (1.40-2.44) | 2.08 (1.54-2.84) | 2.41 (1.71-3.45) | 2.68 (1.83-3.97) |
| 3-hr | 0.661 (0.554-0.797) | 0.858 (0.718-1.04) | 1.13 (0.939-1.36) | 1.35 (1.12-1.65) | 1.67 (1.33-2.11) | 1.92 (1.50-2.49) | 2.19 (1.67-2.91) | 2.47 (1.83-3.38) | 2.86 (2.02-4.09) | 3.18 (2.17-4.71) |
| 6-hr | 0.930 (0.780-1.12) | 1.20 (1.00-1.45) | 1.56 (1.30-1.89) | 1.87 (1.54-2.28) | 2.30 (1.83-2.90) | 2.64 (2.06-3.41) | 3.00 (2.28-3.98) | 3.38 (2.49-4.61) | 3.91 (2.76-5.58) | 4.33 (2.95-6.41) |
| 12-hr | 1.21 (1.01-1.45) | 1.59 (1.33-1.92) | 2.10 (1.75-2.54) | 2.52 (2.09-3.08) | 3.11 (2.48-3.94) | 3.57 (2.79-4.62) | 4.05 (3.08-5.38) | 4.55 (3.36-6.22) | 5.24 (3.70-7.48) | 5.78 (3.94-8.56) |
| 24-hr | 1.58 (1.40-1.82) | 2.16 (1.91-2.49) | 2.92 (2.57-3.38) | 3.54 (3.10-4.14) | 4.40 (3.72-5.30) | 5.06 (4.20-6.22) | 5.73 (4.64-7.22) | 6.43 (5.07-8.33) | 7.39 (5.60-9.96) | 8.13 (5.96-11.3) |
| 2-day | 1.90 (1.68-2.19) | 2.66 (2.35-3.07) | 3.66 (3.23-4.24) | 4.49 (3.92-5.24) | 5.62 (4.75-6.77) | 6.49 (5.39-7.99) | 7.39 (5.99-9.31) | 8.32 (6.56-10.8) | 9.59 (7.27-12.9) | 10.6 (7.75-14.7) |
| 3-day | 2.06 (1.82-2.37) | 2.92 (2.58-3.37) | 4.07 (3.58-4.71) | 5.01 (4.38-5.86) | 6.32 (5.35-7.62) | 7.34 (6.08-9.03) | 8.38 (6.79-10.6) | 9.48 (7.47-12.3) | 11.0 (8.32-14.8) | 12.2 (8.91-17.0) |
| 4-day | 2.22 (1.96-2.56) | 3.18 (2.80-3.67) | 4.46 (3.93-5.16) | 5.52 (4.82-6.45) | 6.99 (5.92-8.43) | 8.14 (6.75-10.0) | 9.34 (7.57-11.8) | 10.6 (8.35-13.7) | 12.3 (9.34-16.6) | 13.7 (10.0-19.1) |
| 7-day | 2.51 (2.22-2.90) | 3.61 (3.19-4.17) | 5.11 (4.50-5.92) | 6.38 (5.57-7.45) | 8.16 (6.90-9.84) | 9.57 (7.94-11.8) | 11.1 (8.96-13.9) | 12.6 (9.96-16.3) | 14.8 (11.2-20.0) | 16.6 (12.2-23.1) |
| 10-day | 2.66 (2.35-3.07) | 3.84 (3.39-4.43) | 5.47 (4.82-6.33) | 6.85 (5.99-8.00) | 8.83 (7.47-10.6) | 10.4 (8.63-12.8) | 12.1 (9.79-15.2) | 13.9 (10.9-18.0) | 16.4 (12.4-22.1) | 18.5 (13.5-25.7) |
| 20-day | 3.12 (2.75-3.60) | 4.54 (4.01-5.25) | 6.56 (5.78-7.60) | 8.30 (7.26-9.70) | 10.8 (9.17-13.1) | 12.9 (10.7-15.9) | 15.1 (12.3-19.1) | 17.5 (13.8-22.7) | 21.0 (15.9-28.3) | 23.8 (17.4-33.1) |
| 30-day | 3.70 (3.27-4.27) | 5.39 (4.76-6.22) | 7.79 (6.86-9.02) | 9.89 (8.64-11.5) | 13.0 (11.0-15.6) | 15.5 (12.9-19.1) | 18.2 (14.8-23.0) | 21.2 (16.7-27.5) | 25.6 (19.4-34.4) | 29.1 (21.3-40.6) |
| 45-day | 4.31 (3.81-4.97) | 6.23 (5.50-7.20) | 8.99 (7.92-10.4) | 11.4 (9.99-13.4) | 15.1 (12.7-18.2) | 18.1 (15.0-22.3) | 21.4 (17.3-26.9) | 24.9 (19.7-32.3) | 30.2 (22.8-40.6) | 34.5 (25.3-48.0) |
| 60-day | 4.98 (4.40-5.75) | 7.11 (6.28-8.21) | 10.2 (8.98-11.8) | 12.9 (11.3-15.1) | 17.0 (14.4-20.5) | 20.5 (17.0-25.2) | 24.2 (19.6-30.5) | 28.3 (22.3-36.6) | 34.3 (26.0-46.2) | 39.3 (28.8-54.8) |

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

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

Please refer to NOAA Atlas 14 document for more information.

Back to Top







| Lat Long | GPS Coordinates |
|---|---|
| (33.732763, -117.420739) | 33° 43' 57.9468" N<br>117° 25' 14.6604" W |

| Manning "n" Value Worksheet | | | | | |
|---|---|---|---|---|---|
| **Drainage Area B1 - 5.45 Ac (proposed)** | | | | | |
| [1] | [2] | [3] | [4] | [5] | [7] |
| **Subarea** | **Area in (Ac)** | **Land Use (Plate D-5.6)** | **"n" Value** | **Decimal portion of Area [2] / SUM[2]** | **Average "n" Value [4] * [5]** |
| | | Natural | 0.04 | 0.00 | 0.000 |
| | 0.11 | Basin | 0.035 | 0.02 | 0.001 |
| | | Res 1/2 Ac | 0.015 | 0.00 | 0.000 |
| | | Res 1/4 Ac | 0.015 | 0.00 | 0.000 |
| | | Res < 1/4 Ac | 0.015 | 0.00 | 0.000 |
| | | Apartment | 0.015 | 0.00 | 0.000 |
| | | Mobil Home | 0.015 | 0.00 | 0.000 |
| | | Hospital | 0.02 | 0.00 | 0.000 |
| | 5.34 | Commercial | 0.015 | 0.98 | 0.015 |
| | | | | | |
| Sum = | 5.45 | | | 1.00 | **0.015** |

| Runoff Index (RI) Worksheet | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drainage Area B1 - 5.45 Ac (proposed)** | | | | | | | |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |
| **Subarea** | **Area in (Ac)** | **Soil Group** | **Cover Type** | **RI Number (Plate E6-1)** | **Land Use** | **Decimal portion of Area [2] / SUM[2]** | **Average RI Value [5] * [7]** |
| **Natural** | | B | grass (fair) | 69 | Natural | | 0.0 |
| | | C | grass (fair) | 79 | Natural | | 0.0 |
| | | D | grass (fair) | 84 | Natural | | 0.0 |
| *Sum =* | *0* | | | | | | **0.0** |
| | | | | | | | |
| **Basin** | 0.11 | B | Landscape | 56 | Basin | 1.00 | 56.0 |
| | | C | Landscape | 69 | Basin | 0.00 | 0.0 |
| | | D | Landscape | 75 | Basin | 0.00 | 0.0 |
| *Sum =* | *0.11* | | | | | 1.00 | **56.0** |
| | | | | | | | |
| **Commercial** | 1 | B | Landscape | 56 | Commercial | 0.19 | 10.5 |
| | | C | Landscape | 69 | Commercial | 0.00 | 0.0 |
| | 4.34 | D | Landscape | 75 | Commercial | 0.81 | 61.0 |
| *Sum =* | *5.34* | | | | | 1.00 | **71.4** |

| Soil Low Loss Rate Worksheet | | | | | | |
|---|---|---|---|---|---|---|
| **Drainage Area B1 - 5.45 Ac (proposed)** | | | | | | |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] |
| **Subarea** | **Area in (Ac)** | **Land Use (Plate D-5.6)** | **% Impervious (Plate D-5.6)** | **Soil Low Loss Rate 0.9-(0.8)* [4]** | **Decimal portion of Area [2] / SUM[2]** | **Average Low Loss Rate [5] * [6]** |
| | | Natural | 0 | 0.90 | 0.00 | 0.00 |
| | 0.11 | Basin/Park | 5 | 0.86 | 0.02 | 0.02 |
| | | Res 1/2 Ac | 40 | 0.58 | 0.00 | 0.00 |
| | | Res 1/4 Ac | 57 | 0.44 | 0.00 | 0.00 |
| | | Res < 1/4 Ac | 65 | 0.38 | 0.00 | 0.00 |
| | | Apartment | 80 | 0.26 | 0.00 | 0.00 |
| | | Mobil Home | 75 | 0.30 | 0.00 | 0.00 |
| | | Hospital | 75 | 0.30 | 0.00 | 0.00 |
| | 5.34 | Commercial | 90 | 0.18 | 0.98 | 0.18 |
| Sum = | 5.45 | | | | 1.00 | **0.19** |

U n i t  H y d r o g r a p h  A n a l y s i s
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Study date 09/01/20 File: 2rrb1242.out

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

Program License Serial Number 4029

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

English Units used in output format

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Renaissance Ranch
Drainage Area B1a
Proposed Condition - Area = 5.45 Ac
2-year 24-hour storm

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Drainage Area = 5.45(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.45(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 810.00(Ft.)
Length along longest watercourse measured to centroid = 410.00(Ft.)
Length along longest watercourse = 0.153 Mi.
Length along longest watercourse measured to centroid = 0.078 Mi.
Difference in elevation = 4.50(Ft.)
Slope along watercourse = 29.3333 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.035 Hr.
Lag time = 2.11 Min.
25% of lag time = 0.53 Min.
40% of lag time = 0.84 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] |
|---|---|---|
| 5.45 | 2.16 | 11.77 |

100 YEAR Area rainfall data:

| Area(Ac.)[1] | Rainfall(In)[2] | Weighting[1*2] |
|---|---|---|
| 5.45 | 5.73 | 31.23 |

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.160(In)
Area Averaged 100-Year Rainfall = 5.730(In)

Point rain (area averaged) = 2.160(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.160(In)

Sub-Area Data:

| Area(Ac.) | Runoff Index | Impervious % |
|---|---|---|
| 0.110 | 56.00 | 0.020 |
| 5.340 | 62.20 | 0.900 |

Total Area Entered = 5.45(Ac.)

| RI AMC2 | RI AMC-1 | Infil. Rate (In/Hr) | Impervious (Dec.%) | Adj. Infil. Rate (In/Hr) | Area% (Dec.) | F (In/Hr) |
|---|---|---|---|---|---|---|
| 56.0 | 36.0 | 0.706 | 0.020 | 0.693 | 0.020 | 0.014 |

```
      62.2  42.2      0.648     0.900         0.123        0.980       0.121
                                                          Sum (F) =    0.135
      Area averaged mean soil loss (F) (In/Hr) =  0.135
      Minimum soil loss rate ((In/Hr)) =  0.067
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.190
      ------------------------------------------------------------------------

                   U n i t  H y d r o g r a p h
                          VALLEY S-Curve
      ------------------------------------------------------------------------
                   Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %            (CFS)
      ------------------------------------------------------------------------
          1   0.083        236.829         49.119              2.698
          2   0.167        473.658         40.884              2.246
          3   0.250        710.486          7.459              0.410
          4   0.333        947.315          2.538              0.139
                                   Sum = 100.000   Sum=       5.493
-------------------------------------------------------------------------
```

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 | 0.017 | ( 0.239) | 0.003 | 0.014 |
| 2 | 0.17 | 0.07 | 0.017 | ( 0.238) | 0.003 | 0.014 |
| 3 | 0.25 | 0.07 | 0.017 | ( 0.237) | 0.003 | 0.014 |
| 4 | 0.33 | 0.10 | 0.026 | ( 0.236) | 0.005 | 0.021 |
| 5 | 0.42 | 0.10 | 0.026 | ( 0.235) | 0.005 | 0.021 |
| 6 | 0.50 | 0.10 | 0.026 | ( 0.234) | 0.005 | 0.021 |
| 7 | 0.58 | 0.10 | 0.026 | ( 0.233) | 0.005 | 0.021 |
| 8 | 0.67 | 0.10 | 0.026 | ( 0.232) | 0.005 | 0.021 |
| 9 | 0.75 | 0.10 | 0.026 | ( 0.231) | 0.005 | 0.021 |
| 10 | 0.83 | 0.13 | 0.035 | ( 0.231) | 0.007 | 0.028 |
| 11 | 0.92 | 0.13 | 0.035 | ( 0.230) | 0.007 | 0.028 |
| 12 | 1.00 | 0.13 | 0.035 | ( 0.229) | 0.007 | 0.028 |
| 13 | 1.08 | 0.10 | 0.026 | ( 0.228) | 0.005 | 0.021 |
| 14 | 1.17 | 0.10 | 0.026 | ( 0.227) | 0.005 | 0.021 |
| 15 | 1.25 | 0.10 | 0.026 | ( 0.226) | 0.005 | 0.021 |
| 16 | 1.33 | 0.10 | 0.026 | ( 0.225) | 0.005 | 0.021 |
| 17 | 1.42 | 0.10 | 0.026 | ( 0.224) | 0.005 | 0.021 |
| 18 | 1.50 | 0.10 | 0.026 | ( 0.223) | 0.005 | 0.021 |
| 19 | 1.58 | 0.10 | 0.026 | ( 0.222) | 0.005 | 0.021 |
| 20 | 1.67 | 0.10 | 0.026 | ( 0.222) | 0.005 | 0.021 |
| 21 | 1.75 | 0.10 | 0.026 | ( 0.221) | 0.005 | 0.021 |
| 22 | 1.83 | 0.13 | 0.035 | ( 0.220) | 0.007 | 0.028 |
| 23 | 1.92 | 0.13 | 0.035 | ( 0.219) | 0.007 | 0.028 |
| 24 | 2.00 | 0.13 | 0.035 | ( 0.218) | 0.007 | 0.028 |
| 25 | 2.08 | 0.13 | 0.035 | ( 0.217) | 0.007 | 0.028 |
| 26 | 2.17 | 0.13 | 0.035 | ( 0.216) | 0.007 | 0.028 |
| 27 | 2.25 | 0.13 | 0.035 | ( 0.215) | 0.007 | 0.028 |
| 28 | 2.33 | 0.13 | 0.035 | ( 0.215) | 0.007 | 0.028 |
| 29 | 2.42 | 0.13 | 0.035 | ( 0.214) | 0.007 | 0.028 |
| 30 | 2.50 | 0.13 | 0.035 | ( 0.213) | 0.007 | 0.028 |
| 31 | 2.58 | 0.17 | 0.043 | ( 0.212) | 0.008 | 0.035 |
| 32 | 2.67 | 0.17 | 0.043 | ( 0.211) | 0.008 | 0.035 |
| 33 | 2.75 | 0.17 | 0.043 | ( 0.210) | 0.008 | 0.035 |
| 34 | 2.83 | 0.17 | 0.043 | ( 0.209) | 0.008 | 0.035 |
| 35 | 2.92 | 0.17 | 0.043 | ( 0.208) | 0.008 | 0.035 |
| 36 | 3.00 | 0.17 | 0.043 | ( 0.208) | 0.008 | 0.035 |
| 37 | 3.08 | 0.17 | 0.043 | ( 0.207) | 0.008 | 0.035 |
| 38 | 3.17 | 0.17 | 0.043 | ( 0.206) | 0.008 | 0.035 |
| 39 | 3.25 | 0.17 | 0.043 | ( 0.205) | 0.008 | 0.035 |
| 40 | 3.33 | 0.17 | 0.043 | ( 0.204) | 0.008 | 0.035 |
| 41 | 3.42 | 0.17 | 0.043 | ( 0.203) | 0.008 | 0.035 |
| 42 | 3.50 | 0.17 | 0.043 | ( 0.202) | 0.008 | 0.035 |
| 43 | 3.58 | 0.17 | 0.043 | ( 0.202) | 0.008 | 0.035 |
| 44 | 3.67 | 0.17 | 0.043 | ( 0.201) | 0.008 | 0.035 |
| 45 | 3.75 | 0.17 | 0.043 | ( 0.200) | 0.008 | 0.035 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 46 | 3.83 | 0.20 | 0.052 | ( 0.199) | 0.010 | 0.042 |
| 47 | 3.92 | 0.20 | 0.052 | ( 0.198) | 0.010 | 0.042 |
| 48 | 4.00 | 0.20 | 0.052 | ( 0.197) | 0.010 | 0.042 |
| 49 | 4.08 | 0.20 | 0.052 | ( 0.197) | 0.010 | 0.042 |
| 50 | 4.17 | 0.20 | 0.052 | ( 0.196) | 0.010 | 0.042 |
| 51 | 4.25 | 0.20 | 0.052 | ( 0.195) | 0.010 | 0.042 |
| 52 | 4.33 | 0.23 | 0.060 | ( 0.194) | 0.011 | 0.049 |
| 53 | 4.42 | 0.23 | 0.060 | ( 0.193) | 0.011 | 0.049 |
| 54 | 4.50 | 0.23 | 0.060 | ( 0.192) | 0.011 | 0.049 |
| 55 | 4.58 | 0.23 | 0.060 | ( 0.192) | 0.011 | 0.049 |
| 56 | 4.67 | 0.23 | 0.060 | ( 0.191) | 0.011 | 0.049 |
| 57 | 4.75 | 0.23 | 0.060 | ( 0.190) | 0.011 | 0.049 |
| 58 | 4.83 | 0.27 | 0.069 | ( 0.189) | 0.013 | 0.056 |
| 59 | 4.92 | 0.27 | 0.069 | ( 0.188) | 0.013 | 0.056 |
| 60 | 5.00 | 0.27 | 0.069 | ( 0.187) | 0.013 | 0.056 |
| 61 | 5.08 | 0.20 | 0.052 | ( 0.187) | 0.010 | 0.042 |
| 62 | 5.17 | 0.20 | 0.052 | ( 0.186) | 0.010 | 0.042 |
| 63 | 5.25 | 0.20 | 0.052 | ( 0.185) | 0.010 | 0.042 |
| 64 | 5.33 | 0.23 | 0.060 | ( 0.184) | 0.011 | 0.049 |
| 65 | 5.42 | 0.23 | 0.060 | ( 0.183) | 0.011 | 0.049 |
| 66 | 5.50 | 0.23 | 0.060 | ( 0.183) | 0.011 | 0.049 |
| 67 | 5.58 | 0.27 | 0.069 | ( 0.182) | 0.013 | 0.056 |
| 68 | 5.67 | 0.27 | 0.069 | ( 0.181) | 0.013 | 0.056 |
| 69 | 5.75 | 0.27 | 0.069 | ( 0.180) | 0.013 | 0.056 |
| 70 | 5.83 | 0.27 | 0.069 | ( 0.179) | 0.013 | 0.056 |
| 71 | 5.92 | 0.27 | 0.069 | ( 0.179) | 0.013 | 0.056 |
| 72 | 6.00 | 0.27 | 0.069 | ( 0.178) | 0.013 | 0.056 |
| 73 | 6.08 | 0.30 | 0.078 | ( 0.177) | 0.015 | 0.063 |
| 74 | 6.17 | 0.30 | 0.078 | ( 0.176) | 0.015 | 0.063 |
| 75 | 6.25 | 0.30 | 0.078 | ( 0.175) | 0.015 | 0.063 |
| 76 | 6.33 | 0.30 | 0.078 | ( 0.175) | 0.015 | 0.063 |
| 77 | 6.42 | 0.30 | 0.078 | ( 0.174) | 0.015 | 0.063 |
| 78 | 6.50 | 0.30 | 0.078 | ( 0.173) | 0.015 | 0.063 |
| 79 | 6.58 | 0.33 | 0.086 | ( 0.172) | 0.016 | 0.070 |
| 80 | 6.67 | 0.33 | 0.086 | ( 0.172) | 0.016 | 0.070 |
| 81 | 6.75 | 0.33 | 0.086 | ( 0.171) | 0.016 | 0.070 |
| 82 | 6.83 | 0.33 | 0.086 | ( 0.170) | 0.016 | 0.070 |
| 83 | 6.92 | 0.33 | 0.086 | ( 0.169) | 0.016 | 0.070 |
| 84 | 7.00 | 0.33 | 0.086 | ( 0.168) | 0.016 | 0.070 |
| 85 | 7.08 | 0.33 | 0.086 | ( 0.168) | 0.016 | 0.070 |
| 86 | 7.17 | 0.33 | 0.086 | ( 0.167) | 0.016 | 0.070 |
| 87 | 7.25 | 0.33 | 0.086 | ( 0.166) | 0.016 | 0.070 |
| 88 | 7.33 | 0.37 | 0.095 | ( 0.165) | 0.018 | 0.077 |
| 89 | 7.42 | 0.37 | 0.095 | ( 0.165) | 0.018 | 0.077 |
| 90 | 7.50 | 0.37 | 0.095 | ( 0.164) | 0.018 | 0.077 |
| 91 | 7.58 | 0.40 | 0.104 | ( 0.163) | 0.020 | 0.084 |
| 92 | 7.67 | 0.40 | 0.104 | ( 0.162) | 0.020 | 0.084 |
| 93 | 7.75 | 0.40 | 0.104 | ( 0.162) | 0.020 | 0.084 |
| 94 | 7.83 | 0.43 | 0.112 | ( 0.161) | 0.021 | 0.091 |
| 95 | 7.92 | 0.43 | 0.112 | ( 0.160) | 0.021 | 0.091 |
| 96 | 8.00 | 0.43 | 0.112 | ( 0.159) | 0.021 | 0.091 |
| 97 | 8.08 | 0.50 | 0.130 | ( 0.159) | 0.025 | 0.105 |
| 98 | 8.17 | 0.50 | 0.130 | ( 0.158) | 0.025 | 0.105 |
| 99 | 8.25 | 0.50 | 0.130 | ( 0.157) | 0.025 | 0.105 |
| 100 | 8.33 | 0.50 | 0.130 | ( 0.156) | 0.025 | 0.105 |
| 101 | 8.42 | 0.50 | 0.130 | ( 0.156) | 0.025 | 0.105 |
| 102 | 8.50 | 0.50 | 0.130 | ( 0.155) | 0.025 | 0.105 |
| 103 | 8.58 | 0.53 | 0.138 | ( 0.154) | 0.026 | 0.112 |
| 104 | 8.67 | 0.53 | 0.138 | ( 0.154) | 0.026 | 0.112 |
| 105 | 8.75 | 0.53 | 0.138 | ( 0.153) | 0.026 | 0.112 |
| 106 | 8.83 | 0.57 | 0.147 | ( 0.152) | 0.028 | 0.119 |
| 107 | 8.92 | 0.57 | 0.147 | ( 0.151) | 0.028 | 0.119 |
| 108 | 9.00 | 0.57 | 0.147 | ( 0.151) | 0.028 | 0.119 |
| 109 | 9.08 | 0.63 | 0.164 | ( 0.150) | 0.031 | 0.133 |
| 110 | 9.17 | 0.63 | 0.164 | ( 0.149) | 0.031 | 0.133 |
| 111 | 9.25 | 0.63 | 0.164 | ( 0.149) | 0.031 | 0.133 |
| 112 | 9.33 | 0.67 | 0.173 | ( 0.148) | 0.033 | 0.140 |
| 113 | 9.42 | 0.67 | 0.173 | ( 0.147) | 0.033 | 0.140 |
| 114 | 9.50 | 0.67 | 0.173 | ( 0.146) | 0.033 | 0.140 |
| 115 | 9.58 | 0.70 | 0.181 | ( 0.146) | 0.034 | 0.147 |
| 116 | 9.67 | 0.70 | 0.181 | ( 0.145) | 0.034 | 0.147 |
| 117 | 9.75 | 0.70 | 0.181 | ( 0.144) | 0.034 | 0.147 |
| 118 | 9.83 | 0.73 | 0.190 | ( 0.144) | 0.036 | 0.154 |
| 119 | 9.92 | 0.73 | 0.190 | ( 0.143) | 0.036 | 0.154 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 120 | 10.00 | 0.73 | 0.190 | ( 0.142) | 0.036 | 0.154 |
| 121 | 10.08 | 0.50 | 0.130 | ( 0.142) | 0.025 | 0.105 |
| 122 | 10.17 | 0.50 | 0.130 | ( 0.141) | 0.025 | 0.105 |
| 123 | 10.25 | 0.50 | 0.130 | ( 0.140) | 0.025 | 0.105 |
| 124 | 10.33 | 0.50 | 0.130 | ( 0.140) | 0.025 | 0.105 |
| 125 | 10.42 | 0.50 | 0.130 | ( 0.139) | 0.025 | 0.105 |
| 126 | 10.50 | 0.50 | 0.130 | ( 0.138) | 0.025 | 0.105 |
| 127 | 10.58 | 0.67 | 0.173 | ( 0.137) | 0.033 | 0.140 |
| 128 | 10.67 | 0.67 | 0.173 | ( 0.137) | 0.033 | 0.140 |
| 129 | 10.75 | 0.67 | 0.173 | ( 0.136) | 0.033 | 0.140 |
| 130 | 10.83 | 0.67 | 0.173 | ( 0.135) | 0.033 | 0.140 |
| 131 | 10.92 | 0.67 | 0.173 | ( 0.135) | 0.033 | 0.140 |
| 132 | 11.00 | 0.67 | 0.173 | ( 0.134) | 0.033 | 0.140 |
| 133 | 11.08 | 0.63 | 0.164 | ( 0.133) | 0.031 | 0.133 |
| 134 | 11.17 | 0.63 | 0.164 | ( 0.133) | 0.031 | 0.133 |
| 135 | 11.25 | 0.63 | 0.164 | ( 0.132) | 0.031 | 0.133 |
| 136 | 11.33 | 0.63 | 0.164 | ( 0.132) | 0.031 | 0.133 |
| 137 | 11.42 | 0.63 | 0.164 | ( 0.131) | 0.031 | 0.133 |
| 138 | 11.50 | 0.63 | 0.164 | ( 0.130) | 0.031 | 0.133 |
| 139 | 11.58 | 0.57 | 0.147 | ( 0.130) | 0.028 | 0.119 |
| 140 | 11.67 | 0.57 | 0.147 | ( 0.129) | 0.028 | 0.119 |
| 141 | 11.75 | 0.57 | 0.147 | ( 0.128) | 0.028 | 0.119 |
| 142 | 11.83 | 0.60 | 0.156 | ( 0.128) | 0.030 | 0.126 |
| 143 | 11.92 | 0.60 | 0.156 | ( 0.127) | 0.030 | 0.126 |
| 144 | 12.00 | 0.60 | 0.156 | ( 0.126) | 0.030 | 0.126 |
| 145 | 12.08 | 0.83 | 0.216 | ( 0.126) | 0.041 | 0.175 |
| 146 | 12.17 | 0.83 | 0.216 | ( 0.125) | 0.041 | 0.175 |
| 147 | 12.25 | 0.83 | 0.216 | ( 0.124) | 0.041 | 0.175 |
| 148 | 12.33 | 0.87 | 0.225 | ( 0.124) | 0.043 | 0.182 |
| 149 | 12.42 | 0.87 | 0.225 | ( 0.123) | 0.043 | 0.182 |
| 150 | 12.50 | 0.87 | 0.225 | ( 0.123) | 0.043 | 0.182 |
| 151 | 12.58 | 0.93 | 0.242 | ( 0.122) | 0.046 | 0.196 |
| 152 | 12.67 | 0.93 | 0.242 | ( 0.121) | 0.046 | 0.196 |
| 153 | 12.75 | 0.93 | 0.242 | ( 0.121) | 0.046 | 0.196 |
| 154 | 12.83 | 0.97 | 0.251 | ( 0.120) | 0.048 | 0.203 |
| 155 | 12.92 | 0.97 | 0.251 | ( 0.120) | 0.048 | 0.203 |
| 156 | 13.00 | 0.97 | 0.251 | ( 0.119) | 0.048 | 0.203 |
| 157 | 13.08 | 1.13 | 0.294 | ( 0.118) | 0.056 | 0.238 |
| 158 | 13.17 | 1.13 | 0.294 | ( 0.118) | 0.056 | 0.238 |
| 159 | 13.25 | 1.13 | 0.294 | ( 0.117) | 0.056 | 0.238 |
| 160 | 13.33 | 1.13 | 0.294 | ( 0.117) | 0.056 | 0.238 |
| 161 | 13.42 | 1.13 | 0.294 | ( 0.116) | 0.056 | 0.238 |
| 162 | 13.50 | 1.13 | 0.294 | ( 0.115) | 0.056 | 0.238 |
| 163 | 13.58 | 0.77 | 0.199 | ( 0.115) | 0.038 | 0.161 |
| 164 | 13.67 | 0.77 | 0.199 | ( 0.114) | 0.038 | 0.161 |
| 165 | 13.75 | 0.77 | 0.199 | ( 0.114) | 0.038 | 0.161 |
| 166 | 13.83 | 0.77 | 0.199 | ( 0.113) | 0.038 | 0.161 |
| 167 | 13.92 | 0.77 | 0.199 | ( 0.112) | 0.038 | 0.161 |
| 168 | 14.00 | 0.77 | 0.199 | ( 0.112) | 0.038 | 0.161 |
| 169 | 14.08 | 0.90 | 0.233 | ( 0.111) | 0.044 | 0.189 |
| 170 | 14.17 | 0.90 | 0.233 | ( 0.111) | 0.044 | 0.189 |
| 171 | 14.25 | 0.90 | 0.233 | ( 0.110) | 0.044 | 0.189 |
| 172 | 14.33 | 0.87 | 0.225 | ( 0.110) | 0.043 | 0.182 |
| 173 | 14.42 | 0.87 | 0.225 | ( 0.109) | 0.043 | 0.182 |
| 174 | 14.50 | 0.87 | 0.225 | ( 0.109) | 0.043 | 0.182 |
| 175 | 14.58 | 0.87 | 0.225 | ( 0.108) | 0.043 | 0.182 |
| 176 | 14.67 | 0.87 | 0.225 | ( 0.107) | 0.043 | 0.182 |
| 177 | 14.75 | 0.87 | 0.225 | ( 0.107) | 0.043 | 0.182 |
| 178 | 14.83 | 0.83 | 0.216 | ( 0.106) | 0.041 | 0.175 |
| 179 | 14.92 | 0.83 | 0.216 | ( 0.106) | 0.041 | 0.175 |
| 180 | 15.00 | 0.83 | 0.216 | ( 0.105) | 0.041 | 0.175 |
| 181 | 15.08 | 0.80 | 0.207 | ( 0.105) | 0.039 | 0.168 |
| 182 | 15.17 | 0.80 | 0.207 | ( 0.104) | 0.039 | 0.168 |
| 183 | 15.25 | 0.80 | 0.207 | ( 0.104) | 0.039 | 0.168 |
| 184 | 15.33 | 0.77 | 0.199 | ( 0.103) | 0.038 | 0.161 |
| 185 | 15.42 | 0.77 | 0.199 | ( 0.103) | 0.038 | 0.161 |
| 186 | 15.50 | 0.77 | 0.199 | ( 0.102) | 0.038 | 0.161 |
| 187 | 15.58 | 0.63 | 0.164 | ( 0.101) | 0.031 | 0.133 |
| 188 | 15.67 | 0.63 | 0.164 | ( 0.101) | 0.031 | 0.133 |
| 189 | 15.75 | 0.63 | 0.164 | ( 0.100) | 0.031 | 0.133 |
| 190 | 15.83 | 0.63 | 0.164 | ( 0.100) | 0.031 | 0.133 |
| 191 | 15.92 | 0.63 | 0.164 | ( 0.099) | 0.031 | 0.133 |
| 192 | 16.00 | 0.63 | 0.164 | ( 0.099) | 0.031 | 0.133 |
| 193 | 16.08 | 0.13 | 0.035 | ( 0.098) | 0.007 | 0.028 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 194 | 16.17 | 0.13 | 0.035 | ( 0.098) | 0.007 | 0.028 |
| 195 | 16.25 | 0.13 | 0.035 | ( 0.097) | 0.007 | 0.028 |
| 196 | 16.33 | 0.13 | 0.035 | ( 0.097) | 0.007 | 0.028 |
| 197 | 16.42 | 0.13 | 0.035 | ( 0.096) | 0.007 | 0.028 |
| 198 | 16.50 | 0.13 | 0.035 | ( 0.096) | 0.007 | 0.028 |
| 199 | 16.58 | 0.10 | 0.026 | ( 0.095) | 0.005 | 0.021 |
| 200 | 16.67 | 0.10 | 0.026 | ( 0.095) | 0.005 | 0.021 |
| 201 | 16.75 | 0.10 | 0.026 | ( 0.094) | 0.005 | 0.021 |
| 202 | 16.83 | 0.10 | 0.026 | ( 0.094) | 0.005 | 0.021 |
| 203 | 16.92 | 0.10 | 0.026 | ( 0.094) | 0.005 | 0.021 |
| 204 | 17.00 | 0.10 | 0.026 | ( 0.093) | 0.005 | 0.021 |
| 205 | 17.08 | 0.17 | 0.043 | ( 0.093) | 0.008 | 0.035 |
| 206 | 17.17 | 0.17 | 0.043 | ( 0.092) | 0.008 | 0.035 |
| 207 | 17.25 | 0.17 | 0.043 | ( 0.092) | 0.008 | 0.035 |
| 208 | 17.33 | 0.17 | 0.043 | ( 0.091) | 0.008 | 0.035 |
| 209 | 17.42 | 0.17 | 0.043 | ( 0.091) | 0.008 | 0.035 |
| 210 | 17.50 | 0.17 | 0.043 | ( 0.090) | 0.008 | 0.035 |
| 211 | 17.58 | 0.17 | 0.043 | ( 0.090) | 0.008 | 0.035 |
| 212 | 17.67 | 0.17 | 0.043 | ( 0.089) | 0.008 | 0.035 |
| 213 | 17.75 | 0.17 | 0.043 | ( 0.089) | 0.008 | 0.035 |
| 214 | 17.83 | 0.13 | 0.035 | ( 0.088) | 0.007 | 0.028 |
| 215 | 17.92 | 0.13 | 0.035 | ( 0.088) | 0.007 | 0.028 |
| 216 | 18.00 | 0.13 | 0.035 | ( 0.088) | 0.007 | 0.028 |
| 217 | 18.08 | 0.13 | 0.035 | ( 0.087) | 0.007 | 0.028 |
| 218 | 18.17 | 0.13 | 0.035 | ( 0.087) | 0.007 | 0.028 |
| 219 | 18.25 | 0.13 | 0.035 | ( 0.086) | 0.007 | 0.028 |
| 220 | 18.33 | 0.13 | 0.035 | ( 0.086) | 0.007 | 0.028 |
| 221 | 18.42 | 0.13 | 0.035 | ( 0.085) | 0.007 | 0.028 |
| 222 | 18.50 | 0.13 | 0.035 | ( 0.085) | 0.007 | 0.028 |
| 223 | 18.58 | 0.10 | 0.026 | ( 0.085) | 0.005 | 0.021 |
| 224 | 18.67 | 0.10 | 0.026 | ( 0.084) | 0.005 | 0.021 |
| 225 | 18.75 | 0.10 | 0.026 | ( 0.084) | 0.005 | 0.021 |
| 226 | 18.83 | 0.07 | 0.017 | ( 0.083) | 0.003 | 0.014 |
| 227 | 18.92 | 0.07 | 0.017 | ( 0.083) | 0.003 | 0.014 |
| 228 | 19.00 | 0.07 | 0.017 | ( 0.083) | 0.003 | 0.014 |
| 229 | 19.08 | 0.10 | 0.026 | ( 0.082) | 0.005 | 0.021 |
| 230 | 19.17 | 0.10 | 0.026 | ( 0.082) | 0.005 | 0.021 |
| 231 | 19.25 | 0.10 | 0.026 | ( 0.082) | 0.005 | 0.021 |
| 232 | 19.33 | 0.13 | 0.035 | ( 0.081) | 0.007 | 0.028 |
| 233 | 19.42 | 0.13 | 0.035 | ( 0.081) | 0.007 | 0.028 |
| 234 | 19.50 | 0.13 | 0.035 | ( 0.080) | 0.007 | 0.028 |
| 235 | 19.58 | 0.10 | 0.026 | ( 0.080) | 0.005 | 0.021 |
| 236 | 19.67 | 0.10 | 0.026 | ( 0.080) | 0.005 | 0.021 |
| 237 | 19.75 | 0.10 | 0.026 | ( 0.079) | 0.005 | 0.021 |
| 238 | 19.83 | 0.07 | 0.017 | ( 0.079) | 0.003 | 0.014 |
| 239 | 19.92 | 0.07 | 0.017 | ( 0.079) | 0.003 | 0.014 |
| 240 | 20.00 | 0.07 | 0.017 | ( 0.078) | 0.003 | 0.014 |
| 241 | 20.08 | 0.10 | 0.026 | ( 0.078) | 0.005 | 0.021 |
| 242 | 20.17 | 0.10 | 0.026 | ( 0.078) | 0.005 | 0.021 |
| 243 | 20.25 | 0.10 | 0.026 | ( 0.077) | 0.005 | 0.021 |
| 244 | 20.33 | 0.10 | 0.026 | ( 0.077) | 0.005 | 0.021 |
| 245 | 20.42 | 0.10 | 0.026 | ( 0.077) | 0.005 | 0.021 |
| 246 | 20.50 | 0.10 | 0.026 | ( 0.076) | 0.005 | 0.021 |
| 247 | 20.58 | 0.10 | 0.026 | ( 0.076) | 0.005 | 0.021 |
| 248 | 20.67 | 0.10 | 0.026 | ( 0.076) | 0.005 | 0.021 |
| 249 | 20.75 | 0.10 | 0.026 | ( 0.075) | 0.005 | 0.021 |
| 250 | 20.83 | 0.07 | 0.017 | ( 0.075) | 0.003 | 0.014 |
| 251 | 20.92 | 0.07 | 0.017 | ( 0.075) | 0.003 | 0.014 |
| 252 | 21.00 | 0.07 | 0.017 | ( 0.074) | 0.003 | 0.014 |
| 253 | 21.08 | 0.10 | 0.026 | ( 0.074) | 0.005 | 0.021 |
| 254 | 21.17 | 0.10 | 0.026 | ( 0.074) | 0.005 | 0.021 |
| 255 | 21.25 | 0.10 | 0.026 | ( 0.073) | 0.005 | 0.021 |
| 256 | 21.33 | 0.07 | 0.017 | ( 0.073) | 0.003 | 0.014 |
| 257 | 21.42 | 0.07 | 0.017 | ( 0.073) | 0.003 | 0.014 |
| 258 | 21.50 | 0.07 | 0.017 | ( 0.073) | 0.003 | 0.014 |
| 259 | 21.58 | 0.10 | 0.026 | ( 0.072) | 0.005 | 0.021 |
| 260 | 21.67 | 0.10 | 0.026 | ( 0.072) | 0.005 | 0.021 |
| 261 | 21.75 | 0.10 | 0.026 | ( 0.072) | 0.005 | 0.021 |
| 262 | 21.83 | 0.07 | 0.017 | ( 0.072) | 0.003 | 0.014 |
| 263 | 21.92 | 0.07 | 0.017 | ( 0.071) | 0.003 | 0.014 |
| 264 | 22.00 | 0.07 | 0.017 | ( 0.071) | 0.003 | 0.014 |
| 265 | 22.08 | 0.10 | 0.026 | ( 0.071) | 0.005 | 0.021 |
| 266 | 22.17 | 0.10 | 0.026 | ( 0.071) | 0.005 | 0.021 |
| 267 | 22.25 | 0.10 | 0.026 | ( 0.070) | 0.005 | 0.021 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 268 | 22.33 | 0.07 | 0.017 | ( 0.070) | 0.003 | 0.014 |
| 269 | 22.42 | 0.07 | 0.017 | ( 0.070) | 0.003 | 0.014 |
| 270 | 22.50 | 0.07 | 0.017 | ( 0.070) | 0.003 | 0.014 |
| 271 | 22.58 | 0.07 | 0.017 | ( 0.070) | 0.003 | 0.014 |
| 272 | 22.67 | 0.07 | 0.017 | ( 0.069) | 0.003 | 0.014 |
| 273 | 22.75 | 0.07 | 0.017 | ( 0.069) | 0.003 | 0.014 |
| 274 | 22.83 | 0.07 | 0.017 | ( 0.069) | 0.003 | 0.014 |
| 275 | 22.92 | 0.07 | 0.017 | ( 0.069) | 0.003 | 0.014 |
| 276 | 23.00 | 0.07 | 0.017 | ( 0.069) | 0.003 | 0.014 |
| 277 | 23.08 | 0.07 | 0.017 | ( 0.069) | 0.003 | 0.014 |
| 278 | 23.17 | 0.07 | 0.017 | ( 0.068) | 0.003 | 0.014 |
| 279 | 23.25 | 0.07 | 0.017 | ( 0.068) | 0.003 | 0.014 |
| 280 | 23.33 | 0.07 | 0.017 | ( 0.068) | 0.003 | 0.014 |
| 281 | 23.42 | 0.07 | 0.017 | ( 0.068) | 0.003 | 0.014 |
| 282 | 23.50 | 0.07 | 0.017 | ( 0.068) | 0.003 | 0.014 |
| 283 | 23.58 | 0.07 | 0.017 | ( 0.068) | 0.003 | 0.014 |
| 284 | 23.67 | 0.07 | 0.017 | ( 0.068) | 0.003 | 0.014 |
| 285 | 23.75 | 0.07 | 0.017 | ( 0.068) | 0.003 | 0.014 |
| 286 | 23.83 | 0.07 | 0.017 | ( 0.067) | 0.003 | 0.014 |
| 287 | 23.92 | 0.07 | 0.017 | ( 0.067) | 0.003 | 0.014 |
| 288 | 24.00 | 0.07 | 0.017 | ( 0.067) | 0.003 | 0.014 |

(Loss Rate Not Used)

Sum = 100.0 Sum = 21.0

Flood volume = Effective rainfall 1.75(In)
times area 5.5(Ac.)/[(In)/(Ft.)] = 0.8(Ac.Ft)
Total soil loss = 0.41(In)
Total soil loss = 0.186(Ac.Ft)
Total rainfall = 2.16(In)
Flood volume = 34612.8 Cubic Feet
Total soil loss = 8119.1 Cubic Feet

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Peak flow rate of this hydrograph = 1.308(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

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Hydrograph in 5 Minute intervals ((CFS))

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| Time(h+m) | Volume Ac.Ft | Q(CFS) | 0 | 2.5 | 5.0 | 7.5 | 10.0 |
|---|---|---|---|---|---|---|---|
| 0+ 5 | 0.0003 | 0.04 | Q | \| | \| | \| | \| |
| 0+10 | 0.0007 | 0.07 | Q | \| | \| | \| | \| |
| 0+15 | 0.0013 | 0.07 | Q | \| | \| | \| | \| |
| 0+20 | 0.0019 | 0.10 | Q | \| | \| | \| | \| |
| 0+25 | 0.0027 | 0.11 | Q | \| | \| | \| | \| |
| 0+30 | 0.0035 | 0.11 | Q | \| | \| | \| | \| |
| 0+35 | 0.0043 | 0.12 | Q | \| | \| | \| | \| |
| 0+40 | 0.0051 | 0.12 | Q | \| | \| | \| | \| |
| 0+45 | 0.0059 | 0.12 | Q | \| | \| | \| | \| |
| 0+50 | 0.0068 | 0.13 | Q | \| | \| | \| | \| |
| 0+55 | 0.0078 | 0.15 | Q | \| | \| | \| | \| |
| 1+ 0 | 0.0089 | 0.15 | Q | \| | \| | \| | \| |
| 1+ 5 | 0.0098 | 0.13 | Q | \| | \| | \| | \| |
| 1+10 | 0.0106 | 0.12 | Q | \| | \| | \| | \| |
| 1+15 | 0.0114 | 0.12 | Q | \| | \| | \| | \| |
| 1+20 | 0.0122 | 0.12 | Q | \| | \| | \| | \| |
| 1+25 | 0.0130 | 0.12 | Q | \| | \| | \| | \| |
| 1+30 | 0.0138 | 0.12 | Q | \| | \| | \| | \| |
| 1+35 | 0.0146 | 0.12 | Q | \| | \| | \| | \| |
| 1+40 | 0.0154 | 0.12 | Q | \| | \| | \| | \| |
| 1+45 | 0.0162 | 0.12 | Q | \| | \| | \| | \| |
| 1+50 | 0.0171 | 0.13 | Q | \| | \| | \| | \| |
| 1+55 | 0.0181 | 0.15 | Q | \| | \| | \| | \| |
| 2+ 0 | 0.0192 | 0.15 | Q | \| | \| | \| | \| |
| 2+ 5 | 0.0203 | 0.15 | QV | \| | \| | \| | \| |
| 2+10 | 0.0213 | 0.15 | QV | \| | \| | \| | \| |
| 2+15 | 0.0224 | 0.15 | QV | \| | \| | \| | \| |
| 2+20 | 0.0234 | 0.15 | QV | \| | \| | \| | \| |
| 2+25 | 0.0245 | 0.15 | QV | \| | \| | \| | \| |
| 2+30 | 0.0255 | 0.15 | QV | \| | \| | \| | \| |
| 2+35 | 0.0267 | 0.17 | QV | \| | \| | \| | \| |
| 2+40 | 0.0280 | 0.19 | QV | \| | \| | \| | \| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2+45 | 0.0294 | 0.19 | QV | \| | \| | \| | \| |
| 2+50 | 0.0307 | 0.19 | QV | \| | \| | \| | \| |
| 2+55 | 0.0320 | 0.19 | QV | \| | \| | \| | \| |
| 3+ 0 | 0.0333 | 0.19 | QV | \| | \| | \| | \| |
| 3+ 5 | 0.0347 | 0.19 | QV | \| | \| | \| | \| |
| 3+10 | 0.0360 | 0.19 | QV | \| | \| | \| | \| |
| 3+15 | 0.0373 | 0.19 | QV | \| | \| | \| | \| |
| 3+20 | 0.0386 | 0.19 | QV | \| | \| | \| | \| |
| 3+25 | 0.0399 | 0.19 | Q V | \| | \| | \| | \| |
| 3+30 | 0.0413 | 0.19 | Q V | \| | \| | \| | \| |
| 3+35 | 0.0426 | 0.19 | Q V | \| | \| | \| | \| |
| 3+40 | 0.0439 | 0.19 | Q V | \| | \| | \| | \| |
| 3+45 | 0.0452 | 0.19 | Q V | \| | \| | \| | \| |
| 3+50 | 0.0467 | 0.21 | Q V | \| | \| | \| | \| |
| 3+55 | 0.0483 | 0.23 | Q V | \| | \| | \| | \| |
| 4+ 0 | 0.0498 | 0.23 | Q V | \| | \| | \| | \| |
| 4+ 5 | 0.0514 | 0.23 | Q V | \| | \| | \| | \| |
| 4+10 | 0.0530 | 0.23 | Q V | \| | \| | \| | \| |
| 4+15 | 0.0546 | 0.23 | Q V | \| | \| | \| | \| |
| 4+20 | 0.0563 | 0.25 | Q V | \| | \| | \| | \| |
| 4+25 | 0.0582 | 0.27 | \|QV | \| | \| | \| | \| |
| 4+30 | 0.0600 | 0.27 | \|Q V | \| | \| | \| | \| |
| 4+35 | 0.0619 | 0.27 | \|Q V | \| | \| | \| | \| |
| 4+40 | 0.0637 | 0.27 | \|Q V | \| | \| | \| | \| |
| 4+45 | 0.0656 | 0.27 | \|Q V | \| | \| | \| | \| |
| 4+50 | 0.0676 | 0.29 | \|Q V | \| | \| | \| | \| |
| 4+55 | 0.0696 | 0.30 | \|Q V | \| | \| | \| | \| |
| 5+ 0 | 0.0718 | 0.31 | \|Q V | \| | \| | \| | \| |
| 5+ 5 | 0.0736 | 0.27 | \|Q V | \| | \| | \| | \| |
| 5+10 | 0.0753 | 0.24 | Q  V | \| | \| | \| | \| |
| 5+15 | 0.0769 | 0.23 | Q  V | \| | \| | \| | \| |
| 5+20 | 0.0786 | 0.25 | Q  V | \| | \| | \| | \| |
| 5+25 | 0.0804 | 0.27 | \|Q  V | \| | \| | \| | \| |
| 5+30 | 0.0823 | 0.27 | \|Q  V | \| | \| | \| | \| |
| 5+35 | 0.0842 | 0.29 | \|Q  V | \| | \| | \| | \| |
| 5+40 | 0.0863 | 0.30 | \|Q  V | \| | \| | \| | \| |
| 5+45 | 0.0884 | 0.31 | \|Q  V | \| | \| | \| | \| |
| 5+50 | 0.0906 | 0.31 | \|Q  V | \| | \| | \| | \| |
| 5+55 | 0.0927 | 0.31 | \|Q  V | \| | \| | \| | \| |
| 6+ 0 | 0.0948 | 0.31 | \|Q  V | \| | \| | \| | \| |
| 6+ 5 | 0.0971 | 0.33 | \|Q  V | \| | \| | \| | \| |
| 6+10 | 0.0994 | 0.34 | \|Q   V | \| | \| | \| | \| |
| 6+15 | 0.1018 | 0.35 | \|Q   V | \| | \| | \| | \| |
| 6+20 | 0.1042 | 0.35 | \|Q   V | \| | \| | \| | \| |
| 6+25 | 0.1066 | 0.35 | \|Q   V | \| | \| | \| | \| |
| 6+30 | 0.1089 | 0.35 | \|Q   V | \| | \| | \| | \| |
| 6+35 | 0.1115 | 0.37 | \|Q   V | \| | \| | \| | \| |
| 6+40 | 0.1141 | 0.38 | \|Q   V | \| | \| | \| | \| |
| 6+45 | 0.1167 | 0.38 | \|Q   V | \| | \| | \| | \| |
| 6+50 | 0.1194 | 0.38 | \|Q    V | \| | \| | \| | \| |
| 6+55 | 0.1220 | 0.38 | \|Q    V | \| | \| | \| | \| |
| 7+ 0 | 0.1247 | 0.38 | \|Q    V | \| | \| | \| | \| |
| 7+ 5 | 0.1273 | 0.38 | \|Q    V | \| | \| | \| | \| |
| 7+10 | 0.1300 | 0.38 | \|Q    V | \| | \| | \| | \| |
| 7+15 | 0.1326 | 0.38 | \|Q    V | \| | \| | \| | \| |
| 7+20 | 0.1354 | 0.40 | \|Q    V | \| | \| | \| | \| |
| 7+25 | 0.1383 | 0.42 | \|Q    V | \| | \| | \| | \| |
| 7+30 | 0.1412 | 0.42 | \|Q     V | \| | \| | \| | \| |
| 7+35 | 0.1442 | 0.44 | \|Q     V | \| | \| | \| | \| |
| 7+40 | 0.1474 | 0.46 | \|Q     V | \| | \| | \| | \| |
| 7+45 | 0.1505 | 0.46 | \|Q     V | \| | \| | \| | \| |
| 7+50 | 0.1539 | 0.48 | \|Q     V | \| | \| | \| | \| |
| 7+55 | 0.1573 | 0.50 | \|Q     V | \| | \| | \| | \| |
| 8+ 0 | 0.1607 | 0.50 | \|Q      V | \| | \| | \| | \| |
| 8+ 5 | 0.1644 | 0.54 | \| Q     V | \| | \| | \| | \| |
| 8+10 | 0.1683 | 0.57 | \| Q     V | \| | \| | \| | \| |
| 8+15 | 0.1723 | 0.57 | \| Q     V | \| | \| | \| | \| |
| 8+20 | 0.1763 | 0.58 | \| Q     V | \| | \| | \| | \| |
| 8+25 | 0.1802 | 0.58 | \| Q      V\| | \| | \| | \| | \| |
| 8+30 | 0.1842 | 0.58 | \| Q      V\| | \| | \| | \| | \| |
| 8+35 | 0.1883 | 0.60 | \| Q      V\| | \| | \| | \| | \| |
| 8+40 | 0.1925 | 0.61 | \| Q      V\| | \| | \| | \| | \| |
| 8+45 | 0.1968 | 0.61 | \| Q      V\| | \| | \| | \| | \| |
| 8+50 | 0.2011 | 0.63 | \| Q       V | \| | \| | \| | \| |

```
 8+55       0.2056      0.65  | Q       V         |         |         |
 9+ 0       0.2101      0.65  | Q       V         |         |         |
 9+ 5       0.2149      0.69  | Q       V         |         |         |
 9+10       0.2198      0.72  | Q       |V        |         |         |
 9+15       0.2249      0.73  | Q       |V        |         |         |
 9+20       0.2300      0.75  | Q       |V        |         |         |
 9+25       0.2353      0.77  |  Q      |V        |         |         |
 9+30       0.2406      0.77  |  Q      | V       |         |         |
 9+35       0.2460      0.79  |  Q      | V       |         |         |
 9+40       0.2515      0.80  |  Q      | V       |         |         |
 9+45       0.2571      0.81  |  Q      | V       |         |         |
 9+50       0.2628      0.83  |  Q      |  V      |         |         |
 9+55       0.2686      0.84  |  Q      |  V      |         |         |
10+ 0       0.2744      0.85  |  Q      |  V      |         |         |
10+ 5       0.2793      0.71  | Q       |   V     |         |         |
10+10       0.2835      0.60  | Q       |   V     |         |         |
10+15       0.2875      0.58  | Q       |   V     |         |         |
10+20       0.2915      0.58  | Q       |   V     |         |         |
10+25       0.2955      0.58  | Q       |   V     |         |         |
10+30       0.2994      0.58  | Q       |    V    |         |         |
10+35       0.3041      0.67  | Q       |    V    |         |         |
10+40       0.3092      0.75  | Q       |    V    |         |         |
10+45       0.3145      0.76  |  Q      |    V    |         |         |
10+50       0.3198      0.77  |  Q      |     V   |         |         |
10+55       0.3251      0.77  |  Q      |     V   |         |         |
11+ 0       0.3304      0.77  |  Q      |     V   |         |         |
11+ 5       0.3355      0.75  |  Q      |     V   |         |         |
11+10       0.3406      0.73  | Q       |      V  |         |         |
11+15       0.3456      0.73  | Q       |      V  |         |         |
11+20       0.3507      0.73  | Q       |      V  |         |         |
11+25       0.3557      0.73  | Q       |      V  |         |         |
11+30       0.3607      0.73  | Q       |       V |         |         |
11+35       0.3655      0.69  | Q       |       V |         |         |
11+40       0.3701      0.66  | Q       |       V |         |         |
11+45       0.3746      0.66  | Q       |       V |         |         |
11+50       0.3792      0.67  | Q       |        V|         |         |
11+55       0.3840      0.69  | Q       |        V|         |         |
12+ 0       0.3887      0.69  | Q       |        V|         |         |
12+ 5       0.3944      0.82  |  Q      |        V|         |         |
12+10       0.4008      0.93  |  Q      |         V         |         |
12+15       0.4074      0.95  |  Q      |         V         |         |
12+20       0.4142      0.98  |  Q      |         V         |         |
12+25       0.4210      1.00  |  Q      |          |V       |         |
12+30       0.4279      1.00  |  Q      |          |V       |         |
12+35       0.4350      1.04  |   Q     |          |V       |         |
12+40       0.4424      1.07  |   Q     |          | V      |         |
12+45       0.4498      1.07  |   Q     |          | V      |         |
12+50       0.4574      1.10  |   Q     |          |  V     |         |
12+55       0.4650      1.11  |   Q     |          |  V     |         |
13+ 0       0.4727      1.11  |   Q     |          |  V     |         |
13+ 5       0.4810      1.21  |   Q     |          |   V    |         |
13+10       0.4899      1.29  |    Q    |          |   V    |         |
13+15       0.4989      1.30  |    Q    |          |    V   |         |
13+20       0.5079      1.31  |    Q    |          |    V   |         |
13+25       0.5169      1.31  |    Q    |          |     V  |         |
13+30       0.5259      1.31  |    Q    |          |     V  |         |
13+35       0.5335      1.10  |   Q     |          |     V  |         |
13+40       0.5398      0.93  |  Q      |          |      V |         |
13+45       0.5460      0.90  |  Q      |          |      V |         |
13+50       0.5521      0.88  |  Q      |          |      V |         |
13+55       0.5582      0.88  |  Q      |          |       V|         |
14+ 0       0.5643      0.88  |  Q      |          |       V|         |
14+ 5       0.5709      0.96  |  Q      |          |       V|         |
14+10       0.5779      1.02  |   Q     |          |        V|        |
14+15       0.5851      1.03  |   Q     |          |        V|        |
14+20       0.5921      1.02  |   Q     |          |        V|        |
14+25       0.5990      1.00  |   Q     |          |         V        |
14+30       0.6059      1.00  |   Q     |          |         V        |
14+35       0.6128      1.00  |  Q      |          |         V        |
14+40       0.6197      1.00  |  Q      |          |          |V      |
14+45       0.6265      1.00  |  Q      |          |          |V      |
14+50       0.6333      0.98  |  Q      |          |          |V      |
14+55       0.6400      0.97  |  Q      |          |          | V     |
15+ 0       0.6466      0.96  |  Q      |          |          | V     |
```

| | | | | | | |
|---|---|---|---|---|---|---|
| 15+ 5 | 0.6531 | 0.94 | \| Q | \| | \| | \| V \| |
| 15+10 | 0.6595 | 0.93 | \| Q | \| | \| | \| V \| |
| 15+15 | 0.6658 | 0.92 | \| Q | \| | \| | \| V \| |
| 15+20 | 0.6720 | 0.90 | \| Q | \| | \| | \| V \| |
| 15+25 | 0.6782 | 0.89 | \| Q | \| | \| | \| V \| |
| 15+30 | 0.6843 | 0.89 | \| Q | \| | \| | \| V \| |
| 15+35 | 0.6898 | 0.81 | \| Q | \| | \| | \| V \| |
| 15+40 | 0.6950 | 0.75 | \| Q | \| | \| | \| V \| |
| 15+45 | 0.7000 | 0.73 | \| Q | \| | \| | \| V \| |
| 15+50 | 0.7051 | 0.73 | \| Q | \| | \| | \| V \| |
| 15+55 | 0.7101 | 0.73 | \| Q | \| | \| | \| V \| |
| 16+ 0 | 0.7151 | 0.73 | \| Q | \| | \| | \| V \| |
| 16+ 5 | 0.7182 | 0.45 | \|Q | \| | \| | \| V \| |
| 16+10 | 0.7197 | 0.21 | Q | \| | \| | \| V \| |
| 16+15 | 0.7208 | 0.17 | Q | \| | \| | \| V \| |
| 16+20 | 0.7219 | 0.15 | Q | \| | \| | \| V \| |
| 16+25 | 0.7229 | 0.15 | Q | \| | \| | \| V \| |
| 16+30 | 0.7240 | 0.15 | Q | \| | \| | \| V \| |
| 16+35 | 0.7249 | 0.13 | Q | \| | \| | \| V \| |
| 16+40 | 0.7258 | 0.12 | Q | \| | \| | \| V \| |
| 16+45 | 0.7266 | 0.12 | Q | \| | \| | \| V \| |
| 16+50 | 0.7274 | 0.12 | Q | \| | \| | \| V \| |
| 16+55 | 0.7281 | 0.12 | Q | \| | \| | \| V \| |
| 17+ 0 | 0.7289 | 0.12 | Q | \| | \| | \| V \| |
| 17+ 5 | 0.7300 | 0.15 | Q | \| | \| | \| V \| |
| 17+10 | 0.7313 | 0.18 | Q | \| | \| | \| V \| |
| 17+15 | 0.7326 | 0.19 | Q | \| | \| | \| V \| |
| 17+20 | 0.7339 | 0.19 | Q | \| | \| | \| V \| |
| 17+25 | 0.7352 | 0.19 | Q | \| | \| | \| V \| |
| 17+30 | 0.7366 | 0.19 | Q | \| | \| | \| V \| |
| 17+35 | 0.7379 | 0.19 | Q | \| | \| | \| V \| |
| 17+40 | 0.7392 | 0.19 | Q | \| | \| | \| V \| |
| 17+45 | 0.7405 | 0.19 | Q | \| | \| | \| V \| |
| 17+50 | 0.7417 | 0.17 | Q | \| | \| | \| V \| |
| 17+55 | 0.7428 | 0.16 | Q | \| | \| | \| V \| |
| 18+ 0 | 0.7439 | 0.15 | Q | \| | \| | \| V \| |
| 18+ 5 | 0.7449 | 0.15 | Q | \| | \| | \| V \| |
| 18+10 | 0.7460 | 0.15 | Q | \| | \| | \| V \| |
| 18+15 | 0.7470 | 0.15 | Q | \| | \| | \| V \| |
| 18+20 | 0.7481 | 0.15 | Q | \| | \| | \| V \| |
| 18+25 | 0.7492 | 0.15 | Q | \| | \| | \| V \| |
| 18+30 | 0.7502 | 0.15 | Q | \| | \| | \| V \| |
| 18+35 | 0.7512 | 0.13 | Q | \| | \| | \| V \| |
| 18+40 | 0.7520 | 0.12 | Q | \| | \| | \| V \| |
| 18+45 | 0.7528 | 0.12 | Q | \| | \| | \| V \| |
| 18+50 | 0.7534 | 0.10 | Q | \| | \| | \| V \| |
| 18+55 | 0.7540 | 0.08 | Q | \| | \| | \| V \| |
| 19+ 0 | 0.7545 | 0.08 | Q | \| | \| | \| V \| |
| 19+ 5 | 0.7552 | 0.10 | Q | \| | \| | \| V \| |
| 19+10 | 0.7560 | 0.11 | Q | \| | \| | \| V \| |
| 19+15 | 0.7568 | 0.11 | Q | \| | \| | \| V \| |
| 19+20 | 0.7577 | 0.13 | Q | \| | \| | \| V \| |
| 19+25 | 0.7587 | 0.15 | Q | \| | \| | \| V \| |
| 19+30 | 0.7598 | 0.15 | Q | \| | \| | \| V \| |
| 19+35 | 0.7607 | 0.13 | Q | \| | \| | \| V \| |
| 19+40 | 0.7615 | 0.12 | Q | \| | \| | \| V \| |
| 19+45 | 0.7623 | 0.12 | Q | \| | \| | \| V \| |
| 19+50 | 0.7630 | 0.10 | Q | \| | \| | \| V \| |
| 19+55 | 0.7635 | 0.08 | Q | \| | \| | \| V \| |
| 20+ 0 | 0.7641 | 0.08 | Q | \| | \| | \| V \| |
| 20+ 5 | 0.7647 | 0.10 | Q | \| | \| | \| V \| |
| 20+10 | 0.7655 | 0.11 | Q | \| | \| | \| V \| |
| 20+15 | 0.7663 | 0.11 | Q | \| | \| | \| V \| |
| 20+20 | 0.7671 | 0.12 | Q | \| | \| | \| V \| |
| 20+25 | 0.7679 | 0.12 | Q | \| | \| | \| V \| |
| 20+30 | 0.7687 | 0.12 | Q | \| | \| | \| V \| |
| 20+35 | 0.7695 | 0.12 | Q | \| | \| | \| V \| |
| 20+40 | 0.7703 | 0.12 | Q | \| | \| | \| V \| |
| 20+45 | 0.7711 | 0.12 | Q | \| | \| | \| V \| |
| 20+50 | 0.7717 | 0.10 | Q | \| | \| | \| V \| |
| 20+55 | 0.7723 | 0.08 | Q | \| | \| | \| V \| |
| 21+ 0 | 0.7728 | 0.08 | Q | \| | \| | \| V \| |
| 21+ 5 | 0.7735 | 0.10 | Q | \| | \| | \| V \| |
| 21+10 | 0.7742 | 0.11 | Q | \| | \| | \| V \| |

```
  21+15       0.7750      0.11  Q          |          |          |         V|
  21+20       0.7757      0.10  Q          |          |          |         V|
  21+25       0.7762      0.08  Q          |          |          |         V|
  21+30       0.7768      0.08  Q          |          |          |         V|
  21+35       0.7774      0.10  Q          |          |          |         V|
  21+40       0.7782      0.11  Q          |          |          |         V|
  21+45       0.7790      0.11  Q          |          |          |         V|
  21+50       0.7797      0.10  Q          |          |          |         V|
  21+55       0.7802      0.08  Q          |          |          |         V|
  22+ 0       0.7808      0.08  Q          |          |          |         V|
  22+ 5       0.7814      0.10  Q          |          |          |         V|
  22+10       0.7822      0.11  Q          |          |          |         V|
  22+15       0.7830      0.11  Q          |          |          |         V|
  22+20       0.7836      0.10  Q          |          |          |         V|
  22+25       0.7842      0.08  Q          |          |          |         V|
  22+30       0.7847      0.08  Q          |          |          |         V|
  22+35       0.7853      0.08  Q          |          |          |         V|
  22+40       0.7858      0.08  Q          |          |          |         V|
  22+45       0.7863      0.08  Q          |          |          |         V|
  22+50       0.7868      0.08  Q          |          |          |         V|
  22+55       0.7874      0.08  Q          |          |          |         V|
  23+ 0       0.7879      0.08  Q          |          |          |         V|
  23+ 5       0.7884      0.08  Q          |          |          |         V|
  23+10       0.7890      0.08  Q          |          |          |         V|
  23+15       0.7895      0.08  Q          |          |          |         V|
  23+20       0.7900      0.08  Q          |          |          |         V|
  23+25       0.7906      0.08  Q          |          |          |         V|
  23+30       0.7911      0.08  Q          |          |          |         V|
  23+35       0.7916      0.08  Q          |          |          |         V|
  23+40       0.7921      0.08  Q          |          |          |         V|
  23+45       0.7927      0.08  Q          |          |          |         V|
  23+50       0.7932      0.08  Q          |          |          |         V|
  23+55       0.7937      0.08  Q          |          |          |         V|
  24+ 0       0.7943      0.08  Q          |          |          |         V|
  24+ 5       0.7945      0.04  Q          |          |          |         V|
  24+10       0.7946      0.01  Q          |          |          |         V|
  24+15       0.7946      0.00  Q          |          |          |          V
-------------------------------------------------------------------------
```

| Manning "n" Value Worksheet | | | | | |
|---|---|---|---|---|---|
| **Drainage Area B1 - 5.45 Ac (existing)** | | | | | |
| [1] | [2] | [3] | [4] | [5] | [7] |
| **Subarea** | **Area in (Ac)** | **Land Use (Plate D-5.6)** | **"n" Value** | **Decimal portion of Area [2] / SUM[2]** | **Average "n" Value [4] * [5]** |
| | 5.45 | Natural | 0.04 | 1.00 | 0.040 |
| | | Basin | 0.035 | 0.00 | 0.000 |
| | | Res 1/2 Ac | 0.015 | 0.00 | 0.000 |
| | | Res 1/4 Ac | 0.015 | 0.00 | 0.000 |
| | | Res < 1/4 Ac | 0.015 | 0.00 | 0.000 |
| | | Apartment | 0.015 | 0.00 | 0.000 |
| | | Mobil Home | 0.015 | 0.00 | 0.000 |
| | | Hospital | 0.02 | 0.00 | 0.000 |
| | | Commercial | 0.015 | 0.00 | 0.000 |
| | | | | | |
| Sum = | 5.45 | | | 1.00 | **0.040** |

| Runoff Index (RI) Worksheet | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drainage Area B1 - 5.45 Ac (existing)** | | | | | | | |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |
| **Subarea** | **Area in (Ac)** | **Soil Group** | **Cover Type** | **RI Number (Plate E6-1)** | **Land Use** | **Decimal portion of Area [2] / SUM[2]** | **Average RI Value [5] * [7]** |
| **Natural** | 1 | B | grass (fair) | 69 | Natural | 0.18 | 12.7 |
| | | C | grass (fair) | 79 | Natural | 0.00 | 0.0 |
| | 4.45 | D | grass (fair) | 84 | Natural | 0.82 | 68.6 |
| *Sum =* | *5.45* | | | | | 1.00 | **81.2** |
| | | | | | | | |

| Soil Low Loss Rate Worksheet | | | | | | |
|---|---|---|---|---|---|---|
| **Drainage Area B1 - 5.45 Ac (existing)** | | | | | | |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] |
| **Subarea** | **Area in (Ac)** | **Land Use (Plate D-5.6)** | **% Impervious (Plate D-5.6)** | **Soil Low Loss Rate 0.9-(0.8)* [4]** | **Decimal portion of Area [2] / SUM[2]** | **Average Low Loss Rate [5] * [6]** |
| | 5.45 | Natural | 0 | 0.90 | 1.00 | 0.90 |
| | | Basin/Park | 5 | 0.86 | 0.00 | 0.00 |
| | | Res 1/2 Ac | 40 | 0.58 | 0.00 | 0.00 |
| | | Res 1/4 Ac | 57 | 0.44 | 0.00 | 0.00 |
| | | Res < 1/4 Ac | 65 | 0.38 | 0.00 | 0.00 |
| | | Apartment | 80 | 0.26 | 0.00 | 0.00 |
| | | Mobil Home | 75 | 0.30 | 0.00 | 0.00 |
| | | Hospital | 75 | 0.30 | 0.00 | 0.00 |
| | | Commercial | 90 | 0.18 | 0.00 | 0.00 |
| Sum = | 5.45 | | | | 1.00 | **0.90** |

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

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Study date 09/01/20 File: 2rrb1x242.out

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

Program License Serial Number 4029

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

English Units used in output format

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Renaissance Ranch
Drainage Area B1a
Existing Condition - Area = 5.45 Ac
2-year 24-hour storm

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Drainage Area = 5.45(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.45(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 810.00(Ft.)
Length along longest watercourse measured to centroid = 410.00(Ft.)
Length along longest watercourse = 0.153 Mi.
Length along longest watercourse measured to centroid = 0.078 Mi.
Difference in elevation = 4.50(Ft.)
Slope along watercourse = 29.3333 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time = 0.094 Hr.
Lag time = 5.63 Min.
25% of lag time = 1.41 Min.
40% of lag time = 2.25 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] |
|---|---|---|
| 5.45 | 2.16 | 11.77 |

100 YEAR Area rainfall data:

| Area(Ac.)[1] | Rainfall(In)[2] | Weighting[1*2] |
|---|---|---|
| 5.45 | 5.73 | 31.23 |

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.160(In)
Area Averaged 100-Year Rainfall = 5.730(In)

Point rain (area averaged) = 2.160(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.160(In)

Sub-Area Data:

| Area(Ac.) | Runoff Index | Impervious % |
|---|---|---|
| 5.450 | 73.80 | 0.000 |

Total Area Entered = 5.45(Ac.)

| RI AMC2 | RI AMC-1 | Infil. Rate (In/Hr) | Impervious (Dec.%) | Adj. Infil. Rate (In/Hr) | Area% (Dec.) | F (In/Hr) |
|---|---|---|---|---|---|---|
| 73.8 | 55.6 | 0.515 | 0.000 | 0.515 | 1.000 | 0.515 |

Sum (F) = 0.515

Area averaged mean soil loss (F) (In/Hr) = 0.515
Minimum soil loss rate ((In/Hr)) = 0.258
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

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

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Unit Hydrograph Data

| Unit time period (hrs) | | Time % of lag | Distribution Graph % | Unit Hydrograph (CFS) |
|---|---|---|---|---|
| 1 | 0.083 | 88.811 | 15.827 | 0.869 |
| 2 | 0.167 | 177.622 | 46.848 | 2.573 |
| 3 | 0.250 | 266.432 | 17.678 | 0.971 |
| 4 | 0.333 | 355.243 | 7.712 | 0.424 |
| 5 | 0.417 | 444.054 | 4.488 | 0.247 |
| 6 | 0.500 | 532.865 | 2.851 | 0.157 |
| 7 | 0.583 | 621.676 | 1.969 | 0.108 |
| 8 | 0.667 | 710.486 | 1.269 | 0.070 |
| 9 | 0.750 | 799.297 | 0.906 | 0.050 |
| 10 | 0.833 | 888.108 | 0.451 | 0.025 |
| | | | Sum = 100.000 | Sum= 5.493 |

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

| Unit Time (Hr.) | Pattern Percent | Storm Rain (In/Hr) | Loss rate(In./Hr) Max | Low | Effective (In/Hr) |
|---|---|---|---|---|---|
| 1 | 0.08 | 0.07 | 0.017 | ( 0.913) | 0.016 | 0.002 |
| 2 | 0.17 | 0.07 | 0.017 | ( 0.910) | 0.016 | 0.002 |
| 3 | 0.25 | 0.07 | 0.017 | ( 0.906) | 0.016 | 0.002 |
| 4 | 0.33 | 0.10 | 0.026 | ( 0.903) | 0.023 | 0.003 |
| 5 | 0.42 | 0.10 | 0.026 | ( 0.899) | 0.023 | 0.003 |
| 6 | 0.50 | 0.10 | 0.026 | ( 0.896) | 0.023 | 0.003 |
| 7 | 0.58 | 0.10 | 0.026 | ( 0.892) | 0.023 | 0.003 |
| 8 | 0.67 | 0.10 | 0.026 | ( 0.889) | 0.023 | 0.003 |
| 9 | 0.75 | 0.10 | 0.026 | ( 0.885) | 0.023 | 0.003 |
| 10 | 0.83 | 0.13 | 0.035 | ( 0.882) | 0.031 | 0.003 |
| 11 | 0.92 | 0.13 | 0.035 | ( 0.878) | 0.031 | 0.003 |
| 12 | 1.00 | 0.13 | 0.035 | ( 0.875) | 0.031 | 0.003 |
| 13 | 1.08 | 0.10 | 0.026 | ( 0.872) | 0.023 | 0.003 |
| 14 | 1.17 | 0.10 | 0.026 | ( 0.868) | 0.023 | 0.003 |
| 15 | 1.25 | 0.10 | 0.026 | ( 0.865) | 0.023 | 0.003 |
| 16 | 1.33 | 0.10 | 0.026 | ( 0.861) | 0.023 | 0.003 |
| 17 | 1.42 | 0.10 | 0.026 | ( 0.858) | 0.023 | 0.003 |
| 18 | 1.50 | 0.10 | 0.026 | ( 0.854) | 0.023 | 0.003 |
| 19 | 1.58 | 0.10 | 0.026 | ( 0.851) | 0.023 | 0.003 |
| 20 | 1.67 | 0.10 | 0.026 | ( 0.848) | 0.023 | 0.003 |
| 21 | 1.75 | 0.10 | 0.026 | ( 0.844) | 0.023 | 0.003 |
| 22 | 1.83 | 0.13 | 0.035 | ( 0.841) | 0.031 | 0.003 |
| 23 | 1.92 | 0.13 | 0.035 | ( 0.837) | 0.031 | 0.003 |
| 24 | 2.00 | 0.13 | 0.035 | ( 0.834) | 0.031 | 0.003 |
| 25 | 2.08 | 0.13 | 0.035 | ( 0.831) | 0.031 | 0.003 |
| 26 | 2.17 | 0.13 | 0.035 | ( 0.827) | 0.031 | 0.003 |
| 27 | 2.25 | 0.13 | 0.035 | ( 0.824) | 0.031 | 0.003 |
| 28 | 2.33 | 0.13 | 0.035 | ( 0.821) | 0.031 | 0.003 |
| 29 | 2.42 | 0.13 | 0.035 | ( 0.817) | 0.031 | 0.003 |
| 30 | 2.50 | 0.13 | 0.035 | ( 0.814) | 0.031 | 0.003 |
| 31 | 2.58 | 0.17 | 0.043 | ( 0.810) | 0.039 | 0.004 |
| 32 | 2.67 | 0.17 | 0.043 | ( 0.807) | 0.039 | 0.004 |
| 33 | 2.75 | 0.17 | 0.043 | ( 0.804) | 0.039 | 0.004 |
| 34 | 2.83 | 0.17 | 0.043 | ( 0.801) | 0.039 | 0.004 |
| 35 | 2.92 | 0.17 | 0.043 | ( 0.797) | 0.039 | 0.004 |
| 36 | 3.00 | 0.17 | 0.043 | ( 0.794) | 0.039 | 0.004 |
| 37 | 3.08 | 0.17 | 0.043 | ( 0.791) | 0.039 | 0.004 |
| 38 | 3.17 | 0.17 | 0.043 | ( 0.787) | 0.039 | 0.004 |
| 39 | 3.25 | 0.17 | 0.043 | ( 0.784) | 0.039 | 0.004 |
| 40 | 3.33 | 0.17 | 0.043 | ( 0.781) | 0.039 | 0.004 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 41 | 3.42 | 0.17 | 0.043 | ( 0.778) | 0.039 | 0.004 |
| 42 | 3.50 | 0.17 | 0.043 | ( 0.774) | 0.039 | 0.004 |
| 43 | 3.58 | 0.17 | 0.043 | ( 0.771) | 0.039 | 0.004 |
| 44 | 3.67 | 0.17 | 0.043 | ( 0.768) | 0.039 | 0.004 |
| 45 | 3.75 | 0.17 | 0.043 | ( 0.765) | 0.039 | 0.004 |
| 46 | 3.83 | 0.20 | 0.052 | ( 0.761) | 0.047 | 0.005 |
| 47 | 3.92 | 0.20 | 0.052 | ( 0.758) | 0.047 | 0.005 |
| 48 | 4.00 | 0.20 | 0.052 | ( 0.755) | 0.047 | 0.005 |
| 49 | 4.08 | 0.20 | 0.052 | ( 0.752) | 0.047 | 0.005 |
| 50 | 4.17 | 0.20 | 0.052 | ( 0.749) | 0.047 | 0.005 |
| 51 | 4.25 | 0.20 | 0.052 | ( 0.745) | 0.047 | 0.005 |
| 52 | 4.33 | 0.23 | 0.060 | ( 0.742) | 0.054 | 0.006 |
| 53 | 4.42 | 0.23 | 0.060 | ( 0.739) | 0.054 | 0.006 |
| 54 | 4.50 | 0.23 | 0.060 | ( 0.736) | 0.054 | 0.006 |
| 55 | 4.58 | 0.23 | 0.060 | ( 0.733) | 0.054 | 0.006 |
| 56 | 4.67 | 0.23 | 0.060 | ( 0.730) | 0.054 | 0.006 |
| 57 | 4.75 | 0.23 | 0.060 | ( 0.726) | 0.054 | 0.006 |
| 58 | 4.83 | 0.27 | 0.069 | ( 0.723) | 0.062 | 0.007 |
| 59 | 4.92 | 0.27 | 0.069 | ( 0.720) | 0.062 | 0.007 |
| 60 | 5.00 | 0.27 | 0.069 | ( 0.717) | 0.062 | 0.007 |
| 61 | 5.08 | 0.20 | 0.052 | ( 0.714) | 0.047 | 0.005 |
| 62 | 5.17 | 0.20 | 0.052 | ( 0.711) | 0.047 | 0.005 |
| 63 | 5.25 | 0.20 | 0.052 | ( 0.708) | 0.047 | 0.005 |
| 64 | 5.33 | 0.23 | 0.060 | ( 0.705) | 0.054 | 0.006 |
| 65 | 5.42 | 0.23 | 0.060 | ( 0.702) | 0.054 | 0.006 |
| 66 | 5.50 | 0.23 | 0.060 | ( 0.698) | 0.054 | 0.006 |
| 67 | 5.58 | 0.27 | 0.069 | ( 0.695) | 0.062 | 0.007 |
| 68 | 5.67 | 0.27 | 0.069 | ( 0.692) | 0.062 | 0.007 |
| 69 | 5.75 | 0.27 | 0.069 | ( 0.689) | 0.062 | 0.007 |
| 70 | 5.83 | 0.27 | 0.069 | ( 0.686) | 0.062 | 0.007 |
| 71 | 5.92 | 0.27 | 0.069 | ( 0.683) | 0.062 | 0.007 |
| 72 | 6.00 | 0.27 | 0.069 | ( 0.680) | 0.062 | 0.007 |
| 73 | 6.08 | 0.30 | 0.078 | ( 0.677) | 0.070 | 0.008 |
| 74 | 6.17 | 0.30 | 0.078 | ( 0.674) | 0.070 | 0.008 |
| 75 | 6.25 | 0.30 | 0.078 | ( 0.671) | 0.070 | 0.008 |
| 76 | 6.33 | 0.30 | 0.078 | ( 0.668) | 0.070 | 0.008 |
| 77 | 6.42 | 0.30 | 0.078 | ( 0.665) | 0.070 | 0.008 |
| 78 | 6.50 | 0.30 | 0.078 | ( 0.662) | 0.070 | 0.008 |
| 79 | 6.58 | 0.33 | 0.086 | ( 0.659) | 0.078 | 0.009 |
| 80 | 6.67 | 0.33 | 0.086 | ( 0.656) | 0.078 | 0.009 |
| 81 | 6.75 | 0.33 | 0.086 | ( 0.653) | 0.078 | 0.009 |
| 82 | 6.83 | 0.33 | 0.086 | ( 0.650) | 0.078 | 0.009 |
| 83 | 6.92 | 0.33 | 0.086 | ( 0.647) | 0.078 | 0.009 |
| 84 | 7.00 | 0.33 | 0.086 | ( 0.644) | 0.078 | 0.009 |
| 85 | 7.08 | 0.33 | 0.086 | ( 0.642) | 0.078 | 0.009 |
| 86 | 7.17 | 0.33 | 0.086 | ( 0.639) | 0.078 | 0.009 |
| 87 | 7.25 | 0.33 | 0.086 | ( 0.636) | 0.078 | 0.009 |
| 88 | 7.33 | 0.37 | 0.095 | ( 0.633) | 0.086 | 0.010 |
| 89 | 7.42 | 0.37 | 0.095 | ( 0.630) | 0.086 | 0.010 |
| 90 | 7.50 | 0.37 | 0.095 | ( 0.627) | 0.086 | 0.010 |
| 91 | 7.58 | 0.40 | 0.104 | ( 0.624) | 0.093 | 0.010 |
| 92 | 7.67 | 0.40 | 0.104 | ( 0.621) | 0.093 | 0.010 |
| 93 | 7.75 | 0.40 | 0.104 | ( 0.618) | 0.093 | 0.010 |
| 94 | 7.83 | 0.43 | 0.112 | ( 0.616) | 0.101 | 0.011 |
| 95 | 7.92 | 0.43 | 0.112 | ( 0.613) | 0.101 | 0.011 |
| 96 | 8.00 | 0.43 | 0.112 | ( 0.610) | 0.101 | 0.011 |
| 97 | 8.08 | 0.50 | 0.130 | ( 0.607) | 0.117 | 0.013 |
| 98 | 8.17 | 0.50 | 0.130 | ( 0.604) | 0.117 | 0.013 |
| 99 | 8.25 | 0.50 | 0.130 | ( 0.601) | 0.117 | 0.013 |
| 100 | 8.33 | 0.50 | 0.130 | ( 0.599) | 0.117 | 0.013 |
| 101 | 8.42 | 0.50 | 0.130 | ( 0.596) | 0.117 | 0.013 |
| 102 | 8.50 | 0.50 | 0.130 | ( 0.593) | 0.117 | 0.013 |
| 103 | 8.58 | 0.53 | 0.138 | ( 0.590) | 0.124 | 0.014 |
| 104 | 8.67 | 0.53 | 0.138 | ( 0.587) | 0.124 | 0.014 |
| 105 | 8.75 | 0.53 | 0.138 | ( 0.585) | 0.124 | 0.014 |
| 106 | 8.83 | 0.57 | 0.147 | ( 0.582) | 0.132 | 0.015 |
| 107 | 8.92 | 0.57 | 0.147 | ( 0.579) | 0.132 | 0.015 |
| 108 | 9.00 | 0.57 | 0.147 | ( 0.576) | 0.132 | 0.015 |
| 109 | 9.08 | 0.63 | 0.164 | ( 0.574) | 0.148 | 0.016 |
| 110 | 9.17 | 0.63 | 0.164 | ( 0.571) | 0.148 | 0.016 |
| 111 | 9.25 | 0.63 | 0.164 | ( 0.568) | 0.148 | 0.016 |
| 112 | 9.33 | 0.67 | 0.173 | ( 0.566) | 0.156 | 0.017 |
| 113 | 9.42 | 0.67 | 0.173 | ( 0.563) | 0.156 | 0.017 |
| 114 | 9.50 | 0.67 | 0.173 | ( 0.560) | 0.156 | 0.017 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 115 | 9.58 | 0.70 | 0.181 | ( 0.557) | 0.163 | 0.018 |
| 116 | 9.67 | 0.70 | 0.181 | ( 0.555) | 0.163 | 0.018 |
| 117 | 9.75 | 0.70 | 0.181 | ( 0.552) | 0.163 | 0.018 |
| 118 | 9.83 | 0.73 | 0.190 | ( 0.549) | 0.171 | 0.019 |
| 119 | 9.92 | 0.73 | 0.190 | ( 0.547) | 0.171 | 0.019 |
| 120 | 10.00 | 0.73 | 0.190 | ( 0.544) | 0.171 | 0.019 |
| 121 | 10.08 | 0.50 | 0.130 | ( 0.542) | 0.117 | 0.013 |
| 122 | 10.17 | 0.50 | 0.130 | ( 0.539) | 0.117 | 0.013 |
| 123 | 10.25 | 0.50 | 0.130 | ( 0.536) | 0.117 | 0.013 |
| 124 | 10.33 | 0.50 | 0.130 | ( 0.534) | 0.117 | 0.013 |
| 125 | 10.42 | 0.50 | 0.130 | ( 0.531) | 0.117 | 0.013 |
| 126 | 10.50 | 0.50 | 0.130 | ( 0.528) | 0.117 | 0.013 |
| 127 | 10.58 | 0.67 | 0.173 | ( 0.526) | 0.156 | 0.017 |
| 128 | 10.67 | 0.67 | 0.173 | ( 0.523) | 0.156 | 0.017 |
| 129 | 10.75 | 0.67 | 0.173 | ( 0.521) | 0.156 | 0.017 |
| 130 | 10.83 | 0.67 | 0.173 | ( 0.518) | 0.156 | 0.017 |
| 131 | 10.92 | 0.67 | 0.173 | ( 0.516) | 0.156 | 0.017 |
| 132 | 11.00 | 0.67 | 0.173 | ( 0.513) | 0.156 | 0.017 |
| 133 | 11.08 | 0.63 | 0.164 | ( 0.511) | 0.148 | 0.016 |
| 134 | 11.17 | 0.63 | 0.164 | ( 0.508) | 0.148 | 0.016 |
| 135 | 11.25 | 0.63 | 0.164 | ( 0.506) | 0.148 | 0.016 |
| 136 | 11.33 | 0.63 | 0.164 | ( 0.503) | 0.148 | 0.016 |
| 137 | 11.42 | 0.63 | 0.164 | ( 0.501) | 0.148 | 0.016 |
| 138 | 11.50 | 0.63 | 0.164 | ( 0.498) | 0.148 | 0.016 |
| 139 | 11.58 | 0.57 | 0.147 | ( 0.496) | 0.132 | 0.015 |
| 140 | 11.67 | 0.57 | 0.147 | ( 0.493) | 0.132 | 0.015 |
| 141 | 11.75 | 0.57 | 0.147 | ( 0.491) | 0.132 | 0.015 |
| 142 | 11.83 | 0.60 | 0.156 | ( 0.488) | 0.140 | 0.016 |
| 143 | 11.92 | 0.60 | 0.156 | ( 0.486) | 0.140 | 0.016 |
| 144 | 12.00 | 0.60 | 0.156 | ( 0.483) | 0.140 | 0.016 |
| 145 | 12.08 | 0.83 | 0.216 | ( 0.481) | 0.194 | 0.022 |
| 146 | 12.17 | 0.83 | 0.216 | ( 0.479) | 0.194 | 0.022 |
| 147 | 12.25 | 0.83 | 0.216 | ( 0.476) | 0.194 | 0.022 |
| 148 | 12.33 | 0.87 | 0.225 | ( 0.474) | 0.202 | 0.022 |
| 149 | 12.42 | 0.87 | 0.225 | ( 0.471) | 0.202 | 0.022 |
| 150 | 12.50 | 0.87 | 0.225 | ( 0.469) | 0.202 | 0.022 |
| 151 | 12.58 | 0.93 | 0.242 | ( 0.467) | 0.218 | 0.024 |
| 152 | 12.67 | 0.93 | 0.242 | ( 0.464) | 0.218 | 0.024 |
| 153 | 12.75 | 0.93 | 0.242 | ( 0.462) | 0.218 | 0.024 |
| 154 | 12.83 | 0.97 | 0.251 | ( 0.460) | 0.226 | 0.025 |
| 155 | 12.92 | 0.97 | 0.251 | ( 0.457) | 0.226 | 0.025 |
| 156 | 13.00 | 0.97 | 0.251 | ( 0.455) | 0.226 | 0.025 |
| 157 | 13.08 | 1.13 | 0.294 | ( 0.453) | 0.264 | 0.029 |
| 158 | 13.17 | 1.13 | 0.294 | ( 0.450) | 0.264 | 0.029 |
| 159 | 13.25 | 1.13 | 0.294 | ( 0.448) | 0.264 | 0.029 |
| 160 | 13.33 | 1.13 | 0.294 | ( 0.446) | 0.264 | 0.029 |
| 161 | 13.42 | 1.13 | 0.294 | ( 0.444) | 0.264 | 0.029 |
| 162 | 13.50 | 1.13 | 0.294 | ( 0.441) | 0.264 | 0.029 |
| 163 | 13.58 | 0.77 | 0.199 | ( 0.439) | 0.179 | 0.020 |
| 164 | 13.67 | 0.77 | 0.199 | ( 0.437) | 0.179 | 0.020 |
| 165 | 13.75 | 0.77 | 0.199 | ( 0.435) | 0.179 | 0.020 |
| 166 | 13.83 | 0.77 | 0.199 | ( 0.432) | 0.179 | 0.020 |
| 167 | 13.92 | 0.77 | 0.199 | ( 0.430) | 0.179 | 0.020 |
| 168 | 14.00 | 0.77 | 0.199 | ( 0.428) | 0.179 | 0.020 |
| 169 | 14.08 | 0.90 | 0.233 | ( 0.426) | 0.210 | 0.023 |
| 170 | 14.17 | 0.90 | 0.233 | ( 0.424) | 0.210 | 0.023 |
| 171 | 14.25 | 0.90 | 0.233 | ( 0.421) | 0.210 | 0.023 |
| 172 | 14.33 | 0.87 | 0.225 | ( 0.419) | 0.202 | 0.022 |
| 173 | 14.42 | 0.87 | 0.225 | ( 0.417) | 0.202 | 0.022 |
| 174 | 14.50 | 0.87 | 0.225 | ( 0.415) | 0.202 | 0.022 |
| 175 | 14.58 | 0.87 | 0.225 | ( 0.413) | 0.202 | 0.022 |
| 176 | 14.67 | 0.87 | 0.225 | ( 0.411) | 0.202 | 0.022 |
| 177 | 14.75 | 0.87 | 0.225 | ( 0.409) | 0.202 | 0.022 |
| 178 | 14.83 | 0.83 | 0.216 | ( 0.407) | 0.194 | 0.022 |
| 179 | 14.92 | 0.83 | 0.216 | ( 0.405) | 0.194 | 0.022 |
| 180 | 15.00 | 0.83 | 0.216 | ( 0.402) | 0.194 | 0.022 |
| 181 | 15.08 | 0.80 | 0.207 | ( 0.400) | 0.187 | 0.021 |
| 182 | 15.17 | 0.80 | 0.207 | ( 0.398) | 0.187 | 0.021 |
| 183 | 15.25 | 0.80 | 0.207 | ( 0.396) | 0.187 | 0.021 |
| 184 | 15.33 | 0.77 | 0.199 | ( 0.394) | 0.179 | 0.020 |
| 185 | 15.42 | 0.77 | 0.199 | ( 0.392) | 0.179 | 0.020 |
| 186 | 15.50 | 0.77 | 0.199 | ( 0.390) | 0.179 | 0.020 |
| 187 | 15.58 | 0.63 | 0.164 | ( 0.388) | 0.148 | 0.016 |
| 188 | 15.67 | 0.63 | 0.164 | ( 0.386) | 0.148 | 0.016 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 189 | 15.75 | 0.63 | 0.164 | ( 0.384) | 0.148 | 0.016 |
| 190 | 15.83 | 0.63 | 0.164 | ( 0.382) | 0.148 | 0.016 |
| 191 | 15.92 | 0.63 | 0.164 | ( 0.380) | 0.148 | 0.016 |
| 192 | 16.00 | 0.63 | 0.164 | ( 0.378) | 0.148 | 0.016 |
| 193 | 16.08 | 0.13 | 0.035 | ( 0.376) | 0.031 | 0.003 |
| 194 | 16.17 | 0.13 | 0.035 | ( 0.375) | 0.031 | 0.003 |
| 195 | 16.25 | 0.13 | 0.035 | ( 0.373) | 0.031 | 0.003 |
| 196 | 16.33 | 0.13 | 0.035 | ( 0.371) | 0.031 | 0.003 |
| 197 | 16.42 | 0.13 | 0.035 | ( 0.369) | 0.031 | 0.003 |
| 198 | 16.50 | 0.13 | 0.035 | ( 0.367) | 0.031 | 0.003 |
| 199 | 16.58 | 0.10 | 0.026 | ( 0.365) | 0.023 | 0.003 |
| 200 | 16.67 | 0.10 | 0.026 | ( 0.363) | 0.023 | 0.003 |
| 201 | 16.75 | 0.10 | 0.026 | ( 0.361) | 0.023 | 0.003 |
| 202 | 16.83 | 0.10 | 0.026 | ( 0.360) | 0.023 | 0.003 |
| 203 | 16.92 | 0.10 | 0.026 | ( 0.358) | 0.023 | 0.003 |
| 204 | 17.00 | 0.10 | 0.026 | ( 0.356) | 0.023 | 0.003 |
| 205 | 17.08 | 0.17 | 0.043 | ( 0.354) | 0.039 | 0.004 |
| 206 | 17.17 | 0.17 | 0.043 | ( 0.352) | 0.039 | 0.004 |
| 207 | 17.25 | 0.17 | 0.043 | ( 0.351) | 0.039 | 0.004 |
| 208 | 17.33 | 0.17 | 0.043 | ( 0.349) | 0.039 | 0.004 |
| 209 | 17.42 | 0.17 | 0.043 | ( 0.347) | 0.039 | 0.004 |
| 210 | 17.50 | 0.17 | 0.043 | ( 0.345) | 0.039 | 0.004 |
| 211 | 17.58 | 0.17 | 0.043 | ( 0.344) | 0.039 | 0.004 |
| 212 | 17.67 | 0.17 | 0.043 | ( 0.342) | 0.039 | 0.004 |
| 213 | 17.75 | 0.17 | 0.043 | ( 0.340) | 0.039 | 0.004 |
| 214 | 17.83 | 0.13 | 0.035 | ( 0.339) | 0.031 | 0.003 |
| 215 | 17.92 | 0.13 | 0.035 | ( 0.337) | 0.031 | 0.003 |
| 216 | 18.00 | 0.13 | 0.035 | ( 0.335) | 0.031 | 0.003 |
| 217 | 18.08 | 0.13 | 0.035 | ( 0.334) | 0.031 | 0.003 |
| 218 | 18.17 | 0.13 | 0.035 | ( 0.332) | 0.031 | 0.003 |
| 219 | 18.25 | 0.13 | 0.035 | ( 0.330) | 0.031 | 0.003 |
| 220 | 18.33 | 0.13 | 0.035 | ( 0.329) | 0.031 | 0.003 |
| 221 | 18.42 | 0.13 | 0.035 | ( 0.327) | 0.031 | 0.003 |
| 222 | 18.50 | 0.13 | 0.035 | ( 0.325) | 0.031 | 0.003 |
| 223 | 18.58 | 0.10 | 0.026 | ( 0.324) | 0.023 | 0.003 |
| 224 | 18.67 | 0.10 | 0.026 | ( 0.322) | 0.023 | 0.003 |
| 225 | 18.75 | 0.10 | 0.026 | ( 0.321) | 0.023 | 0.003 |
| 226 | 18.83 | 0.07 | 0.017 | ( 0.319) | 0.016 | 0.002 |
| 227 | 18.92 | 0.07 | 0.017 | ( 0.318) | 0.016 | 0.002 |
| 228 | 19.00 | 0.07 | 0.017 | ( 0.316) | 0.016 | 0.002 |
| 229 | 19.08 | 0.10 | 0.026 | ( 0.315) | 0.023 | 0.003 |
| 230 | 19.17 | 0.10 | 0.026 | ( 0.313) | 0.023 | 0.003 |
| 231 | 19.25 | 0.10 | 0.026 | ( 0.312) | 0.023 | 0.003 |
| 232 | 19.33 | 0.13 | 0.035 | ( 0.310) | 0.031 | 0.003 |
| 233 | 19.42 | 0.13 | 0.035 | ( 0.309) | 0.031 | 0.003 |
| 234 | 19.50 | 0.13 | 0.035 | ( 0.307) | 0.031 | 0.003 |
| 235 | 19.58 | 0.10 | 0.026 | ( 0.306) | 0.023 | 0.003 |
| 236 | 19.67 | 0.10 | 0.026 | ( 0.305) | 0.023 | 0.003 |
| 237 | 19.75 | 0.10 | 0.026 | ( 0.303) | 0.023 | 0.003 |
| 238 | 19.83 | 0.07 | 0.017 | ( 0.302) | 0.016 | 0.002 |
| 239 | 19.92 | 0.07 | 0.017 | ( 0.301) | 0.016 | 0.002 |
| 240 | 20.00 | 0.07 | 0.017 | ( 0.299) | 0.016 | 0.002 |
| 241 | 20.08 | 0.10 | 0.026 | ( 0.298) | 0.023 | 0.003 |
| 242 | 20.17 | 0.10 | 0.026 | ( 0.297) | 0.023 | 0.003 |
| 243 | 20.25 | 0.10 | 0.026 | ( 0.295) | 0.023 | 0.003 |
| 244 | 20.33 | 0.10 | 0.026 | ( 0.294) | 0.023 | 0.003 |
| 245 | 20.42 | 0.10 | 0.026 | ( 0.293) | 0.023 | 0.003 |
| 246 | 20.50 | 0.10 | 0.026 | ( 0.292) | 0.023 | 0.003 |
| 247 | 20.58 | 0.10 | 0.026 | ( 0.290) | 0.023 | 0.003 |
| 248 | 20.67 | 0.10 | 0.026 | ( 0.289) | 0.023 | 0.003 |
| 249 | 20.75 | 0.10 | 0.026 | ( 0.288) | 0.023 | 0.003 |
| 250 | 20.83 | 0.07 | 0.017 | ( 0.287) | 0.016 | 0.002 |
| 251 | 20.92 | 0.07 | 0.017 | ( 0.286) | 0.016 | 0.002 |
| 252 | 21.00 | 0.07 | 0.017 | ( 0.284) | 0.016 | 0.002 |
| 253 | 21.08 | 0.10 | 0.026 | ( 0.283) | 0.023 | 0.003 |
| 254 | 21.17 | 0.10 | 0.026 | ( 0.282) | 0.023 | 0.003 |
| 255 | 21.25 | 0.10 | 0.026 | ( 0.281) | 0.023 | 0.003 |
| 256 | 21.33 | 0.07 | 0.017 | ( 0.280) | 0.016 | 0.002 |
| 257 | 21.42 | 0.07 | 0.017 | ( 0.279) | 0.016 | 0.002 |
| 258 | 21.50 | 0.07 | 0.017 | ( 0.278) | 0.016 | 0.002 |
| 259 | 21.58 | 0.10 | 0.026 | ( 0.277) | 0.023 | 0.003 |
| 260 | 21.67 | 0.10 | 0.026 | ( 0.276) | 0.023 | 0.003 |
| 261 | 21.75 | 0.10 | 0.026 | ( 0.275) | 0.023 | 0.003 |
| 262 | 21.83 | 0.07 | 0.017 | ( 0.274) | 0.016 | 0.002 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 263 | 21.92 | 0.07 | 0.017 | ( 0.273) | 0.016 | 0.002 |
| 264 | 22.00 | 0.07 | 0.017 | ( 0.272) | 0.016 | 0.002 |
| 265 | 22.08 | 0.10 | 0.026 | ( 0.271) | 0.023 | 0.003 |
| 266 | 22.17 | 0.10 | 0.026 | ( 0.270) | 0.023 | 0.003 |
| 267 | 22.25 | 0.10 | 0.026 | ( 0.269) | 0.023 | 0.003 |
| 268 | 22.33 | 0.07 | 0.017 | ( 0.269) | 0.016 | 0.002 |
| 269 | 22.42 | 0.07 | 0.017 | ( 0.268) | 0.016 | 0.002 |
| 270 | 22.50 | 0.07 | 0.017 | ( 0.267) | 0.016 | 0.002 |
| 271 | 22.58 | 0.07 | 0.017 | ( 0.266) | 0.016 | 0.002 |
| 272 | 22.67 | 0.07 | 0.017 | ( 0.265) | 0.016 | 0.002 |
| 273 | 22.75 | 0.07 | 0.017 | ( 0.265) | 0.016 | 0.002 |
| 274 | 22.83 | 0.07 | 0.017 | ( 0.264) | 0.016 | 0.002 |
| 275 | 22.92 | 0.07 | 0.017 | ( 0.263) | 0.016 | 0.002 |
| 276 | 23.00 | 0.07 | 0.017 | ( 0.263) | 0.016 | 0.002 |
| 277 | 23.08 | 0.07 | 0.017 | ( 0.262) | 0.016 | 0.002 |
| 278 | 23.17 | 0.07 | 0.017 | ( 0.262) | 0.016 | 0.002 |
| 279 | 23.25 | 0.07 | 0.017 | ( 0.261) | 0.016 | 0.002 |
| 280 | 23.33 | 0.07 | 0.017 | ( 0.260) | 0.016 | 0.002 |
| 281 | 23.42 | 0.07 | 0.017 | ( 0.260) | 0.016 | 0.002 |
| 282 | 23.50 | 0.07 | 0.017 | ( 0.259) | 0.016 | 0.002 |
| 283 | 23.58 | 0.07 | 0.017 | ( 0.259) | 0.016 | 0.002 |
| 284 | 23.67 | 0.07 | 0.017 | ( 0.259) | 0.016 | 0.002 |
| 285 | 23.75 | 0.07 | 0.017 | ( 0.258) | 0.016 | 0.002 |
| 286 | 23.83 | 0.07 | 0.017 | ( 0.258) | 0.016 | 0.002 |
| 287 | 23.92 | 0.07 | 0.017 | ( 0.258) | 0.016 | 0.002 |
| 288 | 24.00 | 0.07 | 0.017 | ( 0.258) | 0.016 | 0.002 |

(Loss Rate Not Used)

Sum = 100.0 Sum = 2.6

Flood volume = Effective rainfall 0.22(In)
times area 5.5(Ac.)/[(In)/(Ft.)] = 0.1(Ac.Ft)
Total soil loss = 1.94(In)
Total soil loss = 0.883(Ac.Ft)
Total rainfall = 2.16(In)
Flood volume = 4273.2 Cubic Feet
Total soil loss = 38458.7 Cubic Feet

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Peak flow rate of this hydrograph = 0.160(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

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Hydrograph in 5 Minute intervals ((CFS))

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| Time(h+m) | Volume Ac.Ft | Q(CFS) | 0 | 2.5 | 5.0 | 7.5 | 10.0 |
|---|---|---|---|---|---|---|---|
| 0+ 5 | 0.0000 | 0.00 | Q | | | | |
| 0+10 | 0.0001 | 0.01 | Q | | | | |
| 0+15 | 0.0001 | 0.01 | Q | | | | |
| 0+20 | 0.0002 | 0.01 | Q | | | | |
| 0+25 | 0.0002 | 0.01 | Q | | | | |
| 0+30 | 0.0003 | 0.01 | Q | | | | |
| 0+35 | 0.0004 | 0.01 | Q | | | | |
| 0+40 | 0.0005 | 0.01 | Q | | | | |
| 0+45 | 0.0006 | 0.01 | Q | | | | |
| 0+50 | 0.0007 | 0.01 | Q | | | | |
| 0+55 | 0.0008 | 0.02 | Q | | | | |
| 1+ 0 | 0.0010 | 0.02 | Q | | | | |
| 1+ 5 | 0.0011 | 0.02 | Q | | | | |
| 1+10 | 0.0012 | 0.02 | Q | | | | |
| 1+15 | 0.0013 | 0.01 | Q | | | | |
| 1+20 | 0.0014 | 0.01 | Q | | | | |
| 1+25 | 0.0015 | 0.01 | Q | | | | |
| 1+30 | 0.0016 | 0.01 | Q | | | | |
| 1+35 | 0.0017 | 0.01 | Q | | | | |
| 1+40 | 0.0018 | 0.01 | Q | | | | |
| 1+45 | 0.0019 | 0.01 | Q | | | | |
| 1+50 | 0.0020 | 0.01 | Q | | | | |
| 1+55 | 0.0021 | 0.02 | Q | | | | |
| 2+ 0 | 0.0022 | 0.02 | Q | | | | |
| 2+ 5 | 0.0024 | 0.02 | Q | | | | |
| 2+10 | 0.0025 | 0.02 | QV | | | | |
| 2+15 | 0.0026 | 0.02 | QV | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2+20 | 0.0028 | 0.02 | QV | \| | \| | \| | \| |
| 2+25 | 0.0029 | 0.02 | QV | \| | \| | \| | \| |
| 2+30 | 0.0030 | 0.02 | QV | \| | \| | \| | \| |
| 2+35 | 0.0032 | 0.02 | QV | \| | \| | \| | \| |
| 2+40 | 0.0033 | 0.02 | QV | \| | \| | \| | \| |
| 2+45 | 0.0035 | 0.02 | QV | \| | \| | \| | \| |
| 2+50 | 0.0036 | 0.02 | QV | \| | \| | \| | \| |
| 2+55 | 0.0038 | 0.02 | QV | \| | \| | \| | \| |
| 3+ 0 | 0.0039 | 0.02 | QV | \| | \| | \| | \| |
| 3+ 5 | 0.0041 | 0.02 | QV | \| | \| | \| | \| |
| 3+10 | 0.0043 | 0.02 | QV | \| | \| | \| | \| |
| 3+15 | 0.0044 | 0.02 | QV | \| | \| | \| | \| |
| 3+20 | 0.0046 | 0.02 | QV | \| | \| | \| | \| |
| 3+25 | 0.0048 | 0.02 | QV | \| | \| | \| | \| |
| 3+30 | 0.0049 | 0.02 | Q V | \| | \| | \| | \| |
| 3+35 | 0.0051 | 0.02 | Q V | \| | \| | \| | \| |
| 3+40 | 0.0052 | 0.02 | Q V | \| | \| | \| | \| |
| 3+45 | 0.0054 | 0.02 | Q V | \| | \| | \| | \| |
| 3+50 | 0.0056 | 0.02 | Q V | \| | \| | \| | \| |
| 3+55 | 0.0058 | 0.03 | Q V | \| | \| | \| | \| |
| 4+ 0 | 0.0060 | 0.03 | Q V | \| | \| | \| | \| |
| 4+ 5 | 0.0061 | 0.03 | Q V | \| | \| | \| | \| |
| 4+10 | 0.0063 | 0.03 | Q V | \| | \| | \| | \| |
| 4+15 | 0.0065 | 0.03 | Q V | \| | \| | \| | \| |
| 4+20 | 0.0067 | 0.03 | Q V | \| | \| | \| | \| |
| 4+25 | 0.0070 | 0.03 | Q V | \| | \| | \| | \| |
| 4+30 | 0.0072 | 0.03 | Q V | \| | \| | \| | \| |
| 4+35 | 0.0074 | 0.03 | Q  V | \| | \| | \| | \| |
| 4+40 | 0.0076 | 0.03 | Q  V | \| | \| | \| | \| |
| 4+45 | 0.0079 | 0.03 | Q  V | \| | \| | \| | \| |
| 4+50 | 0.0081 | 0.03 | Q  V | \| | \| | \| | \| |
| 4+55 | 0.0083 | 0.04 | Q  V | \| | \| | \| | \| |
| 5+ 0 | 0.0086 | 0.04 | Q  V | \| | \| | \| | \| |
| 5+ 5 | 0.0088 | 0.04 | Q  V | \| | \| | \| | \| |
| 5+10 | 0.0091 | 0.03 | Q  V | \| | \| | \| | \| |
| 5+15 | 0.0093 | 0.03 | Q  V | \| | \| | \| | \| |
| 5+20 | 0.0095 | 0.03 | Q  V | \| | \| | \| | \| |
| 5+25 | 0.0097 | 0.03 | Q  V | \| | \| | \| | \| |
| 5+30 | 0.0099 | 0.03 | Q   V | \| | \| | \| | \| |
| 5+35 | 0.0102 | 0.03 | Q   V | \| | \| | \| | \| |
| 5+40 | 0.0104 | 0.04 | Q   V | \| | \| | \| | \| |
| 5+45 | 0.0107 | 0.04 | Q   V | \| | \| | \| | \| |
| 5+50 | 0.0109 | 0.04 | Q   V | \| | \| | \| | \| |
| 5+55 | 0.0112 | 0.04 | Q   V | \| | \| | \| | \| |
| 6+ 0 | 0.0114 | 0.04 | Q   V | \| | \| | \| | \| |
| 6+ 5 | 0.0117 | 0.04 | Q   V | \| | \| | \| | \| |
| 6+10 | 0.0120 | 0.04 | Q   V | \| | \| | \| | \| |
| 6+15 | 0.0123 | 0.04 | Q    V | \| | \| | \| | \| |
| 6+20 | 0.0126 | 0.04 | Q    V | \| | \| | \| | \| |
| 6+25 | 0.0128 | 0.04 | Q    V | \| | \| | \| | \| |
| 6+30 | 0.0131 | 0.04 | Q    V | \| | \| | \| | \| |
| 6+35 | 0.0134 | 0.04 | Q    V | \| | \| | \| | \| |
| 6+40 | 0.0138 | 0.05 | Q    V | \| | \| | \| | \| |
| 6+45 | 0.0141 | 0.05 | Q    V | \| | \| | \| | \| |
| 6+50 | 0.0144 | 0.05 | Q    V | \| | \| | \| | \| |
| 6+55 | 0.0147 | 0.05 | Q     V | \| | \| | \| | \| |
| 7+ 0 | 0.0150 | 0.05 | Q     V | \| | \| | \| | \| |
| 7+ 5 | 0.0154 | 0.05 | Q     V | \| | \| | \| | \| |
| 7+10 | 0.0157 | 0.05 | Q     V | \| | \| | \| | \| |
| 7+15 | 0.0160 | 0.05 | Q     V | \| | \| | \| | \| |
| 7+20 | 0.0164 | 0.05 | Q     V | \| | \| | \| | \| |
| 7+25 | 0.0167 | 0.05 | Q     V | \| | \| | \| | \| |
| 7+30 | 0.0171 | 0.05 | Q     V | \| | \| | \| | \| |
| 7+35 | 0.0174 | 0.05 | Q      V | \| | \| | \| | \| |
| 7+40 | 0.0178 | 0.05 | Q      V | \| | \| | \| | \| |
| 7+45 | 0.0182 | 0.06 | Q      V | \| | \| | \| | \| |
| 7+50 | 0.0186 | 0.06 | Q      V | \| | \| | \| | \| |
| 7+55 | 0.0190 | 0.06 | Q      V | \| | \| | \| | \| |
| 8+ 0 | 0.0194 | 0.06 | Q      V | \| | \| | \| | \| |
| 8+ 5 | 0.0198 | 0.06 | Q       V | \| | \| | \| | \| |
| 8+10 | 0.0203 | 0.07 | Q       V | \| | \| | \| | \| |
| 8+15 | 0.0208 | 0.07 | Q       V | \| | \| | \| | \| |
| 8+20 | 0.0213 | 0.07 | Q       V | \| | \| | \| | \| |
| 8+25 | 0.0217 | 0.07 | Q       V | \| | \| | \| | \| |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8+30 | 0.0222 | 0.07 | Q | V\| | \| | \| | \| |
| 8+35 | 0.0227 | 0.07 | Q | V\| | \| | \| | \| |
| 8+40 | 0.0232 | 0.07 | Q | V\| | \| | \| | \| |
| 8+45 | 0.0237 | 0.07 | Q | V\| | \| | \| | \| |
| 8+50 | 0.0243 | 0.08 | Q | V\| | \| | \| | \| |
| 8+55 | 0.0248 | 0.08 | Q | V | \| | \| | \| |
| 9+ 0 | 0.0254 | 0.08 | Q | V | \| | \| | \| |
| 9+ 5 | 0.0259 | 0.08 | Q | V | \| | \| | \| |
| 9+10 | 0.0265 | 0.09 | Q | V | \| | \| | \| |
| 9+15 | 0.0271 | 0.09 | Q | \|V | \| | \| | \| |
| 9+20 | 0.0277 | 0.09 | Q | \|V | \| | \| | \| |
| 9+25 | 0.0284 | 0.09 | Q | \|V | \| | \| | \| |
| 9+30 | 0.0290 | 0.09 | Q | \|V | \| | \| | \| |
| 9+35 | 0.0297 | 0.09 | Q | \| V | \| | \| | \| |
| 9+40 | 0.0303 | 0.10 | Q | \| V | \| | \| | \| |
| 9+45 | 0.0310 | 0.10 | Q | \| V | \| | \| | \| |
| 9+50 | 0.0317 | 0.10 | Q | \| V | \| | \| | \| |
| 9+55 | 0.0324 | 0.10 | Q | \| V | \| | \| | \| |
| 10+ 0 | 0.0331 | 0.10 | Q | \| V | \| | \| | \| |
| 10+ 5 | 0.0338 | 0.10 | Q | \| V | \| | \| | \| |
| 10+10 | 0.0344 | 0.08 | Q | \| V | \| | \| | \| |
| 10+15 | 0.0349 | 0.08 | Q | \| V | \| | \| | \| |
| 10+20 | 0.0354 | 0.08 | Q | \| V | \| | \| | \| |
| 10+25 | 0.0359 | 0.07 | Q | \| V | \| | \| | \| |
| 10+30 | 0.0364 | 0.07 | Q | \| V | \| | \| | \| |
| 10+35 | 0.0370 | 0.08 | Q | \| V | \| | \| | \| |
| 10+40 | 0.0376 | 0.09 | Q | \| V | \| | \| | \| |
| 10+45 | 0.0382 | 0.09 | Q | \| V | \| | \| | \| |
| 10+50 | 0.0388 | 0.09 | Q | \| V | \| | \| | \| |
| 10+55 | 0.0395 | 0.09 | Q | \| V | \| | \| | \| |
| 11+ 0 | 0.0401 | 0.09 | Q | \| V | \| | \| | \| |
| 11+ 5 | 0.0407 | 0.09 | Q | \| V | \| | \| | \| |
| 11+10 | 0.0414 | 0.09 | Q | \| V | \| | \| | \| |
| 11+15 | 0.0420 | 0.09 | Q | \| V | \| | \| | \| |
| 11+20 | 0.0426 | 0.09 | Q | \| V | \| | \| | \| |
| 11+25 | 0.0433 | 0.09 | Q | \| V | \| | \| | \| |
| 11+30 | 0.0439 | 0.09 | Q | \| V | \| | \| | \| |
| 11+35 | 0.0445 | 0.09 | Q | \| V | \| | \| | \| |
| 11+40 | 0.0451 | 0.08 | Q | \| V | \| | \| | \| |
| 11+45 | 0.0456 | 0.08 | Q | \| V | \| | \| | \| |
| 11+50 | 0.0462 | 0.08 | Q | \| V | \| | \| | \| |
| 11+55 | 0.0468 | 0.08 | Q | \| V\| | \| | \| | \| |
| 12+ 0 | 0.0474 | 0.08 | Q | \| V\| | \| | \| | \| |
| 12+ 5 | 0.0480 | 0.09 | Q | \| V\| | \| | \| | \| |
| 12+10 | 0.0487 | 0.11 | Q | \| V\| | \| | \| | \| |
| 12+15 | 0.0495 | 0.11 | Q | \| V | \| | \| | \| |
| 12+20 | 0.0503 | 0.12 | Q | \| V | \| | \| | \| |
| 12+25 | 0.0511 | 0.12 | Q | \| V | \| | \| | \| |
| 12+30 | 0.0519 | 0.12 | Q | \| \|V | \| | \| | \| |
| 12+35 | 0.0528 | 0.12 | Q | \| \|V | \| | \| | \| |
| 12+40 | 0.0537 | 0.13 | Q | \| \|V | \| | \| | \| |
| 12+45 | 0.0546 | 0.13 | Q | \| \| V | \| | \| | \| |
| 12+50 | 0.0555 | 0.13 | Q | \| \| V | \| | \| | \| |
| 12+55 | 0.0564 | 0.14 | Q | \| \| V | \| | \| | \| |
| 13+ 0 | 0.0574 | 0.14 | Q | \| \| V | \| | \| | \| |
| 13+ 5 | 0.0583 | 0.14 | Q | \| \| V | \| | \| | \| |
| 13+10 | 0.0594 | 0.15 | Q | \| \| V | \| | \| | \| |
| 13+15 | 0.0605 | 0.16 | Q | \| \| V | \| | \| | \| |
| 13+20 | 0.0615 | 0.16 | Q | \| \| V | \| | \| | \| |
| 13+25 | 0.0626 | 0.16 | Q | \| \| V | \| | \| | \| |
| 13+30 | 0.0638 | 0.16 | Q | \| \| V | \| | \| | \| |
| 13+35 | 0.0648 | 0.15 | Q | \| \| V | \| | \| | \| |
| 13+40 | 0.0657 | 0.13 | Q | \| \| V | \| | \| | \| |
| 13+45 | 0.0665 | 0.12 | Q | \| \| V | \| | \| | \| |
| 13+50 | 0.0673 | 0.12 | Q | \| \| V | \| | \| | \| |
| 13+55 | 0.0681 | 0.11 | Q | \| \| V | \| | \| | \| |
| 14+ 0 | 0.0688 | 0.11 | Q | \| \| V | \| | \| | \| |
| 14+ 5 | 0.0696 | 0.11 | Q | \| \| V | \| | \| | \| |
| 14+10 | 0.0705 | 0.12 | Q | \| \| V | \| | \| | \| |
| 14+15 | 0.0713 | 0.12 | Q | \| \| V\| | \| | \| | \| |
| 14+20 | 0.0722 | 0.13 | Q | \| \| V\| | \| | \| | \| |
| 14+25 | 0.0730 | 0.12 | Q | \| \| V\| | \| | \| | \| |
| 14+30 | 0.0739 | 0.12 | Q | \| \| V | \| | \| | \| |
| 14+35 | 0.0747 | 0.12 | Q | \| \| V | \| | \| | \| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 14+40 | 0.0756 | 0.12 | Q | \| | \| | V | \| |
| 14+45 | 0.0764 | 0.12 | Q | \| | \| | \|V | \| |
| 14+50 | 0.0773 | 0.12 | Q | \| | \| | \|V | \| |
| 14+55 | 0.0781 | 0.12 | Q | \| | \| | \|V | \| |
| 15+ 0 | 0.0789 | 0.12 | Q | \| | \| | \| V | \| |
| 15+ 5 | 0.0798 | 0.12 | Q | \| | \| | \| V | \| |
| 15+10 | 0.0806 | 0.12 | Q | \| | \| | \| V | \| |
| 15+15 | 0.0814 | 0.12 | Q | \| | \| | \| V | \| |
| 15+20 | 0.0821 | 0.11 | Q | \| | \| | \| V | \| |
| 15+25 | 0.0829 | 0.11 | Q | \| | \| | \| V | \| |
| 15+30 | 0.0837 | 0.11 | Q | \| | \| | \| V | \| |
| 15+35 | 0.0844 | 0.11 | Q | \| | \| | \| V | \| |
| 15+40 | 0.0851 | 0.10 | Q | \| | \| | \| V | \| |
| 15+45 | 0.0857 | 0.09 | Q | \| | \| | \| V | \| |
| 15+50 | 0.0864 | 0.09 | Q | \| | \| | \| V | \| |
| 15+55 | 0.0870 | 0.09 | Q | \| | \| | \| V | \| |
| 16+ 0 | 0.0876 | 0.09 | Q | \| | \| | \| V | \| |
| 16+ 5 | 0.0882 | 0.08 | Q | \| | \| | \| V | \| |
| 16+10 | 0.0885 | 0.05 | Q | \| | \| | \| V | \| |
| 16+15 | 0.0887 | 0.03 | Q | \| | \| | \| V | \| |
| 16+20 | 0.0889 | 0.03 | Q | \| | \| | \| V | \| |
| 16+25 | 0.0891 | 0.02 | Q | \| | \| | \| V | \| |
| 16+30 | 0.0892 | 0.02 | Q | \| | \| | \| V | \| |
| 16+35 | 0.0894 | 0.02 | Q | \| | \| | \| V | \| |
| 16+40 | 0.0895 | 0.02 | Q | \| | \| | \| V | \| |
| 16+45 | 0.0896 | 0.02 | Q | \| | \| | \| V | \| |
| 16+50 | 0.0897 | 0.01 | Q | \| | \| | \| V | \| |
| 16+55 | 0.0898 | 0.01 | Q | \| | \| | \| V | \| |
| 17+ 0 | 0.0899 | 0.01 | Q | \| | \| | \| V | \| |
| 17+ 5 | 0.0900 | 0.02 | Q | \| | \| | \| V | \| |
| 17+10 | 0.0901 | 0.02 | Q | \| | \| | \| V | \| |
| 17+15 | 0.0903 | 0.02 | Q | \| | \| | \| V | \| |
| 17+20 | 0.0904 | 0.02 | Q | \| | \| | \| V | \| |
| 17+25 | 0.0906 | 0.02 | Q | \| | \| | \| V | \| |
| 17+30 | 0.0908 | 0.02 | Q | \| | \| | \| V | \| |
| 17+35 | 0.0909 | 0.02 | Q | \| | \| | \| V | \| |
| 17+40 | 0.0911 | 0.02 | Q | \| | \| | \| V | \| |
| 17+45 | 0.0912 | 0.02 | Q | \| | \| | \| V | \| |
| 17+50 | 0.0914 | 0.02 | Q | \| | \| | \| V | \| |
| 17+55 | 0.0916 | 0.02 | Q | \| | \| | \| V | \| |
| 18+ 0 | 0.0917 | 0.02 | Q | \| | \| | \| V | \| |
| 18+ 5 | 0.0918 | 0.02 | Q | \| | \| | \| V | \| |
| 18+10 | 0.0920 | 0.02 | Q | \| | \| | \| V | \| |
| 18+15 | 0.0921 | 0.02 | Q | \| | \| | \| V | \| |
| 18+20 | 0.0922 | 0.02 | Q | \| | \| | \| V | \| |
| 18+25 | 0.0924 | 0.02 | Q | \| | \| | \| V | \| |
| 18+30 | 0.0925 | 0.02 | Q | \| | \| | \| V | \| |
| 18+35 | 0.0926 | 0.02 | Q | \| | \| | \| V | \| |
| 18+40 | 0.0927 | 0.02 | Q | \| | \| | \| V | \| |
| 18+45 | 0.0928 | 0.02 | Q | \| | \| | \| V | \| |
| 18+50 | 0.0929 | 0.01 | Q | \| | \| | \| V | \| |
| 18+55 | 0.0930 | 0.01 | Q | \| | \| | \| V | \| |
| 19+ 0 | 0.0931 | 0.01 | Q | \| | \| | \| V | \| |
| 19+ 5 | 0.0931 | 0.01 | Q | \| | \| | \| V | \| |
| 19+10 | 0.0932 | 0.01 | Q | \| | \| | \| V | \| |
| 19+15 | 0.0933 | 0.01 | Q | \| | \| | \| V | \| |
| 19+20 | 0.0934 | 0.01 | Q | \| | \| | \| V | \| |
| 19+25 | 0.0935 | 0.02 | Q | \| | \| | \| V | \| |
| 19+30 | 0.0937 | 0.02 | Q | \| | \| | \| V | \| |
| 19+35 | 0.0938 | 0.02 | Q | \| | \| | \| V | \| |
| 19+40 | 0.0939 | 0.02 | Q | \| | \| | \| V | \| |
| 19+45 | 0.0940 | 0.01 | Q | \| | \| | \| V | \| |
| 19+50 | 0.0941 | 0.01 | Q | \| | \| | \| V | \| |
| 19+55 | 0.0942 | 0.01 | Q | \| | \| | \| V | \| |
| 20+ 0 | 0.0942 | 0.01 | Q | \| | \| | \| V | \| |
| 20+ 5 | 0.0943 | 0.01 | Q | \| | \| | \| V | \| |
| 20+10 | 0.0944 | 0.01 | Q | \| | \| | \| V | \| |
| 20+15 | 0.0945 | 0.01 | Q | \| | \| | \| V | \| |
| 20+20 | 0.0946 | 0.01 | Q | \| | \| | \| V | \| |
| 20+25 | 0.0947 | 0.01 | Q | \| | \| | \| V | \| |
| 20+30 | 0.0948 | 0.01 | Q | \| | \| | \| V | \| |
| 20+35 | 0.0949 | 0.01 | Q | \| | \| | \| V | \| |
| 20+40 | 0.0950 | 0.01 | Q | \| | \| | \| V | \| |
| 20+45 | 0.0951 | 0.01 | Q | \| | \| | \| V | \| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20+50 | 0.0952 | 0.01 | Q | \| | \| | \| | V \| |
| 20+55 | 0.0953 | 0.01 | Q | \| | \| | \| | V \| |
| 21+ 0 | 0.0953 | 0.01 | Q | \| | \| | \| | V \| |
| 21+ 5 | 0.0954 | 0.01 | Q | \| | \| | \| | V \| |
| 21+10 | 0.0955 | 0.01 | Q | \| | \| | \| | V \| |
| 21+15 | 0.0956 | 0.01 | Q | \| | \| | \| | V \| |
| 21+20 | 0.0957 | 0.01 | Q | \| | \| | \| | V\| |
| 21+25 | 0.0958 | 0.01 | Q | \| | \| | \| | V\| |
| 21+30 | 0.0958 | 0.01 | Q | \| | \| | \| | V\| |
| 21+35 | 0.0959 | 0.01 | Q | \| | \| | \| | V\| |
| 21+40 | 0.0960 | 0.01 | Q | \| | \| | \| | V\| |
| 21+45 | 0.0961 | 0.01 | Q | \| | \| | \| | V\| |
| 21+50 | 0.0962 | 0.01 | Q | \| | \| | \| | V\| |
| 21+55 | 0.0962 | 0.01 | Q | \| | \| | \| | V\| |
| 22+ 0 | 0.0963 | 0.01 | Q | \| | \| | \| | V\| |
| 22+ 5 | 0.0964 | 0.01 | Q | \| | \| | \| | V\| |
| 22+10 | 0.0965 | 0.01 | Q | \| | \| | \| | V\| |
| 22+15 | 0.0966 | 0.01 | Q | \| | \| | \| | V\| |
| 22+20 | 0.0967 | 0.01 | Q | \| | \| | \| | V\| |
| 22+25 | 0.0967 | 0.01 | Q | \| | \| | \| | V\| |
| 22+30 | 0.0968 | 0.01 | Q | \| | \| | \| | V\| |
| 22+35 | 0.0969 | 0.01 | Q | \| | \| | \| | V\| |
| 22+40 | 0.0969 | 0.01 | Q | \| | \| | \| | V\| |
| 22+45 | 0.0970 | 0.01 | Q | \| | \| | \| | V\| |
| 22+50 | 0.0971 | 0.01 | Q | \| | \| | \| | V\| |
| 22+55 | 0.0971 | 0.01 | Q | \| | \| | \| | V\| |
| 23+ 0 | 0.0972 | 0.01 | Q | \| | \| | \| | V\| |
| 23+ 5 | 0.0973 | 0.01 | Q | \| | \| | \| | V\| |
| 23+10 | 0.0973 | 0.01 | Q | \| | \| | \| | V\| |
| 23+15 | 0.0974 | 0.01 | Q | \| | \| | \| | V\| |
| 23+20 | 0.0975 | 0.01 | Q | \| | \| | \| | V\| |
| 23+25 | 0.0975 | 0.01 | Q | \| | \| | \| | V\| |
| 23+30 | 0.0976 | 0.01 | Q | \| | \| | \| | V\| |
| 23+35 | 0.0977 | 0.01 | Q | \| | \| | \| | V\| |
| 23+40 | 0.0977 | 0.01 | Q | \| | \| | \| | V\| |
| 23+45 | 0.0978 | 0.01 | Q | \| | \| | \| | V\| |
| 23+50 | 0.0979 | 0.01 | Q | \| | \| | \| | V\| |
| 23+55 | 0.0979 | 0.01 | Q | \| | \| | \| | V\| |
| 24+ 0 | 0.0980 | 0.01 | Q | \| | \| | \| | V\| |
| 24+ 5 | 0.0980 | 0.01 | Q | \| | \| | \| | V\| |
| 24+10 | 0.0981 | 0.00 | Q | \| | \| | \| | V\| |
| 24+15 | 0.0981 | 0.00 | Q | \| | \| | \| | V\| |
| 24+20 | 0.0981 | 0.00 | Q | \| | \| | \| | V\| |
| 24+25 | 0.0981 | 0.00 | Q | \| | \| | \| | V\| |
| 24+30 | 0.0981 | 0.00 | Q | \| | \| | \| | V\| |
| 24+35 | 0.0981 | 0.00 | Q | \| | \| | \| | V\| |
| 24+40 | 0.0981 | 0.00 | Q | \| | \| | \| | V\| |
| 24+45 | 0.0981 | 0.00 | Q | \| | \| | \| | V |

# Detention Basin B1a

**Renaissance Ranch**
**County of Riverside**
**Proposed Extended/Detention Basin Area B1**

| Elev (ft) | Depth (ft) | Vol (ac-ft) | Headwater Stage 1 Depth (ft) | Stage 1 Orifice A=0.01 sf 2ea-1" Opening 1312 | Stage 1 Orifice A=0.01 sf 1ea-1" Opening 1317 | Emergency Spillway 10' Opening 1320 | Total Outflow **Q total** (cfs) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| 1312 | 0 | 0.00 | 0 | 0 | 0 | | **0.00** |
| 1313 | 1 | 0.11 | 1 | 0.06 | 0 | | **0.06** |
| 1314 | 2 | 0.23 | 2 | 0.08 | 0 | | **0.08** |
| 1315 | 3 | 0.34 | 3 | 0.1 | 0 | | **0.10** |
| 1316 | 4 | 0.46 | 4 | 0.12 | 0 | | **0.12** |
| 1317 | 5 | 0.57 | 5 | 0.12 | 0 | | **0.12** |
| 1318 | 6 | 0.69 | 6 | 0.14 | 0.03 | | **0.17** |
| 1319 | 7 | 0.80 | 7 | 0.14 | 0.04 | | **0.18** |
| 1289 | 8 | 0.92 | 8 | 0.16 | 0.05 | | **0.21** |
| 1290 | 9 | 1.03 | 9 | 0.18 | 0.06 | 30.00 | **30.24** |
| 1291 | 10 | 1.15 | 10 | 0.18 | 0.06 | 84.85 | **85.09** |
| | | | | | | | |
| | | | | | | | |

# Rating Table for Circular Orifice - 1" opening

## Project Description

| | |
|---|---|
| Solve For | Discharge |

## Input Data

| | | |
|---|---|---|
| Headwater Elevation | 2.30 | ft |
| Centroid Elevation | 0.04 | ft |
| Tailwater Elevation | 0.00 | ft |
| Discharge Coefficient | 0.65 | |
| Diameter | 0.08 | ft |

| Headwater Elevation (ft) | Discharge (ft³/s) | Velocity (ft/s) |
|---|---|---|
| 0.50 | 0.02 | 3.54 |
| 1.00 | 0.03 | 5.11 |
| 1.50 | 0.03 | 6.30 |
| 2.00 | 0.04 | 7.30 |
| 2.50 | 0.04 | 8.18 |
| 3.00 | 0.05 | 8.97 |
| 3.50 | 0.05 | 9.70 |
| 4.00 | 0.06 | 10.38 |
| 4.50 | 0.06 | 11.01 |
| 5.00 | 0.06 | 11.61 |
| 5.50 | 0.07 | 12.18 |
| 6.00 | 0.07 | 12.73 |
| 6.50 | 0.07 | 13.25 |
| 7.00 | 0.08 | 13.76 |
| 7.50 | 0.08 | 14.24 |
| 8.00 | 0.08 | 14.71 |
| 8.50 | 0.08 | 15.17 |
| 9.00 | 0.09 | 15.61 |
| 9.50 | 0.09 | 16.04 |
| 10.00 | 0.09 | 16.46 |
| 10.50 | 0.09 | 16.86 |
| 11.00 | 0.09 | 17.26 |
| 11.50 | 0.10 | 17.65 |
| 12.00 | 0.10 | 18.03 |
| 12.50 | 0.10 | 18.41 |
| 13.00 | 0.10 | 18.77 |
| 13.50 | 0.10 | 19.13 |
| 14.00 | 0.11 | 19.48 |

FLOOD HYDROGRAPH ROUTING PROGRAM
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2005
Study date: 09/01/20

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Renaissance Ranch
Drainage Area B1a - Area = 5.45 Ac
Detention Basin Routing
2-year 24-hour storm

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Program License Serial Number 4029

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

From study/file name: 2rrb1242.rte

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

Number of intervals = 291
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 1.308 (CFS)
Total volume = 0.795 (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 10.000 to Point/Station 11.000
**** RETARDING BASIN ROUTING ****

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 |
| 1.000 | 0.110 | 0.060 | 0.110 | 0.110 |
| 2.000 | 0.230 | 0.080 | 0.230 | 0.230 |
| 3.000 | 0.340 | 0.100 | 0.340 | 0.340 |
| 4.000 | 0.460 | 0.120 | 0.460 | 0.460 |
| 5.000 | 0.570 | 0.120 | 0.570 | 0.570 |
| 6.000 | 0.690 | 0.170 | 0.689 | 0.691 |
| 7.000 | 0.800 | 0.180 | 0.799 | 0.801 |
| 8.000 | 0.890 | 0.210 | 0.889 | 0.891 |
| 9.000 | 1.030 | 30.240 | 0.926 | 1.134 |
| 10.000 | 1.150 | 85.090 | 0.857 | 1.443 |

Hydrograph Detention Basin Routing

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

| Time (Hours) | Inflow (CFS) | Outflow (CFS) | Storage (Ac.Ft) | .0 | 0.3 | 0.65 | 0.98 | 1.31 (Ft.) Depth |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0.083 | 0.04 | 0.00 | 0.000 | O | \| | \| | \| | 0.00 |
| 0.167 | 0.07 | 0.00 | 0.000 | OI | \| | \| | \| | 0.00 |
| 0.250 | 0.07 | 0.00 | 0.001 | OI | \| | \| | \| | 0.01 |
| 0.333 | 0.10 | 0.00 | 0.002 | O I | \| | \| | \| | 0.01 |
| 0.417 | 0.11 | 0.00 | 0.002 | O I | \| | \| | \| | 0.02 |
| 0.500 | 0.11 | 0.00 | 0.003 | O I | \| | \| | \| | 0.03 |
| 0.583 | 0.12 | 0.00 | 0.004 | O I | \| | \| | \| | 0.03 |
| 0.667 | 0.12 | 0.00 | 0.005 | O I | \| | \| | \| | 0.04 |
| 0.750 | 0.12 | 0.00 | 0.005 | O I | \| | \| | \| | 0.05 |
| 0.833 | 0.13 | 0.00 | 0.006 | O I | \| | \| | \| | 0.06 |
| 0.917 | 0.15 | 0.00 | 0.007 | O I | \| | \| | \| | 0.07 |
| 1.000 | 0.15 | 0.00 | 0.008 | O I | \| | \| | \| | 0.07 |
| 1.083 | 0.13 | 0.00 | 0.009 | O I | \| | \| | \| | 0.08 |
| 1.167 | 0.12 | 0.01 | 0.010 | O I | \| | \| | \| | 0.09 |
| 1.250 | 0.12 | 0.01 | 0.011 | O I | \| | \| | \| | 0.10 |
| 1.333 | 0.12 | 0.01 | 0.012 | O I | \| | \| | \| | 0.10 |
| 1.417 | 0.12 | 0.01 | 0.012 | O I | \| | \| | \| | 0.11 |
| 1.500 | 0.12 | 0.01 | 0.013 | O I | \| | \| | \| | 0.12 |
| 1.583 | 0.12 | 0.01 | 0.014 | O I | \| | \| | \| | 0.13 |
| 1.667 | 0.12 | 0.01 | 0.014 | O I | \| | \| | \| | 0.13 |
| 1.750 | 0.12 | 0.01 | 0.015 | O I | \| | \| | \| | 0.14 |
| 1.833 | 0.13 | 0.01 | 0.016 | O I | \| | \| | \| | 0.15 |
| 1.917 | 0.15 | 0.01 | 0.017 | O I | \| | \| | \| | 0.15 |
| 2.000 | 0.15 | 0.01 | 0.018 | O I | \| | \| | \| | 0.16 |
| 2.083 | 0.15 | 0.01 | 0.019 | O I | \| | \| | \| | 0.17 |
| 2.167 | 0.15 | 0.01 | 0.020 | O I | \| | \| | \| | 0.18 |
| 2.250 | 0.15 | 0.01 | 0.021 | O I | \| | \| | \| | 0.19 |
| 2.333 | 0.15 | 0.01 | 0.022 | O I | \| | \| | \| | 0.20 |
| 2.417 | 0.15 | 0.01 | 0.023 | O I | \| | \| | \| | 0.21 |
| 2.500 | 0.15 | 0.01 | 0.024 | O I | \| | \| | \| | 0.22 |
| 2.583 | 0.17 | 0.01 | 0.025 | O I | \| | \| | \| | 0.23 |
| 2.667 | 0.19 | 0.01 | 0.026 | O I | \| | \| | \| | 0.24 |
| 2.750 | 0.19 | 0.01 | 0.027 | O I | \| | \| | \| | 0.25 |
| 2.833 | 0.19 | 0.02 | 0.028 | O I | \| | \| | \| | 0.26 |
| 2.917 | 0.19 | 0.02 | 0.030 | O I | \| | \| | \| | 0.27 |
| 3.000 | 0.19 | 0.02 | 0.031 | O I | \| | \| | \| | 0.28 |
| 3.083 | 0.19 | 0.02 | 0.032 | O I | \| | \| | \| | 0.29 |
| 3.167 | 0.19 | 0.02 | 0.033 | O I | \| | \| | \| | 0.30 |
| 3.250 | 0.19 | 0.02 | 0.034 | O I | \| | \| | \| | 0.31 |
| 3.333 | 0.19 | 0.02 | 0.036 | O I | \| | \| | \| | 0.32 |
| 3.417 | 0.19 | 0.02 | 0.037 | O I | \| | \| | \| | 0.33 |
| 3.500 | 0.19 | 0.02 | 0.038 | O I | \| | \| | \| | 0.35 |
| 3.583 | 0.19 | 0.02 | 0.039 | O I | \| | \| | \| | 0.36 |
| 3.667 | 0.19 | 0.02 | 0.040 | O I | \| | \| | \| | 0.37 |
| 3.750 | 0.19 | 0.02 | 0.042 | O I | \| | \| | \| | 0.38 |
| 3.833 | 0.21 | 0.02 | 0.043 | O I | \| | \| | \| | 0.39 |
| 3.917 | 0.23 | 0.02 | 0.044 | O I | \| | \| | \| | 0.40 |
| 4.000 | 0.23 | 0.02 | 0.046 | O I | \| | \| | \| | 0.41 |
| 4.083 | 0.23 | 0.03 | 0.047 | O I | \| | \| | \| | 0.43 |
| 4.167 | 0.23 | 0.03 | 0.048 | O I | \| | \| | \| | 0.44 |
| 4.250 | 0.23 | 0.03 | 0.050 | O I | \| | \| | \| | 0.45 |
| 4.333 | 0.25 | 0.03 | 0.051 | O I | \| | \| | \| | 0.47 |
| 4.417 | 0.27 | 0.03 | 0.053 | O I | \| | \| | \| | 0.48 |
| 4.500 | 0.27 | 0.03 | 0.054 | O I | \| | \| | \| | 0.49 |
| 4.583 | 0.27 | 0.03 | 0.056 | O I | \| | \| | \| | 0.51 |
| 4.667 | 0.27 | 0.03 | 0.058 | O I | \| | \| | \| | 0.52 |
| 4.750 | 0.27 | 0.03 | 0.059 | O I | \| | \| | \| | 0.54 |
| 4.833 | 0.29 | 0.03 | 0.061 | O I | \| | \| | \| | 0.55 |
| 4.917 | 0.30 | 0.03 | 0.063 | O I | \| | \| | \| | 0.57 |
| 5.000 | 0.31 | 0.04 | 0.065 | O I | \| | \| | \| | 0.59 |
| 5.083 | 0.27 | 0.04 | 0.066 | O I | \| | \| | \| | 0.60 |
| 5.167 | 0.24 | 0.04 | 0.068 | O I | \| | \| | \| | 0.62 |
| 5.250 | 0.23 | 0.04 | 0.069 | O I | \| | \| | \| | 0.63 |
| 5.333 | 0.25 | 0.04 | 0.071 | O I | \| | \| | \| | 0.64 |
| 5.417 | 0.27 | 0.04 | 0.072 | O I | \| | \| | \| | 0.66 |
| 5.500 | 0.27 | 0.04 | 0.074 | O I | \| | \| | \| | 0.67 |
| 5.583 | 0.29 | 0.04 | 0.075 | O I | \| | \| | \| | 0.69 |
| 5.667 | 0.30 | 0.04 | 0.077 | O I | \| | \| | \| | 0.70 |
| 5.750 | 0.31 | 0.04 | 0.079 | O I | \| | \| | \| | 0.72 |
| 5.833 | 0.31 | 0.04 | 0.081 | O I | \| | \| | \| | 0.73 |
| 5.917 | 0.31 | 0.05 | 0.083 | O I | \| | \| | \| | 0.75 |
| 6.000 | 0.31 | 0.05 | 0.084 | O I | \| | \| | \| | 0.77 |
| 6.083 | 0.33 | 0.05 | 0.086 | O I | \| | \| | \| | 0.78 |
| 6.167 | 0.34 | 0.05 | 0.088 | O I | \| | \| | \| | 0.80 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 6.250 | 0.35 | 0.05 | 0.090 | \|O | I | \| | \| | \| | 0.82 |
| 6.333 | 0.35 | 0.05 | 0.092 | \|O | I | \| | \| | \| | 0.84 |
| 6.417 | 0.35 | 0.05 | 0.094 | \|O | I | \| | \| | \| | 0.86 |
| 6.500 | 0.35 | 0.05 | 0.096 | \|O | I | \| | \| | \| | 0.88 |
| 6.583 | 0.37 | 0.05 | 0.098 | \|O | I | \| | \| | \| | 0.90 |
| 6.667 | 0.38 | 0.05 | 0.101 | \|O | \|I | \| | \| | \| | 0.91 |
| 6.750 | 0.38 | 0.06 | 0.103 | \|O | \|I | \| | \| | \| | 0.94 |
| 6.833 | 0.38 | 0.06 | 0.105 | \|O | \|I | \| | \| | \| | 0.96 |
| 6.917 | 0.38 | 0.06 | 0.107 | \|O | \|I | \| | \| | \| | 0.98 |
| 7.000 | 0.38 | 0.06 | 0.110 | \|O | \|I | \| | \| | \| | 1.00 |
| 7.083 | 0.38 | 0.06 | 0.112 | \|O | \|I | \| | \| | \| | 1.02 |
| 7.167 | 0.38 | 0.06 | 0.114 | \|O | \|I | \| | \| | \| | 1.03 |
| 7.250 | 0.38 | 0.06 | 0.116 | \|O | \|I | \| | \| | \| | 1.05 |
| 7.333 | 0.40 | 0.06 | 0.119 | \|O | \|I | \| | \| | \| | 1.07 |
| 7.417 | 0.42 | 0.06 | 0.121 | \|O | \| I | \| | \| | \| | 1.09 |
| 7.500 | 0.42 | 0.06 | 0.124 | \|O | \| I | \| | \| | \| | 1.11 |
| 7.583 | 0.44 | 0.06 | 0.126 | \|O | \| I | \| | \| | \| | 1.13 |
| 7.667 | 0.46 | 0.06 | 0.129 | \|O | \| I | \| | \| | \| | 1.16 |
| 7.750 | 0.46 | 0.06 | 0.131 | \|O | \| I | \| | \| | \| | 1.18 |
| 7.833 | 0.48 | 0.06 | 0.134 | \|O | \| I | \| | \| | \| | 1.20 |
| 7.917 | 0.50 | 0.06 | 0.137 | \|O | \| I | \| | \| | \| | 1.23 |
| 8.000 | 0.50 | 0.07 | 0.140 | \|O | \| I | \| | \| | \| | 1.25 |
| 8.083 | 0.54 | 0.07 | 0.143 | \|O | \| I | \| | \| | \| | 1.28 |
| 8.167 | 0.57 | 0.07 | 0.147 | \|O | \| I | \| | \| | \| | 1.31 |
| 8.250 | 0.57 | 0.07 | 0.150 | \|O | \| I | \| | \| | \| | 1.33 |
| 8.333 | 0.58 | 0.07 | 0.154 | \|O | \| I | \| | \| | \| | 1.36 |
| 8.417 | 0.58 | 0.07 | 0.157 | \|O | \| I | \| | \| | \| | 1.39 |
| 8.500 | 0.58 | 0.07 | 0.161 | \|O | \| I | \| | \| | \| | 1.42 |
| 8.583 | 0.60 | 0.07 | 0.164 | \|O | \| I | \| | \| | \| | 1.45 |
| 8.667 | 0.61 | 0.07 | 0.168 | \|O | \| I | \| | \| | \| | 1.48 |
| 8.750 | 0.61 | 0.07 | 0.172 | \|O | \| I\| | \| | \| | \| | 1.51 |
| 8.833 | 0.63 | 0.07 | 0.175 | \|O | \| I\| | \| | \| | \| | 1.55 |
| 8.917 | 0.65 | 0.07 | 0.179 | \|O | \| I\| | \| | \| | \| | 1.58 |
| 9.000 | 0.65 | 0.07 | 0.183 | \|O | \| I\| | \| | \| | \| | 1.61 |
| 9.083 | 0.69 | 0.07 | 0.187 | \|O | \| I | \| | \| | \| | 1.65 |
| 9.167 | 0.72 | 0.07 | 0.192 | \|O | \| \|I | \| | \| | \| | 1.68 |
| 9.250 | 0.73 | 0.07 | 0.196 | \|O | \| \|I | \| | \| | \| | 1.72 |
| 9.333 | 0.75 | 0.08 | 0.201 | \|O | \| \| I | \| | \| | \| | 1.76 |
| 9.417 | 0.77 | 0.08 | 0.206 | \|O | \| \| I | \| | \| | \| | 1.80 |
| 9.500 | 0.77 | 0.08 | 0.210 | \|O | \| \| I | \| | \| | \| | 1.84 |
| 9.583 | 0.79 | 0.08 | 0.215 | \|O | \| \| I | \| | \| | \| | 1.88 |
| 9.667 | 0.80 | 0.08 | 0.220 | \|O | \| \| I | \| | \| | \| | 1.92 |
| 9.750 | 0.81 | 0.08 | 0.225 | \|O | \| \| I | \| | \| | \| | 1.96 |
| 9.833 | 0.83 | 0.08 | 0.230 | \|O | \| \| I | \| | \| | \| | 2.00 |
| 9.917 | 0.84 | 0.08 | 0.235 | \|O | \| \| I | \| | \| | \| | 2.05 |
| 10.000 | 0.85 | 0.08 | 0.241 | \| O | \| \| I | \| | \| | \| | 2.10 |
| 10.083 | 0.71 | 0.08 | 0.245 | \| O | \| \|I | \| | \| | \| | 2.14 |
| 10.167 | 0.60 | 0.08 | 0.249 | \| O | \| I | \| | \| | \| | 2.18 |
| 10.250 | 0.58 | 0.08 | 0.253 | \| O | \| I | \| | \| | \| | 2.21 |
| 10.333 | 0.58 | 0.08 | 0.256 | \| O | \| I | \| | \| | \| | 2.24 |
| 10.417 | 0.58 | 0.09 | 0.260 | \| O | \| I | \| | \| | \| | 2.27 |
| 10.500 | 0.58 | 0.09 | 0.263 | \| O | \| I | \| | \| | \| | 2.30 |
| 10.583 | 0.67 | 0.09 | 0.267 | \| O | \| I | \| | \| | \| | 2.33 |
| 10.667 | 0.75 | 0.09 | 0.271 | \| O | \| \| I | \| | \| | \| | 2.37 |
| 10.750 | 0.76 | 0.09 | 0.276 | \| O | \| \| I | \| | \| | \| | 2.42 |
| 10.833 | 0.77 | 0.09 | 0.280 | \| O | \| \| I | \| | \| | \| | 2.46 |
| 10.917 | 0.77 | 0.09 | 0.285 | \| O | \| \| I | \| | \| | \| | 2.50 |
| 11.000 | 0.77 | 0.09 | 0.290 | \| O | \| \| I | \| | \| | \| | 2.54 |
| 11.083 | 0.75 | 0.09 | 0.294 | \| O | \| \| I | \| | \| | \| | 2.58 |
| 11.167 | 0.73 | 0.09 | 0.299 | \| O | \| \|I | \| | \| | \| | 2.63 |
| 11.250 | 0.73 | 0.09 | 0.303 | \| O | \| \|I | \| | \| | \| | 2.67 |
| 11.333 | 0.73 | 0.09 | 0.308 | \| O | \| \|I | \| | \| | \| | 2.71 |
| 11.417 | 0.73 | 0.09 | 0.312 | \| O | \| \|I | \| | \| | \| | 2.75 |
| 11.500 | 0.73 | 0.10 | 0.316 | \| O | \| \|I | \| | \| | \| | 2.79 |
| 11.583 | 0.69 | 0.10 | 0.321 | \| O | \| I | \| | \| | \| | 2.82 |
| 11.667 | 0.66 | 0.10 | 0.325 | \| O | \| I | \| | \| | \| | 2.86 |
| 11.750 | 0.66 | 0.10 | 0.328 | \| O | \| I | \| | \| | \| | 2.90 |
| 11.833 | 0.67 | 0.10 | 0.332 | \| O | \| I | \| | \| | \| | 2.93 |
| 11.917 | 0.69 | 0.10 | 0.336 | \| O | \| I | \| | \| | \| | 2.97 |
| 12.000 | 0.69 | 0.10 | 0.340 | \| O | \| I | \| | \| | \| | 3.00 |
| 12.083 | 0.82 | 0.10 | 0.345 | \| O | \| \| I | \| | \| | \| | 3.04 |
| 12.167 | 0.93 | 0.10 | 0.350 | \| O | \| \| I | \| | \| | \| | 3.09 |
| 12.250 | 0.95 | 0.10 | 0.356 | \| O | \| \| I\| | \| | \| | \| | 3.13 |
| 12.333 | 0.98 | 0.10 | 0.362 | \| O | \| \| I\| | \| | \| | \| | 3.18 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12.417 | 1.00 | 0.10 | 0.368 | O | | | I | | 3.23 |
| 12.500 | 1.00 | 0.11 | 0.374 | O | | | I | | 3.29 |
| 12.583 | 1.04 | 0.11 | 0.381 | O | | | I | | 3.34 |
| 12.667 | 1.07 | 0.11 | 0.387 | O | | | I | | 3.39 |
| 12.750 | 1.07 | 0.11 | 0.394 | O | | | I | | 3.45 |
| 12.833 | 1.10 | 0.11 | 0.400 | O | | | I | | 3.50 |
| 12.917 | 1.11 | 0.11 | 0.407 | O | | | I | | 3.56 |
| 13.000 | 1.11 | 0.11 | 0.414 | O | | | I | | 3.62 |
| 13.083 | 1.21 | 0.11 | 0.421 | O | | | I | | 3.68 |
| 13.167 | 1.29 | 0.11 | 0.429 | O | | | I | | 3.74 |
| 13.250 | 1.30 | 0.12 | 0.437 | O | | | I | | 3.81 |
| 13.333 | 1.31 | 0.12 | 0.446 | O | | | I | | 3.88 |
| 13.417 | 1.31 | 0.12 | 0.454 | O | | | I | | 3.95 |
| 13.500 | 1.31 | 0.12 | 0.462 | O | | | I | | 4.02 |
| 13.583 | 1.10 | 0.12 | 0.469 | O | | | I | | 4.09 |
| 13.667 | 0.93 | 0.12 | 0.476 | O | | I | | | 4.14 |
| 13.750 | 0.90 | 0.12 | 0.481 | O | | I | | | 4.19 |
| 13.833 | 0.88 | 0.12 | 0.486 | O | | I | | | 4.24 |
| 13.917 | 0.88 | 0.12 | 0.492 | O | | I | | | 4.29 |
| 14.000 | 0.88 | 0.12 | 0.497 | O | | I | | | 4.33 |
| 14.083 | 0.96 | 0.12 | 0.502 | O | | I | | | 4.39 |
| 14.167 | 1.02 | 0.12 | 0.508 | O | | I | | | 4.44 |
| 14.250 | 1.03 | 0.12 | 0.515 | O | | I | | | 4.50 |
| 14.333 | 1.02 | 0.12 | 0.521 | O | | I | | | 4.55 |
| 14.417 | 1.00 | 0.12 | 0.527 | O | | I | | | 4.61 |
| 14.500 | 1.00 | 0.12 | 0.533 | O | | I | | | 4.66 |
| 14.583 | 1.00 | 0.12 | 0.539 | O | | I | | | 4.72 |
| 14.667 | 1.00 | 0.12 | 0.545 | O | | I | | | 4.77 |
| 14.750 | 1.00 | 0.12 | 0.551 | O | | I | | | 4.83 |
| 14.833 | 0.98 | 0.12 | 0.557 | O | | I | | | 4.88 |
| 14.917 | 0.97 | 0.12 | 0.563 | O | | I | | | 4.94 |
| 15.000 | 0.96 | 0.12 | 0.569 | O | | I | | | 4.99 |
| 15.083 | 0.94 | 0.12 | 0.575 | O | | I | | | 5.04 |
| 15.167 | 0.93 | 0.12 | 0.580 | O | | I | | | 5.09 |
| 15.250 | 0.92 | 0.13 | 0.586 | O | | I | | | 5.13 |
| 15.333 | 0.90 | 0.13 | 0.591 | O | | I | | | 5.18 |
| 15.417 | 0.89 | 0.13 | 0.596 | O | | I | | | 5.22 |
| 15.500 | 0.89 | 0.13 | 0.602 | O | | I | | | 5.26 |
| 15.583 | 0.81 | 0.14 | 0.607 | O | | I | | | 5.30 |
| 15.667 | 0.75 | 0.14 | 0.611 | O | | I | | | 5.34 |
| 15.750 | 0.73 | 0.14 | 0.615 | O | | I | | | 5.38 |
| 15.833 | 0.73 | 0.14 | 0.619 | O | | I | | | 5.41 |
| 15.917 | 0.73 | 0.14 | 0.623 | O | | I | | | 5.44 |
| 16.000 | 0.73 | 0.14 | 0.627 | O | | I | | | 5.48 |
| 16.083 | 0.45 | 0.15 | 0.630 | O | I | | | | 5.50 |
| 16.167 | 0.21 | 0.15 | 0.632 | O I | | | | | 5.51 |
| 16.250 | 0.17 | 0.15 | 0.632 | OI | | | | | 5.52 |
| 16.333 | 0.15 | 0.15 | 0.632 | O | | | | | 5.52 |
| 16.417 | 0.15 | 0.15 | 0.632 | O | | | | | 5.52 |
| 16.500 | 0.15 | 0.15 | 0.632 | O | | | | | 5.52 |
| 16.583 | 0.13 | 0.15 | 0.632 | O | | | | | 5.52 |
| 16.667 | 0.12 | 0.15 | 0.632 | IO | | | | | 5.52 |
| 16.750 | 0.12 | 0.15 | 0.632 | IO | | | | | 5.52 |
| 16.833 | 0.12 | 0.15 | 0.632 | IO | | | | | 5.51 |
| 16.917 | 0.12 | 0.15 | 0.631 | IO | | | | | 5.51 |
| 17.000 | 0.12 | 0.15 | 0.631 | IO | | | | | 5.51 |
| 17.083 | 0.15 | 0.15 | 0.631 | O | | | | | 5.51 |
| 17.167 | 0.18 | 0.15 | 0.631 | OI | | | | | 5.51 |
| 17.250 | 0.19 | 0.15 | 0.632 | OI | | | | | 5.51 |
| 17.333 | 0.19 | 0.15 | 0.632 | OI | | | | | 5.52 |
| 17.417 | 0.19 | 0.15 | 0.632 | OI | | | | | 5.52 |
| 17.500 | 0.19 | 0.15 | 0.633 | OI | | | | | 5.52 |
| 17.583 | 0.19 | 0.15 | 0.633 | OI | | | | | 5.52 |
| 17.667 | 0.19 | 0.15 | 0.633 | OI | | | | | 5.53 |
| 17.750 | 0.19 | 0.15 | 0.634 | OI | | | | | 5.53 |
| 17.833 | 0.17 | 0.15 | 0.634 | OI | | | | | 5.53 |
| 17.917 | 0.16 | 0.15 | 0.634 | O | | | | | 5.53 |
| 18.000 | 0.15 | 0.15 | 0.634 | O | | | | | 5.53 |
| 18.083 | 0.15 | 0.15 | 0.634 | O | | | | | 5.53 |
| 18.167 | 0.15 | 0.15 | 0.634 | O | | | | | 5.53 |
| 18.250 | 0.15 | 0.15 | 0.634 | O | | | | | 5.53 |
| 18.333 | 0.15 | 0.15 | 0.634 | O | | | | | 5.53 |
| 18.417 | 0.15 | 0.15 | 0.634 | O | | | | | 5.54 |
| 18.500 | 0.15 | 0.15 | 0.634 | O | | | | | 5.54 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 18.583 | 0.13 | 0.15 | 0.634 | \| O | \| | \| | \| | 5.54 |
| 18.667 | 0.12 | 0.15 | 0.634 | \| IO | \| | \| | \| | 5.53 |
| 18.750 | 0.12 | 0.15 | 0.634 | \| IO | \| | \| | \| | 5.53 |
| 18.833 | 0.10 | 0.15 | 0.634 | \| IO | \| | \| | \| | 5.53 |
| 18.917 | 0.08 | 0.15 | 0.633 | \|I O | \| | \| | \| | 5.53 |
| 19.000 | 0.08 | 0.15 | 0.633 | \|I O | \| | \| | \| | 5.52 |
| 19.083 | 0.10 | 0.15 | 0.632 | \| IO | \| | \| | \| | 5.52 |
| 19.167 | 0.11 | 0.15 | 0.632 | \| IO | \| | \| | \| | 5.52 |
| 19.250 | 0.11 | 0.15 | 0.632 | \| IO | \| | \| | \| | 5.52 |
| 19.333 | 0.13 | 0.15 | 0.632 | \| O | \| | \| | \| | 5.51 |
| 19.417 | 0.15 | 0.15 | 0.632 | \| O | \| | \| | \| | 5.51 |
| 19.500 | 0.15 | 0.15 | 0.632 | \| O | \| | \| | \| | 5.51 |
| 19.583 | 0.13 | 0.15 | 0.632 | \| O | \| | \| | \| | 5.51 |
| 19.667 | 0.12 | 0.15 | 0.632 | \| IO | \| | \| | \| | 5.51 |
| 19.750 | 0.12 | 0.15 | 0.631 | \| IO | \| | \| | \| | 5.51 |
| 19.833 | 0.10 | 0.15 | 0.631 | \| IO | \| | \| | \| | 5.51 |
| 19.917 | 0.08 | 0.15 | 0.631 | \|I O | \| | \| | \| | 5.51 |
| 20.000 | 0.08 | 0.15 | 0.630 | \|I O | \| | \| | \| | 5.50 |
| 20.083 | 0.10 | 0.14 | 0.630 | \| IO | \| | \| | \| | 5.50 |
| 20.167 | 0.11 | 0.14 | 0.630 | \| IO | \| | \| | \| | 5.50 |
| 20.250 | 0.11 | 0.14 | 0.629 | \| IO | \| | \| | \| | 5.49 |
| 20.333 | 0.12 | 0.14 | 0.629 | \| IO | \| | \| | \| | 5.49 |
| 20.417 | 0.12 | 0.14 | 0.629 | \| IO | \| | \| | \| | 5.49 |
| 20.500 | 0.12 | 0.14 | 0.629 | \| IO | \| | \| | \| | 5.49 |
| 20.583 | 0.12 | 0.14 | 0.629 | \| IO | \| | \| | \| | 5.49 |
| 20.667 | 0.12 | 0.14 | 0.628 | \| IO | \| | \| | \| | 5.49 |
| 20.750 | 0.12 | 0.14 | 0.628 | \| IO | \| | \| | \| | 5.48 |
| 20.833 | 0.10 | 0.14 | 0.628 | \| IO | \| | \| | \| | 5.48 |
| 20.917 | 0.08 | 0.14 | 0.628 | \|I O | \| | \| | \| | 5.48 |
| 21.000 | 0.08 | 0.14 | 0.627 | \|I O | \| | \| | \| | 5.48 |
| 21.083 | 0.10 | 0.14 | 0.627 | \| IO | \| | \| | \| | 5.47 |
| 21.167 | 0.11 | 0.14 | 0.626 | \| IO | \| | \| | \| | 5.47 |
| 21.250 | 0.11 | 0.14 | 0.626 | \| IO | \| | \| | \| | 5.47 |
| 21.333 | 0.10 | 0.14 | 0.626 | \| IO | \| | \| | \| | 5.47 |
| 21.417 | 0.08 | 0.14 | 0.626 | \|I O | \| | \| | \| | 5.46 |
| 21.500 | 0.08 | 0.14 | 0.625 | \|I O | \| | \| | \| | 5.46 |
| 21.583 | 0.10 | 0.14 | 0.625 | \| IO | \| | \| | \| | 5.46 |
| 21.667 | 0.11 | 0.14 | 0.624 | \| IO | \| | \| | \| | 5.45 |
| 21.750 | 0.11 | 0.14 | 0.624 | \| IO | \| | \| | \| | 5.45 |
| 21.833 | 0.10 | 0.14 | 0.624 | \| IO | \| | \| | \| | 5.45 |
| 21.917 | 0.08 | 0.14 | 0.624 | \|I O | \| | \| | \| | 5.45 |
| 22.000 | 0.08 | 0.14 | 0.623 | \|I O | \| | \| | \| | 5.44 |
| 22.083 | 0.10 | 0.14 | 0.623 | \| IO | \| | \| | \| | 5.44 |
| 22.167 | 0.11 | 0.14 | 0.623 | \| IO | \| | \| | \| | 5.44 |
| 22.250 | 0.11 | 0.14 | 0.622 | \| IO | \| | \| | \| | 5.44 |
| 22.333 | 0.10 | 0.14 | 0.622 | \| IO | \| | \| | \| | 5.43 |
| 22.417 | 0.08 | 0.14 | 0.622 | \|I O | \| | \| | \| | 5.43 |
| 22.500 | 0.08 | 0.14 | 0.621 | \|I O | \| | \| | \| | 5.43 |
| 22.583 | 0.08 | 0.14 | 0.621 | \|I O | \| | \| | \| | 5.42 |
| 22.667 | 0.08 | 0.14 | 0.620 | \|I O | \| | \| | \| | 5.42 |
| 22.750 | 0.08 | 0.14 | 0.620 | \|I O | \| | \| | \| | 5.42 |
| 22.833 | 0.08 | 0.14 | 0.620 | \|I O | \| | \| | \| | 5.41 |
| 22.917 | 0.08 | 0.14 | 0.619 | \|I O | \| | \| | \| | 5.41 |
| 23.000 | 0.08 | 0.14 | 0.619 | \|I O | \| | \| | \| | 5.41 |
| 23.083 | 0.08 | 0.14 | 0.618 | \|I O | \| | \| | \| | 5.40 |
| 23.167 | 0.08 | 0.14 | 0.618 | \|I O | \| | \| | \| | 5.40 |
| 23.250 | 0.08 | 0.14 | 0.617 | \|I O | \| | \| | \| | 5.39 |
| 23.333 | 0.08 | 0.14 | 0.617 | \|I O | \| | \| | \| | 5.39 |
| 23.417 | 0.08 | 0.14 | 0.617 | \|I O | \| | \| | \| | 5.39 |
| 23.500 | 0.08 | 0.14 | 0.616 | \|I O | \| | \| | \| | 5.38 |
| 23.583 | 0.08 | 0.14 | 0.616 | \|I O | \| | \| | \| | 5.38 |
| 23.667 | 0.08 | 0.14 | 0.615 | \|I O | \| | \| | \| | 5.38 |
| 23.750 | 0.08 | 0.14 | 0.615 | \|I O | \| | \| | \| | 5.37 |
| 23.833 | 0.08 | 0.14 | 0.614 | \|I O | \| | \| | \| | 5.37 |
| 23.917 | 0.08 | 0.14 | 0.614 | \|I O | \| | \| | \| | 5.37 |
| 24.000 | 0.08 | 0.14 | 0.614 | \|I O | \| | \| | \| | 5.36 |
| 24.083 | 0.04 | 0.14 | 0.613 | I O | \| | \| | \| | 5.36 |
| 24.167 | 0.01 | 0.14 | 0.612 | I O | \| | \| | \| | 5.35 |
| 24.250 | 0.00 | 0.14 | 0.611 | I O | \| | \| | \| | 5.34 |
| 24.333 | 0.00 | 0.14 | 0.610 | I O | \| | \| | \| | 5.34 |
| 24.417 | 0.00 | 0.14 | 0.609 | I O | \| | \| | \| | 5.33 |
| 24.500 | 0.00 | 0.14 | 0.608 | I O | \| | \| | \| | 5.32 |
| 24.583 | 0.00 | 0.14 | 0.608 | I O | \| | \| | \| | 5.31 |
| 24.667 | 0.00 | 0.14 | 0.607 | I O | \| | \| | \| | 5.30 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 24.750 | 0.00 | 0.13 | 0.606 | I | O | \| | \| | \| | \| | 5.30 |
| 24.833 | 0.00 | 0.13 | 0.605 | I | O | \| | \| | \| | \| | 5.29 |
| 24.917 | 0.00 | 0.13 | 0.604 | I | O | \| | \| | \| | \| | 5.28 |
| 25.000 | 0.00 | 0.13 | 0.603 | I | O | \| | \| | \| | \| | 5.27 |
| 25.083 | 0.00 | 0.13 | 0.602 | I | O | \| | \| | \| | \| | 5.27 |
| 25.167 | 0.00 | 0.13 | 0.601 | I | O | \| | \| | \| | \| | 5.26 |
| 25.250 | 0.00 | 0.13 | 0.600 | I | O | \| | \| | \| | \| | 5.25 |
| 25.333 | 0.00 | 0.13 | 0.599 | I | O | \| | \| | \| | \| | 5.24 |
| 25.417 | 0.00 | 0.13 | 0.598 | I | O | \| | \| | \| | \| | 5.24 |
| 25.500 | 0.00 | 0.13 | 0.597 | I | O | \| | \| | \| | \| | 5.23 |
| 25.583 | 0.00 | 0.13 | 0.596 | I | O | \| | \| | \| | \| | 5.22 |
| 25.667 | 0.00 | 0.13 | 0.596 | I | O | \| | \| | \| | \| | 5.21 |
| 25.750 | 0.00 | 0.13 | 0.595 | I | O | \| | \| | \| | \| | 5.21 |
| 25.833 | 0.00 | 0.13 | 0.594 | I | O | \| | \| | \| | \| | 5.20 |
| 25.917 | 0.00 | 0.13 | 0.593 | I | O | \| | \| | \| | \| | 5.19 |
| 26.000 | 0.00 | 0.13 | 0.592 | I | O | \| | \| | \| | \| | 5.18 |
| 26.083 | 0.00 | 0.13 | 0.591 | I | O | \| | \| | \| | \| | 5.18 |
| 26.167 | 0.00 | 0.13 | 0.590 | I | O | \| | \| | \| | \| | 5.17 |
| 26.250 | 0.00 | 0.13 | 0.589 | I | O | \| | \| | \| | \| | 5.16 |
| 26.333 | 0.00 | 0.13 | 0.588 | I | O | \| | \| | \| | \| | 5.15 |
| 26.417 | 0.00 | 0.13 | 0.588 | I | O | \| | \| | \| | \| | 5.15 |
| 26.500 | 0.00 | 0.13 | 0.587 | I | O | \| | \| | \| | \| | 5.14 |
| 26.583 | 0.00 | 0.13 | 0.586 | I | O | \| | \| | \| | \| | 5.13 |
| 26.667 | 0.00 | 0.13 | 0.585 | I | O | \| | \| | \| | \| | 5.12 |
| 26.750 | 0.00 | 0.13 | 0.584 | I | O | \| | \| | \| | \| | 5.12 |
| 26.833 | 0.00 | 0.13 | 0.583 | I | O | \| | \| | \| | \| | 5.11 |
| 26.917 | 0.00 | 0.13 | 0.582 | I | O | \| | \| | \| | \| | 5.10 |
| 27.000 | 0.00 | 0.12 | 0.582 | I | O | \| | \| | \| | \| | 5.10 |
| 27.083 | 0.00 | 0.12 | 0.581 | I | O | \| | \| | \| | \| | 5.09 |
| 27.167 | 0.00 | 0.12 | 0.580 | I | O | \| | \| | \| | \| | 5.08 |
| 27.250 | 0.00 | 0.12 | 0.579 | I | O | \| | \| | \| | \| | 5.07 |
| 27.333 | 0.00 | 0.12 | 0.578 | I | O | \| | \| | \| | \| | 5.07 |
| 27.417 | 0.00 | 0.12 | 0.577 | I | O | \| | \| | \| | \| | 5.06 |
| 27.500 | 0.00 | 0.12 | 0.576 | I | O | \| | \| | \| | \| | 5.05 |
| 27.583 | 0.00 | 0.12 | 0.576 | I | O | \| | \| | \| | \| | 5.05 |
| 27.667 | 0.00 | 0.12 | 0.575 | I | O | \| | \| | \| | \| | 5.04 |
| 27.750 | 0.00 | 0.12 | 0.574 | I | O | \| | \| | \| | \| | 5.03 |
| 27.833 | 0.00 | 0.12 | 0.573 | I | O | \| | \| | \| | \| | 5.03 |
| 27.917 | 0.00 | 0.12 | 0.572 | I | O | \| | \| | \| | \| | 5.02 |
| 28.000 | 0.00 | 0.12 | 0.571 | I | O | \| | \| | \| | \| | 5.01 |
| 28.083 | 0.00 | 0.12 | 0.571 | I | O | \| | \| | \| | \| | 5.00 |
| 28.167 | 0.00 | 0.12 | 0.570 | I | O | \| | \| | \| | \| | 5.00 |
| 28.250 | 0.00 | 0.12 | 0.569 | I | O | \| | \| | \| | \| | 4.99 |
| 28.333 | 0.00 | 0.12 | 0.568 | I | O | \| | \| | \| | \| | 4.98 |
| 28.417 | 0.00 | 0.12 | 0.567 | I | O | \| | \| | \| | \| | 4.97 |
| 28.500 | 0.00 | 0.12 | 0.566 | I | O | \| | \| | \| | \| | 4.97 |
| 28.583 | 0.00 | 0.12 | 0.566 | I | O | \| | \| | \| | \| | 4.96 |
| 28.667 | 0.00 | 0.12 | 0.565 | I | O | \| | \| | \| | \| | 4.95 |
| 28.750 | 0.00 | 0.12 | 0.564 | I | O | \| | \| | \| | \| | 4.94 |
| 28.833 | 0.00 | 0.12 | 0.563 | I | O | \| | \| | \| | \| | 4.94 |
| 28.917 | 0.00 | 0.12 | 0.562 | I | O | \| | \| | \| | \| | 4.93 |
| 29.000 | 0.00 | 0.12 | 0.561 | I | O | \| | \| | \| | \| | 4.92 |
| 29.083 | 0.00 | 0.12 | 0.561 | I | O | \| | \| | \| | \| | 4.91 |
| 29.167 | 0.00 | 0.12 | 0.560 | I | O | \| | \| | \| | \| | 4.91 |
| 29.250 | 0.00 | 0.12 | 0.559 | I | O | \| | \| | \| | \| | 4.90 |
| 29.333 | 0.00 | 0.12 | 0.558 | I | O | \| | \| | \| | \| | 4.89 |
| 29.417 | 0.00 | 0.12 | 0.557 | I | O | \| | \| | \| | \| | 4.88 |
| 29.500 | 0.00 | 0.12 | 0.557 | I | O | \| | \| | \| | \| | 4.88 |
| 29.583 | 0.00 | 0.12 | 0.556 | I | O | \| | \| | \| | \| | 4.87 |
| 29.667 | 0.00 | 0.12 | 0.555 | I | O | \| | \| | \| | \| | 4.86 |
| 29.750 | 0.00 | 0.12 | 0.554 | I | O | \| | \| | \| | \| | 4.85 |
| 29.833 | 0.00 | 0.12 | 0.553 | I | O | \| | \| | \| | \| | 4.85 |
| 29.917 | 0.00 | 0.12 | 0.552 | I | O | \| | \| | \| | \| | 4.84 |
| 30.000 | 0.00 | 0.12 | 0.552 | I | O | \| | \| | \| | \| | 4.83 |
| 30.083 | 0.00 | 0.12 | 0.551 | I | O | \| | \| | \| | \| | 4.82 |
| 30.167 | 0.00 | 0.12 | 0.550 | I | O | \| | \| | \| | \| | 4.82 |
| 30.250 | 0.00 | 0.12 | 0.549 | I | O | \| | \| | \| | \| | 4.81 |
| 30.333 | 0.00 | 0.12 | 0.548 | I | O | \| | \| | \| | \| | 4.80 |
| 30.417 | 0.00 | 0.12 | 0.547 | I | O | \| | \| | \| | \| | 4.79 |
| 30.500 | 0.00 | 0.12 | 0.547 | I | O | \| | \| | \| | \| | 4.79 |
| 30.583 | 0.00 | 0.12 | 0.546 | I | O | \| | \| | \| | \| | 4.78 |
| 30.667 | 0.00 | 0.12 | 0.545 | I | O | \| | \| | \| | \| | 4.77 |
| 30.750 | 0.00 | 0.12 | 0.544 | I | O | \| | \| | \| | \| | 4.76 |
| 30.833 | 0.00 | 0.12 | 0.543 | I | O | \| | \| | \| | \| | 4.76 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 30.917 | 0.00 | 0.12 | 0.542 | I | O | \| | \| | \| | 4.75 |
| 31.000 | 0.00 | 0.12 | 0.542 | I | O | \| | \| | \| | 4.74 |
| 31.083 | 0.00 | 0.12 | 0.541 | I | O | \| | \| | \| | 4.73 |
| 31.167 | 0.00 | 0.12 | 0.540 | I | O | \| | \| | \| | 4.73 |
| 31.250 | 0.00 | 0.12 | 0.539 | I | O | \| | \| | \| | 4.72 |
| 31.333 | 0.00 | 0.12 | 0.538 | I | O | \| | \| | \| | 4.71 |
| 31.417 | 0.00 | 0.12 | 0.537 | I | O | \| | \| | \| | 4.70 |
| 31.500 | 0.00 | 0.12 | 0.537 | I | O | \| | \| | \| | 4.70 |
| 31.583 | 0.00 | 0.12 | 0.536 | I | O | \| | \| | \| | 4.69 |
| 31.667 | 0.00 | 0.12 | 0.535 | I | O | \| | \| | \| | 4.68 |
| 31.750 | 0.00 | 0.12 | 0.534 | I | O | \| | \| | \| | 4.67 |
| 31.833 | 0.00 | 0.12 | 0.533 | I | O | \| | \| | \| | 4.67 |
| 31.917 | 0.00 | 0.12 | 0.533 | I | O | \| | \| | \| | 4.66 |
| 32.000 | 0.00 | 0.12 | 0.532 | I | O | \| | \| | \| | 4.65 |
| 32.083 | 0.00 | 0.12 | 0.531 | I | O | \| | \| | \| | 4.64 |
| 32.167 | 0.00 | 0.12 | 0.530 | I | O | \| | \| | \| | 4.64 |
| 32.250 | 0.00 | 0.12 | 0.529 | I | O | \| | \| | \| | 4.63 |
| 32.333 | 0.00 | 0.12 | 0.528 | I | O | \| | \| | \| | 4.62 |
| 32.417 | 0.00 | 0.12 | 0.528 | I | O | \| | \| | \| | 4.61 |
| 32.500 | 0.00 | 0.12 | 0.527 | I | O | \| | \| | \| | 4.61 |
| 32.583 | 0.00 | 0.12 | 0.526 | I | O | \| | \| | \| | 4.60 |
| 32.667 | 0.00 | 0.12 | 0.525 | I | O | \| | \| | \| | 4.59 |
| 32.750 | 0.00 | 0.12 | 0.524 | I | O | \| | \| | \| | 4.58 |
| 32.833 | 0.00 | 0.12 | 0.523 | I | O | \| | \| | \| | 4.58 |
| 32.917 | 0.00 | 0.12 | 0.523 | I | O | \| | \| | \| | 4.57 |
| 33.000 | 0.00 | 0.12 | 0.522 | I | O | \| | \| | \| | 4.56 |
| 33.083 | 0.00 | 0.12 | 0.521 | I | O | \| | \| | \| | 4.55 |
| 33.167 | 0.00 | 0.12 | 0.520 | I | O | \| | \| | \| | 4.55 |
| 33.250 | 0.00 | 0.12 | 0.519 | I | O | \| | \| | \| | 4.54 |
| 33.333 | 0.00 | 0.12 | 0.518 | I | O | \| | \| | \| | 4.53 |
| 33.417 | 0.00 | 0.12 | 0.518 | I | O | \| | \| | \| | 4.52 |
| 33.500 | 0.00 | 0.12 | 0.517 | I | O | \| | \| | \| | 4.52 |
| 33.583 | 0.00 | 0.12 | 0.516 | I | O | \| | \| | \| | 4.51 |
| 33.667 | 0.00 | 0.12 | 0.515 | I | O | \| | \| | \| | 4.50 |
| 33.750 | 0.00 | 0.12 | 0.514 | I | O | \| | \| | \| | 4.49 |
| 33.833 | 0.00 | 0.12 | 0.514 | I | O | \| | \| | \| | 4.49 |
| 33.917 | 0.00 | 0.12 | 0.513 | I | O | \| | \| | \| | 4.48 |
| 34.000 | 0.00 | 0.12 | 0.512 | I | O | \| | \| | \| | 4.47 |
| 34.083 | 0.00 | 0.12 | 0.511 | I | O | \| | \| | \| | 4.46 |
| 34.167 | 0.00 | 0.12 | 0.510 | I | O | \| | \| | \| | 4.46 |
| 34.250 | 0.00 | 0.12 | 0.509 | I | O | \| | \| | \| | 4.45 |
| 34.333 | 0.00 | 0.12 | 0.509 | I | O | \| | \| | \| | 4.44 |
| 34.417 | 0.00 | 0.12 | 0.508 | I | O | \| | \| | \| | 4.43 |
| 34.500 | 0.00 | 0.12 | 0.507 | I | O | \| | \| | \| | 4.43 |
| 34.583 | 0.00 | 0.12 | 0.506 | I | O | \| | \| | \| | 4.42 |
| 34.667 | 0.00 | 0.12 | 0.505 | I | O | \| | \| | \| | 4.41 |
| 34.750 | 0.00 | 0.12 | 0.504 | I | O | \| | \| | \| | 4.40 |
| 34.833 | 0.00 | 0.12 | 0.504 | I | O | \| | \| | \| | 4.40 |
| 34.917 | 0.00 | 0.12 | 0.503 | I | O | \| | \| | \| | 4.39 |
| 35.000 | 0.00 | 0.12 | 0.502 | I | O | \| | \| | \| | 4.38 |
| 35.083 | 0.00 | 0.12 | 0.501 | I | O | \| | \| | \| | 4.37 |
| 35.167 | 0.00 | 0.12 | 0.500 | I | O | \| | \| | \| | 4.37 |
| 35.250 | 0.00 | 0.12 | 0.499 | I | O | \| | \| | \| | 4.36 |
| 35.333 | 0.00 | 0.12 | 0.499 | I | O | \| | \| | \| | 4.35 |
| 35.417 | 0.00 | 0.12 | 0.498 | I | O | \| | \| | \| | 4.34 |
| 35.500 | 0.00 | 0.12 | 0.497 | I | O | \| | \| | \| | 4.34 |
| 35.583 | 0.00 | 0.12 | 0.496 | I | O | \| | \| | \| | 4.33 |
| 35.667 | 0.00 | 0.12 | 0.495 | I | O | \| | \| | \| | 4.32 |
| 35.750 | 0.00 | 0.12 | 0.495 | I | O | \| | \| | \| | 4.31 |
| 35.833 | 0.00 | 0.12 | 0.494 | I | O | \| | \| | \| | 4.31 |
| 35.917 | 0.00 | 0.12 | 0.493 | I | O | \| | \| | \| | 4.30 |
| 36.000 | 0.00 | 0.12 | 0.492 | I | O | \| | \| | \| | 4.29 |
| 36.083 | 0.00 | 0.12 | 0.491 | I | O | \| | \| | \| | 4.28 |
| 36.167 | 0.00 | 0.12 | 0.490 | I | O | \| | \| | \| | 4.28 |
| 36.250 | 0.00 | 0.12 | 0.490 | I | O | \| | \| | \| | 4.27 |
| 36.333 | 0.00 | 0.12 | 0.489 | I | O | \| | \| | \| | 4.26 |
| 36.417 | 0.00 | 0.12 | 0.488 | I | O | \| | \| | \| | 4.25 |
| 36.500 | 0.00 | 0.12 | 0.487 | I | O | \| | \| | \| | 4.25 |
| 36.583 | 0.00 | 0.12 | 0.486 | I | O | \| | \| | \| | 4.24 |
| 36.667 | 0.00 | 0.12 | 0.485 | I | O | \| | \| | \| | 4.23 |
| 36.750 | 0.00 | 0.12 | 0.485 | I | O | \| | \| | \| | 4.22 |
| 36.833 | 0.00 | 0.12 | 0.484 | I | O | \| | \| | \| | 4.22 |
| 36.917 | 0.00 | 0.12 | 0.483 | I | O | \| | \| | \| | 4.21 |
| 37.000 | 0.00 | 0.12 | 0.482 | I | O | \| | \| | \| | 4.20 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37.083 | 0.00 | 0.12 | 0.481 | I O | \| | \| | \| | 4.19 |
| 37.167 | 0.00 | 0.12 | 0.480 | I O | \| | \| | \| | 4.19 |
| 37.250 | 0.00 | 0.12 | 0.480 | I O | \| | \| | \| | 4.18 |
| 37.333 | 0.00 | 0.12 | 0.479 | I O | \| | \| | \| | 4.17 |
| 37.417 | 0.00 | 0.12 | 0.478 | I O | \| | \| | \| | 4.16 |
| 37.500 | 0.00 | 0.12 | 0.477 | I O | \| | \| | \| | 4.16 |
| 37.583 | 0.00 | 0.12 | 0.476 | I O | \| | \| | \| | 4.15 |
| 37.667 | 0.00 | 0.12 | 0.476 | I O | \| | \| | \| | 4.14 |
| 37.750 | 0.00 | 0.12 | 0.475 | I O | \| | \| | \| | 4.13 |
| 37.833 | 0.00 | 0.12 | 0.474 | I O | \| | \| | \| | 4.13 |
| 37.917 | 0.00 | 0.12 | 0.473 | I O | \| | \| | \| | 4.12 |
| 38.000 | 0.00 | 0.12 | 0.472 | I O | \| | \| | \| | 4.11 |
| 38.083 | 0.00 | 0.12 | 0.471 | I O | \| | \| | \| | 4.10 |
| 38.167 | 0.00 | 0.12 | 0.471 | I O | \| | \| | \| | 4.10 |
| 38.250 | 0.00 | 0.12 | 0.470 | I O | \| | \| | \| | 4.09 |
| 38.333 | 0.00 | 0.12 | 0.469 | I O | \| | \| | \| | 4.08 |
| 38.417 | 0.00 | 0.12 | 0.468 | I O | \| | \| | \| | 4.07 |
| 38.500 | 0.00 | 0.12 | 0.467 | I O | \| | \| | \| | 4.07 |
| 38.583 | 0.00 | 0.12 | 0.466 | I O | \| | \| | \| | 4.06 |
| 38.667 | 0.00 | 0.12 | 0.466 | I O | \| | \| | \| | 4.05 |
| 38.750 | 0.00 | 0.12 | 0.465 | I O | \| | \| | \| | 4.04 |
| 38.833 | 0.00 | 0.12 | 0.464 | I O | \| | \| | \| | 4.04 |
| 38.917 | 0.00 | 0.12 | 0.463 | I O | \| | \| | \| | 4.03 |
| 39.000 | 0.00 | 0.12 | 0.462 | I O | \| | \| | \| | 4.02 |
| 39.083 | 0.00 | 0.12 | 0.461 | I O | \| | \| | \| | 4.01 |
| 39.167 | 0.00 | 0.12 | 0.461 | I O | \| | \| | \| | 4.01 |
| 39.250 | 0.00 | 0.12 | 0.460 | I O | \| | \| | \| | 4.00 |
| 39.333 | 0.00 | 0.12 | 0.459 | I O | \| | \| | \| | 3.99 |
| 39.417 | 0.00 | 0.12 | 0.458 | I O | \| | \| | \| | 3.98 |
| 39.500 | 0.00 | 0.12 | 0.457 | I O | \| | \| | \| | 3.98 |
| 39.583 | 0.00 | 0.12 | 0.457 | I O | \| | \| | \| | 3.97 |
| 39.667 | 0.00 | 0.12 | 0.456 | I O | \| | \| | \| | 3.96 |
| 39.750 | 0.00 | 0.12 | 0.455 | I O | \| | \| | \| | 3.96 |
| 39.833 | 0.00 | 0.12 | 0.454 | I O | \| | \| | \| | 3.95 |
| 39.917 | 0.00 | 0.12 | 0.453 | I O | \| | \| | \| | 3.94 |
| 40.000 | 0.00 | 0.12 | 0.452 | I O | \| | \| | \| | 3.94 |
| 40.083 | 0.00 | 0.12 | 0.452 | I O | \| | \| | \| | 3.93 |
| 40.167 | 0.00 | 0.12 | 0.451 | I O | \| | \| | \| | 3.92 |
| 40.250 | 0.00 | 0.12 | 0.450 | I O | \| | \| | \| | 3.92 |
| 40.333 | 0.00 | 0.12 | 0.449 | I O | \| | \| | \| | 3.91 |
| 40.417 | 0.00 | 0.12 | 0.448 | I O | \| | \| | \| | 3.90 |
| 40.500 | 0.00 | 0.12 | 0.448 | I O | \| | \| | \| | 3.90 |
| 40.583 | 0.00 | 0.12 | 0.447 | I O | \| | \| | \| | 3.89 |
| 40.667 | 0.00 | 0.12 | 0.446 | I O | \| | \| | \| | 3.88 |
| 40.750 | 0.00 | 0.12 | 0.445 | I O | \| | \| | \| | 3.88 |
| 40.833 | 0.00 | 0.12 | 0.444 | I O | \| | \| | \| | 3.87 |
| 40.917 | 0.00 | 0.12 | 0.443 | I O | \| | \| | \| | 3.86 |
| 41.000 | 0.00 | 0.12 | 0.443 | I O | \| | \| | \| | 3.86 |
| 41.083 | 0.00 | 0.12 | 0.442 | I O | \| | \| | \| | 3.85 |
| 41.167 | 0.00 | 0.12 | 0.441 | I O | \| | \| | \| | 3.84 |
| 41.250 | 0.00 | 0.12 | 0.440 | I O | \| | \| | \| | 3.84 |
| 41.333 | 0.00 | 0.12 | 0.439 | I O | \| | \| | \| | 3.83 |
| 41.417 | 0.00 | 0.12 | 0.439 | I O | \| | \| | \| | 3.82 |
| 41.500 | 0.00 | 0.12 | 0.438 | I O | \| | \| | \| | 3.82 |
| 41.583 | 0.00 | 0.12 | 0.437 | I O | \| | \| | \| | 3.81 |
| 41.667 | 0.00 | 0.12 | 0.436 | I O | \| | \| | \| | 3.80 |
| 41.750 | 0.00 | 0.12 | 0.435 | I O | \| | \| | \| | 3.80 |
| 41.833 | 0.00 | 0.12 | 0.435 | I O | \| | \| | \| | 3.79 |
| 41.917 | 0.00 | 0.12 | 0.434 | I O | \| | \| | \| | 3.78 |
| 42.000 | 0.00 | 0.12 | 0.433 | I O | \| | \| | \| | 3.78 |
| 42.083 | 0.00 | 0.12 | 0.432 | I O | \| | \| | \| | 3.77 |
| 42.167 | 0.00 | 0.12 | 0.431 | I O | \| | \| | \| | 3.76 |
| 42.250 | 0.00 | 0.12 | 0.431 | I O | \| | \| | \| | 3.76 |
| 42.333 | 0.00 | 0.11 | 0.430 | I O | \| | \| | \| | 3.75 |
| 42.417 | 0.00 | 0.11 | 0.429 | I O | \| | \| | \| | 3.74 |
| 42.500 | 0.00 | 0.11 | 0.428 | I O | \| | \| | \| | 3.74 |
| 42.583 | 0.00 | 0.11 | 0.428 | I O | \| | \| | \| | 3.73 |
| 42.667 | 0.00 | 0.11 | 0.427 | I O | \| | \| | \| | 3.72 |
| 42.750 | 0.00 | 0.11 | 0.426 | I O | \| | \| | \| | 3.72 |
| 42.833 | 0.00 | 0.11 | 0.425 | I O | \| | \| | \| | 3.71 |
| 42.917 | 0.00 | 0.11 | 0.424 | I O | \| | \| | \| | 3.70 |
| 43.000 | 0.00 | 0.11 | 0.424 | I O | \| | \| | \| | 3.70 |
| 43.083 | 0.00 | 0.11 | 0.423 | I O | \| | \| | \| | 3.69 |
| 43.167 | 0.00 | 0.11 | 0.422 | I O | \| | \| | \| | 3.68 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 43.250 | 0.00 | 0.11 | 0.421 | I O | \| | \| | \| | 3.68 |
| 43.333 | 0.00 | 0.11 | 0.420 | I O | \| | \| | \| | 3.67 |
| 43.417 | 0.00 | 0.11 | 0.420 | I O | \| | \| | \| | 3.66 |
| 43.500 | 0.00 | 0.11 | 0.419 | I O | \| | \| | \| | 3.66 |
| 43.583 | 0.00 | 0.11 | 0.418 | I O | \| | \| | \| | 3.65 |
| 43.667 | 0.00 | 0.11 | 0.417 | I O | \| | \| | \| | 3.64 |
| 43.750 | 0.00 | 0.11 | 0.417 | I O | \| | \| | \| | 3.64 |
| 43.833 | 0.00 | 0.11 | 0.416 | I O | \| | \| | \| | 3.63 |
| 43.917 | 0.00 | 0.11 | 0.415 | I O | \| | \| | \| | 3.62 |
| 44.000 | 0.00 | 0.11 | 0.414 | I O | \| | \| | \| | 3.62 |
| 44.083 | 0.00 | 0.11 | 0.413 | I O | \| | \| | \| | 3.61 |
| 44.167 | 0.00 | 0.11 | 0.413 | I O | \| | \| | \| | 3.61 |
| 44.250 | 0.00 | 0.11 | 0.412 | I O | \| | \| | \| | 3.60 |
| 44.333 | 0.00 | 0.11 | 0.411 | I O | \| | \| | \| | 3.59 |
| 44.417 | 0.00 | 0.11 | 0.410 | I O | \| | \| | \| | 3.59 |
| 44.500 | 0.00 | 0.11 | 0.410 | I O | \| | \| | \| | 3.58 |
| 44.583 | 0.00 | 0.11 | 0.409 | I O | \| | \| | \| | 3.57 |
| 44.667 | 0.00 | 0.11 | 0.408 | I O | \| | \| | \| | 3.57 |
| 44.750 | 0.00 | 0.11 | 0.407 | I O | \| | \| | \| | 3.56 |
| 44.833 | 0.00 | 0.11 | 0.407 | I O | \| | \| | \| | 3.55 |
| 44.917 | 0.00 | 0.11 | 0.406 | I O | \| | \| | \| | 3.55 |
| 45.000 | 0.00 | 0.11 | 0.405 | I O | \| | \| | \| | 3.54 |
| 45.083 | 0.00 | 0.11 | 0.404 | I O | \| | \| | \| | 3.54 |
| 45.167 | 0.00 | 0.11 | 0.403 | I O | \| | \| | \| | 3.53 |
| 45.250 | 0.00 | 0.11 | 0.403 | I O | \| | \| | \| | 3.52 |
| 45.333 | 0.00 | 0.11 | 0.402 | I O | \| | \| | \| | 3.52 |
| 45.417 | 0.00 | 0.11 | 0.401 | I O | \| | \| | \| | 3.51 |
| 45.500 | 0.00 | 0.11 | 0.400 | I O | \| | \| | \| | 3.50 |
| 45.583 | 0.00 | 0.11 | 0.400 | I O | \| | \| | \| | 3.50 |
| 45.667 | 0.00 | 0.11 | 0.399 | I O | \| | \| | \| | 3.49 |
| 45.750 | 0.00 | 0.11 | 0.398 | I O | \| | \| | \| | 3.48 |
| 45.833 | 0.00 | 0.11 | 0.397 | I O | \| | \| | \| | 3.48 |
| 45.917 | 0.00 | 0.11 | 0.397 | I O | \| | \| | \| | 3.47 |
| 46.000 | 0.00 | 0.11 | 0.396 | I O | \| | \| | \| | 3.47 |
| 46.083 | 0.00 | 0.11 | 0.395 | I O | \| | \| | \| | 3.46 |
| 46.167 | 0.00 | 0.11 | 0.394 | I O | \| | \| | \| | 3.45 |
| 46.250 | 0.00 | 0.11 | 0.394 | I O | \| | \| | \| | 3.45 |
| 46.333 | 0.00 | 0.11 | 0.393 | I O | \| | \| | \| | 3.44 |
| 46.417 | 0.00 | 0.11 | 0.392 | I O | \| | \| | \| | 3.43 |
| 46.500 | 0.00 | 0.11 | 0.391 | I O | \| | \| | \| | 3.43 |
| 46.583 | 0.00 | 0.11 | 0.391 | I O | \| | \| | \| | 3.42 |
| 46.667 | 0.00 | 0.11 | 0.390 | I O | \| | \| | \| | 3.42 |
| 46.750 | 0.00 | 0.11 | 0.389 | I O | \| | \| | \| | 3.41 |
| 46.833 | 0.00 | 0.11 | 0.388 | I O | \| | \| | \| | 3.40 |
| 46.917 | 0.00 | 0.11 | 0.388 | I O | \| | \| | \| | 3.40 |
| 47.000 | 0.00 | 0.11 | 0.387 | I O | \| | \| | \| | 3.39 |
| 47.083 | 0.00 | 0.11 | 0.386 | I O | \| | \| | \| | 3.38 |
| 47.167 | 0.00 | 0.11 | 0.385 | I O | \| | \| | \| | 3.38 |
| 47.250 | 0.00 | 0.11 | 0.385 | I O | \| | \| | \| | 3.37 |
| 47.333 | 0.00 | 0.11 | 0.384 | I O | \| | \| | \| | 3.37 |
| 47.417 | 0.00 | 0.11 | 0.383 | I O | \| | \| | \| | 3.36 |
| 47.500 | 0.00 | 0.11 | 0.382 | I O | \| | \| | \| | 3.35 |
| 47.583 | 0.00 | 0.11 | 0.382 | I O | \| | \| | \| | 3.35 |
| 47.667 | 0.00 | 0.11 | 0.381 | I O | \| | \| | \| | 3.34 |
| 47.750 | 0.00 | 0.11 | 0.380 | I O | \| | \| | \| | 3.34 |
| 47.833 | 0.00 | 0.11 | 0.380 | I O | \| | \| | \| | 3.33 |
| 47.917 | 0.00 | 0.11 | 0.379 | I O | \| | \| | \| | 3.32 |
| 48.000 | 0.00 | 0.11 | 0.378 | I O | \| | \| | \| | 3.32 |
| 48.083 | 0.00 | 0.11 | 0.377 | I O | \| | \| | \| | 3.31 |
| 48.167 | 0.00 | 0.11 | 0.377 | I O | \| | \| | \| | 3.31 |
| 48.250 | 0.00 | 0.11 | 0.376 | I O | \| | \| | \| | 3.30 |
| 48.333 | 0.00 | 0.11 | 0.375 | I O | \| | \| | \| | 3.29 |
| 48.417 | 0.00 | 0.11 | 0.374 | I O | \| | \| | \| | 3.29 |
| 48.500 | 0.00 | 0.11 | 0.374 | I O | \| | \| | \| | 3.28 |
| 48.583 | 0.00 | 0.11 | 0.373 | I O | \| | \| | \| | 3.27 |
| 48.667 | 0.00 | 0.11 | 0.372 | I O | \| | \| | \| | 3.27 |
| 48.750 | 0.00 | 0.11 | 0.372 | I O | \| | \| | \| | 3.26 |
| 48.833 | 0.00 | 0.11 | 0.371 | I O | \| | \| | \| | 3.26 |
| 48.917 | 0.00 | 0.11 | 0.370 | I O | \| | \| | \| | 3.25 |
| 49.000 | 0.00 | 0.10 | 0.369 | I O | \| | \| | \| | 3.24 |
| 49.083 | 0.00 | 0.10 | 0.369 | I O | \| | \| | \| | 3.24 |
| 49.167 | 0.00 | 0.10 | 0.368 | I O | \| | \| | \| | 3.23 |
| 49.250 | 0.00 | 0.10 | 0.367 | I O | \| | \| | \| | 3.23 |
| 49.333 | 0.00 | 0.10 | 0.366 | I O | \| | \| | \| | 3.22 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 49.417 | 0.00 | 0.10 | 0.366 | I | O | \| | \| | \| | \| 3.21 |
| 49.500 | 0.00 | 0.10 | 0.365 | I | O | \| | \| | \| | \| 3.21 |
| 49.583 | 0.00 | 0.10 | 0.364 | I | O | \| | \| | \| | \| 3.20 |
| 49.667 | 0.00 | 0.10 | 0.364 | I | O | \| | \| | \| | \| 3.20 |
| 49.750 | 0.00 | 0.10 | 0.363 | I | O | \| | \| | \| | \| 3.19 |
| 49.833 | 0.00 | 0.10 | 0.362 | I | O | \| | \| | \| | \| 3.18 |
| 49.917 | 0.00 | 0.10 | 0.361 | I | O | \| | \| | \| | \| 3.18 |
| 50.000 | 0.00 | 0.10 | 0.361 | I | O | \| | \| | \| | \| 3.17 |
| 50.083 | 0.00 | 0.10 | 0.360 | I | O | \| | \| | \| | \| 3.17 |
| 50.167 | 0.00 | 0.10 | 0.359 | I | O | \| | \| | \| | \| 3.16 |
| 50.250 | 0.00 | 0.10 | 0.359 | I | O | \| | \| | \| | \| 3.16 |
| 50.333 | 0.00 | 0.10 | 0.358 | I | O | \| | \| | \| | \| 3.15 |
| 50.417 | 0.00 | 0.10 | 0.357 | I | O | \| | \| | \| | \| 3.14 |
| 50.500 | 0.00 | 0.10 | 0.356 | I | O | \| | \| | \| | \| 3.14 |
| 50.583 | 0.00 | 0.10 | 0.356 | I | O | \| | \| | \| | \| 3.13 |
| 50.667 | 0.00 | 0.10 | 0.355 | I | O | \| | \| | \| | \| 3.13 |
| 50.750 | 0.00 | 0.10 | 0.354 | I | O | \| | \| | \| | \| 3.12 |
| 50.833 | 0.00 | 0.10 | 0.354 | I | O | \| | \| | \| | \| 3.11 |
| 50.917 | 0.00 | 0.10 | 0.353 | I | O | \| | \| | \| | \| 3.11 |
| 51.000 | 0.00 | 0.10 | 0.352 | I | O | \| | \| | \| | \| 3.10 |
| 51.083 | 0.00 | 0.10 | 0.352 | I | O | \| | \| | \| | \| 3.10 |
| 51.167 | 0.00 | 0.10 | 0.351 | I | O | \| | \| | \| | \| 3.09 |
| 51.250 | 0.00 | 0.10 | 0.350 | I | O | \| | \| | \| | \| 3.08 |
| 51.333 | 0.00 | 0.10 | 0.349 | I | O | \| | \| | \| | \| 3.08 |
| 51.417 | 0.00 | 0.10 | 0.349 | I | O | \| | \| | \| | \| 3.07 |
| 51.500 | 0.00 | 0.10 | 0.348 | I | O | \| | \| | \| | \| 3.07 |
| 51.583 | 0.00 | 0.10 | 0.347 | I | O | \| | \| | \| | \| 3.06 |
| 51.667 | 0.00 | 0.10 | 0.347 | I | O | \| | \| | \| | \| 3.06 |
| 51.750 | 0.00 | 0.10 | 0.346 | I | O | \| | \| | \| | \| 3.05 |
| 51.833 | 0.00 | 0.10 | 0.345 | I | O | \| | \| | \| | \| 3.04 |
| 51.917 | 0.00 | 0.10 | 0.345 | I | O | \| | \| | \| | \| 3.04 |
| 52.000 | 0.00 | 0.10 | 0.344 | I | O | \| | \| | \| | \| 3.03 |
| 52.083 | 0.00 | 0.10 | 0.343 | I | O | \| | \| | \| | \| 3.03 |
| 52.167 | 0.00 | 0.10 | 0.342 | I | O | \| | \| | \| | \| 3.02 |
| 52.250 | 0.00 | 0.10 | 0.342 | I | O | \| | \| | \| | \| 3.02 |
| 52.333 | 0.00 | 0.10 | 0.341 | I | O | \| | \| | \| | \| 3.01 |
| 52.417 | 0.00 | 0.10 | 0.340 | I | O | \| | \| | \| | \| 3.00 |
| 52.500 | 0.00 | 0.10 | 0.340 | I | O | \| | \| | \| | \| 3.00 |
| 52.583 | 0.00 | 0.10 | 0.339 | I | O | \| | \| | \| | \| 2.99 |
| 52.667 | 0.00 | 0.10 | 0.338 | I | O | \| | \| | \| | \| 2.99 |
| 52.750 | 0.00 | 0.10 | 0.338 | I | O | \| | \| | \| | \| 2.98 |
| 52.833 | 0.00 | 0.10 | 0.337 | I | O | \| | \| | \| | \| 2.97 |
| 52.917 | 0.00 | 0.10 | 0.336 | I | O | \| | \| | \| | \| 2.97 |
| 53.000 | 0.00 | 0.10 | 0.336 | I | O | \| | \| | \| | \| 2.96 |
| 53.083 | 0.00 | 0.10 | 0.335 | I | O | \| | \| | \| | \| 2.95 |
| 53.167 | 0.00 | 0.10 | 0.334 | I | O | \| | \| | \| | \| 2.95 |
| 53.250 | 0.00 | 0.10 | 0.334 | I | O | \| | \| | \| | \| 2.94 |
| 53.333 | 0.00 | 0.10 | 0.333 | I | O | \| | \| | \| | \| 2.94 |
| 53.417 | 0.00 | 0.10 | 0.332 | I | O | \| | \| | \| | \| 2.93 |
| 53.500 | 0.00 | 0.10 | 0.332 | I | O | \| | \| | \| | \| 2.92 |
| 53.583 | 0.00 | 0.10 | 0.331 | I | O | \| | \| | \| | \| 2.92 |
| 53.667 | 0.00 | 0.10 | 0.330 | I | O | \| | \| | \| | \| 2.91 |
| 53.750 | 0.00 | 0.10 | 0.330 | I | O | \| | \| | \| | \| 2.90 |
| 53.833 | 0.00 | 0.10 | 0.329 | I | O | \| | \| | \| | \| 2.90 |
| 53.917 | 0.00 | 0.10 | 0.328 | I | O | \| | \| | \| | \| 2.89 |
| 54.000 | 0.00 | 0.10 | 0.327 | I | O | \| | \| | \| | \| 2.89 |
| 54.083 | 0.00 | 0.10 | 0.327 | I | O | \| | \| | \| | \| 2.88 |
| 54.167 | 0.00 | 0.10 | 0.326 | I | O | \| | \| | \| | \| 2.87 |
| 54.250 | 0.00 | 0.10 | 0.325 | I | O | \| | \| | \| | \| 2.87 |
| 54.333 | 0.00 | 0.10 | 0.325 | I | O | \| | \| | \| | \| 2.86 |
| 54.417 | 0.00 | 0.10 | 0.324 | I | O | \| | \| | \| | \| 2.86 |
| 54.500 | 0.00 | 0.10 | 0.323 | I | O | \| | \| | \| | \| 2.85 |
| 54.583 | 0.00 | 0.10 | 0.323 | I | O | \| | \| | \| | \| 2.84 |
| 54.667 | 0.00 | 0.10 | 0.322 | I | O | \| | \| | \| | \| 2.84 |
| 54.750 | 0.00 | 0.10 | 0.321 | I | O | \| | \| | \| | \| 2.83 |
| 54.833 | 0.00 | 0.10 | 0.321 | I | O | \| | \| | \| | \| 2.83 |
| 54.917 | 0.00 | 0.10 | 0.320 | I | O | \| | \| | \| | \| 2.82 |
| 55.000 | 0.00 | 0.10 | 0.319 | I | O | \| | \| | \| | \| 2.81 |
| 55.083 | 0.00 | 0.10 | 0.319 | I | O | \| | \| | \| | \| 2.81 |
| 55.167 | 0.00 | 0.10 | 0.318 | I | O | \| | \| | \| | \| 2.80 |
| 55.250 | 0.00 | 0.10 | 0.317 | I | O | \| | \| | \| | \| 2.80 |
| 55.333 | 0.00 | 0.10 | 0.317 | I | O | \| | \| | \| | \| 2.79 |
| 55.417 | 0.00 | 0.10 | 0.316 | I | O | \| | \| | \| | \| 2.78 |
| 55.500 | 0.00 | 0.10 | 0.316 | I | O | \| | \| | \| | \| 2.78 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 55.583 | 0.00 | 0.10 | 0.315 | I | O | \| | \| | \| | \| 2.77 |
| 55.667 | 0.00 | 0.10 | 0.314 | I | O | \| | \| | \| | \| 2.77 |
| 55.750 | 0.00 | 0.10 | 0.314 | I | O | \| | \| | \| | \| 2.76 |
| 55.833 | 0.00 | 0.10 | 0.313 | I | O | \| | \| | \| | \| 2.75 |
| 55.917 | 0.00 | 0.09 | 0.312 | I | O | \| | \| | \| | \| 2.75 |
| 56.000 | 0.00 | 0.09 | 0.312 | I | O | \| | \| | \| | \| 2.74 |
| 56.083 | 0.00 | 0.09 | 0.311 | I | O | \| | \| | \| | \| 2.74 |
| 56.167 | 0.00 | 0.09 | 0.310 | I | O | \| | \| | \| | \| 2.73 |
| 56.250 | 0.00 | 0.09 | 0.310 | I | O | \| | \| | \| | \| 2.72 |
| 56.333 | 0.00 | 0.09 | 0.309 | I | O | \| | \| | \| | \| 2.72 |
| 56.417 | 0.00 | 0.09 | 0.308 | I | O | \| | \| | \| | \| 2.71 |
| 56.500 | 0.00 | 0.09 | 0.308 | I | O | \| | \| | \| | \| 2.71 |
| 56.583 | 0.00 | 0.09 | 0.307 | I | O | \| | \| | \| | \| 2.70 |
| 56.667 | 0.00 | 0.09 | 0.306 | I | O | \| | \| | \| | \| 2.69 |
| 56.750 | 0.00 | 0.09 | 0.306 | I | O | \| | \| | \| | \| 2.69 |
| 56.833 | 0.00 | 0.09 | 0.305 | I | O | \| | \| | \| | \| 2.68 |
| 56.917 | 0.00 | 0.09 | 0.304 | I | O | \| | \| | \| | \| 2.68 |
| 57.000 | 0.00 | 0.09 | 0.304 | I | O | \| | \| | \| | \| 2.67 |
| 57.083 | 0.00 | 0.09 | 0.303 | I | O | \| | \| | \| | \| 2.66 |
| 57.167 | 0.00 | 0.09 | 0.303 | I | O | \| | \| | \| | \| 2.66 |
| 57.250 | 0.00 | 0.09 | 0.302 | I | O | \| | \| | \| | \| 2.65 |
| 57.333 | 0.00 | 0.09 | 0.301 | I | O | \| | \| | \| | \| 2.65 |
| 57.417 | 0.00 | 0.09 | 0.301 | I | O | \| | \| | \| | \| 2.64 |
| 57.500 | 0.00 | 0.09 | 0.300 | I | O | \| | \| | \| | \| 2.64 |
| 57.583 | 0.00 | 0.09 | 0.299 | I | O | \| | \| | \| | \| 2.63 |
| 57.667 | 0.00 | 0.09 | 0.299 | I | O | \| | \| | \| | \| 2.62 |
| 57.750 | 0.00 | 0.09 | 0.298 | I | O | \| | \| | \| | \| 2.62 |
| 57.833 | 0.00 | 0.09 | 0.297 | I | O | \| | \| | \| | \| 2.61 |
| 57.917 | 0.00 | 0.09 | 0.297 | I | O | \| | \| | \| | \| 2.61 |
| 58.000 | 0.00 | 0.09 | 0.296 | I | O | \| | \| | \| | \| 2.60 |
| 58.083 | 0.00 | 0.09 | 0.295 | I | O | \| | \| | \| | \| 2.60 |
| 58.167 | 0.00 | 0.09 | 0.295 | I | O | \| | \| | \| | \| 2.59 |
| 58.250 | 0.00 | 0.09 | 0.294 | I | O | \| | \| | \| | \| 2.58 |
| 58.333 | 0.00 | 0.09 | 0.294 | I | O | \| | \| | \| | \| 2.58 |
| 58.417 | 0.00 | 0.09 | 0.293 | I | O | \| | \| | \| | \| 2.57 |
| 58.500 | 0.00 | 0.09 | 0.292 | I | O | \| | \| | \| | \| 2.57 |
| 58.583 | 0.00 | 0.09 | 0.292 | I | O | \| | \| | \| | \| 2.56 |
| 58.667 | 0.00 | 0.09 | 0.291 | I | O | \| | \| | \| | \| 2.56 |
| 58.750 | 0.00 | 0.09 | 0.290 | I | O | \| | \| | \| | \| 2.55 |
| 58.833 | 0.00 | 0.09 | 0.290 | I | O | \| | \| | \| | \| 2.54 |
| 58.917 | 0.00 | 0.09 | 0.289 | I | O | \| | \| | \| | \| 2.54 |
| 59.000 | 0.00 | 0.09 | 0.289 | I | O | \| | \| | \| | \| 2.53 |
| 59.083 | 0.00 | 0.09 | 0.288 | I | O | \| | \| | \| | \| 2.53 |
| 59.167 | 0.00 | 0.09 | 0.287 | I | O | \| | \| | \| | \| 2.52 |
| 59.250 | 0.00 | 0.09 | 0.287 | I | O | \| | \| | \| | \| 2.52 |
| 59.333 | 0.00 | 0.09 | 0.286 | I | O | \| | \| | \| | \| 2.51 |
| 59.417 | 0.00 | 0.09 | 0.285 | I | O | \| | \| | \| | \| 2.50 |
| 59.500 | 0.00 | 0.09 | 0.285 | I | O | \| | \| | \| | \| 2.50 |
| 59.583 | 0.00 | 0.09 | 0.284 | I | O | \| | \| | \| | \| 2.49 |
| 59.667 | 0.00 | 0.09 | 0.284 | I | O | \| | \| | \| | \| 2.49 |
| 59.750 | 0.00 | 0.09 | 0.283 | I | O | \| | \| | \| | \| 2.48 |
| 59.833 | 0.00 | 0.09 | 0.282 | I | O | \| | \| | \| | \| 2.48 |
| 59.917 | 0.00 | 0.09 | 0.282 | I | O | \| | \| | \| | \| 2.47 |
| 60.000 | 0.00 | 0.09 | 0.281 | I | O | \| | \| | \| | \| 2.46 |
| 60.083 | 0.00 | 0.09 | 0.281 | I | O | \| | \| | \| | \| 2.46 |
| 60.167 | 0.00 | 0.09 | 0.280 | I | O | \| | \| | \| | \| 2.45 |
| 60.250 | 0.00 | 0.09 | 0.279 | I | O | \| | \| | \| | \| 2.45 |
| 60.333 | 0.00 | 0.09 | 0.279 | I | O | \| | \| | \| | \| 2.44 |
| 60.417 | 0.00 | 0.09 | 0.278 | I | O | \| | \| | \| | \| 2.44 |
| 60.500 | 0.00 | 0.09 | 0.277 | I | O | \| | \| | \| | \| 2.43 |
| 60.583 | 0.00 | 0.09 | 0.277 | I | O | \| | \| | \| | \| 2.43 |
| 60.667 | 0.00 | 0.09 | 0.276 | I | O | \| | \| | \| | \| 2.42 |
| 60.750 | 0.00 | 0.09 | 0.276 | I | O | \| | \| | \| | \| 2.41 |
| 60.833 | 0.00 | 0.09 | 0.275 | I | O | \| | \| | \| | \| 2.41 |
| 60.917 | 0.00 | 0.09 | 0.274 | I | O | \| | \| | \| | \| 2.40 |
| 61.000 | 0.00 | 0.09 | 0.274 | I | O | \| | \| | \| | \| 2.40 |
| 61.083 | 0.00 | 0.09 | 0.273 | I | O | \| | \| | \| | \| 2.39 |
| 61.167 | 0.00 | 0.09 | 0.273 | I | O | \| | \| | \| | \| 2.39 |
| 61.250 | 0.00 | 0.09 | 0.272 | I | O | \| | \| | \| | \| 2.38 |
| 61.333 | 0.00 | 0.09 | 0.271 | I | O | \| | \| | \| | \| 2.38 |
| 61.417 | 0.00 | 0.09 | 0.271 | I | O | \| | \| | \| | \| 2.37 |
| 61.500 | 0.00 | 0.09 | 0.270 | I | O | \| | \| | \| | \| 2.37 |
| 61.583 | 0.00 | 0.09 | 0.270 | I | O | \| | \| | \| | \| 2.36 |
| 61.667 | 0.00 | 0.09 | 0.269 | I | O | \| | \| | \| | \| 2.35 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 61.750 | 0.00 | 0.09 | 0.268 | I O | \| | \| | \| | 2.35 |
| 61.833 | 0.00 | 0.09 | 0.268 | I O | \| | \| | \| | 2.34 |
| 61.917 | 0.00 | 0.09 | 0.267 | I O | \| | \| | \| | 2.34 |
| 62.000 | 0.00 | 0.09 | 0.267 | I O | \| | \| | \| | 2.33 |
| 62.083 | 0.00 | 0.09 | 0.266 | I O | \| | \| | \| | 2.33 |
| 62.167 | 0.00 | 0.09 | 0.265 | I O | \| | \| | \| | 2.32 |
| 62.250 | 0.00 | 0.09 | 0.265 | I O | \| | \| | \| | 2.32 |
| 62.333 | 0.00 | 0.09 | 0.264 | I O | \| | \| | \| | 2.31 |
| 62.417 | 0.00 | 0.09 | 0.264 | I O | \| | \| | \| | 2.31 |
| 62.500 | 0.00 | 0.09 | 0.263 | I O | \| | \| | \| | 2.30 |
| 62.583 | 0.00 | 0.09 | 0.262 | I O | \| | \| | \| | 2.29 |
| 62.667 | 0.00 | 0.09 | 0.262 | I O | \| | \| | \| | 2.29 |
| 62.750 | 0.00 | 0.09 | 0.261 | I O | \| | \| | \| | 2.28 |
| 62.833 | 0.00 | 0.09 | 0.261 | I O | \| | \| | \| | 2.28 |
| 62.917 | 0.00 | 0.09 | 0.260 | I O | \| | \| | \| | 2.27 |
| 63.000 | 0.00 | 0.09 | 0.259 | I O | \| | \| | \| | 2.27 |
| 63.083 | 0.00 | 0.09 | 0.259 | I O | \| | \| | \| | 2.26 |
| 63.167 | 0.00 | 0.09 | 0.258 | I O | \| | \| | \| | 2.26 |
| 63.250 | 0.00 | 0.09 | 0.258 | I O | \| | \| | \| | 2.25 |
| 63.333 | 0.00 | 0.08 | 0.257 | I O | \| | \| | \| | 2.25 |
| 63.417 | 0.00 | 0.08 | 0.257 | I O | \| | \| | \| | 2.24 |
| 63.500 | 0.00 | 0.08 | 0.256 | I O | \| | \| | \| | 2.24 |
| 63.583 | 0.00 | 0.08 | 0.255 | I O | \| | \| | \| | 2.23 |
| 63.667 | 0.00 | 0.08 | 0.255 | I O | \| | \| | \| | 2.23 |
| 63.750 | 0.00 | 0.08 | 0.254 | I O | \| | \| | \| | 2.22 |
| 63.833 | 0.00 | 0.08 | 0.254 | I O | \| | \| | \| | 2.22 |
| 63.917 | 0.00 | 0.08 | 0.253 | I O | \| | \| | \| | 2.21 |
| 64.000 | 0.00 | 0.08 | 0.252 | I O | \| | \| | \| | 2.20 |
| 64.083 | 0.00 | 0.08 | 0.252 | I O | \| | \| | \| | 2.20 |
| 64.167 | 0.00 | 0.08 | 0.251 | I O | \| | \| | \| | 2.19 |
| 64.250 | 0.00 | 0.08 | 0.251 | I O | \| | \| | \| | 2.19 |
| 64.333 | 0.00 | 0.08 | 0.250 | I O | \| | \| | \| | 2.18 |
| 64.417 | 0.00 | 0.08 | 0.250 | I O | \| | \| | \| | 2.18 |
| 64.500 | 0.00 | 0.08 | 0.249 | I O | \| | \| | \| | 2.17 |
| 64.583 | 0.00 | 0.08 | 0.248 | I O | \| | \| | \| | 2.17 |
| 64.667 | 0.00 | 0.08 | 0.248 | I O | \| | \| | \| | 2.16 |
| 64.750 | 0.00 | 0.08 | 0.247 | I O | \| | \| | \| | 2.16 |
| 64.833 | 0.00 | 0.08 | 0.247 | I O | \| | \| | \| | 2.15 |
| 64.917 | 0.00 | 0.08 | 0.246 | I O | \| | \| | \| | 2.15 |
| 65.000 | 0.00 | 0.08 | 0.246 | I O | \| | \| | \| | 2.14 |
| 65.083 | 0.00 | 0.08 | 0.245 | I O | \| | \| | \| | 2.14 |
| 65.167 | 0.00 | 0.08 | 0.244 | I O | \| | \| | \| | 2.13 |
| 65.250 | 0.00 | 0.08 | 0.244 | I O | \| | \| | \| | 2.13 |
| 65.333 | 0.00 | 0.08 | 0.243 | I O | \| | \| | \| | 2.12 |
| 65.417 | 0.00 | 0.08 | 0.243 | I O | \| | \| | \| | 2.12 |
| 65.500 | 0.00 | 0.08 | 0.242 | I O | \| | \| | \| | 2.11 |
| 65.583 | 0.00 | 0.08 | 0.242 | I O | \| | \| | \| | 2.11 |
| 65.667 | 0.00 | 0.08 | 0.241 | I O | \| | \| | \| | 2.10 |
| 65.750 | 0.00 | 0.08 | 0.240 | I O | \| | \| | \| | 2.10 |
| 65.833 | 0.00 | 0.08 | 0.240 | I O | \| | \| | \| | 2.09 |
| 65.917 | 0.00 | 0.08 | 0.239 | IO | \| | \| | \| | 2.09 |
| 66.000 | 0.00 | 0.08 | 0.239 | IO | \| | \| | \| | 2.08 |
| 66.083 | 0.00 | 0.08 | 0.238 | IO | \| | \| | \| | 2.07 |
| 66.167 | 0.00 | 0.08 | 0.238 | IO | \| | \| | \| | 2.07 |
| 66.250 | 0.00 | 0.08 | 0.237 | IO | \| | \| | \| | 2.06 |
| 66.333 | 0.00 | 0.08 | 0.237 | IO | \| | \| | \| | 2.06 |
| 66.417 | 0.00 | 0.08 | 0.236 | IO | \| | \| | \| | 2.05 |
| 66.500 | 0.00 | 0.08 | 0.235 | IO | \| | \| | \| | 2.05 |
| 66.583 | 0.00 | 0.08 | 0.235 | IO | \| | \| | \| | 2.04 |
| 66.667 | 0.00 | 0.08 | 0.234 | IO | \| | \| | \| | 2.04 |
| 66.750 | 0.00 | 0.08 | 0.234 | IO | \| | \| | \| | 2.03 |
| 66.833 | 0.00 | 0.08 | 0.233 | IO | \| | \| | \| | 2.03 |
| 66.917 | 0.00 | 0.08 | 0.233 | IO | \| | \| | \| | 2.02 |
| 67.000 | 0.00 | 0.08 | 0.232 | IO | \| | \| | \| | 2.02 |
| 67.083 | 0.00 | 0.08 | 0.232 | IO | \| | \| | \| | 2.01 |
| 67.167 | 0.00 | 0.08 | 0.231 | IO | \| | \| | \| | 2.01 |
| 67.250 | 0.00 | 0.08 | 0.230 | IO | \| | \| | \| | 2.00 |
| 67.333 | 0.00 | 0.08 | 0.230 | IO | \| | \| | \| | 2.00 |
| 67.417 | 0.00 | 0.08 | 0.229 | IO | \| | \| | \| | 1.99 |
| 67.500 | 0.00 | 0.08 | 0.229 | IO | \| | \| | \| | 1.99 |
| 67.583 | 0.00 | 0.08 | 0.228 | IO | \| | \| | \| | 1.99 |
| 67.667 | 0.00 | 0.08 | 0.228 | IO | \| | \| | \| | 1.98 |
| 67.750 | 0.00 | 0.08 | 0.227 | IO | \| | \| | \| | 1.98 |
| 67.833 | 0.00 | 0.08 | 0.227 | IO | \| | \| | \| | 1.97 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 67.917 | 0.00 | 0.08 | 0.226 | IO | | | | 1.97 |
| 68.000 | 0.00 | 0.08 | 0.226 | IO | | | | 1.96 |
| 68.083 | 0.00 | 0.08 | 0.225 | IO | | | | 1.96 |
| 68.167 | 0.00 | 0.08 | 0.224 | IO | | | | 1.95 |
| 68.250 | 0.00 | 0.08 | 0.224 | IO | | | | 1.95 |
| 68.333 | 0.00 | 0.08 | 0.223 | IO | | | | 1.94 |
| 68.417 | 0.00 | 0.08 | 0.223 | IO | | | | 1.94 |
| 68.500 | 0.00 | 0.08 | 0.222 | IO | | | | 1.94 |
| 68.583 | 0.00 | 0.08 | 0.222 | IO | | | | 1.93 |
| 68.667 | 0.00 | 0.08 | 0.221 | IO | | | | 1.93 |
| 68.750 | 0.00 | 0.08 | 0.221 | IO | | | | 1.92 |
| 68.833 | 0.00 | 0.08 | 0.220 | IO | | | | 1.92 |
| 68.917 | 0.00 | 0.08 | 0.220 | IO | | | | 1.91 |
| 69.000 | 0.00 | 0.08 | 0.219 | IO | | | | 1.91 |
| 69.083 | 0.00 | 0.08 | 0.218 | IO | | | | 1.90 |
| 69.167 | 0.00 | 0.08 | 0.218 | IO | | | | 1.90 |
| 69.250 | 0.00 | 0.08 | 0.217 | IO | | | | 1.89 |
| 69.333 | 0.00 | 0.08 | 0.217 | IO | | | | 1.89 |
| 69.417 | 0.00 | 0.08 | 0.216 | IO | | | | 1.89 |
| 69.500 | 0.00 | 0.08 | 0.216 | IO | | | | 1.88 |
| 69.583 | 0.00 | 0.08 | 0.215 | IO | | | | 1.88 |
| 69.667 | 0.00 | 0.08 | 0.215 | IO | | | | 1.87 |
| 69.750 | 0.00 | 0.08 | 0.214 | IO | | | | 1.87 |
| 69.833 | 0.00 | 0.08 | 0.214 | IO | | | | 1.86 |
| 69.917 | 0.00 | 0.08 | 0.213 | IO | | | | 1.86 |
| 70.000 | 0.00 | 0.08 | 0.213 | IO | | | | 1.85 |
| 70.083 | 0.00 | 0.08 | 0.212 | IO | | | | 1.85 |
| 70.167 | 0.00 | 0.08 | 0.212 | IO | | | | 1.85 |
| 70.250 | 0.00 | 0.08 | 0.211 | IO | | | | 1.84 |
| 70.333 | 0.00 | 0.08 | 0.210 | IO | | | | 1.84 |
| 70.417 | 0.00 | 0.08 | 0.210 | IO | | | | 1.83 |
| 70.500 | 0.00 | 0.08 | 0.209 | IO | | | | 1.83 |
| 70.583 | 0.00 | 0.08 | 0.209 | IO | | | | 1.82 |
| 70.667 | 0.00 | 0.08 | 0.208 | IO | | | | 1.82 |
| 70.750 | 0.00 | 0.08 | 0.208 | IO | | | | 1.82 |
| 70.833 | 0.00 | 0.08 | 0.207 | IO | | | | 1.81 |
| 70.917 | 0.00 | 0.08 | 0.207 | IO | | | | 1.81 |
| 71.000 | 0.00 | 0.08 | 0.206 | IO | | | | 1.80 |
| 71.083 | 0.00 | 0.08 | 0.206 | IO | | | | 1.80 |
| 71.167 | 0.00 | 0.08 | 0.205 | IO | | | | 1.79 |
| 71.250 | 0.00 | 0.08 | 0.205 | IO | | | | 1.79 |
| 71.333 | 0.00 | 0.08 | 0.204 | IO | | | | 1.78 |
| 71.417 | 0.00 | 0.08 | 0.204 | IO | | | | 1.78 |
| 71.500 | 0.00 | 0.08 | 0.203 | IO | | | | 1.78 |
| 71.583 | 0.00 | 0.08 | 0.203 | IO | | | | 1.77 |
| 71.667 | 0.00 | 0.08 | 0.202 | IO | | | | 1.77 |
| 71.750 | 0.00 | 0.08 | 0.202 | IO | | | | 1.76 |
| 71.833 | 0.00 | 0.08 | 0.201 | IO | | | | 1.76 |
| 71.917 | 0.00 | 0.08 | 0.201 | IO | | | | 1.75 |
| 72.000 | 0.00 | 0.08 | 0.200 | IO | | | | 1.75 |
| 72.083 | 0.00 | 0.07 | 0.200 | IO | | | | 1.75 |
| 72.167 | 0.00 | 0.07 | 0.199 | IO | | | | 1.74 |
| 72.250 | 0.00 | 0.07 | 0.198 | IO | | | | 1.74 |
| 72.333 | 0.00 | 0.07 | 0.198 | IO | | | | 1.73 |
| 72.417 | 0.00 | 0.07 | 0.197 | IO | | | | 1.73 |
| 72.500 | 0.00 | 0.07 | 0.197 | IO | | | | 1.72 |
| 72.583 | 0.00 | 0.07 | 0.196 | IO | | | | 1.72 |
| 72.667 | 0.00 | 0.07 | 0.196 | IO | | | | 1.72 |
| 72.750 | 0.00 | 0.07 | 0.195 | IO | | | | 1.71 |
| 72.833 | 0.00 | 0.07 | 0.195 | IO | | | | 1.71 |
| 72.917 | 0.00 | 0.07 | 0.194 | IO | | | | 1.70 |
| 73.000 | 0.00 | 0.07 | 0.194 | IO | | | | 1.70 |
| 73.083 | 0.00 | 0.07 | 0.193 | IO | | | | 1.69 |
| 73.167 | 0.00 | 0.07 | 0.193 | IO | | | | 1.69 |
| 73.250 | 0.00 | 0.07 | 0.192 | IO | | | | 1.69 |
| 73.333 | 0.00 | 0.07 | 0.192 | IO | | | | 1.68 |
| 73.417 | 0.00 | 0.07 | 0.191 | IO | | | | 1.68 |
| 73.500 | 0.00 | 0.07 | 0.191 | IO | | | | 1.67 |
| 73.583 | 0.00 | 0.07 | 0.190 | IO | | | | 1.67 |
| 73.667 | 0.00 | 0.07 | 0.190 | IO | | | | 1.67 |
| 73.750 | 0.00 | 0.07 | 0.189 | IO | | | | 1.66 |
| 73.833 | 0.00 | 0.07 | 0.189 | IO | | | | 1.66 |
| 73.917 | 0.00 | 0.07 | 0.188 | IO | | | | 1.65 |
| 74.000 | 0.00 | 0.07 | 0.188 | IO | | | | 1.65 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 74.083 | 0.00 | 0.07 | 0.187 | IO | | | | | 1.64 |
| 74.167 | 0.00 | 0.07 | 0.187 | IO | | | | | 1.64 |
| 74.250 | 0.00 | 0.07 | 0.186 | IO | | | | | 1.64 |
| 74.333 | 0.00 | 0.07 | 0.186 | IO | | | | | 1.63 |
| 74.417 | 0.00 | 0.07 | 0.185 | IO | | | | | 1.63 |
| 74.500 | 0.00 | 0.07 | 0.185 | IO | | | | | 1.62 |
| 74.583 | 0.00 | 0.07 | 0.184 | IO | | | | | 1.62 |
| 74.667 | 0.00 | 0.07 | 0.184 | IO | | | | | 1.61 |
| 74.750 | 0.00 | 0.07 | 0.183 | IO | | | | | 1.61 |
| 74.833 | 0.00 | 0.07 | 0.183 | IO | | | | | 1.61 |
| 74.917 | 0.00 | 0.07 | 0.182 | IO | | | | | 1.60 |
| 75.000 | 0.00 | 0.07 | 0.182 | IO | | | | | 1.60 |
| 75.083 | 0.00 | 0.07 | 0.181 | IO | | | | | 1.59 |
| 75.167 | 0.00 | 0.07 | 0.181 | IO | | | | | 1.59 |
| 75.250 | 0.00 | 0.07 | 0.180 | IO | | | | | 1.59 |
| 75.333 | 0.00 | 0.07 | 0.180 | IO | | | | | 1.58 |
| 75.417 | 0.00 | 0.07 | 0.179 | IO | | | | | 1.58 |
| 75.500 | 0.00 | 0.07 | 0.179 | IO | | | | | 1.57 |
| 75.583 | 0.00 | 0.07 | 0.178 | IO | | | | | 1.57 |
| 75.667 | 0.00 | 0.07 | 0.178 | IO | | | | | 1.57 |
| 75.750 | 0.00 | 0.07 | 0.177 | IO | | | | | 1.56 |
| 75.833 | 0.00 | 0.07 | 0.177 | IO | | | | | 1.56 |
| 75.917 | 0.00 | 0.07 | 0.176 | IO | | | | | 1.55 |
| 76.000 | 0.00 | 0.07 | 0.176 | IO | | | | | 1.55 |
| 76.083 | 0.00 | 0.07 | 0.175 | IO | | | | | 1.55 |
| 76.167 | 0.00 | 0.07 | 0.175 | IO | | | | | 1.54 |
| 76.250 | 0.00 | 0.07 | 0.174 | IO | | | | | 1.54 |
| 76.333 | 0.00 | 0.07 | 0.174 | IO | | | | | 1.53 |
| 76.417 | 0.00 | 0.07 | 0.173 | IO | | | | | 1.53 |
| 76.500 | 0.00 | 0.07 | 0.173 | IO | | | | | 1.52 |
| 76.583 | 0.00 | 0.07 | 0.172 | IO | | | | | 1.52 |
| 76.667 | 0.00 | 0.07 | 0.172 | IO | | | | | 1.52 |
| 76.750 | 0.00 | 0.07 | 0.172 | IO | | | | | 1.51 |
| 76.833 | 0.00 | 0.07 | 0.171 | IO | | | | | 1.51 |
| 76.917 | 0.00 | 0.07 | 0.171 | IO | | | | | 1.50 |
| 77.000 | 0.00 | 0.07 | 0.170 | IO | | | | | 1.50 |
| 77.083 | 0.00 | 0.07 | 0.170 | IO | | | | | 1.50 |
| 77.167 | 0.00 | 0.07 | 0.169 | IO | | | | | 1.49 |
| 77.250 | 0.00 | 0.07 | 0.169 | IO | | | | | 1.49 |
| 77.333 | 0.00 | 0.07 | 0.168 | IO | | | | | 1.48 |
| 77.417 | 0.00 | 0.07 | 0.168 | IO | | | | | 1.48 |
| 77.500 | 0.00 | 0.07 | 0.167 | IO | | | | | 1.48 |
| 77.583 | 0.00 | 0.07 | 0.167 | IO | | | | | 1.47 |
| 77.667 | 0.00 | 0.07 | 0.166 | IO | | | | | 1.47 |
| 77.750 | 0.00 | 0.07 | 0.166 | IO | | | | | 1.46 |
| 77.833 | 0.00 | 0.07 | 0.165 | IO | | | | | 1.46 |
| 77.917 | 0.00 | 0.07 | 0.165 | IO | | | | | 1.46 |
| 78.000 | 0.00 | 0.07 | 0.164 | IO | | | | | 1.45 |
| 78.083 | 0.00 | 0.07 | 0.164 | IO | | | | | 1.45 |
| 78.167 | 0.00 | 0.07 | 0.163 | IO | | | | | 1.44 |
| 78.250 | 0.00 | 0.07 | 0.163 | IO | | | | | 1.44 |
| 78.333 | 0.00 | 0.07 | 0.162 | IO | | | | | 1.44 |
| 78.417 | 0.00 | 0.07 | 0.162 | IO | | | | | 1.43 |
| 78.500 | 0.00 | 0.07 | 0.161 | IO | | | | | 1.43 |
| 78.583 | 0.00 | 0.07 | 0.161 | IO | | | | | 1.43 |
| 78.667 | 0.00 | 0.07 | 0.161 | IO | | | | | 1.42 |
| 78.750 | 0.00 | 0.07 | 0.160 | IO | | | | | 1.42 |
| 78.833 | 0.00 | 0.07 | 0.160 | IO | | | | | 1.41 |
| 78.917 | 0.00 | 0.07 | 0.159 | IO | | | | | 1.41 |
| 79.000 | 0.00 | 0.07 | 0.159 | IO | | | | | 1.41 |
| 79.083 | 0.00 | 0.07 | 0.158 | IO | | | | | 1.40 |
| 79.167 | 0.00 | 0.07 | 0.158 | IO | | | | | 1.40 |
| 79.250 | 0.00 | 0.07 | 0.157 | IO | | | | | 1.39 |
| 79.333 | 0.00 | 0.07 | 0.157 | IO | | | | | 1.39 |
| 79.417 | 0.00 | 0.07 | 0.156 | IO | | | | | 1.39 |
| 79.500 | 0.00 | 0.07 | 0.156 | IO | | | | | 1.38 |
| 79.583 | 0.00 | 0.07 | 0.155 | IO | | | | | 1.38 |
| 79.667 | 0.00 | 0.07 | 0.155 | IO | | | | | 1.37 |
| 79.750 | 0.00 | 0.07 | 0.154 | IO | | | | | 1.37 |
| 79.833 | 0.00 | 0.07 | 0.154 | IO | | | | | 1.37 |
| 79.917 | 0.00 | 0.07 | 0.154 | IO | | | | | 1.36 |
| 80.000 | 0.00 | 0.07 | 0.153 | IO | | | | | 1.36 |
| 80.083 | 0.00 | 0.07 | 0.153 | IO | | | | | 1.36 |
| 80.167 | 0.00 | 0.07 | 0.152 | IO | | | | | 1.35 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 80.250 | 0.00 | 0.07 | 0.152 | IO | | | | 1.35 |
| 80.333 | 0.00 | 0.07 | 0.151 | IO | | | | 1.34 |
| 80.417 | 0.00 | 0.07 | 0.151 | IO | | | | 1.34 |
| 80.500 | 0.00 | 0.07 | 0.150 | IO | | | | 1.34 |
| 80.583 | 0.00 | 0.07 | 0.150 | IO | | | | 1.33 |
| 80.667 | 0.00 | 0.07 | 0.149 | IO | | | | 1.33 |
| 80.750 | 0.00 | 0.07 | 0.149 | IO | | | | 1.32 |
| 80.833 | 0.00 | 0.07 | 0.148 | IO | | | | 1.32 |
| 80.917 | 0.00 | 0.07 | 0.148 | IO | | | | 1.32 |
| 81.000 | 0.00 | 0.07 | 0.148 | IO | | | | 1.31 |
| 81.083 | 0.00 | 0.07 | 0.147 | IO | | | | 1.31 |
| 81.167 | 0.00 | 0.07 | 0.147 | IO | | | | 1.31 |
| 81.250 | 0.00 | 0.07 | 0.146 | IO | | | | 1.30 |
| 81.333 | 0.00 | 0.07 | 0.146 | IO | | | | 1.30 |
| 81.417 | 0.00 | 0.07 | 0.145 | IO | | | | 1.29 |
| 81.500 | 0.00 | 0.07 | 0.145 | IO | | | | 1.29 |
| 81.583 | 0.00 | 0.07 | 0.144 | IO | | | | 1.29 |
| 81.667 | 0.00 | 0.07 | 0.144 | IO | | | | 1.28 |
| 81.750 | 0.00 | 0.07 | 0.143 | IO | | | | 1.28 |
| 81.833 | 0.00 | 0.07 | 0.143 | IO | | | | 1.28 |
| 81.917 | 0.00 | 0.07 | 0.143 | IO | | | | 1.27 |
| 82.000 | 0.00 | 0.07 | 0.142 | IO | | | | 1.27 |
| 82.083 | 0.00 | 0.07 | 0.142 | IO | | | | 1.26 |
| 82.167 | 0.00 | 0.07 | 0.141 | IO | | | | 1.26 |
| 82.250 | 0.00 | 0.07 | 0.141 | IO | | | | 1.26 |
| 82.333 | 0.00 | 0.07 | 0.140 | IO | | | | 1.25 |
| 82.417 | 0.00 | 0.06 | 0.140 | IO | | | | 1.25 |
| 82.500 | 0.00 | 0.06 | 0.139 | IO | | | | 1.25 |
| 82.583 | 0.00 | 0.06 | 0.139 | IO | | | | 1.24 |
| 82.667 | 0.00 | 0.06 | 0.139 | IO | | | | 1.24 |
| 82.750 | 0.00 | 0.06 | 0.138 | IO | | | | 1.23 |
| 82.833 | 0.00 | 0.06 | 0.138 | IO | | | | 1.23 |
| 82.917 | 0.00 | 0.06 | 0.137 | IO | | | | 1.23 |
| 83.000 | 0.00 | 0.06 | 0.137 | IO | | | | 1.22 |
| 83.083 | 0.00 | 0.06 | 0.136 | IO | | | | 1.22 |
| 83.167 | 0.00 | 0.06 | 0.136 | IO | | | | 1.22 |
| 83.250 | 0.00 | 0.06 | 0.135 | IO | | | | 1.21 |
| 83.333 | 0.00 | 0.06 | 0.135 | IO | | | | 1.21 |
| 83.417 | 0.00 | 0.06 | 0.135 | IO | | | | 1.20 |
| 83.500 | 0.00 | 0.06 | 0.134 | IO | | | | 1.20 |
| 83.583 | 0.00 | 0.06 | 0.134 | IO | | | | 1.20 |
| 83.667 | 0.00 | 0.06 | 0.133 | IO | | | | 1.19 |
| 83.750 | 0.00 | 0.06 | 0.133 | IO | | | | 1.19 |
| 83.833 | 0.00 | 0.06 | 0.132 | IO | | | | 1.19 |
| 83.917 | 0.00 | 0.06 | 0.132 | IO | | | | 1.18 |
| 84.000 | 0.00 | 0.06 | 0.131 | IO | | | | 1.18 |
| 84.083 | 0.00 | 0.06 | 0.131 | IO | | | | 1.18 |
| 84.167 | 0.00 | 0.06 | 0.131 | IO | | | | 1.17 |
| 84.250 | 0.00 | 0.06 | 0.130 | IO | | | | 1.17 |
| 84.333 | 0.00 | 0.06 | 0.130 | IO | | | | 1.16 |
| 84.417 | 0.00 | 0.06 | 0.129 | IO | | | | 1.16 |
| 84.500 | 0.00 | 0.06 | 0.129 | IO | | | | 1.16 |
| 84.583 | 0.00 | 0.06 | 0.128 | IO | | | | 1.15 |
| 84.667 | 0.00 | 0.06 | 0.128 | IO | | | | 1.15 |
| 84.750 | 0.00 | 0.06 | 0.128 | IO | | | | 1.15 |
| 84.833 | 0.00 | 0.06 | 0.127 | IO | | | | 1.14 |
| 84.917 | 0.00 | 0.06 | 0.127 | IO | | | | 1.14 |
| 85.000 | 0.00 | 0.06 | 0.126 | IO | | | | 1.14 |
| 85.083 | 0.00 | 0.06 | 0.126 | IO | | | | 1.13 |
| 85.167 | 0.00 | 0.06 | 0.125 | IO | | | | 1.13 |
| 85.250 | 0.00 | 0.06 | 0.125 | IO | | | | 1.12 |
| 85.333 | 0.00 | 0.06 | 0.125 | IO | | | | 1.12 |
| 85.417 | 0.00 | 0.06 | 0.124 | IO | | | | 1.12 |
| 85.500 | 0.00 | 0.06 | 0.124 | IO | | | | 1.11 |
| 85.583 | 0.00 | 0.06 | 0.123 | IO | | | | 1.11 |
| 85.667 | 0.00 | 0.06 | 0.123 | IO | | | | 1.11 |
| 85.750 | 0.00 | 0.06 | 0.122 | IO | | | | 1.10 |
| 85.833 | 0.00 | 0.06 | 0.122 | IO | | | | 1.10 |
| 85.917 | 0.00 | 0.06 | 0.122 | IO | | | | 1.10 |
| 86.000 | 0.00 | 0.06 | 0.121 | IO | | | | 1.09 |
| 86.083 | 0.00 | 0.06 | 0.121 | IO | | | | 1.09 |
| 86.167 | 0.00 | 0.06 | 0.120 | IO | | | | 1.09 |
| 86.250 | 0.00 | 0.06 | 0.120 | IO | | | | 1.08 |
| 86.333 | 0.00 | 0.06 | 0.119 | IO | | | | 1.08 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 86.417 | 0.00 | 0.06 | 0.119 | IO | | | | 1.07 |
| 86.500 | 0.00 | 0.06 | 0.119 | IO | | | | 1.07 |
| 86.583 | 0.00 | 0.06 | 0.118 | IO | | | | 1.07 |
| 86.667 | 0.00 | 0.06 | 0.118 | IO | | | | 1.06 |
| 86.750 | 0.00 | 0.06 | 0.117 | IO | | | | 1.06 |
| 86.833 | 0.00 | 0.06 | 0.117 | IO | | | | 1.06 |
| 86.917 | 0.00 | 0.06 | 0.116 | IO | | | | 1.05 |
| 87.000 | 0.00 | 0.06 | 0.116 | IO | | | | 1.05 |
| 87.083 | 0.00 | 0.06 | 0.116 | IO | | | | 1.05 |
| 87.167 | 0.00 | 0.06 | 0.115 | IO | | | | 1.04 |
| 87.250 | 0.00 | 0.06 | 0.115 | IO | | | | 1.04 |
| 87.333 | 0.00 | 0.06 | 0.114 | IO | | | | 1.04 |
| 87.417 | 0.00 | 0.06 | 0.114 | IO | | | | 1.03 |
| 87.500 | 0.00 | 0.06 | 0.114 | IO | | | | 1.03 |
| 87.583 | 0.00 | 0.06 | 0.113 | IO | | | | 1.03 |
| 87.667 | 0.00 | 0.06 | 0.113 | IO | | | | 1.02 |
| 87.750 | 0.00 | 0.06 | 0.112 | IO | | | | 1.02 |
| 87.833 | 0.00 | 0.06 | 0.112 | IO | | | | 1.02 |
| 87.917 | 0.00 | 0.06 | 0.111 | IO | | | | 1.01 |
| 88.000 | 0.00 | 0.06 | 0.111 | IO | | | | 1.01 |
| 88.083 | 0.00 | 0.06 | 0.111 | IO | | | | 1.00 |
| 88.167 | 0.00 | 0.06 | 0.110 | IO | | | | 1.00 |
| 88.250 | 0.00 | 0.06 | 0.110 | IO | | | | 1.00 |
| 88.333 | 0.00 | 0.06 | 0.109 | IO | | | | 0.99 |
| 88.417 | 0.00 | 0.06 | 0.109 | IO | | | | 0.99 |
| 88.500 | 0.00 | 0.06 | 0.109 | IO | | | | 0.99 |
| 88.583 | 0.00 | 0.06 | 0.108 | IO | | | | 0.98 |
| 88.667 | 0.00 | 0.06 | 0.108 | IO | | | | 0.98 |
| 88.750 | 0.00 | 0.06 | 0.107 | IO | | | | 0.98 |
| 88.833 | 0.00 | 0.06 | 0.107 | IO | | | | 0.97 |
| 88.917 | 0.00 | 0.06 | 0.107 | IO | | | | 0.97 |
| 89.000 | 0.00 | 0.06 | 0.106 | IO | | | | 0.96 |
| 89.083 | 0.00 | 0.06 | 0.106 | IO | | | | 0.96 |
| 89.167 | 0.00 | 0.06 | 0.105 | IO | | | | 0.96 |
| 89.250 | 0.00 | 0.06 | 0.105 | IO | | | | 0.95 |
| 89.333 | 0.00 | 0.06 | 0.105 | IO | | | | 0.95 |
| 89.417 | 0.00 | 0.06 | 0.104 | IO | | | | 0.95 |
| 89.500 | 0.00 | 0.06 | 0.104 | IO | | | | 0.94 |
| 89.583 | 0.00 | 0.06 | 0.103 | IO | | | | 0.94 |
| 89.667 | 0.00 | 0.06 | 0.103 | IO | | | | 0.94 |
| 89.750 | 0.00 | 0.06 | 0.103 | IO | | | | 0.93 |
| 89.833 | 0.00 | 0.06 | 0.102 | IO | | | | 0.93 |
| 89.917 | 0.00 | 0.06 | 0.102 | IO | | | | 0.93 |
| 90.000 | 0.00 | 0.06 | 0.101 | IO | | | | 0.92 |
| 90.083 | 0.00 | 0.06 | 0.101 | IO | | | | 0.92 |
| 90.167 | 0.00 | 0.05 | 0.101 | IO | | | | 0.92 |
| 90.250 | 0.00 | 0.05 | 0.100 | IO | | | | 0.91 |
| 90.333 | 0.00 | 0.05 | 0.100 | IO | | | | 0.91 |
| 90.417 | 0.00 | 0.05 | 0.100 | IO | | | | 0.91 |
| 90.500 | 0.00 | 0.05 | 0.099 | IO | | | | 0.90 |
| 90.583 | 0.00 | 0.05 | 0.099 | IO | | | | 0.90 |
| 90.667 | 0.00 | 0.05 | 0.098 | IO | | | | 0.89 |
| 90.750 | 0.00 | 0.05 | 0.098 | IO | | | | 0.89 |
| 90.833 | 0.00 | 0.05 | 0.098 | IO | | | | 0.89 |
| 90.917 | 0.00 | 0.05 | 0.097 | IO | | | | 0.88 |
| 91.000 | 0.00 | 0.05 | 0.097 | IO | | | | 0.88 |
| 91.083 | 0.00 | 0.05 | 0.097 | IO | | | | 0.88 |
| 91.167 | 0.00 | 0.05 | 0.096 | IO | | | | 0.87 |
| 91.250 | 0.00 | 0.05 | 0.096 | IO | | | | 0.87 |
| 91.333 | 0.00 | 0.05 | 0.096 | IO | | | | 0.87 |
| 91.417 | 0.00 | 0.05 | 0.095 | IO | | | | 0.87 |
| 91.500 | 0.00 | 0.05 | 0.095 | IO | | | | 0.86 |
| 91.583 | 0.00 | 0.05 | 0.094 | IO | | | | 0.86 |
| 91.667 | 0.00 | 0.05 | 0.094 | IO | | | | 0.86 |
| 91.750 | 0.00 | 0.05 | 0.094 | IO | | | | 0.85 |
| 91.833 | 0.00 | 0.05 | 0.093 | IO | | | | 0.85 |
| 91.917 | 0.00 | 0.05 | 0.093 | IO | | | | 0.85 |
| 92.000 | 0.00 | 0.05 | 0.093 | IO | | | | 0.84 |
| 92.083 | 0.00 | 0.05 | 0.092 | IO | | | | 0.84 |
| 92.167 | 0.00 | 0.05 | 0.092 | IO | | | | 0.84 |
| 92.250 | 0.00 | 0.05 | 0.092 | IO | | | | 0.83 |
| 92.333 | 0.00 | 0.05 | 0.091 | IO | | | | 0.83 |
| 92.417 | 0.00 | 0.05 | 0.091 | IO | | | | 0.83 |
| 92.500 | 0.00 | 0.05 | 0.091 | IO | | | | 0.82 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 92.583 | 0.00 | 0.05 | 0.090 | IO | | | | 0.82 |
| 92.667 | 0.00 | 0.05 | 0.090 | IO | | | | 0.82 |
| 92.750 | 0.00 | 0.05 | 0.090 | IO | | | | 0.81 |
| 92.833 | 0.00 | 0.05 | 0.089 | IO | | | | 0.81 |
| 92.917 | 0.00 | 0.05 | 0.089 | IO | | | | 0.81 |
| 93.000 | 0.00 | 0.05 | 0.089 | IO | | | | 0.81 |
| 93.083 | 0.00 | 0.05 | 0.088 | IO | | | | 0.80 |
| 93.167 | 0.00 | 0.05 | 0.088 | IO | | | | 0.80 |
| 93.250 | 0.00 | 0.05 | 0.088 | IO | | | | 0.80 |
| 93.333 | 0.00 | 0.05 | 0.087 | IO | | | | 0.79 |
| 93.417 | 0.00 | 0.05 | 0.087 | IO | | | | 0.79 |
| 93.500 | 0.00 | 0.05 | 0.087 | IO | | | | 0.79 |
| 93.583 | 0.00 | 0.05 | 0.086 | IO | | | | 0.78 |
| 93.667 | 0.00 | 0.05 | 0.086 | IO | | | | 0.78 |
| 93.750 | 0.00 | 0.05 | 0.086 | IO | | | | 0.78 |
| 93.833 | 0.00 | 0.05 | 0.085 | IO | | | | 0.78 |
| 93.917 | 0.00 | 0.05 | 0.085 | IO | | | | 0.77 |
| 94.000 | 0.00 | 0.05 | 0.085 | IO | | | | 0.77 |
| 94.083 | 0.00 | 0.05 | 0.084 | IO | | | | 0.77 |
| 94.167 | 0.00 | 0.05 | 0.084 | IO | | | | 0.76 |
| 94.250 | 0.00 | 0.05 | 0.084 | IO | | | | 0.76 |
| 94.333 | 0.00 | 0.05 | 0.083 | IO | | | | 0.76 |
| 94.417 | 0.00 | 0.05 | 0.083 | IO | | | | 0.76 |
| 94.500 | 0.00 | 0.05 | 0.083 | IO | | | | 0.75 |
| 94.583 | 0.00 | 0.05 | 0.083 | IO | | | | 0.75 |
| 94.667 | 0.00 | 0.04 | 0.082 | IO | | | | 0.75 |
| 94.750 | 0.00 | 0.04 | 0.082 | IO | | | | 0.74 |
| 94.833 | 0.00 | 0.04 | 0.082 | IO | | | | 0.74 |
| 94.917 | 0.00 | 0.04 | 0.081 | IO | | | | 0.74 |
| 95.000 | 0.00 | 0.04 | 0.081 | IO | | | | 0.74 |
| 95.083 | 0.00 | 0.04 | 0.081 | IO | | | | 0.73 |
| 95.167 | 0.00 | 0.04 | 0.080 | IO | | | | 0.73 |
| 95.250 | 0.00 | 0.04 | 0.080 | IO | | | | 0.73 |
| 95.333 | 0.00 | 0.04 | 0.080 | IO | | | | 0.73 |
| 95.417 | 0.00 | 0.04 | 0.079 | IO | | | | 0.72 |
| 95.500 | 0.00 | 0.04 | 0.079 | IO | | | | 0.72 |
| 95.583 | 0.00 | 0.04 | 0.079 | IO | | | | 0.72 |
| 95.667 | 0.00 | 0.04 | 0.079 | IO | | | | 0.71 |
| 95.750 | 0.00 | 0.04 | 0.078 | IO | | | | 0.71 |
| 95.833 | 0.00 | 0.04 | 0.078 | IO | | | | 0.71 |
| 95.917 | 0.00 | 0.04 | 0.078 | IO | | | | 0.71 |
| 96.000 | 0.00 | 0.04 | 0.077 | IO | | | | 0.70 |
| 96.083 | 0.00 | 0.04 | 0.077 | IO | | | | 0.70 |
| 96.167 | 0.00 | 0.04 | 0.077 | IO | | | | 0.70 |
| 96.250 | 0.00 | 0.04 | 0.077 | IO | | | | 0.70 |
| 96.333 | 0.00 | 0.04 | 0.076 | IO | | | | 0.69 |
| 96.417 | 0.00 | 0.04 | 0.076 | IO | | | | 0.69 |
| 96.500 | 0.00 | 0.04 | 0.076 | IO | | | | 0.69 |
| 96.583 | 0.00 | 0.04 | 0.075 | IO | | | | 0.69 |
| 96.667 | 0.00 | 0.04 | 0.075 | IO | | | | 0.68 |
| 96.750 | 0.00 | 0.04 | 0.075 | O | | | | 0.68 |
| 96.833 | 0.00 | 0.04 | 0.075 | O | | | | 0.68 |
| 96.917 | 0.00 | 0.04 | 0.074 | O | | | | 0.68 |
| 97.000 | 0.00 | 0.04 | 0.074 | O | | | | 0.67 |
| 97.083 | 0.00 | 0.04 | 0.074 | O | | | | 0.67 |
| 97.167 | 0.00 | 0.04 | 0.073 | O | | | | 0.67 |
| 97.250 | 0.00 | 0.04 | 0.073 | O | | | | 0.67 |
| 97.333 | 0.00 | 0.04 | 0.073 | O | | | | 0.66 |
| 97.417 | 0.00 | 0.04 | 0.073 | O | | | | 0.66 |
| 97.500 | 0.00 | 0.04 | 0.072 | O | | | | 0.66 |
| 97.583 | 0.00 | 0.04 | 0.072 | O | | | | 0.66 |
| 97.667 | 0.00 | 0.04 | 0.072 | O | | | | 0.65 |
| 97.750 | 0.00 | 0.04 | 0.072 | O | | | | 0.65 |
| 97.833 | 0.00 | 0.04 | 0.071 | O | | | | 0.65 |
| 97.917 | 0.00 | 0.04 | 0.071 | O | | | | 0.65 |
| 98.000 | 0.00 | 0.04 | 0.071 | O | | | | 0.64 |
| 98.083 | 0.00 | 0.04 | 0.070 | O | | | | 0.64 |
| 98.167 | 0.00 | 0.04 | 0.070 | O | | | | 0.64 |
| 98.250 | 0.00 | 0.04 | 0.070 | O | | | | 0.64 |
| 98.333 | 0.00 | 0.04 | 0.070 | O | | | | 0.63 |
| 98.417 | 0.00 | 0.04 | 0.069 | O | | | | 0.63 |
| 98.500 | 0.00 | 0.04 | 0.069 | O | | | | 0.63 |
| 98.583 | 0.00 | 0.04 | 0.069 | O | | | | 0.63 |
| 98.667 | 0.00 | 0.04 | 0.069 | O | | | | 0.62 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 98.750 | 0.00 | 0.04 | 0.068 | O | \| | \| | \| | 0.62 |
| 98.833 | 0.00 | 0.04 | 0.068 | O | \| | \| | \| | 0.62 |
| 98.917 | 0.00 | 0.04 | 0.068 | O | \| | \| | \| | 0.62 |
| 99.000 | 0.00 | 0.04 | 0.068 | O | \| | \| | \| | 0.61 |
| 99.083 | 0.00 | 0.04 | 0.067 | O | \| | \| | \| | 0.61 |
| 99.167 | 0.00 | 0.04 | 0.067 | O | \| | \| | \| | 0.61 |
| 99.250 | 0.00 | 0.04 | 0.067 | O | \| | \| | \| | 0.61 |
| 99.333 | 0.00 | 0.04 | 0.067 | O | \| | \| | \| | 0.61 |
| 99.417 | 0.00 | 0.04 | 0.066 | O | \| | \| | \| | 0.60 |
| 99.500 | 0.00 | 0.04 | 0.066 | O | \| | \| | \| | 0.60 |
| 99.583 | 0.00 | 0.04 | 0.066 | O | \| | \| | \| | 0.60 |
| 99.667 | 0.00 | 0.04 | 0.066 | O | \| | \| | \| | 0.60 |
| 99.750 | 0.00 | 0.04 | 0.065 | O | \| | \| | \| | 0.59 |
| 99.833 | 0.00 | 0.04 | 0.065 | O | \| | \| | \| | 0.59 |
| 99.917 | 0.00 | 0.04 | 0.065 | O | \| | \| | \| | 0.59 |
| 100.000 | 0.00 | 0.04 | 0.065 | O | \| | \| | \| | 0.59 |
| 100.083 | 0.00 | 0.04 | 0.064 | O | \| | \| | \| | 0.59 |
| 100.167 | 0.00 | 0.03 | 0.064 | O | \| | \| | \| | 0.58 |
| 100.250 | 0.00 | 0.03 | 0.064 | O | \| | \| | \| | 0.58 |
| 100.333 | 0.00 | 0.03 | 0.064 | O | \| | \| | \| | 0.58 |
| 100.417 | 0.00 | 0.03 | 0.063 | O | \| | \| | \| | 0.58 |
| 100.500 | 0.00 | 0.03 | 0.063 | O | \| | \| | \| | 0.57 |
| 100.583 | 0.00 | 0.03 | 0.063 | O | \| | \| | \| | 0.57 |
| 100.667 | 0.00 | 0.03 | 0.063 | O | \| | \| | \| | 0.57 |
| 100.750 | 0.00 | 0.03 | 0.062 | O | \| | \| | \| | 0.57 |
| 100.833 | 0.00 | 0.03 | 0.062 | O | \| | \| | \| | 0.57 |
| 100.917 | 0.00 | 0.03 | 0.062 | O | \| | \| | \| | 0.56 |
| 101.000 | 0.00 | 0.03 | 0.062 | O | \| | \| | \| | 0.56 |
| 101.083 | 0.00 | 0.03 | 0.062 | O | \| | \| | \| | 0.56 |
| 101.167 | 0.00 | 0.03 | 0.061 | O | \| | \| | \| | 0.56 |
| 101.250 | 0.00 | 0.03 | 0.061 | O | \| | \| | \| | 0.56 |
| 101.333 | 0.00 | 0.03 | 0.061 | O | \| | \| | \| | 0.55 |
| 101.417 | 0.00 | 0.03 | 0.061 | O | \| | \| | \| | 0.55 |
| 101.500 | 0.00 | 0.03 | 0.060 | O | \| | \| | \| | 0.55 |
| 101.583 | 0.00 | 0.03 | 0.060 | O | \| | \| | \| | 0.55 |
| 101.667 | 0.00 | 0.03 | 0.060 | O | \| | \| | \| | 0.55 |
| 101.750 | 0.00 | 0.03 | 0.060 | O | \| | \| | \| | 0.54 |
| 101.833 | 0.00 | 0.03 | 0.060 | O | \| | \| | \| | 0.54 |
| 101.917 | 0.00 | 0.03 | 0.059 | O | \| | \| | \| | 0.54 |
| 102.000 | 0.00 | 0.03 | 0.059 | O | \| | \| | \| | 0.54 |
| 102.083 | 0.00 | 0.03 | 0.059 | O | \| | \| | \| | 0.53 |
| 102.167 | 0.00 | 0.03 | 0.059 | O | \| | \| | \| | 0.53 |
| 102.250 | 0.00 | 0.03 | 0.058 | O | \| | \| | \| | 0.53 |
| 102.333 | 0.00 | 0.03 | 0.058 | O | \| | \| | \| | 0.53 |
| 102.417 | 0.00 | 0.03 | 0.058 | O | \| | \| | \| | 0.53 |
| 102.500 | 0.00 | 0.03 | 0.058 | O | \| | \| | \| | 0.52 |
| 102.583 | 0.00 | 0.03 | 0.058 | O | \| | \| | \| | 0.52 |
| 102.667 | 0.00 | 0.03 | 0.057 | O | \| | \| | \| | 0.52 |
| 102.750 | 0.00 | 0.03 | 0.057 | O | \| | \| | \| | 0.52 |
| 102.833 | 0.00 | 0.03 | 0.057 | O | \| | \| | \| | 0.52 |
| 102.917 | 0.00 | 0.03 | 0.057 | O | \| | \| | \| | 0.52 |
| 103.000 | 0.00 | 0.03 | 0.056 | O | \| | \| | \| | 0.51 |
| 103.083 | 0.00 | 0.03 | 0.056 | O | \| | \| | \| | 0.51 |
| 103.167 | 0.00 | 0.03 | 0.056 | O | \| | \| | \| | 0.51 |
| 103.250 | 0.00 | 0.03 | 0.056 | O | \| | \| | \| | 0.51 |
| 103.333 | 0.00 | 0.03 | 0.056 | O | \| | \| | \| | 0.51 |
| 103.417 | 0.00 | 0.03 | 0.055 | O | \| | \| | \| | 0.50 |
| 103.500 | 0.00 | 0.03 | 0.055 | O | \| | \| | \| | 0.50 |
| 103.583 | 0.00 | 0.03 | 0.055 | O | \| | \| | \| | 0.50 |
| 103.667 | 0.00 | 0.03 | 0.055 | O | \| | \| | \| | 0.50 |
| 103.750 | 0.00 | 0.03 | 0.055 | O | \| | \| | \| | 0.50 |
| 103.833 | 0.00 | 0.03 | 0.054 | O | \| | \| | \| | 0.49 |
| 103.917 | 0.00 | 0.03 | 0.054 | O | \| | \| | \| | 0.49 |
| 104.000 | 0.00 | 0.03 | 0.054 | O | \| | \| | \| | 0.49 |
| 104.083 | 0.00 | 0.03 | 0.054 | O | \| | \| | \| | 0.49 |
| 104.167 | 0.00 | 0.03 | 0.054 | O | \| | \| | \| | 0.49 |
| 104.250 | 0.00 | 0.03 | 0.053 | O | \| | \| | \| | 0.49 |
| 104.333 | 0.00 | 0.03 | 0.053 | O | \| | \| | \| | 0.48 |
| 104.417 | 0.00 | 0.03 | 0.053 | O | \| | \| | \| | 0.48 |
| 104.500 | 0.00 | 0.03 | 0.053 | O | \| | \| | \| | 0.48 |
| 104.583 | 0.00 | 0.03 | 0.053 | O | \| | \| | \| | 0.48 |
| 104.667 | 0.00 | 0.03 | 0.052 | O | \| | \| | \| | 0.48 |
| 104.750 | 0.00 | 0.03 | 0.052 | O | \| | \| | \| | 0.47 |
| 104.833 | 0.00 | 0.03 | 0.052 | O | \| | \| | \| | 0.47 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 104.917 | 0.00 | 0.03 | 0.052 | O | | | | | 0.47 |
| 105.000 | 0.00 | 0.03 | 0.052 | O | | | | | 0.47 |
| 105.083 | 0.00 | 0.03 | 0.051 | O | | | | | 0.47 |
| 105.167 | 0.00 | 0.03 | 0.051 | O | | | | | 0.47 |
| 105.250 | 0.00 | 0.03 | 0.051 | O | | | | | 0.46 |
| 105.333 | 0.00 | 0.03 | 0.051 | O | | | | | 0.46 |
| 105.417 | 0.00 | 0.03 | 0.051 | O | | | | | 0.46 |
| 105.500 | 0.00 | 0.03 | 0.050 | O | | | | | 0.46 |
| 105.583 | 0.00 | 0.03 | 0.050 | O | | | | | 0.46 |
| 105.667 | 0.00 | 0.03 | 0.050 | O | | | | | 0.46 |
| 105.750 | 0.00 | 0.03 | 0.050 | O | | | | | 0.45 |
| 105.833 | 0.00 | 0.03 | 0.050 | O | | | | | 0.45 |
| 105.917 | 0.00 | 0.03 | 0.050 | O | | | | | 0.45 |
| 106.000 | 0.00 | 0.03 | 0.049 | O | | | | | 0.45 |
| 106.083 | 0.00 | 0.03 | 0.049 | O | | | | | 0.45 |
| 106.167 | 0.00 | 0.03 | 0.049 | O | | | | | 0.44 |
| 106.250 | 0.00 | 0.03 | 0.049 | O | | | | | 0.44 |
| 106.333 | 0.00 | 0.03 | 0.049 | O | | | | | 0.44 |
| 106.417 | 0.00 | 0.03 | 0.048 | O | | | | | 0.44 |
| 106.500 | 0.00 | 0.03 | 0.048 | O | | | | | 0.44 |
| 106.583 | 0.00 | 0.03 | 0.048 | O | | | | | 0.44 |
| 106.667 | 0.00 | 0.03 | 0.048 | O | | | | | 0.44 |
| 106.750 | 0.00 | 0.03 | 0.048 | O | | | | | 0.43 |
| 106.833 | 0.00 | 0.03 | 0.047 | O | | | | | 0.43 |
| 106.917 | 0.00 | 0.03 | 0.047 | O | | | | | 0.43 |
| 107.000 | 0.00 | 0.03 | 0.047 | O | | | | | 0.43 |
| 107.083 | 0.00 | 0.03 | 0.047 | O | | | | | 0.43 |
| 107.167 | 0.00 | 0.03 | 0.047 | O | | | | | 0.43 |
| 107.250 | 0.00 | 0.03 | 0.047 | O | | | | | 0.42 |
| 107.333 | 0.00 | 0.03 | 0.046 | O | | | | | 0.42 |
| 107.417 | 0.00 | 0.03 | 0.046 | O | | | | | 0.42 |
| 107.500 | 0.00 | 0.03 | 0.046 | O | | | | | 0.42 |
| 107.583 | 0.00 | 0.03 | 0.046 | O | | | | | 0.42 |
| 107.667 | 0.00 | 0.02 | 0.046 | O | | | | | 0.42 |
| 107.750 | 0.00 | 0.02 | 0.046 | O | | | | | 0.41 |
| 107.833 | 0.00 | 0.02 | 0.045 | O | | | | | 0.41 |
| 107.917 | 0.00 | 0.02 | 0.045 | O | | | | | 0.41 |
| 108.000 | 0.00 | 0.02 | 0.045 | O | | | | | 0.41 |
| 108.083 | 0.00 | 0.02 | 0.045 | O | | | | | 0.41 |
| 108.167 | 0.00 | 0.02 | 0.045 | O | | | | | 0.41 |
| 108.250 | 0.00 | 0.02 | 0.045 | O | | | | | 0.41 |
| 108.333 | 0.00 | 0.02 | 0.044 | O | | | | | 0.40 |
| 108.417 | 0.00 | 0.02 | 0.044 | O | | | | | 0.40 |
| 108.500 | 0.00 | 0.02 | 0.044 | O | | | | | 0.40 |
| 108.583 | 0.00 | 0.02 | 0.044 | O | | | | | 0.40 |
| 108.667 | 0.00 | 0.02 | 0.044 | O | | | | | 0.40 |
| 108.750 | 0.00 | 0.02 | 0.044 | O | | | | | 0.40 |
| 108.833 | 0.00 | 0.02 | 0.043 | O | | | | | 0.39 |
| 108.917 | 0.00 | 0.02 | 0.043 | O | | | | | 0.39 |
| 109.000 | 0.00 | 0.02 | 0.043 | O | | | | | 0.39 |
| 109.083 | 0.00 | 0.02 | 0.043 | O | | | | | 0.39 |
| 109.167 | 0.00 | 0.02 | 0.043 | O | | | | | 0.39 |
| 109.250 | 0.00 | 0.02 | 0.043 | O | | | | | 0.39 |
| 109.333 | 0.00 | 0.02 | 0.042 | O | | | | | 0.39 |
| 109.417 | 0.00 | 0.02 | 0.042 | O | | | | | 0.38 |
| 109.500 | 0.00 | 0.02 | 0.042 | O | | | | | 0.38 |
| 109.583 | 0.00 | 0.02 | 0.042 | O | | | | | 0.38 |
| 109.667 | 0.00 | 0.02 | 0.042 | O | | | | | 0.38 |
| 109.750 | 0.00 | 0.02 | 0.042 | O | | | | | 0.38 |
| 109.833 | 0.00 | 0.02 | 0.041 | O | | | | | 0.38 |
| 109.917 | 0.00 | 0.02 | 0.041 | O | | | | | 0.38 |
| 110.000 | 0.00 | 0.02 | 0.041 | O | | | | | 0.37 |
| 110.083 | 0.00 | 0.02 | 0.041 | O | | | | | 0.37 |
| 110.167 | 0.00 | 0.02 | 0.041 | O | | | | | 0.37 |
| 110.250 | 0.00 | 0.02 | 0.041 | O | | | | | 0.37 |
| 110.333 | 0.00 | 0.02 | 0.041 | O | | | | | 0.37 |
| 110.417 | 0.00 | 0.02 | 0.040 | O | | | | | 0.37 |
| 110.500 | 0.00 | 0.02 | 0.040 | O | | | | | 0.37 |
| 110.583 | 0.00 | 0.02 | 0.040 | O | | | | | 0.36 |
| 110.667 | 0.00 | 0.02 | 0.040 | O | | | | | 0.36 |
| 110.750 | 0.00 | 0.02 | 0.040 | O | | | | | 0.36 |
| 110.833 | 0.00 | 0.02 | 0.040 | O | | | | | 0.36 |
| 110.917 | 0.00 | 0.02 | 0.040 | O | | | | | 0.36 |
| 111.000 | 0.00 | 0.02 | 0.039 | O | | | | | 0.36 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 111.083 | 0.00 | 0.02 | 0.039 | O | \| | \| | \| | \| | 0.36 |
| 111.167 | 0.00 | 0.02 | 0.039 | O | \| | \| | \| | \| | 0.36 |
| 111.250 | 0.00 | 0.02 | 0.039 | O | \| | \| | \| | \| | 0.35 |
| 111.333 | 0.00 | 0.02 | 0.039 | O | \| | \| | \| | \| | 0.35 |
| 111.417 | 0.00 | 0.02 | 0.039 | O | \| | \| | \| | \| | 0.35 |
| 111.500 | 0.00 | 0.02 | 0.038 | O | \| | \| | \| | \| | 0.35 |
| 111.583 | 0.00 | 0.02 | 0.038 | O | \| | \| | \| | \| | 0.35 |
| 111.667 | 0.00 | 0.02 | 0.038 | O | \| | \| | \| | \| | 0.35 |
| 111.750 | 0.00 | 0.02 | 0.038 | O | \| | \| | \| | \| | 0.35 |
| 111.833 | 0.00 | 0.02 | 0.038 | O | \| | \| | \| | \| | 0.34 |
| 111.917 | 0.00 | 0.02 | 0.038 | O | \| | \| | \| | \| | 0.34 |
| 112.000 | 0.00 | 0.02 | 0.038 | O | \| | \| | \| | \| | 0.34 |
| 112.083 | 0.00 | 0.02 | 0.037 | O | \| | \| | \| | \| | 0.34 |
| 112.167 | 0.00 | 0.02 | 0.037 | O | \| | \| | \| | \| | 0.34 |
| 112.250 | 0.00 | 0.02 | 0.037 | O | \| | \| | \| | \| | 0.34 |
| 112.333 | 0.00 | 0.02 | 0.037 | O | \| | \| | \| | \| | 0.34 |
| 112.417 | 0.00 | 0.02 | 0.037 | O | \| | \| | \| | \| | 0.34 |
| 112.500 | 0.00 | 0.02 | 0.037 | O | \| | \| | \| | \| | 0.33 |
| 112.583 | 0.00 | 0.02 | 0.037 | O | \| | \| | \| | \| | 0.33 |
| 112.667 | 0.00 | 0.02 | 0.037 | O | \| | \| | \| | \| | 0.33 |
| 112.750 | 0.00 | 0.02 | 0.036 | O | \| | \| | \| | \| | 0.33 |
| 112.833 | 0.00 | 0.02 | 0.036 | O | \| | \| | \| | \| | 0.33 |
| 112.917 | 0.00 | 0.02 | 0.036 | O | \| | \| | \| | \| | 0.33 |
| 113.000 | 0.00 | 0.02 | 0.036 | O | \| | \| | \| | \| | 0.33 |
| 113.083 | 0.00 | 0.02 | 0.036 | O | \| | \| | \| | \| | 0.33 |
| 113.167 | 0.00 | 0.02 | 0.036 | O | \| | \| | \| | \| | 0.32 |
| 113.250 | 0.00 | 0.02 | 0.036 | O | \| | \| | \| | \| | 0.32 |
| 113.333 | 0.00 | 0.02 | 0.035 | O | \| | \| | \| | \| | 0.32 |
| 113.417 | 0.00 | 0.02 | 0.035 | O | \| | \| | \| | \| | 0.32 |
| 113.500 | 0.00 | 0.02 | 0.035 | O | \| | \| | \| | \| | 0.32 |
| 113.583 | 0.00 | 0.02 | 0.035 | O | \| | \| | \| | \| | 0.32 |
| 113.667 | 0.00 | 0.02 | 0.035 | O | \| | \| | \| | \| | 0.32 |
| 113.750 | 0.00 | 0.02 | 0.035 | O | \| | \| | \| | \| | 0.32 |
| 113.833 | 0.00 | 0.02 | 0.035 | O | \| | \| | \| | \| | 0.31 |
| 113.917 | 0.00 | 0.02 | 0.035 | O | \| | \| | \| | \| | 0.31 |
| 114.000 | 0.00 | 0.02 | 0.034 | O | \| | \| | \| | \| | 0.31 |
| 114.083 | 0.00 | 0.02 | 0.034 | O | \| | \| | \| | \| | 0.31 |
| 114.167 | 0.00 | 0.02 | 0.034 | O | \| | \| | \| | \| | 0.31 |
| 114.250 | 0.00 | 0.02 | 0.034 | O | \| | \| | \| | \| | 0.31 |
| 114.333 | 0.00 | 0.02 | 0.034 | O | \| | \| | \| | \| | 0.31 |
| 114.417 | 0.00 | 0.02 | 0.034 | O | \| | \| | \| | \| | 0.31 |
| 114.500 | 0.00 | 0.02 | 0.034 | O | \| | \| | \| | \| | 0.31 |
| 114.583 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 114.667 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 114.750 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 114.833 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 114.917 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 115.000 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 115.083 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 115.167 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 115.250 | 0.00 | 0.02 | 0.033 | O | \| | \| | \| | \| | 0.30 |
| 115.333 | 0.00 | 0.02 | 0.032 | O | \| | \| | \| | \| | 0.29 |
| 115.417 | 0.00 | 0.02 | 0.032 | O | \| | \| | \| | \| | 0.29 |
| 115.500 | 0.00 | 0.02 | 0.032 | O | \| | \| | \| | \| | 0.29 |
| 115.583 | 0.00 | 0.02 | 0.032 | O | \| | \| | \| | \| | 0.29 |
| 115.667 | 0.00 | 0.02 | 0.032 | O | \| | \| | \| | \| | 0.29 |
| 115.750 | 0.00 | 0.02 | 0.032 | O | \| | \| | \| | \| | 0.29 |
| 115.833 | 0.00 | 0.02 | 0.032 | O | \| | \| | \| | \| | 0.29 |
| 115.917 | 0.00 | 0.02 | 0.032 | O | \| | \| | \| | \| | 0.29 |
| 116.000 | 0.00 | 0.02 | 0.031 | O | \| | \| | \| | \| | 0.29 |
| 116.083 | 0.00 | 0.02 | 0.031 | O | \| | \| | \| | \| | 0.28 |
| 116.167 | 0.00 | 0.02 | 0.031 | O | \| | \| | \| | \| | 0.28 |
| 116.250 | 0.00 | 0.02 | 0.031 | O | \| | \| | \| | \| | 0.28 |
| 116.333 | 0.00 | 0.02 | 0.031 | O | \| | \| | \| | \| | 0.28 |
| 116.417 | 0.00 | 0.02 | 0.031 | O | \| | \| | \| | \| | 0.28 |
| 116.500 | 0.00 | 0.02 | 0.031 | O | \| | \| | \| | \| | 0.28 |
| 116.583 | 0.00 | 0.02 | 0.031 | O | \| | \| | \| | \| | 0.28 |
| 116.667 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.28 |
| 116.750 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.28 |
| 116.833 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.28 |
| 116.917 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.27 |
| 117.000 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.27 |
| 117.083 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.27 |
| 117.167 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.27 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 117.250 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.27 |
| 117.333 | 0.00 | 0.02 | 0.030 | O | \| | \| | \| | \| | 0.27 |
| 117.417 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.27 |
| 117.500 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.27 |
| 117.583 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.27 |
| 117.667 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.26 |
| 117.750 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.26 |
| 117.833 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.26 |
| 117.917 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.26 |
| 118.000 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.26 |
| 118.083 | 0.00 | 0.02 | 0.029 | O | \| | \| | \| | \| | 0.26 |
| 118.167 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.26 |
| 118.250 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.26 |
| 118.333 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.26 |
| 118.417 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.26 |
| 118.500 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.26 |
| 118.583 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.25 |
| 118.667 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.25 |
| 118.750 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.25 |
| 118.833 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.25 |
| 118.917 | 0.00 | 0.02 | 0.028 | O | \| | \| | \| | \| | 0.25 |
| 119.000 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.25 |
| 119.083 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.25 |
| 119.167 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.25 |
| 119.250 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.25 |
| 119.333 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.25 |
| 119.417 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.24 |
| 119.500 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.24 |
| 119.583 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.24 |
| 119.667 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.24 |
| 119.750 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.24 |
| 119.833 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.24 |
| 119.917 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.24 |
| 120.000 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.24 |
| 120.083 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.24 |
| 120.167 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.24 |
| 120.250 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.24 |
| 120.333 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.23 |
| 120.417 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.23 |
| 120.500 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.23 |
| 120.583 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.23 |
| 120.667 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.23 |
| 120.750 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.23 |
| 120.833 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.23 |
| 120.917 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.23 |
| 121.000 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.23 |
| 121.083 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.23 |
| 121.167 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.23 |
| 121.250 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.23 |
| 121.333 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.22 |
| 121.417 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.22 |
| 121.500 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.22 |
| 121.583 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 121.667 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 121.750 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 121.833 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 121.917 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 122.000 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 122.083 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 122.167 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 122.250 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.22 |
| 122.333 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.21 |
| 122.417 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.21 |
| 122.500 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 122.583 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 122.667 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 122.750 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 122.833 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 122.917 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 123.000 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 123.083 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 123.167 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 123.250 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |
| 123.333 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.21 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 123.417 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 123.500 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 123.583 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 123.667 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 123.750 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 123.833 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 123.917 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 124.000 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 124.083 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 124.167 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 124.250 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 124.333 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.20 |
| 124.417 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.20 |
| 124.500 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 124.583 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 124.667 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 124.750 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 124.833 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 124.917 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 125.000 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 125.083 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 125.167 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 125.250 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 125.333 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 125.417 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.19 |
| 125.500 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.19 |
| 125.583 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.19 |
| 125.667 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 125.750 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 125.833 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 125.917 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 126.000 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 126.083 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 126.167 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 126.250 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 126.333 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 126.417 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 126.500 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.18 |
| 126.583 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.18 |
| 126.667 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.18 |
| 126.750 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.18 |
| 126.833 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.18 |
| 126.917 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.000 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.083 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.167 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.250 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.333 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.417 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.500 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.583 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.667 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.17 |
| 127.750 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.17 |
| 127.833 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.17 |
| 127.917 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.17 |
| 128.000 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.17 |
| 128.083 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.17 |
| 128.167 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.17 |
| 128.250 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 128.333 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 128.417 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 128.500 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 128.583 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 128.667 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 128.750 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 128.833 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 128.917 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.16 |
| 129.000 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.16 |
| 129.083 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.16 |
| 129.167 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.16 |
| 129.250 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.16 |
| 129.333 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.16 |
| 129.417 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.16 |
| 129.500 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.16 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 129.583 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 129.667 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 129.750 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 129.833 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 129.917 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 130.000 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 130.083 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 130.167 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 130.250 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.15 |
| 130.333 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 130.417 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 130.500 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 130.583 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 130.667 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 130.750 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 130.833 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 130.917 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 131.000 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.15 |
| 131.083 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.14 |
| 131.167 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.14 |
| 131.250 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.14 |
| 131.333 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.14 |
| 131.417 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.14 |
| 131.500 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.14 |
| 131.583 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.14 |
| 131.667 | 0.00 | 0.01 | 0.016 | O | \| | \| | \| | \| | 0.14 |
| 131.750 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 131.833 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 131.917 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.000 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.083 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.167 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.250 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.333 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.417 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.500 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.583 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.14 |
| 132.667 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.13 |
| 132.750 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.13 |
| 132.833 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.13 |
| 132.917 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.13 |
| 133.000 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.13 |
| 133.083 | 0.00 | 0.01 | 0.015 | O | \| | \| | \| | \| | 0.13 |
| 133.167 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.250 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.333 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.417 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.500 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.583 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.667 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.750 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.833 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 133.917 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 134.000 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 134.083 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 134.167 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 134.250 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.13 |
| 134.333 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.12 |
| 134.417 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.12 |
| 134.500 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.12 |
| 134.583 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.12 |
| 134.667 | 0.00 | 0.01 | 0.014 | O | \| | \| | \| | \| | 0.12 |
| 134.750 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 134.833 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 134.917 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.000 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.083 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.167 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.250 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.333 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.417 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.500 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.583 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |
| 135.667 | 0.00 | 0.01 | 0.013 | O | \| | \| | \| | \| | 0.12 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 135.750 | 0.00 | 0.01 | 0.013 | O | | | | | 0.12 |
| 135.833 | 0.00 | 0.01 | 0.013 | O | | | | | 0.12 |
| 135.917 | 0.00 | 0.01 | 0.013 | O | | | | | 0.12 |
| 136.000 | 0.00 | 0.01 | 0.013 | O | | | | | 0.12 |
| 136.083 | 0.00 | 0.01 | 0.013 | O | | | | | 0.12 |
| 136.167 | 0.00 | 0.01 | 0.013 | O | | | | | 0.12 |
| 136.250 | 0.00 | 0.01 | 0.013 | O | | | | | 0.11 |
| 136.333 | 0.00 | 0.01 | 0.013 | O | | | | | 0.11 |
| 136.417 | 0.00 | 0.01 | 0.013 | O | | | | | 0.11 |
| 136.500 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 136.583 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 136.667 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 136.750 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 136.833 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 136.917 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.000 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.083 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.167 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.250 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.333 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.417 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.500 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.583 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.667 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.750 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.833 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 137.917 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 138.000 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 138.083 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 138.167 | 0.00 | 0.01 | 0.012 | O | | | | | 0.11 |
| 138.250 | 0.00 | 0.01 | 0.012 | O | | | | | 0.10 |
| 138.333 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 138.417 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 138.500 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 138.583 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 138.667 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 138.750 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 138.833 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 138.917 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.000 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.083 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.167 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.250 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.333 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.417 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.500 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.583 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.667 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.750 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.833 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 139.917 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 140.000 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 140.083 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 140.167 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 140.250 | 0.00 | 0.01 | 0.011 | O | | | | | 0.10 |
| 140.333 | 0.00 | 0.01 | 0.010 | O | | | | | 0.10 |
| 140.417 | 0.00 | 0.01 | 0.010 | O | | | | | 0.10 |
| 140.500 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 140.583 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 140.667 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 140.750 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 140.833 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 140.917 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.000 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.083 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.167 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.250 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.333 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.417 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.500 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.583 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.667 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.750 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |
| 141.833 | 0.00 | 0.01 | 0.010 | O | | | | | 0.09 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 141.917 | 0.00 | 0.01 | 0.010 | O | \| | \| | \| | \| | 0.09 |
| 142.000 | 0.00 | 0.01 | 0.010 | O | \| | \| | \| | \| | 0.09 |
| 142.083 | 0.00 | 0.01 | 0.010 | O | \| | \| | \| | \| | 0.09 |
| 142.167 | 0.00 | 0.01 | 0.010 | O | \| | \| | \| | \| | 0.09 |
| 142.250 | 0.00 | 0.01 | 0.010 | O | \| | \| | \| | \| | 0.09 |
| 142.333 | 0.00 | 0.01 | 0.010 | O | \| | \| | \| | \| | 0.09 |
| 142.417 | 0.00 | 0.01 | 0.010 | O | \| | \| | \| | \| | 0.09 |
| 142.500 | 0.00 | 0.01 | 0.010 | O | \| | \| | \| | \| | 0.09 |
| 142.583 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.09 |
| 142.667 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.09 |
| 142.750 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.09 |
| 142.833 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.09 |
| 142.917 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.000 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.083 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.167 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.250 | 0.00 | 0.01 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 143.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 144.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 145.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.08 |
| 145.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.08 |
| 145.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.08 |
| 145.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.08 |
| 145.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.08 |
| 145.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.08 |
| 145.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.08 |
| 145.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.08 |
| 145.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 145.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 145.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 145.917 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.000 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 146.917 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.000 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.07 |
| 147.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 147.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 148.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.07 |
| 148.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 149.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 150.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.06 |
| 151.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 151.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 152.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 152.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 152.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 152.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 152.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 152.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 152.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.06 |
| 152.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 152.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 152.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 152.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 152.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 153.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 154.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 154.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 154.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 154.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 154.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 154.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 154.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 154.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.05 |
| 154.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 154.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 154.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 154.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 155.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 156.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.05 |
| 157.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 157.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 158.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 159.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 159.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.04 |
| 159.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 159.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 160.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 160.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 161.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 162.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 162.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 162.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 162.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 162.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 162.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 162.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.04 |
| 162.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 162.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 162.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 162.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 162.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 163.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.03 |
| 164.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 164.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 164.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 165.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 166.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 166.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 167.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 168.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 169.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 170.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.03 |
| 170.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 170.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 171.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 172.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 172.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.02 |
| 172.167 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 172.250 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 172.333 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 172.417 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 172.500 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 172.583 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 172.667 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 172.750 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 172.833 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 172.917 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.000 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.083 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.167 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.250 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.333 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.417 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.500 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.583 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.667 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.750 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.833 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 173.917 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.000 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.083 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.167 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.250 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.333 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.417 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.500 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.583 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.667 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.750 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.833 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 174.917 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.000 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.083 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.167 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.250 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.333 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.417 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.500 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.583 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.667 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.750 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.833 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 175.917 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.000 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.083 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.167 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.250 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.333 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.417 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.500 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.583 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.667 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.750 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.833 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 176.917 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.000 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.083 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.167 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.250 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.333 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.417 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.500 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.583 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.667 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.750 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.833 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 177.917 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.000 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.083 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.167 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.250 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.333 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.417 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.500 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.583 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.667 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.750 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |
| 178.833 | 0.00 | 0.00 | 0.002 | O | \| | \| | \| | \| | 0.02 |

```
178.917    0.00    0.00      0.002  O       |       |       |       |     0.02
179.000    0.00    0.00      0.002  O       |       |       |       |     0.02
179.083    0.00    0.00      0.002  O       |       |       |       |     0.02


 Remaining water in basin =    0.00 (Ac.Ft)


 ****************************HYDROGRAPH DATA****************************
               Number of intervals =  2149
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =        0.147 (CFS)
               Total volume =       0.793 (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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```

# Inflow Hydrographs

| Manning "n" Value Worksheet | | | | | |
|---|---|---|---|---|---|
| **Drainage Area B2 - 42.59 Ac (proposed)** | | | | | |
| [1] | [2] | [3] | [4] | [5] | [7] |
| **Subarea** | **Area in (Ac)** | **Land Use (Plate D-5.6)** | **"n" Value** | **Decimal portion of Area [2] / SUM[2]** | **Average "n" Value [4] * [5]** |
| | | Natural | 0.04 | 0.00 | 0.000 |
| | 0.6 | Basin | 0.035 | 0.01 | 0.000 |
| | | Res 1/2 Ac | 0.015 | 0.00 | 0.000 |
| | | Res 1/4 Ac | 0.015 | 0.00 | 0.000 |
| | | Res < 1/4 Ac | 0.015 | 0.00 | 0.000 |
| | | Apartment | 0.015 | 0.00 | 0.000 |
| | | Mobil Home | 0.015 | 0.00 | 0.000 |
| | | Hospital | 0.02 | 0.00 | 0.000 |
| | 41.99 | Commercial | 0.015 | 0.99 | 0.015 |
| | | | | | |
| Sum = | 42.59 | | | 1.00 | **0.015** |

| Runoff Index (RI) Worksheet | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drainage Area B2 - 42.59 Ac (proposed)** | | | | | | | |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |
| **Subarea** | **Area in (Ac)** | **Soil Group** | **Cover Type** | **RI Number (Plate E6-1)** | **Land Use** | **Decimal portion of Area [2] / SUM[2]** | **Average RI Value [5] * [7]** |
| **Natural** | | B | grass (fair) | 69 | Natural | | 0.0 |
| | | C | grass (fair) | 79 | Natural | | 0.0 |
| | | D | grass (fair) | 84 | Natural | | 0.0 |
| *Sum =* | *0* | | | | | | **0.0** |
| | | | | | | | |
| **Basin** | 0.6 | B | Landscape | 56 | Basin | 1.00 | 56.0 |
| | | C | Landscape | 69 | Basin | 0.00 | 0.0 |
| | | D | Landscape | 75 | Basin | 0.00 | 0.0 |
| *Sum =* | *0.6* | | | | | 1.00 | **56.0** |
| | | | | | | | |
| **Commercial** | 32.99 | B | Landscape | 56 | Commercial | 0.79 | 44.0 |
| | | C | Landscape | 69 | Commercial | 0.00 | 0.0 |
| | 9 | D | Landscape | 75 | Commercial | 0.21 | 16.1 |
| *Sum =* | *41.99* | | | | | 1.00 | **60.1** |
| | | | | | | | |
| | 42.59 | | | | | | |

| Soil Low Loss Rate Worksheet | | | | | | |
|---|---|---|---|---|---|---|
| **Drainage Area B2 - 42.59 Ac (proposed)** | | | | | | |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] |
| **Subarea** | **Area in (Ac)** | **Land Use (Plate D-5.6)** | **% Impervious (Plate D-5.6)** | **Soil Low Loss Rate 0.9-(0.8)* [4]** | **Decimal portion of Area [2] / SUM[2]** | **Average Low Loss Rate [5] * [6]** |
| | | Natural | 0 | 0.90 | 0.00 | 0.00 |
| | 0.6 | Basin/Park | 5 | 0.86 | 0.01 | 0.01 |
| | | Res 1/2 Ac | 40 | 0.58 | 0.00 | 0.00 |
| | | Res 1/4 Ac | 57 | 0.44 | 0.00 | 0.00 |
| | | Res < 1/4 Ac | 65 | 0.38 | 0.00 | 0.00 |
| | | Apartment | 80 | 0.26 | 0.00 | 0.00 |
| | | Mobil Home | 75 | 0.30 | 0.00 | 0.00 |
| | | Hospital | 75 | 0.30 | 0.00 | 0.00 |
| | 41.99 | Commercial | 90 | 0.18 | 0.99 | 0.18 |
| Sum = | 42.59 | | | | 1.00 | **0.19** |

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

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Study date 09/21/20 File: 2rrb2242.out

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

Program License Serial Number 4029

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

English Units used in output format

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Renaissance Ranch
Drainage Area B2
Proposed Condition - Area = 42.59 Ac
2-year 24-hour storm

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Drainage Area = 42.59(Ac.) = 0.067 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 42.59(Ac.) = 0.067 Sq. Mi.
Length along longest watercourse = 1680.00(Ft.)
Length along longest watercourse measured to centroid = 820.00(Ft.)
Length along longest watercourse = 0.318 Mi.
Length along longest watercourse measured to centroid = 0.155 Mi.
Difference in elevation = 13.50(Ft.)
Slope along watercourse = 42.4286 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.056 Hr.
Lag time = 3.38 Min.
25% of lag time = 0.84 Min.
40% of lag time = 1.35 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] |
|---|---|---|
| 42.59 | 2.16 | 91.99 |

100 YEAR Area rainfall data:

| Area(Ac.)[1] | Rainfall(In)[2] | Weighting[1*2] |
|---|---|---|
| 42.59 | 5.73 | 244.04 |

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.160(In)
Area Averaged 100-Year Rainfall = 5.730(In)

Point rain (area averaged) = 2.160(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 2.160(In)

Sub-Area Data:

| Area(Ac.) | Runoff Index | Impervious % |
|---|---|---|
| 0.600 | 56.00 | 0.020 |
| 41.990 | 60.10 | 0.900 |

Total Area Entered = 42.59(Ac.)

| RI AMC2 | RI AMC-1 | Infil. Rate (In/Hr) | Impervious (Dec.%) | Adj. Infil. Rate (In/Hr) | Area% (Dec.) | F (In/Hr) |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 56.0 | 36.0 | 0.706 | 0.020 | 0.693 | 0.014 | 0.010 |
| 60.1 | 40.1 | 0.669 | 0.900 | 0.127 | 0.986 | 0.125 |
| | | | | | Sum (F) = | 0.135 |

Area averaged mean soil loss (F) (In/Hr) = 0.135
Minimum soil loss rate ((In/Hr)) = 0.068
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.190

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

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Unit Hydrograph Data

| Unit time period (hrs) | | Time % of lag | Distribution Graph % | Unit Hydrograph (CFS) |
|---|---|---|---|---|
| 1 | 0.083 | 147.947 | 32.675 | 14.025 |
| 2 | 0.167 | 295.894 | 47.159 | 20.242 |
| 3 | 0.250 | 443.841 | 11.303 | 4.852 |
| 4 | 0.333 | 591.788 | 4.946 | 2.123 |
| 5 | 0.417 | 739.735 | 2.528 | 1.085 |
| 6 | 0.500 | 887.682 | 1.389 | 0.596 |
| | | | Sum = 100.000 | Sum= 42.923 |

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

| Unit Time (Hr.) | Pattern Percent | Storm Rain (In/Hr) | Loss rate(In./Hr) Max | Low | Effective (In/Hr) |
|---|---|---|---|---|---|
| 1 | 0.08 | 0.07 | 0.017 | ( 0.239) | 0.003 | 0.014 |
| 2 | 0.17 | 0.07 | 0.017 | ( 0.239) | 0.003 | 0.014 |
| 3 | 0.25 | 0.07 | 0.017 | ( 0.238) | 0.003 | 0.014 |
| 4 | 0.33 | 0.10 | 0.026 | ( 0.237) | 0.005 | 0.021 |
| 5 | 0.42 | 0.10 | 0.026 | ( 0.236) | 0.005 | 0.021 |
| 6 | 0.50 | 0.10 | 0.026 | ( 0.235) | 0.005 | 0.021 |
| 7 | 0.58 | 0.10 | 0.026 | ( 0.234) | 0.005 | 0.021 |
| 8 | 0.67 | 0.10 | 0.026 | ( 0.233) | 0.005 | 0.021 |
| 9 | 0.75 | 0.10 | 0.026 | ( 0.232) | 0.005 | 0.021 |
| 10 | 0.83 | 0.13 | 0.035 | ( 0.231) | 0.007 | 0.028 |
| 11 | 0.92 | 0.13 | 0.035 | ( 0.230) | 0.007 | 0.028 |
| 12 | 1.00 | 0.13 | 0.035 | ( 0.229) | 0.007 | 0.028 |
| 13 | 1.08 | 0.10 | 0.026 | ( 0.228) | 0.005 | 0.021 |
| 14 | 1.17 | 0.10 | 0.026 | ( 0.228) | 0.005 | 0.021 |
| 15 | 1.25 | 0.10 | 0.026 | ( 0.227) | 0.005 | 0.021 |
| 16 | 1.33 | 0.10 | 0.026 | ( 0.226) | 0.005 | 0.021 |
| 17 | 1.42 | 0.10 | 0.026 | ( 0.225) | 0.005 | 0.021 |
| 18 | 1.50 | 0.10 | 0.026 | ( 0.224) | 0.005 | 0.021 |
| 19 | 1.58 | 0.10 | 0.026 | ( 0.223) | 0.005 | 0.021 |
| 20 | 1.67 | 0.10 | 0.026 | ( 0.222) | 0.005 | 0.021 |
| 21 | 1.75 | 0.10 | 0.026 | ( 0.221) | 0.005 | 0.021 |
| 22 | 1.83 | 0.13 | 0.035 | ( 0.220) | 0.007 | 0.028 |
| 23 | 1.92 | 0.13 | 0.035 | ( 0.220) | 0.007 | 0.028 |
| 24 | 2.00 | 0.13 | 0.035 | ( 0.219) | 0.007 | 0.028 |
| 25 | 2.08 | 0.13 | 0.035 | ( 0.218) | 0.007 | 0.028 |
| 26 | 2.17 | 0.13 | 0.035 | ( 0.217) | 0.007 | 0.028 |
| 27 | 2.25 | 0.13 | 0.035 | ( 0.216) | 0.007 | 0.028 |
| 28 | 2.33 | 0.13 | 0.035 | ( 0.215) | 0.007 | 0.028 |
| 29 | 2.42 | 0.13 | 0.035 | ( 0.214) | 0.007 | 0.028 |
| 30 | 2.50 | 0.13 | 0.035 | ( 0.213) | 0.007 | 0.028 |
| 31 | 2.58 | 0.17 | 0.043 | ( 0.212) | 0.008 | 0.035 |
| 32 | 2.67 | 0.17 | 0.043 | ( 0.212) | 0.008 | 0.035 |
| 33 | 2.75 | 0.17 | 0.043 | ( 0.211) | 0.008 | 0.035 |
| 34 | 2.83 | 0.17 | 0.043 | ( 0.210) | 0.008 | 0.035 |
| 35 | 2.92 | 0.17 | 0.043 | ( 0.209) | 0.008 | 0.035 |
| 36 | 3.00 | 0.17 | 0.043 | ( 0.208) | 0.008 | 0.035 |
| 37 | 3.08 | 0.17 | 0.043 | ( 0.207) | 0.008 | 0.035 |
| 38 | 3.17 | 0.17 | 0.043 | ( 0.206) | 0.008 | 0.035 |
| 39 | 3.25 | 0.17 | 0.043 | ( 0.206) | 0.008 | 0.035 |
| 40 | 3.33 | 0.17 | 0.043 | ( 0.205) | 0.008 | 0.035 |
| 41 | 3.42 | 0.17 | 0.043 | ( 0.204) | 0.008 | 0.035 |
| 42 | 3.50 | 0.17 | 0.043 | ( 0.203) | 0.008 | 0.035 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 43 | 3.58 | 0.17 | 0.043 | ( 0.202) | 0.008 | 0.035 |
| 44 | 3.67 | 0.17 | 0.043 | ( 0.201) | 0.008 | 0.035 |
| 45 | 3.75 | 0.17 | 0.043 | ( 0.200) | 0.008 | 0.035 |
| 46 | 3.83 | 0.20 | 0.052 | ( 0.200) | 0.010 | 0.042 |
| 47 | 3.92 | 0.20 | 0.052 | ( 0.199) | 0.010 | 0.042 |
| 48 | 4.00 | 0.20 | 0.052 | ( 0.198) | 0.010 | 0.042 |
| 49 | 4.08 | 0.20 | 0.052 | ( 0.197) | 0.010 | 0.042 |
| 50 | 4.17 | 0.20 | 0.052 | ( 0.196) | 0.010 | 0.042 |
| 51 | 4.25 | 0.20 | 0.052 | ( 0.195) | 0.010 | 0.042 |
| 52 | 4.33 | 0.23 | 0.060 | ( 0.195) | 0.011 | 0.049 |
| 53 | 4.42 | 0.23 | 0.060 | ( 0.194) | 0.011 | 0.049 |
| 54 | 4.50 | 0.23 | 0.060 | ( 0.193) | 0.011 | 0.049 |
| 55 | 4.58 | 0.23 | 0.060 | ( 0.192) | 0.011 | 0.049 |
| 56 | 4.67 | 0.23 | 0.060 | ( 0.191) | 0.011 | 0.049 |
| 57 | 4.75 | 0.23 | 0.060 | ( 0.190) | 0.011 | 0.049 |
| 58 | 4.83 | 0.27 | 0.069 | ( 0.190) | 0.013 | 0.056 |
| 59 | 4.92 | 0.27 | 0.069 | ( 0.189) | 0.013 | 0.056 |
| 60 | 5.00 | 0.27 | 0.069 | ( 0.188) | 0.013 | 0.056 |
| 61 | 5.08 | 0.20 | 0.052 | ( 0.187) | 0.010 | 0.042 |
| 62 | 5.17 | 0.20 | 0.052 | ( 0.186) | 0.010 | 0.042 |
| 63 | 5.25 | 0.20 | 0.052 | ( 0.186) | 0.010 | 0.042 |
| 64 | 5.33 | 0.23 | 0.060 | ( 0.185) | 0.011 | 0.049 |
| 65 | 5.42 | 0.23 | 0.060 | ( 0.184) | 0.011 | 0.049 |
| 66 | 5.50 | 0.23 | 0.060 | ( 0.183) | 0.011 | 0.049 |
| 67 | 5.58 | 0.27 | 0.069 | ( 0.182) | 0.013 | 0.056 |
| 68 | 5.67 | 0.27 | 0.069 | ( 0.182) | 0.013 | 0.056 |
| 69 | 5.75 | 0.27 | 0.069 | ( 0.181) | 0.013 | 0.056 |
| 70 | 5.83 | 0.27 | 0.069 | ( 0.180) | 0.013 | 0.056 |
| 71 | 5.92 | 0.27 | 0.069 | ( 0.179) | 0.013 | 0.056 |
| 72 | 6.00 | 0.27 | 0.069 | ( 0.178) | 0.013 | 0.056 |
| 73 | 6.08 | 0.30 | 0.078 | ( 0.178) | 0.015 | 0.063 |
| 74 | 6.17 | 0.30 | 0.078 | ( 0.177) | 0.015 | 0.063 |
| 75 | 6.25 | 0.30 | 0.078 | ( 0.176) | 0.015 | 0.063 |
| 76 | 6.33 | 0.30 | 0.078 | ( 0.175) | 0.015 | 0.063 |
| 77 | 6.42 | 0.30 | 0.078 | ( 0.174) | 0.015 | 0.063 |
| 78 | 6.50 | 0.30 | 0.078 | ( 0.174) | 0.015 | 0.063 |
| 79 | 6.58 | 0.33 | 0.086 | ( 0.173) | 0.016 | 0.070 |
| 80 | 6.67 | 0.33 | 0.086 | ( 0.172) | 0.016 | 0.070 |
| 81 | 6.75 | 0.33 | 0.086 | ( 0.171) | 0.016 | 0.070 |
| 82 | 6.83 | 0.33 | 0.086 | ( 0.170) | 0.016 | 0.070 |
| 83 | 6.92 | 0.33 | 0.086 | ( 0.170) | 0.016 | 0.070 |
| 84 | 7.00 | 0.33 | 0.086 | ( 0.169) | 0.016 | 0.070 |
| 85 | 7.08 | 0.33 | 0.086 | ( 0.168) | 0.016 | 0.070 |
| 86 | 7.17 | 0.33 | 0.086 | ( 0.167) | 0.016 | 0.070 |
| 87 | 7.25 | 0.33 | 0.086 | ( 0.167) | 0.016 | 0.070 |
| 88 | 7.33 | 0.37 | 0.095 | ( 0.166) | 0.018 | 0.077 |
| 89 | 7.42 | 0.37 | 0.095 | ( 0.165) | 0.018 | 0.077 |
| 90 | 7.50 | 0.37 | 0.095 | ( 0.164) | 0.018 | 0.077 |
| 91 | 7.58 | 0.40 | 0.104 | ( 0.164) | 0.020 | 0.084 |
| 92 | 7.67 | 0.40 | 0.104 | ( 0.163) | 0.020 | 0.084 |
| 93 | 7.75 | 0.40 | 0.104 | ( 0.162) | 0.020 | 0.084 |
| 94 | 7.83 | 0.43 | 0.112 | ( 0.161) | 0.021 | 0.091 |
| 95 | 7.92 | 0.43 | 0.112 | ( 0.161) | 0.021 | 0.091 |
| 96 | 8.00 | 0.43 | 0.112 | ( 0.160) | 0.021 | 0.091 |
| 97 | 8.08 | 0.50 | 0.130 | ( 0.159) | 0.025 | 0.105 |
| 98 | 8.17 | 0.50 | 0.130 | ( 0.158) | 0.025 | 0.105 |
| 99 | 8.25 | 0.50 | 0.130 | ( 0.158) | 0.025 | 0.105 |
| 100 | 8.33 | 0.50 | 0.130 | ( 0.157) | 0.025 | 0.105 |
| 101 | 8.42 | 0.50 | 0.130 | ( 0.156) | 0.025 | 0.105 |
| 102 | 8.50 | 0.50 | 0.130 | ( 0.155) | 0.025 | 0.105 |
| 103 | 8.58 | 0.53 | 0.138 | ( 0.155) | 0.026 | 0.112 |
| 104 | 8.67 | 0.53 | 0.138 | ( 0.154) | 0.026 | 0.112 |
| 105 | 8.75 | 0.53 | 0.138 | ( 0.153) | 0.026 | 0.112 |
| 106 | 8.83 | 0.57 | 0.147 | ( 0.153) | 0.028 | 0.119 |
| 107 | 8.92 | 0.57 | 0.147 | ( 0.152) | 0.028 | 0.119 |
| 108 | 9.00 | 0.57 | 0.147 | ( 0.151) | 0.028 | 0.119 |
| 109 | 9.08 | 0.63 | 0.164 | ( 0.150) | 0.031 | 0.133 |
| 110 | 9.17 | 0.63 | 0.164 | ( 0.150) | 0.031 | 0.133 |
| 111 | 9.25 | 0.63 | 0.164 | ( 0.149) | 0.031 | 0.133 |
| 112 | 9.33 | 0.67 | 0.173 | ( 0.148) | 0.033 | 0.140 |
| 113 | 9.42 | 0.67 | 0.173 | ( 0.148) | 0.033 | 0.140 |
| 114 | 9.50 | 0.67 | 0.173 | ( 0.147) | 0.033 | 0.140 |
| 115 | 9.58 | 0.70 | 0.181 | ( 0.146) | 0.034 | 0.147 |
| 116 | 9.67 | 0.70 | 0.181 | ( 0.145) | 0.034 | 0.147 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 117 | 9.75 | 0.70 | 0.181 | ( 0.145) | 0.034 | 0.147 |
| 118 | 9.83 | 0.73 | 0.190 | ( 0.144) | 0.036 | 0.154 |
| 119 | 9.92 | 0.73 | 0.190 | ( 0.143) | 0.036 | 0.154 |
| 120 | 10.00 | 0.73 | 0.190 | ( 0.143) | 0.036 | 0.154 |
| 121 | 10.08 | 0.50 | 0.130 | ( 0.142) | 0.025 | 0.105 |
| 122 | 10.17 | 0.50 | 0.130 | ( 0.141) | 0.025 | 0.105 |
| 123 | 10.25 | 0.50 | 0.130 | ( 0.141) | 0.025 | 0.105 |
| 124 | 10.33 | 0.50 | 0.130 | ( 0.140) | 0.025 | 0.105 |
| 125 | 10.42 | 0.50 | 0.130 | ( 0.139) | 0.025 | 0.105 |
| 126 | 10.50 | 0.50 | 0.130 | ( 0.139) | 0.025 | 0.105 |
| 127 | 10.58 | 0.67 | 0.173 | ( 0.138) | 0.033 | 0.140 |
| 128 | 10.67 | 0.67 | 0.173 | ( 0.137) | 0.033 | 0.140 |
| 129 | 10.75 | 0.67 | 0.173 | ( 0.137) | 0.033 | 0.140 |
| 130 | 10.83 | 0.67 | 0.173 | ( 0.136) | 0.033 | 0.140 |
| 131 | 10.92 | 0.67 | 0.173 | ( 0.135) | 0.033 | 0.140 |
| 132 | 11.00 | 0.67 | 0.173 | ( 0.135) | 0.033 | 0.140 |
| 133 | 11.08 | 0.63 | 0.164 | ( 0.134) | 0.031 | 0.133 |
| 134 | 11.17 | 0.63 | 0.164 | ( 0.133) | 0.031 | 0.133 |
| 135 | 11.25 | 0.63 | 0.164 | ( 0.133) | 0.031 | 0.133 |
| 136 | 11.33 | 0.63 | 0.164 | ( 0.132) | 0.031 | 0.133 |
| 137 | 11.42 | 0.63 | 0.164 | ( 0.131) | 0.031 | 0.133 |
| 138 | 11.50 | 0.63 | 0.164 | ( 0.131) | 0.031 | 0.133 |
| 139 | 11.58 | 0.57 | 0.147 | ( 0.130) | 0.028 | 0.119 |
| 140 | 11.67 | 0.57 | 0.147 | ( 0.129) | 0.028 | 0.119 |
| 141 | 11.75 | 0.57 | 0.147 | ( 0.129) | 0.028 | 0.119 |
| 142 | 11.83 | 0.60 | 0.156 | ( 0.128) | 0.030 | 0.126 |
| 143 | 11.92 | 0.60 | 0.156 | ( 0.127) | 0.030 | 0.126 |
| 144 | 12.00 | 0.60 | 0.156 | ( 0.127) | 0.030 | 0.126 |
| 145 | 12.08 | 0.83 | 0.216 | ( 0.126) | 0.041 | 0.175 |
| 146 | 12.17 | 0.83 | 0.216 | ( 0.125) | 0.041 | 0.175 |
| 147 | 12.25 | 0.83 | 0.216 | ( 0.125) | 0.041 | 0.175 |
| 148 | 12.33 | 0.87 | 0.225 | ( 0.124) | 0.043 | 0.182 |
| 149 | 12.42 | 0.87 | 0.225 | ( 0.124) | 0.043 | 0.182 |
| 150 | 12.50 | 0.87 | 0.225 | ( 0.123) | 0.043 | 0.182 |
| 151 | 12.58 | 0.93 | 0.242 | ( 0.122) | 0.046 | 0.196 |
| 152 | 12.67 | 0.93 | 0.242 | ( 0.122) | 0.046 | 0.196 |
| 153 | 12.75 | 0.93 | 0.242 | ( 0.121) | 0.046 | 0.196 |
| 154 | 12.83 | 0.97 | 0.251 | ( 0.121) | 0.048 | 0.203 |
| 155 | 12.92 | 0.97 | 0.251 | ( 0.120) | 0.048 | 0.203 |
| 156 | 13.00 | 0.97 | 0.251 | ( 0.119) | 0.048 | 0.203 |
| 157 | 13.08 | 1.13 | 0.294 | ( 0.119) | 0.056 | 0.238 |
| 158 | 13.17 | 1.13 | 0.294 | ( 0.118) | 0.056 | 0.238 |
| 159 | 13.25 | 1.13 | 0.294 | ( 0.117) | 0.056 | 0.238 |
| 160 | 13.33 | 1.13 | 0.294 | ( 0.117) | 0.056 | 0.238 |
| 161 | 13.42 | 1.13 | 0.294 | ( 0.116) | 0.056 | 0.238 |
| 162 | 13.50 | 1.13 | 0.294 | ( 0.116) | 0.056 | 0.238 |
| 163 | 13.58 | 0.77 | 0.199 | ( 0.115) | 0.038 | 0.161 |
| 164 | 13.67 | 0.77 | 0.199 | ( 0.115) | 0.038 | 0.161 |
| 165 | 13.75 | 0.77 | 0.199 | ( 0.114) | 0.038 | 0.161 |
| 166 | 13.83 | 0.77 | 0.199 | ( 0.113) | 0.038 | 0.161 |
| 167 | 13.92 | 0.77 | 0.199 | ( 0.113) | 0.038 | 0.161 |
| 168 | 14.00 | 0.77 | 0.199 | ( 0.112) | 0.038 | 0.161 |
| 169 | 14.08 | 0.90 | 0.233 | ( 0.112) | 0.044 | 0.189 |
| 170 | 14.17 | 0.90 | 0.233 | ( 0.111) | 0.044 | 0.189 |
| 171 | 14.25 | 0.90 | 0.233 | ( 0.111) | 0.044 | 0.189 |
| 172 | 14.33 | 0.87 | 0.225 | ( 0.110) | 0.043 | 0.182 |
| 173 | 14.42 | 0.87 | 0.225 | ( 0.109) | 0.043 | 0.182 |
| 174 | 14.50 | 0.87 | 0.225 | ( 0.109) | 0.043 | 0.182 |
| 175 | 14.58 | 0.87 | 0.225 | ( 0.108) | 0.043 | 0.182 |
| 176 | 14.67 | 0.87 | 0.225 | ( 0.108) | 0.043 | 0.182 |
| 177 | 14.75 | 0.87 | 0.225 | ( 0.107) | 0.043 | 0.182 |
| 178 | 14.83 | 0.83 | 0.216 | ( 0.107) | 0.041 | 0.175 |
| 179 | 14.92 | 0.83 | 0.216 | ( 0.106) | 0.041 | 0.175 |
| 180 | 15.00 | 0.83 | 0.216 | ( 0.106) | 0.041 | 0.175 |
| 181 | 15.08 | 0.80 | 0.207 | ( 0.105) | 0.039 | 0.168 |
| 182 | 15.17 | 0.80 | 0.207 | ( 0.104) | 0.039 | 0.168 |
| 183 | 15.25 | 0.80 | 0.207 | ( 0.104) | 0.039 | 0.168 |
| 184 | 15.33 | 0.77 | 0.199 | ( 0.103) | 0.038 | 0.161 |
| 185 | 15.42 | 0.77 | 0.199 | ( 0.103) | 0.038 | 0.161 |
| 186 | 15.50 | 0.77 | 0.199 | ( 0.102) | 0.038 | 0.161 |
| 187 | 15.58 | 0.63 | 0.164 | ( 0.102) | 0.031 | 0.133 |
| 188 | 15.67 | 0.63 | 0.164 | ( 0.101) | 0.031 | 0.133 |
| 189 | 15.75 | 0.63 | 0.164 | ( 0.101) | 0.031 | 0.133 |
| 190 | 15.83 | 0.63 | 0.164 | ( 0.100) | 0.031 | 0.133 |

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|---|---|---|---|---|---|---|
| 191 | 15.92 | 0.63 | 0.164 | ( 0.100) | 0.031 | 0.133 |
| 192 | 16.00 | 0.63 | 0.164 | ( 0.099) | 0.031 | 0.133 |
| 193 | 16.08 | 0.13 | 0.035 | ( 0.099) | 0.007 | 0.028 |
| 194 | 16.17 | 0.13 | 0.035 | ( 0.098) | 0.007 | 0.028 |
| 195 | 16.25 | 0.13 | 0.035 | ( 0.098) | 0.007 | 0.028 |
| 196 | 16.33 | 0.13 | 0.035 | ( 0.097) | 0.007 | 0.028 |
| 197 | 16.42 | 0.13 | 0.035 | ( 0.097) | 0.007 | 0.028 |
| 198 | 16.50 | 0.13 | 0.035 | ( 0.096) | 0.007 | 0.028 |
| 199 | 16.58 | 0.10 | 0.026 | ( 0.096) | 0.005 | 0.021 |
| 200 | 16.67 | 0.10 | 0.026 | ( 0.095) | 0.005 | 0.021 |
| 201 | 16.75 | 0.10 | 0.026 | ( 0.095) | 0.005 | 0.021 |
| 202 | 16.83 | 0.10 | 0.026 | ( 0.094) | 0.005 | 0.021 |
| 203 | 16.92 | 0.10 | 0.026 | ( 0.094) | 0.005 | 0.021 |
| 204 | 17.00 | 0.10 | 0.026 | ( 0.093) | 0.005 | 0.021 |
| 205 | 17.08 | 0.17 | 0.043 | ( 0.093) | 0.008 | 0.035 |
| 206 | 17.17 | 0.17 | 0.043 | ( 0.092) | 0.008 | 0.035 |
| 207 | 17.25 | 0.17 | 0.043 | ( 0.092) | 0.008 | 0.035 |
| 208 | 17.33 | 0.17 | 0.043 | ( 0.091) | 0.008 | 0.035 |
| 209 | 17.42 | 0.17 | 0.043 | ( 0.091) | 0.008 | 0.035 |
| 210 | 17.50 | 0.17 | 0.043 | ( 0.091) | 0.008 | 0.035 |
| 211 | 17.58 | 0.17 | 0.043 | ( 0.090) | 0.008 | 0.035 |
| 212 | 17.67 | 0.17 | 0.043 | ( 0.090) | 0.008 | 0.035 |
| 213 | 17.75 | 0.17 | 0.043 | ( 0.089) | 0.008 | 0.035 |
| 214 | 17.83 | 0.13 | 0.035 | ( 0.089) | 0.007 | 0.028 |
| 215 | 17.92 | 0.13 | 0.035 | ( 0.088) | 0.007 | 0.028 |
| 216 | 18.00 | 0.13 | 0.035 | ( 0.088) | 0.007 | 0.028 |
| 217 | 18.08 | 0.13 | 0.035 | ( 0.087) | 0.007 | 0.028 |
| 218 | 18.17 | 0.13 | 0.035 | ( 0.087) | 0.007 | 0.028 |
| 219 | 18.25 | 0.13 | 0.035 | ( 0.087) | 0.007 | 0.028 |
| 220 | 18.33 | 0.13 | 0.035 | ( 0.086) | 0.007 | 0.028 |
| 221 | 18.42 | 0.13 | 0.035 | ( 0.086) | 0.007 | 0.028 |
| 222 | 18.50 | 0.13 | 0.035 | ( 0.085) | 0.007 | 0.028 |
| 223 | 18.58 | 0.10 | 0.026 | ( 0.085) | 0.005 | 0.021 |
| 224 | 18.67 | 0.10 | 0.026 | ( 0.084) | 0.005 | 0.021 |
| 225 | 18.75 | 0.10 | 0.026 | ( 0.084) | 0.005 | 0.021 |
| 226 | 18.83 | 0.07 | 0.017 | ( 0.084) | 0.003 | 0.014 |
| 227 | 18.92 | 0.07 | 0.017 | ( 0.083) | 0.003 | 0.014 |
| 228 | 19.00 | 0.07 | 0.017 | ( 0.083) | 0.003 | 0.014 |
| 229 | 19.08 | 0.10 | 0.026 | ( 0.083) | 0.005 | 0.021 |
| 230 | 19.17 | 0.10 | 0.026 | ( 0.082) | 0.005 | 0.021 |
| 231 | 19.25 | 0.10 | 0.026 | ( 0.082) | 0.005 | 0.021 |
| 232 | 19.33 | 0.13 | 0.035 | ( 0.081) | 0.007 | 0.028 |
| 233 | 19.42 | 0.13 | 0.035 | ( 0.081) | 0.007 | 0.028 |
| 234 | 19.50 | 0.13 | 0.035 | ( 0.081) | 0.007 | 0.028 |
| 235 | 19.58 | 0.10 | 0.026 | ( 0.080) | 0.005 | 0.021 |
| 236 | 19.67 | 0.10 | 0.026 | ( 0.080) | 0.005 | 0.021 |
| 237 | 19.75 | 0.10 | 0.026 | ( 0.080) | 0.005 | 0.021 |
| 238 | 19.83 | 0.07 | 0.017 | ( 0.079) | 0.003 | 0.014 |
| 239 | 19.92 | 0.07 | 0.017 | ( 0.079) | 0.003 | 0.014 |
| 240 | 20.00 | 0.07 | 0.017 | ( 0.078) | 0.003 | 0.014 |
| 241 | 20.08 | 0.10 | 0.026 | ( 0.078) | 0.005 | 0.021 |
| 242 | 20.17 | 0.10 | 0.026 | ( 0.078) | 0.005 | 0.021 |
| 243 | 20.25 | 0.10 | 0.026 | ( 0.077) | 0.005 | 0.021 |
| 244 | 20.33 | 0.10 | 0.026 | ( 0.077) | 0.005 | 0.021 |
| 245 | 20.42 | 0.10 | 0.026 | ( 0.077) | 0.005 | 0.021 |
| 246 | 20.50 | 0.10 | 0.026 | ( 0.076) | 0.005 | 0.021 |
| 247 | 20.58 | 0.10 | 0.026 | ( 0.076) | 0.005 | 0.021 |
| 248 | 20.67 | 0.10 | 0.026 | ( 0.076) | 0.005 | 0.021 |
| 249 | 20.75 | 0.10 | 0.026 | ( 0.075) | 0.005 | 0.021 |
| 250 | 20.83 | 0.07 | 0.017 | ( 0.075) | 0.003 | 0.014 |
| 251 | 20.92 | 0.07 | 0.017 | ( 0.075) | 0.003 | 0.014 |
| 252 | 21.00 | 0.07 | 0.017 | ( 0.075) | 0.003 | 0.014 |
| 253 | 21.08 | 0.10 | 0.026 | ( 0.074) | 0.005 | 0.021 |
| 254 | 21.17 | 0.10 | 0.026 | ( 0.074) | 0.005 | 0.021 |
| 255 | 21.25 | 0.10 | 0.026 | ( 0.074) | 0.005 | 0.021 |
| 256 | 21.33 | 0.07 | 0.017 | ( 0.073) | 0.003 | 0.014 |
| 257 | 21.42 | 0.07 | 0.017 | ( 0.073) | 0.003 | 0.014 |
| 258 | 21.50 | 0.07 | 0.017 | ( 0.073) | 0.003 | 0.014 |
| 259 | 21.58 | 0.10 | 0.026 | ( 0.073) | 0.005 | 0.021 |
| 260 | 21.67 | 0.10 | 0.026 | ( 0.072) | 0.005 | 0.021 |
| 261 | 21.75 | 0.10 | 0.026 | ( 0.072) | 0.005 | 0.021 |
| 262 | 21.83 | 0.07 | 0.017 | ( 0.072) | 0.003 | 0.014 |
| 263 | 21.92 | 0.07 | 0.017 | ( 0.072) | 0.003 | 0.014 |
| 264 | 22.00 | 0.07 | 0.017 | ( 0.071) | 0.003 | 0.014 |

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265  22.08     0.10      0.026       (  0.071)       0.005        0.021
266  22.17     0.10      0.026       (  0.071)       0.005        0.021
267  22.25     0.10      0.026       (  0.071)       0.005        0.021
268  22.33     0.07      0.017       (  0.070)       0.003        0.014
269  22.42     0.07      0.017       (  0.070)       0.003        0.014
270  22.50     0.07      0.017       (  0.070)       0.003        0.014
271  22.58     0.07      0.017       (  0.070)       0.003        0.014
272  22.67     0.07      0.017       (  0.070)       0.003        0.014
273  22.75     0.07      0.017       (  0.069)       0.003        0.014
274  22.83     0.07      0.017       (  0.069)       0.003        0.014
275  22.92     0.07      0.017       (  0.069)       0.003        0.014
276  23.00     0.07      0.017       (  0.069)       0.003        0.014
277  23.08     0.07      0.017       (  0.069)       0.003        0.014
278  23.17     0.07      0.017       (  0.069)       0.003        0.014
279  23.25     0.07      0.017       (  0.068)       0.003        0.014
280  23.33     0.07      0.017       (  0.068)       0.003        0.014
281  23.42     0.07      0.017       (  0.068)       0.003        0.014
282  23.50     0.07      0.017       (  0.068)       0.003        0.014
283  23.58     0.07      0.017       (  0.068)       0.003        0.014
284  23.67     0.07      0.017       (  0.068)       0.003        0.014
285  23.75     0.07      0.017       (  0.068)       0.003        0.014
286  23.83     0.07      0.017       (  0.068)       0.003        0.014
287  23.92     0.07      0.017       (  0.068)       0.003        0.014
288  24.00     0.07      0.017       (  0.068)       0.003        0.014
               (Loss Rate Not Used)
    Sum =     100.0                                    Sum =    21.0
      Flood volume = Effective rainfall      1.75(In)
       times area      42.6(Ac.)/[(In)/(Ft.)] =       6.2(Ac.Ft)
      Total soil loss =      0.41(In)
      Total soil loss =     1.456(Ac.Ft)
      Total rainfall =      2.16(In)
      Flood volume =      270468.6 Cubic Feet
      Total soil loss =       63443.3 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     10.218(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        5.0      10.0      15.0      20.0
 ---------------------------------------------------------------------------
   0+ 5       0.0014      0.20  Q         |         |         |         |
   0+10       0.0047      0.48  Q         |         |         |         |
   0+15       0.0084      0.55  VQ        |         |         |         |
   0+20       0.0131      0.68  VQ        |         |         |         |
   0+25       0.0188      0.83  VQ        |         |         |         |
   0+30       0.0248      0.87  VQ        |         |         |         |
   0+35       0.0310      0.89  VQ        |         |         |         |
   0+40       0.0372      0.90  VQ        |         |         |         |
   0+45       0.0434      0.90  VQ        |         |         |         |
   0+50       0.0502      1.00  VQ        |         |         |         |
   0+55       0.0581      1.14  V Q       |         |         |         |
   1+ 0       0.0662      1.18  V Q       |         |         |         |
   1+ 5       0.0737      1.09  V Q       |         |         |         |
   1+10       0.0803      0.96  VQ        |         |         |         |
   1+15       0.0867      0.93  VQ        |         |         |         |
   1+20       0.0930      0.91  VQ        |         |         |         |
   1+25       0.0992      0.91  VQ        |         |         |         |
   1+30       0.1055      0.90  VQ        |         |         |         |
   1+35       0.1117      0.90  VQ        |         |         |         |
   1+40       0.1179      0.90  VQ        |         |         |         |
   1+45       0.1241      0.90  VQ        |         |         |         |
   1+50       0.1310      1.00  VQ        |         |         |         |
   1+55       0.1388      1.14  V Q       |         |         |         |
   2+ 0       0.1469      1.18  V Q       |         |         |         |
   2+ 5       0.1551      1.19  V Q       |         |         |         |
   2+10       0.1634      1.20  |VQ       |         |         |         |
   2+15       0.1716      1.20  |VQ       |         |         |         |
   2+20       0.1799      1.20  |VQ       |         |         |         |
   2+25       0.1882      1.20  |VQ       |         |         |         |
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2+30 | 0.1965 | 1.20 | VQ | | | | |
| 2+35 | 0.2054 | 1.30 | VQ | | | | |
| 2+40 | 0.2154 | 1.44 | VQ | | | | |
| 2+45 | 0.2255 | 1.48 | VQ | | | | |
| 2+50 | 0.2358 | 1.49 | VQ | | | | |
| 2+55 | 0.2461 | 1.50 | VQ | | | | |
| 3+ 0 | 0.2565 | 1.50 | V Q | | | | |
| 3+ 5 | 0.2668 | 1.50 | V Q | | | | |
| 3+10 | 0.2772 | 1.50 | V Q | | | | |
| 3+15 | 0.2875 | 1.50 | V Q | | | | |
| 3+20 | 0.2979 | 1.50 | V Q | | | | |
| 3+25 | 0.3082 | 1.50 | V Q | | | | |
| 3+30 | 0.3186 | 1.50 | VQ | | | | |
| 3+35 | 0.3289 | 1.50 | VQ | | | | |
| 3+40 | 0.3393 | 1.50 | VQ | | | | |
| 3+45 | 0.3496 | 1.50 | VQ | | | | |
| 3+50 | 0.3606 | 1.60 | VQ | | | | |
| 3+55 | 0.3726 | 1.74 | VQ | | | | |
| 4+ 0 | 0.3849 | 1.78 | VQ | | | | |
| 4+ 5 | 0.3972 | 1.79 | VQ | | | | |
| 4+10 | 0.4096 | 1.80 | VQ | | | | |
| 4+15 | 0.4220 | 1.80 | VQ | | | | |
| 4+20 | 0.4351 | 1.90 | VQ | | | | |
| 4+25 | 0.4492 | 2.04 | V Q | | | | |
| 4+30 | 0.4635 | 2.08 | V Q | | | | |
| 4+35 | 0.4779 | 2.09 | VQ | | | | |
| 4+40 | 0.4923 | 2.10 | VQ | | | | |
| 4+45 | 0.5068 | 2.10 | VQ | | | | |
| 4+50 | 0.5220 | 2.20 | VQ | | | | |
| 4+55 | 0.5381 | 2.34 | VQ | | | | |
| 5+ 0 | 0.5545 | 2.38 | VQ | | | | |
| 5+ 5 | 0.5696 | 2.20 | VQ | | | | |
| 5+10 | 0.5829 | 1.92 | Q | | | | |
| 5+15 | 0.5956 | 1.86 | Q | | | | |
| 5+20 | 0.6089 | 1.92 | Q | | | | |
| 5+25 | 0.6230 | 2.05 | Q | | | | |
| 5+30 | 0.6373 | 2.08 | Q | | | | |
| 5+35 | 0.6524 | 2.19 | Q | | | | |
| 5+40 | 0.6685 | 2.34 | Q | | | | |
| 5+45 | 0.6849 | 2.38 | Q | | | | |
| 5+50 | 0.7014 | 2.39 | Q | | | | |
| 5+55 | 0.7179 | 2.40 | Q | | | | |
| 6+ 0 | 0.7345 | 2.40 | Q | | | | |
| 6+ 5 | 0.7517 | 2.50 | VQ | | | | |
| 6+10 | 0.7699 | 2.64 | VQ | | | | |
| 6+15 | 0.7884 | 2.68 | Q | | | | |
| 6+20 | 0.8069 | 2.69 | Q | | | | |
| 6+25 | 0.8255 | 2.70 | Q | | | | |
| 6+30 | 0.8441 | 2.70 | Q | | | | |
| 6+35 | 0.8634 | 2.80 | Q | | | | |
| 6+40 | 0.8837 | 2.94 | Q | | | | |
| 6+45 | 0.9042 | 2.98 | Q | | | | |
| 6+50 | 0.9248 | 2.99 | Q | | | | |
| 6+55 | 0.9455 | 3.00 | Q | | | | |
| 7+ 0 | 0.9662 | 3.01 | Q | | | | |
| 7+ 5 | 0.9869 | 3.01 | Q | | | | |
| 7+10 | 1.0076 | 3.01 | Q | | | | |
| 7+15 | 1.0283 | 3.01 | Q | | | | |
| 7+20 | 1.0497 | 3.10 | Q | | | | |
| 7+25 | 1.0720 | 3.25 | Q | | | | |
| 7+30 | 1.0946 | 3.28 | QV | | | | |
| 7+35 | 1.1180 | 3.39 | QV | | | | |
| 7+40 | 1.1424 | 3.54 | Q | | | | |
| 7+45 | 1.1670 | 3.58 | Q | | | | |
| 7+50 | 1.1924 | 3.69 | Q | | | | |
| 7+55 | 1.2189 | 3.84 | Q | | | | |
| 8+ 0 | 1.2456 | 3.88 | QV | | | | |
| 8+ 5 | 1.2738 | 4.09 | Q | | | | |
| 8+10 | 1.3040 | 4.38 | Q | | | | |
| 8+15 | 1.3347 | 4.45 | Q | | | | |
| 8+20 | 1.3655 | 4.48 | Q | | | | |
| 8+25 | 1.3965 | 4.50 | Q | | | | |
| 8+30 | 1.4276 | 4.51 | Q | | | | |
| 8+35 | 1.4593 | 4.61 | Q | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8+40 | 1.4920 | 4.75 | Q | | | | |
| 8+45 | 1.5249 | 4.78 | Q | | | | |
| 8+50 | 1.5586 | 4.89 | QV | | | | |
| 8+55 | 1.5934 | 5.04 | Q | | | | |
| 9+ 0 | 1.6284 | 5.08 | Q | | | | |
| 9+ 5 | 1.6648 | 5.29 | Q | | | | |
| 9+10 | 1.7033 | 5.58 | VQ | | | | |
| 9+15 | 1.7423 | 5.66 | \|Q | | | | |
| 9+20 | 1.7821 | 5.78 | \|Q | | | | |
| 9+25 | 1.8230 | 5.94 | \|Q | | | | |
| 9+30 | 1.8642 | 5.98 | \|QV | | | | |
| 9+35 | 1.9062 | 6.10 | \| Q | | | | |
| 9+40 | 1.9492 | 6.25 | \| Q | | | | |
| 9+45 | 1.9925 | 6.28 | \| Q | | | | |
| 9+50 | 2.0366 | 6.40 | \| QV | | | | |
| 9+55 | 2.0817 | 6.55 | \| Q | | | | |
| 10+ 0 | 2.1270 | 6.58 | \| Q | | | | |
| 10+ 5 | 2.1677 | 5.91 | \|Q V | | | | |
| 10+10 | 2.2017 | 4.93 | Q\| V | | | | |
| 10+15 | 2.2340 | 4.69 | Q\| V | | | | |
| 10+20 | 2.2656 | 4.59 | Q\| V | | | | |
| 10+25 | 2.2969 | 4.54 | Q\| V | | | | |
| 10+30 | 2.3279 | 4.51 | Q\| V | | | | |
| 10+35 | 2.3623 | 5.00 | Q\| V | | | | |
| 10+40 | 2.4016 | 5.71 | \|Q V | | | | |
| 10+45 | 2.4421 | 5.88 | \|Q V | | | | |
| 10+50 | 2.4831 | 5.95 | \|Q V | | | | |
| 10+55 | 2.5243 | 5.99 | \|Q V | | | | |
| 11+ 0 | 2.5657 | 6.01 | \| Q V | | | | |
| 11+ 5 | 2.6065 | 5.91 | \|Q V | | | | |
| 11+10 | 2.6462 | 5.77 | \|Q V | | | | |
| 11+15 | 2.6857 | 5.74 | \|Q V | | | | |
| 11+20 | 2.7251 | 5.72 | \|Q V | | | | |
| 11+25 | 2.7645 | 5.71 | \|Q V | | | | |
| 11+30 | 2.8038 | 5.71 | \|Q V | | | | |
| 11+35 | 2.8418 | 5.51 | \|Q V | | | | |
| 11+40 | 2.8778 | 5.23 | Q V \| | | | | |
| 11+45 | 2.9133 | 5.16 | Q V \| | | | | |
| 11+50 | 2.9494 | 5.23 | Q V\| | | | | |
| 11+55 | 2.9863 | 5.36 | Q V\| | | | | |
| 12+ 0 | 3.0233 | 5.38 | Q V\| | | | | |
| 12+ 5 | 3.0652 | 6.08 | \| Q V\| | | | | |
| 12+10 | 3.1140 | 7.08 | \| Q V | | | | |
| 12+15 | 3.1645 | 7.33 | \| Q V | | | | |
| 12+20 | 3.2163 | 7.53 | \| Q V | | | | |
| 12+25 | 3.2695 | 7.72 | \| Q \|V | | | | |
| 12+30 | 3.3232 | 7.79 | \| Q \|V | | | | |
| 12+35 | 3.3782 | 8.00 | \| Q \|V | | | | |
| 12+40 | 3.4353 | 8.29 | \| Q \| V | | | | |
| 12+45 | 3.4929 | 8.36 | \| Q \| V | | | | |
| 12+50 | 3.5514 | 8.49 | \| Q \| V | | | | |
| 12+55 | 3.6109 | 8.65 | \| Q \| V | | | | |
| 13+ 0 | 3.6708 | 8.69 | \| Q \| V | | | | |
| 13+ 5 | 3.7341 | 9.19 | \| Q \| V | | | | |
| 13+10 | 3.8023 | 9.91 | \| Q\| V | | | | |
| 13+15 | 3.8718 | 10.08 | \| Q V | | | | |
| 13+20 | 3.9418 | 10.16 | \| Q V | | | | |
| 13+25 | 4.0120 | 10.20 | \| Q V | | | | |
| 13+30 | 4.0824 | 10.22 | \| Q V | | | | |
| 13+35 | 4.1453 | 9.14 | \| Q \| V | | | | |
| 13+40 | 4.1975 | 7.58 | \| Q \| V | | | | |
| 13+45 | 4.2471 | 7.20 | \| Q \| V | | | | |
| 13+50 | 4.2956 | 7.04 | \| Q \| V | | | | |
| 13+55 | 4.3435 | 6.96 | \| Q \| V | | | | |
| 14+ 0 | 4.3911 | 6.91 | \| Q \| V | | | | |
| 14+ 5 | 4.4414 | 7.30 | \| Q \| V | | | | |
| 14+10 | 4.4956 | 7.87 | \| Q \| V | | | | |
| 14+15 | 4.5508 | 8.01 | \| Q \| V\| | | | | |
| 14+20 | 4.6057 | 7.97 | \| Q \| V\| | | | | |
| 14+25 | 4.6598 | 7.86 | \| Q \| V | | | | |
| 14+30 | 4.7138 | 7.84 | \| Q \| V | | | | |
| 14+35 | 4.7677 | 7.83 | \| Q \| V | | | | |
| 14+40 | 4.8215 | 7.82 | \| Q \| \|V | | | | |
| 14+45 | 4.8753 | 7.81 | \| Q \| \|V | | | | |

```
14+50       4.9285      7.72  |          |    Q     |          |V         |
14+55       4.9806      7.57  |          |    Q     |          | V        |
15+ 0       5.0325      7.54  |          |    Q     |          | V        |
15+ 5       5.0837      7.43  |          |   Q      |          | V        |
15+10       5.1338      7.28  |          |   Q      |          |  V       |
15+15       5.1837      7.24  |          |   Q      |          |  V       |
15+20       5.2327      7.13  |          |   Q      |          |  V       |
15+25       5.2808      6.98  |          |  Q       |          |   V      |
15+30       5.3286      6.94  |          |  Q       |          |   V      |
15+35       5.3736      6.53  |          |  Q       |          |   V      |
15+40       5.4146      5.96  |          |Q         |          |   V      |
15+45       5.4546      5.82  |          |Q         |          |    V     |
15+50       5.4943      5.76  |          |Q         |          |    V     |
15+55       5.5337      5.73  |          |Q         |          |    V     |
16+ 0       5.5731      5.71  |          |Q         |          |    V     |
16+ 5       5.6022      4.24  |        Q |          |          |     V    |
16+10       5.6168      2.11  |   Q      |          |          |     V    |
16+15       5.6278      1.60  |  Q       |          |          |     V    |
16+20       5.6373      1.38  | Q        |          |          |     V    |
16+25       5.6460      1.26  | Q        |          |          |     V    |
16+30       5.6543      1.20  | Q        |          |          |     V    |
16+35       5.6619      1.10  | Q        |          |          |     V    |
16+40       5.6685      0.96  |Q         |          |          |     V    |
16+45       5.6749      0.93  |Q         |          |          |     V    |
16+50       5.6812      0.91  |Q         |          |          |     V    |
16+55       5.6874      0.91  |Q         |          |          |     V    |
17+ 0       5.6936      0.90  |Q         |          |          |     V    |
17+ 5       5.7012      1.10  | Q        |          |          |     V    |
17+10       5.7107      1.38  | Q        |          |          |     V    |
17+15       5.7207      1.45  | Q        |          |          |     V    |
17+20       5.7309      1.48  | Q        |          |          |     V    |
17+25       5.7412      1.49  | Q        |          |          |     V    |
17+30       5.7515      1.50  |  Q       |          |          |      V   |
17+35       5.7619      1.50  |  Q       |          |          |      V   |
17+40       5.7722      1.50  |  Q       |          |          |      V   |
17+45       5.7826      1.50  |  Q       |          |          |      V   |
17+50       5.7922      1.40  | Q        |          |          |      V   |
17+55       5.8009      1.26  | Q        |          |          |      V   |
18+ 0       5.8094      1.23  | Q        |          |          |      V   |
18+ 5       5.8178      1.21  | Q        |          |          |      V   |
18+10       5.8261      1.21  | Q        |          |          |      V   |
18+15       5.8344      1.20  | Q        |          |          |      V   |
18+20       5.8426      1.20  | Q        |          |          |      V   |
18+25       5.8509      1.20  | Q        |          |          |      V   |
18+30       5.8592      1.20  | Q        |          |          |      V   |
18+35       5.8668      1.10  | Q        |          |          |      V   |
18+40       5.8734      0.96  |Q         |          |          |      V   |
18+45       5.8798      0.93  |Q         |          |          |      V   |
18+50       5.8854      0.82  |Q         |          |          |      V   |
18+55       5.8900      0.67  |Q         |          |          |      V   |
19+ 0       5.8943      0.63  |Q         |          |          |      V   |
19+ 5       5.8992      0.71  |Q         |          |          |       V  |
19+10       5.9050      0.85  |Q         |          |          |       V  |
19+15       5.9111      0.87  |Q         |          |          |       V  |
19+20       5.9179      0.99  |Q         |          |          |       V  |
19+25       5.9257      1.14  | Q        |          |          |       V  |
19+30       5.9338      1.18  | Q        |          |          |       V  |
19+35       5.9413      1.09  | Q        |          |          |       V  |
19+40       5.9479      0.96  |Q         |          |          |       V  |
19+45       5.9543      0.93  |Q         |          |          |       V  |
19+50       5.9599      0.82  |Q         |          |          |       V  |
19+55       5.9645      0.67  |Q         |          |          |       V  |
20+ 0       5.9688      0.63  |Q         |          |          |       V  |
20+ 5       5.9737      0.71  |Q         |          |          |       V  |
20+10       5.9796      0.85  |Q         |          |          |       V  |
20+15       5.9856      0.87  |Q         |          |          |       V  |
20+20       5.9917      0.89  |Q         |          |          |       V  |
20+25       5.9979      0.90  |Q         |          |          |       V  |
20+30       6.0041      0.90  |Q         |          |          |       V  |
20+35       6.0103      0.90  |Q         |          |          |       V  |
20+40       6.0165      0.90  |Q         |          |          |       V  |
20+45       6.0227      0.90  |Q         |          |          |       V  |
20+50       6.0283      0.80  |Q         |          |          |       V  |
20+55       6.0328      0.66  |Q         |          |          |       V  |
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 21+ 0 | 6.0371 | 0.63 | \|Q | \| | \| | \| | V \| |
| 21+ 5 | 6.0420 | 0.71 | \|Q | \| | \| | \| | V \| |
| 21+10 | 6.0479 | 0.85 | \|Q | \| | \| | \| | V \| |
| 21+15 | 6.0539 | 0.87 | \|Q | \| | \| | \| | V\| |
| 21+20 | 6.0593 | 0.79 | \|Q | \| | \| | \| | V\| |
| 21+25 | 6.0639 | 0.66 | \|Q | \| | \| | \| | V\| |
| 21+30 | 6.0682 | 0.63 | \|Q | \| | \| | \| | V\| |
| 21+35 | 6.0731 | 0.71 | \|Q | \| | \| | \| | V\| |
| 21+40 | 6.0789 | 0.85 | \|Q | \| | \| | \| | V\| |
| 21+45 | 6.0849 | 0.87 | \|Q | \| | \| | \| | V\| |
| 21+50 | 6.0904 | 0.79 | \|Q | \| | \| | \| | V\| |
| 21+55 | 6.0949 | 0.66 | \|Q | \| | \| | \| | V\| |
| 22+ 0 | 6.0992 | 0.63 | \|Q | \| | \| | \| | V\| |
| 22+ 5 | 6.1041 | 0.71 | \|Q | \| | \| | \| | V\| |
| 22+10 | 6.1099 | 0.85 | \|Q | \| | \| | \| | V\| |
| 22+15 | 6.1160 | 0.87 | \|Q | \| | \| | \| | V\| |
| 22+20 | 6.1214 | 0.79 | \|Q | \| | \| | \| | V\| |
| 22+25 | 6.1260 | 0.66 | \|Q | \| | \| | \| | V\| |
| 22+30 | 6.1303 | 0.63 | \|Q | \| | \| | \| | V\| |
| 22+35 | 6.1345 | 0.61 | \|Q | \| | \| | \| | V\| |
| 22+40 | 6.1387 | 0.61 | \|Q | \| | \| | \| | V\| |
| 22+45 | 6.1428 | 0.60 | \|Q | \| | \| | \| | V\| |
| 22+50 | 6.1469 | 0.60 | \|Q | \| | \| | \| | V\| |
| 22+55 | 6.1511 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+ 0 | 6.1552 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+ 5 | 6.1594 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+10 | 6.1635 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+15 | 6.1676 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+20 | 6.1718 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+25 | 6.1759 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+30 | 6.1801 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+35 | 6.1842 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+40 | 6.1883 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+45 | 6.1925 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+50 | 6.1966 | 0.60 | \|Q | \| | \| | \| | V\| |
| 23+55 | 6.2008 | 0.60 | \|Q | \| | \| | \| | V\| |
| 24+ 0 | 6.2049 | 0.60 | \|Q | \| | \| | \| | V\| |
| 24+ 5 | 6.2077 | 0.40 | Q | \| | \| | \| | V\| |
| 24+10 | 6.2085 | 0.12 | Q | \| | \| | \| | V\| |
| 24+15 | 6.2089 | 0.05 | Q | \| | \| | \| | V\| |
| 24+20 | 6.2090 | 0.02 | Q | \| | \| | \| | V\| |
| 24+25 | 6.2091 | 0.01 | Q | \| | \| | \| | V\| |

## Manning "n" Value Worksheet

## Drainage Area B2 - 42.59 Ac (existing)

| [1] | [2] | [3] | [4] | [5] | [7] |
|---|---|---|---|---|---|
| **Subarea** | **Area in (Ac)** | **Land Use (Plate D-5.6)** | **"n" Value** | **Decimal portion of Area [2] / SUM[2]** | **Average "n" Value [4] * [5]** |
| | 42.59 | Natural | 0.04 | 1.00 | 0.040 |
| | | Basin | 0.035 | 0.00 | 0.000 |
| | | Res 1/2 Ac | 0.015 | 0.00 | 0.000 |
| | | Res 1/4 Ac | 0.015 | 0.00 | 0.000 |
| | | Res < 1/4 Ac | 0.015 | 0.00 | 0.000 |
| | | Apartment | 0.015 | 0.00 | 0.000 |
| | | Mobil Home | 0.015 | 0.00 | 0.000 |
| | | Hospital | 0.02 | 0.00 | 0.000 |
| | | Commercial | 0.015 | 0.00 | 0.000 |
| | | | | | |
| Sum = | 42.59 | | | 1.00 | **0.040** |

## Runoff Index (RI) Worksheet

## Drainage Area B2 - 42.59 Ac (existing)

| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |
|---|---|---|---|---|---|---|---|
| **Subarea** | **Area in (Ac)** | **Soil Group** | **Cover Type** | **RI Number (Plate E6-1)** | **Land Use** | **Decimal portion of Area [2] / SUM[2]** | **Average RI Value [5] * [7]** |
| **Natural** | 33.49 | B | grass (fair) | 69 | Natural | 0.79 | 54.3 |
| | | C | grass (fair) | 79 | Natural | 0.00 | 0.0 |
| | 9.1 | D | grass (fair) | 84 | Natural | 0.21 | 17.9 |
| *Sum =* | *42.59* | | | | | 1.00 | **72.2** |

## Soil Low Loss Rate Worksheet

## Drainage Area B2 - 42.59 Ac (existing)

| [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|---|---|---|---|---|---|---|
| **Subarea** | **Area in (Ac)** | **Land Use (Plate D-5.6)** | **% Impervious (Plate D-5.6)** | **Soil Low Loss Rate 0.9-(0.8)* [4]** | **Decimal portion of Area [2] / SUM[2]** | **Average Low Loss Rate [5] * [6]** |
| | 42.59 | Natural | 0 | 0.90 | 1.00 | 0.90 |
| | | Basin/Park | 5 | 0.86 | 0.00 | 0.00 |
| | | Res 1/2 Ac | 40 | 0.58 | 0.00 | 0.00 |
| | | Res 1/4 Ac | 57 | 0.44 | 0.00 | 0.00 |
| | | Res < 1/4 Ac | 65 | 0.38 | 0.00 | 0.00 |
| | | Apartment | 80 | 0.26 | 0.00 | 0.00 |
| | | Mobil Home | 75 | 0.30 | 0.00 | 0.00 |
| | | Hospital | 75 | 0.30 | 0.00 | 0.00 |
| | | Commercial | 90 | 0.18 | 0.00 | 0.00 |
| Sum = | 42.59 | | | | 1.00 | **0.90** |

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

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Study date 09/21/20 File: 2rrb2ex242.out

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

Program License Serial Number 4029

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

English Units used in output format

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Renaissance Ranch
Drainage Area B2
Existing Condition - Area = 42.59 Ac
2-year 24-hour storm

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Drainage Area = 42.59(Ac.) = 0.067 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 42.59(Ac.) = 0.067 Sq. Mi.
Length along longest watercourse = 1680.00(Ft.)
Length along longest watercourse measured to centroid = 820.00(Ft.)
Length along longest watercourse = 0.318 Mi.
Length along longest watercourse measured to centroid = 0.155 Mi.
Difference in elevation = 13.50(Ft.)
Slope along watercourse = 42.4286 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time = 0.150 Hr.
Lag time = 9.01 Min.
25% of lag time = 2.25 Min.
40% of lag time = 3.60 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] |
|---|---|---|
| 42.59 | 2.16 | 91.99 |

100 YEAR Area rainfall data:

| Area(Ac.)[1] | Rainfall(In)[2] | Weighting[1*2] |
|---|---|---|
| 42.59 | 5.73 | 244.04 |

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.160(In)
Area Averaged 100-Year Rainfall = 5.730(In)

Point rain (area averaged) = 2.160(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 2.160(In)

Sub-Area Data:

| Area(Ac.) | Runoff Index | Impervious % |
|---|---|---|
| 42.590 | 72.20 | 0.010 |

Total Area Entered = 42.59(Ac.)

| RI | RI | Infil. Rate | Impervious | Adj. Infil. Rate | Area% | F |
|---|---|---|---|---|---|---|

| AMC2 | AMC-1 | (In/Hr) | (Dec.%) | (In/Hr) | (Dec.) | (In/Hr) |
|---|---|---|---|---|---|---|
| 72.2 | 53.6 | 0.535 | 0.010 | 0.530 | 1.000 | 0.530 |
| | | | | | Sum (F) = | 0.530 |

Area averaged mean soil loss (F) (In/Hr) = 0.530
Minimum soil loss rate ((In/Hr)) = 0.265
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

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

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Unit Hydrograph Data

| Unit time period (hrs) | | Time % of lag | Distribution Graph % | Unit Hydrograph (CFS) |
|---|---|---|---|---|
| 1 | 0.083 | 55.480 | 7.222 | 3.100 |
| 2 | 0.167 | 110.960 | 30.610 | 13.139 |
| 3 | 0.250 | 166.440 | 27.905 | 11.977 |
| 4 | 0.333 | 221.921 | 11.266 | 4.836 |
| 5 | 0.417 | 277.401 | 6.379 | 2.738 |
| 6 | 0.500 | 332.881 | 4.371 | 1.876 |
| 7 | 0.583 | 388.361 | 3.172 | 1.361 |
| 8 | 0.667 | 443.841 | 2.276 | 0.977 |
| 9 | 0.750 | 499.321 | 1.746 | 0.750 |
| 10 | 0.833 | 554.801 | 1.448 | 0.621 |
| 11 | 0.917 | 610.282 | 1.087 | 0.467 |
| 12 | 1.000 | 665.762 | 0.841 | 0.361 |
| 13 | 1.083 | 721.242 | 0.612 | 0.263 |
| 14 | 1.167 | 776.722 | 0.555 | 0.238 |
| 15 | 1.250 | 832.202 | 0.510 | 0.219 |
| | | | Sum = 100.000 Sum= | 42.923 |

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

| Unit | Time (Hr.) | Pattern Percent | Storm Rain (In/Hr) | Loss rate(In./Hr) Max | | Low | Effective (In/Hr) |
|---|---|---|---|---|---|---|---|
| 1 | 0.08 | 0.07 | 0.017 | ( 0.940) | | 0.016 | 0.002 |
| 2 | 0.17 | 0.07 | 0.017 | ( 0.936) | | 0.016 | 0.002 |
| 3 | 0.25 | 0.07 | 0.017 | ( 0.932) | | 0.016 | 0.002 |
| 4 | 0.33 | 0.10 | 0.026 | ( 0.929) | | 0.023 | 0.003 |
| 5 | 0.42 | 0.10 | 0.026 | ( 0.925) | | 0.023 | 0.003 |
| 6 | 0.50 | 0.10 | 0.026 | ( 0.922) | | 0.023 | 0.003 |
| 7 | 0.58 | 0.10 | 0.026 | ( 0.918) | | 0.023 | 0.003 |
| 8 | 0.67 | 0.10 | 0.026 | ( 0.914) | | 0.023 | 0.003 |
| 9 | 0.75 | 0.10 | 0.026 | ( 0.911) | | 0.023 | 0.003 |
| 10 | 0.83 | 0.13 | 0.035 | ( 0.907) | | 0.031 | 0.003 |
| 11 | 0.92 | 0.13 | 0.035 | ( 0.904) | | 0.031 | 0.003 |
| 12 | 1.00 | 0.13 | 0.035 | ( 0.900) | | 0.031 | 0.003 |
| 13 | 1.08 | 0.10 | 0.026 | ( 0.897) | | 0.023 | 0.003 |
| 14 | 1.17 | 0.10 | 0.026 | ( 0.893) | | 0.023 | 0.003 |
| 15 | 1.25 | 0.10 | 0.026 | ( 0.889) | | 0.023 | 0.003 |
| 16 | 1.33 | 0.10 | 0.026 | ( 0.886) | | 0.023 | 0.003 |
| 17 | 1.42 | 0.10 | 0.026 | ( 0.882) | | 0.023 | 0.003 |
| 18 | 1.50 | 0.10 | 0.026 | ( 0.879) | | 0.023 | 0.003 |
| 19 | 1.58 | 0.10 | 0.026 | ( 0.875) | | 0.023 | 0.003 |
| 20 | 1.67 | 0.10 | 0.026 | ( 0.872) | | 0.023 | 0.003 |
| 21 | 1.75 | 0.10 | 0.026 | ( 0.868) | | 0.023 | 0.003 |
| 22 | 1.83 | 0.13 | 0.035 | ( 0.865) | | 0.031 | 0.003 |
| 23 | 1.92 | 0.13 | 0.035 | ( 0.861) | | 0.031 | 0.003 |
| 24 | 2.00 | 0.13 | 0.035 | ( 0.858) | | 0.031 | 0.003 |
| 25 | 2.08 | 0.13 | 0.035 | ( 0.854) | | 0.031 | 0.003 |
| 26 | 2.17 | 0.13 | 0.035 | ( 0.851) | | 0.031 | 0.003 |
| 27 | 2.25 | 0.13 | 0.035 | ( 0.847) | | 0.031 | 0.003 |
| 28 | 2.33 | 0.13 | 0.035 | ( 0.844) | | 0.031 | 0.003 |
| 29 | 2.42 | 0.13 | 0.035 | ( 0.841) | | 0.031 | 0.003 |
| 30 | 2.50 | 0.13 | 0.035 | ( 0.837) | | 0.031 | 0.003 |
| 31 | 2.58 | 0.17 | 0.043 | ( 0.834) | | 0.039 | 0.004 |
| 32 | 2.67 | 0.17 | 0.043 | ( 0.830) | | 0.039 | 0.004 |
| 33 | 2.75 | 0.17 | 0.043 | ( 0.827) | | 0.039 | 0.004 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 34 | 2.83 | 0.17 | 0.043 | ( 0.823) | 0.039 | 0.004 |
| 35 | 2.92 | 0.17 | 0.043 | ( 0.820) | 0.039 | 0.004 |
| 36 | 3.00 | 0.17 | 0.043 | ( 0.817) | 0.039 | 0.004 |
| 37 | 3.08 | 0.17 | 0.043 | ( 0.813) | 0.039 | 0.004 |
| 38 | 3.17 | 0.17 | 0.043 | ( 0.810) | 0.039 | 0.004 |
| 39 | 3.25 | 0.17 | 0.043 | ( 0.807) | 0.039 | 0.004 |
| 40 | 3.33 | 0.17 | 0.043 | ( 0.803) | 0.039 | 0.004 |
| 41 | 3.42 | 0.17 | 0.043 | ( 0.800) | 0.039 | 0.004 |
| 42 | 3.50 | 0.17 | 0.043 | ( 0.797) | 0.039 | 0.004 |
| 43 | 3.58 | 0.17 | 0.043 | ( 0.793) | 0.039 | 0.004 |
| 44 | 3.67 | 0.17 | 0.043 | ( 0.790) | 0.039 | 0.004 |
| 45 | 3.75 | 0.17 | 0.043 | ( 0.787) | 0.039 | 0.004 |
| 46 | 3.83 | 0.20 | 0.052 | ( 0.783) | 0.047 | 0.005 |
| 47 | 3.92 | 0.20 | 0.052 | ( 0.780) | 0.047 | 0.005 |
| 48 | 4.00 | 0.20 | 0.052 | ( 0.777) | 0.047 | 0.005 |
| 49 | 4.08 | 0.20 | 0.052 | ( 0.773) | 0.047 | 0.005 |
| 50 | 4.17 | 0.20 | 0.052 | ( 0.770) | 0.047 | 0.005 |
| 51 | 4.25 | 0.20 | 0.052 | ( 0.767) | 0.047 | 0.005 |
| 52 | 4.33 | 0.23 | 0.060 | ( 0.763) | 0.054 | 0.006 |
| 53 | 4.42 | 0.23 | 0.060 | ( 0.760) | 0.054 | 0.006 |
| 54 | 4.50 | 0.23 | 0.060 | ( 0.757) | 0.054 | 0.006 |
| 55 | 4.58 | 0.23 | 0.060 | ( 0.754) | 0.054 | 0.006 |
| 56 | 4.67 | 0.23 | 0.060 | ( 0.750) | 0.054 | 0.006 |
| 57 | 4.75 | 0.23 | 0.060 | ( 0.747) | 0.054 | 0.006 |
| 58 | 4.83 | 0.27 | 0.069 | ( 0.744) | 0.062 | 0.007 |
| 59 | 4.92 | 0.27 | 0.069 | ( 0.741) | 0.062 | 0.007 |
| 60 | 5.00 | 0.27 | 0.069 | ( 0.738) | 0.062 | 0.007 |
| 61 | 5.08 | 0.20 | 0.052 | ( 0.734) | 0.047 | 0.005 |
| 62 | 5.17 | 0.20 | 0.052 | ( 0.731) | 0.047 | 0.005 |
| 63 | 5.25 | 0.20 | 0.052 | ( 0.728) | 0.047 | 0.005 |
| 64 | 5.33 | 0.23 | 0.060 | ( 0.725) | 0.054 | 0.006 |
| 65 | 5.42 | 0.23 | 0.060 | ( 0.722) | 0.054 | 0.006 |
| 66 | 5.50 | 0.23 | 0.060 | ( 0.718) | 0.054 | 0.006 |
| 67 | 5.58 | 0.27 | 0.069 | ( 0.715) | 0.062 | 0.007 |
| 68 | 5.67 | 0.27 | 0.069 | ( 0.712) | 0.062 | 0.007 |
| 69 | 5.75 | 0.27 | 0.069 | ( 0.709) | 0.062 | 0.007 |
| 70 | 5.83 | 0.27 | 0.069 | ( 0.706) | 0.062 | 0.007 |
| 71 | 5.92 | 0.27 | 0.069 | ( 0.703) | 0.062 | 0.007 |
| 72 | 6.00 | 0.27 | 0.069 | ( 0.700) | 0.062 | 0.007 |
| 73 | 6.08 | 0.30 | 0.078 | ( 0.697) | 0.070 | 0.008 |
| 74 | 6.17 | 0.30 | 0.078 | ( 0.693) | 0.070 | 0.008 |
| 75 | 6.25 | 0.30 | 0.078 | ( 0.690) | 0.070 | 0.008 |
| 76 | 6.33 | 0.30 | 0.078 | ( 0.687) | 0.070 | 0.008 |
| 77 | 6.42 | 0.30 | 0.078 | ( 0.684) | 0.070 | 0.008 |
| 78 | 6.50 | 0.30 | 0.078 | ( 0.681) | 0.070 | 0.008 |
| 79 | 6.58 | 0.33 | 0.086 | ( 0.678) | 0.078 | 0.009 |
| 80 | 6.67 | 0.33 | 0.086 | ( 0.675) | 0.078 | 0.009 |
| 81 | 6.75 | 0.33 | 0.086 | ( 0.672) | 0.078 | 0.009 |
| 82 | 6.83 | 0.33 | 0.086 | ( 0.669) | 0.078 | 0.009 |
| 83 | 6.92 | 0.33 | 0.086 | ( 0.666) | 0.078 | 0.009 |
| 84 | 7.00 | 0.33 | 0.086 | ( 0.663) | 0.078 | 0.009 |
| 85 | 7.08 | 0.33 | 0.086 | ( 0.660) | 0.078 | 0.009 |
| 86 | 7.17 | 0.33 | 0.086 | ( 0.657) | 0.078 | 0.009 |
| 87 | 7.25 | 0.33 | 0.086 | ( 0.654) | 0.078 | 0.009 |
| 88 | 7.33 | 0.37 | 0.095 | ( 0.651) | 0.086 | 0.010 |
| 89 | 7.42 | 0.37 | 0.095 | ( 0.648) | 0.086 | 0.010 |
| 90 | 7.50 | 0.37 | 0.095 | ( 0.645) | 0.086 | 0.010 |
| 91 | 7.58 | 0.40 | 0.104 | ( 0.642) | 0.093 | 0.010 |
| 92 | 7.67 | 0.40 | 0.104 | ( 0.639) | 0.093 | 0.010 |
| 93 | 7.75 | 0.40 | 0.104 | ( 0.636) | 0.093 | 0.010 |
| 94 | 7.83 | 0.43 | 0.112 | ( 0.633) | 0.101 | 0.011 |
| 95 | 7.92 | 0.43 | 0.112 | ( 0.630) | 0.101 | 0.011 |
| 96 | 8.00 | 0.43 | 0.112 | ( 0.627) | 0.101 | 0.011 |
| 97 | 8.08 | 0.50 | 0.130 | ( 0.624) | 0.117 | 0.013 |
| 98 | 8.17 | 0.50 | 0.130 | ( 0.621) | 0.117 | 0.013 |
| 99 | 8.25 | 0.50 | 0.130 | ( 0.619) | 0.117 | 0.013 |
| 100 | 8.33 | 0.50 | 0.130 | ( 0.616) | 0.117 | 0.013 |
| 101 | 8.42 | 0.50 | 0.130 | ( 0.613) | 0.117 | 0.013 |
| 102 | 8.50 | 0.50 | 0.130 | ( 0.610) | 0.117 | 0.013 |
| 103 | 8.58 | 0.53 | 0.138 | ( 0.607) | 0.124 | 0.014 |
| 104 | 8.67 | 0.53 | 0.138 | ( 0.604) | 0.124 | 0.014 |
| 105 | 8.75 | 0.53 | 0.138 | ( 0.601) | 0.124 | 0.014 |
| 106 | 8.83 | 0.57 | 0.147 | ( 0.599) | 0.132 | 0.015 |
| 107 | 8.92 | 0.57 | 0.147 | ( 0.596) | 0.132 | 0.015 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 108 | 9.00 | 0.57 | 0.147 | ( 0.593) | 0.132 | 0.015 |
| 109 | 9.08 | 0.63 | 0.164 | ( 0.590) | 0.148 | 0.016 |
| 110 | 9.17 | 0.63 | 0.164 | ( 0.587) | 0.148 | 0.016 |
| 111 | 9.25 | 0.63 | 0.164 | ( 0.584) | 0.148 | 0.016 |
| 112 | 9.33 | 0.67 | 0.173 | ( 0.582) | 0.156 | 0.017 |
| 113 | 9.42 | 0.67 | 0.173 | ( 0.579) | 0.156 | 0.017 |
| 114 | 9.50 | 0.67 | 0.173 | ( 0.576) | 0.156 | 0.017 |
| 115 | 9.58 | 0.70 | 0.181 | ( 0.573) | 0.163 | 0.018 |
| 116 | 9.67 | 0.70 | 0.181 | ( 0.571) | 0.163 | 0.018 |
| 117 | 9.75 | 0.70 | 0.181 | ( 0.568) | 0.163 | 0.018 |
| 118 | 9.83 | 0.73 | 0.190 | ( 0.565) | 0.171 | 0.019 |
| 119 | 9.92 | 0.73 | 0.190 | ( 0.562) | 0.171 | 0.019 |
| 120 | 10.00 | 0.73 | 0.190 | ( 0.560) | 0.171 | 0.019 |
| 121 | 10.08 | 0.50 | 0.130 | ( 0.557) | 0.117 | 0.013 |
| 122 | 10.17 | 0.50 | 0.130 | ( 0.554) | 0.117 | 0.013 |
| 123 | 10.25 | 0.50 | 0.130 | ( 0.552) | 0.117 | 0.013 |
| 124 | 10.33 | 0.50 | 0.130 | ( 0.549) | 0.117 | 0.013 |
| 125 | 10.42 | 0.50 | 0.130 | ( 0.546) | 0.117 | 0.013 |
| 126 | 10.50 | 0.50 | 0.130 | ( 0.544) | 0.117 | 0.013 |
| 127 | 10.58 | 0.67 | 0.173 | ( 0.541) | 0.156 | 0.017 |
| 128 | 10.67 | 0.67 | 0.173 | ( 0.538) | 0.156 | 0.017 |
| 129 | 10.75 | 0.67 | 0.173 | ( 0.536) | 0.156 | 0.017 |
| 130 | 10.83 | 0.67 | 0.173 | ( 0.533) | 0.156 | 0.017 |
| 131 | 10.92 | 0.67 | 0.173 | ( 0.530) | 0.156 | 0.017 |
| 132 | 11.00 | 0.67 | 0.173 | ( 0.528) | 0.156 | 0.017 |
| 133 | 11.08 | 0.63 | 0.164 | ( 0.525) | 0.148 | 0.016 |
| 134 | 11.17 | 0.63 | 0.164 | ( 0.523) | 0.148 | 0.016 |
| 135 | 11.25 | 0.63 | 0.164 | ( 0.520) | 0.148 | 0.016 |
| 136 | 11.33 | 0.63 | 0.164 | ( 0.518) | 0.148 | 0.016 |
| 137 | 11.42 | 0.63 | 0.164 | ( 0.515) | 0.148 | 0.016 |
| 138 | 11.50 | 0.63 | 0.164 | ( 0.512) | 0.148 | 0.016 |
| 139 | 11.58 | 0.57 | 0.147 | ( 0.510) | 0.132 | 0.015 |
| 140 | 11.67 | 0.57 | 0.147 | ( 0.507) | 0.132 | 0.015 |
| 141 | 11.75 | 0.57 | 0.147 | ( 0.505) | 0.132 | 0.015 |
| 142 | 11.83 | 0.60 | 0.156 | ( 0.502) | 0.140 | 0.016 |
| 143 | 11.92 | 0.60 | 0.156 | ( 0.500) | 0.140 | 0.016 |
| 144 | 12.00 | 0.60 | 0.156 | ( 0.497) | 0.140 | 0.016 |
| 145 | 12.08 | 0.83 | 0.216 | ( 0.495) | 0.194 | 0.022 |
| 146 | 12.17 | 0.83 | 0.216 | ( 0.492) | 0.194 | 0.022 |
| 147 | 12.25 | 0.83 | 0.216 | ( 0.490) | 0.194 | 0.022 |
| 148 | 12.33 | 0.87 | 0.225 | ( 0.487) | 0.202 | 0.022 |
| 149 | 12.42 | 0.87 | 0.225 | ( 0.485) | 0.202 | 0.022 |
| 150 | 12.50 | 0.87 | 0.225 | ( 0.483) | 0.202 | 0.022 |
| 151 | 12.58 | 0.93 | 0.242 | ( 0.480) | 0.218 | 0.024 |
| 152 | 12.67 | 0.93 | 0.242 | ( 0.478) | 0.218 | 0.024 |
| 153 | 12.75 | 0.93 | 0.242 | ( 0.475) | 0.218 | 0.024 |
| 154 | 12.83 | 0.97 | 0.251 | ( 0.473) | 0.225 | 0.025 |
| 155 | 12.92 | 0.97 | 0.251 | ( 0.470) | 0.225 | 0.025 |
| 156 | 13.00 | 0.97 | 0.251 | ( 0.468) | 0.225 | 0.025 |
| 157 | 13.08 | 1.13 | 0.294 | ( 0.466) | 0.264 | 0.029 |
| 158 | 13.17 | 1.13 | 0.294 | ( 0.463) | 0.264 | 0.029 |
| 159 | 13.25 | 1.13 | 0.294 | ( 0.461) | 0.264 | 0.029 |
| 160 | 13.33 | 1.13 | 0.294 | ( 0.459) | 0.264 | 0.029 |
| 161 | 13.42 | 1.13 | 0.294 | ( 0.456) | 0.264 | 0.029 |
| 162 | 13.50 | 1.13 | 0.294 | ( 0.454) | 0.264 | 0.029 |
| 163 | 13.58 | 0.77 | 0.199 | ( 0.452) | 0.179 | 0.020 |
| 164 | 13.67 | 0.77 | 0.199 | ( 0.449) | 0.179 | 0.020 |
| 165 | 13.75 | 0.77 | 0.199 | ( 0.447) | 0.179 | 0.020 |
| 166 | 13.83 | 0.77 | 0.199 | ( 0.445) | 0.179 | 0.020 |
| 167 | 13.92 | 0.77 | 0.199 | ( 0.443) | 0.179 | 0.020 |
| 168 | 14.00 | 0.77 | 0.199 | ( 0.440) | 0.179 | 0.020 |
| 169 | 14.08 | 0.90 | 0.233 | ( 0.438) | 0.210 | 0.023 |
| 170 | 14.17 | 0.90 | 0.233 | ( 0.436) | 0.210 | 0.023 |
| 171 | 14.25 | 0.90 | 0.233 | ( 0.434) | 0.210 | 0.023 |
| 172 | 14.33 | 0.87 | 0.225 | ( 0.431) | 0.202 | 0.022 |
| 173 | 14.42 | 0.87 | 0.225 | ( 0.429) | 0.202 | 0.022 |
| 174 | 14.50 | 0.87 | 0.225 | ( 0.427) | 0.202 | 0.022 |
| 175 | 14.58 | 0.87 | 0.225 | ( 0.425) | 0.202 | 0.022 |
| 176 | 14.67 | 0.87 | 0.225 | ( 0.423) | 0.202 | 0.022 |
| 177 | 14.75 | 0.87 | 0.225 | ( 0.420) | 0.202 | 0.022 |
| 178 | 14.83 | 0.83 | 0.216 | ( 0.418) | 0.194 | 0.022 |
| 179 | 14.92 | 0.83 | 0.216 | ( 0.416) | 0.194 | 0.022 |
| 180 | 15.00 | 0.83 | 0.216 | ( 0.414) | 0.194 | 0.022 |
| 181 | 15.08 | 0.80 | 0.207 | ( 0.412) | 0.187 | 0.021 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 182 | 15.17 | 0.80 | 0.207 | ( 0.410) | 0.187 | 0.021 |
| 183 | 15.25 | 0.80 | 0.207 | ( 0.408) | 0.187 | 0.021 |
| 184 | 15.33 | 0.77 | 0.199 | ( 0.406) | 0.179 | 0.020 |
| 185 | 15.42 | 0.77 | 0.199 | ( 0.403) | 0.179 | 0.020 |
| 186 | 15.50 | 0.77 | 0.199 | ( 0.401) | 0.179 | 0.020 |
| 187 | 15.58 | 0.63 | 0.164 | ( 0.399) | 0.148 | 0.016 |
| 188 | 15.67 | 0.63 | 0.164 | ( 0.397) | 0.148 | 0.016 |
| 189 | 15.75 | 0.63 | 0.164 | ( 0.395) | 0.148 | 0.016 |
| 190 | 15.83 | 0.63 | 0.164 | ( 0.393) | 0.148 | 0.016 |
| 191 | 15.92 | 0.63 | 0.164 | ( 0.391) | 0.148 | 0.016 |
| 192 | 16.00 | 0.63 | 0.164 | ( 0.389) | 0.148 | 0.016 |
| 193 | 16.08 | 0.13 | 0.035 | ( 0.387) | 0.031 | 0.003 |
| 194 | 16.17 | 0.13 | 0.035 | ( 0.385) | 0.031 | 0.003 |
| 195 | 16.25 | 0.13 | 0.035 | ( 0.383) | 0.031 | 0.003 |
| 196 | 16.33 | 0.13 | 0.035 | ( 0.381) | 0.031 | 0.003 |
| 197 | 16.42 | 0.13 | 0.035 | ( 0.379) | 0.031 | 0.003 |
| 198 | 16.50 | 0.13 | 0.035 | ( 0.377) | 0.031 | 0.003 |
| 199 | 16.58 | 0.10 | 0.026 | ( 0.376) | 0.023 | 0.003 |
| 200 | 16.67 | 0.10 | 0.026 | ( 0.374) | 0.023 | 0.003 |
| 201 | 16.75 | 0.10 | 0.026 | ( 0.372) | 0.023 | 0.003 |
| 202 | 16.83 | 0.10 | 0.026 | ( 0.370) | 0.023 | 0.003 |
| 203 | 16.92 | 0.10 | 0.026 | ( 0.368) | 0.023 | 0.003 |
| 204 | 17.00 | 0.10 | 0.026 | ( 0.366) | 0.023 | 0.003 |
| 205 | 17.08 | 0.17 | 0.043 | ( 0.364) | 0.039 | 0.004 |
| 206 | 17.17 | 0.17 | 0.043 | ( 0.362) | 0.039 | 0.004 |
| 207 | 17.25 | 0.17 | 0.043 | ( 0.361) | 0.039 | 0.004 |
| 208 | 17.33 | 0.17 | 0.043 | ( 0.359) | 0.039 | 0.004 |
| 209 | 17.42 | 0.17 | 0.043 | ( 0.357) | 0.039 | 0.004 |
| 210 | 17.50 | 0.17 | 0.043 | ( 0.355) | 0.039 | 0.004 |
| 211 | 17.58 | 0.17 | 0.043 | ( 0.353) | 0.039 | 0.004 |
| 212 | 17.67 | 0.17 | 0.043 | ( 0.352) | 0.039 | 0.004 |
| 213 | 17.75 | 0.17 | 0.043 | ( 0.350) | 0.039 | 0.004 |
| 214 | 17.83 | 0.13 | 0.035 | ( 0.348) | 0.031 | 0.003 |
| 215 | 17.92 | 0.13 | 0.035 | ( 0.346) | 0.031 | 0.003 |
| 216 | 18.00 | 0.13 | 0.035 | ( 0.345) | 0.031 | 0.003 |
| 217 | 18.08 | 0.13 | 0.035 | ( 0.343) | 0.031 | 0.003 |
| 218 | 18.17 | 0.13 | 0.035 | ( 0.341) | 0.031 | 0.003 |
| 219 | 18.25 | 0.13 | 0.035 | ( 0.340) | 0.031 | 0.003 |
| 220 | 18.33 | 0.13 | 0.035 | ( 0.338) | 0.031 | 0.003 |
| 221 | 18.42 | 0.13 | 0.035 | ( 0.336) | 0.031 | 0.003 |
| 222 | 18.50 | 0.13 | 0.035 | ( 0.335) | 0.031 | 0.003 |
| 223 | 18.58 | 0.10 | 0.026 | ( 0.333) | 0.023 | 0.003 |
| 224 | 18.67 | 0.10 | 0.026 | ( 0.332) | 0.023 | 0.003 |
| 225 | 18.75 | 0.10 | 0.026 | ( 0.330) | 0.023 | 0.003 |
| 226 | 18.83 | 0.07 | 0.017 | ( 0.328) | 0.016 | 0.002 |
| 227 | 18.92 | 0.07 | 0.017 | ( 0.327) | 0.016 | 0.002 |
| 228 | 19.00 | 0.07 | 0.017 | ( 0.325) | 0.016 | 0.002 |
| 229 | 19.08 | 0.10 | 0.026 | ( 0.324) | 0.023 | 0.003 |
| 230 | 19.17 | 0.10 | 0.026 | ( 0.322) | 0.023 | 0.003 |
| 231 | 19.25 | 0.10 | 0.026 | ( 0.321) | 0.023 | 0.003 |
| 232 | 19.33 | 0.13 | 0.035 | ( 0.319) | 0.031 | 0.003 |
| 233 | 19.42 | 0.13 | 0.035 | ( 0.318) | 0.031 | 0.003 |
| 234 | 19.50 | 0.13 | 0.035 | ( 0.316) | 0.031 | 0.003 |
| 235 | 19.58 | 0.10 | 0.026 | ( 0.315) | 0.023 | 0.003 |
| 236 | 19.67 | 0.10 | 0.026 | ( 0.313) | 0.023 | 0.003 |
| 237 | 19.75 | 0.10 | 0.026 | ( 0.312) | 0.023 | 0.003 |
| 238 | 19.83 | 0.07 | 0.017 | ( 0.311) | 0.016 | 0.002 |
| 239 | 19.92 | 0.07 | 0.017 | ( 0.309) | 0.016 | 0.002 |
| 240 | 20.00 | 0.07 | 0.017 | ( 0.308) | 0.016 | 0.002 |
| 241 | 20.08 | 0.10 | 0.026 | ( 0.306) | 0.023 | 0.003 |
| 242 | 20.17 | 0.10 | 0.026 | ( 0.305) | 0.023 | 0.003 |
| 243 | 20.25 | 0.10 | 0.026 | ( 0.304) | 0.023 | 0.003 |
| 244 | 20.33 | 0.10 | 0.026 | ( 0.302) | 0.023 | 0.003 |
| 245 | 20.42 | 0.10 | 0.026 | ( 0.301) | 0.023 | 0.003 |
| 246 | 20.50 | 0.10 | 0.026 | ( 0.300) | 0.023 | 0.003 |
| 247 | 20.58 | 0.10 | 0.026 | ( 0.299) | 0.023 | 0.003 |
| 248 | 20.67 | 0.10 | 0.026 | ( 0.297) | 0.023 | 0.003 |
| 249 | 20.75 | 0.10 | 0.026 | ( 0.296) | 0.023 | 0.003 |
| 250 | 20.83 | 0.07 | 0.017 | ( 0.295) | 0.016 | 0.002 |
| 251 | 20.92 | 0.07 | 0.017 | ( 0.294) | 0.016 | 0.002 |
| 252 | 21.00 | 0.07 | 0.017 | ( 0.293) | 0.016 | 0.002 |
| 253 | 21.08 | 0.10 | 0.026 | ( 0.291) | 0.023 | 0.003 |
| 254 | 21.17 | 0.10 | 0.026 | ( 0.290) | 0.023 | 0.003 |
| 255 | 21.25 | 0.10 | 0.026 | ( 0.289) | 0.023 | 0.003 |

```
256  21.33     0.07      0.017       (  0.288)       0.016        0.002
257  21.42     0.07      0.017       (  0.287)       0.016        0.002
258  21.50     0.07      0.017       (  0.286)       0.016        0.002
259  21.58     0.10      0.026       (  0.285)       0.023        0.003
260  21.67     0.10      0.026       (  0.284)       0.023        0.003
261  21.75     0.10      0.026       (  0.283)       0.023        0.003
262  21.83     0.07      0.017       (  0.282)       0.016        0.002
263  21.92     0.07      0.017       (  0.281)       0.016        0.002
264  22.00     0.07      0.017       (  0.280)       0.016        0.002
265  22.08     0.10      0.026       (  0.279)       0.023        0.003
266  22.17     0.10      0.026       (  0.278)       0.023        0.003
267  22.25     0.10      0.026       (  0.277)       0.023        0.003
268  22.33     0.07      0.017       (  0.276)       0.016        0.002
269  22.42     0.07      0.017       (  0.275)       0.016        0.002
270  22.50     0.07      0.017       (  0.275)       0.016        0.002
271  22.58     0.07      0.017       (  0.274)       0.016        0.002
272  22.67     0.07      0.017       (  0.273)       0.016        0.002
273  22.75     0.07      0.017       (  0.272)       0.016        0.002
274  22.83     0.07      0.017       (  0.272)       0.016        0.002
275  22.92     0.07      0.017       (  0.271)       0.016        0.002
276  23.00     0.07      0.017       (  0.270)       0.016        0.002
277  23.08     0.07      0.017       (  0.270)       0.016        0.002
278  23.17     0.07      0.017       (  0.269)       0.016        0.002
279  23.25     0.07      0.017       (  0.268)       0.016        0.002
280  23.33     0.07      0.017       (  0.268)       0.016        0.002
281  23.42     0.07      0.017       (  0.267)       0.016        0.002
282  23.50     0.07      0.017       (  0.267)       0.016        0.002
283  23.58     0.07      0.017       (  0.266)       0.016        0.002
284  23.67     0.07      0.017       (  0.266)       0.016        0.002
285  23.75     0.07      0.017       (  0.266)       0.016        0.002
286  23.83     0.07      0.017       (  0.265)       0.016        0.002
287  23.92     0.07      0.017       (  0.265)       0.016        0.002
288  24.00     0.07      0.017       (  0.265)       0.016        0.002
              (Loss Rate Not Used)
    Sum =     100.0                                  Sum =     2.6
      Flood volume = Effective rainfall      0.22(In)
       times area      42.6(Ac.)/[(In)/(Ft.)] =       0.8(Ac.Ft)
      Total soil loss =      1.94(In)
      Total soil loss =     6.899(Ac.Ft)
      Total rainfall =      2.16(In)
      Flood volume =       33391.2 Cubic Feet
      Total soil loss =      300520.7 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      1.236(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      0.01  Q         |         |         |         |
   0+10       0.0002      0.03  Q         |         |         |         |
   0+15       0.0006      0.05  Q         |         |         |         |
   0+20       0.0010      0.06  Q         |         |         |         |
   0+25       0.0015      0.08  Q         |         |         |         |
   0+30       0.0021      0.09  Q         |         |         |         |
   0+35       0.0028      0.10  Q         |         |         |         |
   0+40       0.0035      0.10  Q         |         |         |         |
   0+45       0.0042      0.10  Q         |         |         |         |
   0+50       0.0049      0.11  Q         |         |         |         |
   0+55       0.0058      0.12  Q         |         |         |         |
   1+ 0       0.0067      0.13  Q         |         |         |         |
   1+ 5       0.0076      0.14  Q         |         |         |         |
   1+10       0.0085      0.13  Q         |         |         |         |
   1+15       0.0093      0.12  Q         |         |         |         |
   1+20       0.0101      0.12  Q         |         |         |         |
   1+25       0.0109      0.11  Q         |         |         |         |
   1+30       0.0117      0.11  Q         |         |         |         |
   1+35       0.0124      0.11  Q         |         |         |         |
   1+40       0.0132      0.11  Q         |         |         |         |
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1+45 | 0.0140 | 0.11 | Q | \| | \| | \| | \| |
| 1+50 | 0.0148 | 0.11 | Q | \| | \| | \| | \| |
| 1+55 | 0.0157 | 0.13 | Q | \| | \| | \| | \| |
| 2+ 0 | 0.0166 | 0.14 | Q | \| | \| | \| | \| |
| 2+ 5 | 0.0176 | 0.14 | Q | \| | \| | \| | \| |
| 2+10 | 0.0185 | 0.14 | Q | \| | \| | \| | \| |
| 2+15 | 0.0195 | 0.14 | QV | \| | \| | \| | \| |
| 2+20 | 0.0205 | 0.15 | QV | \| | \| | \| | \| |
| 2+25 | 0.0215 | 0.15 | QV | \| | \| | \| | \| |
| 2+30 | 0.0225 | 0.15 | QV | \| | \| | \| | \| |
| 2+35 | 0.0236 | 0.15 | QV | \| | \| | \| | \| |
| 2+40 | 0.0247 | 0.16 | QV | \| | \| | \| | \| |
| 2+45 | 0.0259 | 0.17 | QV | \| | \| | \| | \| |
| 2+50 | 0.0271 | 0.18 | QV | \| | \| | \| | \| |
| 2+55 | 0.0283 | 0.18 | QV | \| | \| | \| | \| |
| 3+ 0 | 0.0296 | 0.18 | QV | \| | \| | \| | \| |
| 3+ 5 | 0.0308 | 0.18 | QV | \| | \| | \| | \| |
| 3+10 | 0.0321 | 0.18 | QV | \| | \| | \| | \| |
| 3+15 | 0.0334 | 0.18 | QV | \| | \| | \| | \| |
| 3+20 | 0.0346 | 0.18 | QV | \| | \| | \| | \| |
| 3+25 | 0.0359 | 0.18 | QV | \| | \| | \| | \| |
| 3+30 | 0.0372 | 0.18 | QV | \| | \| | \| | \| |
| 3+35 | 0.0384 | 0.19 | Q V | \| | \| | \| | \| |
| 3+40 | 0.0397 | 0.19 | Q V | \| | \| | \| | \| |
| 3+45 | 0.0410 | 0.19 | Q V | \| | \| | \| | \| |
| 3+50 | 0.0423 | 0.19 | Q V | \| | \| | \| | \| |
| 3+55 | 0.0437 | 0.20 | Q V | \| | \| | \| | \| |
| 4+ 0 | 0.0451 | 0.21 | Q V | \| | \| | \| | \| |
| 4+ 5 | 0.0466 | 0.21 | Q V | \| | \| | \| | \| |
| 4+10 | 0.0481 | 0.22 | Q V | \| | \| | \| | \| |
| 4+15 | 0.0496 | 0.22 | Q V | \| | \| | \| | \| |
| 4+20 | 0.0511 | 0.22 | Q V | \| | \| | \| | \| |
| 4+25 | 0.0527 | 0.23 | Q V | \| | \| | \| | \| |
| 4+30 | 0.0544 | 0.25 | Q V | \| | \| | \| | \| |
| 4+35 | 0.0561 | 0.25 | Q V | \| | \| | \| | \| |
| 4+40 | 0.0579 | 0.25 | \|Q V | \| | \| | \| | \| |
| 4+45 | 0.0596 | 0.25 | \|Q V | \| | \| | \| | \| |
| 4+50 | 0.0614 | 0.26 | \|Q V | \| | \| | \| | \| |
| 4+55 | 0.0633 | 0.27 | \|Q V | \| | \| | \| | \| |
| 5+ 0 | 0.0652 | 0.28 | \|Q V | \| | \| | \| | \| |
| 5+ 5 | 0.0671 | 0.28 | \|Q V | \| | \| | \| | \| |
| 5+10 | 0.0690 | 0.26 | \|Q V | \| | \| | \| | \| |
| 5+15 | 0.0706 | 0.24 | Q  V | \| | \| | \| | \| |
| 5+20 | 0.0723 | 0.24 | Q  V | \| | \| | \| | \| |
| 5+25 | 0.0740 | 0.25 | Q  V | \| | \| | \| | \| |
| 5+30 | 0.0757 | 0.25 | \|Q V | \| | \| | \| | \| |
| 5+35 | 0.0775 | 0.26 | \|Q  V | \| | \| | \| | \| |
| 5+40 | 0.0794 | 0.27 | \|Q  V | \| | \| | \| | \| |
| 5+45 | 0.0813 | 0.28 | \|Q  V | \| | \| | \| | \| |
| 5+50 | 0.0833 | 0.29 | \|Q  V | \| | \| | \| | \| |
| 5+55 | 0.0853 | 0.29 | \|Q  V | \| | \| | \| | \| |
| 6+ 0 | 0.0873 | 0.29 | \|Q  V | \| | \| | \| | \| |
| 6+ 5 | 0.0893 | 0.30 | \|Q  V | \| | \| | \| | \| |
| 6+10 | 0.0915 | 0.31 | \|Q  V | \| | \| | \| | \| |
| 6+15 | 0.0936 | 0.32 | \|Q  V | \| | \| | \| | \| |
| 6+20 | 0.0959 | 0.32 | \|Q   V | \| | \| | \| | \| |
| 6+25 | 0.0981 | 0.33 | \|Q   V | \| | \| | \| | \| |
| 6+30 | 0.1004 | 0.33 | \|Q   V | \| | \| | \| | \| |
| 6+35 | 0.1027 | 0.33 | \|Q   V | \| | \| | \| | \| |
| 6+40 | 0.1051 | 0.35 | \|Q   V | \| | \| | \| | \| |
| 6+45 | 0.1075 | 0.36 | \|Q   V | \| | \| | \| | \| |
| 6+50 | 0.1100 | 0.36 | \|Q   V | \| | \| | \| | \| |
| 6+55 | 0.1125 | 0.36 | \|Q   V | \| | \| | \| | \| |
| 7+ 0 | 0.1150 | 0.37 | \|Q    V | \| | \| | \| | \| |
| 7+ 5 | 0.1176 | 0.37 | \|Q    V | \| | \| | \| | \| |
| 7+10 | 0.1201 | 0.37 | \|Q    V | \| | \| | \| | \| |
| 7+15 | 0.1226 | 0.37 | \|Q    V | \| | \| | \| | \| |
| 7+20 | 0.1252 | 0.37 | \|Q    V | \| | \| | \| | \| |
| 7+25 | 0.1278 | 0.38 | \|Q    V | \| | \| | \| | \| |
| 7+30 | 0.1306 | 0.39 | \|Q    V | \| | \| | \| | \| |
| 7+35 | 0.1333 | 0.40 | \|Q    V | \| | \| | \| | \| |
| 7+40 | 0.1362 | 0.42 | \|Q     V | \| | \| | \| | \| |
| 7+45 | 0.1391 | 0.43 | \|Q     V | \| | \| | \| | \| |
| 7+50 | 0.1421 | 0.44 | \|Q     V | \| | \| | \| | \| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 7+55 | 0.1453 | 0.45 | Q V | | | | |
| 8+ 0 | 0.1484 | 0.46 | Q V | | | | |
| 8+ 5 | 0.1517 | 0.47 | Q V | | | | |
| 8+10 | 0.1552 | 0.50 | Q V | | | | |
| 8+15 | 0.1588 | 0.52 | Q V | | | | |
| 8+20 | 0.1624 | 0.53 | Q V | | | | |
| 8+25 | 0.1662 | 0.54 | Q V | | | | |
| 8+30 | 0.1699 | 0.54 | Q V | | | | |
| 8+35 | 0.1737 | 0.55 | Q V | | | | |
| 8+40 | 0.1776 | 0.56 | Q V | | | | |
| 8+45 | 0.1816 | 0.58 | Q V | | | | |
| 8+50 | 0.1856 | 0.58 | Q V | | | | |
| 8+55 | 0.1897 | 0.60 | Q V | | | | |
| 9+ 0 | 0.1939 | 0.61 | Q V | | | | |
| 9+ 5 | 0.1982 | 0.62 | Q V | | | | |
| 9+10 | 0.2027 | 0.65 | Q V | | | | |
| 9+15 | 0.2073 | 0.67 | Q V | | | | |
| 9+20 | 0.2121 | 0.69 | Q V | | | | |
| 9+25 | 0.2169 | 0.70 | Q V | | | | |
| 9+30 | 0.2219 | 0.72 | Q V | | | | |
| 9+35 | 0.2269 | 0.73 | Q V | | | | |
| 9+40 | 0.2320 | 0.74 | Q V | | | | |
| 9+45 | 0.2372 | 0.76 | Q V | | | | |
| 9+50 | 0.2425 | 0.77 | Q V | | | | |
| 9+55 | 0.2479 | 0.78 | Q V | | | | |
| 10+ 0 | 0.2534 | 0.80 | Q V | | | | |
| 10+ 5 | 0.2588 | 0.78 | Q V | | | | |
| 10+10 | 0.2636 | 0.71 | Q V | | | | |
| 10+15 | 0.2680 | 0.64 | Q V | | | | |
| 10+20 | 0.2722 | 0.61 | Q V | | | | |
| 10+25 | 0.2763 | 0.60 | Q V | | | | |
| 10+30 | 0.2804 | 0.59 | Q V | | | | |
| 10+35 | 0.2845 | 0.59 | Q V | | | | |
| 10+40 | 0.2889 | 0.64 | Q V | | | | |
| 10+45 | 0.2936 | 0.69 | Q V | | | | |
| 10+50 | 0.2985 | 0.71 | Q V | | | | |
| 10+55 | 0.3035 | 0.72 | Q V | | | | |
| 11+ 0 | 0.3084 | 0.72 | Q V | | | | |
| 11+ 5 | 0.3134 | 0.73 | Q V | | | | |
| 11+10 | 0.3184 | 0.72 | Q V | | | | |
| 11+15 | 0.3233 | 0.71 | Q V | | | | |
| 11+20 | 0.3281 | 0.71 | Q V | | | | |
| 11+25 | 0.3330 | 0.71 | Q V | | | | |
| 11+30 | 0.3379 | 0.71 | Q V | | | | |
| 11+35 | 0.3427 | 0.70 | Q V | | | | |
| 11+40 | 0.3474 | 0.68 | Q V | | | | |
| 11+45 | 0.3519 | 0.66 | Q V | | | | |
| 11+50 | 0.3564 | 0.65 | Q V | | | | |
| 11+55 | 0.3609 | 0.66 | Q V | | | | |
| 12+ 0 | 0.3655 | 0.66 | Q V | | | | |
| 12+ 5 | 0.3702 | 0.69 | Q V | | | | |
| 12+10 | 0.3755 | 0.77 | Q V | | | | |
| 12+15 | 0.3812 | 0.84 | Q V | | | | |
| 12+20 | 0.3872 | 0.87 | Q V | | | | |
| 12+25 | 0.3934 | 0.90 | Q V | | | | |
| 12+30 | 0.3997 | 0.92 | Q V | | | | |
| 12+35 | 0.4062 | 0.94 | Q V | | | | |
| 12+40 | 0.4129 | 0.97 | Q V | | | | |
| 12+45 | 0.4197 | 1.00 | Q V | | | | |
| 12+50 | 0.4267 | 1.01 | Q V | | | | |
| 12+55 | 0.4338 | 1.03 | Q V | | | | |
| 13+ 0 | 0.4410 | 1.05 | Q V | | | | |
| 13+ 5 | 0.4484 | 1.07 | Q V | | | | |
| 13+10 | 0.4562 | 1.13 | Q V | | | | |
| 13+15 | 0.4644 | 1.19 | Q V | | | | |
| 13+20 | 0.4727 | 1.21 | Q V | | | | |
| 13+25 | 0.4812 | 1.23 | Q V | | | | |
| 13+30 | 0.4897 | 1.24 | Q V | | | | |
| 13+35 | 0.4980 | 1.21 | Q V | | | | |
| 13+40 | 0.5056 | 1.09 | Q V | | | | |
| 13+45 | 0.5123 | 0.98 | Q V | | | | |
| 13+50 | 0.5188 | 0.94 | Q V | | | | |
| 13+55 | 0.5251 | 0.92 | Q V | | | | |
| 14+ 0 | 0.5313 | 0.90 | Q V | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 14+ 5 | 0.5375 | 0.90 | Q | | V | |
| 14+10 | 0.5439 | 0.94 | Q | | V | |
| 14+15 | 0.5506 | 0.97 | Q | | V | |
| 14+20 | 0.5574 | 0.98 | Q | | V | |
| 14+25 | 0.5641 | 0.97 | Q | | V | |
| 14+30 | 0.5707 | 0.97 | Q | | V | |
| 14+35 | 0.5774 | 0.96 | Q | | V | |
| 14+40 | 0.5840 | 0.96 | Q | | V | |
| 14+45 | 0.5906 | 0.96 | Q | | V | |
| 14+50 | 0.5972 | 0.96 | Q | | V | |
| 14+55 | 0.6038 | 0.95 | Q | | V | |
| 15+ 0 | 0.6103 | 0.94 | Q | | V | |
| 15+ 5 | 0.6167 | 0.93 | Q | | V | |
| 15+10 | 0.6230 | 0.92 | Q | | V | |
| 15+15 | 0.6293 | 0.91 | Q | | V | |
| 15+20 | 0.6355 | 0.90 | Q | | V | |
| 15+25 | 0.6416 | 0.89 | Q | | V | |
| 15+30 | 0.6476 | 0.87 | Q | | V | |
| 15+35 | 0.6535 | 0.86 | Q | | V | |
| 15+40 | 0.6590 | 0.81 | Q | | V | |
| 15+45 | 0.6643 | 0.76 | Q | | V | |
| 15+50 | 0.6694 | 0.74 | Q | | V | |
| 15+55 | 0.6745 | 0.73 | Q | | V | |
| 16+ 0 | 0.6795 | 0.73 | Q | | V | |
| 16+ 5 | 0.6841 | 0.68 | Q | | V | |
| 16+10 | 0.6876 | 0.51 | Q | | V | |
| 16+15 | 0.6900 | 0.35 | Q | | V | |
| 16+20 | 0.6920 | 0.28 | Q | | V | |
| 16+25 | 0.6936 | 0.24 | Q | | V | |
| 16+30 | 0.6951 | 0.22 | Q | | V | |
| 16+35 | 0.6965 | 0.20 | Q | | V | |
| 16+40 | 0.6977 | 0.17 | Q | | V | |
| 16+45 | 0.6987 | 0.15 | Q | | V | |
| 16+50 | 0.6997 | 0.14 | Q | | V | |
| 16+55 | 0.7006 | 0.13 | Q | | V | |
| 17+ 0 | 0.7015 | 0.13 | Q | | V | |
| 17+ 5 | 0.7023 | 0.13 | Q | | V | |
| 17+10 | 0.7033 | 0.14 | Q | | V | |
| 17+15 | 0.7045 | 0.16 | Q | | V | |
| 17+20 | 0.7056 | 0.17 | Q | | V | |
| 17+25 | 0.7068 | 0.17 | Q | | V | |
| 17+30 | 0.7080 | 0.18 | Q | | V | |
| 17+35 | 0.7093 | 0.18 | Q | | V | |
| 17+40 | 0.7105 | 0.18 | Q | | V | |
| 17+45 | 0.7118 | 0.18 | Q | | V | |
| 17+50 | 0.7130 | 0.18 | Q | | V | |
| 17+55 | 0.7142 | 0.17 | Q | | V | |
| 18+ 0 | 0.7153 | 0.16 | Q | | V | |
| 18+ 5 | 0.7164 | 0.16 | Q | | V | |
| 18+10 | 0.7174 | 0.15 | Q | | V | |
| 18+15 | 0.7185 | 0.15 | Q | | V | |
| 18+20 | 0.7195 | 0.15 | Q | | V | |
| 18+25 | 0.7206 | 0.15 | Q | | V | |
| 18+30 | 0.7216 | 0.15 | Q | | V | |
| 18+35 | 0.7226 | 0.15 | Q | | V | |
| 18+40 | 0.7235 | 0.14 | Q | | V | |
| 18+45 | 0.7244 | 0.12 | Q | | V | |
| 18+50 | 0.7252 | 0.12 | Q | | V | |
| 18+55 | 0.7259 | 0.10 | Q | | V | |
| 19+ 0 | 0.7266 | 0.09 | Q | | V | |
| 19+ 5 | 0.7272 | 0.09 | Q | | V | |
| 19+10 | 0.7278 | 0.10 | Q | | V | |
| 19+15 | 0.7286 | 0.11 | Q | | V | |
| 19+20 | 0.7293 | 0.11 | Q | | V | |
| 19+25 | 0.7302 | 0.12 | Q | | V | |
| 19+30 | 0.7311 | 0.13 | Q | | V | |
| 19+35 | 0.7320 | 0.14 | Q | | V | |
| 19+40 | 0.7329 | 0.13 | Q | | V | |
| 19+45 | 0.7337 | 0.12 | Q | | V | |
| 19+50 | 0.7345 | 0.11 | Q | | V | |
| 19+55 | 0.7352 | 0.10 | Q | | V | |
| 20+ 0 | 0.7358 | 0.09 | Q | | V | |
| 20+ 5 | 0.7364 | 0.09 | Q | | V | |
| 20+10 | 0.7370 | 0.10 | Q | | V | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20+15 | 0.7378 | 0.10 | Q | \| | \| | \| | V \| |
| 20+20 | 0.7385 | 0.11 | Q | \| | \| | \| | V \| |
| 20+25 | 0.7392 | 0.11 | Q | \| | \| | \| | V \| |
| 20+30 | 0.7400 | 0.11 | Q | \| | \| | \| | V \| |
| 20+35 | 0.7408 | 0.11 | Q | \| | \| | \| | V \| |
| 20+40 | 0.7415 | 0.11 | Q | \| | \| | \| | V \| |
| 20+45 | 0.7423 | 0.11 | Q | \| | \| | \| | V \| |
| 20+50 | 0.7430 | 0.11 | Q | \| | \| | \| | V \| |
| 20+55 | 0.7437 | 0.10 | Q | \| | \| | \| | V \| |
| 21+ 0 | 0.7443 | 0.09 | Q | \| | \| | \| | V \| |
| 21+ 5 | 0.7449 | 0.09 | Q | \| | \| | \| | V \| |
| 21+10 | 0.7455 | 0.09 | Q | \| | \| | \| | V \| |
| 21+15 | 0.7462 | 0.10 | Q | \| | \| | \| | V \| |
| 21+20 | 0.7469 | 0.10 | Q | \| | \| | \| | V \| |
| 21+25 | 0.7476 | 0.09 | Q | \| | \| | \| | V\| |
| 21+30 | 0.7481 | 0.08 | Q | \| | \| | \| | V\| |
| 21+35 | 0.7487 | 0.08 | Q | \| | \| | \| | V\| |
| 21+40 | 0.7494 | 0.09 | Q | \| | \| | \| | V\| |
| 21+45 | 0.7501 | 0.10 | Q | \| | \| | \| | V\| |
| 21+50 | 0.7508 | 0.10 | Q | \| | \| | \| | V\| |
| 21+55 | 0.7514 | 0.09 | Q | \| | \| | \| | V\| |
| 22+ 0 | 0.7520 | 0.08 | Q | \| | \| | \| | V\| |
| 22+ 5 | 0.7526 | 0.08 | Q | \| | \| | \| | V\| |
| 22+10 | 0.7532 | 0.09 | Q | \| | \| | \| | V\| |
| 22+15 | 0.7539 | 0.10 | Q | \| | \| | \| | V\| |
| 22+20 | 0.7546 | 0.10 | Q | \| | \| | \| | V\| |
| 22+25 | 0.7552 | 0.09 | Q | \| | \| | \| | V\| |
| 22+30 | 0.7558 | 0.08 | Q | \| | \| | \| | V\| |
| 22+35 | 0.7564 | 0.08 | Q | \| | \| | \| | V\| |
| 22+40 | 0.7569 | 0.08 | Q | \| | \| | \| | V\| |
| 22+45 | 0.7574 | 0.08 | Q | \| | \| | \| | V\| |
| 22+50 | 0.7580 | 0.08 | Q | \| | \| | \| | V\| |
| 22+55 | 0.7585 | 0.08 | Q | \| | \| | \| | V\| |
| 23+ 0 | 0.7590 | 0.08 | Q | \| | \| | \| | V\| |
| 23+ 5 | 0.7595 | 0.08 | Q | \| | \| | \| | V\| |
| 23+10 | 0.7601 | 0.07 | Q | \| | \| | \| | V\| |
| 23+15 | 0.7606 | 0.07 | Q | \| | \| | \| | V\| |
| 23+20 | 0.7611 | 0.07 | Q | \| | \| | \| | V\| |
| 23+25 | 0.7616 | 0.07 | Q | \| | \| | \| | V\| |
| 23+30 | 0.7621 | 0.07 | Q | \| | \| | \| | V\| |
| 23+35 | 0.7626 | 0.07 | Q | \| | \| | \| | V\| |
| 23+40 | 0.7631 | 0.07 | Q | \| | \| | \| | V\| |
| 23+45 | 0.7636 | 0.07 | Q | \| | \| | \| | V\| |
| 23+50 | 0.7641 | 0.07 | Q | \| | \| | \| | V\| |
| 23+55 | 0.7647 | 0.07 | Q | \| | \| | \| | V\| |
| 24+ 0 | 0.7652 | 0.07 | Q | \| | \| | \| | V\| |
| 24+ 5 | 0.7656 | 0.07 | Q | \| | \| | \| | V\| |
| 24+10 | 0.7660 | 0.05 | Q | \| | \| | \| | V\| |
| 24+15 | 0.7661 | 0.03 | Q | \| | \| | \| | V\| |
| 24+20 | 0.7663 | 0.02 | Q | \| | \| | \| | V\| |
| 24+25 | 0.7663 | 0.01 | Q | \| | \| | \| | V\| |
| 24+30 | 0.7664 | 0.01 | Q | \| | \| | \| | V\| |
| 24+35 | 0.7664 | 0.01 | Q | \| | \| | \| | V\| |
| 24+40 | 0.7665 | 0.01 | Q | \| | \| | \| | V\| |
| 24+45 | 0.7665 | 0.00 | Q | \| | \| | \| | V\| |
| 24+50 | 0.7665 | 0.00 | Q | \| | \| | \| | V\| |
| 24+55 | 0.7665 | 0.00 | Q | \| | \| | \| | V\| |
| 25+ 0 | 0.7665 | 0.00 | Q | \| | \| | \| | V\| |
| 25+ 5 | 0.7666 | 0.00 | Q | \| | \| | \| | V\| |
| 25+10 | 0.7666 | 0.00 | Q | \| | \| | \| | V\| |

# Detention Basin B2

**Renaissance Ranch**
**County of Riverside**
**Proposed Extended/Detention Basin Area B2**

| Elev | Depth | Vol | Headwater Stage 1 | Stage 1 Orifice A=0.05 sf | Stage 1 Orifice A=0.05 sf | Emergency Spillway | Total Outflow |
|---|---|---|---|---|---|---|---|
| | | | Depth | 1ea-3" Opening | 1ea-3" Opening | 10' Opening | **Q total** |
| (ft) | (ft) | (ac-ft) | (ft) | 1342 | 1346 | 1350 | (cfs) |
| | | | | | | | |
| 1342 | 0 | 0.00 | 0 | 0 | 0 | | **0.00** |
| 1343 | 1 | 0.69 | 1 | 0.24 | 0 | | **0.24** |
| 1344 | 2 | 1.38 | 2 | 0.35 | 0 | | **0.35** |
| 1345 | 3 | 2.07 | 3 | 0.43 | 0 | | **0.43** |
| 1346 | 4 | 2.75 | 4 | 0.5 | 0 | | **0.50** |
| 1347 | 5 | 3.44 | 5 | 0.57 | 0.24 | | **0.81** |
| 1348 | 6 | 4.13 | 6 | 0.62 | 0.35 | | **0.97** |
| 1349 | 7 | 4.82 | 7 | 0.67 | 0.43 | | **1.10** |
| 1350 | 8 | 5.51 | 8 | 0.72 | 0.5 | | **1.22** |
| 1351 | 9 | 6.20 | 9 | 0.76 | 0.57 | 30.00 | **31.33** |
| 1352 | 10 | 6.89 | 10 | 0.8 | 0.62 | 84.85 | **86.27** |
| | | | | | | | |
| | | | | | | | |

```
FLOOD HYDROGRAPH ROUTING PROGRAM
                  Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2005
                              Study date: 09/21/20


       ----------------------------------------------------------------------
       Renaissance Ranch
       Drainage Area B2 - Area = 42.59 Ac
       Detention Basin Routing
       2-year 24-hour storm

       ----------------------------------------------------------------------
       Program License Serial Number 4029

       ----------------------------------------------------------------------
       ******************** HYDROGRAPH INFORMATION **********************

                    From study/file name: 2rrb2242.rte
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   293
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =       10.218 (CFS)
                    Total volume =       6.209 (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
       ************************************************************************



       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       10.000 to Point/Station       11.000
       **** RETARDING BASIN ROUTING ****
       ________________________________________________________________________

       User entry of depth-outflow-storage data
       ----------------------------------------------------------------------
       Total number of inflow hydrograph intervals = 293
       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  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
             (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
       ----------------------------------------------------------------------
          0.000      0.000      0.000      0.000        0.000
          1.000      0.690      0.240      0.689        0.691
          2.000      1.380      0.350      1.379        1.381
          3.000      2.070      0.430      2.069        2.071
          4.000      2.750      0.500      2.748        2.752
          5.000      3.440      0.810      3.437        3.443
          6.000      4.130      0.970      4.127        4.133
          7.000      4.820      1.100      4.816        4.824
          8.000      5.510      1.220      5.506        5.514
          9.000      6.200     31.330      6.092        6.308
         10.000      6.890     86.270      6.593        7.187
       ----------------------------------------------------------------------
                     Hydrograph Detention Basin Routing
       ----------------------------------------------------------------------

       Graph values: 'I'= unit inflow; 'O'=outflow at time shown
       ----------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                      Depth
 (Hours)  (CFS)    (CFS)     (Ac.Ft) .0       2.6    5.11    7.66   10.22 (Ft.)
 0.083    0.20    0.00      0.001  O       |       |       |       |     0.00
 0.167    0.48    0.00      0.003  OI      |       |       |       |     0.00
```

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0.250 | 0.55 | 0.00 | 0.007 | OI | \| | \| | \| | 0.01 |
| 0.333 | 0.68 | 0.00 | 0.011 | O I | \| | \| | \| | 0.02 |
| 0.417 | 0.83 | 0.01 | 0.016 | O I | \| | \| | \| | 0.02 |
| 0.500 | 0.87 | 0.01 | 0.022 | O I | \| | \| | \| | 0.03 |
| 0.583 | 0.89 | 0.01 | 0.028 | O I | \| | \| | \| | 0.04 |
| 0.667 | 0.90 | 0.01 | 0.034 | O I | \| | \| | \| | 0.05 |
| 0.750 | 0.90 | 0.01 | 0.040 | O I | \| | \| | \| | 0.06 |
| 0.833 | 1.00 | 0.02 | 0.046 | O I | \| | \| | \| | 0.07 |
| 0.917 | 1.14 | 0.02 | 0.054 | O I | \| | \| | \| | 0.08 |
| 1.000 | 1.18 | 0.02 | 0.061 | O I | \| | \| | \| | 0.09 |
| 1.083 | 1.09 | 0.02 | 0.069 | O I | \| | \| | \| | 0.10 |
| 1.167 | 0.96 | 0.03 | 0.076 | O I | \| | \| | \| | 0.11 |
| 1.250 | 0.93 | 0.03 | 0.082 | O I | \| | \| | \| | 0.12 |
| 1.333 | 0.91 | 0.03 | 0.088 | O I | \| | \| | \| | 0.13 |
| 1.417 | 0.91 | 0.03 | 0.094 | O I | \| | \| | \| | 0.14 |
| 1.500 | 0.90 | 0.03 | 0.100 | O I | \| | \| | \| | 0.15 |
| 1.583 | 0.90 | 0.04 | 0.106 | O I | \| | \| | \| | 0.15 |
| 1.667 | 0.90 | 0.04 | 0.112 | O I | \| | \| | \| | 0.16 |
| 1.750 | 0.90 | 0.04 | 0.118 | O I | \| | \| | \| | 0.17 |
| 1.833 | 1.00 | 0.04 | 0.125 | O I | \| | \| | \| | 0.18 |
| 1.917 | 1.14 | 0.05 | 0.132 | O I | \| | \| | \| | 0.19 |
| 2.000 | 1.18 | 0.05 | 0.139 | O I | \| | \| | \| | 0.20 |
| 2.083 | 1.19 | 0.05 | 0.147 | O I | \| | \| | \| | 0.21 |
| 2.167 | 1.20 | 0.05 | 0.155 | O I | \| | \| | \| | 0.22 |
| 2.250 | 1.20 | 0.06 | 0.163 | O I | \| | \| | \| | 0.24 |
| 2.333 | 1.20 | 0.06 | 0.171 | O I | \| | \| | \| | 0.25 |
| 2.417 | 1.20 | 0.06 | 0.179 | O I | \| | \| | \| | 0.26 |
| 2.500 | 1.20 | 0.06 | 0.186 | O I | \| | \| | \| | 0.27 |
| 2.583 | 1.30 | 0.07 | 0.195 | O I | \| | \| | \| | 0.28 |
| 2.667 | 1.44 | 0.07 | 0.204 | O I | \| | \| | \| | 0.29 |
| 2.750 | 1.48 | 0.07 | 0.213 | O I | \| | \| | \| | 0.31 |
| 2.833 | 1.49 | 0.08 | 0.223 | O I | \| | \| | \| | 0.32 |
| 2.917 | 1.50 | 0.08 | 0.233 | O I | \| | \| | \| | 0.34 |
| 3.000 | 1.50 | 0.08 | 0.242 | O I | \| | \| | \| | 0.35 |
| 3.083 | 1.50 | 0.09 | 0.252 | O I | \| | \| | \| | 0.37 |
| 3.167 | 1.50 | 0.09 | 0.262 | O I | \| | \| | \| | 0.38 |
| 3.250 | 1.50 | 0.09 | 0.272 | O I | \| | \| | \| | 0.39 |
| 3.333 | 1.50 | 0.10 | 0.281 | O I | \| | \| | \| | 0.41 |
| 3.417 | 1.50 | 0.10 | 0.291 | O I | \| | \| | \| | 0.42 |
| 3.500 | 1.50 | 0.10 | 0.300 | O I | \| | \| | \| | 0.44 |
| 3.583 | 1.50 | 0.11 | 0.310 | O I | \| | \| | \| | 0.45 |
| 3.667 | 1.50 | 0.11 | 0.320 | O I | \| | \| | \| | 0.46 |
| 3.750 | 1.50 | 0.11 | 0.329 | O I | \| | \| | \| | 0.48 |
| 3.833 | 1.60 | 0.12 | 0.339 | O I | \| | \| | \| | 0.49 |
| 3.917 | 1.74 | 0.12 | 0.350 | O I | \| | \| | \| | 0.51 |
| 4.000 | 1.78 | 0.13 | 0.361 | O I | \| | \| | \| | 0.52 |
| 4.083 | 1.79 | 0.13 | 0.373 | O I | \| | \| | \| | 0.54 |
| 4.167 | 1.80 | 0.13 | 0.384 | O I | \| | \| | \| | 0.56 |
| 4.250 | 1.80 | 0.14 | 0.395 | O I | \| | \| | \| | 0.57 |
| 4.333 | 1.90 | 0.14 | 0.407 | O I | \| | \| | \| | 0.59 |
| 4.417 | 2.04 | 0.15 | 0.420 | O I | \| | \| | \| | 0.61 |
| 4.500 | 2.08 | 0.15 | 0.433 | O I | \| | \| | \| | 0.63 |
| 4.583 | 2.09 | 0.16 | 0.446 | O I | \| | \| | \| | 0.65 |
| 4.667 | 2.10 | 0.16 | 0.460 | O I | \| | \| | \| | 0.67 |
| 4.750 | 2.10 | 0.16 | 0.473 | O I | \| | \| | \| | 0.69 |
| 4.833 | 2.20 | 0.17 | 0.487 | O I | \| | \| | \| | 0.71 |
| 4.917 | 2.34 | 0.17 | 0.501 | O I | \| | \| | \| | 0.73 |
| 5.000 | 2.38 | 0.18 | 0.516 | O I | \| | \| | \| | 0.75 |
| 5.083 | 2.20 | 0.18 | 0.531 | O I | \| | \| | \| | 0.77 |
| 5.167 | 1.92 | 0.19 | 0.544 | O I | \| | \| | \| | 0.79 |
| 5.250 | 1.86 | 0.19 | 0.555 | O I | \| | \| | \| | 0.80 |
| 5.333 | 1.92 | 0.20 | 0.567 | O I | \| | \| | \| | 0.82 |
| 5.417 | 2.05 | 0.20 | 0.579 | O I | \| | \| | \| | 0.84 |
| 5.500 | 2.08 | 0.21 | 0.592 | O I | \| | \| | \| | 0.86 |
| 5.583 | 2.19 | 0.21 | 0.605 | O I | \| | \| | \| | 0.88 |
| 5.667 | 2.34 | 0.22 | 0.619 | O I | \| | \| | \| | 0.90 |
| 5.750 | 2.38 | 0.22 | 0.634 | O I | \| | \| | \| | 0.92 |
| 5.833 | 2.39 | 0.23 | 0.649 | O I | \| | \| | \| | 0.94 |
| 5.917 | 2.40 | 0.23 | 0.664 | O I | \| | \| | \| | 0.96 |
| 6.000 | 2.40 | 0.24 | 0.679 | O I | \| | \| | \| | 0.98 |
| 6.083 | 2.50 | 0.24 | 0.694 | O I | \| | \| | \| | 1.01 |
| 6.167 | 2.64 | 0.24 | 0.710 | O I | \| | \| | \| | 1.03 |
| 6.250 | 2.68 | 0.25 | 0.727 | O I | \| | \| | \| | 1.05 |
| 6.333 | 2.69 | 0.25 | 0.744 | O I | \| | \| | \| | 1.08 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 6.417 | 2.70 | 0.25 | 0.761 | O | I | \| | \| | \| | 1.10 |
| 6.500 | 2.70 | 0.25 | 0.777 | O | I | \| | \| | \| | 1.13 |
| 6.583 | 2.80 | 0.26 | 0.795 | O | I | \| | \| | \| | 1.15 |
| 6.667 | 2.94 | 0.26 | 0.813 | O | \|I | \| | \| | \| | 1.18 |
| 6.750 | 2.98 | 0.26 | 0.831 | O | \|I | \| | \| | \| | 1.20 |
| 6.833 | 2.99 | 0.27 | 0.850 | O | \|I | \| | \| | \| | 1.23 |
| 6.917 | 3.00 | 0.27 | 0.869 | O | \|I | \| | \| | \| | 1.26 |
| 7.000 | 3.01 | 0.27 | 0.888 | O | \|I | \| | \| | \| | 1.29 |
| 7.083 | 3.01 | 0.27 | 0.906 | O | \|I | \| | \| | \| | 1.31 |
| 7.167 | 3.01 | 0.28 | 0.925 | O | \|I | \| | \| | \| | 1.34 |
| 7.250 | 3.01 | 0.28 | 0.944 | O | \|I | \| | \| | \| | 1.37 |
| 7.333 | 3.10 | 0.28 | 0.963 | O | \|I | \| | \| | \| | 1.40 |
| 7.417 | 3.25 | 0.29 | 0.983 | O | \| I | \| | \| | \| | 1.42 |
| 7.500 | 3.28 | 0.29 | 1.003 | O | \| I | \| | \| | \| | 1.45 |
| 7.583 | 3.39 | 0.29 | 1.024 | O | \| I | \| | \| | \| | 1.48 |
| 7.667 | 3.54 | 0.30 | 1.046 | O | \| I | \| | \| | \| | 1.52 |
| 7.750 | 3.58 | 0.30 | 1.069 | O | \| I | \| | \| | \| | 1.55 |
| 7.833 | 3.69 | 0.30 | 1.092 | O | \| I | \| | \| | \| | 1.58 |
| 7.917 | 3.84 | 0.31 | 1.116 | O | \| I | \| | \| | \| | 1.62 |
| 8.000 | 3.88 | 0.31 | 1.140 | O | \| I | \| | \| | \| | 1.65 |
| 8.083 | 4.09 | 0.32 | 1.165 | O | \| I | \| | \| | \| | 1.69 |
| 8.167 | 4.38 | 0.32 | 1.192 | \|O | \| I | \| | \| | \| | 1.73 |
| 8.250 | 4.45 | 0.32 | 1.221 | \|O | \| I | \| | \| | \| | 1.77 |
| 8.333 | 4.48 | 0.33 | 1.249 | \|O | \| I | \| | \| | \| | 1.81 |
| 8.417 | 4.50 | 0.33 | 1.278 | \|O | \| I | \| | \| | \| | 1.85 |
| 8.500 | 4.51 | 0.34 | 1.306 | \|O | \| I | \| | \| | \| | 1.89 |
| 8.583 | 4.61 | 0.34 | 1.335 | \|O | \| I | \| | \| | \| | 1.94 |
| 8.667 | 4.75 | 0.35 | 1.365 | \|O | \| I | \| | \| | \| | 1.98 |
| 8.750 | 4.78 | 0.35 | 1.396 | \|O | \| I | \| | \| | \| | 2.02 |
| 8.833 | 4.89 | 0.36 | 1.427 | \|O | \| I\| | \| | \| | \| | 2.07 |
| 8.917 | 5.04 | 0.36 | 1.458 | \|O | \| I\| | \| | \| | \| | 2.11 |
| 9.000 | 5.08 | 0.36 | 1.491 | \|O | \| I\| | \| | \| | \| | 2.16 |
| 9.083 | 5.29 | 0.37 | 1.524 | \|O | \| I | \| | \| | \| | 2.21 |
| 9.167 | 5.58 | 0.37 | 1.559 | \|O | \| \|I | \| | \| | \| | 2.26 |
| 9.250 | 5.66 | 0.37 | 1.595 | \|O | \| \|I | \| | \| | \| | 2.31 |
| 9.333 | 5.78 | 0.38 | 1.632 | \|O | \| \| I | \| | \| | \| | 2.36 |
| 9.417 | 5.94 | 0.38 | 1.670 | \|O | \| \| I | \| | \| | \| | 2.42 |
| 9.500 | 5.98 | 0.39 | 1.708 | \|O | \| \| I | \| | \| | \| | 2.48 |
| 9.583 | 6.10 | 0.39 | 1.747 | \|O | \| \| I | \| | \| | \| | 2.53 |
| 9.667 | 6.25 | 0.40 | 1.787 | \|O | \| \| I | \| | \| | \| | 2.59 |
| 9.750 | 6.28 | 0.40 | 1.827 | \|O | \| \| I | \| | \| | \| | 2.65 |
| 9.833 | 6.40 | 0.41 | 1.868 | \|O | \| \| I | \| | \| | \| | 2.71 |
| 9.917 | 6.55 | 0.41 | 1.910 | \|O | \| \| I | \| | \| | \| | 2.77 |
| 10.000 | 6.58 | 0.42 | 1.952 | \|O | \| \| I | \| | \| | \| | 2.83 |
| 10.083 | 5.91 | 0.42 | 1.992 | \|O | \| \| I | \| | \| | \| | 2.89 |
| 10.167 | 4.93 | 0.42 | 2.027 | \|O | \| I\| | \| | \| | \| | 2.94 |
| 10.250 | 4.69 | 0.43 | 2.057 | \|O | \| I | \| | \| | \| | 2.98 |
| 10.333 | 4.59 | 0.43 | 2.086 | \|O | \| I | \| | \| | \| | 3.02 |
| 10.417 | 4.54 | 0.43 | 2.114 | \|O | \| I | \| | \| | \| | 3.07 |
| 10.500 | 4.51 | 0.44 | 2.142 | \|O | \| I | \| | \| | \| | 3.11 |
| 10.583 | 5.00 | 0.44 | 2.172 | \|O | \| I\| | \| | \| | \| | 3.15 |
| 10.667 | 5.71 | 0.44 | 2.206 | \|O | \| \|I | \| | \| | \| | 3.20 |
| 10.750 | 5.88 | 0.45 | 2.243 | \|O | \| \| I | \| | \| | \| | 3.25 |
| 10.833 | 5.95 | 0.45 | 2.280 | \|O | \| \| I | \| | \| | \| | 3.31 |
| 10.917 | 5.99 | 0.46 | 2.318 | \|O | \| \| I | \| | \| | \| | 3.37 |
| 11.000 | 6.01 | 0.46 | 2.357 | \|O | \| \| I | \| | \| | \| | 3.42 |
| 11.083 | 5.91 | 0.46 | 2.394 | \|O | \| \| I | \| | \| | \| | 3.48 |
| 11.167 | 5.77 | 0.47 | 2.431 | \|O | \| \| I | \| | \| | \| | 3.53 |
| 11.250 | 5.74 | 0.47 | 2.468 | \|O | \| \|I | \| | \| | \| | 3.59 |
| 11.333 | 5.72 | 0.47 | 2.504 | \|O | \| \|I | \| | \| | \| | 3.64 |
| 11.417 | 5.71 | 0.48 | 2.540 | \|O | \| \|I | \| | \| | \| | 3.69 |
| 11.500 | 5.71 | 0.48 | 2.576 | \|O | \| \|I | \| | \| | \| | 3.74 |
| 11.583 | 5.51 | 0.49 | 2.612 | \|O | \| \|I | \| | \| | \| | 3.80 |
| 11.667 | 5.23 | 0.49 | 2.645 | \|O | \| I | \| | \| | \| | 3.85 |
| 11.750 | 5.16 | 0.49 | 2.678 | \|O | \| I | \| | \| | \| | 3.89 |
| 11.833 | 5.23 | 0.50 | 2.710 | \|O | \| I | \| | \| | \| | 3.94 |
| 11.917 | 5.36 | 0.50 | 2.743 | \|O | \| I | \| | \| | \| | 3.99 |
| 12.000 | 5.38 | 0.51 | 2.776 | \|O | \| I | \| | \| | \| | 4.04 |
| 12.083 | 6.08 | 0.53 | 2.812 | \|O | \| \| I | \| | \| | \| | 4.09 |
| 12.167 | 7.08 | 0.55 | 2.854 | \|O | \| \| I | \| | \| | \| | 4.15 |
| 12.250 | 7.33 | 0.57 | 2.900 | \|O | \| \| I | \| | \| | \| | 4.22 |
| 12.333 | 7.53 | 0.59 | 2.947 | \|O | \| \| I | \| | \| | \| | 4.29 |
| 12.417 | 7.72 | 0.61 | 2.995 | \|O | \| \| I | \| | \| | \| | 4.36 |
| 12.500 | 7.79 | 0.63 | 3.045 | \|O | \| \| I | \| | \| | \| | 4.43 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12.583 | 8.00 | 0.65 | 3.094 | O | | | I | | 4.50 |
| 12.667 | 8.29 | 0.68 | 3.146 | O | | | I | | 4.57 |
| 12.750 | 8.36 | 0.70 | 3.199 | O | | | I | | 4.65 |
| 12.833 | 8.49 | 0.73 | 3.252 | O | | | I | | 4.73 |
| 12.917 | 8.65 | 0.75 | 3.306 | O | | | I | | 4.81 |
| 13.000 | 8.69 | 0.77 | 3.360 | O | | | I | | 4.88 |
| 13.083 | 9.19 | 0.80 | 3.416 | O | | | I | | 4.97 |
| 13.167 | 9.91 | 0.82 | 3.476 | O | | | I | | 5.05 |
| 13.250 | 10.08 | 0.83 | 3.540 | O | | | I | | 5.14 |
| 13.333 | 10.16 | 0.85 | 3.603 | O | | | I | | 5.24 |
| 13.417 | 10.20 | 0.86 | 3.668 | O | | | I | | 5.33 |
| 13.500 | 10.22 | 0.88 | 3.732 | O | | | I | | 5.42 |
| 13.583 | 9.14 | 0.89 | 3.793 | O | | | I | | 5.51 |
| 13.667 | 7.58 | 0.90 | 3.844 | O | | | I | | 5.59 |
| 13.750 | 7.20 | 0.91 | 3.889 | O | | I | | | 5.65 |
| 13.833 | 7.04 | 0.92 | 3.931 | O | | I | | | 5.71 |
| 13.917 | 6.96 | 0.93 | 3.973 | O | | I | | | 5.77 |
| 14.000 | 6.91 | 0.94 | 4.014 | O | | I | | | 5.83 |
| 14.083 | 7.30 | 0.95 | 4.057 | O | | I | | | 5.89 |
| 14.167 | 7.87 | 0.96 | 4.102 | O | | I | | | 5.96 |
| 14.250 | 8.01 | 0.97 | 4.150 | O | | I | | | 6.03 |
| 14.333 | 7.97 | 0.98 | 4.199 | O | | I | | | 6.10 |
| 14.417 | 7.86 | 0.99 | 4.246 | O | | I | | | 6.17 |
| 14.500 | 7.84 | 1.00 | 4.294 | O | | I | | | 6.24 |
| 14.583 | 7.83 | 1.01 | 4.341 | O | | I | | | 6.31 |
| 14.667 | 7.82 | 1.02 | 4.388 | O | | I | | | 6.37 |
| 14.750 | 7.81 | 1.03 | 4.434 | O | | I | | | 6.44 |
| 14.833 | 7.72 | 1.04 | 4.481 | O | | I | | | 6.51 |
| 14.917 | 7.57 | 1.04 | 4.526 | O | | I | | | 6.57 |
| 15.000 | 7.54 | 1.05 | 4.571 | O | | I | | | 6.64 |
| 15.083 | 7.43 | 1.06 | 4.615 | O | | I | | | 6.70 |
| 15.167 | 7.28 | 1.07 | 4.659 | O | | I | | | 6.77 |
| 15.250 | 7.24 | 1.08 | 4.701 | O | | I | | | 6.83 |
| 15.333 | 7.13 | 1.09 | 4.743 | O | | I | | | 6.89 |
| 15.417 | 6.98 | 1.09 | 4.784 | O | | I | | | 6.95 |
| 15.500 | 6.94 | 1.10 | 4.825 | O | | I | | | 7.01 |
| 15.583 | 6.53 | 1.11 | 4.863 | O | | I | | | 7.06 |
| 15.667 | 5.96 | 1.11 | 4.899 | O | I | | | | 7.11 |
| 15.750 | 5.82 | 1.12 | 4.932 | O | I | | | | 7.16 |
| 15.833 | 5.76 | 1.12 | 4.964 | O | I | | | | 7.21 |
| 15.917 | 5.73 | 1.13 | 4.995 | O | I | | | | 7.25 |
| 16.000 | 5.71 | 1.14 | 5.027 | O | I | | | | 7.30 |
| 16.083 | 4.24 | 1.14 | 5.053 | O | | I | | | 7.34 |
| 16.167 | 2.11 | 1.14 | 5.067 | O I | | | | | 7.36 |
| 16.250 | 1.60 | 1.14 | 5.072 | O I | | | | | 7.37 |
| 16.333 | 1.38 | 1.14 | 5.075 | OI | | | | | 7.37 |
| 16.417 | 1.26 | 1.14 | 5.076 | O | | | | | 7.37 |
| 16.500 | 1.20 | 1.14 | 5.077 | O | | | | | 7.37 |
| 16.583 | 1.10 | 1.14 | 5.077 | O | | | | | 7.37 |
| 16.667 | 0.96 | 1.14 | 5.076 | O | | | | | 7.37 |
| 16.750 | 0.93 | 1.14 | 5.075 | IO | | | | | 7.37 |
| 16.833 | 0.91 | 1.14 | 5.073 | IO | | | | | 7.37 |
| 16.917 | 0.91 | 1.14 | 5.071 | IO | | | | | 7.36 |
| 17.000 | 0.90 | 1.14 | 5.070 | IO | | | | | 7.36 |
| 17.083 | 1.10 | 1.14 | 5.069 | O | | | | | 7.36 |
| 17.167 | 1.38 | 1.14 | 5.069 | OI | | | | | 7.36 |
| 17.250 | 1.45 | 1.14 | 5.071 | OI | | | | | 7.36 |
| 17.333 | 1.48 | 1.14 | 5.073 | OI | | | | | 7.37 |
| 17.417 | 1.49 | 1.14 | 5.076 | OI | | | | | 7.37 |
| 17.500 | 1.50 | 1.14 | 5.078 | OI | | | | | 7.37 |
| 17.583 | 1.50 | 1.15 | 5.081 | OI | | | | | 7.38 |
| 17.667 | 1.50 | 1.15 | 5.083 | OI | | | | | 7.38 |
| 17.750 | 1.50 | 1.15 | 5.086 | OI | | | | | 7.38 |
| 17.833 | 1.40 | 1.15 | 5.088 | OI | | | | | 7.39 |
| 17.917 | 1.26 | 1.15 | 5.089 | O | | | | | 7.39 |
| 18.000 | 1.23 | 1.15 | 5.090 | O | | | | | 7.39 |
| 18.083 | 1.21 | 1.15 | 5.090 | O | | | | | 7.39 |
| 18.167 | 1.21 | 1.15 | 5.091 | O | | | | | 7.39 |
| 18.250 | 1.20 | 1.15 | 5.091 | O | | | | | 7.39 |
| 18.333 | 1.20 | 1.15 | 5.091 | O | | | | | 7.39 |
| 18.417 | 1.20 | 1.15 | 5.092 | O | | | | | 7.39 |
| 18.500 | 1.20 | 1.15 | 5.092 | O | | | | | 7.39 |
| 18.583 | 1.10 | 1.15 | 5.092 | O | | | | | 7.39 |
| 18.667 | 0.96 | 1.15 | 5.091 | O | | | | | 7.39 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 18.750 | 0.93 | 1.15 | 5.090 | \| IO | \| | \| | \| | 7.39 |
| 18.833 | 0.82 | 1.15 | 5.088 | \| IO | \| | \| | \| | 7.39 |
| 18.917 | 0.67 | 1.15 | 5.085 | \| IO | \| | \| | \| | 7.38 |
| 19.000 | 0.63 | 1.15 | 5.082 | \|I O | \| | \| | \| | 7.38 |
| 19.083 | 0.71 | 1.14 | 5.079 | \| IO | \| | \| | \| | 7.37 |
| 19.167 | 0.85 | 1.14 | 5.076 | \| IO | \| | \| | \| | 7.37 |
| 19.250 | 0.87 | 1.14 | 5.074 | \| IO | \| | \| | \| | 7.37 |
| 19.333 | 0.99 | 1.14 | 5.073 | \| O | \| | \| | \| | 7.37 |
| 19.417 | 1.14 | 1.14 | 5.072 | \| O | \| | \| | \| | 7.37 |
| 19.500 | 1.18 | 1.14 | 5.072 | \| O | \| | \| | \| | 7.37 |
| 19.583 | 1.09 | 1.14 | 5.072 | \| O | \| | \| | \| | 7.37 |
| 19.667 | 0.96 | 1.14 | 5.071 | \| O | \| | \| | \| | 7.36 |
| 19.750 | 0.93 | 1.14 | 5.070 | \| IO | \| | \| | \| | 7.36 |
| 19.833 | 0.82 | 1.14 | 5.068 | \| IO | \| | \| | \| | 7.36 |
| 19.917 | 0.67 | 1.14 | 5.065 | \| IO | \| | \| | \| | 7.36 |
| 20.000 | 0.63 | 1.14 | 5.062 | \|I O | \| | \| | \| | 7.35 |
| 20.083 | 0.71 | 1.14 | 5.059 | \| IO | \| | \| | \| | 7.35 |
| 20.167 | 0.85 | 1.14 | 5.056 | \| IO | \| | \| | \| | 7.34 |
| 20.250 | 0.87 | 1.14 | 5.054 | \| IO | \| | \| | \| | 7.34 |
| 20.333 | 0.89 | 1.14 | 5.052 | \| IO | \| | \| | \| | 7.34 |
| 20.417 | 0.90 | 1.14 | 5.051 | \| IO | \| | \| | \| | 7.33 |
| 20.500 | 0.90 | 1.14 | 5.049 | \| IO | \| | \| | \| | 7.33 |
| 20.583 | 0.90 | 1.14 | 5.047 | \| IO | \| | \| | \| | 7.33 |
| 20.667 | 0.90 | 1.14 | 5.046 | \| IO | \| | \| | \| | 7.33 |
| 20.750 | 0.90 | 1.14 | 5.044 | \| IO | \| | \| | \| | 7.32 |
| 20.833 | 0.80 | 1.14 | 5.042 | \| IO | \| | \| | \| | 7.32 |
| 20.917 | 0.66 | 1.14 | 5.039 | \| IO | \| | \| | \| | 7.32 |
| 21.000 | 0.63 | 1.14 | 5.036 | \|I O | \| | \| | \| | 7.31 |
| 21.083 | 0.71 | 1.14 | 5.033 | \| IO | \| | \| | \| | 7.31 |
| 21.167 | 0.85 | 1.14 | 5.030 | \| IO | \| | \| | \| | 7.30 |
| 21.250 | 0.87 | 1.14 | 5.028 | \| IO | \| | \| | \| | 7.30 |
| 21.333 | 0.79 | 1.14 | 5.026 | \| IO | \| | \| | \| | 7.30 |
| 21.417 | 0.66 | 1.14 | 5.023 | \| IO | \| | \| | \| | 7.29 |
| 21.500 | 0.63 | 1.13 | 5.020 | \|I O | \| | \| | \| | 7.29 |
| 21.583 | 0.71 | 1.13 | 5.017 | \| IO | \| | \| | \| | 7.29 |
| 21.667 | 0.85 | 1.13 | 5.014 | \| IO | \| | \| | \| | 7.28 |
| 21.750 | 0.87 | 1.13 | 5.013 | \| IO | \| | \| | \| | 7.28 |
| 21.833 | 0.79 | 1.13 | 5.010 | \| IO | \| | \| | \| | 7.28 |
| 21.917 | 0.66 | 1.13 | 5.008 | \| IO | \| | \| | \| | 7.27 |
| 22.000 | 0.63 | 1.13 | 5.004 | \|I O | \| | \| | \| | 7.27 |
| 22.083 | 0.71 | 1.13 | 5.001 | \| IO | \| | \| | \| | 7.26 |
| 22.167 | 0.85 | 1.13 | 4.999 | \| IO | \| | \| | \| | 7.26 |
| 22.250 | 0.87 | 1.13 | 4.997 | \| IO | \| | \| | \| | 7.26 |
| 22.333 | 0.79 | 1.13 | 4.995 | \| IO | \| | \| | \| | 7.25 |
| 22.417 | 0.66 | 1.13 | 4.992 | \| IO | \| | \| | \| | 7.25 |
| 22.500 | 0.63 | 1.13 | 4.989 | \|I O | \| | \| | \| | 7.24 |
| 22.583 | 0.61 | 1.13 | 4.985 | \|I O | \| | \| | \| | 7.24 |
| 22.667 | 0.61 | 1.13 | 4.982 | \|I O | \| | \| | \| | 7.23 |
| 22.750 | 0.60 | 1.13 | 4.978 | \|I O | \| | \| | \| | 7.23 |
| 22.833 | 0.60 | 1.13 | 4.974 | \|I O | \| | \| | \| | 7.22 |
| 22.917 | 0.60 | 1.13 | 4.971 | \|I O | \| | \| | \| | 7.22 |
| 23.000 | 0.60 | 1.13 | 4.967 | \|I O | \| | \| | \| | 7.21 |
| 23.083 | 0.60 | 1.12 | 4.963 | \|I O | \| | \| | \| | 7.21 |
| 23.167 | 0.60 | 1.12 | 4.960 | \|I O | \| | \| | \| | 7.20 |
| 23.250 | 0.60 | 1.12 | 4.956 | \|I O | \| | \| | \| | 7.20 |
| 23.333 | 0.60 | 1.12 | 4.953 | \|I O | \| | \| | \| | 7.19 |
| 23.417 | 0.60 | 1.12 | 4.949 | \|I O | \| | \| | \| | 7.19 |
| 23.500 | 0.60 | 1.12 | 4.945 | \|I O | \| | \| | \| | 7.18 |
| 23.583 | 0.60 | 1.12 | 4.942 | \|I O | \| | \| | \| | 7.18 |
| 23.667 | 0.60 | 1.12 | 4.938 | \|I O | \| | \| | \| | 7.17 |
| 23.750 | 0.60 | 1.12 | 4.935 | \|I O | \| | \| | \| | 7.17 |
| 23.833 | 0.60 | 1.12 | 4.931 | \|I O | \| | \| | \| | 7.16 |
| 23.917 | 0.60 | 1.12 | 4.928 | \|I O | \| | \| | \| | 7.16 |
| 24.000 | 0.60 | 1.12 | 4.924 | \|I O | \| | \| | \| | 7.15 |
| 24.083 | 0.40 | 1.12 | 4.920 | \|I O | \| | \| | \| | 7.14 |
| 24.167 | 0.12 | 1.12 | 4.914 | I O | \| | \| | \| | 7.14 |
| 24.250 | 0.05 | 1.12 | 4.907 | I O | \| | \| | \| | 7.13 |
| 24.333 | 0.02 | 1.11 | 4.899 | I O | \| | \| | \| | 7.12 |
| 24.417 | 0.01 | 1.11 | 4.892 | I O | \| | \| | \| | 7.10 |
| 24.500 | 0.00 | 1.11 | 4.884 | I O | \| | \| | \| | 7.09 |
| 24.583 | 0.00 | 1.11 | 4.877 | I O | \| | \| | \| | 7.08 |
| 24.667 | 0.00 | 1.11 | 4.869 | I O | \| | \| | \| | 7.07 |
| 24.750 | 0.00 | 1.11 | 4.861 | I O | \| | \| | \| | 7.06 |
| 24.833 | 0.00 | 1.11 | 4.854 | I O | \| | \| | \| | 7.05 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 24.917 | 0.00 | 1.10 | 4.846 | I | O | \| | \| | \| | \| | 7.04 |
| 25.000 | 0.00 | 1.10 | 4.838 | I | O | \| | \| | \| | \| | 7.03 |
| 25.083 | 0.00 | 1.10 | 4.831 | I | O | \| | \| | \| | \| | 7.02 |
| 25.167 | 0.00 | 1.10 | 4.823 | I | O | \| | \| | \| | \| | 7.00 |
| 25.250 | 0.00 | 1.10 | 4.816 | I | O | \| | \| | \| | \| | 6.99 |
| 25.333 | 0.00 | 1.10 | 4.808 | I | O | \| | \| | \| | \| | 6.98 |
| 25.417 | 0.00 | 1.10 | 4.801 | I | O | \| | \| | \| | \| | 6.97 |
| 25.500 | 0.00 | 1.09 | 4.793 | I | O | \| | \| | \| | \| | 6.96 |
| 25.583 | 0.00 | 1.09 | 4.786 | I | O | \| | \| | \| | \| | 6.95 |
| 25.667 | 0.00 | 1.09 | 4.778 | I | O | \| | \| | \| | \| | 6.94 |
| 25.750 | 0.00 | 1.09 | 4.770 | I | O | \| | \| | \| | \| | 6.93 |
| 25.833 | 0.00 | 1.09 | 4.763 | I | O | \| | \| | \| | \| | 6.92 |
| 25.917 | 0.00 | 1.09 | 4.755 | I | O | \| | \| | \| | \| | 6.91 |
| 26.000 | 0.00 | 1.09 | 4.748 | I | O | \| | \| | \| | \| | 6.90 |
| 26.083 | 0.00 | 1.09 | 4.741 | I | O | \| | \| | \| | \| | 6.88 |
| 26.167 | 0.00 | 1.08 | 4.733 | I | O | \| | \| | \| | \| | 6.87 |
| 26.250 | 0.00 | 1.08 | 4.726 | I | O | \| | \| | \| | \| | 6.86 |
| 26.333 | 0.00 | 1.08 | 4.718 | I | O | \| | \| | \| | \| | 6.85 |
| 26.417 | 0.00 | 1.08 | 4.711 | I | O | \| | \| | \| | \| | 6.84 |
| 26.500 | 0.00 | 1.08 | 4.703 | I | O | \| | \| | \| | \| | 6.83 |
| 26.583 | 0.00 | 1.08 | 4.696 | I | O | \| | \| | \| | \| | 6.82 |
| 26.667 | 0.00 | 1.08 | 4.688 | I | O | \| | \| | \| | \| | 6.81 |
| 26.750 | 0.00 | 1.07 | 4.681 | I | O | \| | \| | \| | \| | 6.80 |
| 26.833 | 0.00 | 1.07 | 4.674 | I | O | \| | \| | \| | \| | 6.79 |
| 26.917 | 0.00 | 1.07 | 4.666 | I | O | \| | \| | \| | \| | 6.78 |
| 27.000 | 0.00 | 1.07 | 4.659 | I | O | \| | \| | \| | \| | 6.77 |
| 27.083 | 0.00 | 1.07 | 4.652 | I | O | \| | \| | \| | \| | 6.76 |
| 27.167 | 0.00 | 1.07 | 4.644 | I | O | \| | \| | \| | \| | 6.75 |
| 27.250 | 0.00 | 1.07 | 4.637 | I | O | \| | \| | \| | \| | 6.73 |
| 27.333 | 0.00 | 1.06 | 4.630 | I | O | \| | \| | \| | \| | 6.72 |
| 27.417 | 0.00 | 1.06 | 4.622 | I | O | \| | \| | \| | \| | 6.71 |
| 27.500 | 0.00 | 1.06 | 4.615 | I | O | \| | \| | \| | \| | 6.70 |
| 27.583 | 0.00 | 1.06 | 4.608 | I | O | \| | \| | \| | \| | 6.69 |
| 27.667 | 0.00 | 1.06 | 4.600 | I | O | \| | \| | \| | \| | 6.68 |
| 27.750 | 0.00 | 1.06 | 4.593 | I | O | \| | \| | \| | \| | 6.67 |
| 27.833 | 0.00 | 1.06 | 4.586 | I | O | \| | \| | \| | \| | 6.66 |
| 27.917 | 0.00 | 1.05 | 4.578 | I | O | \| | \| | \| | \| | 6.65 |
| 28.000 | 0.00 | 1.05 | 4.571 | I | O | \| | \| | \| | \| | 6.64 |
| 28.083 | 0.00 | 1.05 | 4.564 | I | O | \| | \| | \| | \| | 6.63 |
| 28.167 | 0.00 | 1.05 | 4.557 | I | O | \| | \| | \| | \| | 6.62 |
| 28.250 | 0.00 | 1.05 | 4.549 | I | O | \| | \| | \| | \| | 6.61 |
| 28.333 | 0.00 | 1.05 | 4.542 | I | O | \| | \| | \| | \| | 6.60 |
| 28.417 | 0.00 | 1.05 | 4.535 | I | O | \| | \| | \| | \| | 6.59 |
| 28.500 | 0.00 | 1.04 | 4.528 | I | O | \| | \| | \| | \| | 6.58 |
| 28.583 | 0.00 | 1.04 | 4.521 | I | O | \| | \| | \| | \| | 6.57 |
| 28.667 | 0.00 | 1.04 | 4.513 | I | O | \| | \| | \| | \| | 6.56 |
| 28.750 | 0.00 | 1.04 | 4.506 | I | O | \| | \| | \| | \| | 6.55 |
| 28.833 | 0.00 | 1.04 | 4.499 | I | O | \| | \| | \| | \| | 6.53 |
| 28.917 | 0.00 | 1.04 | 4.492 | I | O | \| | \| | \| | \| | 6.52 |
| 29.000 | 0.00 | 1.04 | 4.485 | I | O | \| | \| | \| | \| | 6.51 |
| 29.083 | 0.00 | 1.04 | 4.478 | I | O | \| | \| | \| | \| | 6.50 |
| 29.167 | 0.00 | 1.03 | 4.471 | I | O | \| | \| | \| | \| | 6.49 |
| 29.250 | 0.00 | 1.03 | 4.463 | I | O | \| | \| | \| | \| | 6.48 |
| 29.333 | 0.00 | 1.03 | 4.456 | I | O | \| | \| | \| | \| | 6.47 |
| 29.417 | 0.00 | 1.03 | 4.449 | I | O | \| | \| | \| | \| | 6.46 |
| 29.500 | 0.00 | 1.03 | 4.442 | I | O | \| | \| | \| | \| | 6.45 |
| 29.583 | 0.00 | 1.03 | 4.435 | I | O | \| | \| | \| | \| | 6.44 |
| 29.667 | 0.00 | 1.03 | 4.428 | I | O | \| | \| | \| | \| | 6.43 |
| 29.750 | 0.00 | 1.02 | 4.421 | I | O | \| | \| | \| | \| | 6.42 |
| 29.833 | 0.00 | 1.02 | 4.414 | I | O | \| | \| | \| | \| | 6.41 |
| 29.917 | 0.00 | 1.02 | 4.407 | I | O | \| | \| | \| | \| | 6.40 |
| 30.000 | 0.00 | 1.02 | 4.400 | I | O | \| | \| | \| | \| | 6.39 |
| 30.083 | 0.00 | 1.02 | 4.393 | I | O | \| | \| | \| | \| | 6.38 |
| 30.167 | 0.00 | 1.02 | 4.386 | I | O | \| | \| | \| | \| | 6.37 |
| 30.250 | 0.00 | 1.02 | 4.379 | I | O | \| | \| | \| | \| | 6.36 |
| 30.333 | 0.00 | 1.02 | 4.372 | I | O | \| | \| | \| | \| | 6.35 |
| 30.417 | 0.00 | 1.01 | 4.365 | I | O | \| | \| | \| | \| | 6.34 |
| 30.500 | 0.00 | 1.01 | 4.358 | I | O | \| | \| | \| | \| | 6.33 |
| 30.583 | 0.00 | 1.01 | 4.351 | I | O | \| | \| | \| | \| | 6.32 |
| 30.667 | 0.00 | 1.01 | 4.344 | I | O | \| | \| | \| | \| | 6.31 |
| 30.750 | 0.00 | 1.01 | 4.337 | I | O | \| | \| | \| | \| | 6.30 |
| 30.833 | 0.00 | 1.01 | 4.330 | I | O | \| | \| | \| | \| | 6.29 |
| 30.917 | 0.00 | 1.01 | 4.323 | I | O | \| | \| | \| | \| | 6.28 |
| 31.000 | 0.00 | 1.01 | 4.316 | I | O | \| | \| | \| | \| | 6.27 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 31.083 | 0.00 | 1.00 | 4.309 | I | O | \| | \| | \| | \| | 6.26 |
| 31.167 | 0.00 | 1.00 | 4.302 | I | O | \| | \| | \| | \| | 6.25 |
| 31.250 | 0.00 | 1.00 | 4.295 | I | O | \| | \| | \| | \| | 6.24 |
| 31.333 | 0.00 | 1.00 | 4.288 | I | O | \| | \| | \| | \| | 6.23 |
| 31.417 | 0.00 | 1.00 | 4.282 | I | O | \| | \| | \| | \| | 6.22 |
| 31.500 | 0.00 | 1.00 | 4.275 | I | O | \| | \| | \| | \| | 6.21 |
| 31.583 | 0.00 | 1.00 | 4.268 | I | O | \| | \| | \| | \| | 6.20 |
| 31.667 | 0.00 | 0.99 | 4.261 | I | O | \| | \| | \| | \| | 6.19 |
| 31.750 | 0.00 | 0.99 | 4.254 | I | O | \| | \| | \| | \| | 6.18 |
| 31.833 | 0.00 | 0.99 | 4.247 | I | O | \| | \| | \| | \| | 6.17 |
| 31.917 | 0.00 | 0.99 | 4.240 | I | O | \| | \| | \| | \| | 6.16 |
| 32.000 | 0.00 | 0.99 | 4.234 | I | O | \| | \| | \| | \| | 6.15 |
| 32.083 | 0.00 | 0.99 | 4.227 | I | O | \| | \| | \| | \| | 6.14 |
| 32.167 | 0.00 | 0.99 | 4.220 | I | O | \| | \| | \| | \| | 6.13 |
| 32.250 | 0.00 | 0.99 | 4.213 | I | O | \| | \| | \| | \| | 6.12 |
| 32.333 | 0.00 | 0.98 | 4.206 | I | O | \| | \| | \| | \| | 6.11 |
| 32.417 | 0.00 | 0.98 | 4.200 | I | O | \| | \| | \| | \| | 6.10 |
| 32.500 | 0.00 | 0.98 | 4.193 | I | O | \| | \| | \| | \| | 6.09 |
| 32.583 | 0.00 | 0.98 | 4.186 | I | O | \| | \| | \| | \| | 6.08 |
| 32.667 | 0.00 | 0.98 | 4.179 | I | O | \| | \| | \| | \| | 6.07 |
| 32.750 | 0.00 | 0.98 | 4.173 | I | O | \| | \| | \| | \| | 6.06 |
| 32.833 | 0.00 | 0.98 | 4.166 | I | O | \| | \| | \| | \| | 6.05 |
| 32.917 | 0.00 | 0.98 | 4.159 | I | O | \| | \| | \| | \| | 6.04 |
| 33.000 | 0.00 | 0.97 | 4.153 | I | O | \| | \| | \| | \| | 6.03 |
| 33.083 | 0.00 | 0.97 | 4.146 | I | O | \| | \| | \| | \| | 6.02 |
| 33.167 | 0.00 | 0.97 | 4.139 | I | O | \| | \| | \| | \| | 6.01 |
| 33.250 | 0.00 | 0.97 | 4.132 | I | O | \| | \| | \| | \| | 6.00 |
| 33.333 | 0.00 | 0.97 | 4.126 | I | O | \| | \| | \| | \| | 5.99 |
| 33.417 | 0.00 | 0.97 | 4.119 | I | O | \| | \| | \| | \| | 5.98 |
| 33.500 | 0.00 | 0.97 | 4.112 | I | O | \| | \| | \| | \| | 5.97 |
| 33.583 | 0.00 | 0.96 | 4.106 | I | O | \| | \| | \| | \| | 5.96 |
| 33.667 | 0.00 | 0.96 | 4.099 | I | O | \| | \| | \| | \| | 5.96 |
| 33.750 | 0.00 | 0.96 | 4.093 | I | O | \| | \| | \| | \| | 5.95 |
| 33.833 | 0.00 | 0.96 | 4.086 | I | O | \| | \| | \| | \| | 5.94 |
| 33.917 | 0.00 | 0.96 | 4.079 | I | O | \| | \| | \| | \| | 5.93 |
| 34.000 | 0.00 | 0.96 | 4.073 | I | O | \| | \| | \| | \| | 5.92 |
| 34.083 | 0.00 | 0.96 | 4.066 | I | O | \| | \| | \| | \| | 5.91 |
| 34.167 | 0.00 | 0.95 | 4.060 | I | O | \| | \| | \| | \| | 5.90 |
| 34.250 | 0.00 | 0.95 | 4.053 | I | O | \| | \| | \| | \| | 5.89 |
| 34.333 | 0.00 | 0.95 | 4.046 | I | O | \| | \| | \| | \| | 5.88 |
| 34.417 | 0.00 | 0.95 | 4.040 | I | O | \| | \| | \| | \| | 5.87 |
| 34.500 | 0.00 | 0.95 | 4.033 | I | O | \| | \| | \| | \| | 5.86 |
| 34.583 | 0.00 | 0.95 | 4.027 | I | O | \| | \| | \| | \| | 5.85 |
| 34.667 | 0.00 | 0.94 | 4.020 | I | O | \| | \| | \| | \| | 5.84 |
| 34.750 | 0.00 | 0.94 | 4.014 | I | O | \| | \| | \| | \| | 5.83 |
| 34.833 | 0.00 | 0.94 | 4.007 | I | O | \| | \| | \| | \| | 5.82 |
| 34.917 | 0.00 | 0.94 | 4.001 | I | O | \| | \| | \| | \| | 5.81 |
| 35.000 | 0.00 | 0.94 | 3.994 | I | O | \| | \| | \| | \| | 5.80 |
| 35.083 | 0.00 | 0.94 | 3.988 | I | O | \| | \| | \| | \| | 5.79 |
| 35.167 | 0.00 | 0.94 | 3.981 | I | O | \| | \| | \| | \| | 5.78 |
| 35.250 | 0.00 | 0.93 | 3.975 | I | O | \| | \| | \| | \| | 5.78 |
| 35.333 | 0.00 | 0.93 | 3.969 | I | O | \| | \| | \| | \| | 5.77 |
| 35.417 | 0.00 | 0.93 | 3.962 | I | O | \| | \| | \| | \| | 5.76 |
| 35.500 | 0.00 | 0.93 | 3.956 | I | O | \| | \| | \| | \| | 5.75 |
| 35.583 | 0.00 | 0.93 | 3.949 | I | O | \| | \| | \| | \| | 5.74 |
| 35.667 | 0.00 | 0.93 | 3.943 | I | O | \| | \| | \| | \| | 5.73 |
| 35.750 | 0.00 | 0.93 | 3.937 | I | O | \| | \| | \| | \| | 5.72 |
| 35.833 | 0.00 | 0.92 | 3.930 | I | O | \| | \| | \| | \| | 5.71 |
| 35.917 | 0.00 | 0.92 | 3.924 | I | O | \| | \| | \| | \| | 5.70 |
| 36.000 | 0.00 | 0.92 | 3.918 | I | O | \| | \| | \| | \| | 5.69 |
| 36.083 | 0.00 | 0.92 | 3.911 | I | O | \| | \| | \| | \| | 5.68 |
| 36.167 | 0.00 | 0.92 | 3.905 | I | O | \| | \| | \| | \| | 5.67 |
| 36.250 | 0.00 | 0.92 | 3.899 | I | O | \| | \| | \| | \| | 5.66 |
| 36.333 | 0.00 | 0.91 | 3.892 | I | O | \| | \| | \| | \| | 5.66 |
| 36.417 | 0.00 | 0.91 | 3.886 | I | O | \| | \| | \| | \| | 5.65 |
| 36.500 | 0.00 | 0.91 | 3.880 | I | O | \| | \| | \| | \| | 5.64 |
| 36.583 | 0.00 | 0.91 | 3.873 | I | O | \| | \| | \| | \| | 5.63 |
| 36.667 | 0.00 | 0.91 | 3.867 | I | O | \| | \| | \| | \| | 5.62 |
| 36.750 | 0.00 | 0.91 | 3.861 | I | O | \| | \| | \| | \| | 5.61 |
| 36.833 | 0.00 | 0.91 | 3.855 | I | O | \| | \| | \| | \| | 5.60 |
| 36.917 | 0.00 | 0.90 | 3.848 | I | O | \| | \| | \| | \| | 5.59 |
| 37.000 | 0.00 | 0.90 | 3.842 | I | O | \| | \| | \| | \| | 5.58 |
| 37.083 | 0.00 | 0.90 | 3.836 | I | O | \| | \| | \| | \| | 5.57 |
| 37.167 | 0.00 | 0.90 | 3.830 | I | O | \| | \| | \| | \| | 5.56 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37.250 | 0.00 | 0.90 | 3.824 | I O | \| | \| | \| | 5.56 |
| 37.333 | 0.00 | 0.90 | 3.817 | I O | \| | \| | \| | 5.55 |
| 37.417 | 0.00 | 0.90 | 3.811 | I O | \| | \| | \| | 5.54 |
| 37.500 | 0.00 | 0.89 | 3.805 | I O | \| | \| | \| | 5.53 |
| 37.583 | 0.00 | 0.89 | 3.799 | I O | \| | \| | \| | 5.52 |
| 37.667 | 0.00 | 0.89 | 3.793 | I O | \| | \| | \| | 5.51 |
| 37.750 | 0.00 | 0.89 | 3.787 | I O | \| | \| | \| | 5.50 |
| 37.833 | 0.00 | 0.89 | 3.780 | I O | \| | \| | \| | 5.49 |
| 37.917 | 0.00 | 0.89 | 3.774 | I O | \| | \| | \| | 5.48 |
| 38.000 | 0.00 | 0.89 | 3.768 | I O | \| | \| | \| | 5.48 |
| 38.083 | 0.00 | 0.88 | 3.762 | I O | \| | \| | \| | 5.47 |
| 38.167 | 0.00 | 0.88 | 3.756 | I O | \| | \| | \| | 5.46 |
| 38.250 | 0.00 | 0.88 | 3.750 | I O | \| | \| | \| | 5.45 |
| 38.333 | 0.00 | 0.88 | 3.744 | I O | \| | \| | \| | 5.44 |
| 38.417 | 0.00 | 0.88 | 3.738 | I O | \| | \| | \| | 5.43 |
| 38.500 | 0.00 | 0.88 | 3.732 | I O | \| | \| | \| | 5.42 |
| 38.583 | 0.00 | 0.88 | 3.726 | I O | \| | \| | \| | 5.41 |
| 38.667 | 0.00 | 0.87 | 3.720 | I O | \| | \| | \| | 5.41 |
| 38.750 | 0.00 | 0.87 | 3.714 | I O | \| | \| | \| | 5.40 |
| 38.833 | 0.00 | 0.87 | 3.708 | I O | \| | \| | \| | 5.39 |
| 38.917 | 0.00 | 0.87 | 3.702 | I O | \| | \| | \| | 5.38 |
| 39.000 | 0.00 | 0.87 | 3.696 | I O | \| | \| | \| | 5.37 |
| 39.083 | 0.00 | 0.87 | 3.690 | I O | \| | \| | \| | 5.36 |
| 39.167 | 0.00 | 0.87 | 3.684 | I O | \| | \| | \| | 5.35 |
| 39.250 | 0.00 | 0.87 | 3.678 | I O | \| | \| | \| | 5.34 |
| 39.333 | 0.00 | 0.86 | 3.672 | I O | \| | \| | \| | 5.34 |
| 39.417 | 0.00 | 0.86 | 3.666 | I O | \| | \| | \| | 5.33 |
| 39.500 | 0.00 | 0.86 | 3.660 | I O | \| | \| | \| | 5.32 |
| 39.583 | 0.00 | 0.86 | 3.654 | I O | \| | \| | \| | 5.31 |
| 39.667 | 0.00 | 0.86 | 3.648 | I O | \| | \| | \| | 5.30 |
| 39.750 | 0.00 | 0.86 | 3.642 | I O | \| | \| | \| | 5.29 |
| 39.833 | 0.00 | 0.86 | 3.636 | I O | \| | \| | \| | 5.28 |
| 39.917 | 0.00 | 0.85 | 3.630 | I O | \| | \| | \| | 5.28 |
| 40.000 | 0.00 | 0.85 | 3.625 | I O | \| | \| | \| | 5.27 |
| 40.083 | 0.00 | 0.85 | 3.619 | I O | \| | \| | \| | 5.26 |
| 40.167 | 0.00 | 0.85 | 3.613 | I O | \| | \| | \| | 5.25 |
| 40.250 | 0.00 | 0.85 | 3.607 | I O | \| | \| | \| | 5.24 |
| 40.333 | 0.00 | 0.85 | 3.601 | I O | \| | \| | \| | 5.23 |
| 40.417 | 0.00 | 0.85 | 3.595 | I O | \| | \| | \| | 5.23 |
| 40.500 | 0.00 | 0.84 | 3.589 | I O | \| | \| | \| | 5.22 |
| 40.583 | 0.00 | 0.84 | 3.584 | I O | \| | \| | \| | 5.21 |
| 40.667 | 0.00 | 0.84 | 3.578 | I O | \| | \| | \| | 5.20 |
| 40.750 | 0.00 | 0.84 | 3.572 | I O | \| | \| | \| | 5.19 |
| 40.833 | 0.00 | 0.84 | 3.566 | I O | \| | \| | \| | 5.18 |
| 40.917 | 0.00 | 0.84 | 3.561 | I O | \| | \| | \| | 5.17 |
| 41.000 | 0.00 | 0.84 | 3.555 | I O | \| | \| | \| | 5.17 |
| 41.083 | 0.00 | 0.84 | 3.549 | I O | \| | \| | \| | 5.16 |
| 41.167 | 0.00 | 0.83 | 3.543 | I O | \| | \| | \| | 5.15 |
| 41.250 | 0.00 | 0.83 | 3.538 | I O | \| | \| | \| | 5.14 |
| 41.333 | 0.00 | 0.83 | 3.532 | I O | \| | \| | \| | 5.13 |
| 41.417 | 0.00 | 0.83 | 3.526 | I O | \| | \| | \| | 5.12 |
| 41.500 | 0.00 | 0.83 | 3.520 | I O | \| | \| | \| | 5.12 |
| 41.583 | 0.00 | 0.83 | 3.515 | I O | \| | \| | \| | 5.11 |
| 41.667 | 0.00 | 0.83 | 3.509 | I O | \| | \| | \| | 5.10 |
| 41.750 | 0.00 | 0.82 | 3.503 | I O | \| | \| | \| | 5.09 |
| 41.833 | 0.00 | 0.82 | 3.498 | I O | \| | \| | \| | 5.08 |
| 41.917 | 0.00 | 0.82 | 3.492 | I O | \| | \| | \| | 5.08 |
| 42.000 | 0.00 | 0.82 | 3.486 | I O | \| | \| | \| | 5.07 |
| 42.083 | 0.00 | 0.82 | 3.481 | I O | \| | \| | \| | 5.06 |
| 42.167 | 0.00 | 0.82 | 3.475 | I O | \| | \| | \| | 5.05 |
| 42.250 | 0.00 | 0.82 | 3.469 | I O | \| | \| | \| | 5.04 |
| 42.333 | 0.00 | 0.82 | 3.464 | I O | \| | \| | \| | 5.03 |
| 42.417 | 0.00 | 0.81 | 3.458 | I O | \| | \| | \| | 5.03 |
| 42.500 | 0.00 | 0.81 | 3.453 | I O | \| | \| | \| | 5.02 |
| 42.583 | 0.00 | 0.81 | 3.447 | I O | \| | \| | \| | 5.01 |
| 42.667 | 0.00 | 0.81 | 3.441 | I O | \| | \| | \| | 5.00 |
| 42.750 | 0.00 | 0.81 | 3.436 | I O | \| | \| | \| | 4.99 |
| 42.833 | 0.00 | 0.81 | 3.430 | I O | \| | \| | \| | 4.99 |
| 42.917 | 0.00 | 0.80 | 3.425 | I O | \| | \| | \| | 4.98 |
| 43.000 | 0.00 | 0.80 | 3.419 | I O | \| | \| | \| | 4.97 |
| 43.083 | 0.00 | 0.80 | 3.414 | I O | \| | \| | \| | 4.96 |
| 43.167 | 0.00 | 0.80 | 3.408 | I O | \| | \| | \| | 4.95 |
| 43.250 | 0.00 | 0.79 | 3.403 | I O | \| | \| | \| | 4.95 |
| 43.333 | 0.00 | 0.79 | 3.397 | I O | \| | \| | \| | 4.94 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 43.417 | 0.00 | 0.79 | 3.392 | I O | \| | \| | \| | 4.93 |
| 43.500 | 0.00 | 0.79 | 3.386 | I O | \| | \| | \| | 4.92 |
| 43.583 | 0.00 | 0.78 | 3.381 | I O | \| | \| | \| | 4.91 |
| 43.667 | 0.00 | 0.78 | 3.376 | I O | \| | \| | \| | 4.91 |
| 43.750 | 0.00 | 0.78 | 3.370 | I O | \| | \| | \| | 4.90 |
| 43.833 | 0.00 | 0.78 | 3.365 | I O | \| | \| | \| | 4.89 |
| 43.917 | 0.00 | 0.77 | 3.360 | I O | \| | \| | \| | 4.88 |
| 44.000 | 0.00 | 0.77 | 3.354 | I O | \| | \| | \| | 4.88 |
| 44.083 | 0.00 | 0.77 | 3.349 | I O | \| | \| | \| | 4.87 |
| 44.167 | 0.00 | 0.77 | 3.344 | I O | \| | \| | \| | 4.86 |
| 44.250 | 0.00 | 0.76 | 3.338 | I O | \| | \| | \| | 4.85 |
| 44.333 | 0.00 | 0.76 | 3.333 | I O | \| | \| | \| | 4.85 |
| 44.417 | 0.00 | 0.76 | 3.328 | I O | \| | \| | \| | 4.84 |
| 44.500 | 0.00 | 0.76 | 3.323 | I O | \| | \| | \| | 4.83 |
| 44.583 | 0.00 | 0.75 | 3.317 | I O | \| | \| | \| | 4.82 |
| 44.667 | 0.00 | 0.75 | 3.312 | I O | \| | \| | \| | 4.81 |
| 44.750 | 0.00 | 0.75 | 3.307 | I O | \| | \| | \| | 4.81 |
| 44.833 | 0.00 | 0.75 | 3.302 | I O | \| | \| | \| | 4.80 |
| 44.917 | 0.00 | 0.75 | 3.297 | I O | \| | \| | \| | 4.79 |
| 45.000 | 0.00 | 0.74 | 3.292 | I O | \| | \| | \| | 4.78 |
| 45.083 | 0.00 | 0.74 | 3.286 | I O | \| | \| | \| | 4.78 |
| 45.167 | 0.00 | 0.74 | 3.281 | I O | \| | \| | \| | 4.77 |
| 45.250 | 0.00 | 0.74 | 3.276 | I O | \| | \| | \| | 4.76 |
| 45.333 | 0.00 | 0.73 | 3.271 | I O | \| | \| | \| | 4.76 |
| 45.417 | 0.00 | 0.73 | 3.266 | I O | \| | \| | \| | 4.75 |
| 45.500 | 0.00 | 0.73 | 3.261 | I O | \| | \| | \| | 4.74 |
| 45.583 | 0.00 | 0.73 | 3.256 | I O | \| | \| | \| | 4.73 |
| 45.667 | 0.00 | 0.73 | 3.251 | I O | \| | \| | \| | 4.73 |
| 45.750 | 0.00 | 0.72 | 3.246 | I O | \| | \| | \| | 4.72 |
| 45.833 | 0.00 | 0.72 | 3.241 | I O | \| | \| | \| | 4.71 |
| 45.917 | 0.00 | 0.72 | 3.236 | I O | \| | \| | \| | 4.70 |
| 46.000 | 0.00 | 0.72 | 3.231 | I O | \| | \| | \| | 4.70 |
| 46.083 | 0.00 | 0.71 | 3.226 | I O | \| | \| | \| | 4.69 |
| 46.167 | 0.00 | 0.71 | 3.221 | I O | \| | \| | \| | 4.68 |
| 46.250 | 0.00 | 0.71 | 3.217 | I O | \| | \| | \| | 4.68 |
| 46.333 | 0.00 | 0.71 | 3.212 | I O | \| | \| | \| | 4.67 |
| 46.417 | 0.00 | 0.71 | 3.207 | I O | \| | \| | \| | 4.66 |
| 46.500 | 0.00 | 0.70 | 3.202 | I O | \| | \| | \| | 4.66 |
| 46.583 | 0.00 | 0.70 | 3.197 | I O | \| | \| | \| | 4.65 |
| 46.667 | 0.00 | 0.70 | 3.192 | I O | \| | \| | \| | 4.64 |
| 46.750 | 0.00 | 0.70 | 3.188 | I O | \| | \| | \| | 4.63 |
| 46.833 | 0.00 | 0.69 | 3.183 | I O | \| | \| | \| | 4.63 |
| 46.917 | 0.00 | 0.69 | 3.178 | I O | \| | \| | \| | 4.62 |
| 47.000 | 0.00 | 0.69 | 3.173 | I O | \| | \| | \| | 4.61 |
| 47.083 | 0.00 | 0.69 | 3.168 | I O | \| | \| | \| | 4.61 |
| 47.167 | 0.00 | 0.69 | 3.164 | I O | \| | \| | \| | 4.60 |
| 47.250 | 0.00 | 0.68 | 3.159 | I O | \| | \| | \| | 4.59 |
| 47.333 | 0.00 | 0.68 | 3.154 | I O | \| | \| | \| | 4.59 |
| 47.417 | 0.00 | 0.68 | 3.150 | I O | \| | \| | \| | 4.58 |
| 47.500 | 0.00 | 0.68 | 3.145 | I O | \| | \| | \| | 4.57 |
| 47.583 | 0.00 | 0.68 | 3.140 | I O | \| | \| | \| | 4.57 |
| 47.667 | 0.00 | 0.67 | 3.136 | I O | \| | \| | \| | 4.56 |
| 47.750 | 0.00 | 0.67 | 3.131 | I O | \| | \| | \| | 4.55 |
| 47.833 | 0.00 | 0.67 | 3.126 | I O | \| | \| | \| | 4.55 |
| 47.917 | 0.00 | 0.67 | 3.122 | I O | \| | \| | \| | 4.54 |
| 48.000 | 0.00 | 0.66 | 3.117 | I O | \| | \| | \| | 4.53 |
| 48.083 | 0.00 | 0.66 | 3.113 | I O | \| | \| | \| | 4.53 |
| 48.167 | 0.00 | 0.66 | 3.108 | I O | \| | \| | \| | 4.52 |
| 48.250 | 0.00 | 0.66 | 3.104 | I O | \| | \| | \| | 4.51 |
| 48.333 | 0.00 | 0.66 | 3.099 | I O | \| | \| | \| | 4.51 |
| 48.417 | 0.00 | 0.65 | 3.094 | I O | \| | \| | \| | 4.50 |
| 48.500 | 0.00 | 0.65 | 3.090 | I O | \| | \| | \| | 4.49 |
| 48.583 | 0.00 | 0.65 | 3.085 | I O | \| | \| | \| | 4.49 |
| 48.667 | 0.00 | 0.65 | 3.081 | I O | \| | \| | \| | 4.48 |
| 48.750 | 0.00 | 0.65 | 3.077 | I O | \| | \| | \| | 4.47 |
| 48.833 | 0.00 | 0.64 | 3.072 | I O | \| | \| | \| | 4.47 |
| 48.917 | 0.00 | 0.64 | 3.068 | I O | \| | \| | \| | 4.46 |
| 49.000 | 0.00 | 0.64 | 3.063 | I O | \| | \| | \| | 4.45 |
| 49.083 | 0.00 | 0.64 | 3.059 | I O | \| | \| | \| | 4.45 |
| 49.167 | 0.00 | 0.64 | 3.054 | IO | \| | \| | \| | 4.44 |
| 49.250 | 0.00 | 0.63 | 3.050 | IO | \| | \| | \| | 4.43 |
| 49.333 | 0.00 | 0.63 | 3.046 | IO | \| | \| | \| | 4.43 |
| 49.417 | 0.00 | 0.63 | 3.041 | IO | \| | \| | \| | 4.42 |
| 49.500 | 0.00 | 0.63 | 3.037 | IO | \| | \| | \| | 4.42 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 49.583 | 0.00 | 0.63 | 3.033 | IO | | | | | 4.41 |
| 49.667 | 0.00 | 0.63 | 3.028 | IO | | | | | 4.40 |
| 49.750 | 0.00 | 0.62 | 3.024 | IO | | | | | 4.40 |
| 49.833 | 0.00 | 0.62 | 3.020 | IO | | | | | 4.39 |
| 49.917 | 0.00 | 0.62 | 3.016 | IO | | | | | 4.38 |
| 50.000 | 0.00 | 0.62 | 3.011 | IO | | | | | 4.38 |
| 50.083 | 0.00 | 0.62 | 3.007 | IO | | | | | 4.37 |
| 50.167 | 0.00 | 0.61 | 3.003 | IO | | | | | 4.37 |
| 50.250 | 0.00 | 0.61 | 2.999 | IO | | | | | 4.36 |
| 50.333 | 0.00 | 0.61 | 2.994 | IO | | | | | 4.35 |
| 50.417 | 0.00 | 0.61 | 2.990 | IO | | | | | 4.35 |
| 50.500 | 0.00 | 0.61 | 2.986 | IO | | | | | 4.34 |
| 50.583 | 0.00 | 0.60 | 2.982 | IO | | | | | 4.34 |
| 50.667 | 0.00 | 0.60 | 2.978 | IO | | | | | 4.33 |
| 50.750 | 0.00 | 0.60 | 2.974 | IO | | | | | 4.32 |
| 50.833 | 0.00 | 0.60 | 2.969 | IO | | | | | 4.32 |
| 50.917 | 0.00 | 0.60 | 2.965 | IO | | | | | 4.31 |
| 51.000 | 0.00 | 0.59 | 2.961 | IO | | | | | 4.31 |
| 51.083 | 0.00 | 0.59 | 2.957 | IO | | | | | 4.30 |
| 51.167 | 0.00 | 0.59 | 2.953 | IO | | | | | 4.29 |
| 51.250 | 0.00 | 0.59 | 2.949 | IO | | | | | 4.29 |
| 51.333 | 0.00 | 0.59 | 2.945 | IO | | | | | 4.28 |
| 51.417 | 0.00 | 0.59 | 2.941 | IO | | | | | 4.28 |
| 51.500 | 0.00 | 0.58 | 2.937 | IO | | | | | 4.27 |
| 51.583 | 0.00 | 0.58 | 2.933 | IO | | | | | 4.26 |
| 51.667 | 0.00 | 0.58 | 2.929 | IO | | | | | 4.26 |
| 51.750 | 0.00 | 0.58 | 2.925 | IO | | | | | 4.25 |
| 51.833 | 0.00 | 0.58 | 2.921 | IO | | | | | 4.25 |
| 51.917 | 0.00 | 0.57 | 2.917 | IO | | | | | 4.24 |
| 52.000 | 0.00 | 0.57 | 2.913 | IO | | | | | 4.24 |
| 52.083 | 0.00 | 0.57 | 2.909 | IO | | | | | 4.23 |
| 52.167 | 0.00 | 0.57 | 2.905 | IO | | | | | 4.22 |
| 52.250 | 0.00 | 0.57 | 2.901 | IO | | | | | 4.22 |
| 52.333 | 0.00 | 0.57 | 2.897 | IO | | | | | 4.21 |
| 52.417 | 0.00 | 0.56 | 2.893 | IO | | | | | 4.21 |
| 52.500 | 0.00 | 0.56 | 2.889 | IO | | | | | 4.20 |
| 52.583 | 0.00 | 0.56 | 2.886 | IO | | | | | 4.20 |
| 52.667 | 0.00 | 0.56 | 2.882 | IO | | | | | 4.19 |
| 52.750 | 0.00 | 0.56 | 2.878 | IO | | | | | 4.19 |
| 52.833 | 0.00 | 0.56 | 2.874 | IO | | | | | 4.18 |
| 52.917 | 0.00 | 0.55 | 2.870 | IO | | | | | 4.17 |
| 53.000 | 0.00 | 0.55 | 2.866 | IO | | | | | 4.17 |
| 53.083 | 0.00 | 0.55 | 2.863 | IO | | | | | 4.16 |
| 53.167 | 0.00 | 0.55 | 2.859 | IO | | | | | 4.16 |
| 53.250 | 0.00 | 0.55 | 2.855 | IO | | | | | 4.15 |
| 53.333 | 0.00 | 0.55 | 2.851 | IO | | | | | 4.15 |
| 53.417 | 0.00 | 0.54 | 2.848 | IO | | | | | 4.14 |
| 53.500 | 0.00 | 0.54 | 2.844 | IO | | | | | 4.14 |
| 53.583 | 0.00 | 0.54 | 2.840 | IO | | | | | 4.13 |
| 53.667 | 0.00 | 0.54 | 2.836 | IO | | | | | 4.13 |
| 53.750 | 0.00 | 0.54 | 2.833 | IO | | | | | 4.12 |
| 53.833 | 0.00 | 0.54 | 2.829 | IO | | | | | 4.11 |
| 53.917 | 0.00 | 0.53 | 2.825 | IO | | | | | 4.11 |
| 54.000 | 0.00 | 0.53 | 2.822 | IO | | | | | 4.10 |
| 54.083 | 0.00 | 0.53 | 2.818 | IO | | | | | 4.10 |
| 54.167 | 0.00 | 0.53 | 2.814 | IO | | | | | 4.09 |
| 54.250 | 0.00 | 0.53 | 2.811 | IO | | | | | 4.09 |
| 54.333 | 0.00 | 0.53 | 2.807 | IO | | | | | 4.08 |
| 54.417 | 0.00 | 0.52 | 2.803 | IO | | | | | 4.08 |
| 54.500 | 0.00 | 0.52 | 2.800 | IO | | | | | 4.07 |
| 54.583 | 0.00 | 0.52 | 2.796 | IO | | | | | 4.07 |
| 54.667 | 0.00 | 0.52 | 2.793 | IO | | | | | 4.06 |
| 54.750 | 0.00 | 0.52 | 2.789 | IO | | | | | 4.06 |
| 54.833 | 0.00 | 0.52 | 2.786 | IO | | | | | 4.05 |
| 54.917 | 0.00 | 0.51 | 2.782 | IO | | | | | 4.05 |
| 55.000 | 0.00 | 0.51 | 2.778 | IO | | | | | 4.04 |
| 55.083 | 0.00 | 0.51 | 2.775 | IO | | | | | 4.04 |
| 55.167 | 0.00 | 0.51 | 2.771 | IO | | | | | 4.03 |
| 55.250 | 0.00 | 0.51 | 2.768 | IO | | | | | 4.03 |
| 55.333 | 0.00 | 0.51 | 2.764 | IO | | | | | 4.02 |
| 55.417 | 0.00 | 0.50 | 2.761 | IO | | | | | 4.02 |
| 55.500 | 0.00 | 0.50 | 2.757 | IO | | | | | 4.01 |
| 55.583 | 0.00 | 0.50 | 2.754 | IO | | | | | 4.01 |
| 55.667 | 0.00 | 0.50 | 2.751 | IO | | | | | 4.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 55.750 | 0.00 | 0.50 | 2.747 | IO | | | | | 4.00 |
| 55.833 | 0.00 | 0.50 | 2.744 | IO | | | | | 3.99 |
| 55.917 | 0.00 | 0.50 | 2.740 | IO | | | | | 3.99 |
| 56.000 | 0.00 | 0.50 | 2.737 | IO | | | | | 3.98 |
| 56.083 | 0.00 | 0.50 | 2.733 | IO | | | | | 3.98 |
| 56.167 | 0.00 | 0.50 | 2.730 | IO | | | | | 3.97 |
| 56.250 | 0.00 | 0.50 | 2.726 | IO | | | | | 3.97 |
| 56.333 | 0.00 | 0.50 | 2.723 | IO | | | | | 3.96 |
| 56.417 | 0.00 | 0.50 | 2.720 | IO | | | | | 3.96 |
| 56.500 | 0.00 | 0.50 | 2.716 | IO | | | | | 3.95 |
| 56.583 | 0.00 | 0.50 | 2.713 | IO | | | | | 3.95 |
| 56.667 | 0.00 | 0.50 | 2.709 | IO | | | | | 3.94 |
| 56.750 | 0.00 | 0.50 | 2.706 | IO | | | | | 3.94 |
| 56.833 | 0.00 | 0.50 | 2.703 | IO | | | | | 3.93 |
| 56.917 | 0.00 | 0.49 | 2.699 | IO | | | | | 3.93 |
| 57.000 | 0.00 | 0.49 | 2.696 | IO | | | | | 3.92 |
| 57.083 | 0.00 | 0.49 | 2.692 | IO | | | | | 3.92 |
| 57.167 | 0.00 | 0.49 | 2.689 | IO | | | | | 3.91 |
| 57.250 | 0.00 | 0.49 | 2.686 | IO | | | | | 3.91 |
| 57.333 | 0.00 | 0.49 | 2.682 | IO | | | | | 3.90 |
| 57.417 | 0.00 | 0.49 | 2.679 | IO | | | | | 3.90 |
| 57.500 | 0.00 | 0.49 | 2.675 | IO | | | | | 3.89 |
| 57.583 | 0.00 | 0.49 | 2.672 | IO | | | | | 3.89 |
| 57.667 | 0.00 | 0.49 | 2.669 | IO | | | | | 3.88 |
| 57.750 | 0.00 | 0.49 | 2.665 | IO | | | | | 3.88 |
| 57.833 | 0.00 | 0.49 | 2.662 | IO | | | | | 3.87 |
| 57.917 | 0.00 | 0.49 | 2.658 | IO | | | | | 3.87 |
| 58.000 | 0.00 | 0.49 | 2.655 | IO | | | | | 3.86 |
| 58.083 | 0.00 | 0.49 | 2.652 | IO | | | | | 3.86 |
| 58.167 | 0.00 | 0.49 | 2.648 | IO | | | | | 3.85 |
| 58.250 | 0.00 | 0.49 | 2.645 | IO | | | | | 3.85 |
| 58.333 | 0.00 | 0.49 | 2.642 | IO | | | | | 3.84 |
| 58.417 | 0.00 | 0.49 | 2.638 | IO | | | | | 3.84 |
| 58.500 | 0.00 | 0.49 | 2.635 | IO | | | | | 3.83 |
| 58.583 | 0.00 | 0.49 | 2.631 | IO | | | | | 3.83 |
| 58.667 | 0.00 | 0.49 | 2.628 | IO | | | | | 3.82 |
| 58.750 | 0.00 | 0.49 | 2.625 | IO | | | | | 3.82 |
| 58.833 | 0.00 | 0.49 | 2.621 | IO | | | | | 3.81 |
| 58.917 | 0.00 | 0.49 | 2.618 | IO | | | | | 3.81 |
| 59.000 | 0.00 | 0.49 | 2.615 | IO | | | | | 3.80 |
| 59.083 | 0.00 | 0.49 | 2.611 | IO | | | | | 3.80 |
| 59.167 | 0.00 | 0.49 | 2.608 | IO | | | | | 3.79 |
| 59.250 | 0.00 | 0.49 | 2.605 | IO | | | | | 3.79 |
| 59.333 | 0.00 | 0.48 | 2.601 | IO | | | | | 3.78 |
| 59.417 | 0.00 | 0.48 | 2.598 | IO | | | | | 3.78 |
| 59.500 | 0.00 | 0.48 | 2.595 | IO | | | | | 3.77 |
| 59.583 | 0.00 | 0.48 | 2.591 | IO | | | | | 3.77 |
| 59.667 | 0.00 | 0.48 | 2.588 | IO | | | | | 3.76 |
| 59.750 | 0.00 | 0.48 | 2.585 | IO | | | | | 3.76 |
| 59.833 | 0.00 | 0.48 | 2.581 | IO | | | | | 3.75 |
| 59.917 | 0.00 | 0.48 | 2.578 | IO | | | | | 3.75 |
| 60.000 | 0.00 | 0.48 | 2.575 | IO | | | | | 3.74 |
| 60.083 | 0.00 | 0.48 | 2.571 | IO | | | | | 3.74 |
| 60.167 | 0.00 | 0.48 | 2.568 | IO | | | | | 3.73 |
| 60.250 | 0.00 | 0.48 | 2.565 | IO | | | | | 3.73 |
| 60.333 | 0.00 | 0.48 | 2.561 | IO | | | | | 3.72 |
| 60.417 | 0.00 | 0.48 | 2.558 | IO | | | | | 3.72 |
| 60.500 | 0.00 | 0.48 | 2.555 | IO | | | | | 3.71 |
| 60.583 | 0.00 | 0.48 | 2.552 | IO | | | | | 3.71 |
| 60.667 | 0.00 | 0.48 | 2.548 | IO | | | | | 3.70 |
| 60.750 | 0.00 | 0.48 | 2.545 | IO | | | | | 3.70 |
| 60.833 | 0.00 | 0.48 | 2.542 | IO | | | | | 3.69 |
| 60.917 | 0.00 | 0.48 | 2.538 | IO | | | | | 3.69 |
| 61.000 | 0.00 | 0.48 | 2.535 | IO | | | | | 3.68 |
| 61.083 | 0.00 | 0.48 | 2.532 | IO | | | | | 3.68 |
| 61.167 | 0.00 | 0.48 | 2.528 | IO | | | | | 3.67 |
| 61.250 | 0.00 | 0.48 | 2.525 | IO | | | | | 3.67 |
| 61.333 | 0.00 | 0.48 | 2.522 | IO | | | | | 3.66 |
| 61.417 | 0.00 | 0.48 | 2.519 | IO | | | | | 3.66 |
| 61.500 | 0.00 | 0.48 | 2.515 | IO | | | | | 3.65 |
| 61.583 | 0.00 | 0.48 | 2.512 | IO | | | | | 3.65 |
| 61.667 | 0.00 | 0.48 | 2.509 | IO | | | | | 3.65 |
| 61.750 | 0.00 | 0.47 | 2.506 | IO | | | | | 3.64 |
| 61.833 | 0.00 | 0.47 | 2.502 | IO | | | | | 3.64 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 61.917 | 0.00 | 0.47 | 2.499 | IO | | | | 3.63 |
| 62.000 | 0.00 | 0.47 | 2.496 | IO | | | | 3.63 |
| 62.083 | 0.00 | 0.47 | 2.492 | IO | | | | 3.62 |
| 62.167 | 0.00 | 0.47 | 2.489 | IO | | | | 3.62 |
| 62.250 | 0.00 | 0.47 | 2.486 | IO | | | | 3.61 |
| 62.333 | 0.00 | 0.47 | 2.483 | IO | | | | 3.61 |
| 62.417 | 0.00 | 0.47 | 2.479 | IO | | | | 3.60 |
| 62.500 | 0.00 | 0.47 | 2.476 | IO | | | | 3.60 |
| 62.583 | 0.00 | 0.47 | 2.473 | IO | | | | 3.59 |
| 62.667 | 0.00 | 0.47 | 2.470 | IO | | | | 3.59 |
| 62.750 | 0.00 | 0.47 | 2.466 | IO | | | | 3.58 |
| 62.833 | 0.00 | 0.47 | 2.463 | IO | | | | 3.58 |
| 62.917 | 0.00 | 0.47 | 2.460 | IO | | | | 3.57 |
| 63.000 | 0.00 | 0.47 | 2.457 | IO | | | | 3.57 |
| 63.083 | 0.00 | 0.47 | 2.453 | IO | | | | 3.56 |
| 63.167 | 0.00 | 0.47 | 2.450 | IO | | | | 3.56 |
| 63.250 | 0.00 | 0.47 | 2.447 | IO | | | | 3.55 |
| 63.333 | 0.00 | 0.47 | 2.444 | IO | | | | 3.55 |
| 63.417 | 0.00 | 0.47 | 2.441 | IO | | | | 3.54 |
| 63.500 | 0.00 | 0.47 | 2.437 | IO | | | | 3.54 |
| 63.583 | 0.00 | 0.47 | 2.434 | IO | | | | 3.54 |
| 63.667 | 0.00 | 0.47 | 2.431 | IO | | | | 3.53 |
| 63.750 | 0.00 | 0.47 | 2.428 | IO | | | | 3.53 |
| 63.833 | 0.00 | 0.47 | 2.424 | IO | | | | 3.52 |
| 63.917 | 0.00 | 0.47 | 2.421 | IO | | | | 3.52 |
| 64.000 | 0.00 | 0.47 | 2.418 | IO | | | | 3.51 |
| 64.083 | 0.00 | 0.47 | 2.415 | IO | | | | 3.51 |
| 64.167 | 0.00 | 0.47 | 2.412 | IO | | | | 3.50 |
| 64.250 | 0.00 | 0.46 | 2.408 | IO | | | | 3.50 |
| 64.333 | 0.00 | 0.46 | 2.405 | IO | | | | 3.49 |
| 64.417 | 0.00 | 0.46 | 2.402 | IO | | | | 3.49 |
| 64.500 | 0.00 | 0.46 | 2.399 | IO | | | | 3.48 |
| 64.583 | 0.00 | 0.46 | 2.396 | IO | | | | 3.48 |
| 64.667 | 0.00 | 0.46 | 2.392 | IO | | | | 3.47 |
| 64.750 | 0.00 | 0.46 | 2.389 | IO | | | | 3.47 |
| 64.833 | 0.00 | 0.46 | 2.386 | IO | | | | 3.46 |
| 64.917 | 0.00 | 0.46 | 2.383 | IO | | | | 3.46 |
| 65.000 | 0.00 | 0.46 | 2.380 | IO | | | | 3.46 |
| 65.083 | 0.00 | 0.46 | 2.377 | IO | | | | 3.45 |
| 65.167 | 0.00 | 0.46 | 2.373 | IO | | | | 3.45 |
| 65.250 | 0.00 | 0.46 | 2.370 | IO | | | | 3.44 |
| 65.333 | 0.00 | 0.46 | 2.367 | IO | | | | 3.44 |
| 65.417 | 0.00 | 0.46 | 2.364 | IO | | | | 3.43 |
| 65.500 | 0.00 | 0.46 | 2.361 | IO | | | | 3.43 |
| 65.583 | 0.00 | 0.46 | 2.358 | IO | | | | 3.42 |
| 65.667 | 0.00 | 0.46 | 2.354 | IO | | | | 3.42 |
| 65.750 | 0.00 | 0.46 | 2.351 | IO | | | | 3.41 |
| 65.833 | 0.00 | 0.46 | 2.348 | IO | | | | 3.41 |
| 65.917 | 0.00 | 0.46 | 2.345 | IO | | | | 3.40 |
| 66.000 | 0.00 | 0.46 | 2.342 | IO | | | | 3.40 |
| 66.083 | 0.00 | 0.46 | 2.339 | IO | | | | 3.39 |
| 66.167 | 0.00 | 0.46 | 2.335 | IO | | | | 3.39 |
| 66.250 | 0.00 | 0.46 | 2.332 | IO | | | | 3.39 |
| 66.333 | 0.00 | 0.46 | 2.329 | IO | | | | 3.38 |
| 66.417 | 0.00 | 0.46 | 2.326 | IO | | | | 3.38 |
| 66.500 | 0.00 | 0.46 | 2.323 | IO | | | | 3.37 |
| 66.583 | 0.00 | 0.46 | 2.320 | IO | | | | 3.37 |
| 66.667 | 0.00 | 0.46 | 2.317 | IO | | | | 3.36 |
| 66.750 | 0.00 | 0.46 | 2.313 | IO | | | | 3.36 |
| 66.833 | 0.00 | 0.45 | 2.310 | IO | | | | 3.35 |
| 66.917 | 0.00 | 0.45 | 2.307 | IO | | | | 3.35 |
| 67.000 | 0.00 | 0.45 | 2.304 | IO | | | | 3.34 |
| 67.083 | 0.00 | 0.45 | 2.301 | IO | | | | 3.34 |
| 67.167 | 0.00 | 0.45 | 2.298 | IO | | | | 3.33 |
| 67.250 | 0.00 | 0.45 | 2.295 | IO | | | | 3.33 |
| 67.333 | 0.00 | 0.45 | 2.292 | IO | | | | 3.33 |
| 67.417 | 0.00 | 0.45 | 2.288 | IO | | | | 3.32 |
| 67.500 | 0.00 | 0.45 | 2.285 | IO | | | | 3.32 |
| 67.583 | 0.00 | 0.45 | 2.282 | IO | | | | 3.31 |
| 67.667 | 0.00 | 0.45 | 2.279 | IO | | | | 3.31 |
| 67.750 | 0.00 | 0.45 | 2.276 | IO | | | | 3.30 |
| 67.833 | 0.00 | 0.45 | 2.273 | IO | | | | 3.30 |
| 67.917 | 0.00 | 0.45 | 2.270 | IO | | | | 3.29 |
| 68.000 | 0.00 | 0.45 | 2.267 | IO | | | | 3.29 |

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|---|---|---|---|---|---|---|---|---|
| 68.083 | 0.00 | 0.45 | 2.264 | IO | | | | 3.28 |
| 68.167 | 0.00 | 0.45 | 2.260 | IO | | | | 3.28 |
| 68.250 | 0.00 | 0.45 | 2.257 | IO | | | | 3.28 |
| 68.333 | 0.00 | 0.45 | 2.254 | IO | | | | 3.27 |
| 68.417 | 0.00 | 0.45 | 2.251 | IO | | | | 3.27 |
| 68.500 | 0.00 | 0.45 | 2.248 | IO | | | | 3.26 |
| 68.583 | 0.00 | 0.45 | 2.245 | IO | | | | 3.26 |
| 68.667 | 0.00 | 0.45 | 2.242 | IO | | | | 3.25 |
| 68.750 | 0.00 | 0.45 | 2.239 | IO | | | | 3.25 |
| 68.833 | 0.00 | 0.45 | 2.236 | IO | | | | 3.24 |
| 68.917 | 0.00 | 0.45 | 2.233 | IO | | | | 3.24 |
| 69.000 | 0.00 | 0.45 | 2.230 | IO | | | | 3.23 |
| 69.083 | 0.00 | 0.45 | 2.227 | IO | | | | 3.23 |
| 69.167 | 0.00 | 0.45 | 2.223 | IO | | | | 3.23 |
| 69.250 | 0.00 | 0.45 | 2.220 | IO | | | | 3.22 |
| 69.333 | 0.00 | 0.45 | 2.217 | IO | | | | 3.22 |
| 69.417 | 0.00 | 0.44 | 2.214 | IO | | | | 3.21 |
| 69.500 | 0.00 | 0.44 | 2.211 | IO | | | | 3.21 |
| 69.583 | 0.00 | 0.44 | 2.208 | IO | | | | 3.20 |
| 69.667 | 0.00 | 0.44 | 2.205 | IO | | | | 3.20 |
| 69.750 | 0.00 | 0.44 | 2.202 | IO | | | | 3.19 |
| 69.833 | 0.00 | 0.44 | 2.199 | IO | | | | 3.19 |
| 69.917 | 0.00 | 0.44 | 2.196 | IO | | | | 3.19 |
| 70.000 | 0.00 | 0.44 | 2.193 | IO | | | | 3.18 |
| 70.083 | 0.00 | 0.44 | 2.190 | IO | | | | 3.18 |
| 70.167 | 0.00 | 0.44 | 2.187 | IO | | | | 3.17 |
| 70.250 | 0.00 | 0.44 | 2.184 | IO | | | | 3.17 |
| 70.333 | 0.00 | 0.44 | 2.181 | IO | | | | 3.16 |
| 70.417 | 0.00 | 0.44 | 2.178 | IO | | | | 3.16 |
| 70.500 | 0.00 | 0.44 | 2.175 | IO | | | | 3.15 |
| 70.583 | 0.00 | 0.44 | 2.172 | IO | | | | 3.15 |
| 70.667 | 0.00 | 0.44 | 2.169 | IO | | | | 3.14 |
| 70.750 | 0.00 | 0.44 | 2.166 | IO | | | | 3.14 |
| 70.833 | 0.00 | 0.44 | 2.162 | IO | | | | 3.14 |
| 70.917 | 0.00 | 0.44 | 2.159 | IO | | | | 3.13 |
| 71.000 | 0.00 | 0.44 | 2.156 | IO | | | | 3.13 |
| 71.083 | 0.00 | 0.44 | 2.153 | IO | | | | 3.12 |
| 71.167 | 0.00 | 0.44 | 2.150 | IO | | | | 3.12 |
| 71.250 | 0.00 | 0.44 | 2.147 | IO | | | | 3.11 |
| 71.333 | 0.00 | 0.44 | 2.144 | IO | | | | 3.11 |
| 71.417 | 0.00 | 0.44 | 2.141 | IO | | | | 3.10 |
| 71.500 | 0.00 | 0.44 | 2.138 | IO | | | | 3.10 |
| 71.583 | 0.00 | 0.44 | 2.135 | IO | | | | 3.10 |
| 71.667 | 0.00 | 0.44 | 2.132 | IO | | | | 3.09 |
| 71.750 | 0.00 | 0.44 | 2.129 | IO | | | | 3.09 |
| 71.833 | 0.00 | 0.44 | 2.126 | IO | | | | 3.08 |
| 71.917 | 0.00 | 0.44 | 2.123 | IO | | | | 3.08 |
| 72.000 | 0.00 | 0.44 | 2.120 | IO | | | | 3.07 |
| 72.083 | 0.00 | 0.43 | 2.117 | IO | | | | 3.07 |
| 72.167 | 0.00 | 0.43 | 2.114 | IO | | | | 3.07 |
| 72.250 | 0.00 | 0.43 | 2.111 | IO | | | | 3.06 |
| 72.333 | 0.00 | 0.43 | 2.108 | IO | | | | 3.06 |
| 72.417 | 0.00 | 0.43 | 2.105 | IO | | | | 3.05 |
| 72.500 | 0.00 | 0.43 | 2.102 | IO | | | | 3.05 |
| 72.583 | 0.00 | 0.43 | 2.099 | IO | | | | 3.04 |
| 72.667 | 0.00 | 0.43 | 2.096 | IO | | | | 3.04 |
| 72.750 | 0.00 | 0.43 | 2.093 | IO | | | | 3.03 |
| 72.833 | 0.00 | 0.43 | 2.090 | IO | | | | 3.03 |
| 72.917 | 0.00 | 0.43 | 2.087 | IO | | | | 3.03 |
| 73.000 | 0.00 | 0.43 | 2.085 | IO | | | | 3.02 |
| 73.083 | 0.00 | 0.43 | 2.082 | IO | | | | 3.02 |
| 73.167 | 0.00 | 0.43 | 2.079 | IO | | | | 3.01 |
| 73.250 | 0.00 | 0.43 | 2.076 | IO | | | | 3.01 |
| 73.333 | 0.00 | 0.43 | 2.073 | IO | | | | 3.00 |
| 73.417 | 0.00 | 0.43 | 2.070 | IO | | | | 3.00 |
| 73.500 | 0.00 | 0.43 | 2.067 | IO | | | | 3.00 |
| 73.583 | 0.00 | 0.43 | 2.064 | IO | | | | 2.99 |
| 73.667 | 0.00 | 0.43 | 2.061 | IO | | | | 2.99 |
| 73.750 | 0.00 | 0.43 | 2.058 | IO | | | | 2.98 |
| 73.833 | 0.00 | 0.43 | 2.055 | IO | | | | 2.98 |
| 73.917 | 0.00 | 0.43 | 2.052 | IO | | | | 2.97 |
| 74.000 | 0.00 | 0.43 | 2.049 | IO | | | | 2.97 |
| 74.083 | 0.00 | 0.43 | 2.046 | IO | | | | 2.97 |
| 74.167 | 0.00 | 0.43 | 2.043 | IO | | | | 2.96 |

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|---|---|---|---|---|---|---|---|---|---|
| 74.250 | 0.00 | 0.43 | 2.040 | IO | | | | | 2.96 |
| 74.333 | 0.00 | 0.43 | 2.037 | IO | | | | | 2.95 |
| 74.417 | 0.00 | 0.43 | 2.034 | IO | | | | | 2.95 |
| 74.500 | 0.00 | 0.43 | 2.031 | IO | | | | | 2.94 |
| 74.583 | 0.00 | 0.43 | 2.028 | IO | | | | | 2.94 |
| 74.667 | 0.00 | 0.42 | 2.026 | IO | | | | | 2.94 |
| 74.750 | 0.00 | 0.42 | 2.023 | IO | | | | | 2.93 |
| 74.833 | 0.00 | 0.42 | 2.020 | IO | | | | | 2.93 |
| 74.917 | 0.00 | 0.42 | 2.017 | IO | | | | | 2.92 |
| 75.000 | 0.00 | 0.42 | 2.014 | IO | | | | | 2.92 |
| 75.083 | 0.00 | 0.42 | 2.011 | IO | | | | | 2.91 |
| 75.167 | 0.00 | 0.42 | 2.008 | IO | | | | | 2.91 |
| 75.250 | 0.00 | 0.42 | 2.005 | IO | | | | | 2.91 |
| 75.333 | 0.00 | 0.42 | 2.002 | IO | | | | | 2.90 |
| 75.417 | 0.00 | 0.42 | 1.999 | IO | | | | | 2.90 |
| 75.500 | 0.00 | 0.42 | 1.996 | IO | | | | | 2.89 |
| 75.583 | 0.00 | 0.42 | 1.993 | IO | | | | | 2.89 |
| 75.667 | 0.00 | 0.42 | 1.991 | IO | | | | | 2.88 |
| 75.750 | 0.00 | 0.42 | 1.988 | IO | | | | | 2.88 |
| 75.833 | 0.00 | 0.42 | 1.985 | IO | | | | | 2.88 |
| 75.917 | 0.00 | 0.42 | 1.982 | IO | | | | | 2.87 |
| 76.000 | 0.00 | 0.42 | 1.979 | IO | | | | | 2.87 |
| 76.083 | 0.00 | 0.42 | 1.976 | IO | | | | | 2.86 |
| 76.167 | 0.00 | 0.42 | 1.973 | IO | | | | | 2.86 |
| 76.250 | 0.00 | 0.42 | 1.970 | IO | | | | | 2.86 |
| 76.333 | 0.00 | 0.42 | 1.967 | IO | | | | | 2.85 |
| 76.417 | 0.00 | 0.42 | 1.965 | IO | | | | | 2.85 |
| 76.500 | 0.00 | 0.42 | 1.962 | IO | | | | | 2.84 |
| 76.583 | 0.00 | 0.42 | 1.959 | IO | | | | | 2.84 |
| 76.667 | 0.00 | 0.42 | 1.956 | IO | | | | | 2.83 |
| 76.750 | 0.00 | 0.42 | 1.953 | IO | | | | | 2.83 |
| 76.833 | 0.00 | 0.42 | 1.950 | IO | | | | | 2.83 |
| 76.917 | 0.00 | 0.42 | 1.947 | IO | | | | | 2.82 |
| 77.000 | 0.00 | 0.42 | 1.945 | IO | | | | | 2.82 |
| 77.083 | 0.00 | 0.42 | 1.942 | IO | | | | | 2.81 |
| 77.167 | 0.00 | 0.41 | 1.939 | IO | | | | | 2.81 |
| 77.250 | 0.00 | 0.41 | 1.936 | IO | | | | | 2.81 |
| 77.333 | 0.00 | 0.41 | 1.933 | IO | | | | | 2.80 |
| 77.417 | 0.00 | 0.41 | 1.930 | IO | | | | | 2.80 |
| 77.500 | 0.00 | 0.41 | 1.927 | IO | | | | | 2.79 |
| 77.583 | 0.00 | 0.41 | 1.925 | IO | | | | | 2.79 |
| 77.667 | 0.00 | 0.41 | 1.922 | IO | | | | | 2.79 |
| 77.750 | 0.00 | 0.41 | 1.919 | IO | | | | | 2.78 |
| 77.833 | 0.00 | 0.41 | 1.916 | IO | | | | | 2.78 |
| 77.917 | 0.00 | 0.41 | 1.913 | IO | | | | | 2.77 |
| 78.000 | 0.00 | 0.41 | 1.910 | IO | | | | | 2.77 |
| 78.083 | 0.00 | 0.41 | 1.908 | IO | | | | | 2.76 |
| 78.167 | 0.00 | 0.41 | 1.905 | IO | | | | | 2.76 |
| 78.250 | 0.00 | 0.41 | 1.902 | IO | | | | | 2.76 |
| 78.333 | 0.00 | 0.41 | 1.899 | IO | | | | | 2.75 |
| 78.417 | 0.00 | 0.41 | 1.896 | IO | | | | | 2.75 |
| 78.500 | 0.00 | 0.41 | 1.893 | IO | | | | | 2.74 |
| 78.583 | 0.00 | 0.41 | 1.891 | IO | | | | | 2.74 |
| 78.667 | 0.00 | 0.41 | 1.888 | IO | | | | | 2.74 |
| 78.750 | 0.00 | 0.41 | 1.885 | IO | | | | | 2.73 |
| 78.833 | 0.00 | 0.41 | 1.882 | IO | | | | | 2.73 |
| 78.917 | 0.00 | 0.41 | 1.879 | IO | | | | | 2.72 |
| 79.000 | 0.00 | 0.41 | 1.876 | IO | | | | | 2.72 |
| 79.083 | 0.00 | 0.41 | 1.874 | IO | | | | | 2.72 |
| 79.167 | 0.00 | 0.41 | 1.871 | IO | | | | | 2.71 |
| 79.250 | 0.00 | 0.41 | 1.868 | IO | | | | | 2.71 |
| 79.333 | 0.00 | 0.41 | 1.865 | IO | | | | | 2.70 |
| 79.417 | 0.00 | 0.41 | 1.862 | IO | | | | | 2.70 |
| 79.500 | 0.00 | 0.41 | 1.860 | IO | | | | | 2.70 |
| 79.583 | 0.00 | 0.41 | 1.857 | IO | | | | | 2.69 |
| 79.667 | 0.00 | 0.40 | 1.854 | IO | | | | | 2.69 |
| 79.750 | 0.00 | 0.40 | 1.851 | IO | | | | | 2.68 |
| 79.833 | 0.00 | 0.40 | 1.849 | IO | | | | | 2.68 |
| 79.917 | 0.00 | 0.40 | 1.846 | IO | | | | | 2.68 |
| 80.000 | 0.00 | 0.40 | 1.843 | IO | | | | | 2.67 |
| 80.083 | 0.00 | 0.40 | 1.840 | IO | | | | | 2.67 |
| 80.167 | 0.00 | 0.40 | 1.837 | IO | | | | | 2.66 |
| 80.250 | 0.00 | 0.40 | 1.835 | IO | | | | | 2.66 |
| 80.333 | 0.00 | 0.40 | 1.832 | IO | | | | | 2.65 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 80.417 | 0.00 | 0.40 | 1.829 | IO | | | | | 2.65 |
| 80.500 | 0.00 | 0.40 | 1.826 | IO | | | | | 2.65 |
| 80.583 | 0.00 | 0.40 | 1.824 | IO | | | | | 2.64 |
| 80.667 | 0.00 | 0.40 | 1.821 | IO | | | | | 2.64 |
| 80.750 | 0.00 | 0.40 | 1.818 | IO | | | | | 2.63 |
| 80.833 | 0.00 | 0.40 | 1.815 | IO | | | | | 2.63 |
| 80.917 | 0.00 | 0.40 | 1.813 | IO | | | | | 2.63 |
| 81.000 | 0.00 | 0.40 | 1.810 | IO | | | | | 2.62 |
| 81.083 | 0.00 | 0.40 | 1.807 | IO | | | | | 2.62 |
| 81.167 | 0.00 | 0.40 | 1.804 | IO | | | | | 2.61 |
| 81.250 | 0.00 | 0.40 | 1.802 | IO | | | | | 2.61 |
| 81.333 | 0.00 | 0.40 | 1.799 | IO | | | | | 2.61 |
| 81.417 | 0.00 | 0.40 | 1.796 | IO | | | | | 2.60 |
| 81.500 | 0.00 | 0.40 | 1.793 | IO | | | | | 2.60 |
| 81.583 | 0.00 | 0.40 | 1.791 | IO | | | | | 2.59 |
| 81.667 | 0.00 | 0.40 | 1.788 | IO | | | | | 2.59 |
| 81.750 | 0.00 | 0.40 | 1.785 | IO | | | | | 2.59 |
| 81.833 | 0.00 | 0.40 | 1.782 | IO | | | | | 2.58 |
| 81.917 | 0.00 | 0.40 | 1.780 | IO | | | | | 2.58 |
| 82.000 | 0.00 | 0.40 | 1.777 | IO | | | | | 2.58 |
| 82.083 | 0.00 | 0.40 | 1.774 | IO | | | | | 2.57 |
| 82.167 | 0.00 | 0.40 | 1.771 | IO | | | | | 2.57 |
| 82.250 | 0.00 | 0.40 | 1.769 | IO | | | | | 2.56 |
| 82.333 | 0.00 | 0.39 | 1.766 | IO | | | | | 2.56 |
| 82.417 | 0.00 | 0.39 | 1.763 | IO | | | | | 2.56 |
| 82.500 | 0.00 | 0.39 | 1.761 | IO | | | | | 2.55 |
| 82.583 | 0.00 | 0.39 | 1.758 | IO | | | | | 2.55 |
| 82.667 | 0.00 | 0.39 | 1.755 | IO | | | | | 2.54 |
| 82.750 | 0.00 | 0.39 | 1.752 | IO | | | | | 2.54 |
| 82.833 | 0.00 | 0.39 | 1.750 | IO | | | | | 2.54 |
| 82.917 | 0.00 | 0.39 | 1.747 | IO | | | | | 2.53 |
| 83.000 | 0.00 | 0.39 | 1.744 | IO | | | | | 2.53 |
| 83.083 | 0.00 | 0.39 | 1.742 | IO | | | | | 2.52 |
| 83.167 | 0.00 | 0.39 | 1.739 | IO | | | | | 2.52 |
| 83.250 | 0.00 | 0.39 | 1.736 | IO | | | | | 2.52 |
| 83.333 | 0.00 | 0.39 | 1.734 | IO | | | | | 2.51 |
| 83.417 | 0.00 | 0.39 | 1.731 | IO | | | | | 2.51 |
| 83.500 | 0.00 | 0.39 | 1.728 | IO | | | | | 2.50 |
| 83.583 | 0.00 | 0.39 | 1.725 | IO | | | | | 2.50 |
| 83.667 | 0.00 | 0.39 | 1.723 | IO | | | | | 2.50 |
| 83.750 | 0.00 | 0.39 | 1.720 | IO | | | | | 2.49 |
| 83.833 | 0.00 | 0.39 | 1.717 | IO | | | | | 2.49 |
| 83.917 | 0.00 | 0.39 | 1.715 | IO | | | | | 2.49 |
| 84.000 | 0.00 | 0.39 | 1.712 | IO | | | | | 2.48 |
| 84.083 | 0.00 | 0.39 | 1.709 | IO | | | | | 2.48 |
| 84.167 | 0.00 | 0.39 | 1.707 | IO | | | | | 2.47 |
| 84.250 | 0.00 | 0.39 | 1.704 | IO | | | | | 2.47 |
| 84.333 | 0.00 | 0.39 | 1.701 | IO | | | | | 2.47 |
| 84.417 | 0.00 | 0.39 | 1.699 | IO | | | | | 2.46 |
| 84.500 | 0.00 | 0.39 | 1.696 | IO | | | | | 2.46 |
| 84.583 | 0.00 | 0.39 | 1.693 | IO | | | | | 2.45 |
| 84.667 | 0.00 | 0.39 | 1.691 | IO | | | | | 2.45 |
| 84.750 | 0.00 | 0.39 | 1.688 | IO | | | | | 2.45 |
| 84.833 | 0.00 | 0.39 | 1.685 | IO | | | | | 2.44 |
| 84.917 | 0.00 | 0.39 | 1.683 | IO | | | | | 2.44 |
| 85.000 | 0.00 | 0.38 | 1.680 | IO | | | | | 2.43 |
| 85.083 | 0.00 | 0.38 | 1.677 | IO | | | | | 2.43 |
| 85.167 | 0.00 | 0.38 | 1.675 | IO | | | | | 2.43 |
| 85.250 | 0.00 | 0.38 | 1.672 | IO | | | | | 2.42 |
| 85.333 | 0.00 | 0.38 | 1.670 | IO | | | | | 2.42 |
| 85.417 | 0.00 | 0.38 | 1.667 | IO | | | | | 2.42 |
| 85.500 | 0.00 | 0.38 | 1.664 | IO | | | | | 2.41 |
| 85.583 | 0.00 | 0.38 | 1.662 | IO | | | | | 2.41 |
| 85.667 | 0.00 | 0.38 | 1.659 | IO | | | | | 2.40 |
| 85.750 | 0.00 | 0.38 | 1.656 | IO | | | | | 2.40 |
| 85.833 | 0.00 | 0.38 | 1.654 | IO | | | | | 2.40 |
| 85.917 | 0.00 | 0.38 | 1.651 | IO | | | | | 2.39 |
| 86.000 | 0.00 | 0.38 | 1.648 | IO | | | | | 2.39 |
| 86.083 | 0.00 | 0.38 | 1.646 | IO | | | | | 2.39 |
| 86.167 | 0.00 | 0.38 | 1.643 | IO | | | | | 2.38 |
| 86.250 | 0.00 | 0.38 | 1.641 | IO | | | | | 2.38 |
| 86.333 | 0.00 | 0.38 | 1.638 | IO | | | | | 2.37 |
| 86.417 | 0.00 | 0.38 | 1.635 | IO | | | | | 2.37 |
| 86.500 | 0.00 | 0.38 | 1.633 | IO | | | | | 2.37 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 86.583 | 0.00 | 0.38 | 1.630 | IO | | | | | 2.36 |
| 86.667 | 0.00 | 0.38 | 1.628 | IO | | | | | 2.36 |
| 86.750 | 0.00 | 0.38 | 1.625 | IO | | | | | 2.35 |
| 86.833 | 0.00 | 0.38 | 1.622 | IO | | | | | 2.35 |
| 86.917 | 0.00 | 0.38 | 1.620 | IO | | | | | 2.35 |
| 87.000 | 0.00 | 0.38 | 1.617 | IO | | | | | 2.34 |
| 87.083 | 0.00 | 0.38 | 1.614 | IO | | | | | 2.34 |
| 87.167 | 0.00 | 0.38 | 1.612 | IO | | | | | 2.34 |
| 87.250 | 0.00 | 0.38 | 1.609 | IO | | | | | 2.33 |
| 87.333 | 0.00 | 0.38 | 1.607 | IO | | | | | 2.33 |
| 87.417 | 0.00 | 0.38 | 1.604 | IO | | | | | 2.32 |
| 87.500 | 0.00 | 0.38 | 1.602 | IO | | | | | 2.32 |
| 87.583 | 0.00 | 0.38 | 1.599 | IO | | | | | 2.32 |
| 87.667 | 0.00 | 0.38 | 1.596 | IO | | | | | 2.31 |
| 87.750 | 0.00 | 0.37 | 1.594 | IO | | | | | 2.31 |
| 87.833 | 0.00 | 0.37 | 1.591 | IO | | | | | 2.31 |
| 87.917 | 0.00 | 0.37 | 1.589 | IO | | | | | 2.30 |
| 88.000 | 0.00 | 0.37 | 1.586 | IO | | | | | 2.30 |
| 88.083 | 0.00 | 0.37 | 1.583 | IO | | | | | 2.29 |
| 88.167 | 0.00 | 0.37 | 1.581 | IO | | | | | 2.29 |
| 88.250 | 0.00 | 0.37 | 1.578 | IO | | | | | 2.29 |
| 88.333 | 0.00 | 0.37 | 1.576 | IO | | | | | 2.28 |
| 88.417 | 0.00 | 0.37 | 1.573 | IO | | | | | 2.28 |
| 88.500 | 0.00 | 0.37 | 1.571 | IO | | | | | 2.28 |
| 88.583 | 0.00 | 0.37 | 1.568 | IO | | | | | 2.27 |
| 88.667 | 0.00 | 0.37 | 1.566 | IO | | | | | 2.27 |
| 88.750 | 0.00 | 0.37 | 1.563 | IO | | | | | 2.27 |
| 88.833 | 0.00 | 0.37 | 1.560 | IO | | | | | 2.26 |
| 88.917 | 0.00 | 0.37 | 1.558 | IO | | | | | 2.26 |
| 89.000 | 0.00 | 0.37 | 1.555 | IO | | | | | 2.25 |
| 89.083 | 0.00 | 0.37 | 1.553 | IO | | | | | 2.25 |
| 89.167 | 0.00 | 0.37 | 1.550 | IO | | | | | 2.25 |
| 89.250 | 0.00 | 0.37 | 1.548 | IO | | | | | 2.24 |
| 89.333 | 0.00 | 0.37 | 1.545 | IO | | | | | 2.24 |
| 89.417 | 0.00 | 0.37 | 1.543 | IO | | | | | 2.24 |
| 89.500 | 0.00 | 0.37 | 1.540 | IO | | | | | 2.23 |
| 89.583 | 0.00 | 0.37 | 1.537 | IO | | | | | 2.23 |
| 89.667 | 0.00 | 0.37 | 1.535 | IO | | | | | 2.22 |
| 89.750 | 0.00 | 0.37 | 1.532 | IO | | | | | 2.22 |
| 89.833 | 0.00 | 0.37 | 1.530 | IO | | | | | 2.22 |
| 89.917 | 0.00 | 0.37 | 1.527 | IO | | | | | 2.21 |
| 90.000 | 0.00 | 0.37 | 1.525 | IO | | | | | 2.21 |
| 90.083 | 0.00 | 0.37 | 1.522 | IO | | | | | 2.21 |
| 90.167 | 0.00 | 0.37 | 1.520 | IO | | | | | 2.20 |
| 90.250 | 0.00 | 0.37 | 1.517 | IO | | | | | 2.20 |
| 90.333 | 0.00 | 0.37 | 1.515 | IO | | | | | 2.20 |
| 90.417 | 0.00 | 0.37 | 1.512 | IO | | | | | 2.19 |
| 90.500 | 0.00 | 0.37 | 1.510 | IO | | | | | 2.19 |
| 90.583 | 0.00 | 0.36 | 1.507 | IO | | | | | 2.18 |
| 90.667 | 0.00 | 0.36 | 1.505 | IO | | | | | 2.18 |
| 90.750 | 0.00 | 0.36 | 1.502 | IO | | | | | 2.18 |
| 90.833 | 0.00 | 0.36 | 1.500 | IO | | | | | 2.17 |
| 90.917 | 0.00 | 0.36 | 1.497 | IO | | | | | 2.17 |
| 91.000 | 0.00 | 0.36 | 1.495 | IO | | | | | 2.17 |
| 91.083 | 0.00 | 0.36 | 1.492 | IO | | | | | 2.16 |
| 91.167 | 0.00 | 0.36 | 1.490 | IO | | | | | 2.16 |
| 91.250 | 0.00 | 0.36 | 1.487 | IO | | | | | 2.16 |
| 91.333 | 0.00 | 0.36 | 1.485 | IO | | | | | 2.15 |
| 91.417 | 0.00 | 0.36 | 1.482 | IO | | | | | 2.15 |
| 91.500 | 0.00 | 0.36 | 1.480 | IO | | | | | 2.14 |
| 91.583 | 0.00 | 0.36 | 1.477 | IO | | | | | 2.14 |
| 91.667 | 0.00 | 0.36 | 1.475 | IO | | | | | 2.14 |
| 91.750 | 0.00 | 0.36 | 1.472 | IO | | | | | 2.13 |
| 91.833 | 0.00 | 0.36 | 1.470 | IO | | | | | 2.13 |
| 91.917 | 0.00 | 0.36 | 1.467 | IO | | | | | 2.13 |
| 92.000 | 0.00 | 0.36 | 1.465 | IO | | | | | 2.12 |
| 92.083 | 0.00 | 0.36 | 1.462 | IO | | | | | 2.12 |
| 92.167 | 0.00 | 0.36 | 1.460 | IO | | | | | 2.12 |
| 92.250 | 0.00 | 0.36 | 1.457 | IO | | | | | 2.11 |
| 92.333 | 0.00 | 0.36 | 1.455 | IO | | | | | 2.11 |
| 92.417 | 0.00 | 0.36 | 1.452 | IO | | | | | 2.10 |
| 92.500 | 0.00 | 0.36 | 1.450 | IO | | | | | 2.10 |
| 92.583 | 0.00 | 0.36 | 1.447 | IO | | | | | 2.10 |
| 92.667 | 0.00 | 0.36 | 1.445 | IO | | | | | 2.09 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 92.750 | 0.00 | 0.36 | 1.443 | IO | | | | 2.09 |
| 92.833 | 0.00 | 0.36 | 1.440 | IO | | | | 2.09 |
| 92.917 | 0.00 | 0.36 | 1.438 | IO | | | | 2.08 |
| 93.000 | 0.00 | 0.36 | 1.435 | IO | | | | 2.08 |
| 93.083 | 0.00 | 0.36 | 1.433 | IO | | | | 2.08 |
| 93.167 | 0.00 | 0.36 | 1.430 | IO | | | | 2.07 |
| 93.250 | 0.00 | 0.36 | 1.428 | IO | | | | 2.07 |
| 93.333 | 0.00 | 0.36 | 1.425 | IO | | | | 2.07 |
| 93.417 | 0.00 | 0.35 | 1.423 | IO | | | | 2.06 |
| 93.500 | 0.00 | 0.35 | 1.421 | IO | | | | 2.06 |
| 93.583 | 0.00 | 0.35 | 1.418 | IO | | | | 2.06 |
| 93.667 | 0.00 | 0.35 | 1.416 | IO | | | | 2.05 |
| 93.750 | 0.00 | 0.35 | 1.413 | IO | | | | 2.05 |
| 93.833 | 0.00 | 0.35 | 1.411 | IO | | | | 2.04 |
| 93.917 | 0.00 | 0.35 | 1.408 | IO | | | | 2.04 |
| 94.000 | 0.00 | 0.35 | 1.406 | IO | | | | 2.04 |
| 94.083 | 0.00 | 0.35 | 1.403 | IO | | | | 2.03 |
| 94.167 | 0.00 | 0.35 | 1.401 | IO | | | | 2.03 |
| 94.250 | 0.00 | 0.35 | 1.399 | IO | | | | 2.03 |
| 94.333 | 0.00 | 0.35 | 1.396 | IO | | | | 2.02 |
| 94.417 | 0.00 | 0.35 | 1.394 | IO | | | | 2.02 |
| 94.500 | 0.00 | 0.35 | 1.391 | IO | | | | 2.02 |
| 94.583 | 0.00 | 0.35 | 1.389 | IO | | | | 2.01 |
| 94.667 | 0.00 | 0.35 | 1.386 | IO | | | | 2.01 |
| 94.750 | 0.00 | 0.35 | 1.384 | IO | | | | 2.01 |
| 94.833 | 0.00 | 0.35 | 1.382 | IO | | | | 2.00 |
| 94.917 | 0.00 | 0.35 | 1.379 | IO | | | | 2.00 |
| 95.000 | 0.00 | 0.35 | 1.377 | IO | | | | 2.00 |
| 95.083 | 0.00 | 0.35 | 1.374 | IO | | | | 1.99 |
| 95.167 | 0.00 | 0.35 | 1.372 | IO | | | | 1.99 |
| 95.250 | 0.00 | 0.35 | 1.370 | IO | | | | 1.98 |
| 95.333 | 0.00 | 0.35 | 1.367 | IO | | | | 1.98 |
| 95.417 | 0.00 | 0.35 | 1.365 | IO | | | | 1.98 |
| 95.500 | 0.00 | 0.35 | 1.362 | IO | | | | 1.97 |
| 95.583 | 0.00 | 0.35 | 1.360 | IO | | | | 1.97 |
| 95.667 | 0.00 | 0.35 | 1.358 | IO | | | | 1.97 |
| 95.750 | 0.00 | 0.35 | 1.355 | IO | | | | 1.96 |
| 95.833 | 0.00 | 0.35 | 1.353 | IO | | | | 1.96 |
| 95.917 | 0.00 | 0.35 | 1.351 | IO | | | | 1.96 |
| 96.000 | 0.00 | 0.34 | 1.348 | IO | | | | 1.95 |
| 96.083 | 0.00 | 0.34 | 1.346 | IO | | | | 1.95 |
| 96.167 | 0.00 | 0.34 | 1.343 | IO | | | | 1.95 |
| 96.250 | 0.00 | 0.34 | 1.341 | IO | | | | 1.94 |
| 96.333 | 0.00 | 0.34 | 1.339 | IO | | | | 1.94 |
| 96.417 | 0.00 | 0.34 | 1.336 | IO | | | | 1.94 |
| 96.500 | 0.00 | 0.34 | 1.334 | IO | | | | 1.93 |
| 96.583 | 0.00 | 0.34 | 1.332 | IO | | | | 1.93 |
| 96.667 | 0.00 | 0.34 | 1.329 | IO | | | | 1.93 |
| 96.750 | 0.00 | 0.34 | 1.327 | IO | | | | 1.92 |
| 96.833 | 0.00 | 0.34 | 1.325 | IO | | | | 1.92 |
| 96.917 | 0.00 | 0.34 | 1.322 | IO | | | | 1.92 |
| 97.000 | 0.00 | 0.34 | 1.320 | IO | | | | 1.91 |
| 97.083 | 0.00 | 0.34 | 1.317 | IO | | | | 1.91 |
| 97.167 | 0.00 | 0.34 | 1.315 | IO | | | | 1.91 |
| 97.250 | 0.00 | 0.34 | 1.313 | IO | | | | 1.90 |
| 97.333 | 0.00 | 0.34 | 1.310 | IO | | | | 1.90 |
| 97.417 | 0.00 | 0.34 | 1.308 | IO | | | | 1.90 |
| 97.500 | 0.00 | 0.34 | 1.306 | IO | | | | 1.89 |
| 97.583 | 0.00 | 0.34 | 1.303 | IO | | | | 1.89 |
| 97.667 | 0.00 | 0.34 | 1.301 | IO | | | | 1.89 |
| 97.750 | 0.00 | 0.34 | 1.299 | IO | | | | 1.88 |
| 97.833 | 0.00 | 0.34 | 1.297 | IO | | | | 1.88 |
| 97.917 | 0.00 | 0.34 | 1.294 | IO | | | | 1.88 |
| 98.000 | 0.00 | 0.34 | 1.292 | IO | | | | 1.87 |
| 98.083 | 0.00 | 0.34 | 1.290 | IO | | | | 1.87 |
| 98.167 | 0.00 | 0.34 | 1.287 | IO | | | | 1.87 |
| 98.250 | 0.00 | 0.33 | 1.285 | IO | | | | 1.86 |
| 98.333 | 0.00 | 0.33 | 1.283 | IO | | | | 1.86 |
| 98.417 | 0.00 | 0.33 | 1.280 | IO | | | | 1.86 |
| 98.500 | 0.00 | 0.33 | 1.278 | IO | | | | 1.85 |
| 98.583 | 0.00 | 0.33 | 1.276 | IO | | | | 1.85 |
| 98.667 | 0.00 | 0.33 | 1.273 | IO | | | | 1.85 |
| 98.750 | 0.00 | 0.33 | 1.271 | IO | | | | 1.84 |
| 98.833 | 0.00 | 0.33 | 1.269 | IO | | | | 1.84 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 98.917 | 0.00 | 0.33 | 1.267 | IO | | | | 1.84 |
| 99.000 | 0.00 | 0.33 | 1.264 | IO | | | | 1.83 |
| 99.083 | 0.00 | 0.33 | 1.262 | IO | | | | 1.83 |
| 99.167 | 0.00 | 0.33 | 1.260 | IO | | | | 1.83 |
| 99.250 | 0.00 | 0.33 | 1.257 | IO | | | | 1.82 |
| 99.333 | 0.00 | 0.33 | 1.255 | IO | | | | 1.82 |
| 99.417 | 0.00 | 0.33 | 1.253 | IO | | | | 1.82 |
| 99.500 | 0.00 | 0.33 | 1.251 | IO | | | | 1.81 |
| 99.583 | 0.00 | 0.33 | 1.248 | IO | | | | 1.81 |
| 99.667 | 0.00 | 0.33 | 1.246 | IO | | | | 1.81 |
| 99.750 | 0.00 | 0.33 | 1.244 | IO | | | | 1.80 |
| 99.833 | 0.00 | 0.33 | 1.242 | IO | | | | 1.80 |
| 99.917 | 0.00 | 0.33 | 1.239 | IO | | | | 1.80 |
| 100.000 | 0.00 | 0.33 | 1.237 | IO | | | | 1.79 |
| 100.083 | 0.00 | 0.33 | 1.235 | IO | | | | 1.79 |
| 100.167 | 0.00 | 0.33 | 1.233 | IO | | | | 1.79 |
| 100.250 | 0.00 | 0.33 | 1.230 | IO | | | | 1.78 |
| 100.333 | 0.00 | 0.33 | 1.228 | IO | | | | 1.78 |
| 100.417 | 0.00 | 0.33 | 1.226 | IO | | | | 1.78 |
| 100.500 | 0.00 | 0.33 | 1.224 | IO | | | | 1.77 |
| 100.583 | 0.00 | 0.32 | 1.221 | IO | | | | 1.77 |
| 100.667 | 0.00 | 0.32 | 1.219 | IO | | | | 1.77 |
| 100.750 | 0.00 | 0.32 | 1.217 | IO | | | | 1.76 |
| 100.833 | 0.00 | 0.32 | 1.215 | IO | | | | 1.76 |
| 100.917 | 0.00 | 0.32 | 1.212 | IO | | | | 1.76 |
| 101.000 | 0.00 | 0.32 | 1.210 | IO | | | | 1.75 |
| 101.083 | 0.00 | 0.32 | 1.208 | IO | | | | 1.75 |
| 101.167 | 0.00 | 0.32 | 1.206 | IO | | | | 1.75 |
| 101.250 | 0.00 | 0.32 | 1.204 | IO | | | | 1.74 |
| 101.333 | 0.00 | 0.32 | 1.201 | IO | | | | 1.74 |
| 101.417 | 0.00 | 0.32 | 1.199 | IO | | | | 1.74 |
| 101.500 | 0.00 | 0.32 | 1.197 | IO | | | | 1.73 |
| 101.583 | 0.00 | 0.32 | 1.195 | IO | | | | 1.73 |
| 101.667 | 0.00 | 0.32 | 1.192 | IO | | | | 1.73 |
| 101.750 | 0.00 | 0.32 | 1.190 | IO | | | | 1.73 |
| 101.833 | 0.00 | 0.32 | 1.188 | IO | | | | 1.72 |
| 101.917 | 0.00 | 0.32 | 1.186 | O | | | | 1.72 |
| 102.000 | 0.00 | 0.32 | 1.184 | O | | | | 1.72 |
| 102.083 | 0.00 | 0.32 | 1.182 | O | | | | 1.71 |
| 102.167 | 0.00 | 0.32 | 1.179 | O | | | | 1.71 |
| 102.250 | 0.00 | 0.32 | 1.177 | O | | | | 1.71 |
| 102.333 | 0.00 | 0.32 | 1.175 | O | | | | 1.70 |
| 102.417 | 0.00 | 0.32 | 1.173 | O | | | | 1.70 |
| 102.500 | 0.00 | 0.32 | 1.171 | O | | | | 1.70 |
| 102.583 | 0.00 | 0.32 | 1.168 | O | | | | 1.69 |
| 102.667 | 0.00 | 0.32 | 1.166 | O | | | | 1.69 |
| 102.750 | 0.00 | 0.32 | 1.164 | O | | | | 1.69 |
| 102.833 | 0.00 | 0.32 | 1.162 | O | | | | 1.68 |
| 102.917 | 0.00 | 0.31 | 1.160 | O | | | | 1.68 |
| 103.000 | 0.00 | 0.31 | 1.158 | O | | | | 1.68 |
| 103.083 | 0.00 | 0.31 | 1.155 | O | | | | 1.67 |
| 103.167 | 0.00 | 0.31 | 1.153 | O | | | | 1.67 |
| 103.250 | 0.00 | 0.31 | 1.151 | O | | | | 1.67 |
| 103.333 | 0.00 | 0.31 | 1.149 | O | | | | 1.67 |
| 103.417 | 0.00 | 0.31 | 1.147 | O | | | | 1.66 |
| 103.500 | 0.00 | 0.31 | 1.145 | O | | | | 1.66 |
| 103.583 | 0.00 | 0.31 | 1.142 | O | | | | 1.66 |
| 103.667 | 0.00 | 0.31 | 1.140 | O | | | | 1.65 |
| 103.750 | 0.00 | 0.31 | 1.138 | O | | | | 1.65 |
| 103.833 | 0.00 | 0.31 | 1.136 | O | | | | 1.65 |
| 103.917 | 0.00 | 0.31 | 1.134 | O | | | | 1.64 |
| 104.000 | 0.00 | 0.31 | 1.132 | O | | | | 1.64 |
| 104.083 | 0.00 | 0.31 | 1.130 | O | | | | 1.64 |
| 104.167 | 0.00 | 0.31 | 1.127 | O | | | | 1.63 |
| 104.250 | 0.00 | 0.31 | 1.125 | O | | | | 1.63 |
| 104.333 | 0.00 | 0.31 | 1.123 | O | | | | 1.63 |
| 104.417 | 0.00 | 0.31 | 1.121 | O | | | | 1.62 |
| 104.500 | 0.00 | 0.31 | 1.119 | O | | | | 1.62 |
| 104.583 | 0.00 | 0.31 | 1.117 | O | | | | 1.62 |
| 104.667 | 0.00 | 0.31 | 1.115 | O | | | | 1.62 |
| 104.750 | 0.00 | 0.31 | 1.113 | O | | | | 1.61 |
| 104.833 | 0.00 | 0.31 | 1.110 | O | | | | 1.61 |
| 104.917 | 0.00 | 0.31 | 1.108 | O | | | | 1.61 |
| 105.000 | 0.00 | 0.31 | 1.106 | O | | | | 1.60 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 105.083 | 0.00 | 0.31 | 1.104 | O | \| | \| | \| | \| | 1.60 |
| 105.167 | 0.00 | 0.31 | 1.102 | O | \| | \| | \| | \| | 1.60 |
| 105.250 | 0.00 | 0.31 | 1.100 | O | \| | \| | \| | \| | 1.59 |
| 105.333 | 0.00 | 0.31 | 1.098 | O | \| | \| | \| | \| | 1.59 |
| 105.417 | 0.00 | 0.30 | 1.096 | O | \| | \| | \| | \| | 1.59 |
| 105.500 | 0.00 | 0.30 | 1.094 | O | \| | \| | \| | \| | 1.58 |
| 105.583 | 0.00 | 0.30 | 1.092 | O | \| | \| | \| | \| | 1.58 |
| 105.667 | 0.00 | 0.30 | 1.089 | O | \| | \| | \| | \| | 1.58 |
| 105.750 | 0.00 | 0.30 | 1.087 | O | \| | \| | \| | \| | 1.58 |
| 105.833 | 0.00 | 0.30 | 1.085 | O | \| | \| | \| | \| | 1.57 |
| 105.917 | 0.00 | 0.30 | 1.083 | O | \| | \| | \| | \| | 1.57 |
| 106.000 | 0.00 | 0.30 | 1.081 | O | \| | \| | \| | \| | 1.57 |
| 106.083 | 0.00 | 0.30 | 1.079 | O | \| | \| | \| | \| | 1.56 |
| 106.167 | 0.00 | 0.30 | 1.077 | O | \| | \| | \| | \| | 1.56 |
| 106.250 | 0.00 | 0.30 | 1.075 | O | \| | \| | \| | \| | 1.56 |
| 106.333 | 0.00 | 0.30 | 1.073 | O | \| | \| | \| | \| | 1.55 |
| 106.417 | 0.00 | 0.30 | 1.071 | O | \| | \| | \| | \| | 1.55 |
| 106.500 | 0.00 | 0.30 | 1.069 | O | \| | \| | \| | \| | 1.55 |
| 106.583 | 0.00 | 0.30 | 1.067 | O | \| | \| | \| | \| | 1.55 |
| 106.667 | 0.00 | 0.30 | 1.064 | O | \| | \| | \| | \| | 1.54 |
| 106.750 | 0.00 | 0.30 | 1.062 | O | \| | \| | \| | \| | 1.54 |
| 106.833 | 0.00 | 0.30 | 1.060 | O | \| | \| | \| | \| | 1.54 |
| 106.917 | 0.00 | 0.30 | 1.058 | O | \| | \| | \| | \| | 1.53 |
| 107.000 | 0.00 | 0.30 | 1.056 | O | \| | \| | \| | \| | 1.53 |
| 107.083 | 0.00 | 0.30 | 1.054 | O | \| | \| | \| | \| | 1.53 |
| 107.167 | 0.00 | 0.30 | 1.052 | O | \| | \| | \| | \| | 1.52 |
| 107.250 | 0.00 | 0.30 | 1.050 | O | \| | \| | \| | \| | 1.52 |
| 107.333 | 0.00 | 0.30 | 1.048 | O | \| | \| | \| | \| | 1.52 |
| 107.417 | 0.00 | 0.30 | 1.046 | O | \| | \| | \| | \| | 1.52 |
| 107.500 | 0.00 | 0.30 | 1.044 | O | \| | \| | \| | \| | 1.51 |
| 107.583 | 0.00 | 0.30 | 1.042 | O | \| | \| | \| | \| | 1.51 |
| 107.667 | 0.00 | 0.30 | 1.040 | O | \| | \| | \| | \| | 1.51 |
| 107.750 | 0.00 | 0.30 | 1.038 | O | \| | \| | \| | \| | 1.50 |
| 107.833 | 0.00 | 0.30 | 1.036 | O | \| | \| | \| | \| | 1.50 |
| 107.917 | 0.00 | 0.29 | 1.034 | O | \| | \| | \| | \| | 1.50 |
| 108.000 | 0.00 | 0.29 | 1.032 | O | \| | \| | \| | \| | 1.50 |
| 108.083 | 0.00 | 0.29 | 1.030 | O | \| | \| | \| | \| | 1.49 |
| 108.167 | 0.00 | 0.29 | 1.028 | O | \| | \| | \| | \| | 1.49 |
| 108.250 | 0.00 | 0.29 | 1.026 | O | \| | \| | \| | \| | 1.49 |
| 108.333 | 0.00 | 0.29 | 1.024 | O | \| | \| | \| | \| | 1.48 |
| 108.417 | 0.00 | 0.29 | 1.022 | O | \| | \| | \| | \| | 1.48 |
| 108.500 | 0.00 | 0.29 | 1.020 | O | \| | \| | \| | \| | 1.48 |
| 108.583 | 0.00 | 0.29 | 1.018 | O | \| | \| | \| | \| | 1.47 |
| 108.667 | 0.00 | 0.29 | 1.016 | O | \| | \| | \| | \| | 1.47 |
| 108.750 | 0.00 | 0.29 | 1.014 | O | \| | \| | \| | \| | 1.47 |
| 108.833 | 0.00 | 0.29 | 1.012 | O | \| | \| | \| | \| | 1.47 |
| 108.917 | 0.00 | 0.29 | 1.010 | O | \| | \| | \| | \| | 1.46 |
| 109.000 | 0.00 | 0.29 | 1.008 | O | \| | \| | \| | \| | 1.46 |
| 109.083 | 0.00 | 0.29 | 1.006 | O | \| | \| | \| | \| | 1.46 |
| 109.167 | 0.00 | 0.29 | 1.004 | O | \| | \| | \| | \| | 1.45 |
| 109.250 | 0.00 | 0.29 | 1.002 | O | \| | \| | \| | \| | 1.45 |
| 109.333 | 0.00 | 0.29 | 1.000 | O | \| | \| | \| | \| | 1.45 |
| 109.417 | 0.00 | 0.29 | 0.998 | O | \| | \| | \| | \| | 1.45 |
| 109.500 | 0.00 | 0.29 | 0.996 | O | \| | \| | \| | \| | 1.44 |
| 109.583 | 0.00 | 0.29 | 0.994 | O | \| | \| | \| | \| | 1.44 |
| 109.667 | 0.00 | 0.29 | 0.992 | O | \| | \| | \| | \| | 1.44 |
| 109.750 | 0.00 | 0.29 | 0.990 | O | \| | \| | \| | \| | 1.43 |
| 109.833 | 0.00 | 0.29 | 0.988 | O | \| | \| | \| | \| | 1.43 |
| 109.917 | 0.00 | 0.29 | 0.986 | O | \| | \| | \| | \| | 1.43 |
| 110.000 | 0.00 | 0.29 | 0.984 | O | \| | \| | \| | \| | 1.43 |
| 110.083 | 0.00 | 0.29 | 0.982 | O | \| | \| | \| | \| | 1.42 |
| 110.167 | 0.00 | 0.29 | 0.980 | O | \| | \| | \| | \| | 1.42 |
| 110.250 | 0.00 | 0.29 | 0.978 | O | \| | \| | \| | \| | 1.42 |
| 110.333 | 0.00 | 0.29 | 0.976 | O | \| | \| | \| | \| | 1.41 |
| 110.417 | 0.00 | 0.29 | 0.974 | O | \| | \| | \| | \| | 1.41 |
| 110.500 | 0.00 | 0.28 | 0.972 | O | \| | \| | \| | \| | 1.41 |
| 110.583 | 0.00 | 0.28 | 0.970 | O | \| | \| | \| | \| | 1.41 |
| 110.667 | 0.00 | 0.28 | 0.968 | O | \| | \| | \| | \| | 1.40 |
| 110.750 | 0.00 | 0.28 | 0.966 | O | \| | \| | \| | \| | 1.40 |
| 110.833 | 0.00 | 0.28 | 0.964 | O | \| | \| | \| | \| | 1.40 |
| 110.917 | 0.00 | 0.28 | 0.962 | O | \| | \| | \| | \| | 1.39 |
| 111.000 | 0.00 | 0.28 | 0.960 | O | \| | \| | \| | \| | 1.39 |
| 111.083 | 0.00 | 0.28 | 0.958 | O | \| | \| | \| | \| | 1.39 |
| 111.167 | 0.00 | 0.28 | 0.956 | O | \| | \| | \| | \| | 1.39 |

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|---|---|---|---|---|---|---|---|---|
| 111.250 | 0.00 | 0.28 | 0.954 | O | \| | \| | \| | 1.38 |
| 111.333 | 0.00 | 0.28 | 0.952 | O | \| | \| | \| | 1.38 |
| 111.417 | 0.00 | 0.28 | 0.950 | O | \| | \| | \| | 1.38 |
| 111.500 | 0.00 | 0.28 | 0.949 | O | \| | \| | \| | 1.37 |
| 111.583 | 0.00 | 0.28 | 0.947 | O | \| | \| | \| | 1.37 |
| 111.667 | 0.00 | 0.28 | 0.945 | O | \| | \| | \| | 1.37 |
| 111.750 | 0.00 | 0.28 | 0.943 | O | \| | \| | \| | 1.37 |
| 111.833 | 0.00 | 0.28 | 0.941 | O | \| | \| | \| | 1.36 |
| 111.917 | 0.00 | 0.28 | 0.939 | O | \| | \| | \| | 1.36 |
| 112.000 | 0.00 | 0.28 | 0.937 | O | \| | \| | \| | 1.36 |
| 112.083 | 0.00 | 0.28 | 0.935 | O | \| | \| | \| | 1.36 |
| 112.167 | 0.00 | 0.28 | 0.933 | O | \| | \| | \| | 1.35 |
| 112.250 | 0.00 | 0.28 | 0.931 | O | \| | \| | \| | 1.35 |
| 112.333 | 0.00 | 0.28 | 0.929 | O | \| | \| | \| | 1.35 |
| 112.417 | 0.00 | 0.28 | 0.927 | O | \| | \| | \| | 1.34 |
| 112.500 | 0.00 | 0.28 | 0.925 | O | \| | \| | \| | 1.34 |
| 112.583 | 0.00 | 0.28 | 0.924 | O | \| | \| | \| | 1.34 |
| 112.667 | 0.00 | 0.28 | 0.922 | O | \| | \| | \| | 1.34 |
| 112.750 | 0.00 | 0.28 | 0.920 | O | \| | \| | \| | 1.33 |
| 112.833 | 0.00 | 0.28 | 0.918 | O | \| | \| | \| | 1.33 |
| 112.917 | 0.00 | 0.28 | 0.916 | O | \| | \| | \| | 1.33 |
| 113.000 | 0.00 | 0.28 | 0.914 | O | \| | \| | \| | 1.32 |
| 113.083 | 0.00 | 0.28 | 0.912 | O | \| | \| | \| | 1.32 |
| 113.167 | 0.00 | 0.28 | 0.910 | O | \| | \| | \| | 1.32 |
| 113.250 | 0.00 | 0.27 | 0.908 | O | \| | \| | \| | 1.32 |
| 113.333 | 0.00 | 0.27 | 0.906 | O | \| | \| | \| | 1.31 |
| 113.417 | 0.00 | 0.27 | 0.905 | O | \| | \| | \| | 1.31 |
| 113.500 | 0.00 | 0.27 | 0.903 | O | \| | \| | \| | 1.31 |
| 113.583 | 0.00 | 0.27 | 0.901 | O | \| | \| | \| | 1.31 |
| 113.667 | 0.00 | 0.27 | 0.899 | O | \| | \| | \| | 1.30 |
| 113.750 | 0.00 | 0.27 | 0.897 | O | \| | \| | \| | 1.30 |
| 113.833 | 0.00 | 0.27 | 0.895 | O | \| | \| | \| | 1.30 |
| 113.917 | 0.00 | 0.27 | 0.893 | O | \| | \| | \| | 1.29 |
| 114.000 | 0.00 | 0.27 | 0.891 | O | \| | \| | \| | 1.29 |
| 114.083 | 0.00 | 0.27 | 0.889 | O | \| | \| | \| | 1.29 |
| 114.167 | 0.00 | 0.27 | 0.888 | O | \| | \| | \| | 1.29 |
| 114.250 | 0.00 | 0.27 | 0.886 | O | \| | \| | \| | 1.28 |
| 114.333 | 0.00 | 0.27 | 0.884 | O | \| | \| | \| | 1.28 |
| 114.417 | 0.00 | 0.27 | 0.882 | O | \| | \| | \| | 1.28 |
| 114.500 | 0.00 | 0.27 | 0.880 | O | \| | \| | \| | 1.28 |
| 114.583 | 0.00 | 0.27 | 0.878 | O | \| | \| | \| | 1.27 |
| 114.667 | 0.00 | 0.27 | 0.876 | O | \| | \| | \| | 1.27 |
| 114.750 | 0.00 | 0.27 | 0.875 | O | \| | \| | \| | 1.27 |
| 114.833 | 0.00 | 0.27 | 0.873 | O | \| | \| | \| | 1.26 |
| 114.917 | 0.00 | 0.27 | 0.871 | O | \| | \| | \| | 1.26 |
| 115.000 | 0.00 | 0.27 | 0.869 | O | \| | \| | \| | 1.26 |
| 115.083 | 0.00 | 0.27 | 0.867 | O | \| | \| | \| | 1.26 |
| 115.167 | 0.00 | 0.27 | 0.865 | O | \| | \| | \| | 1.25 |
| 115.250 | 0.00 | 0.27 | 0.863 | O | \| | \| | \| | 1.25 |
| 115.333 | 0.00 | 0.27 | 0.862 | O | \| | \| | \| | 1.25 |
| 115.417 | 0.00 | 0.27 | 0.860 | O | \| | \| | \| | 1.25 |
| 115.500 | 0.00 | 0.27 | 0.858 | O | \| | \| | \| | 1.24 |
| 115.583 | 0.00 | 0.27 | 0.856 | O | \| | \| | \| | 1.24 |
| 115.667 | 0.00 | 0.27 | 0.854 | O | \| | \| | \| | 1.24 |
| 115.750 | 0.00 | 0.27 | 0.852 | O | \| | \| | \| | 1.24 |
| 115.833 | 0.00 | 0.27 | 0.851 | O | \| | \| | \| | 1.23 |
| 115.917 | 0.00 | 0.27 | 0.849 | O | \| | \| | \| | 1.23 |
| 116.000 | 0.00 | 0.27 | 0.847 | O | \| | \| | \| | 1.23 |
| 116.083 | 0.00 | 0.26 | 0.845 | O | \| | \| | \| | 1.22 |
| 116.167 | 0.00 | 0.26 | 0.843 | O | \| | \| | \| | 1.22 |
| 116.250 | 0.00 | 0.26 | 0.841 | O | \| | \| | \| | 1.22 |
| 116.333 | 0.00 | 0.26 | 0.840 | O | \| | \| | \| | 1.22 |
| 116.417 | 0.00 | 0.26 | 0.838 | O | \| | \| | \| | 1.21 |
| 116.500 | 0.00 | 0.26 | 0.836 | O | \| | \| | \| | 1.21 |
| 116.583 | 0.00 | 0.26 | 0.834 | O | \| | \| | \| | 1.21 |
| 116.667 | 0.00 | 0.26 | 0.832 | O | \| | \| | \| | 1.21 |
| 116.750 | 0.00 | 0.26 | 0.831 | O | \| | \| | \| | 1.20 |
| 116.833 | 0.00 | 0.26 | 0.829 | O | \| | \| | \| | 1.20 |
| 116.917 | 0.00 | 0.26 | 0.827 | O | \| | \| | \| | 1.20 |
| 117.000 | 0.00 | 0.26 | 0.825 | O | \| | \| | \| | 1.20 |
| 117.083 | 0.00 | 0.26 | 0.823 | O | \| | \| | \| | 1.19 |
| 117.167 | 0.00 | 0.26 | 0.822 | O | \| | \| | \| | 1.19 |
| 117.250 | 0.00 | 0.26 | 0.820 | O | \| | \| | \| | 1.19 |
| 117.333 | 0.00 | 0.26 | 0.818 | O | \| | \| | \| | 1.19 |

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|---|---|---|---|---|---|---|---|---|---|
| 117.417 | 0.00 | 0.26 | 0.816 | O | \| | \| | \| | \| | 1.18 |
| 117.500 | 0.00 | 0.26 | 0.814 | O | \| | \| | \| | \| | 1.18 |
| 117.583 | 0.00 | 0.26 | 0.813 | O | \| | \| | \| | \| | 1.18 |
| 117.667 | 0.00 | 0.26 | 0.811 | O | \| | \| | \| | \| | 1.18 |
| 117.750 | 0.00 | 0.26 | 0.809 | O | \| | \| | \| | \| | 1.17 |
| 117.833 | 0.00 | 0.26 | 0.807 | O | \| | \| | \| | \| | 1.17 |
| 117.917 | 0.00 | 0.26 | 0.806 | O | \| | \| | \| | \| | 1.17 |
| 118.000 | 0.00 | 0.26 | 0.804 | O | \| | \| | \| | \| | 1.16 |
| 118.083 | 0.00 | 0.26 | 0.802 | O | \| | \| | \| | \| | 1.16 |
| 118.167 | 0.00 | 0.26 | 0.800 | O | \| | \| | \| | \| | 1.16 |
| 118.250 | 0.00 | 0.26 | 0.798 | O | \| | \| | \| | \| | 1.16 |
| 118.333 | 0.00 | 0.26 | 0.797 | O | \| | \| | \| | \| | 1.15 |
| 118.417 | 0.00 | 0.26 | 0.795 | O | \| | \| | \| | \| | 1.15 |
| 118.500 | 0.00 | 0.26 | 0.793 | O | \| | \| | \| | \| | 1.15 |
| 118.583 | 0.00 | 0.26 | 0.791 | O | \| | \| | \| | \| | 1.15 |
| 118.667 | 0.00 | 0.26 | 0.790 | O | \| | \| | \| | \| | 1.14 |
| 118.750 | 0.00 | 0.26 | 0.788 | O | \| | \| | \| | \| | 1.14 |
| 118.833 | 0.00 | 0.26 | 0.786 | O | \| | \| | \| | \| | 1.14 |
| 118.917 | 0.00 | 0.26 | 0.784 | O | \| | \| | \| | \| | 1.14 |
| 119.000 | 0.00 | 0.25 | 0.783 | O | \| | \| | \| | \| | 1.13 |
| 119.083 | 0.00 | 0.25 | 0.781 | O | \| | \| | \| | \| | 1.13 |
| 119.167 | 0.00 | 0.25 | 0.779 | O | \| | \| | \| | \| | 1.13 |
| 119.250 | 0.00 | 0.25 | 0.777 | O | \| | \| | \| | \| | 1.13 |
| 119.333 | 0.00 | 0.25 | 0.776 | O | \| | \| | \| | \| | 1.12 |
| 119.417 | 0.00 | 0.25 | 0.774 | O | \| | \| | \| | \| | 1.12 |
| 119.500 | 0.00 | 0.25 | 0.772 | O | \| | \| | \| | \| | 1.12 |
| 119.583 | 0.00 | 0.25 | 0.770 | O | \| | \| | \| | \| | 1.12 |
| 119.667 | 0.00 | 0.25 | 0.769 | O | \| | \| | \| | \| | 1.11 |
| 119.750 | 0.00 | 0.25 | 0.767 | O | \| | \| | \| | \| | 1.11 |
| 119.833 | 0.00 | 0.25 | 0.765 | O | \| | \| | \| | \| | 1.11 |
| 119.917 | 0.00 | 0.25 | 0.763 | O | \| | \| | \| | \| | 1.11 |
| 120.000 | 0.00 | 0.25 | 0.762 | O | \| | \| | \| | \| | 1.10 |
| 120.083 | 0.00 | 0.25 | 0.760 | O | \| | \| | \| | \| | 1.10 |
| 120.167 | 0.00 | 0.25 | 0.758 | O | \| | \| | \| | \| | 1.10 |
| 120.250 | 0.00 | 0.25 | 0.756 | O | \| | \| | \| | \| | 1.10 |
| 120.333 | 0.00 | 0.25 | 0.755 | O | \| | \| | \| | \| | 1.09 |
| 120.417 | 0.00 | 0.25 | 0.753 | O | \| | \| | \| | \| | 1.09 |
| 120.500 | 0.00 | 0.25 | 0.751 | O | \| | \| | \| | \| | 1.09 |
| 120.583 | 0.00 | 0.25 | 0.750 | O | \| | \| | \| | \| | 1.09 |
| 120.667 | 0.00 | 0.25 | 0.748 | O | \| | \| | \| | \| | 1.08 |
| 120.750 | 0.00 | 0.25 | 0.746 | O | \| | \| | \| | \| | 1.08 |
| 120.833 | 0.00 | 0.25 | 0.744 | O | \| | \| | \| | \| | 1.08 |
| 120.917 | 0.00 | 0.25 | 0.743 | O | \| | \| | \| | \| | 1.08 |
| 121.000 | 0.00 | 0.25 | 0.741 | O | \| | \| | \| | \| | 1.07 |
| 121.083 | 0.00 | 0.25 | 0.739 | O | \| | \| | \| | \| | 1.07 |
| 121.167 | 0.00 | 0.25 | 0.738 | O | \| | \| | \| | \| | 1.07 |
| 121.250 | 0.00 | 0.25 | 0.736 | O | \| | \| | \| | \| | 1.07 |
| 121.333 | 0.00 | 0.25 | 0.734 | O | \| | \| | \| | \| | 1.06 |
| 121.417 | 0.00 | 0.25 | 0.732 | O | \| | \| | \| | \| | 1.06 |
| 121.500 | 0.00 | 0.25 | 0.731 | O | \| | \| | \| | \| | 1.06 |
| 121.583 | 0.00 | 0.25 | 0.729 | O | \| | \| | \| | \| | 1.06 |
| 121.667 | 0.00 | 0.25 | 0.727 | O | \| | \| | \| | \| | 1.05 |
| 121.750 | 0.00 | 0.25 | 0.726 | O | \| | \| | \| | \| | 1.05 |
| 121.833 | 0.00 | 0.25 | 0.724 | O | \| | \| | \| | \| | 1.05 |
| 121.917 | 0.00 | 0.25 | 0.722 | O | \| | \| | \| | \| | 1.05 |
| 122.000 | 0.00 | 0.24 | 0.721 | O | \| | \| | \| | \| | 1.04 |
| 122.083 | 0.00 | 0.24 | 0.719 | O | \| | \| | \| | \| | 1.04 |
| 122.167 | 0.00 | 0.24 | 0.717 | O | \| | \| | \| | \| | 1.04 |
| 122.250 | 0.00 | 0.24 | 0.716 | O | \| | \| | \| | \| | 1.04 |
| 122.333 | 0.00 | 0.24 | 0.714 | O | \| | \| | \| | \| | 1.03 |
| 122.417 | 0.00 | 0.24 | 0.712 | O | \| | \| | \| | \| | 1.03 |
| 122.500 | 0.00 | 0.24 | 0.711 | O | \| | \| | \| | \| | 1.03 |
| 122.583 | 0.00 | 0.24 | 0.709 | O | \| | \| | \| | \| | 1.03 |
| 122.667 | 0.00 | 0.24 | 0.707 | O | \| | \| | \| | \| | 1.02 |
| 122.750 | 0.00 | 0.24 | 0.706 | O | \| | \| | \| | \| | 1.02 |
| 122.833 | 0.00 | 0.24 | 0.704 | O | \| | \| | \| | \| | 1.02 |
| 122.917 | 0.00 | 0.24 | 0.702 | O | \| | \| | \| | \| | 1.02 |
| 123.000 | 0.00 | 0.24 | 0.700 | O | \| | \| | \| | \| | 1.02 |
| 123.083 | 0.00 | 0.24 | 0.699 | O | \| | \| | \| | \| | 1.01 |
| 123.167 | 0.00 | 0.24 | 0.697 | O | \| | \| | \| | \| | 1.01 |
| 123.250 | 0.00 | 0.24 | 0.696 | O | \| | \| | \| | \| | 1.01 |
| 123.333 | 0.00 | 0.24 | 0.694 | O | \| | \| | \| | \| | 1.01 |
| 123.417 | 0.00 | 0.24 | 0.692 | O | \| | \| | \| | \| | 1.00 |
| 123.500 | 0.00 | 0.24 | 0.691 | O | \| | \| | \| | \| | 1.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 123.583 | 0.00 | 0.24 | 0.689 | O | \| | \| | \| | 1.00 |
| 123.667 | 0.00 | 0.24 | 0.687 | O | \| | \| | \| | 1.00 |
| 123.750 | 0.00 | 0.24 | 0.686 | O | \| | \| | \| | 0.99 |
| 123.833 | 0.00 | 0.24 | 0.684 | O | \| | \| | \| | 0.99 |
| 123.917 | 0.00 | 0.24 | 0.682 | O | \| | \| | \| | 0.99 |
| 124.000 | 0.00 | 0.24 | 0.681 | O | \| | \| | \| | 0.99 |
| 124.083 | 0.00 | 0.24 | 0.679 | O | \| | \| | \| | 0.98 |
| 124.167 | 0.00 | 0.24 | 0.677 | O | \| | \| | \| | 0.98 |
| 124.250 | 0.00 | 0.24 | 0.676 | O | \| | \| | \| | 0.98 |
| 124.333 | 0.00 | 0.23 | 0.674 | O | \| | \| | \| | 0.98 |
| 124.417 | 0.00 | 0.23 | 0.673 | O | \| | \| | \| | 0.97 |
| 124.500 | 0.00 | 0.23 | 0.671 | O | \| | \| | \| | 0.97 |
| 124.583 | 0.00 | 0.23 | 0.669 | O | \| | \| | \| | 0.97 |
| 124.667 | 0.00 | 0.23 | 0.668 | O | \| | \| | \| | 0.97 |
| 124.750 | 0.00 | 0.23 | 0.666 | O | \| | \| | \| | 0.97 |
| 124.833 | 0.00 | 0.23 | 0.665 | O | \| | \| | \| | 0.96 |
| 124.917 | 0.00 | 0.23 | 0.663 | O | \| | \| | \| | 0.96 |
| 125.000 | 0.00 | 0.23 | 0.661 | O | \| | \| | \| | 0.96 |
| 125.083 | 0.00 | 0.23 | 0.660 | O | \| | \| | \| | 0.96 |
| 125.167 | 0.00 | 0.23 | 0.658 | O | \| | \| | \| | 0.95 |
| 125.250 | 0.00 | 0.23 | 0.657 | O | \| | \| | \| | 0.95 |
| 125.333 | 0.00 | 0.23 | 0.655 | O | \| | \| | \| | 0.95 |
| 125.417 | 0.00 | 0.23 | 0.654 | O | \| | \| | \| | 0.95 |
| 125.500 | 0.00 | 0.23 | 0.652 | O | \| | \| | \| | 0.94 |
| 125.583 | 0.00 | 0.23 | 0.650 | O | \| | \| | \| | 0.94 |
| 125.667 | 0.00 | 0.23 | 0.649 | O | \| | \| | \| | 0.94 |
| 125.750 | 0.00 | 0.23 | 0.647 | O | \| | \| | \| | 0.94 |
| 125.833 | 0.00 | 0.22 | 0.646 | O | \| | \| | \| | 0.94 |
| 125.917 | 0.00 | 0.22 | 0.644 | O | \| | \| | \| | 0.93 |
| 126.000 | 0.00 | 0.22 | 0.643 | O | \| | \| | \| | 0.93 |
| 126.083 | 0.00 | 0.22 | 0.641 | O | \| | \| | \| | 0.93 |
| 126.167 | 0.00 | 0.22 | 0.640 | O | \| | \| | \| | 0.93 |
| 126.250 | 0.00 | 0.22 | 0.638 | O | \| | \| | \| | 0.92 |
| 126.333 | 0.00 | 0.22 | 0.637 | O | \| | \| | \| | 0.92 |
| 126.417 | 0.00 | 0.22 | 0.635 | O | \| | \| | \| | 0.92 |
| 126.500 | 0.00 | 0.22 | 0.633 | O | \| | \| | \| | 0.92 |
| 126.583 | 0.00 | 0.22 | 0.632 | O | \| | \| | \| | 0.92 |
| 126.667 | 0.00 | 0.22 | 0.630 | O | \| | \| | \| | 0.91 |
| 126.750 | 0.00 | 0.22 | 0.629 | O | \| | \| | \| | 0.91 |
| 126.833 | 0.00 | 0.22 | 0.627 | O | \| | \| | \| | 0.91 |
| 126.917 | 0.00 | 0.22 | 0.626 | O | \| | \| | \| | 0.91 |
| 127.000 | 0.00 | 0.22 | 0.624 | O | \| | \| | \| | 0.90 |
| 127.083 | 0.00 | 0.22 | 0.623 | O | \| | \| | \| | 0.90 |
| 127.167 | 0.00 | 0.22 | 0.621 | O | \| | \| | \| | 0.90 |
| 127.250 | 0.00 | 0.22 | 0.620 | O | \| | \| | \| | 0.90 |
| 127.333 | 0.00 | 0.22 | 0.618 | O | \| | \| | \| | 0.90 |
| 127.417 | 0.00 | 0.21 | 0.617 | O | \| | \| | \| | 0.89 |
| 127.500 | 0.00 | 0.21 | 0.616 | O | \| | \| | \| | 0.89 |
| 127.583 | 0.00 | 0.21 | 0.614 | O | \| | \| | \| | 0.89 |
| 127.667 | 0.00 | 0.21 | 0.613 | O | \| | \| | \| | 0.89 |
| 127.750 | 0.00 | 0.21 | 0.611 | O | \| | \| | \| | 0.89 |
| 127.833 | 0.00 | 0.21 | 0.610 | O | \| | \| | \| | 0.88 |
| 127.917 | 0.00 | 0.21 | 0.608 | O | \| | \| | \| | 0.88 |
| 128.000 | 0.00 | 0.21 | 0.607 | O | \| | \| | \| | 0.88 |
| 128.083 | 0.00 | 0.21 | 0.605 | O | \| | \| | \| | 0.88 |
| 128.167 | 0.00 | 0.21 | 0.604 | O | \| | \| | \| | 0.88 |
| 128.250 | 0.00 | 0.21 | 0.602 | O | \| | \| | \| | 0.87 |
| 128.333 | 0.00 | 0.21 | 0.601 | O | \| | \| | \| | 0.87 |
| 128.417 | 0.00 | 0.21 | 0.600 | O | \| | \| | \| | 0.87 |
| 128.500 | 0.00 | 0.21 | 0.598 | O | \| | \| | \| | 0.87 |
| 128.583 | 0.00 | 0.21 | 0.597 | O | \| | \| | \| | 0.86 |
| 128.667 | 0.00 | 0.21 | 0.595 | O | \| | \| | \| | 0.86 |
| 128.750 | 0.00 | 0.21 | 0.594 | O | \| | \| | \| | 0.86 |
| 128.833 | 0.00 | 0.21 | 0.592 | O | \| | \| | \| | 0.86 |
| 128.917 | 0.00 | 0.21 | 0.591 | O | \| | \| | \| | 0.86 |
| 129.000 | 0.00 | 0.21 | 0.590 | O | \| | \| | \| | 0.85 |
| 129.083 | 0.00 | 0.20 | 0.588 | O | \| | \| | \| | 0.85 |
| 129.167 | 0.00 | 0.20 | 0.587 | O | \| | \| | \| | 0.85 |
| 129.250 | 0.00 | 0.20 | 0.585 | O | \| | \| | \| | 0.85 |
| 129.333 | 0.00 | 0.20 | 0.584 | O | \| | \| | \| | 0.85 |
| 129.417 | 0.00 | 0.20 | 0.583 | O | \| | \| | \| | 0.84 |
| 129.500 | 0.00 | 0.20 | 0.581 | O | \| | \| | \| | 0.84 |
| 129.583 | 0.00 | 0.20 | 0.580 | O | \| | \| | \| | 0.84 |
| 129.667 | 0.00 | 0.20 | 0.578 | O | \| | \| | \| | 0.84 |

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|---|---|---|---|---|---|---|---|---|
| 129.750 | 0.00 | 0.20 | 0.577 | O | \| | \| | \| | 0.84 |
| 129.833 | 0.00 | 0.20 | 0.576 | O | \| | \| | \| | 0.83 |
| 129.917 | 0.00 | 0.20 | 0.574 | O | \| | \| | \| | 0.83 |
| 130.000 | 0.00 | 0.20 | 0.573 | O | \| | \| | \| | 0.83 |
| 130.083 | 0.00 | 0.20 | 0.571 | O | \| | \| | \| | 0.83 |
| 130.167 | 0.00 | 0.20 | 0.570 | O | \| | \| | \| | 0.83 |
| 130.250 | 0.00 | 0.20 | 0.569 | O | \| | \| | \| | 0.82 |
| 130.333 | 0.00 | 0.20 | 0.567 | O | \| | \| | \| | 0.82 |
| 130.417 | 0.00 | 0.20 | 0.566 | O | \| | \| | \| | 0.82 |
| 130.500 | 0.00 | 0.20 | 0.565 | O | \| | \| | \| | 0.82 |
| 130.583 | 0.00 | 0.20 | 0.563 | O | \| | \| | \| | 0.82 |
| 130.667 | 0.00 | 0.20 | 0.562 | O | \| | \| | \| | 0.81 |
| 130.750 | 0.00 | 0.20 | 0.561 | O | \| | \| | \| | 0.81 |
| 130.833 | 0.00 | 0.19 | 0.559 | O | \| | \| | \| | 0.81 |
| 130.917 | 0.00 | 0.19 | 0.558 | O | \| | \| | \| | 0.81 |
| 131.000 | 0.00 | 0.19 | 0.557 | O | \| | \| | \| | 0.81 |
| 131.083 | 0.00 | 0.19 | 0.555 | O | \| | \| | \| | 0.80 |
| 131.167 | 0.00 | 0.19 | 0.554 | O | \| | \| | \| | 0.80 |
| 131.250 | 0.00 | 0.19 | 0.553 | O | \| | \| | \| | 0.80 |
| 131.333 | 0.00 | 0.19 | 0.551 | O | \| | \| | \| | 0.80 |
| 131.417 | 0.00 | 0.19 | 0.550 | O | \| | \| | \| | 0.80 |
| 131.500 | 0.00 | 0.19 | 0.549 | O | \| | \| | \| | 0.80 |
| 131.583 | 0.00 | 0.19 | 0.547 | O | \| | \| | \| | 0.79 |
| 131.667 | 0.00 | 0.19 | 0.546 | O | \| | \| | \| | 0.79 |
| 131.750 | 0.00 | 0.19 | 0.545 | O | \| | \| | \| | 0.79 |
| 131.833 | 0.00 | 0.19 | 0.543 | O | \| | \| | \| | 0.79 |
| 131.917 | 0.00 | 0.19 | 0.542 | O | \| | \| | \| | 0.79 |
| 132.000 | 0.00 | 0.19 | 0.541 | O | \| | \| | \| | 0.78 |
| 132.083 | 0.00 | 0.19 | 0.540 | O | \| | \| | \| | 0.78 |
| 132.167 | 0.00 | 0.19 | 0.538 | O | \| | \| | \| | 0.78 |
| 132.250 | 0.00 | 0.19 | 0.537 | O | \| | \| | \| | 0.78 |
| 132.333 | 0.00 | 0.19 | 0.536 | O | \| | \| | \| | 0.78 |
| 132.417 | 0.00 | 0.19 | 0.534 | O | \| | \| | \| | 0.77 |
| 132.500 | 0.00 | 0.19 | 0.533 | O | \| | \| | \| | 0.77 |
| 132.583 | 0.00 | 0.18 | 0.532 | O | \| | \| | \| | 0.77 |
| 132.667 | 0.00 | 0.18 | 0.531 | O | \| | \| | \| | 0.77 |
| 132.750 | 0.00 | 0.18 | 0.529 | O | \| | \| | \| | 0.77 |
| 132.833 | 0.00 | 0.18 | 0.528 | O | \| | \| | \| | 0.77 |
| 132.917 | 0.00 | 0.18 | 0.527 | O | \| | \| | \| | 0.76 |
| 133.000 | 0.00 | 0.18 | 0.526 | O | \| | \| | \| | 0.76 |
| 133.083 | 0.00 | 0.18 | 0.524 | O | \| | \| | \| | 0.76 |
| 133.167 | 0.00 | 0.18 | 0.523 | O | \| | \| | \| | 0.76 |
| 133.250 | 0.00 | 0.18 | 0.522 | O | \| | \| | \| | 0.76 |
| 133.333 | 0.00 | 0.18 | 0.521 | O | \| | \| | \| | 0.75 |
| 133.417 | 0.00 | 0.18 | 0.519 | O | \| | \| | \| | 0.75 |
| 133.500 | 0.00 | 0.18 | 0.518 | O | \| | \| | \| | 0.75 |
| 133.583 | 0.00 | 0.18 | 0.517 | O | \| | \| | \| | 0.75 |
| 133.667 | 0.00 | 0.18 | 0.516 | O | \| | \| | \| | 0.75 |
| 133.750 | 0.00 | 0.18 | 0.514 | O | \| | \| | \| | 0.75 |
| 133.833 | 0.00 | 0.18 | 0.513 | O | \| | \| | \| | 0.74 |
| 133.917 | 0.00 | 0.18 | 0.512 | O | \| | \| | \| | 0.74 |
| 134.000 | 0.00 | 0.18 | 0.511 | O | \| | \| | \| | 0.74 |
| 134.083 | 0.00 | 0.18 | 0.509 | O | \| | \| | \| | 0.74 |
| 134.167 | 0.00 | 0.18 | 0.508 | O | \| | \| | \| | 0.74 |
| 134.250 | 0.00 | 0.18 | 0.507 | O | \| | \| | \| | 0.73 |
| 134.333 | 0.00 | 0.18 | 0.506 | O | \| | \| | \| | 0.73 |
| 134.417 | 0.00 | 0.18 | 0.505 | O | \| | \| | \| | 0.73 |
| 134.500 | 0.00 | 0.18 | 0.503 | O | \| | \| | \| | 0.73 |
| 134.583 | 0.00 | 0.17 | 0.502 | O | \| | \| | \| | 0.73 |
| 134.667 | 0.00 | 0.17 | 0.501 | O | \| | \| | \| | 0.73 |
| 134.750 | 0.00 | 0.17 | 0.500 | O | \| | \| | \| | 0.72 |
| 134.833 | 0.00 | 0.17 | 0.499 | O | \| | \| | \| | 0.72 |
| 134.917 | 0.00 | 0.17 | 0.497 | O | \| | \| | \| | 0.72 |
| 135.000 | 0.00 | 0.17 | 0.496 | O | \| | \| | \| | 0.72 |
| 135.083 | 0.00 | 0.17 | 0.495 | O | \| | \| | \| | 0.72 |
| 135.167 | 0.00 | 0.17 | 0.494 | O | \| | \| | \| | 0.72 |
| 135.250 | 0.00 | 0.17 | 0.493 | O | \| | \| | \| | 0.71 |
| 135.333 | 0.00 | 0.17 | 0.491 | O | \| | \| | \| | 0.71 |
| 135.417 | 0.00 | 0.17 | 0.490 | O | \| | \| | \| | 0.71 |
| 135.500 | 0.00 | 0.17 | 0.489 | O | \| | \| | \| | 0.71 |
| 135.583 | 0.00 | 0.17 | 0.488 | O | \| | \| | \| | 0.71 |
| 135.667 | 0.00 | 0.17 | 0.487 | O | \| | \| | \| | 0.71 |
| 135.750 | 0.00 | 0.17 | 0.486 | O | \| | \| | \| | 0.70 |
| 135.833 | 0.00 | 0.17 | 0.484 | O | \| | \| | \| | 0.70 |

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|---|---|---|---|---|---|---|---|---|---|
| 135.917 | 0.00 | 0.17 | 0.483 | O | \| | \| | \| | \| | 0.70 |
| 136.000 | 0.00 | 0.17 | 0.482 | O | \| | \| | \| | \| | 0.70 |
| 136.083 | 0.00 | 0.17 | 0.481 | O | \| | \| | \| | \| | 0.70 |
| 136.167 | 0.00 | 0.17 | 0.480 | O | \| | \| | \| | \| | 0.70 |
| 136.250 | 0.00 | 0.17 | 0.479 | O | \| | \| | \| | \| | 0.69 |
| 136.333 | 0.00 | 0.17 | 0.478 | O | \| | \| | \| | \| | 0.69 |
| 136.417 | 0.00 | 0.17 | 0.476 | O | \| | \| | \| | \| | 0.69 |
| 136.500 | 0.00 | 0.17 | 0.475 | O | \| | \| | \| | \| | 0.69 |
| 136.583 | 0.00 | 0.16 | 0.474 | O | \| | \| | \| | \| | 0.69 |
| 136.667 | 0.00 | 0.16 | 0.473 | O | \| | \| | \| | \| | 0.69 |
| 136.750 | 0.00 | 0.16 | 0.472 | O | \| | \| | \| | \| | 0.68 |
| 136.833 | 0.00 | 0.16 | 0.471 | O | \| | \| | \| | \| | 0.68 |
| 136.917 | 0.00 | 0.16 | 0.470 | O | \| | \| | \| | \| | 0.68 |
| 137.000 | 0.00 | 0.16 | 0.468 | O | \| | \| | \| | \| | 0.68 |
| 137.083 | 0.00 | 0.16 | 0.467 | O | \| | \| | \| | \| | 0.68 |
| 137.167 | 0.00 | 0.16 | 0.466 | O | \| | \| | \| | \| | 0.68 |
| 137.250 | 0.00 | 0.16 | 0.465 | O | \| | \| | \| | \| | 0.67 |
| 137.333 | 0.00 | 0.16 | 0.464 | O | \| | \| | \| | \| | 0.67 |
| 137.417 | 0.00 | 0.16 | 0.463 | O | \| | \| | \| | \| | 0.67 |
| 137.500 | 0.00 | 0.16 | 0.462 | O | \| | \| | \| | \| | 0.67 |
| 137.583 | 0.00 | 0.16 | 0.461 | O | \| | \| | \| | \| | 0.67 |
| 137.667 | 0.00 | 0.16 | 0.460 | O | \| | \| | \| | \| | 0.67 |
| 137.750 | 0.00 | 0.16 | 0.458 | O | \| | \| | \| | \| | 0.66 |
| 137.833 | 0.00 | 0.16 | 0.457 | O | \| | \| | \| | \| | 0.66 |
| 137.917 | 0.00 | 0.16 | 0.456 | O | \| | \| | \| | \| | 0.66 |
| 138.000 | 0.00 | 0.16 | 0.455 | O | \| | \| | \| | \| | 0.66 |
| 138.083 | 0.00 | 0.16 | 0.454 | O | \| | \| | \| | \| | 0.66 |
| 138.167 | 0.00 | 0.16 | 0.453 | O | \| | \| | \| | \| | 0.66 |
| 138.250 | 0.00 | 0.16 | 0.452 | O | \| | \| | \| | \| | 0.65 |
| 138.333 | 0.00 | 0.16 | 0.451 | O | \| | \| | \| | \| | 0.65 |
| 138.417 | 0.00 | 0.16 | 0.450 | O | \| | \| | \| | \| | 0.65 |
| 138.500 | 0.00 | 0.16 | 0.449 | O | \| | \| | \| | \| | 0.65 |
| 138.583 | 0.00 | 0.16 | 0.448 | O | \| | \| | \| | \| | 0.65 |
| 138.667 | 0.00 | 0.16 | 0.447 | O | \| | \| | \| | \| | 0.65 |
| 138.750 | 0.00 | 0.15 | 0.445 | O | \| | \| | \| | \| | 0.65 |
| 138.833 | 0.00 | 0.15 | 0.444 | O | \| | \| | \| | \| | 0.64 |
| 138.917 | 0.00 | 0.15 | 0.443 | O | \| | \| | \| | \| | 0.64 |
| 139.000 | 0.00 | 0.15 | 0.442 | O | \| | \| | \| | \| | 0.64 |
| 139.083 | 0.00 | 0.15 | 0.441 | O | \| | \| | \| | \| | 0.64 |
| 139.167 | 0.00 | 0.15 | 0.440 | O | \| | \| | \| | \| | 0.64 |
| 139.250 | 0.00 | 0.15 | 0.439 | O | \| | \| | \| | \| | 0.64 |
| 139.333 | 0.00 | 0.15 | 0.438 | O | \| | \| | \| | \| | 0.63 |
| 139.417 | 0.00 | 0.15 | 0.437 | O | \| | \| | \| | \| | 0.63 |
| 139.500 | 0.00 | 0.15 | 0.436 | O | \| | \| | \| | \| | 0.63 |
| 139.583 | 0.00 | 0.15 | 0.435 | O | \| | \| | \| | \| | 0.63 |
| 139.667 | 0.00 | 0.15 | 0.434 | O | \| | \| | \| | \| | 0.63 |
| 139.750 | 0.00 | 0.15 | 0.433 | O | \| | \| | \| | \| | 0.63 |
| 139.833 | 0.00 | 0.15 | 0.432 | O | \| | \| | \| | \| | 0.63 |
| 139.917 | 0.00 | 0.15 | 0.431 | O | \| | \| | \| | \| | 0.62 |
| 140.000 | 0.00 | 0.15 | 0.430 | O | \| | \| | \| | \| | 0.62 |
| 140.083 | 0.00 | 0.15 | 0.429 | O | \| | \| | \| | \| | 0.62 |
| 140.167 | 0.00 | 0.15 | 0.428 | O | \| | \| | \| | \| | 0.62 |
| 140.250 | 0.00 | 0.15 | 0.427 | O | \| | \| | \| | \| | 0.62 |
| 140.333 | 0.00 | 0.15 | 0.426 | O | \| | \| | \| | \| | 0.62 |
| 140.417 | 0.00 | 0.15 | 0.425 | O | \| | \| | \| | \| | 0.62 |
| 140.500 | 0.00 | 0.15 | 0.424 | O | \| | \| | \| | \| | 0.61 |
| 140.583 | 0.00 | 0.15 | 0.423 | O | \| | \| | \| | \| | 0.61 |
| 140.667 | 0.00 | 0.15 | 0.422 | O | \| | \| | \| | \| | 0.61 |
| 140.750 | 0.00 | 0.15 | 0.421 | O | \| | \| | \| | \| | 0.61 |
| 140.833 | 0.00 | 0.15 | 0.420 | O | \| | \| | \| | \| | 0.61 |
| 140.917 | 0.00 | 0.15 | 0.419 | O | \| | \| | \| | \| | 0.61 |
| 141.000 | 0.00 | 0.15 | 0.418 | O | \| | \| | \| | \| | 0.61 |
| 141.083 | 0.00 | 0.14 | 0.417 | O | \| | \| | \| | \| | 0.60 |
| 141.167 | 0.00 | 0.14 | 0.416 | O | \| | \| | \| | \| | 0.60 |
| 141.250 | 0.00 | 0.14 | 0.415 | O | \| | \| | \| | \| | 0.60 |
| 141.333 | 0.00 | 0.14 | 0.414 | O | \| | \| | \| | \| | 0.60 |
| 141.417 | 0.00 | 0.14 | 0.413 | O | \| | \| | \| | \| | 0.60 |
| 141.500 | 0.00 | 0.14 | 0.412 | O | \| | \| | \| | \| | 0.60 |
| 141.583 | 0.00 | 0.14 | 0.411 | O | \| | \| | \| | \| | 0.60 |
| 141.667 | 0.00 | 0.14 | 0.410 | O | \| | \| | \| | \| | 0.59 |
| 141.750 | 0.00 | 0.14 | 0.409 | O | \| | \| | \| | \| | 0.59 |
| 141.833 | 0.00 | 0.14 | 0.408 | O | \| | \| | \| | \| | 0.59 |
| 141.917 | 0.00 | 0.14 | 0.407 | O | \| | \| | \| | \| | 0.59 |
| 142.000 | 0.00 | 0.14 | 0.406 | O | \| | \| | \| | \| | 0.59 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 142.083 | 0.00 | 0.14 | 0.405 | O | \| | \| | \| | 0.59 |
| 142.167 | 0.00 | 0.14 | 0.404 | O | \| | \| | \| | 0.59 |
| 142.250 | 0.00 | 0.14 | 0.403 | O | \| | \| | \| | 0.58 |
| 142.333 | 0.00 | 0.14 | 0.402 | O | \| | \| | \| | 0.58 |
| 142.417 | 0.00 | 0.14 | 0.401 | O | \| | \| | \| | 0.58 |
| 142.500 | 0.00 | 0.14 | 0.400 | O | \| | \| | \| | 0.58 |
| 142.583 | 0.00 | 0.14 | 0.399 | O | \| | \| | \| | 0.58 |
| 142.667 | 0.00 | 0.14 | 0.398 | O | \| | \| | \| | 0.58 |
| 142.750 | 0.00 | 0.14 | 0.397 | O | \| | \| | \| | 0.58 |
| 142.833 | 0.00 | 0.14 | 0.396 | O | \| | \| | \| | 0.57 |
| 142.917 | 0.00 | 0.14 | 0.395 | O | \| | \| | \| | 0.57 |
| 143.000 | 0.00 | 0.14 | 0.394 | O | \| | \| | \| | 0.57 |
| 143.083 | 0.00 | 0.14 | 0.393 | O | \| | \| | \| | 0.57 |
| 143.167 | 0.00 | 0.14 | 0.392 | O | \| | \| | \| | 0.57 |
| 143.250 | 0.00 | 0.14 | 0.391 | O | \| | \| | \| | 0.57 |
| 143.333 | 0.00 | 0.14 | 0.390 | O | \| | \| | \| | 0.57 |
| 143.417 | 0.00 | 0.14 | 0.390 | O | \| | \| | \| | 0.56 |
| 143.500 | 0.00 | 0.14 | 0.389 | O | \| | \| | \| | 0.56 |
| 143.583 | 0.00 | 0.13 | 0.388 | O | \| | \| | \| | 0.56 |
| 143.667 | 0.00 | 0.13 | 0.387 | O | \| | \| | \| | 0.56 |
| 143.750 | 0.00 | 0.13 | 0.386 | O | \| | \| | \| | 0.56 |
| 143.833 | 0.00 | 0.13 | 0.385 | O | \| | \| | \| | 0.56 |
| 143.917 | 0.00 | 0.13 | 0.384 | O | \| | \| | \| | 0.56 |
| 144.000 | 0.00 | 0.13 | 0.383 | O | \| | \| | \| | 0.56 |
| 144.083 | 0.00 | 0.13 | 0.382 | O | \| | \| | \| | 0.55 |
| 144.167 | 0.00 | 0.13 | 0.381 | O | \| | \| | \| | 0.55 |
| 144.250 | 0.00 | 0.13 | 0.380 | O | \| | \| | \| | 0.55 |
| 144.333 | 0.00 | 0.13 | 0.379 | O | \| | \| | \| | 0.55 |
| 144.417 | 0.00 | 0.13 | 0.378 | O | \| | \| | \| | 0.55 |
| 144.500 | 0.00 | 0.13 | 0.378 | O | \| | \| | \| | 0.55 |
| 144.583 | 0.00 | 0.13 | 0.377 | O | \| | \| | \| | 0.55 |
| 144.667 | 0.00 | 0.13 | 0.376 | O | \| | \| | \| | 0.54 |
| 144.750 | 0.00 | 0.13 | 0.375 | O | \| | \| | \| | 0.54 |
| 144.833 | 0.00 | 0.13 | 0.374 | O | \| | \| | \| | 0.54 |
| 144.917 | 0.00 | 0.13 | 0.373 | O | \| | \| | \| | 0.54 |
| 145.000 | 0.00 | 0.13 | 0.372 | O | \| | \| | \| | 0.54 |
| 145.083 | 0.00 | 0.13 | 0.371 | O | \| | \| | \| | 0.54 |
| 145.167 | 0.00 | 0.13 | 0.370 | O | \| | \| | \| | 0.54 |
| 145.250 | 0.00 | 0.13 | 0.370 | O | \| | \| | \| | 0.54 |
| 145.333 | 0.00 | 0.13 | 0.369 | O | \| | \| | \| | 0.53 |
| 145.417 | 0.00 | 0.13 | 0.368 | O | \| | \| | \| | 0.53 |
| 145.500 | 0.00 | 0.13 | 0.367 | O | \| | \| | \| | 0.53 |
| 145.583 | 0.00 | 0.13 | 0.366 | O | \| | \| | \| | 0.53 |
| 145.667 | 0.00 | 0.13 | 0.365 | O | \| | \| | \| | 0.53 |
| 145.750 | 0.00 | 0.13 | 0.364 | O | \| | \| | \| | 0.53 |
| 145.833 | 0.00 | 0.13 | 0.363 | O | \| | \| | \| | 0.53 |
| 145.917 | 0.00 | 0.13 | 0.363 | O | \| | \| | \| | 0.53 |
| 146.000 | 0.00 | 0.13 | 0.362 | O | \| | \| | \| | 0.52 |
| 146.083 | 0.00 | 0.13 | 0.361 | O | \| | \| | \| | 0.52 |
| 146.167 | 0.00 | 0.13 | 0.360 | O | \| | \| | \| | 0.52 |
| 146.250 | 0.00 | 0.12 | 0.359 | O | \| | \| | \| | 0.52 |
| 146.333 | 0.00 | 0.12 | 0.358 | O | \| | \| | \| | 0.52 |
| 146.417 | 0.00 | 0.12 | 0.357 | O | \| | \| | \| | 0.52 |
| 146.500 | 0.00 | 0.12 | 0.356 | O | \| | \| | \| | 0.52 |
| 146.583 | 0.00 | 0.12 | 0.356 | O | \| | \| | \| | 0.52 |
| 146.667 | 0.00 | 0.12 | 0.355 | O | \| | \| | \| | 0.51 |
| 146.750 | 0.00 | 0.12 | 0.354 | O | \| | \| | \| | 0.51 |
| 146.833 | 0.00 | 0.12 | 0.353 | O | \| | \| | \| | 0.51 |
| 146.917 | 0.00 | 0.12 | 0.352 | O | \| | \| | \| | 0.51 |
| 147.000 | 0.00 | 0.12 | 0.351 | O | \| | \| | \| | 0.51 |
| 147.083 | 0.00 | 0.12 | 0.351 | O | \| | \| | \| | 0.51 |
| 147.167 | 0.00 | 0.12 | 0.350 | O | \| | \| | \| | 0.51 |
| 147.250 | 0.00 | 0.12 | 0.349 | O | \| | \| | \| | 0.51 |
| 147.333 | 0.00 | 0.12 | 0.348 | O | \| | \| | \| | 0.50 |
| 147.417 | 0.00 | 0.12 | 0.347 | O | \| | \| | \| | 0.50 |
| 147.500 | 0.00 | 0.12 | 0.346 | O | \| | \| | \| | 0.50 |
| 147.583 | 0.00 | 0.12 | 0.346 | O | \| | \| | \| | 0.50 |
| 147.667 | 0.00 | 0.12 | 0.345 | O | \| | \| | \| | 0.50 |
| 147.750 | 0.00 | 0.12 | 0.344 | O | \| | \| | \| | 0.50 |
| 147.833 | 0.00 | 0.12 | 0.343 | O | \| | \| | \| | 0.50 |
| 147.917 | 0.00 | 0.12 | 0.342 | O | \| | \| | \| | 0.50 |
| 148.000 | 0.00 | 0.12 | 0.341 | O | \| | \| | \| | 0.49 |
| 148.083 | 0.00 | 0.12 | 0.341 | O | \| | \| | \| | 0.49 |
| 148.167 | 0.00 | 0.12 | 0.340 | O | \| | \| | \| | 0.49 |

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|---|---|---|---|---|---|---|---|---|---|
| 148.250 | 0.00 | 0.12 | 0.339 | O | \| | \| | \| | \| | 0.49 |
| 148.333 | 0.00 | 0.12 | 0.338 | O | \| | \| | \| | \| | 0.49 |
| 148.417 | 0.00 | 0.12 | 0.337 | O | \| | \| | \| | \| | 0.49 |
| 148.500 | 0.00 | 0.12 | 0.337 | O | \| | \| | \| | \| | 0.49 |
| 148.583 | 0.00 | 0.12 | 0.336 | O | \| | \| | \| | \| | 0.49 |
| 148.667 | 0.00 | 0.12 | 0.335 | O | \| | \| | \| | \| | 0.49 |
| 148.750 | 0.00 | 0.12 | 0.334 | O | \| | \| | \| | \| | 0.48 |
| 148.833 | 0.00 | 0.12 | 0.333 | O | \| | \| | \| | \| | 0.48 |
| 148.917 | 0.00 | 0.12 | 0.333 | O | \| | \| | \| | \| | 0.48 |
| 149.000 | 0.00 | 0.12 | 0.332 | O | \| | \| | \| | \| | 0.48 |
| 149.083 | 0.00 | 0.12 | 0.331 | O | \| | \| | \| | \| | 0.48 |
| 149.167 | 0.00 | 0.11 | 0.330 | O | \| | \| | \| | \| | 0.48 |
| 149.250 | 0.00 | 0.11 | 0.329 | O | \| | \| | \| | \| | 0.48 |
| 149.333 | 0.00 | 0.11 | 0.329 | O | \| | \| | \| | \| | 0.48 |
| 149.417 | 0.00 | 0.11 | 0.328 | O | \| | \| | \| | \| | 0.48 |
| 149.500 | 0.00 | 0.11 | 0.327 | O | \| | \| | \| | \| | 0.47 |
| 149.583 | 0.00 | 0.11 | 0.326 | O | \| | \| | \| | \| | 0.47 |
| 149.667 | 0.00 | 0.11 | 0.325 | O | \| | \| | \| | \| | 0.47 |
| 149.750 | 0.00 | 0.11 | 0.325 | O | \| | \| | \| | \| | 0.47 |
| 149.833 | 0.00 | 0.11 | 0.324 | O | \| | \| | \| | \| | 0.47 |
| 149.917 | 0.00 | 0.11 | 0.323 | O | \| | \| | \| | \| | 0.47 |
| 150.000 | 0.00 | 0.11 | 0.322 | O | \| | \| | \| | \| | 0.47 |
| 150.083 | 0.00 | 0.11 | 0.322 | O | \| | \| | \| | \| | 0.47 |
| 150.167 | 0.00 | 0.11 | 0.321 | O | \| | \| | \| | \| | 0.46 |
| 150.250 | 0.00 | 0.11 | 0.320 | O | \| | \| | \| | \| | 0.46 |
| 150.333 | 0.00 | 0.11 | 0.319 | O | \| | \| | \| | \| | 0.46 |
| 150.417 | 0.00 | 0.11 | 0.319 | O | \| | \| | \| | \| | 0.46 |
| 150.500 | 0.00 | 0.11 | 0.318 | O | \| | \| | \| | \| | 0.46 |
| 150.583 | 0.00 | 0.11 | 0.317 | O | \| | \| | \| | \| | 0.46 |
| 150.667 | 0.00 | 0.11 | 0.316 | O | \| | \| | \| | \| | 0.46 |
| 150.750 | 0.00 | 0.11 | 0.315 | O | \| | \| | \| | \| | 0.46 |
| 150.833 | 0.00 | 0.11 | 0.315 | O | \| | \| | \| | \| | 0.46 |
| 150.917 | 0.00 | 0.11 | 0.314 | O | \| | \| | \| | \| | 0.46 |
| 151.000 | 0.00 | 0.11 | 0.313 | O | \| | \| | \| | \| | 0.45 |
| 151.083 | 0.00 | 0.11 | 0.312 | O | \| | \| | \| | \| | 0.45 |
| 151.167 | 0.00 | 0.11 | 0.312 | O | \| | \| | \| | \| | 0.45 |
| 151.250 | 0.00 | 0.11 | 0.311 | O | \| | \| | \| | \| | 0.45 |
| 151.333 | 0.00 | 0.11 | 0.310 | O | \| | \| | \| | \| | 0.45 |
| 151.417 | 0.00 | 0.11 | 0.310 | O | \| | \| | \| | \| | 0.45 |
| 151.500 | 0.00 | 0.11 | 0.309 | O | \| | \| | \| | \| | 0.45 |
| 151.583 | 0.00 | 0.11 | 0.308 | O | \| | \| | \| | \| | 0.45 |
| 151.667 | 0.00 | 0.11 | 0.307 | O | \| | \| | \| | \| | 0.45 |
| 151.750 | 0.00 | 0.11 | 0.307 | O | \| | \| | \| | \| | 0.44 |
| 151.833 | 0.00 | 0.11 | 0.306 | O | \| | \| | \| | \| | 0.44 |
| 151.917 | 0.00 | 0.11 | 0.305 | O | \| | \| | \| | \| | 0.44 |
| 152.000 | 0.00 | 0.11 | 0.304 | O | \| | \| | \| | \| | 0.44 |
| 152.083 | 0.00 | 0.11 | 0.304 | O | \| | \| | \| | \| | 0.44 |
| 152.167 | 0.00 | 0.11 | 0.303 | O | \| | \| | \| | \| | 0.44 |
| 152.250 | 0.00 | 0.11 | 0.302 | O | \| | \| | \| | \| | 0.44 |
| 152.333 | 0.00 | 0.10 | 0.301 | O | \| | \| | \| | \| | 0.44 |
| 152.417 | 0.00 | 0.10 | 0.301 | O | \| | \| | \| | \| | 0.44 |
| 152.500 | 0.00 | 0.10 | 0.300 | O | \| | \| | \| | \| | 0.43 |
| 152.583 | 0.00 | 0.10 | 0.299 | O | \| | \| | \| | \| | 0.43 |
| 152.667 | 0.00 | 0.10 | 0.299 | O | \| | \| | \| | \| | 0.43 |
| 152.750 | 0.00 | 0.10 | 0.298 | O | \| | \| | \| | \| | 0.43 |
| 152.833 | 0.00 | 0.10 | 0.297 | O | \| | \| | \| | \| | 0.43 |
| 152.917 | 0.00 | 0.10 | 0.296 | O | \| | \| | \| | \| | 0.43 |
| 153.000 | 0.00 | 0.10 | 0.296 | O | \| | \| | \| | \| | 0.43 |
| 153.083 | 0.00 | 0.10 | 0.295 | O | \| | \| | \| | \| | 0.43 |
| 153.167 | 0.00 | 0.10 | 0.294 | O | \| | \| | \| | \| | 0.43 |
| 153.250 | 0.00 | 0.10 | 0.294 | O | \| | \| | \| | \| | 0.43 |
| 153.333 | 0.00 | 0.10 | 0.293 | O | \| | \| | \| | \| | 0.42 |
| 153.417 | 0.00 | 0.10 | 0.292 | O | \| | \| | \| | \| | 0.42 |
| 153.500 | 0.00 | 0.10 | 0.292 | O | \| | \| | \| | \| | 0.42 |
| 153.583 | 0.00 | 0.10 | 0.291 | O | \| | \| | \| | \| | 0.42 |
| 153.667 | 0.00 | 0.10 | 0.290 | O | \| | \| | \| | \| | 0.42 |
| 153.750 | 0.00 | 0.10 | 0.289 | O | \| | \| | \| | \| | 0.42 |
| 153.833 | 0.00 | 0.10 | 0.289 | O | \| | \| | \| | \| | 0.42 |
| 153.917 | 0.00 | 0.10 | 0.288 | O | \| | \| | \| | \| | 0.42 |
| 154.000 | 0.00 | 0.10 | 0.287 | O | \| | \| | \| | \| | 0.42 |
| 154.083 | 0.00 | 0.10 | 0.287 | O | \| | \| | \| | \| | 0.42 |
| 154.167 | 0.00 | 0.10 | 0.286 | O | \| | \| | \| | \| | 0.41 |
| 154.250 | 0.00 | 0.10 | 0.285 | O | \| | \| | \| | \| | 0.41 |
| 154.333 | 0.00 | 0.10 | 0.285 | O | \| | \| | \| | \| | 0.41 |

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|---|---|---|---|---|---|---|---|---|---|
| 154.417 | 0.00 | 0.10 | 0.284 | O | \| | \| | \| | \| | 0.41 |
| 154.500 | 0.00 | 0.10 | 0.283 | O | \| | \| | \| | \| | 0.41 |
| 154.583 | 0.00 | 0.10 | 0.283 | O | \| | \| | \| | \| | 0.41 |
| 154.667 | 0.00 | 0.10 | 0.282 | O | \| | \| | \| | \| | 0.41 |
| 154.750 | 0.00 | 0.10 | 0.281 | O | \| | \| | \| | \| | 0.41 |
| 154.833 | 0.00 | 0.10 | 0.281 | O | \| | \| | \| | \| | 0.41 |
| 154.917 | 0.00 | 0.10 | 0.280 | O | \| | \| | \| | \| | 0.41 |
| 155.000 | 0.00 | 0.10 | 0.279 | O | \| | \| | \| | \| | 0.40 |
| 155.083 | 0.00 | 0.10 | 0.279 | O | \| | \| | \| | \| | 0.40 |
| 155.167 | 0.00 | 0.10 | 0.278 | O | \| | \| | \| | \| | 0.40 |
| 155.250 | 0.00 | 0.10 | 0.277 | O | \| | \| | \| | \| | 0.40 |
| 155.333 | 0.00 | 0.10 | 0.277 | O | \| | \| | \| | \| | 0.40 |
| 155.417 | 0.00 | 0.10 | 0.276 | O | \| | \| | \| | \| | 0.40 |
| 155.500 | 0.00 | 0.10 | 0.275 | O | \| | \| | \| | \| | 0.40 |
| 155.583 | 0.00 | 0.10 | 0.275 | O | \| | \| | \| | \| | 0.40 |
| 155.667 | 0.00 | 0.10 | 0.274 | O | \| | \| | \| | \| | 0.40 |
| 155.750 | 0.00 | 0.10 | 0.273 | O | \| | \| | \| | \| | 0.40 |
| 155.833 | 0.00 | 0.09 | 0.273 | O | \| | \| | \| | \| | 0.40 |
| 155.917 | 0.00 | 0.09 | 0.272 | O | \| | \| | \| | \| | 0.39 |
| 156.000 | 0.00 | 0.09 | 0.271 | O | \| | \| | \| | \| | 0.39 |
| 156.083 | 0.00 | 0.09 | 0.271 | O | \| | \| | \| | \| | 0.39 |
| 156.167 | 0.00 | 0.09 | 0.270 | O | \| | \| | \| | \| | 0.39 |
| 156.250 | 0.00 | 0.09 | 0.269 | O | \| | \| | \| | \| | 0.39 |
| 156.333 | 0.00 | 0.09 | 0.269 | O | \| | \| | \| | \| | 0.39 |
| 156.417 | 0.00 | 0.09 | 0.268 | O | \| | \| | \| | \| | 0.39 |
| 156.500 | 0.00 | 0.09 | 0.267 | O | \| | \| | \| | \| | 0.39 |
| 156.583 | 0.00 | 0.09 | 0.267 | O | \| | \| | \| | \| | 0.39 |
| 156.667 | 0.00 | 0.09 | 0.266 | O | \| | \| | \| | \| | 0.39 |
| 156.750 | 0.00 | 0.09 | 0.266 | O | \| | \| | \| | \| | 0.38 |
| 156.833 | 0.00 | 0.09 | 0.265 | O | \| | \| | \| | \| | 0.38 |
| 156.917 | 0.00 | 0.09 | 0.264 | O | \| | \| | \| | \| | 0.38 |
| 157.000 | 0.00 | 0.09 | 0.264 | O | \| | \| | \| | \| | 0.38 |
| 157.083 | 0.00 | 0.09 | 0.263 | O | \| | \| | \| | \| | 0.38 |
| 157.167 | 0.00 | 0.09 | 0.262 | O | \| | \| | \| | \| | 0.38 |
| 157.250 | 0.00 | 0.09 | 0.262 | O | \| | \| | \| | \| | 0.38 |
| 157.333 | 0.00 | 0.09 | 0.261 | O | \| | \| | \| | \| | 0.38 |
| 157.417 | 0.00 | 0.09 | 0.260 | O | \| | \| | \| | \| | 0.38 |
| 157.500 | 0.00 | 0.09 | 0.260 | O | \| | \| | \| | \| | 0.38 |
| 157.583 | 0.00 | 0.09 | 0.259 | O | \| | \| | \| | \| | 0.38 |
| 157.667 | 0.00 | 0.09 | 0.259 | O | \| | \| | \| | \| | 0.37 |
| 157.750 | 0.00 | 0.09 | 0.258 | O | \| | \| | \| | \| | 0.37 |
| 157.833 | 0.00 | 0.09 | 0.257 | O | \| | \| | \| | \| | 0.37 |
| 157.917 | 0.00 | 0.09 | 0.257 | O | \| | \| | \| | \| | 0.37 |
| 158.000 | 0.00 | 0.09 | 0.256 | O | \| | \| | \| | \| | 0.37 |
| 158.083 | 0.00 | 0.09 | 0.256 | O | \| | \| | \| | \| | 0.37 |
| 158.167 | 0.00 | 0.09 | 0.255 | O | \| | \| | \| | \| | 0.37 |
| 158.250 | 0.00 | 0.09 | 0.254 | O | \| | \| | \| | \| | 0.37 |
| 158.333 | 0.00 | 0.09 | 0.254 | O | \| | \| | \| | \| | 0.37 |
| 158.417 | 0.00 | 0.09 | 0.253 | O | \| | \| | \| | \| | 0.37 |
| 158.500 | 0.00 | 0.09 | 0.252 | O | \| | \| | \| | \| | 0.37 |
| 158.583 | 0.00 | 0.09 | 0.252 | O | \| | \| | \| | \| | 0.37 |
| 158.667 | 0.00 | 0.09 | 0.251 | O | \| | \| | \| | \| | 0.36 |
| 158.750 | 0.00 | 0.09 | 0.251 | O | \| | \| | \| | \| | 0.36 |
| 158.833 | 0.00 | 0.09 | 0.250 | O | \| | \| | \| | \| | 0.36 |
| 158.917 | 0.00 | 0.09 | 0.249 | O | \| | \| | \| | \| | 0.36 |
| 159.000 | 0.00 | 0.09 | 0.249 | O | \| | \| | \| | \| | 0.36 |
| 159.083 | 0.00 | 0.09 | 0.248 | O | \| | \| | \| | \| | 0.36 |
| 159.167 | 0.00 | 0.09 | 0.248 | O | \| | \| | \| | \| | 0.36 |
| 159.250 | 0.00 | 0.09 | 0.247 | O | \| | \| | \| | \| | 0.36 |
| 159.333 | 0.00 | 0.09 | 0.247 | O | \| | \| | \| | \| | 0.36 |
| 159.417 | 0.00 | 0.09 | 0.246 | O | \| | \| | \| | \| | 0.36 |
| 159.500 | 0.00 | 0.09 | 0.245 | O | \| | \| | \| | \| | 0.36 |
| 159.583 | 0.00 | 0.09 | 0.245 | O | \| | \| | \| | \| | 0.35 |
| 159.667 | 0.00 | 0.08 | 0.244 | O | \| | \| | \| | \| | 0.35 |
| 159.750 | 0.00 | 0.08 | 0.244 | O | \| | \| | \| | \| | 0.35 |
| 159.833 | 0.00 | 0.08 | 0.243 | O | \| | \| | \| | \| | 0.35 |
| 159.917 | 0.00 | 0.08 | 0.242 | O | \| | \| | \| | \| | 0.35 |
| 160.000 | 0.00 | 0.08 | 0.242 | O | \| | \| | \| | \| | 0.35 |
| 160.083 | 0.00 | 0.08 | 0.241 | O | \| | \| | \| | \| | 0.35 |
| 160.167 | 0.00 | 0.08 | 0.241 | O | \| | \| | \| | \| | 0.35 |
| 160.250 | 0.00 | 0.08 | 0.240 | O | \| | \| | \| | \| | 0.35 |
| 160.333 | 0.00 | 0.08 | 0.240 | O | \| | \| | \| | \| | 0.35 |
| 160.417 | 0.00 | 0.08 | 0.239 | O | \| | \| | \| | \| | 0.35 |
| 160.500 | 0.00 | 0.08 | 0.238 | O | \| | \| | \| | \| | 0.35 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 160.583 | 0.00 | 0.08 | 0.238 | O | \| | \| | \| | 0.34 |
| 160.667 | 0.00 | 0.08 | 0.237 | O | \| | \| | \| | 0.34 |
| 160.750 | 0.00 | 0.08 | 0.237 | O | \| | \| | \| | 0.34 |
| 160.833 | 0.00 | 0.08 | 0.236 | O | \| | \| | \| | 0.34 |
| 160.917 | 0.00 | 0.08 | 0.236 | O | \| | \| | \| | 0.34 |
| 161.000 | 0.00 | 0.08 | 0.235 | O | \| | \| | \| | 0.34 |
| 161.083 | 0.00 | 0.08 | 0.234 | O | \| | \| | \| | 0.34 |
| 161.167 | 0.00 | 0.08 | 0.234 | O | \| | \| | \| | 0.34 |
| 161.250 | 0.00 | 0.08 | 0.233 | O | \| | \| | \| | 0.34 |
| 161.333 | 0.00 | 0.08 | 0.233 | O | \| | \| | \| | 0.34 |
| 161.417 | 0.00 | 0.08 | 0.232 | O | \| | \| | \| | 0.34 |
| 161.500 | 0.00 | 0.08 | 0.232 | O | \| | \| | \| | 0.34 |
| 161.583 | 0.00 | 0.08 | 0.231 | O | \| | \| | \| | 0.33 |
| 161.667 | 0.00 | 0.08 | 0.231 | O | \| | \| | \| | 0.33 |
| 161.750 | 0.00 | 0.08 | 0.230 | O | \| | \| | \| | 0.33 |
| 161.833 | 0.00 | 0.08 | 0.229 | O | \| | \| | \| | 0.33 |
| 161.917 | 0.00 | 0.08 | 0.229 | O | \| | \| | \| | 0.33 |
| 162.000 | 0.00 | 0.08 | 0.228 | O | \| | \| | \| | 0.33 |
| 162.083 | 0.00 | 0.08 | 0.228 | O | \| | \| | \| | 0.33 |
| 162.167 | 0.00 | 0.08 | 0.227 | O | \| | \| | \| | 0.33 |
| 162.250 | 0.00 | 0.08 | 0.227 | O | \| | \| | \| | 0.33 |
| 162.333 | 0.00 | 0.08 | 0.226 | O | \| | \| | \| | 0.33 |
| 162.417 | 0.00 | 0.08 | 0.226 | O | \| | \| | \| | 0.33 |
| 162.500 | 0.00 | 0.08 | 0.225 | O | \| | \| | \| | 0.33 |
| 162.583 | 0.00 | 0.08 | 0.225 | O | \| | \| | \| | 0.33 |
| 162.667 | 0.00 | 0.08 | 0.224 | O | \| | \| | \| | 0.32 |
| 162.750 | 0.00 | 0.08 | 0.223 | O | \| | \| | \| | 0.32 |
| 162.833 | 0.00 | 0.08 | 0.223 | O | \| | \| | \| | 0.32 |
| 162.917 | 0.00 | 0.08 | 0.222 | O | \| | \| | \| | 0.32 |
| 163.000 | 0.00 | 0.08 | 0.222 | O | \| | \| | \| | 0.32 |
| 163.083 | 0.00 | 0.08 | 0.221 | O | \| | \| | \| | 0.32 |
| 163.167 | 0.00 | 0.08 | 0.221 | O | \| | \| | \| | 0.32 |
| 163.250 | 0.00 | 0.08 | 0.220 | O | \| | \| | \| | 0.32 |
| 163.333 | 0.00 | 0.08 | 0.220 | O | \| | \| | \| | 0.32 |
| 163.417 | 0.00 | 0.08 | 0.219 | O | \| | \| | \| | 0.32 |
| 163.500 | 0.00 | 0.08 | 0.219 | O | \| | \| | \| | 0.32 |
| 163.583 | 0.00 | 0.08 | 0.218 | O | \| | \| | \| | 0.32 |
| 163.667 | 0.00 | 0.08 | 0.218 | O | \| | \| | \| | 0.32 |
| 163.750 | 0.00 | 0.08 | 0.217 | O | \| | \| | \| | 0.31 |
| 163.833 | 0.00 | 0.08 | 0.217 | O | \| | \| | \| | 0.31 |
| 163.917 | 0.00 | 0.08 | 0.216 | O | \| | \| | \| | 0.31 |
| 164.000 | 0.00 | 0.07 | 0.216 | O | \| | \| | \| | 0.31 |
| 164.083 | 0.00 | 0.07 | 0.215 | O | \| | \| | \| | 0.31 |
| 164.167 | 0.00 | 0.07 | 0.215 | O | \| | \| | \| | 0.31 |
| 164.250 | 0.00 | 0.07 | 0.214 | O | \| | \| | \| | 0.31 |
| 164.333 | 0.00 | 0.07 | 0.214 | O | \| | \| | \| | 0.31 |
| 164.417 | 0.00 | 0.07 | 0.213 | O | \| | \| | \| | 0.31 |
| 164.500 | 0.00 | 0.07 | 0.212 | O | \| | \| | \| | 0.31 |
| 164.583 | 0.00 | 0.07 | 0.212 | O | \| | \| | \| | 0.31 |
| 164.667 | 0.00 | 0.07 | 0.211 | O | \| | \| | \| | 0.31 |
| 164.750 | 0.00 | 0.07 | 0.211 | O | \| | \| | \| | 0.31 |
| 164.833 | 0.00 | 0.07 | 0.210 | O | \| | \| | \| | 0.31 |
| 164.917 | 0.00 | 0.07 | 0.210 | O | \| | \| | \| | 0.30 |
| 165.000 | 0.00 | 0.07 | 0.209 | O | \| | \| | \| | 0.30 |
| 165.083 | 0.00 | 0.07 | 0.209 | O | \| | \| | \| | 0.30 |
| 165.167 | 0.00 | 0.07 | 0.208 | O | \| | \| | \| | 0.30 |
| 165.250 | 0.00 | 0.07 | 0.208 | O | \| | \| | \| | 0.30 |
| 165.333 | 0.00 | 0.07 | 0.207 | O | \| | \| | \| | 0.30 |
| 165.417 | 0.00 | 0.07 | 0.207 | O | \| | \| | \| | 0.30 |
| 165.500 | 0.00 | 0.07 | 0.206 | O | \| | \| | \| | 0.30 |
| 165.583 | 0.00 | 0.07 | 0.206 | O | \| | \| | \| | 0.30 |
| 165.667 | 0.00 | 0.07 | 0.205 | O | \| | \| | \| | 0.30 |
| 165.750 | 0.00 | 0.07 | 0.205 | O | \| | \| | \| | 0.30 |
| 165.833 | 0.00 | 0.07 | 0.205 | O | \| | \| | \| | 0.30 |
| 165.917 | 0.00 | 0.07 | 0.204 | O | \| | \| | \| | 0.30 |
| 166.000 | 0.00 | 0.07 | 0.204 | O | \| | \| | \| | 0.29 |
| 166.083 | 0.00 | 0.07 | 0.203 | O | \| | \| | \| | 0.29 |
| 166.167 | 0.00 | 0.07 | 0.203 | O | \| | \| | \| | 0.29 |
| 166.250 | 0.00 | 0.07 | 0.202 | O | \| | \| | \| | 0.29 |
| 166.333 | 0.00 | 0.07 | 0.202 | O | \| | \| | \| | 0.29 |
| 166.417 | 0.00 | 0.07 | 0.201 | O | \| | \| | \| | 0.29 |
| 166.500 | 0.00 | 0.07 | 0.201 | O | \| | \| | \| | 0.29 |
| 166.583 | 0.00 | 0.07 | 0.200 | O | \| | \| | \| | 0.29 |
| 166.667 | 0.00 | 0.07 | 0.200 | O | \| | \| | \| | 0.29 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 166.750 | 0.00 | 0.07 | 0.199 | O | \| | \| | \| | \| | 0.29 |
| 166.833 | 0.00 | 0.07 | 0.199 | O | \| | \| | \| | \| | 0.29 |
| 166.917 | 0.00 | 0.07 | 0.198 | O | \| | \| | \| | \| | 0.29 |
| 167.000 | 0.00 | 0.07 | 0.198 | O | \| | \| | \| | \| | 0.29 |
| 167.083 | 0.00 | 0.07 | 0.197 | O | \| | \| | \| | \| | 0.29 |
| 167.167 | 0.00 | 0.07 | 0.197 | O | \| | \| | \| | \| | 0.29 |
| 167.250 | 0.00 | 0.07 | 0.196 | O | \| | \| | \| | \| | 0.28 |
| 167.333 | 0.00 | 0.07 | 0.196 | O | \| | \| | \| | \| | 0.28 |
| 167.417 | 0.00 | 0.07 | 0.195 | O | \| | \| | \| | \| | 0.28 |
| 167.500 | 0.00 | 0.07 | 0.195 | O | \| | \| | \| | \| | 0.28 |
| 167.583 | 0.00 | 0.07 | 0.194 | O | \| | \| | \| | \| | 0.28 |
| 167.667 | 0.00 | 0.07 | 0.194 | O | \| | \| | \| | \| | 0.28 |
| 167.750 | 0.00 | 0.07 | 0.194 | O | \| | \| | \| | \| | 0.28 |
| 167.833 | 0.00 | 0.07 | 0.193 | O | \| | \| | \| | \| | 0.28 |
| 167.917 | 0.00 | 0.07 | 0.193 | O | \| | \| | \| | \| | 0.28 |
| 168.000 | 0.00 | 0.07 | 0.192 | O | \| | \| | \| | \| | 0.28 |
| 168.083 | 0.00 | 0.07 | 0.192 | O | \| | \| | \| | \| | 0.28 |
| 168.167 | 0.00 | 0.07 | 0.191 | O | \| | \| | \| | \| | 0.28 |
| 168.250 | 0.00 | 0.07 | 0.191 | O | \| | \| | \| | \| | 0.28 |
| 168.333 | 0.00 | 0.07 | 0.190 | O | \| | \| | \| | \| | 0.28 |
| 168.417 | 0.00 | 0.07 | 0.190 | O | \| | \| | \| | \| | 0.28 |
| 168.500 | 0.00 | 0.07 | 0.189 | O | \| | \| | \| | \| | 0.27 |
| 168.583 | 0.00 | 0.07 | 0.189 | O | \| | \| | \| | \| | 0.27 |
| 168.667 | 0.00 | 0.07 | 0.189 | O | \| | \| | \| | \| | 0.27 |
| 168.750 | 0.00 | 0.07 | 0.188 | O | \| | \| | \| | \| | 0.27 |
| 168.833 | 0.00 | 0.07 | 0.188 | O | \| | \| | \| | \| | 0.27 |
| 168.917 | 0.00 | 0.07 | 0.187 | O | \| | \| | \| | \| | 0.27 |
| 169.000 | 0.00 | 0.06 | 0.187 | O | \| | \| | \| | \| | 0.27 |
| 169.083 | 0.00 | 0.06 | 0.186 | O | \| | \| | \| | \| | 0.27 |
| 169.167 | 0.00 | 0.06 | 0.186 | O | \| | \| | \| | \| | 0.27 |
| 169.250 | 0.00 | 0.06 | 0.185 | O | \| | \| | \| | \| | 0.27 |
| 169.333 | 0.00 | 0.06 | 0.185 | O | \| | \| | \| | \| | 0.27 |
| 169.417 | 0.00 | 0.06 | 0.184 | O | \| | \| | \| | \| | 0.27 |
| 169.500 | 0.00 | 0.06 | 0.184 | O | \| | \| | \| | \| | 0.27 |
| 169.583 | 0.00 | 0.06 | 0.184 | O | \| | \| | \| | \| | 0.27 |
| 169.667 | 0.00 | 0.06 | 0.183 | O | \| | \| | \| | \| | 0.27 |
| 169.750 | 0.00 | 0.06 | 0.183 | O | \| | \| | \| | \| | 0.26 |
| 169.833 | 0.00 | 0.06 | 0.182 | O | \| | \| | \| | \| | 0.26 |
| 169.917 | 0.00 | 0.06 | 0.182 | O | \| | \| | \| | \| | 0.26 |
| 170.000 | 0.00 | 0.06 | 0.181 | O | \| | \| | \| | \| | 0.26 |
| 170.083 | 0.00 | 0.06 | 0.181 | O | \| | \| | \| | \| | 0.26 |
| 170.167 | 0.00 | 0.06 | 0.181 | O | \| | \| | \| | \| | 0.26 |
| 170.250 | 0.00 | 0.06 | 0.180 | O | \| | \| | \| | \| | 0.26 |
| 170.333 | 0.00 | 0.06 | 0.180 | O | \| | \| | \| | \| | 0.26 |
| 170.417 | 0.00 | 0.06 | 0.179 | O | \| | \| | \| | \| | 0.26 |
| 170.500 | 0.00 | 0.06 | 0.179 | O | \| | \| | \| | \| | 0.26 |
| 170.583 | 0.00 | 0.06 | 0.178 | O | \| | \| | \| | \| | 0.26 |
| 170.667 | 0.00 | 0.06 | 0.178 | O | \| | \| | \| | \| | 0.26 |
| 170.750 | 0.00 | 0.06 | 0.178 | O | \| | \| | \| | \| | 0.26 |
| 170.833 | 0.00 | 0.06 | 0.177 | O | \| | \| | \| | \| | 0.26 |
| 170.917 | 0.00 | 0.06 | 0.177 | O | \| | \| | \| | \| | 0.26 |
| 171.000 | 0.00 | 0.06 | 0.176 | O | \| | \| | \| | \| | 0.26 |
| 171.083 | 0.00 | 0.06 | 0.176 | O | \| | \| | \| | \| | 0.25 |
| 171.167 | 0.00 | 0.06 | 0.175 | O | \| | \| | \| | \| | 0.25 |
| 171.250 | 0.00 | 0.06 | 0.175 | O | \| | \| | \| | \| | 0.25 |
| 171.333 | 0.00 | 0.06 | 0.175 | O | \| | \| | \| | \| | 0.25 |
| 171.417 | 0.00 | 0.06 | 0.174 | O | \| | \| | \| | \| | 0.25 |
| 171.500 | 0.00 | 0.06 | 0.174 | O | \| | \| | \| | \| | 0.25 |
| 171.583 | 0.00 | 0.06 | 0.173 | O | \| | \| | \| | \| | 0.25 |
| 171.667 | 0.00 | 0.06 | 0.173 | O | \| | \| | \| | \| | 0.25 |
| 171.750 | 0.00 | 0.06 | 0.173 | O | \| | \| | \| | \| | 0.25 |
| 171.833 | 0.00 | 0.06 | 0.172 | O | \| | \| | \| | \| | 0.25 |
| 171.917 | 0.00 | 0.06 | 0.172 | O | \| | \| | \| | \| | 0.25 |
| 172.000 | 0.00 | 0.06 | 0.171 | O | \| | \| | \| | \| | 0.25 |
| 172.083 | 0.00 | 0.06 | 0.171 | O | \| | \| | \| | \| | 0.25 |
| 172.167 | 0.00 | 0.06 | 0.170 | O | \| | \| | \| | \| | 0.25 |
| 172.250 | 0.00 | 0.06 | 0.170 | O | \| | \| | \| | \| | 0.25 |
| 172.333 | 0.00 | 0.06 | 0.170 | O | \| | \| | \| | \| | 0.25 |
| 172.417 | 0.00 | 0.06 | 0.169 | O | \| | \| | \| | \| | 0.25 |
| 172.500 | 0.00 | 0.06 | 0.169 | O | \| | \| | \| | \| | 0.24 |
| 172.583 | 0.00 | 0.06 | 0.168 | O | \| | \| | \| | \| | 0.24 |
| 172.667 | 0.00 | 0.06 | 0.168 | O | \| | \| | \| | \| | 0.24 |
| 172.750 | 0.00 | 0.06 | 0.168 | O | \| | \| | \| | \| | 0.24 |
| 172.833 | 0.00 | 0.06 | 0.167 | O | \| | \| | \| | \| | 0.24 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 172.917 | 0.00 | 0.06 | 0.167 | O | \| | \| | \| | \| | 0.24 |
| 173.000 | 0.00 | 0.06 | 0.166 | O | \| | \| | \| | \| | 0.24 |
| 173.083 | 0.00 | 0.06 | 0.166 | O | \| | \| | \| | \| | 0.24 |
| 173.167 | 0.00 | 0.06 | 0.166 | O | \| | \| | \| | \| | 0.24 |
| 173.250 | 0.00 | 0.06 | 0.165 | O | \| | \| | \| | \| | 0.24 |
| 173.333 | 0.00 | 0.06 | 0.165 | O | \| | \| | \| | \| | 0.24 |
| 173.417 | 0.00 | 0.06 | 0.164 | O | \| | \| | \| | \| | 0.24 |
| 173.500 | 0.00 | 0.06 | 0.164 | O | \| | \| | \| | \| | 0.24 |
| 173.583 | 0.00 | 0.06 | 0.164 | O | \| | \| | \| | \| | 0.24 |
| 173.667 | 0.00 | 0.06 | 0.163 | O | \| | \| | \| | \| | 0.24 |
| 173.750 | 0.00 | 0.06 | 0.163 | O | \| | \| | \| | \| | 0.24 |
| 173.833 | 0.00 | 0.06 | 0.162 | O | \| | \| | \| | \| | 0.24 |
| 173.917 | 0.00 | 0.06 | 0.162 | O | \| | \| | \| | \| | 0.23 |
| 174.000 | 0.00 | 0.06 | 0.162 | O | \| | \| | \| | \| | 0.23 |
| 174.083 | 0.00 | 0.06 | 0.161 | O | \| | \| | \| | \| | 0.23 |
| 174.167 | 0.00 | 0.06 | 0.161 | O | \| | \| | \| | \| | 0.23 |
| 174.250 | 0.00 | 0.06 | 0.161 | O | \| | \| | \| | \| | 0.23 |
| 174.333 | 0.00 | 0.06 | 0.160 | O | \| | \| | \| | \| | 0.23 |
| 174.417 | 0.00 | 0.06 | 0.160 | O | \| | \| | \| | \| | 0.23 |
| 174.500 | 0.00 | 0.06 | 0.159 | O | \| | \| | \| | \| | 0.23 |
| 174.583 | 0.00 | 0.06 | 0.159 | O | \| | \| | \| | \| | 0.23 |
| 174.667 | 0.00 | 0.06 | 0.159 | O | \| | \| | \| | \| | 0.23 |
| 174.750 | 0.00 | 0.06 | 0.158 | O | \| | \| | \| | \| | 0.23 |
| 174.833 | 0.00 | 0.05 | 0.158 | O | \| | \| | \| | \| | 0.23 |
| 174.917 | 0.00 | 0.05 | 0.158 | O | \| | \| | \| | \| | 0.23 |
| 175.000 | 0.00 | 0.05 | 0.157 | O | \| | \| | \| | \| | 0.23 |
| 175.083 | 0.00 | 0.05 | 0.157 | O | \| | \| | \| | \| | 0.23 |
| 175.167 | 0.00 | 0.05 | 0.156 | O | \| | \| | \| | \| | 0.23 |
| 175.250 | 0.00 | 0.05 | 0.156 | O | \| | \| | \| | \| | 0.23 |
| 175.333 | 0.00 | 0.05 | 0.156 | O | \| | \| | \| | \| | 0.23 |
| 175.417 | 0.00 | 0.05 | 0.155 | O | \| | \| | \| | \| | 0.23 |
| 175.500 | 0.00 | 0.05 | 0.155 | O | \| | \| | \| | \| | 0.22 |
| 175.583 | 0.00 | 0.05 | 0.155 | O | \| | \| | \| | \| | 0.22 |
| 175.667 | 0.00 | 0.05 | 0.154 | O | \| | \| | \| | \| | 0.22 |
| 175.750 | 0.00 | 0.05 | 0.154 | O | \| | \| | \| | \| | 0.22 |
| 175.833 | 0.00 | 0.05 | 0.153 | O | \| | \| | \| | \| | 0.22 |
| 175.917 | 0.00 | 0.05 | 0.153 | O | \| | \| | \| | \| | 0.22 |
| 176.000 | 0.00 | 0.05 | 0.153 | O | \| | \| | \| | \| | 0.22 |
| 176.083 | 0.00 | 0.05 | 0.152 | O | \| | \| | \| | \| | 0.22 |
| 176.167 | 0.00 | 0.05 | 0.152 | O | \| | \| | \| | \| | 0.22 |
| 176.250 | 0.00 | 0.05 | 0.152 | O | \| | \| | \| | \| | 0.22 |
| 176.333 | 0.00 | 0.05 | 0.151 | O | \| | \| | \| | \| | 0.22 |
| 176.417 | 0.00 | 0.05 | 0.151 | O | \| | \| | \| | \| | 0.22 |
| 176.500 | 0.00 | 0.05 | 0.150 | O | \| | \| | \| | \| | 0.22 |
| 176.583 | 0.00 | 0.05 | 0.150 | O | \| | \| | \| | \| | 0.22 |
| 176.667 | 0.00 | 0.05 | 0.150 | O | \| | \| | \| | \| | 0.22 |
| 176.750 | 0.00 | 0.05 | 0.149 | O | \| | \| | \| | \| | 0.22 |
| 176.833 | 0.00 | 0.05 | 0.149 | O | \| | \| | \| | \| | 0.22 |
| 176.917 | 0.00 | 0.05 | 0.149 | O | \| | \| | \| | \| | 0.22 |
| 177.000 | 0.00 | 0.05 | 0.148 | O | \| | \| | \| | \| | 0.21 |
| 177.083 | 0.00 | 0.05 | 0.148 | O | \| | \| | \| | \| | 0.21 |
| 177.167 | 0.00 | 0.05 | 0.148 | O | \| | \| | \| | \| | 0.21 |
| 177.250 | 0.00 | 0.05 | 0.147 | O | \| | \| | \| | \| | 0.21 |
| 177.333 | 0.00 | 0.05 | 0.147 | O | \| | \| | \| | \| | 0.21 |
| 177.417 | 0.00 | 0.05 | 0.147 | O | \| | \| | \| | \| | 0.21 |
| 177.500 | 0.00 | 0.05 | 0.146 | O | \| | \| | \| | \| | 0.21 |
| 177.583 | 0.00 | 0.05 | 0.146 | O | \| | \| | \| | \| | 0.21 |
| 177.667 | 0.00 | 0.05 | 0.146 | O | \| | \| | \| | \| | 0.21 |
| 177.750 | 0.00 | 0.05 | 0.145 | O | \| | \| | \| | \| | 0.21 |
| 177.833 | 0.00 | 0.05 | 0.145 | O | \| | \| | \| | \| | 0.21 |
| 177.917 | 0.00 | 0.05 | 0.144 | O | \| | \| | \| | \| | 0.21 |
| 178.000 | 0.00 | 0.05 | 0.144 | O | \| | \| | \| | \| | 0.21 |
| 178.083 | 0.00 | 0.05 | 0.144 | O | \| | \| | \| | \| | 0.21 |
| 178.167 | 0.00 | 0.05 | 0.143 | O | \| | \| | \| | \| | 0.21 |
| 178.250 | 0.00 | 0.05 | 0.143 | O | \| | \| | \| | \| | 0.21 |
| 178.333 | 0.00 | 0.05 | 0.143 | O | \| | \| | \| | \| | 0.21 |
| 178.417 | 0.00 | 0.05 | 0.142 | O | \| | \| | \| | \| | 0.21 |
| 178.500 | 0.00 | 0.05 | 0.142 | O | \| | \| | \| | \| | 0.21 |
| 178.583 | 0.00 | 0.05 | 0.142 | O | \| | \| | \| | \| | 0.21 |
| 178.667 | 0.00 | 0.05 | 0.141 | O | \| | \| | \| | \| | 0.20 |
| 178.750 | 0.00 | 0.05 | 0.141 | O | \| | \| | \| | \| | 0.20 |
| 178.833 | 0.00 | 0.05 | 0.141 | O | \| | \| | \| | \| | 0.20 |
| 178.917 | 0.00 | 0.05 | 0.140 | O | \| | \| | \| | \| | 0.20 |
| 179.000 | 0.00 | 0.05 | 0.140 | O | \| | \| | \| | \| | 0.20 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 179.083 | 0.00 | 0.05 | 0.140 | O | \| | \| | \| | 0.20 |
| 179.167 | 0.00 | 0.05 | 0.139 | O | \| | \| | \| | 0.20 |
| 179.250 | 0.00 | 0.05 | 0.139 | O | \| | \| | \| | 0.20 |
| 179.333 | 0.00 | 0.05 | 0.139 | O | \| | \| | \| | 0.20 |
| 179.417 | 0.00 | 0.05 | 0.138 | O | \| | \| | \| | 0.20 |
| 179.500 | 0.00 | 0.05 | 0.138 | O | \| | \| | \| | 0.20 |
| 179.583 | 0.00 | 0.05 | 0.138 | O | \| | \| | \| | 0.20 |
| 179.667 | 0.00 | 0.05 | 0.137 | O | \| | \| | \| | 0.20 |
| 179.750 | 0.00 | 0.05 | 0.137 | O | \| | \| | \| | 0.20 |
| 179.833 | 0.00 | 0.05 | 0.137 | O | \| | \| | \| | 0.20 |
| 179.917 | 0.00 | 0.05 | 0.136 | O | \| | \| | \| | 0.20 |
| 180.000 | 0.00 | 0.05 | 0.136 | O | \| | \| | \| | 0.20 |
| 180.083 | 0.00 | 0.05 | 0.136 | O | \| | \| | \| | 0.20 |
| 180.167 | 0.00 | 0.05 | 0.135 | O | \| | \| | \| | 0.20 |
| 180.250 | 0.00 | 0.05 | 0.135 | O | \| | \| | \| | 0.20 |
| 180.333 | 0.00 | 0.05 | 0.135 | O | \| | \| | \| | 0.20 |
| 180.417 | 0.00 | 0.05 | 0.134 | O | \| | \| | \| | 0.19 |
| 180.500 | 0.00 | 0.05 | 0.134 | O | \| | \| | \| | 0.19 |
| 180.583 | 0.00 | 0.05 | 0.134 | O | \| | \| | \| | 0.19 |
| 180.667 | 0.00 | 0.05 | 0.134 | O | \| | \| | \| | 0.19 |
| 180.750 | 0.00 | 0.05 | 0.133 | O | \| | \| | \| | 0.19 |
| 180.833 | 0.00 | 0.05 | 0.133 | O | \| | \| | \| | 0.19 |
| 180.917 | 0.00 | 0.05 | 0.133 | O | \| | \| | \| | 0.19 |
| 181.000 | 0.00 | 0.05 | 0.132 | O | \| | \| | \| | 0.19 |
| 181.083 | 0.00 | 0.05 | 0.132 | O | \| | \| | \| | 0.19 |
| 181.167 | 0.00 | 0.05 | 0.132 | O | \| | \| | \| | 0.19 |
| 181.250 | 0.00 | 0.05 | 0.131 | O | \| | \| | \| | 0.19 |
| 181.333 | 0.00 | 0.05 | 0.131 | O | \| | \| | \| | 0.19 |
| 181.417 | 0.00 | 0.05 | 0.131 | O | \| | \| | \| | 0.19 |
| 181.500 | 0.00 | 0.05 | 0.130 | O | \| | \| | \| | 0.19 |
| 181.583 | 0.00 | 0.05 | 0.130 | O | \| | \| | \| | 0.19 |
| 181.667 | 0.00 | 0.05 | 0.130 | O | \| | \| | \| | 0.19 |
| 181.750 | 0.00 | 0.05 | 0.129 | O | \| | \| | \| | 0.19 |
| 181.833 | 0.00 | 0.04 | 0.129 | O | \| | \| | \| | 0.19 |
| 181.917 | 0.00 | 0.04 | 0.129 | O | \| | \| | \| | 0.19 |
| 182.000 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | 0.19 |
| 182.083 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | 0.19 |
| 182.167 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | 0.19 |
| 182.250 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | 0.18 |
| 182.333 | 0.00 | 0.04 | 0.127 | O | \| | \| | \| | 0.18 |
| 182.417 | 0.00 | 0.04 | 0.127 | O | \| | \| | \| | 0.18 |
| 182.500 | 0.00 | 0.04 | 0.127 | O | \| | \| | \| | 0.18 |
| 182.583 | 0.00 | 0.04 | 0.126 | O | \| | \| | \| | 0.18 |
| 182.667 | 0.00 | 0.04 | 0.126 | O | \| | \| | \| | 0.18 |
| 182.750 | 0.00 | 0.04 | 0.126 | O | \| | \| | \| | 0.18 |
| 182.833 | 0.00 | 0.04 | 0.125 | O | \| | \| | \| | 0.18 |
| 182.917 | 0.00 | 0.04 | 0.125 | O | \| | \| | \| | 0.18 |
| 183.000 | 0.00 | 0.04 | 0.125 | O | \| | \| | \| | 0.18 |
| 183.083 | 0.00 | 0.04 | 0.125 | O | \| | \| | \| | 0.18 |
| 183.167 | 0.00 | 0.04 | 0.124 | O | \| | \| | \| | 0.18 |
| 183.250 | 0.00 | 0.04 | 0.124 | O | \| | \| | \| | 0.18 |
| 183.333 | 0.00 | 0.04 | 0.124 | O | \| | \| | \| | 0.18 |
| 183.417 | 0.00 | 0.04 | 0.123 | O | \| | \| | \| | 0.18 |
| 183.500 | 0.00 | 0.04 | 0.123 | O | \| | \| | \| | 0.18 |
| 183.583 | 0.00 | 0.04 | 0.123 | O | \| | \| | \| | 0.18 |
| 183.667 | 0.00 | 0.04 | 0.122 | O | \| | \| | \| | 0.18 |
| 183.750 | 0.00 | 0.04 | 0.122 | O | \| | \| | \| | 0.18 |
| 183.833 | 0.00 | 0.04 | 0.122 | O | \| | \| | \| | 0.18 |
| 183.917 | 0.00 | 0.04 | 0.122 | O | \| | \| | \| | 0.18 |
| 184.000 | 0.00 | 0.04 | 0.121 | O | \| | \| | \| | 0.18 |
| 184.083 | 0.00 | 0.04 | 0.121 | O | \| | \| | \| | 0.18 |
| 184.167 | 0.00 | 0.04 | 0.121 | O | \| | \| | \| | 0.17 |
| 184.250 | 0.00 | 0.04 | 0.120 | O | \| | \| | \| | 0.17 |
| 184.333 | 0.00 | 0.04 | 0.120 | O | \| | \| | \| | 0.17 |
| 184.417 | 0.00 | 0.04 | 0.120 | O | \| | \| | \| | 0.17 |
| 184.500 | 0.00 | 0.04 | 0.120 | O | \| | \| | \| | 0.17 |
| 184.583 | 0.00 | 0.04 | 0.119 | O | \| | \| | \| | 0.17 |
| 184.667 | 0.00 | 0.04 | 0.119 | O | \| | \| | \| | 0.17 |
| 184.750 | 0.00 | 0.04 | 0.119 | O | \| | \| | \| | 0.17 |
| 184.833 | 0.00 | 0.04 | 0.118 | O | \| | \| | \| | 0.17 |
| 184.917 | 0.00 | 0.04 | 0.118 | O | \| | \| | \| | 0.17 |
| 185.000 | 0.00 | 0.04 | 0.118 | O | \| | \| | \| | 0.17 |
| 185.083 | 0.00 | 0.04 | 0.118 | O | \| | \| | \| | 0.17 |
| 185.167 | 0.00 | 0.04 | 0.117 | O | \| | \| | \| | 0.17 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 185.250 | 0.00 | 0.04 | 0.117 | O | \| | \| | \| | 0.17 |
| 185.333 | 0.00 | 0.04 | 0.117 | O | \| | \| | \| | 0.17 |
| 185.417 | 0.00 | 0.04 | 0.116 | O | \| | \| | \| | 0.17 |
| 185.500 | 0.00 | 0.04 | 0.116 | O | \| | \| | \| | 0.17 |
| 185.583 | 0.00 | 0.04 | 0.116 | O | \| | \| | \| | 0.17 |
| 185.667 | 0.00 | 0.04 | 0.116 | O | \| | \| | \| | 0.17 |
| 185.750 | 0.00 | 0.04 | 0.115 | O | \| | \| | \| | 0.17 |
| 185.833 | 0.00 | 0.04 | 0.115 | O | \| | \| | \| | 0.17 |
| 185.917 | 0.00 | 0.04 | 0.115 | O | \| | \| | \| | 0.17 |
| 186.000 | 0.00 | 0.04 | 0.115 | O | \| | \| | \| | 0.17 |
| 186.083 | 0.00 | 0.04 | 0.114 | O | \| | \| | \| | 0.17 |
| 186.167 | 0.00 | 0.04 | 0.114 | O | \| | \| | \| | 0.17 |
| 186.250 | 0.00 | 0.04 | 0.114 | O | \| | \| | \| | 0.16 |
| 186.333 | 0.00 | 0.04 | 0.113 | O | \| | \| | \| | 0.16 |
| 186.417 | 0.00 | 0.04 | 0.113 | O | \| | \| | \| | 0.16 |
| 186.500 | 0.00 | 0.04 | 0.113 | O | \| | \| | \| | 0.16 |
| 186.583 | 0.00 | 0.04 | 0.113 | O | \| | \| | \| | 0.16 |
| 186.667 | 0.00 | 0.04 | 0.112 | O | \| | \| | \| | 0.16 |
| 186.750 | 0.00 | 0.04 | 0.112 | O | \| | \| | \| | 0.16 |
| 186.833 | 0.00 | 0.04 | 0.112 | O | \| | \| | \| | 0.16 |
| 186.917 | 0.00 | 0.04 | 0.112 | O | \| | \| | \| | 0.16 |
| 187.000 | 0.00 | 0.04 | 0.111 | O | \| | \| | \| | 0.16 |
| 187.083 | 0.00 | 0.04 | 0.111 | O | \| | \| | \| | 0.16 |
| 187.167 | 0.00 | 0.04 | 0.111 | O | \| | \| | \| | 0.16 |
| 187.250 | 0.00 | 0.04 | 0.110 | O | \| | \| | \| | 0.16 |
| 187.333 | 0.00 | 0.04 | 0.110 | O | \| | \| | \| | 0.16 |
| 187.417 | 0.00 | 0.04 | 0.110 | O | \| | \| | \| | 0.16 |
| 187.500 | 0.00 | 0.04 | 0.110 | O | \| | \| | \| | 0.16 |
| 187.583 | 0.00 | 0.04 | 0.109 | O | \| | \| | \| | 0.16 |
| 187.667 | 0.00 | 0.04 | 0.109 | O | \| | \| | \| | 0.16 |
| 187.750 | 0.00 | 0.04 | 0.109 | O | \| | \| | \| | 0.16 |
| 187.833 | 0.00 | 0.04 | 0.109 | O | \| | \| | \| | 0.16 |
| 187.917 | 0.00 | 0.04 | 0.108 | O | \| | \| | \| | 0.16 |
| 188.000 | 0.00 | 0.04 | 0.108 | O | \| | \| | \| | 0.16 |
| 188.083 | 0.00 | 0.04 | 0.108 | O | \| | \| | \| | 0.16 |
| 188.167 | 0.00 | 0.04 | 0.108 | O | \| | \| | \| | 0.16 |
| 188.250 | 0.00 | 0.04 | 0.107 | O | \| | \| | \| | 0.16 |
| 188.333 | 0.00 | 0.04 | 0.107 | O | \| | \| | \| | 0.16 |
| 188.417 | 0.00 | 0.04 | 0.107 | O | \| | \| | \| | 0.15 |
| 188.500 | 0.00 | 0.04 | 0.107 | O | \| | \| | \| | 0.15 |
| 188.583 | 0.00 | 0.04 | 0.106 | O | \| | \| | \| | 0.15 |
| 188.667 | 0.00 | 0.04 | 0.106 | O | \| | \| | \| | 0.15 |
| 188.750 | 0.00 | 0.04 | 0.106 | O | \| | \| | \| | 0.15 |
| 188.833 | 0.00 | 0.04 | 0.106 | O | \| | \| | \| | 0.15 |
| 188.917 | 0.00 | 0.04 | 0.105 | O | \| | \| | \| | 0.15 |
| 189.000 | 0.00 | 0.04 | 0.105 | O | \| | \| | \| | 0.15 |
| 189.083 | 0.00 | 0.04 | 0.105 | O | \| | \| | \| | 0.15 |
| 189.167 | 0.00 | 0.04 | 0.105 | O | \| | \| | \| | 0.15 |
| 189.250 | 0.00 | 0.04 | 0.104 | O | \| | \| | \| | 0.15 |
| 189.333 | 0.00 | 0.04 | 0.104 | O | \| | \| | \| | 0.15 |
| 189.417 | 0.00 | 0.04 | 0.104 | O | \| | \| | \| | 0.15 |
| 189.500 | 0.00 | 0.04 | 0.104 | O | \| | \| | \| | 0.15 |
| 189.583 | 0.00 | 0.04 | 0.103 | O | \| | \| | \| | 0.15 |
| 189.667 | 0.00 | 0.04 | 0.103 | O | \| | \| | \| | 0.15 |
| 189.750 | 0.00 | 0.04 | 0.103 | O | \| | \| | \| | 0.15 |
| 189.833 | 0.00 | 0.04 | 0.103 | O | \| | \| | \| | 0.15 |
| 189.917 | 0.00 | 0.04 | 0.102 | O | \| | \| | \| | 0.15 |
| 190.000 | 0.00 | 0.04 | 0.102 | O | \| | \| | \| | 0.15 |
| 190.083 | 0.00 | 0.04 | 0.102 | O | \| | \| | \| | 0.15 |
| 190.167 | 0.00 | 0.04 | 0.102 | O | \| | \| | \| | 0.15 |
| 190.250 | 0.00 | 0.04 | 0.101 | O | \| | \| | \| | 0.15 |
| 190.333 | 0.00 | 0.04 | 0.101 | O | \| | \| | \| | 0.15 |
| 190.417 | 0.00 | 0.04 | 0.101 | O | \| | \| | \| | 0.15 |
| 190.500 | 0.00 | 0.04 | 0.101 | O | \| | \| | \| | 0.15 |
| 190.583 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | 0.15 |
| 190.667 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | 0.15 |
| 190.750 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | 0.14 |
| 190.833 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | 0.14 |
| 190.917 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | 0.14 |
| 191.000 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | 0.14 |
| 191.083 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | 0.14 |
| 191.167 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | 0.14 |
| 191.250 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | 0.14 |
| 191.333 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | 0.14 |

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|---|---|---|---|---|---|---|---|---|---|
| 191.417 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | \| | 0.14 |
| 191.500 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | \| | 0.14 |
| 191.583 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | \| | 0.14 |
| 191.667 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.14 |
| 191.750 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.14 |
| 191.833 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.14 |
| 191.917 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.14 |
| 192.000 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.14 |
| 192.083 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.14 |
| 192.167 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.14 |
| 192.250 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.14 |
| 192.333 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.14 |
| 192.417 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.14 |
| 192.500 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.14 |
| 192.583 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.14 |
| 192.667 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.14 |
| 192.750 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.14 |
| 192.833 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.14 |
| 192.917 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.14 |
| 193.000 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.14 |
| 193.083 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.14 |
| 193.167 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.14 |
| 193.250 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.13 |
| 193.333 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.13 |
| 193.417 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.13 |
| 193.500 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.13 |
| 193.583 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.13 |
| 193.667 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.13 |
| 193.750 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.13 |
| 193.833 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.13 |
| 193.917 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.13 |
| 194.000 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.13 |
| 194.083 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.13 |
| 194.167 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.13 |
| 194.250 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.13 |
| 194.333 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.13 |
| 194.417 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.13 |
| 194.500 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.13 |
| 194.583 | 0.00 | 0.03 | 0.089 | O | \| | \| | \| | \| | 0.13 |
| 194.667 | 0.00 | 0.03 | 0.089 | O | \| | \| | \| | \| | 0.13 |
| 194.750 | 0.00 | 0.03 | 0.089 | O | \| | \| | \| | \| | 0.13 |
| 194.833 | 0.00 | 0.03 | 0.089 | O | \| | \| | \| | \| | 0.13 |
| 194.917 | 0.00 | 0.03 | 0.089 | O | \| | \| | \| | \| | 0.13 |
| 195.000 | 0.00 | 0.03 | 0.088 | O | \| | \| | \| | \| | 0.13 |
| 195.083 | 0.00 | 0.03 | 0.088 | O | \| | \| | \| | \| | 0.13 |
| 195.167 | 0.00 | 0.03 | 0.088 | O | \| | \| | \| | \| | 0.13 |
| 195.250 | 0.00 | 0.03 | 0.088 | O | \| | \| | \| | \| | 0.13 |
| 195.333 | 0.00 | 0.03 | 0.088 | O | \| | \| | \| | \| | 0.13 |
| 195.417 | 0.00 | 0.03 | 0.087 | O | \| | \| | \| | \| | 0.13 |
| 195.500 | 0.00 | 0.03 | 0.087 | O | \| | \| | \| | \| | 0.13 |
| 195.583 | 0.00 | 0.03 | 0.087 | O | \| | \| | \| | \| | 0.13 |
| 195.667 | 0.00 | 0.03 | 0.087 | O | \| | \| | \| | \| | 0.13 |
| 195.750 | 0.00 | 0.03 | 0.087 | O | \| | \| | \| | \| | 0.13 |
| 195.833 | 0.00 | 0.03 | 0.086 | O | \| | \| | \| | \| | 0.13 |
| 195.917 | 0.00 | 0.03 | 0.086 | O | \| | \| | \| | \| | 0.12 |
| 196.000 | 0.00 | 0.03 | 0.086 | O | \| | \| | \| | \| | 0.12 |
| 196.083 | 0.00 | 0.03 | 0.086 | O | \| | \| | \| | \| | 0.12 |
| 196.167 | 0.00 | 0.03 | 0.086 | O | \| | \| | \| | \| | 0.12 |
| 196.250 | 0.00 | 0.03 | 0.085 | O | \| | \| | \| | \| | 0.12 |
| 196.333 | 0.00 | 0.03 | 0.085 | O | \| | \| | \| | \| | 0.12 |
| 196.417 | 0.00 | 0.03 | 0.085 | O | \| | \| | \| | \| | 0.12 |
| 196.500 | 0.00 | 0.03 | 0.085 | O | \| | \| | \| | \| | 0.12 |
| 196.583 | 0.00 | 0.03 | 0.084 | O | \| | \| | \| | \| | 0.12 |
| 196.667 | 0.00 | 0.03 | 0.084 | O | \| | \| | \| | \| | 0.12 |
| 196.750 | 0.00 | 0.03 | 0.084 | O | \| | \| | \| | \| | 0.12 |
| 196.833 | 0.00 | 0.03 | 0.084 | O | \| | \| | \| | \| | 0.12 |
| 196.917 | 0.00 | 0.03 | 0.084 | O | \| | \| | \| | \| | 0.12 |
| 197.000 | 0.00 | 0.03 | 0.083 | O | \| | \| | \| | \| | 0.12 |
| 197.083 | 0.00 | 0.03 | 0.083 | O | \| | \| | \| | \| | 0.12 |
| 197.167 | 0.00 | 0.03 | 0.083 | O | \| | \| | \| | \| | 0.12 |
| 197.250 | 0.00 | 0.03 | 0.083 | O | \| | \| | \| | \| | 0.12 |
| 197.333 | 0.00 | 0.03 | 0.083 | O | \| | \| | \| | \| | 0.12 |
| 197.417 | 0.00 | 0.03 | 0.082 | O | \| | \| | \| | \| | 0.12 |
| 197.500 | 0.00 | 0.03 | 0.082 | O | \| | \| | \| | \| | 0.12 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 197.583 | 0.00 | 0.03 | 0.082 | O | \| | \| | \| | \| | 0.12 |
| 197.667 | 0.00 | 0.03 | 0.082 | O | \| | \| | \| | \| | 0.12 |
| 197.750 | 0.00 | 0.03 | 0.082 | O | \| | \| | \| | \| | 0.12 |
| 197.833 | 0.00 | 0.03 | 0.082 | O | \| | \| | \| | \| | 0.12 |
| 197.917 | 0.00 | 0.03 | 0.081 | O | \| | \| | \| | \| | 0.12 |
| 198.000 | 0.00 | 0.03 | 0.081 | O | \| | \| | \| | \| | 0.12 |
| 198.083 | 0.00 | 0.03 | 0.081 | O | \| | \| | \| | \| | 0.12 |
| 198.167 | 0.00 | 0.03 | 0.081 | O | \| | \| | \| | \| | 0.12 |
| 198.250 | 0.00 | 0.03 | 0.081 | O | \| | \| | \| | \| | 0.12 |
| 198.333 | 0.00 | 0.03 | 0.080 | O | \| | \| | \| | \| | 0.12 |
| 198.417 | 0.00 | 0.03 | 0.080 | O | \| | \| | \| | \| | 0.12 |
| 198.500 | 0.00 | 0.03 | 0.080 | O | \| | \| | \| | \| | 0.12 |
| 198.583 | 0.00 | 0.03 | 0.080 | O | \| | \| | \| | \| | 0.12 |
| 198.667 | 0.00 | 0.03 | 0.080 | O | \| | \| | \| | \| | 0.12 |
| 198.750 | 0.00 | 0.03 | 0.079 | O | \| | \| | \| | \| | 0.12 |
| 198.833 | 0.00 | 0.03 | 0.079 | O | \| | \| | \| | \| | 0.11 |
| 198.917 | 0.00 | 0.03 | 0.079 | O | \| | \| | \| | \| | 0.11 |
| 199.000 | 0.00 | 0.03 | 0.079 | O | \| | \| | \| | \| | 0.11 |
| 199.083 | 0.00 | 0.03 | 0.079 | O | \| | \| | \| | \| | 0.11 |
| 199.167 | 0.00 | 0.03 | 0.078 | O | \| | \| | \| | \| | 0.11 |
| 199.250 | 0.00 | 0.03 | 0.078 | O | \| | \| | \| | \| | 0.11 |
| 199.333 | 0.00 | 0.03 | 0.078 | O | \| | \| | \| | \| | 0.11 |
| 199.417 | 0.00 | 0.03 | 0.078 | O | \| | \| | \| | \| | 0.11 |
| 199.500 | 0.00 | 0.03 | 0.078 | O | \| | \| | \| | \| | 0.11 |
| 199.583 | 0.00 | 0.03 | 0.078 | O | \| | \| | \| | \| | 0.11 |
| 199.667 | 0.00 | 0.03 | 0.077 | O | \| | \| | \| | \| | 0.11 |
| 199.750 | 0.00 | 0.03 | 0.077 | O | \| | \| | \| | \| | 0.11 |
| 199.833 | 0.00 | 0.03 | 0.077 | O | \| | \| | \| | \| | 0.11 |
| 199.917 | 0.00 | 0.03 | 0.077 | O | \| | \| | \| | \| | 0.11 |
| 200.000 | 0.00 | 0.03 | 0.077 | O | \| | \| | \| | \| | 0.11 |
| 200.083 | 0.00 | 0.03 | 0.076 | O | \| | \| | \| | \| | 0.11 |
| 200.167 | 0.00 | 0.03 | 0.076 | O | \| | \| | \| | \| | 0.11 |
| 200.250 | 0.00 | 0.03 | 0.076 | O | \| | \| | \| | \| | 0.11 |
| 200.333 | 0.00 | 0.03 | 0.076 | O | \| | \| | \| | \| | 0.11 |
| 200.417 | 0.00 | 0.03 | 0.076 | O | \| | \| | \| | \| | 0.11 |
| 200.500 | 0.00 | 0.03 | 0.075 | O | \| | \| | \| | \| | 0.11 |
| 200.583 | 0.00 | 0.03 | 0.075 | O | \| | \| | \| | \| | 0.11 |
| 200.667 | 0.00 | 0.03 | 0.075 | O | \| | \| | \| | \| | 0.11 |
| 200.750 | 0.00 | 0.03 | 0.075 | O | \| | \| | \| | \| | 0.11 |
| 200.833 | 0.00 | 0.03 | 0.075 | O | \| | \| | \| | \| | 0.11 |
| 200.917 | 0.00 | 0.03 | 0.075 | O | \| | \| | \| | \| | 0.11 |
| 201.000 | 0.00 | 0.03 | 0.074 | O | \| | \| | \| | \| | 0.11 |
| 201.083 | 0.00 | 0.03 | 0.074 | O | \| | \| | \| | \| | 0.11 |
| 201.167 | 0.00 | 0.03 | 0.074 | O | \| | \| | \| | \| | 0.11 |
| 201.250 | 0.00 | 0.03 | 0.074 | O | \| | \| | \| | \| | 0.11 |
| 201.333 | 0.00 | 0.03 | 0.074 | O | \| | \| | \| | \| | 0.11 |
| 201.417 | 0.00 | 0.03 | 0.074 | O | \| | \| | \| | \| | 0.11 |
| 201.500 | 0.00 | 0.03 | 0.073 | O | \| | \| | \| | \| | 0.11 |
| 201.583 | 0.00 | 0.03 | 0.073 | O | \| | \| | \| | \| | 0.11 |
| 201.667 | 0.00 | 0.03 | 0.073 | O | \| | \| | \| | \| | 0.11 |
| 201.750 | 0.00 | 0.03 | 0.073 | O | \| | \| | \| | \| | 0.11 |
| 201.833 | 0.00 | 0.03 | 0.073 | O | \| | \| | \| | \| | 0.11 |
| 201.917 | 0.00 | 0.03 | 0.072 | O | \| | \| | \| | \| | 0.11 |
| 202.000 | 0.00 | 0.03 | 0.072 | O | \| | \| | \| | \| | 0.10 |
| 202.083 | 0.00 | 0.03 | 0.072 | O | \| | \| | \| | \| | 0.10 |
| 202.167 | 0.00 | 0.03 | 0.072 | O | \| | \| | \| | \| | 0.10 |
| 202.250 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.10 |
| 202.333 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.10 |
| 202.417 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.10 |
| 202.500 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.10 |
| 202.583 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.10 |
| 202.667 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.10 |
| 202.750 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.10 |
| 202.833 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.10 |
| 202.917 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.10 |
| 203.000 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.10 |
| 203.083 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.10 |
| 203.167 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.10 |
| 203.250 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.10 |
| 203.333 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.10 |
| 203.417 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.10 |
| 203.500 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.10 |
| 203.583 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.10 |
| 203.667 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.10 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 203.750 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.10 |
| 203.833 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.10 |
| 203.917 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.10 |
| 204.000 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.10 |
| 204.083 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.10 |
| 204.167 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.10 |
| 204.250 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.10 |
| 204.333 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.10 |
| 204.417 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.10 |
| 204.500 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.10 |
| 204.583 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.10 |
| 204.667 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.10 |
| 204.750 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.10 |
| 204.833 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.10 |
| 204.917 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.10 |
| 205.000 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.10 |
| 205.083 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.10 |
| 205.167 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.10 |
| 205.250 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.10 |
| 205.333 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.10 |
| 205.417 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.09 |
| 205.500 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.09 |
| 205.583 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.09 |
| 205.667 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.09 |
| 205.750 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.09 |
| 205.833 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.09 |
| 205.917 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.09 |
| 206.000 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.09 |
| 206.083 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.09 |
| 206.167 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.09 |
| 206.250 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.09 |
| 206.333 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.09 |
| 206.417 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.09 |
| 206.500 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.09 |
| 206.583 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.09 |
| 206.667 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.09 |
| 206.750 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.09 |
| 206.833 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.09 |
| 206.917 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.09 |
| 207.000 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.09 |
| 207.083 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.09 |
| 207.167 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.09 |
| 207.250 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.09 |
| 207.333 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.09 |
| 207.417 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.09 |
| 207.500 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.09 |
| 207.583 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.09 |
| 207.667 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.09 |
| 207.750 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.09 |
| 207.833 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.09 |
| 207.917 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.09 |
| 208.000 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.09 |
| 208.083 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.09 |
| 208.167 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.09 |
| 208.250 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.09 |
| 208.333 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.09 |
| 208.417 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.09 |
| 208.500 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.09 |
| 208.583 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.09 |
| 208.667 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.09 |
| 208.750 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.09 |
| 208.833 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.09 |
| 208.917 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.09 |
| 209.000 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.09 |
| 209.083 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.09 |
| 209.167 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.09 |
| 209.250 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.09 |
| 209.333 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.08 |
| 209.417 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.08 |
| 209.500 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.08 |
| 209.583 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.08 |
| 209.667 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.08 |
| 209.750 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.08 |
| 209.833 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.08 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 209.917 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.08 |
| 210.000 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.08 |
| 210.083 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.08 |
| 210.167 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.08 |
| 210.250 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.08 |
| 210.333 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.08 |
| 210.417 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.08 |
| 210.500 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.08 |
| 210.583 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.08 |
| 210.667 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.08 |
| 210.750 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.08 |
| 210.833 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.08 |
| 210.917 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.08 |
| 211.000 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.08 |
| 211.083 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.08 |
| 211.167 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.08 |
| 211.250 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.08 |
| 211.333 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.08 |
| 211.417 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.08 |
| 211.500 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.08 |
| 211.583 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.08 |
| 211.667 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.08 |
| 211.750 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.08 |
| 211.833 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.08 |
| 211.917 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.08 |
| 212.000 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.08 |
| 212.083 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.08 |
| 212.167 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.08 |
| 212.250 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.08 |
| 212.333 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.08 |
| 212.417 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.08 |
| 212.500 | 0.00 | 0.02 | 0.053 | O | \| | \| | \| | \| | 0.08 |
| 212.583 | 0.00 | 0.02 | 0.053 | O | \| | \| | \| | \| | 0.08 |
| 212.667 | 0.00 | 0.02 | 0.053 | O | \| | \| | \| | \| | 0.08 |
| 212.750 | 0.00 | 0.02 | 0.053 | O | \| | \| | \| | \| | 0.08 |
| 212.833 | 0.00 | 0.02 | 0.053 | O | \| | \| | \| | \| | 0.08 |
| 212.917 | 0.00 | 0.02 | 0.053 | O | \| | \| | \| | \| | 0.08 |
| 213.000 | 0.00 | 0.02 | 0.053 | O | \| | \| | \| | \| | 0.08 |
| 213.083 | 0.00 | 0.02 | 0.053 | O | \| | \| | \| | \| | 0.08 |
| 213.167 | 0.00 | 0.02 | 0.052 | O | \| | \| | \| | \| | 0.08 |
| 213.250 | 0.00 | 0.02 | 0.052 | O | \| | \| | \| | \| | 0.08 |
| 213.333 | 0.00 | 0.02 | 0.052 | O | \| | \| | \| | \| | 0.08 |
| 213.417 | 0.00 | 0.02 | 0.052 | O | \| | \| | \| | \| | 0.08 |
| 213.500 | 0.00 | 0.02 | 0.052 | O | \| | \| | \| | \| | 0.08 |
| 213.583 | 0.00 | 0.02 | 0.052 | O | \| | \| | \| | \| | 0.08 |
| 213.667 | 0.00 | 0.02 | 0.052 | O | \| | \| | \| | \| | 0.07 |
| 213.750 | 0.00 | 0.02 | 0.052 | O | \| | \| | \| | \| | 0.07 |
| 213.833 | 0.00 | 0.02 | 0.051 | O | \| | \| | \| | \| | 0.07 |
| 213.917 | 0.00 | 0.02 | 0.051 | O | \| | \| | \| | \| | 0.07 |
| 214.000 | 0.00 | 0.02 | 0.051 | O | \| | \| | \| | \| | 0.07 |
| 214.083 | 0.00 | 0.02 | 0.051 | O | \| | \| | \| | \| | 0.07 |
| 214.167 | 0.00 | 0.02 | 0.051 | O | \| | \| | \| | \| | 0.07 |
| 214.250 | 0.00 | 0.02 | 0.051 | O | \| | \| | \| | \| | 0.07 |
| 214.333 | 0.00 | 0.02 | 0.051 | O | \| | \| | \| | \| | 0.07 |
| 214.417 | 0.00 | 0.02 | 0.051 | O | \| | \| | \| | \| | 0.07 |
| 214.500 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 214.583 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 214.667 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 214.750 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 214.833 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 214.917 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 215.000 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 215.083 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 215.167 | 0.00 | 0.02 | 0.050 | O | \| | \| | \| | \| | 0.07 |
| 215.250 | 0.00 | 0.02 | 0.049 | O | \| | \| | \| | \| | 0.07 |
| 215.333 | 0.00 | 0.02 | 0.049 | O | \| | \| | \| | \| | 0.07 |
| 215.417 | 0.00 | 0.02 | 0.049 | O | \| | \| | \| | \| | 0.07 |
| 215.500 | 0.00 | 0.02 | 0.049 | O | \| | \| | \| | \| | 0.07 |
| 215.583 | 0.00 | 0.02 | 0.049 | O | \| | \| | \| | \| | 0.07 |
| 215.667 | 0.00 | 0.02 | 0.049 | O | \| | \| | \| | \| | 0.07 |
| 215.750 | 0.00 | 0.02 | 0.049 | O | \| | \| | \| | \| | 0.07 |
| 215.833 | 0.00 | 0.02 | 0.049 | O | \| | \| | \| | \| | 0.07 |
| 215.917 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |
| 216.000 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 216.083 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |
| 216.167 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |
| 216.250 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |
| 216.333 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |
| 216.417 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |
| 216.500 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |
| 216.583 | 0.00 | 0.02 | 0.048 | O | \| | \| | \| | \| | 0.07 |
| 216.667 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 216.750 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 216.833 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 216.917 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 217.000 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 217.083 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 217.167 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 217.250 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 217.333 | 0.00 | 0.02 | 0.047 | O | \| | \| | \| | \| | 0.07 |
| 217.417 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 217.500 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 217.583 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 217.667 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 217.750 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 217.833 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 217.917 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 218.000 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 218.083 | 0.00 | 0.02 | 0.046 | O | \| | \| | \| | \| | 0.07 |
| 218.167 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.07 |
| 218.250 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.07 |
| 218.333 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.07 |
| 218.417 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.07 |
| 218.500 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.07 |
| 218.583 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.07 |
| 218.667 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.06 |
| 218.750 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.06 |
| 218.833 | 0.00 | 0.02 | 0.045 | O | \| | \| | \| | \| | 0.06 |
| 218.917 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.000 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.083 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.167 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.250 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.333 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.417 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.500 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.583 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.667 | 0.00 | 0.02 | 0.044 | O | \| | \| | \| | \| | 0.06 |
| 219.750 | 0.00 | 0.02 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 219.833 | 0.00 | 0.02 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 219.917 | 0.00 | 0.02 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 220.000 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 220.083 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 220.167 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 220.250 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 220.333 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 220.417 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.06 |
| 220.500 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 220.583 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 220.667 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 220.750 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 220.833 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 220.917 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 221.000 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 221.083 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 221.167 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 221.250 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.06 |
| 221.333 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 221.417 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 221.500 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 221.583 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 221.667 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 221.750 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 221.833 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 221.917 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 222.000 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 222.083 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.06 |
| 222.167 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 222.250 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 222.333 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 222.417 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 222.500 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 222.583 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 222.667 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 222.750 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 222.833 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 222.917 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 223.000 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.06 |
| 223.083 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.167 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.250 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.333 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.417 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.500 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.583 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.667 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.750 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.833 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 223.917 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.06 |
| 224.000 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.06 |
| 224.083 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.06 |
| 224.167 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.06 |
| 224.250 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.06 |
| 224.333 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.06 |
| 224.417 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.06 |
| 224.500 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.05 |
| 224.583 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.05 |
| 224.667 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.05 |
| 224.750 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.05 |
| 224.833 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.05 |
| 224.917 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.000 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.083 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.167 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.250 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.333 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.417 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.500 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.583 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.667 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.750 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.05 |
| 225.833 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 225.917 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.000 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.083 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.167 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.250 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.333 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.417 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.500 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.583 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.667 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.05 |
| 226.750 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 226.833 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 226.917 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.000 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.083 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.167 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.250 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.333 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.417 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.500 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.583 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.667 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.05 |
| 227.750 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 227.833 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 227.917 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.000 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.083 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.167 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.250 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.333 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 228.417 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.500 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.583 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.667 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.750 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.05 |
| 228.833 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 228.917 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.000 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.083 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.167 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.250 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.333 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.417 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.500 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.583 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.667 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.750 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.05 |
| 229.833 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 229.917 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.000 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.083 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.167 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.250 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.333 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.417 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.500 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.583 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.667 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.750 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.833 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.05 |
| 230.917 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.05 |
| 231.000 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.05 |
| 231.083 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.05 |
| 231.167 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.05 |
| 231.250 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.05 |
| 231.333 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.05 |
| 231.417 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.04 |
| 231.500 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.04 |
| 231.583 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.04 |
| 231.667 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.04 |
| 231.750 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.04 |
| 231.833 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.04 |
| 231.917 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.04 |
| 232.000 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.04 |
| 232.083 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.167 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.250 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.333 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.417 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.500 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.583 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.667 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.750 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.833 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 232.917 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 233.000 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 233.083 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 233.167 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.04 |
| 233.250 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 233.333 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 233.417 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 233.500 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 233.583 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 233.667 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 233.750 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 233.833 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 233.917 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 234.000 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 234.083 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 234.167 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 234.250 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 234.333 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.04 |
| 234.417 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 234.500 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 234.583 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 234.667 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 234.750 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 234.833 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 234.917 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.000 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.083 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.167 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.250 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.333 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.417 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.500 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.583 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.04 |
| 235.667 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 235.750 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 235.833 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 235.917 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.000 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.083 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.167 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.250 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.333 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.417 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.500 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.583 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.667 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.750 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.833 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 236.917 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.04 |
| 237.000 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.083 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.167 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.250 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.333 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.417 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.500 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.583 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.667 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.750 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.833 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 237.917 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 238.000 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 238.083 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 238.167 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 238.250 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.04 |
| 238.333 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 238.417 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 238.500 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 238.583 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 238.667 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 238.750 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 238.833 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 238.917 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.000 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.083 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.167 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.250 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.333 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.417 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.500 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.583 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.04 |
| 239.667 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.04 |
| 239.750 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.04 |
| 239.833 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.04 |
| 239.917 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.04 |
| 240.000 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.04 |
| 240.083 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.04 |
| 240.167 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.03 |
| 240.250 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.03 |
| 240.333 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.03 |
| 240.417 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.03 |
| 240.500 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.03 |
| 240.583 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.03 |
| 240.667 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.03 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 240.750 | 0.00 | 0.01 | 0.024 | O | | | | | 0.03 |
| 240.833 | 0.00 | 0.01 | 0.024 | O | | | | | 0.03 |
| 240.917 | 0.00 | 0.01 | 0.024 | O | | | | | 0.03 |
| 241.000 | 0.00 | 0.01 | 0.024 | O | | | | | 0.03 |
| 241.083 | 0.00 | 0.01 | 0.024 | O | | | | | 0.03 |
| 241.167 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.250 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.333 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.417 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.500 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.583 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.667 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.750 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.833 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 241.917 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.000 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.083 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.167 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.250 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.333 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.417 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.500 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.583 | 0.00 | 0.01 | 0.023 | O | | | | | 0.03 |
| 242.667 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 242.750 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 242.833 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 242.917 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.000 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.083 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.167 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.250 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.333 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.417 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.500 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.583 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.667 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.750 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.833 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 243.917 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 244.000 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 244.083 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 244.167 | 0.00 | 0.01 | 0.022 | O | | | | | 0.03 |
| 244.250 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 244.333 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 244.417 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 244.500 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 244.583 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 244.667 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 244.750 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 244.833 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 244.917 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.000 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.083 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.167 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.250 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.333 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.417 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.500 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.583 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.667 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.750 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.833 | 0.00 | 0.01 | 0.021 | O | | | | | 0.03 |
| 245.917 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.000 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.083 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.167 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.250 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.333 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.417 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.500 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.583 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.667 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.750 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |
| 246.833 | 0.00 | 0.01 | 0.020 | O | | | | | 0.03 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 246.917 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.000 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.083 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.167 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.250 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.333 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.417 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.500 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.583 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.03 |
| 247.667 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 247.750 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 247.833 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 247.917 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.000 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.083 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.167 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.250 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.333 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.417 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.500 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.583 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.667 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.750 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.833 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 248.917 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 249.000 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 249.083 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 249.167 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 249.250 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 249.333 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 249.417 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.03 |
| 249.500 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 249.583 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 249.667 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 249.750 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 249.833 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 249.917 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.000 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.083 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.167 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.250 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.333 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.417 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.500 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.583 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.667 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.750 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.833 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 250.917 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 251.000 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 251.083 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 251.167 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 251.250 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 251.333 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.03 |
| 251.417 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.03 |
| 251.500 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.03 |
| 251.583 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.03 |
| 251.667 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.03 |
| 251.750 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.03 |
| 251.833 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.03 |
| 251.917 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.000 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.083 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.167 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.250 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.333 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.417 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.500 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.583 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.667 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.750 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.833 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 252.917 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |
| 253.000 | 0.00 | 0.01 | 0.017 | O | \| | \| | \| | \| | 0.02 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 253.083 | 0.00 | 0.01 | 0.017 | O | | | | | 0.02 |
| 253.167 | 0.00 | 0.01 | 0.017 | O | | | | | 0.02 |
| 253.250 | 0.00 | 0.01 | 0.017 | O | | | | | 0.02 |
| 253.333 | 0.00 | 0.01 | 0.017 | O | | | | | 0.02 |
| 253.417 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 253.500 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 253.583 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 253.667 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 253.750 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 253.833 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 253.917 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.000 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.083 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.167 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.250 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.333 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.417 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.500 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.583 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.667 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.750 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.833 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 254.917 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 255.000 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 255.083 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 255.167 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 255.250 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 255.333 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 255.417 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 255.500 | 0.00 | 0.01 | 0.016 | O | | | | | 0.02 |
| 255.583 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 255.667 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 255.750 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 255.833 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 255.917 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.000 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.083 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.167 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.250 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.333 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.417 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.500 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.583 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.667 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.750 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.833 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 256.917 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.000 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.083 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.167 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.250 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.333 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.417 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.500 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.583 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.667 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.750 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.833 | 0.00 | 0.01 | 0.015 | O | | | | | 0.02 |
| 257.917 | 0.00 | 0.01 | 0.014 | O | | | | | 0.02 |
| 258.000 | 0.00 | 0.01 | 0.014 | O | | | | | 0.02 |
| 258.083 | 0.00 | 0.01 | 0.014 | O | | | | | 0.02 |
| 258.167 | 0.00 | 0.01 | 0.014 | O | | | | | 0.02 |
| 258.250 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 258.333 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 258.417 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 258.500 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 258.583 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 258.667 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 258.750 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 258.833 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 258.917 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 259.000 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 259.083 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |
| 259.167 | 0.00 | 0.00 | 0.014 | O | | | | | 0.02 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 259.250 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 259.333 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 259.417 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 259.500 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 259.583 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 259.667 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 259.750 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 259.833 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 259.917 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 260.000 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 260.083 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 260.167 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 260.250 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 260.333 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.02 |
| 260.417 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 260.500 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 260.583 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 260.667 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 260.750 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 260.833 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 260.917 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.000 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.083 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.167 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.250 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.333 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.417 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.500 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.583 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.667 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.750 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.833 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 261.917 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.000 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.083 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.167 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.250 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.333 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.417 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.500 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.583 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.667 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.750 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.833 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 262.917 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 263.000 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.02 |
| 263.083 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.167 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.250 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.333 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.417 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.500 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.583 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.667 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.750 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.833 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 263.917 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.000 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.083 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.167 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.250 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.333 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.417 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.500 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.583 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.667 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.750 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.833 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 264.917 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.000 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.083 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.167 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.250 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.333 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 265.417 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.500 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.583 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.667 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.750 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.833 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 265.917 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.02 |
| 266.000 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.083 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.167 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.250 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.333 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.417 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.500 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.583 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.667 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.750 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.833 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 266.917 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.000 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.083 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.167 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.250 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.333 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.417 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.500 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.583 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.667 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.750 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.833 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 267.917 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.000 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.083 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.167 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.250 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.333 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.417 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.500 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.583 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.667 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.750 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.833 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 268.917 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 269.000 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 269.083 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.02 |
| 269.167 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.02 |
| 269.250 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.02 |
| 269.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.02 |
| 269.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.02 |
| 269.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.02 |
| 269.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.02 |
| 269.667 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 269.750 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 269.833 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 269.917 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.000 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.083 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.167 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.250 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.667 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.750 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.833 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 270.917 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.000 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.083 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.167 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.250 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 271.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.667 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.750 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.833 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 271.917 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.000 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.083 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.167 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.250 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 272.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 272.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 272.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 272.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 273.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 274.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 275.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 276.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 276.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 276.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 276.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 276.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 276.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 276.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 276.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 276.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 276.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 276.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 276.917 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.000 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 277.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 277.750 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 277.833 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 277.917 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.000 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.083 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.167 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.250 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.333 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.417 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.500 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.583 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.667 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.750 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.833 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 278.917 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.000 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.083 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.167 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.250 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.333 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.417 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.500 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.583 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.667 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.750 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.833 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 279.917 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.000 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.083 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.167 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.250 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.333 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.417 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.500 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.583 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.667 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.750 | 0.00 | 0.00 | 0.008 | O | | | | | 0.01 |
| 280.833 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 280.917 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.000 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.083 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.167 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.250 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.333 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.417 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.500 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.583 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.667 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.750 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.833 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 281.917 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.000 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.083 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.167 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.250 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.333 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.417 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.500 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.583 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.667 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.750 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.833 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 282.917 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.000 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.083 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.167 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.250 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.333 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.417 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.500 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.583 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.667 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.750 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |
| 283.833 | 0.00 | 0.00 | 0.007 | O | | | | | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 283.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 284.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 285.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 285.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 286.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 287.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 288.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 289.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 290.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 290.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 291.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 291.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 291.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 291.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 292.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 293.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 294.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 295.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 296.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 296.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |
| 296.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 296.250 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 296.333 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 296.417 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 296.500 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 296.583 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 296.667 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 296.750 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 296.833 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 296.917 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.000 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.083 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.167 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.250 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.333 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.417 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.500 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.583 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.667 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.750 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.833 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 297.917 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.000 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.083 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.167 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.250 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.333 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.417 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.500 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.583 | 0.00 | 0.00 | 0.005 | O | | | | | 0.01 |
| 298.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 298.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 298.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 298.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.417 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.500 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.583 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 299.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.417 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.500 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.583 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 300.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.417 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.500 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.583 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 301.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 302.417 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.500 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.583 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 302.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.417 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.500 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.583 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 303.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.417 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.500 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.583 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 304.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.417 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.500 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.583 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 305.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.417 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.500 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.583 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.667 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.750 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.833 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 306.917 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 307.000 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 307.083 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 307.167 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 307.250 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 307.333 | 0.00 | 0.00 | 0.004 | O | | | | | 0.01 |
| 307.417 | 0.00 | 0.00 | 0.003 | O | | | | | 0.01 |
| 307.500 | 0.00 | 0.00 | 0.003 | O | | | | | 0.01 |
| 307.583 | 0.00 | 0.00 | 0.003 | O | | | | | 0.01 |
| 307.667 | 0.00 | 0.00 | 0.003 | O | | | | | 0.01 |
| 307.750 | 0.00 | 0.00 | 0.003 | O | | | | | 0.01 |
| 307.833 | 0.00 | 0.00 | 0.003 | O | | | | | 0.01 |
| 307.917 | 0.00 | 0.00 | 0.003 | O | | | | | 0.00 |
| 308.000 | 0.00 | 0.00 | 0.003 | O | | | | | 0.00 |
| 308.083 | 0.00 | 0.00 | 0.003 | O | | | | | 0.00 |
| 308.167 | 0.00 | 0.00 | 0.003 | O | | | | | 0.00 |
| 308.250 | 0.00 | 0.00 | 0.003 | O | | | | | 0.00 |
| 308.333 | 0.00 | 0.00 | 0.003 | O | | | | | 0.00 |
| 308.417 | 0.00 | 0.00 | 0.003 | O | | | | | 0.00 |
| 308.500 | 0.00 | 0.00 | 0.003 | O | | | | | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| 308.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 308.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 308.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 308.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 308.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 309.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 310.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 311.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 312.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.333 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.417 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.500 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.583 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.667 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.750 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.833 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 313.917 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 314.000 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 314.083 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 314.167 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |
| 314.250 | 0.00 | 0.00 | 0.003 | O | \| | \| | \| | \| | 0.00 |

Remaining water in basin = 0.00 (Ac.Ft)

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**************************HYDROGRAPH DATA**************************
               Number of intervals =  3771
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =        1.147 (CFS)
               Total volume =       6.206 (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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# Appendix 8:  Source Control

*Pollutant Sources/Source Control Checklist*

**Source Control BMPs**

| Potential Sources of Runoff Pollutants | Permanent Controls—Show on WQMP Drawings | Permanent Controls—List in WQMP Table and Narrative | 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.<br>☒ Provide stormwater pollution prevention information to new site owners, lessees, or operators.<br>☒ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com<br>☒ 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. |
| ☐ 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.<br>☒ Show self-retaining | State that final landscape plans will accomplish all of the following.<br>☒ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible.<br>☒ Design landscaping to minimize | ☒ Maintain landscaping using minimum or no pesticides.<br>☒ See applicable operational BMPs in "What you should know for…..Landscape and Gardening" at |

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| | landscape areas, if any.<br>☒ Show stormwater treatment and hydrograph modification management BMPs. (See instructions in Chapter 3, Step 5 and guidance in Chapter 5.) | irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.<br>☒ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions.<br>☒ Consider using pest-resistant plants, especially adjacent to hardscape.<br>☒ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions. | http://rcflood.org/stormwater/Error! Hyperlink reference not valid.<br>☒ Provide IPM information to new owners, lessees and operators. |
| ☐ 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.<br>☐ On the drawing, show a note that this drain will be connected to a grease interceptor before | ☐ Describe the location and features of the designated cleaning area.<br>☐ 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/<br>Provide this brochure to new site owners, lessees, and operators. |

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| | discharging to the sanitary sewer. | | |
| ☒ 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.<br>☒ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent runon and show locations of berms to prevent runoff from the area.<br>☒ 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.<br>☒ 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:<br>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 |
| ☒ 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<br>See the brochure "Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities" at http://rcflood.org/stormwater/ |
| ☐ 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 runon or run-off from area.<br>☐ Storage of non-hazardous liquids shall be covered by a | Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains.<br>Where appropriate, reference documentation of compliance with the requirements of Hazardous | ☐ 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 |

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| | roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults.<br>☐ 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. | Materials Programs for:<br>⍰ Hazardous Waste Generation<br>⍰ Hazardous Materials Release Response and Inventory<br>⍰ California Accidental Release (CalARP)<br>⍰ Aboveground Storage Tank<br>⍰ Uniform Fire Code Article 80 Section 103(b) & (c) 1991<br>⍰ Underground Storage Tank<br>www.cchealth.org/groups/hazmat/ | |
| ☐ J. Vehicle and Equipment Cleaning | ☐ Show on drawings as appropriate:<br>(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.<br>(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 shutoff to discourage such use).<br>(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. | ☐ 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):<br>☐ 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<br>☐ Car dealerships and similar may rinse cars with water only. |

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| | (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. | | |
| ☐ 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.<br><br>☐ 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.<br>☐ 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.<br><br>☐ 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.<br><br>☐ 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:<br><br>☐ 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.<br>☐ 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.<br>☐ 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.<br>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/<br>Refer to Outdoor Cleaning Activities and Professional Mobile Service Providers for many of the Potential Sources of Runoff Pollutants |

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| | | | categories below. Brochure can be found at http://rcflood.org/stormwater/ |
| ☐ 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.<br>☐ 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. | | ☐ Move loaded and unloaded items indoors as soon as possible.<br>☐ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com |
| ☒ 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 | | ☐ Move loaded and unloaded items indoors as soon as possible.<br>☐ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com |

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| | drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer.<br>☒ 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.<br>☒ Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer. | | |
| ☒ 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<br>☐ Boiler drain lines<br>☒ Condensate drain lines<br>☒ Rooftop equipment<br>☐ Drainage sumps<br>☒ Roofing, gutters, and trim.<br>☐ 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.<br>☒ 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.<br>☒ Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment.<br>☐ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. | |

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| | | ☒ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.<br>☐ Include controls for other sources as specified by local reviewer. | |
| ☒ 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*

**Maintenance Responsibility**

The extension of the Horsethief-Calendula Storm Drain shall be maintained by the RCFC&WCD.

All storm drains within the public right of way of Street A shall be maintained by the Riverside County Transportation Department.

All other onsite drainage facilities shall be maintained by the POA. These facilities include the Primary Detention Basin, outlet drains that are not in Street A, water quality basins, other peak flow detention facilities, private storm drains, access roads and natural drainage courses outside of PA 5 and PA 6. At the time of development, the County Transportation Department may determine that a CFD/CSA should maintain detention/water quality basins that serve multiple properties within the development.

General Maintenance Notes:

1) Other than ongoing maintenance, after storm events: inspect areas for erosion and ponding, repair accordingly (see schedule in Maintenance Responsibility section).
2) Keep landscape areas maintained above the soil media (repair and maintain sign of erosion).
3) Inspect overall detention basin system; determine the underdrain system for clogging to evaluate if soil media to be replaced (otherwise follow regular routine maintenance schedule).
4) There are several clean-outs along the detention basin outlet can be accessed for monitoring program.

**General Operation and Maintenance Activities**

Operation and maintenance (O&M) activities are described below. The categories of O&M activities are "routine" and "major" where routine refer to activity conducted on a regular schedule, whereas major refers to infrequent activities triggered mainly by need. Each category and its respective activities are described in the following sections.

<u>Routine Operation and Maintenance Activities</u>
O&M responsibility, initially by Developer/Builder until the establishment of POA. The extension of the Horsethief-Calendula Storm Drain shall be maintained by the RCFC&WCD.

All storm drains within the public right of way of Street A shall be maintained by the Riverside County Transportation Department.

*Site Inspection*
The storm drain inlets will be inspected on a regular, scheduled basis to ensure that the facility is operating properly, to record observations, and to initiate any actions that may be required. While the frequency of site inspections may vary depending on the season, it will typically be on a monthly basis.

*Trash & Debris Removal*
Litter may be picked up at any time during site visits for other purposes. Regular, scheduled trash/debris removal will be performed at all sites on a quarterly basis and/or after storm events that result in heavy trash accumulations.

*Minor Vegetation Removal/Thinning*
Vegetation growth will be inspected annually, and removed or thinned as necessary. Vegetation at inlets and outlets will be manually or mechanically removed if vegetation is found to be clogging or otherwise

affecting the operation of the facility. Access roads will remain clear of vegetation and obstructions. Significant vegetation removal is covered under the major maintenance activities section below.

*Snag Removal*
This work typically includes the removal of sticks, dead branches, brush, and small trees that block water flow or otherwise interfere with the operations. This work may be performed as needed on a quarterly basis.

*Minor Sediment Removal*
It is expected that there will be a minor amount of sediment deposition at points within the storm drain inlet, primarily in forebay(s) near the inlet(s). When such deposits obstruct water flow, the deposits will be removed.

Major Operation and Maintenance Activities

Operation and maintenance (O&M) requirements for all Source Control and Treatment Control BMPs shall be identified within this report. The O&M shall include the following:

- Description and Schedule
- Inspection & Monitoring requirements
- Identification of Responsible Parties

The owner of the property, and its successors and assigns is responsible for implementation of this WQMP or BMPs for the project site.

| **O&M MAINTENANCE/FREQUENCY MATRIX** | | |
|---|---|---|
| **BEST MANAGEMENT PRACTICES (BMPs)** | **INSPECTION FREQUENCY** | **MAINTENANCE REPAIR PROGRAM** |
| **Source Control BMPs** | | |
| 1. Education For Property owner, tenants and occupants, Maintenance staffs, contracted maintenance crews. | Training and education program must be provided within 6 months of hire date and annually thereafter. Materials are included in the Project WQMP. | Educational materials and training will be provided to Property owner, tenants and occupants, Maintenance staff members, and contracted maintenance crews if any, including education materials and restrictions to reduce pollutants from reaching the storm drain system. |
| 2. Activity Restriction | Daily activity of Operation | The project will establish the following policies prohibiting activities during operations:<br>- Prohibit discharge of fertilizer, pesticide, or animal waste to street or storm drain.<br>- Prohibit blowing or sweeping of debris (leaf litter, grass clippings, litter, etc.) into street or storm drain.<br>- Require dumpster lid to be closed at all |

| | | |
|---|---|---|
| | | times.<br>- Prohibit discharge of paint or masonry waste to street or storm drain.<br>- Prohibit vehicle washing, maintenance or repair on premises. |
| 3. Common Area Landscape Management | Quarterly, as seasonal changes. | The VWRPD shall direct maintenance staff to employ landscaping practices be consistent with the County of Riverside requirements for use of fertilizer, pesticides, and County ordinances for water conservation. |
| 4. Drainage Facility Inspection and Maintenance | Inspect semiannually for beginning (October) and end of the wet season (April). | Maintenance personnel shall remove debris/sediments if necessary within the inlet area. . |
| 5. MS4 Stenciling and Signage | As needed to clearly depict signage. | Replace or repaint as needed. |
| 6. Protect Slopes and Channels | Inspect semiannually and before and after storm events. | Repair BMP and slopes as needed. |
| | | |
| **Treatment Control BMPs** | | |
| 7. WQ Extended/Detention Basins | Inspect semiannually for beginning (October) and end of the wet season (April). | Maintenance personnel shall repair basin surface as needed and remove debris/sediments if necessary. |
| | | |

***Inspection and Maintenance (from Fact Sheet):***

## Basin Site Inspection Summary Form

**General Information**

Date: Time: Inspector Name:

| **Sediment and Erosion Control Information** | | **Maintenance Required?** |
|---|---|---|
| What is the sediment depth, in inches? | | |
| Does this exceed 18 inches or 10% of the basin volume? | ❒Yes ❒No | ❒Yes ❒No |
| What is the sediment type and location (where is the sediment accumulation located? (Inlet/outlet?)) | | |
| Is there standing water (more than 72-hours after storm event)? If answer is yes, immediate maintenance is required. | ❒Yes ❒No | ❒Yes ❒No |
| If yes, how deep is the water, in inches? Where is it located? Inlet/outlet? | | |
| Is there any evidence of erosion? If yes, maintenance is required. | ❒Yes ❒No | ❒Yes ❒No |
| Is there any evidence of embankment slumping or cracking? If yes, maintenance is required. | ❒Yes ❒No | ❒Yes ❒No |

| **Vegetation Information** | | **Maintenance Required?** |
|---|---|---|
| Is there vegetation greater than 18 inches high? If yes, maintenance may be required. | ❒Yes ❒No | ❒Yes ❒No |
| Does vegetation cover the entire floor and/or all slopes of the basin? If no, revegetation may be required. | ❒Yes ❒No | ❒Yes ❒No |
| Do the irrigation valves function properly and water adequately? | ❒Yes ❒No | ❒Yes ❒No |
| Is there dead or dying vegetation on the bottom of the basin? If yes, maintenance is required. | ❒Yes ❒No | ❒Yes ❒No |

| **Structural Information** | | **Maintenance Required?** |
|---|---|---|
| Are the rocks and riprap clear of sediment? (These are located at both the basin pipe inlets and basin pipe outlet). If no, maintenance is required. | ❒Yes ❒No | ❒Yes ❒No |
| Does the CDS Unit need to be cleaned? | ❒Yes ❒No | ❒Yes ❒No |
| Any blockage or sediment in outlet structure? If yes, maintenance is required. | ❒Yes ❒No | ❒Yes ❒No |
| Is there evidence of concrete scour or cracking of structural parts? If yes, and considered major, maintenance is required. | ❒Yes ❒No | ❒Yes ❒No |
| In what condition are the fences and locks? | ❒OK ❒Not OK ❒Not applicable | ❒Yes ❒No |
| Basin access road accessible? If not, repair or maintenance is required. | ❒OK ❒Not OK ❒Not applicable | ❒Yes ❒No |
| Are there any other general maintenance concerns? | | |

| **Aesthetic Concerns** | | **Maintenance Required?** |
|---|---|---|
| Is there any non-trash debris? If so, maintenance may be required. | ❒Yes ❒No | ❒Yes ❒No |
| Is there any trash? If so, maintenance may be required. | ❒Yes ❒No | ❒Yes ❒No |
| Is there any graffiti? If so, maintenance may be required. | ❒Yes ❒No | ❒Yes ❒No |

| **Non-Storm Water Concerns** | | **Maintenance Required?** |
|---|---|---|
| Are there any non-storm water discharges to the basin? If persistent, investigate upstream of the basin is repairs are needed (i.e., broken sprinklers). | ❒Yes ❒No | ❒Yes ❒No |

# Basin Maintenance Summary Form

## General Information

| Date: | Time: | Inspector Name: |
|---|---|---|

## Sediment and Erosion Control Information

| | |
|---|---|
| Was sediment removal or sediment management performed? | ❒Yes ❒No |
| Was erosion repair (including vegetative stabilization performed)? | ❒Yes ❒No |
| Was embankment/slope repair performed? | ❒Yes ❒No |
| Was any other maintenance performed? *(Describe)* | ❒Yes ❒No |

## Vegetation Information

| | |
|---|---|
| Was basin grass mowing/trimming performed? | ❒Yes ❒No |
| Was vegetation trimming/tree pruning performed? | ❒Yes ❒No |
| Was basin vegetation replanting performed? | ❒Yes ❒No |
| Was weed control performed? | ❒Yes ❒No |

## Structural Information

| | |
|---|---|
| Were any structural repairs performed? *(Describe)* | ❒Yes ❒No |
| Was the CDS Unit cleaned? | ❒Yes ❒No |

## Aesthetic Concerns

| | |
|---|---|
| Was debris and trash removal performed? | ❒Yes ❒No |
| Was graffiti removal performed? | ❒Yes ❒No |
| Was any other maintenance performed? *(Describe)* | ❒Yes ❒No |

| Basin Maintenance Log | | |
|---|---|---|
| Date: | Inspector Name: | Basin: |
| Maintenance Performed: | | |
| Date: | Inspector Name: | Basin: |
| Maintenance Performed: | | |
| Date: | Inspector Name: | Basin: |
| Maintenance Performed: | | |
| Date: | Inspector Name: | Basin: |
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| Date: | Inspector Name: | Basin: |
| Maintenance Performed: | | |

## Extended Detention Basin

| | |
|---|---|
| **Type of BMP** | LID - Biotreatment |
| **Treatment Mechanisms** | Sedimentation, Infiltration, Biofiltration, Evapotranspiration, and Evaporation |
| **Minimum Tributary Drainage Area** | 5 acres |
| **Other Names** | Enhanced Water Quality Basin |

## EXTENDED DETENTION BASIN BMP FACT SHEET

### Design Summary

| Design Parameter | Extended Detention Basin |
|---|---|
| Drawdown time (total) | 72 hours [2,3] |
| Minimum drawdown time for 50% $V_{BMP}$ | 24 hours [2] |
| Minimum tributary area | 5 acres [2] |
| Outlet erosion control | Energy dissipaters to reduce velocities[1] |
| Forebay volume | 3 to 5 % of $V_{BMP}$ [3] |
| Basin Invert Longitudinal Slope (min.) | 1% |
| Basin Invert Transverse (cross) Slope (min) | 1% |
| Low-flow trench width (min.) | 48 inches |
| Low-flow trench depth (min.) | 24 inches |
| Slope of low-flow trench along bottom excavated Surface (max.) | 1% |
| Slope of gravel collector trenches along bottom excavated surface (max.) | 1 % |
| Length to width ratio (min.) | 1.5:1 |
| Basin depth (min.) | 1 foot [3] |
| Bottom stage volume | 0.5 % of $V_{BMP}$ [3] |
| Bottom stage depth (min) | 0.33 feet [3] |
| Filter drain depth (min) | 2.33 feet [3] |

1. Ventura County's Technical Guidance Manual for Stormwater Quality Control Measures
2. CA Stormwater BMP Handbook for New Development and Significant Redevelopment
3. Denver, Colorado's UDFCD Drainage Criteria Manual, Volume 3

# EXTENDED DETENTION BASIN BMP FACT SHEET

## Maintenance Guidelines

| Schedule | Inspection and Maintenance Activity |
|---|---|
| During every scheduled maintenance check (per below), and *as needed* at other times | • Maintain vegetation as needed. Use of fertilizers, pesticides and herbicides should be strongly avoided to ensure they don't contribute to water pollution. If appropriate native plant selections and other IPM methods are used, such products shouldn't be needed. If such projects are used:<br>o Care should be taken to avoid contact with the low-flow or other trenches, and the media filter in the bottom stage.<br>o Products shall be applied in accordance with their labeling, especially in relation to application to water, and in areas subjected to flooding.<br>o Fertilizers should not be applied within 15 days before, after, or during the rainy season.<br>• No ponded water should be present for more than 72 hours to avoid nuisance or vector problems. No algae formation should be visible. Correct problems as needed. |
| **Annually.** If possible, schedule these inspections before the beginning of the rain season to allow for any repairs to occur before rains occur. | • Remove debris and litter from the entire basin<br>• Inspect hydraulic and structural facilities. Examine the outlet for clogging, the embankment and spillway integrity, as well as damage to any structural element.<br>• Check for erosion, slumping and overgrowth. Repair as needed.<br>• Inspect sand media at the filter drain to verify it is allowing acceptable infiltration. **Scarify top 3 inches by raking the filter drain's sand surface annually.**<br>• Check the media filter underdrains (via the cleanout) for damage or clogging. Repair as needed.<br>• Remove accumulated sediment and debris from the forebay, and ensure that the notch weir is clear and will allow proper drainage.<br>• Check gravel filled low flow and collector trenches for sediment buildup and repair as needed. |
| **Every 5 years** or sooner (depending on whether observed drain times to empty the basin are less than 72 hours). | • Remove the top 3 inches of sand from the filter drain and backfill with 3 inches of new sand to return the sand layer to its original depth. When scarification or removal of the top 3 inches of sand is no longer effective, remove and replace sand filter layer. |
| **Whenever substantial sediment accumulation has occurred.** | • Remove accumulated sediment from the bottom of the basin. Removal should extend to original basin depth. |

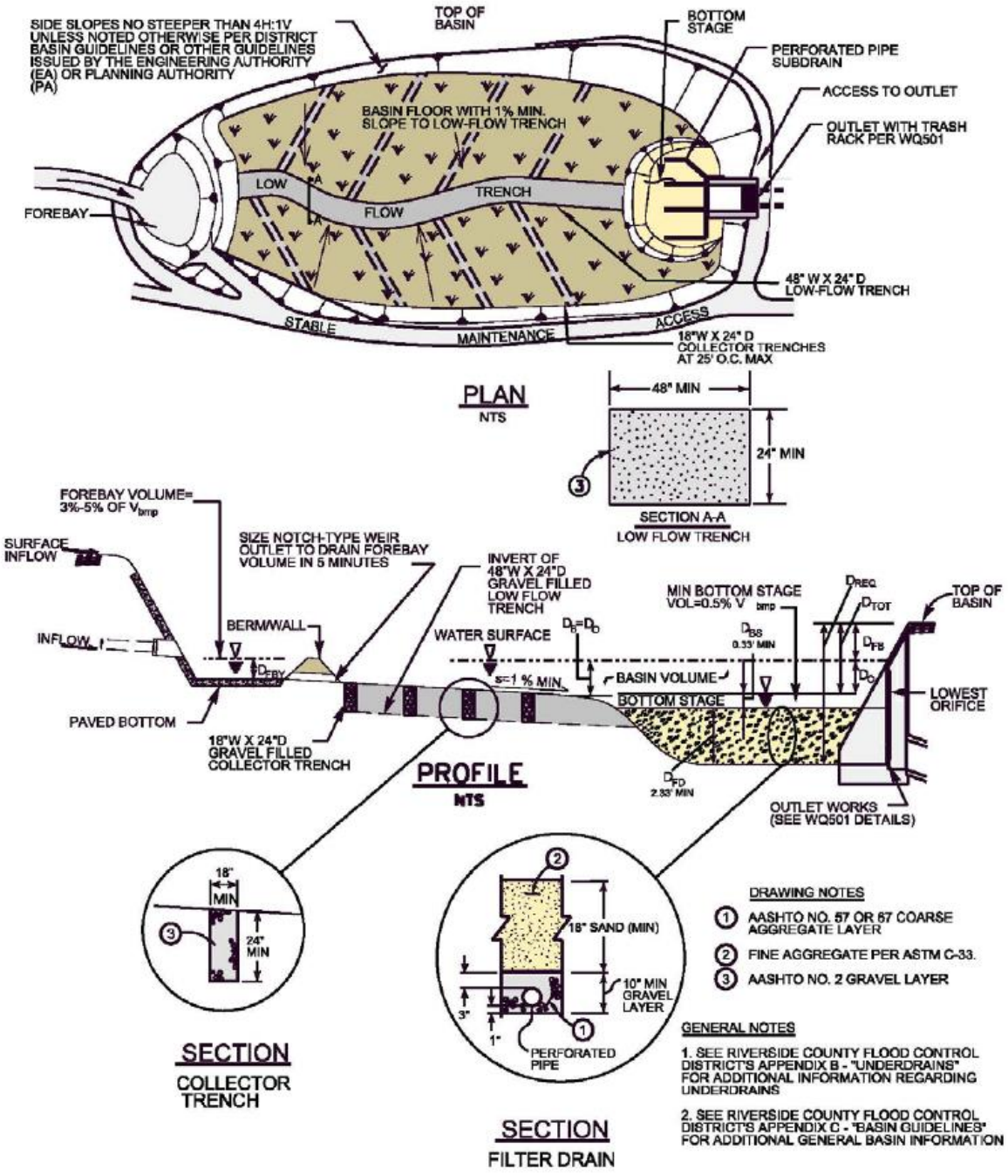



**Figure 1 – Extended Detention Basin**

## Basin Outlet Design

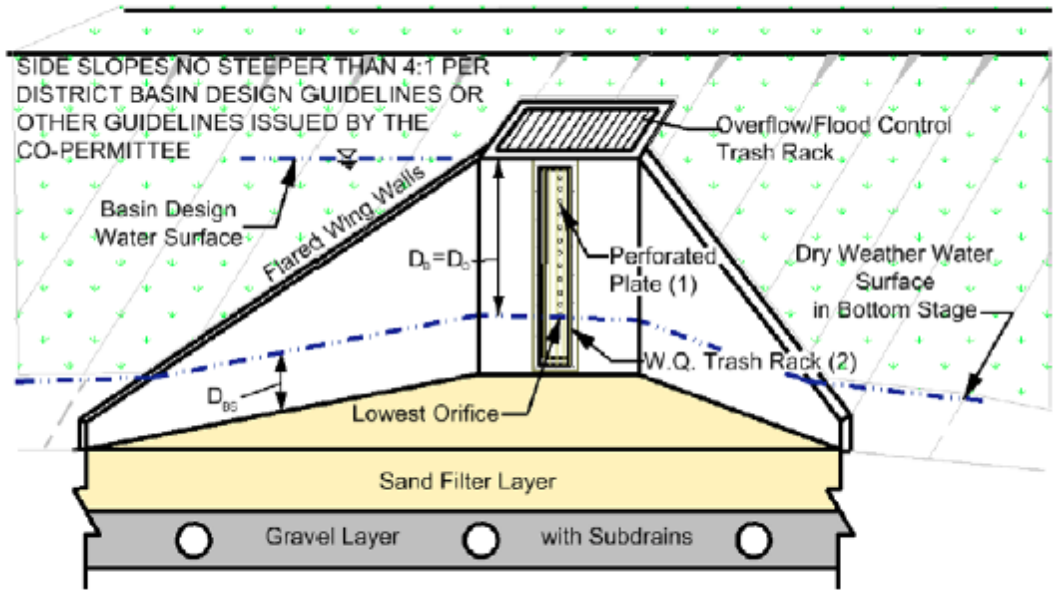
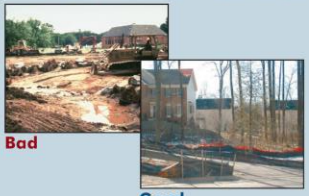



Figure 4: Basin Outlet Structure with Bottom Stage Shown

# Stormwater and the Construction Industry

## Protect Natural Features



Bad

Good

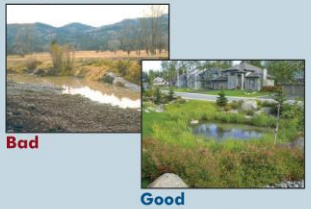
- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

## Construction Phasing



- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

## Vegetative Buffers



Bad

Good

- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

## Silt Fencing



Bad

Good

- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don't place silt fences in the middle of a waterway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

# Maintain your BMPs!

**IN RIVERSIDE COUNTY....Call 1-800-506-2555**
**TO REPORT ILLEGAL STORMDRAIN DISPOSAL**

E-mail: Flood.fcnpdes@co.riverside.ca.us
Visit our website: www.floodcontrol.co.riverside.ca.us

Brought to you by the Storm Water/Clean Water Pollution Protection Program.....
**REMEMBER, ONLY RAIN IN THE STORMDRAIN!**

## Site Stabilization



Bad

Good

- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

## Construction Entrances



Bad

Good

- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

## Slopes



Bad

Good

- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

## Dirt Stockpiles



Bad

Good

- Cover or seed all dirt stockpiles.

## Storm Drain Inlet Protection



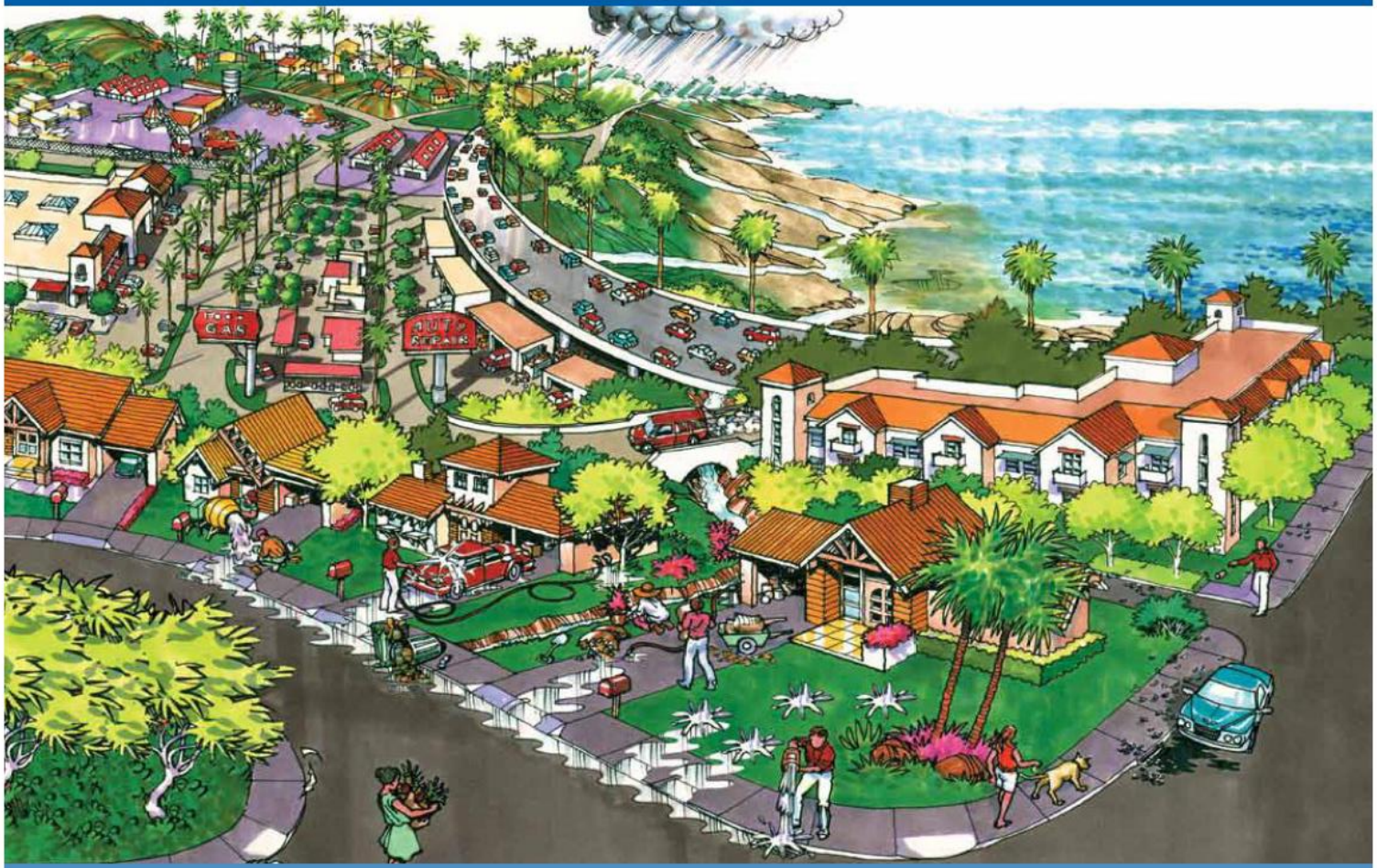
Bad

Good

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

*www.epa.gov/npdes/menuofbmps*

# The Ocean Begins at Your Front Door




*Never allow pollutants to enter the street, gutter or storm drain!*

Follow these simple steps to help reduce water pollution:

## Household Activities

- Do not rinse spills with water. Use dry cleanup methods such as applying cat litter or another absorbent material, sweep and dispose of in the trash. Take items such as used or excess batteries, oven cleaners, automotive fluids, painting products and cathode ray tubes, like TVs and computer monitors, to a Household Hazardous Waste Collection Center (HHWCC).
- For a HHWCC near you call (714) 834-6752 or visit www.oclandfills.com.
- Do not hose down your driveway, sidewalk or patio to the street, gutter or storm drain. Sweep up debris and dispose of it in the trash.

## Automotive

- Take your vehicle to a commercial car wash whenever possible. If you wash your vehicle at home, choose soaps, cleaners, or detergents labeled non-toxic, phosphate- free or biodegradable. Vegetable and citrus-based products are typically safest for the environment.
- Do not allow washwater from vehicle washing to drain into the street, gutter or storm drain. Excess washwater should be disposed of in the sanitary sewer (through a sink or toilet) or onto an absorbent surface like your lawn.
- Monitor your vehicles for leaks and place a pan under leaks. Keep your vehicles well maintained to stop and prevent leaks.
- Never pour oil or antifreeze in the street, gutter or storm drain. Recycle these substances at a service station, a waste oil collection center or used oil recycling center. For the nearest Used Oil Collection Center call 1-800-CLEANUP or visit www.1800cleanup.org.

## Pool Maintenance

- Pool and spa water must be dechlorinated and free of excess acid, alkali or color to be allowed in the street, gutter or storm drain.
- When it is not raining, drain dechlorinated pool and spa water directly into the sanitary sewer.
- Some cities may have ordinances that do not allow pool water to be disposed of in the storm drain. Check with your city.

## Landscape and Gardening

- Do not over-water. Water your lawn and garden by hand to control the amount of water you use or set irrigation systems to reflect seasonal water needs. If water flows off your yard onto your driveway or sidewalk, your system is over-watering. Periodically inspect and fix leaks and misdirected sprinklers.
- Do not rake or blow leaves, clippings or pruning waste into the street, gutter or storm drain. Instead, dispose of waste by composting, hauling it to a permitted landfill, or as green waste through your city's recycling program.
- Follow directions on pesticides and fertilizer, (measure, do not estimate amounts) and do not use if rain is predicted within 48 hours.
- Take unwanted pesticides to a HHWCC to be recycled. For locations and hours of HHWCC, call (714) 834-6752 or visit www.oclandfills.com.

## Trash

- Place trash and litter that cannot be recycled in securely covered trash cans.
- Whenever possible, buy recycled products.
- Remember: Reduce, Reuse, Recycle.

## Pet Care

- Always pick up after your pet. Flush waste down the toilet or dispose of it in the trash. Pet waste, if left outdoors, can wash into the street, gutter or storm drain.
- If possible, bathe your pets indoors. If you must bathe your pet outside, wash it on your lawn or another absorbent/permeable surface to keep the washwater from entering the street, gutter or storm drain.
- Follow directions for use of pet care products and dispose of any unused products at a HHWCC.

## Common Pollutants

### Home Maintenance

- Detergents, cleaners and solvents
- Oil and latex paint
- Swimming pool chemicals
- Outdoor trash and litter

### Lawn and Garden

- Pet and animal waste
- Pesticides
- Clippings, leaves and soil
- Fertilizer

### Automobile

- Oil and grease
- Radiator fluids and antifreeze
- Cleaning chemicals
- Brake pad dust

## Did You Know?

- Most people believe that the largest source of water pollution in urban areas comes from specific sources such as factories and sewage treatment plants. In fact, the largest source of water pollution comes from city streets, neighborhoods, construction sites and parking lots. This type of pollution is sometimes called "non-point source" pollution.
- There are two types of non-point source pollution: stormwater and urban runoff pollution.
- Stormwater runoff results from rainfall. When rainstorms cause large volumes of water to rinse the urban landscape, picking up pollutants along the way.
- Urban runoff can happen any time of the year when excessive water use from irrigation, vehicle washing and other sources carries trash, lawn clippings and other urban pollutants into storm drains.

## Where Does It Go?

- Anything we use outside homes, vehicles and businesses – like motor oil, paint, pesticides, fertilizers and cleaners – can be blown or washed into storm drains.
- A little water from a garden hose or rain can also send materials into storm drains.
- Storm drains are separate from our sanitary sewer systems; unlike water in sanitary sewers (from sinks or toilets), water in storm drains is not treated before entering our waterways.

## Sources of Non-Point Source Pollution

- Automotive leaks and spills.
- Improper disposal of used oil and other engine fluids.
- Metals found in vehicle exhaust, weathered paint, rust, metal plating and tires.
- Pesticides and fertilizers from lawns, gardens and farms.
- Improper disposal of cleaners, paint and paint removers.
- Soil erosion and dust debris from landscape and construction activities.
- Litter, lawn clippings, animal waste, and other organic matter.
- Oil stains on parking lots and paved surfaces.



## The Effect on the Ocean



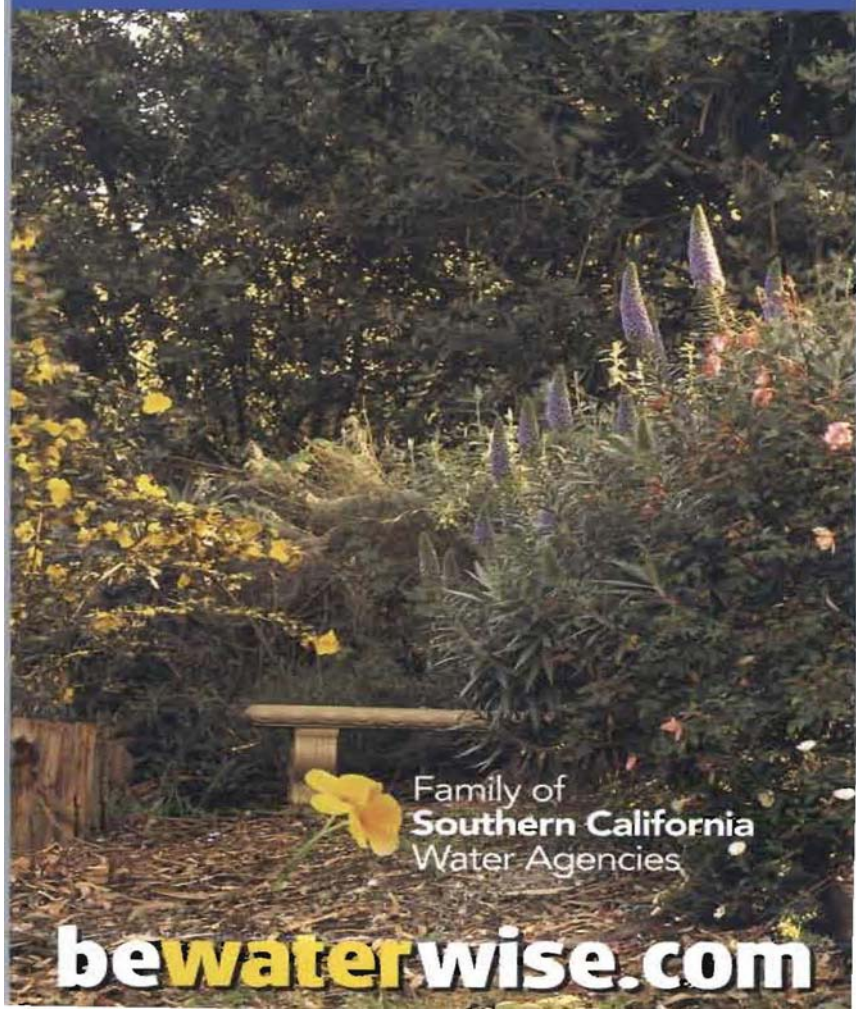
Non-point source pollution can have a serious impact on water quality in Orange County. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade recreation areas such as beaches, harbors and bays.

Stormwater quality management programs have been developed throughout Orange County to educate and encourage the public to protect water quality, monitor runoff in the storm drain system, investigate illegal dumping and maintain storm drains.

Support from Orange County residents and businesses is needed to improve water quality and reduce urban runoff pollution. Proper use and disposal of materials will help stop pollution before it reaches the storm drain and the ocean.



# 10 Ways to Save Water Outdoors



**TIP #1** The average homeowner uses twice the amount of water needed to keep plants healthy. Use the watering calculator and index at **bewaterwise.com** to know exactly how much water your plants need.

**TIP #2** Check your sprinkler system for leaks, overspray and broken sprinkler heads. Update with drip or other more water-efficient sprinklers where appropriate.

**TIP #3** This fall, plant a portion of your garden with beautiful native and California Friendly plants. Browse the plant database at **bewaterwise.com** to find just the right look for your outdoor spaces.

**TIP #4** Reduce the amount of water-thirsty grass. Keep only what you need and replace the rest with less-thirsty plants or permeable paving.

**TIP #5** For the grass you keep, set your lawnmower blade higher.

**TIP #6** Adjust your sprinkler timer downward in September. Plants need less water when days are shorter.

**TIP #7** Use a broom instead of the hose for cleaning sidewalks and patios.

**TIP #8** Mulch! A layer of bark, gravel, compost, sawdust or low-growing groundcover evens out soil temperature and allows better water retention.

**TIP #9** Check the list of invasive plants that hurt our environment at **caleppc.org** and remove any from your garden.

**TIP #10** Share these tips with your gardener, neighbors and friends. Water conservation should be a part of every Southern Californian's lifestyle, but that doesn't mean we can't have lush and beautiful outdoor spaces.

**bewaterwise.com**

# After the Storm

## A Citizen's Guide to Understanding Stormwater

EPA 833-B-03-002

January 2003

Internet Address (URL) • HTTP://www.epa.gov
Recycled/Recyclable • Printed With Vegetable Oil Based Inks on 100% Postconsumer, Process Chlorine Free Recycled Paper

**For more information contact:**

**or visit**
**www.epa.gov/npdes/stormwater**
**www.epa.gov/nps**

## What is stormwater runoff?



Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.



Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

## Why is stormwater runoff a problem?

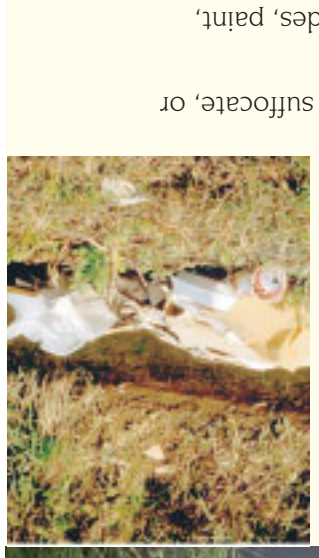


## The effects of pollution

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris—plastic bags, six-pack rings, bottles, and cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.
- Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.







# Stormwater Pollution Solutions



## Residential



*Recycle or properly dispose of household products that contain chemicals, such as insecticides, pesticides, paint, solvents, and used motor oil and other auto fluids. Don't pour them onto the ground or into storm drains.*

### Lawn care



Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.

- Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains or streams.
- Cover piles of dirt or mulch being used in landscaping projects.

### Septic systems



Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.

- Inspect your system every 3 years and pump your tank as necessary (every 3 to 5 years).
- Don't dispose of household hazardous waste in sinks or toilets.

### Auto care




Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so the water infiltrates into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.

### Pet waste



Pet waste can be a major source of bacteria and excess nutrients in local waters.

- When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.




*Education is essential to changing people's behavior. Signs and markers near storm drains warn residents that pollutants entering the drains will be carried untreated into a local waterbody.*

## Residential landscaping

**Permeable Pavement**—Traditional concrete and asphalt don't allow water to soak into the ground. Instead these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak through, decreasing stormwater runoff.



**Rain Barrels**—You can collect rainwater from rooftops in mosquito-proof containers. The water can be used later on lawn or garden areas.

**Rain Gardens and Grassy Swales**—Specially designed areas planted with native plants can provide natural places for rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.



**Vegetated Filter Strips**—Filter strips are areas of native grass or plants created along roadways or streams. They trap the pollutants stormwater picks up as it flows across driveways and streets.



## Commercial

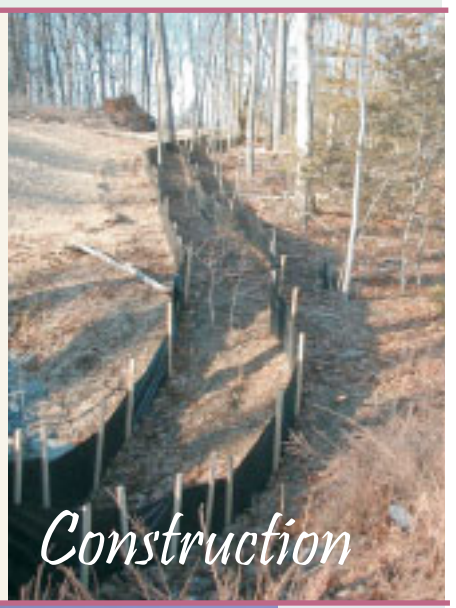
Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

- Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Report any chemical spill to the local hazardous waste cleanup team. They'll know the best way to keep spills from harming the environment.

## Construction

Erosion controls that aren't maintained can cause excessive amounts of sediment and debris to be carried into the stormwater system. Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by stormwater and deposited into local waterbodies.

- Divert stormwater away from disturbed or exposed areas of the construction site.
- Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and erosion controls and properly maintain them, especially after rainstorms.
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.





## Agriculture

Lack of vegetation on streambanks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local waterbodies. Excess fertilizers and pesticides can poison aquatic animals and lead to destructive algae blooms. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.



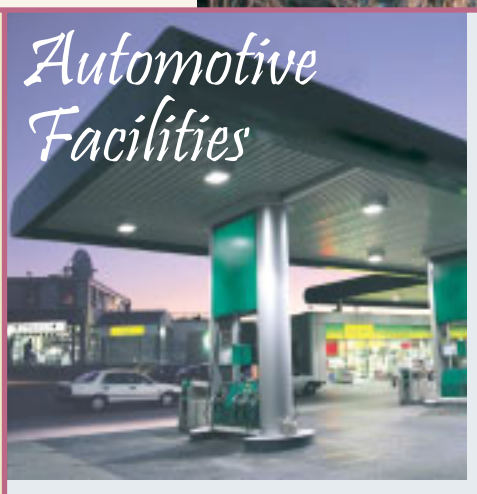
- Keep livestock away from streambanks and provide them a water source away from waterbodies.
- Store and apply manure away from waterbodies and in accordance with a nutrient management plan.
- Vegetate riparian areas along waterways.
- Rotate animal grazing to prevent soil erosion in fields.
- Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.



## Forestry

Improperly managed logging operations can result in erosion and sedimentation.

- Conduct preharvest planning to prevent erosion and lower costs.
- Use logging methods and equipment that minimize soil disturbance.
- Plan and design skid trails, yard areas, and truck access roads to minimize stream crossings and avoid disturbing the forest floor.
- Construct stream crossings so that they minimize erosion and physical changes to streams.
- Expedite revegetation of cleared areas.



## Automotive Facilities

Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by stormwater.

- Clean up spills immediately and properly dispose of cleanup materials.
- Provide cover over fueling stations and design or retrofit facilities for spill containment.
- Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies.
- Install and maintain oil/water separators.



RIVERSIDE COUNTY
ANIMAL SERVICES LOCATIONS:

www.rcdas.org

BLYTHE
16450 West Hobson Way
Blythe, CA 92225
760-921-7857

COACHELLA VALLEY ANIMAL CAMPUS
72-050 Petland Place
Thousand Palms, CA 92276
760-343-3644

RIVERSIDE COUNTY ANIMAL SERVICES
6851 Van Buren Blvd.
Riverside, CA 92509
951-688-4340

OTHER ANIMAL SHELTERS:

ANIMAL CARE CENTER OF INDIO
45-355 Van Buren
Indio, CA 92201
760-391-4138

ANIMAL FRIENDS OF THE VALLEYS
29001 Bastron Avenue
Lake Elsinore, CA 92530
951-674-0618
(Serving incorporated Temecula, Wildomar, Lake Elsinore, Murrieta and Canyon Lake)

MARY S. ROBERTS PET ADOPTION CENTER
6185 Industrial Avenue
Riverside, CA 92504
951-688-4340

RAMONA HUMANE SOCIETY
690 Humane Way
San Jacinto 92586
951-654-8002
(Serving Sun City, Menifee, Romoland and Homeland)

Looking to adopt a pet?
This website is linked to many animal shelters.
www.petfinder.com

To report illegal storm drain disposal, call
1-800-506-2555

Or visit our website at www.rcflood.org

E-mail fcnpdes@rcflood.org

# What's the Scoop?

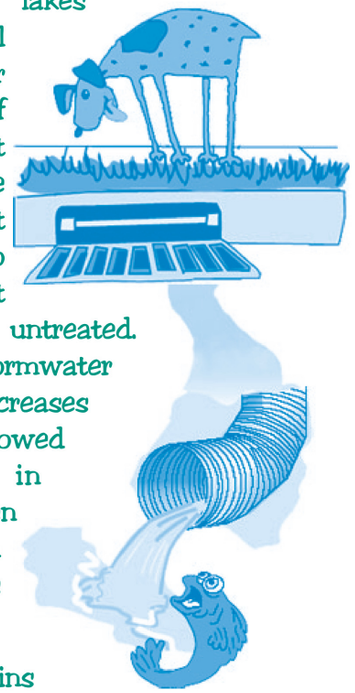


# Tips for a Healthy Pet and a Healthier Environment

CREATE A HEALTHY ENVIRONMENT in and around your home by following these simple pet practices. Your pet, family and neighbors will appreciate their clean comfortable surroundings.

## HOUSEHOLD PETS

We all love our pets, but pet waste is a subject everyone likes to avoid. Pet waste left on trails, sidewalks, streets and grassy areas can be washed into the nearest waterway when it rains. Even if you can't see streams or lakes near you, rainfall (stormwater) or sprinkler runoff can wash pet waste into the storm drains that carry runoff to the nearest streams or lakes untreated. The risk of stormwater contamination increases if pet waste is allowed to accumulate in outdoor animal pen areas or left on sidewalks, streets or driveways.



Pet waste contains nutrients and bacteria. Nutrients can promote the growth of algae in streams and lakes. Algae can cause fish kills and other environmental damage if it is fed too many nutrients. Pet Waste also contains e. Coli and fecal bacteria, which can cause disease in other animals and humans that come in contact with it when swimming or splashing in streams and lakes. Dogs also carry salmonella and giardia, which can make people sick.

Pet waste that is not picked up and properly disposed can also increase vector problems. Flies and other insects are not only attracted to and feed on pet waste, but can also be infected with diseases and spread those diseases to humans and other animals.

## WHAT CAN YOU DO?

- SCOOP up pet waste and flush it down the toilet or place in trash can.
- NEVER DUMP pet waste into a storm drain or catch basin.
- USE the complimentary bags or mutt mitts offered in dispensers at local parks.
- CARRY EXTRA BAGS when walking your dog and make them available to other pet owners who are without.
- TEACH CHILDREN how to properly clean up after a pet.
- TELL FRIENDS AND NEIGHBORS about the ill effects of animal waste on the environment. Encourage them to clean up after pets.

Call 1-800-506-2555 TOLL FREE to report illegal dumping to the storm drain, find the dates and times of local Household Hazardous Waste Collection Events, obtain additional information on stormwater problems and solutions, request presentations about stormwater pollution in your child's classroom, or learn about free grasscycling and composting workshops.

## SCOOP THE POOP



Many communities have "Scoop the Poop" laws that govern pet waste cleanup. Some of these laws specifically require anyone who walks an animal off their property to carry a bag, shovel, or scooper. Any waste left by the animal must be cleaned up immediately. CALL YOUR LOCAL CODE ENFORCEMENT OFFICE to find out more about pet waste regulations.

## OTHER WAYS TO PROTECT YOUR PETS AND THE ENVIRONMENT

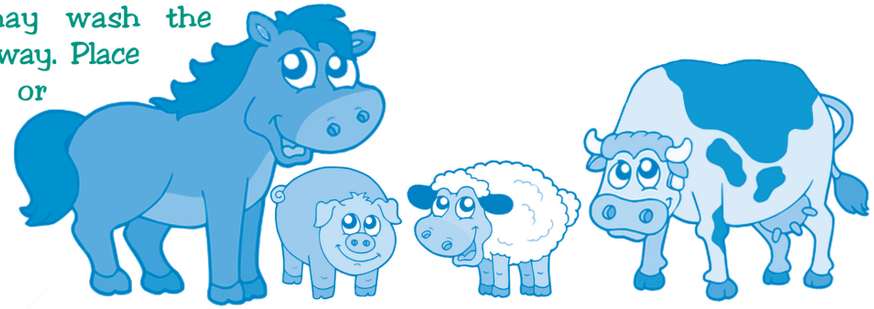
Pets are only one of many sources that contribute to water pollution. However, these other sources of water pollution cannot only harm the environment but also harm your pet. Improperly used or stored lawn fertilizers, pesticides, soaps, grease and vehicle fluids cannot only be washed into local streams and lakes, these chemicals can also harm your pet if they ingest or touch these chemicals. Call 1-800-506-2555 for information regarding how to properly dispose of household hazardous wastes such as these. You can also keep your pets and our environment healthy by properly maintaining your vehicles, and limiting use of pesticides and fertilizers to only the amount that is absolutely needed.

Make sure to not only protect your pets, but to also protect your neighbors pets. NEVER HOSE VEHICLE FLUIDS into the street or gutter. USE ABSORBENT MATERIALS such as cat litter to clean-up spills. SWEEP UP used absorbent materials and place it in the trash.

## HORSES AND LIVESTOCK

Fortunate enough to own a horse or livestock? You, too, can play a part in protecting and cleaning up our water resources. The following are a few simple Best Management Practices (BMPs) specifically designed for horses and livestock.

- STORE your manure properly. Do not store unprotected piles of manure in places where stormwater runoff may wash the manure away. Place a cover or tarp over the pile to keep rainwater out.



- BUILD a manure storage facility to protect your pets, property and the environment. These structures usually consist of a concrete pad to protect groundwater and a short wall on one or two sides to make manure handling easier.
- READ the Only Rain Down the Storm Drain brochure titled "Tips for Horse Care" for additional guidance and recommendations. This brochure should be available from your local city office or for download at www.rcflood.org/stormwater.
- KEEP animals out of streams - Horses and livestock can deficate in streams causing stormwater pollution. Livestock and horses in streams can also disturb sensitive habitat and vegetation, causing additional environmental damage. Keep livestock and horses away from streams and use designated stream crossings whenever possible.
- MATERIAL STORAGE SAFETY TIPS Many of the chemicals found in barns require careful handling and proper disposal. When using these chemicals, be certain to follow these common sense guidelines:
  - Buy only what you need.
  - Treat spills of hoof oils like a fuel spill. Use kitty litter to soak up the oil and dispose of it in a tightly sealed plastic bag.
  - Store pesticides in a locked, dry, well-ventilated area.
  - Protect stored fertilizer and pesticides from rain and surface water.

## RESOURCE CONSERVATION DISTRICTS CAN HELP

Call 1-800-506-2555 for assistance with locating a local conservation district that can help you properly manage your manure, re-establish healthy pastures, control weeds, or identify appropriate grasses for your soils.




Thank you for doing your part to protect your watershed, the environment, your pets and your community!



Landscaping and garden maintenance activities can be major contributors to water pollution. Soils, yard wastes, over-watering and garden chemicals become part of the urban runoff mix that winds its way through streets, gutters and storm drains before entering lakes, rivers, streams, etc. Urban runoff pollution contaminates water and harms aquatic life!

In Riverside County, report illegal discharges into the storm drain, call
1-800-506-2555
"Only Rain Down the Storm Drain"

## Important Links:

Riverside County Household Hazardous Waste Collection Information
1-800-304-2226 or www.rivcowm.org

Riverside County Backyard Composting Program
1-800-366-SAVE

Integrated Pest Management (IPM) Solutions
www.ipm.ucdavis.edu

California Master Gardener Programs
www.mastergardeners.org
www.camastergardeners.ucdavis.edu

California Native Plant Society
www.cnps.org

The Riverside County "Only Rain Down the Storm Drain" Pollution Prevention Program gratefully acknowledges Orange County's Storm Water Program for their contribution to this brochure.

# ...Only Rain Down ...the Storm Drain

*What you should know for... Landscape and Gardening*

Best Management tips for:

- Professionals
- Novices
- Landscapers
- Gardeners
- Cultivators



# Tips for Landscape & Gardening

This brochure will help you to get the most of your lawn and gardening efforts and keep our waterways clean. Clean waterways provide recreation, establish thriving fish habitats, secure safe sanctuaries for wildlife, and add beauty to our communities. NEVER allow gardening products or waste water to enter the street, gutter or storm drain.

## *General Landscaping Tips*

- Protect stockpiles and materials from wind and rain by storing them under tarps or secured plastic sheeting.
- Prevent erosion of slopes by planting fast-growing, dense ground covering plants. These will shield and bind the soil.



- Plant native vegetation to reduce the amount of water, fertilizers and pesticides applied to the landscape.
- Never apply pesticides or fertilizers when rain is predicted within the next 48 hours.

## *Garden & Lawn Maintenance*

- Do not overwater. Use irrigation practices such as drip irrigation, soaker hoses or micro-spray systems. Periodically inspect and fix leaks and misdirected sprinklers.
- Do not rake or blow leaves, clippings or pruning waste into the street, gutter or storm drain. Instead, dispose of green waste by composting, hauling it to a permitted landfill, or recycling it through your city's program.



- Consider recycling your green waste and adding "nature's own fertilizer" to your lawn or garden.
- Read labels and use only as directed. Do not over-apply pesticides or fertilizers. Apply to spots as needed, rather than blanketing an entire area.
- Store pesticides, fertilizers and other chemicals in a dry covered area to prevent exposure that may result in the deterioration of containers and packaging.
- Rinse empty pesticide containers and re-use rinse water as you would use the product. Do not dump rinse water down storm drains or sewers. Dispose of empty containers in the trash.
- When available, use non-toxic alternatives to traditional pesticides, and use pesticides specifically designed to control the pest you are targeting.
- Try natural long-term common sense solutions first. Integrated Pest Management (IPM) can provide landscaping guidance and solutions, such as:
  - **Physical Controls** - Try hand picking, barriers, traps or caulking holes to control weeds and pests.
  - **Biological Controls** - Use predatory insects to control harmful pests.
  - **Chemical Controls** - Check out www.ipm.ucdavis.edu before using chemicals. Remember, all chemicals should be used cautiously and in moderation.
- If fertilizer is spilled, sweep up the spill before irrigating. If the spill is liquid, apply an absorbent material such as cat litter, and then sweep it up and dispose of it in the trash.
- Take unwanted pesticides to a Household Waste Collection Center to be recycled.
- *Dumping toxics into the street, gutter or storm drain is illegal!*

**www.bewaterwise.com** Great water conservation tips and drought tolerant garden designs.

**www.ourwaterourworld.com** Learn how to safely manage home and garden pests.

**Additional information can also be found on the back of this brochure.**

## Helpful telephone numbers and links:

### Riverside County Stormwater Protection Partners

| | |
|---|---|
| Flood Control District | (951) 955-1200 |
| County of Riverside | (951) 955-1000 |
| City of Banning | (951) 922-3105 |
| City of Beaumont | (951) 769-8520 |
| City of Calimesa | (909) 795-9801 |
| City of Canyon Lake | (951) 244-2955 |
| Cathedral City | (760) 770-0327 |
| City of Coachella | (760) 398-4978 |
| City of Corona | (951) 736-2447 |
| City of Desert Hot Springs | (760) 329-6411 |
| City of Eastvale | (951) 361-0900 |
| City of Hemet | (951) 765-2300 |
| City of Indian Wells | (760) 346-2489 |
| City of Indio | (760) 391-4000 |
| City of Lake Elsinore | (951) 674-3124 |
| City of La Quinta | (760) 777-7000 |
| City of Menifee | (951) 672-6777 |
| City of Moreno Valley | (951) 413-3000 |
| City of Murrieta | (951) 304-2489 |
| City of Norco | (951) 270-5607 |
| City of Palm Desert | (760) 346-0611 |
| City of Palm Springs | (760) 323-8299 |
| City of Perris | (951) 943-6100 |
| City of Rancho Mirage | (760) 324-4511 |
| City of Riverside | (951) 361-0900 |
| City of San Jacinto | (951) 654-7337 |
| City of Temecula | (951) 694-6444 |
| City of Wildomar | (951) 677-7751 |

REPORT ILLEGAL STORM DRAIN DISPOSAL
1-800-506-2555 or e-mail us at
fcnpdes@rcflood.org

- Riverside County Flood Control and Water Conservation District
  www.rcflood.org

Online resources include:

- California Storm Water Quality Association
  www.casqa.org
- State Water Resources Control Board
  www.waterboards.ca.gov
- Power Washers of North America
  www.thepwna.org

# Stormwater Pollution

*What you should know for...*

## Outdoor Cleaning Activities and Professional Mobile Service Providers



### Storm drain pollution prevention information for:

- Car Washing / Mobile Detailers
- Window and Carpet Cleaners
- Power Washers
- Waterproofers / Street Sweepers
- Equipment cleaners or degreasers and all mobile service providers

## Do you know where street flows actually go?

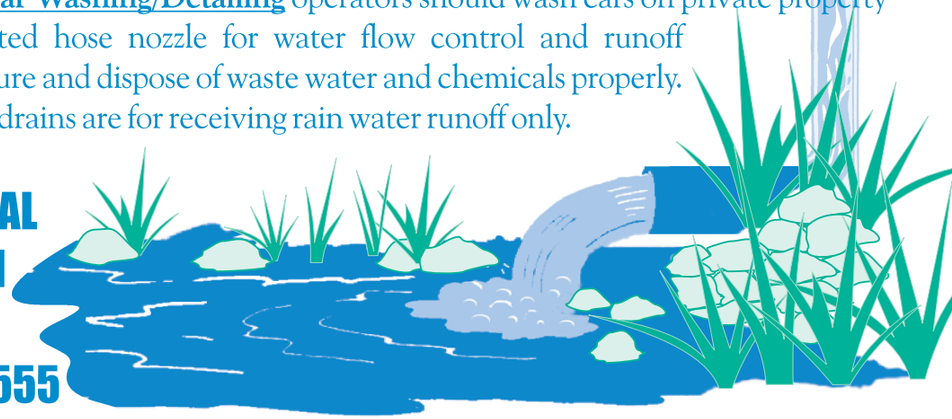
### Storm drains are NOT connected to sanitary sewer systems and treatment plants!




The primary purpose of storm drains is to carry *rain* water away from developed areas to prevent flooding. Pollutants discharged to storm drains are transported directly into rivers, lakes and streams. Soaps, degreasers, automotive fluids, litter and a host of materials are washed off buildings, sidewalks, plazas and parking areas. Vehicles and equipment must be properly managed to prevent the pollution of local waterways.

Unintentional spills by mobile service operators can flow into storm drains and pollute our waterways. **Avoid mishaps.** *Always* have a **Spill Response Kit** on hand to clean up unintentional spills. Only emergency **Mechanical** repairs should be done in City streets, using drip pans for spills. **Plumbing** should be done on private property. Always store chemicals in a leak-proof container and keep covered when not in use. **Window/Power Washing** waste water shouldn't be released into the streets, but should be disposed of in a sanitary sewer, landscaped area or in the soil. Soiled **Carpet Cleaning** wash water should be filtered before being discharged into the sanitary sewer. Dispose of all filter debris properly. **Car Washing/Detailing** operators should wash cars on private property and use a regulated hose nozzle for water flow control and runoff prevention. Capture and dispose of waste water and chemicals properly. Remember, storm drains are for receiving rain water runoff only.

**REPORT ILLEGAL STORM DRAIN DISPOSAL 1-800-506-2555**



# Help Protect Our Waterways!

## Use these guidelines for Outdoor Cleaning Activities and Wash Water Disposal

**Did you know that disposing of pollutants into the street, gutter, storm drain or body of water is *PROHIBITED* by law and can result in stiff penalties?**

## Best Management Practices

Waste wash water from Mechanics, Plumbers, Window/Power Washers, Carpet Cleaners, Car Washing and Mobile Detailing activities may contain significant quantities of motor oil, grease, chemicals, dirt, detergents, brake pad dust, litter and other materials.

Best Management Practices, or BMPs as they are known, are guides to prevent pollutants from entering the storm drains. ***Each of us*** can do our part to keep stormwater clean by using the suggested BMPs below:

## Simple solutions for both light and heavy duty jobs:

**Do...**consider dry cleaning methods first such as a mop, broom, rag or wire brush. Always keep a spill response kit on site.

**Do...**prepare the work area before power cleaning by using sand bags, rubber mats, vacuum booms, containment pads or temporary berms to keep wash water away from the gutters and storm drains.

**Do...**use vacuums or other machines to remove and collect loose debris or litter before applying water.

**Do...**obtain the property owner's permission to dispose of ***small amounts*** of power washing waste water on to landscaped, gravel or unpaved surfaces.

**Do...**check your local sanitary sewer agency's policies on wash water disposal regulations before disposing of wash water into the sewer. (See list on reverse side)

**Do...**be aware that if discharging to landscape areas, soapy wash water may damage landscaping. Residual wash water may remain on paved surfaces to evaporate. Sweep up solid residuals and dispose of properly. Vacuum booms are another option for capturing and collecting wash water.

**Do...**check to see if local ordinances prevent certain activities.

**Do not let...**wash or waste water from sidewalk, plaza or building cleaning go into a street or storm drain.




**Report illegal storm drain disposal**
**Call Toll Free**
**1-800-506-2555**

## Using Cleaning Agents

Try using biodegradable/phosphate-free products. They are easier on the environment, but don't confuse them with being toxic free. Soapy water entering the storm drain system can impact the delicate aquatic environment.



When cleaning surfaces with a ***high-pressure washer*** or ***steam cleaner***, additional precautions should be taken to prevent the discharge of pollutants into the storm drain system. These two methods of surface cleaning can loosen additional material that can contaminate local waterways.

## Think Water Conservation

Minimize water use by using high pressure, low volume nozzles. Be sure to check all hoses for leaks. Water is a precious resource, don't let it flow freely and be sure to shut it off in between uses.

## Screening Wash Water

Conduct thorough dry cleanup before washing exterior surfaces, such as buildings and decks ***with loose paint***, sidewalks or plaza areas. Keep debris from entering the storm drain after cleaning by first passing the wash water through a "20 mesh" or finer screen to catch the solid materials, then dispose of the mesh in a refuse container. Do not let the remaining wash water enter a street, gutter or storm drain.

## Drain Inlet Protection & Collection of Wash Water

- Prior to any washing, block all storm drains with an impervious barrier such as sandbags or berms, or seal the storm drain with plugs or other appropriate materials.
- Create a containment area with berms and traps or take advantage of a low spot to keep wash water contained.
- Wash vehicles and equipment on grassy or gravel areas so that the wash water can seep into the ground.
- Pump or vacuum up all wash water in the contained area.

## Concrete/Coring/Saw Cutting and Drilling Projects

Protect any down-gradient inlets by using dry activity techniques whenever possible. If water is used, minimize the amount of water used during the coring/drilling or saw cutting process. Place a barrier of sandbags and/or absorbent berms to protect the storm drain inlet or watercourse. Use a shovel or wet vacuum to remove the residue from the pavement. Do not wash residue or particulate matter into a storm drain inlet or watercourse.

# Site Design & Landscape Planning SD-10



**Design Objectives**

- ☑ Maximize Infiltration
- ☑ Provide Retention
- ☑ Slow Runoff
- ☑ Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

## Description

Each project site possesses unique topographic, hydrologic, and vegetative features, some of which are more suitable for development than others. Integrating and incorporating appropriate landscape planning methodologies into the project design is the most effective action that can be done to minimize surface and groundwater contamination from stormwater.

## Approach

Landscape planning should couple consideration of land suitability for urban uses with consideration of community goals and projected growth. Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

## Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

## Design Considerations

Design requirements for site design and landscapes planning should conform to applicable standards and specifications of agencies with jurisdiction and be consistent with applicable General Plan and Local Area Plan policies.

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

***Designing New Installations***

Begin the development of a plan for the landscape unit with attention to the following general principles:

- Formulate the plan on the basis of clearly articulated community goals. Carefully identify conflicts and choices between retaining and protecting desired resources and community growth.
- Map and assess land suitability for urban uses. Include the following landscape features in the assessment: wooded land, open unwooded land, steep slopes, erosion-prone soils, foundation suitability, soil suitability for waste disposal, aquifers, aquifer recharge areas, wetlands, floodplains, surface waters, agricultural lands, and various categories of urban land use. When appropriate, the assessment can highlight outstanding local or regional resources that the community determines should be protected (e.g., a scenic area, recreational area, threatened species habitat, farmland, fish run). Mapping and assessment should recognize not only these resources but also additional areas needed for their sustenance.

Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

*Conserve Natural Areas during Landscape Planning*

If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

- Cluster development on least-sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
- Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.
- Promote natural vegetation by using parking lot islands and other landscaped areas.
- Preserve riparian areas and wetlands.

*Maximize Natural Water Storage and Infiltration Opportunities Within the Landscape Unit*

- Promote the conservation of forest cover. Building on land that is already deforested affects basin hydrology to a lesser extent than converting forested land. Loss of forest cover reduces interception storage, detention in the organic forest floor layer, and water losses by evapotranspiration, resulting in large peak runoff increases and either their negative effects or the expense of countering them with structural solutions.
- Maintain natural storage reservoirs and drainage corridors, including depressions, areas of permeable soils, swales, and intermittent streams. Develop and implement policies and

regulations to discourage the clearing, filling, and channelization of these features. Utilize them in drainage networks in preference to pipes, culverts, and engineered ditches.

- Evaluating infiltration opportunities by referring to the stormwater management manual for the jurisdiction and pay particular attention to the selection criteria for avoiding groundwater contamination, poor soils, and hydrogeological conditions that cause these facilities to fail. If necessary, locate developments with large amounts of impervious surfaces or a potential to produce relatively contaminated runoff away from groundwater recharge areas.

*Protection of Slopes and Channels during Landscape Design*

- Convey runoff safely from the tops of slopes.
- Avoid disturbing steep or unstable slopes.
- Avoid disturbing natural channels.
- Stabilize disturbed slopes as quickly as possible.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize temporary and permanent channel crossings as quickly as possible, and ensure that increases in run-off velocity and frequency caused by the project do not erode the channel.
- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Line on-site conveyance channels where appropriate, to reduce erosion caused by increased flow velocity due to increases in tributary impervious area. The first choice for linings should be grass or some other vegetative surface, since these materials not only reduce runoff velocities, but also provide water quality benefits from filtration and infiltration. If velocities in the channel are high enough to erode grass or other vegetative linings, riprap, concrete, soil cement, or geo-grid stabilization are other alternatives.
- Consider other design principles that are comparable and equally effective.

### *Redeveloping Existing Installations*

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “ redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.

Redevelopment may present significant opportunity to add features which had not previously been implemented. Examples include incorporation of depressions, areas of permeable soils, and swales in newly redeveloped areas. While some site constraints may exist due to the status of already existing infrastructure, opportunities should not be missed to maximize infiltration, slow runoff, reduce impervious areas, disconnect directly connected impervious areas.

### Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Stormwater Management Manual for Western Washington, Washington State Department of Ecology, August 2001.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

# Roof Runoff Controls SD-11



Rain Garden

**Design Objectives**

- ☑ Maximize Infiltration
- ☑ Provide Retention
- ☑ Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- ☑ Contain Pollutants
- Collect and Convey

## Description

Various roof runoff controls are available to address stormwater that drains off rooftops. The objective is to reduce the total volume and rate of runoff from individual lots, and retain the pollutants on site that may be picked up from roofing materials and atmospheric deposition. Roof runoff controls consist of directing the roof runoff away from paved areas and mitigating flow to the storm drain system through one of several general approaches: cisterns or rain barrels; dry wells or infiltration trenches; pop-up emitters, and foundation planting. The first three approaches require the roof runoff to be contained in a gutter and downspout system. Foundation planting provides a vegetated strip under the drip line of the roof.

## Approach

Design of individual lots for single-family homes as well as lots for higher density residential and commercial structures should consider site design provisions for containing and infiltrating roof runoff or directing roof runoff to vegetative swales or buffer areas. Retained water can be reused for watering gardens, lawns, and trees. Benefits to the environment include reduced demand for potable water used for irrigation, improved stormwater quality, increased groundwater recharge, decreased runoff volume and peak flows, and decreased flooding potential.

## Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

## Design Considerations

### *Designing New Installations*

*Cisterns or Rain Barrels*

One method of addressing roof runoff is to direct roof downspouts to cisterns or rain barrels. A cistern is an above ground storage vessel with either a manually operated valve or a permanently open outlet. Roof runoff is temporarily stored and then released for irrigation or infiltration between storms. The number of rain

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barrels needed is a function of the rooftop area. Some low impact developers recommend that every house have at least 2 rain barrels, with a minimum storage capacity of 1000 liters. Roof barrels serve several purposes including mitigating the first flush from the roof which has a high volume, amount of contaminants, and thermal load. Several types of rain barrels are commercially available. Consideration must be given to selecting rain barrels that are vector proof and childproof. In addition, some barrels are designed with a bypass valve that filters out grit and other contaminants and routes overflow to a soak-away pit or rain garden.

If the cistern has an operable valve, the valve can be closed to store stormwater for irrigation or infiltration between storms. This system requires continual monitoring by the resident or grounds crews, but provides greater flexibility in water storage and metering. If a cistern is provided with an operable valve and water is stored inside for long periods, the cistern must be covered to prevent mosquitoes from breeding.

A cistern system with a permanently open outlet can also provide for metering stormwater runoff. If the cistern outlet is significantly smaller than the size of the downspout inlet (say ¼ to ½ inch diameter), runoff will build up inside the cistern during storms, and will empty out slowly after peak intensities subside. This is a feasible way to mitigate the peak flow increases caused by rooftop impervious land coverage, especially for the frequent, small storms.

*Dry wells and Infiltration Trenches*

Roof downspouts can be directed to dry wells or infiltration trenches. A dry well is constructed by excavating a hole in the ground and filling it with an open graded aggregate, and allowing the water to fill the dry well and infiltrate after the storm event. An underground connection from the downspout conveys water into the dry well, allowing it to be stored in the voids. To minimize sedimentation from lateral soil movement, the sides and top of the stone storage matrix can be wrapped in a permeable filter fabric, though the bottom may remain open. A perforated observation pipe can be inserted vertically into the dry well to allow for inspection and maintenance.

In practice, dry wells receiving runoff from single roof downspouts have been successful over long periods because they contain very little sediment. They must be sized according to the amount of rooftop runoff received, but are typically 4 to 5 feet square, and 2 to 3 feet deep, with a minimum of 1-foot soil cover over the top (maximum depth of 10 feet).

To protect the foundation, dry wells must be set away from the building at least 10 feet. They must be installed in solids that accommodate infiltration. In poorly drained soils, dry wells have very limited feasibility.

Infiltration trenches function in a similar manner and would be particularly effective for larger roof areas. An infiltration trench is a long, narrow, rock-filled trench with no outlet that receives stormwater runoff. These are described under Treatment Controls.

*Pop-up Drainage Emitter*

Roof downspouts can be directed to an underground pipe that daylights some distance from the building foundation, releasing the roof runoff through a pop-up emitter. Similar to a pop-up irrigation head, the emitter only opens when there is flow from the roof. The emitter remains flush to the ground during dry periods, for ease of lawn or landscape maintenance.

*Foundation Planting*

Landscape planting can be provided around the base to allow increased opportunities for stormwater infiltration and protect the soil from erosion caused by concentrated sheet flow coming off the roof. Foundation plantings can reduce the physical impact of water on the soil and provide a subsurface matrix of roots that encourage infiltration. These plantings must be sturdy enough to tolerate the heavy runoff sheet flows, and periodic soil saturation.

### *Redeveloping Existing Installations*

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

## Supplemental Information

### *Examples*

- City of Ottawa's Water Links Surface –Water Quality Protection Program
- City of Toronto Downspout Disconnection Program
- City of Boston, MA, Rain Barrel Demonstration Program

## Other Resources

Hager, Marty Catherine, Stormwater, "Low-Impact Development", January/February 2003. www.stormh2o.com

Low Impact Urban Design Tools, Low Impact Development Design Center, Beltsville, MD. www.lid-stormwater.net

Start at the Source, Bay Area Stormwater Management Agencies Association, 1999 Edition

# Efficient Irrigation SD-12



**Design Objectives**

- ☑ Maximize Infiltration
- ☑ Provide Retention
- ☑ Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

## Description

Irrigation water provided to landscaped areas may result in excess irrigation water being conveyed into stormwater drainage systems.

## Approach

Project plan designs for development and redevelopment should include application methods of irrigation water that minimize runoff of excess irrigation water into the stormwater conveyance system.

## Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

## Design Considerations

### *Designing New Installations*

The following methods to reduce excessive irrigation runoff should be considered, and incorporated and implemented where determined applicable and feasible by the Permittee:

- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Design irrigation systems to each landscape area's specific water requirements.
- Include design featuring flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
- Implement landscape plans consistent with County or City water conservation resolutions, which may include provision of water sensors, programmable irrigation times (for short cycles), etc.

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- Design timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water drainage system.
- Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider design features such as:
  - Using mulches (such as wood chips or bar) in planter areas without ground cover to minimize sediment in runoff
  - Installing appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant materials where possible and/or as recommended by the landscape architect
  - Leaving a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible
  - Choosing plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth
- Employ other comparable, equally effective methods to reduce irrigation water runoff.

### *Redeveloping Existing Installations*

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

## Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

# Storm Drain Signage SD-13




**Design Objectives**

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- ☑ Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

## Description

Waste materials dumped into storm drain inlets can have severe impacts on receiving and ground waters. Posting notices regarding discharge prohibitions at storm drain inlets can prevent waste dumping. Storm drain signs and stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets.

## Approach

The stencil or affixed sign contains a brief statement that prohibits dumping of improper materials into the urban runoff conveyance system. Storm drain messages have become a popular method of alerting the public about the effects of and the prohibitions against waste disposal.

## Suitable Applications

Stencils and signs alert the public to the destination of pollutants discharged to the storm drain. Signs are appropriate in residential, commercial, and industrial areas, as well as any other area where contributions or dumping to storm drains is likely.

## Design Considerations

Storm drain message markers or placards are recommended at all storm drain inlets within the boundary of a development project. The marker should be placed in clear sight facing toward anyone approaching the inlet from either side. All storm drain inlet locations should be identified on the development site map.

### *Designing New Installations*

The following methods should be considered for inclusion in the project design and show on project plans:

- Provide stenciling or labeling of all storm drain inlets and catch basins, constructed or modified, within the project area with prohibitive language. Examples include “NO DUMPING

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– DRAINS TO OCEAN" and/or other graphical icons to discourage illegal dumping.

- Post signs with prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

Note - Some local agencies have approved specific signage and/or storm drain message placards for use. Consult local agency stormwater staff to determine specific requirements for placard types and methods of application.

### *Redeveloping Existing Installations*

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. If the project meets the definition of "redevelopment", then the requirements stated under " designing new installations" above should be included in all project design plans.

## Additional Information

### *Maintenance Considerations*

- Legibility of markers and signs should be maintained. If required by the agency with jurisdiction over the project, the owner/operator or homeowner's association should enter into a maintenance agreement with the agency or record a deed restriction upon the property title to maintain the legibility of placards or signs.

### *Placement*

- Signage on top of curbs tends to weather and fade.

- Signage on face of curbs tends to be worn by contact with vehicle tires and sweeper brooms.

## Supplemental Information

### *Examples*

- Most MS4 programs have storm drain signage programs. Some MS4 programs will provide stencils, or arrange for volunteers to stencil storm drains as part of their outreach program.

## Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

# Maintenance Bays & Docks SD-31



**Design Objectives**

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- ☑ Prohibit Dumping of Improper Materials
- ☑ Contain Pollutants
- Collect and Convey

## Description

Several measures can be taken to prevent operations at maintenance bays and loading docks from contributing a variety of toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to the stormwater conveyance system.

## Approach

In designs for maintenance bays and loading docks, containment is encouraged. Preventative measures include overflow containment structures and dead-end sumps. However, in the case of loading docks from grocery stores and warehouse/distribution centers, engineered infiltration systems may be considered.

## Suitable Applications

Appropriate applications include commercial and industrial areas planned for development or redevelopment.

## Design Considerations

Design requirements for vehicle maintenance and repair are governed by Building and Fire Codes, and by current local agency ordinances, and zoning requirements. The design criteria described in this fact sheet are meant to enhance and be consistent with these code requirements.

### *Designing New Installations*

Designs of maintenance bays should consider the following:

- Repair/maintenance bays and vehicle parts with fluids should be indoors; or designed to preclude urban run-on and runoff.
- Repair/maintenance floor areas should be paved with Portland cement concrete (or equivalent smooth impervious surface).

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- Repair/maintenance bays should be designed to capture all wash water leaks and spills. Provide impermeable berms, drop inlets, trench catch basins, or overflow containment structures around repair bays to prevent spilled materials and wash-down waters form entering the storm drain system. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.

- Other features may be comparable and equally effective.

The following designs of loading/unloading dock areas should be considered:

- Loading dock areas should be covered, or drainage should be designed to preclude urban run-on and runoff.

- Direct connections into storm drains from depressed loading docks (truck wells) are prohibited.

- Below-grade loading docks from grocery stores and warehouse/distribution centers of fresh food items should drain through water quality inlets, or to an engineered infiltration system, or an equally effective alternative. Pre-treatment may also be required.

- Other features may be comparable and equally effective.

### *Redeveloping Existing Installations*

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

## Additional Information

Stormwater and non-stormwater will accumulate in containment areas and sumps with impervious surfaces. Contaminated accumulated water must be disposed of in accordance with applicable laws and cannot be discharged directly to the storm drain or sanitary sewer system without the appropriate permit.

## Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

# Trash Storage Areas SD-32

## Description

Trash storage areas are areas where a trash receptacle (s) are located for use as a repository for solid wastes. Stormwater runoff from areas where trash is stored or disposed of can be polluted. In addition, loose trash and debris can be easily transported by water or wind into nearby storm drain inlets, channels, and/or creeks. Waste handling operations that may be sources of stormwater pollution include dumpsters, litter control, and waste piles.

## Approach

This fact sheet contains details on the specific measures required to prevent or reduce pollutants in stormwater runoff associated with trash storage and handling. Preventative measures including enclosures, containment structures, and impervious pavements to mitigate spills, should be used to reduce the likelihood of contamination.

**Design Objectives**

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- ☑ Contain Pollutants
- Collect and Convey

## Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

## Design Considerations

Design requirements for waste handling areas are governed by Building and Fire Codes, and by current local agency ordinances and zoning requirements. The design criteria described in this fact sheet are meant to enhance and be consistent with these code and ordinance requirements. Hazardous waste should be handled in accordance with legal requirements established in Title 22, California Code of Regulation.

Wastes from commercial and industrial sites are typically hauled by either public or commercial carriers that may have design or access requirements for waste storage areas. The design criteria in this fact sheet are recommendations and are not intended to be in conflict with requirements established by the waste hauler. The waste hauler should be contacted prior to the design of your site trash collection areas. Conflicts or issues should be discussed with the local agency.

### *Designing New Installations*

Trash storage areas should be designed to consider the following structural or treatment control BMPs:

- Design trash container areas so that drainage from adjoining roofs and pavement is diverted around the area(s) to avoid run-on. This might include berming or grading the waste handling area to prevent run-on of stormwater.
- Make sure trash container areas are screened or walled to prevent off-site transport of trash.

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- Use lined bins or dumpsters to reduce leaking of liquid waste.
- Provide roofs, awnings, or attached lids on all trash containers to minimize direct precipitation and prevent rainfall from entering containers.
- Pave trash storage areas with an impervious surface to mitigate spills.
- Do not locate storm drains in immediate vicinity of the trash storage area.
- Post signs on all dumpsters informing users that hazardous materials are not to be disposed of therein.

### *Redeveloping Existing Installations*

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

## Additional Information

### *Maintenance Considerations*

The integrity of structural elements that are subject to damage (i.e., screens, covers, and signs) must be maintained by the owner/operator. Maintenance agreements between the local agency and the owner/operator may be required. Some agencies will require maintenance deed restrictions to be recorded of the property title. If required by the local agency, maintenance agreements or deed restrictions must be executed by the owner/operator before improvement plans are approved.

## Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

# Outdoor Work Areas SD-35



Photo Credit: Geoff Brosseau

**Design Objectives**

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- ☑ Contain Pollutant
- ☑ Collect and Convey

## Description

Proper design of outdoor work areas for materials reduces opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the stormwater conveyance system.

## Approach

Outdoor work areas require a drainage approach different from the typical infiltration/detention strategy. In outdoor work areas, infiltration is discouraged; collection and conveyance are encouraged. In outdoor work areas, infiltration is discouraged and runoff is often routed directly to the sanitary sewer, not the storm drain. Because this runoff is being added to the loads normally received by the wastewater treatment plants, municipal stormwater programs and/or private developers must work with the local plant to develop solutions that minimize effects on the treatment facility. These concerns are best addressed in the planning and design stage of the outdoor work area.

## Suitable Applications

Appropriate applications include residential, commercial, and industrial areas planned for development or redevelopment.

## Design Considerations

Design requirements for outdoor work areas are governed by Building and Fire Codes, and by current local agency ordinances, and zoning requirements.

### *Designing New Installations*

Outdoor work areas can be designed in particular ways to reduce impacts on both stormwater quality and sewage treatment plants.

- Create an impermeable surface such as concrete or asphalt, or a prefabricated metal drip pan, depending on the use.

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- Cover the area with a roof. This prevents rain from falling on the work area and becoming polluted runoff.
- Berm or perform mounding around the perimeter of the area to prevent water from adjacent areas from flowing on to the surface of the work area.
- Directly connect runoff. Unlike other areas, runoff from work areas is directly connected to the sanitary sewer or other specialized containment system(s). This allows the more highly concentrated pollutants from these areas to receive special treatment that removes particular constituents. Approval for this connection must be obtained from the appropriate sanitary sewer agency.
- Locate the work area away from storm drains or catch basins.

### *Redeveloping Existing Installations*

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

## Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

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Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

# Outdoor Processing Areas SD-36

## Description

Outdoor process equipment operations such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, wastewater and solid waste treatment and disposal, and others operations may contribute a variety of toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to the storm conveyance system.

## Approach

Outdoor processing areas require a drainage approach different from the typical infiltration/detention strategy. In outdoor process equipment areas, infiltration is discouraged. Containment is encouraged, accompanied by collection and conveyance. Preventative measures include enclosures, secondary containment structures, dead-end sumps, and conveyance to treatment facilities in accordance with conditions established by the applicable sewer agency.

**Design Objectives**

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- ☑ Contain Pollutants
- ☑ Collect and Convey

## Suitable Applications

Appropriate applications include commercial and industrial areas planned for development or redevelopment.

## Design Considerations

Design requirements for outdoor processing areas are governed by Building and Fire codes, and by current local agency ordinances, and zoning requirements.

### *Designing New Installations*

Operations determined to be a potential threat to water quality should consider to the following recommendations:

- Cover or enclose areas that would be the most significant source of pollutants; or slope the area toward a dead-end sump; or, discharge to the sanitary sewer system following appropriate treatment in accordance with conditions established by the applicable sewer agency.
- Grade or berm area to prevent run-on from surrounding areas.
- Do not install storm drains in areas of equipment repair.
- Consider other features that are comparable or equally effective.
- Provide secondary containment structures (not double wall containers) where wet material processing occurs (e.g., electroplating), to hold spills resulting from accidents, leaking tanks, or equipment, or any other unplanned releases (Note:

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if these are plumbed to the sanitary sewer, they must be with the prior approval of the sewering agency.)

### *Redeveloping Existing Installations*

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

## Additional Information

Stormwater and non-stormwater will accumulate in containment areas and sumps with impervious surfaces. Contaminated accumulated water must be disposed of in accordance with applicable laws and cannot be discharged directly to the storm drain or sanitary sewer system without the appropriate permit.

## Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

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Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

# Waste Handling & Disposal SC-34



## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Description

Improper storage and handling of solid wastes can allow toxic compounds, oils and greases, heavy metals, nutrients, suspended solids, and other pollutants to enter stormwater runoff. The discharge of pollutants to stormwater from waste handling and disposal can be prevented and reduced by tracking waste generation, storage, and disposal; reducing waste generation and disposal through source reduction, re-use, and recycling; and preventing runon and runoff.

## Targeted Constituents

| | |
|---|---|
| Sediment | ☑ |
| Nutrients | ☑ |
| Trash | ☑ |
| Metals | ☑ |
| Bacteria | ☑ |
| Oil and Grease | ☑ |
| Organics | ☑ |
| Oxygen Demanding | ☑ |

## Approach

### *Pollution Prevention*

- Reduction in the amount of waste generated can be accomplished using the following source controls such as:
  - Production planning and sequencing
  - Process or equipment modification
  - Raw material substitution or elimination
  - Loss prevention and housekeeping
  - Waste segregation and separation
  - Close loop recycling
- Establish a material tracking system to increase awareness about material usage. This may reduce spills and minimize contamination, thus reducing the amount of waste produced.
- Recycle materials whenever possible.

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***Suggested Protocols***

*General*

- Cover storage containers with leak proof lids or some other means. If waste is not in containers, cover all waste piles (plastic tarps are acceptable coverage) and prevent stormwater runon and runoff with a berm. The waste containers or piles must be covered except when in use.
- Use drip pans or absorbent materials whenever grease containers are emptied by vacuum trucks or other means. Grease cannot be left on the ground. Collected grease must be properly disposed of as garbage.
- Check storage containers weekly for leaks and to ensure that lids are on tightly. Replace any that are leaking, corroded, or otherwise deteriorating.
- Sweep and clean the storage area regularly. If it is paved, do not hose down the area to a storm drain.
- Dispose of rinse and wash water from cleaning waste containers into a sanitary sewer if allowed by the local sewer authority. Do not discharge wash water to the street or storm drain.
- Transfer waste from damaged containers into safe containers.
- Take special care when loading or unloading wastes to minimize losses. Loading systems can be used to minimize spills and fugitive emission losses such as dust or mist. Vacuum transfer systems can minimize waste loss.

*Controlling Litter*

- Post "No Littering" signs and enforce anti-litter laws.
- Provide a sufficient number of litter receptacles for the facility.
- Clean out and cover litter receptacles frequently to prevent spillage.

*Waste Collection*

- Keep waste collection areas clean.
- Inspect solid waste containers for structural damage or leaks regularly. Repair or replace damaged containers as necessary.
- Secure solid waste containers; containers must be closed tightly when not in use.
- Place waste containers under cover if possible.
- Do not fill waste containers with washout water or any other liquid.
- Ensure that only appropriate solid wastes are added to the solid waste container. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be

disposed of in solid waste containers (see chemical/ hazardous waste collection section below).

- Do not mix wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal.

*Good Housekeeping*

- Use all of the product before disposing of the container.
- Keep the waste management area clean at all times by sweeping and cleaning up spills immediately.
- Use dry methods when possible (e.g. sweeping, use of absorbents) when cleaning around restaurant/food handling dumpster areas. If water must be used after sweeping/using absorbents, collect water and discharge through grease interceptor to the sewer.
- Stencil storm drains on the facility's property with prohibitive message regarding waste disposal.

*Chemical/Hazardous Wastes*

- Select designated hazardous waste collection areas on-site.
- Store hazardous materials and wastes in covered containers protected from vandalism, and in compliance with fire and hazardous waste codes.
- Place hazardous waste containers in secondary containment.
- Make sure that hazardous waste is collected, removed, and disposed of only at authorized disposal areas.

*Runon/Runoff Prevention*

- Prevent stormwater runon from entering the waste management area by enclosing the area or building a berm around the area.
- Prevent the waste materials from directly contacting rain.
- Cover waste piles with temporary covering material such as reinforced tarpaulin, polyethylene, polyurethane, polypropyleneor hypalon.
- Cover the area with a permanent roof if feasible.
- Cover dumpsters to prevent rain from washing waste out of holes or cracks in the bottom of the dumpster.
- Move the activity indoor after ensuring all safety concerns such as fire hazard and ventilation are addressed.

*Inspection*

- Inspect and replace faulty pumps or hoses regularly to minimize the potential of releases and spills.
- Check waste management areas for leaking containers or spills.
- Repair leaking equipment including valves, lines, seals, or pumps promptly.

***Training***

- Train staff pollution prevention measures and proper disposal methods.
- Train employees and contractors proper spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.
- Train employees and subcontractors in proper hazardous waste management.

***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.
- Vehicles transporting waste should have spill prevention equipment that can prevent spills during transport. The spill prevention equipment includes:
  - Vehicles equipped with baffles for liquid waste
  - Trucks with sealed gates and spill guards for solid waste

***Other Considerations***

- Hazardous waste cannot be re-used or recycled; it must be disposed of by a licensed hazardous waste hauler.

## Requirements

***Costs***

- Capital and operation and maintenance costs will vary substantially depending on the size of the facility and the types of waste handled. Costs should be low if there is an inventory program in place.

***Maintenance***

- None except for maintaining equipment for material tracking program.

## Supplemental Information

***Further Detail of the BMP***

*Land Treatment System*

- Minimize the runoff of polluted stormwater from land application of municipal waste on-site by:
  - Choosing a site where slopes are under 6%, the soil is permeable, there is a low water table, it is located away from wetlands or marshes, there is a closed drainage system.
  - Avoiding application of waste to the site when it is raining or when the ground is saturated with water.
  - Growing vegetation on land disposal areas to stabilize soils and reduce the volume of surface water runoff from the site.
  - Maintaining adequate barriers between the land application site and the receiving waters. Planted strips are particularly good.
  - Using erosion control techniques such as mulching and matting, filter fences, straw bales, diversion terracing, and sediment basins.
  - Performing routine maintenance to ensure the erosion control or site stabilization measures are working.

## References and Resources

King County Stormwater Pollution Control Manual - http://dnr.metrokc.gov/wlr/dss/spcm.htm

Orange County Stormwater Program
http://www.ocwatersheds.com/StormWater/swp_introduction.asp

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Associations (BASMAA). On-line: http://www.basmaa.org

# Building & Grounds Maintenance SC-41




## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

| | |
|---|---|
| Sediment | ☑ |
| Nutrients | ☑ |
| Trash | ☑ |
| Metals | ☑ |
| Bacteria | ☑ |
| Oil and Grease | ☑ |
| Organics | ☑ |
| Oxygen Demanding | ☑ |

## Description

Stormwater runoff from building and grounds maintenance activities can be contaminated with toxic hydrocarbons in solvents, fertilizers and pesticides, suspended solids, heavy metals, and abnormal pH. Utilizing the following protocols will prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance activities by washing and cleaning up with as little water as possible, following good landscape management practices, preventing and cleaning up spills immediately, keeping debris from entering the storm drains, and maintaining the stormwater collection system.

## Approach

### *Pollution Prevention*

- Switch to non-toxic chemicals for maintenance when possible.
- Choose cleaning agents that can be recycled.
- Encourage proper lawn management and landscaping, including use of native vegetation.
- Encourage use of Integrated Pest Management techniques for pest control.
- Encourage proper onsite recycling of yard trimmings.
- Recycle residual paints, solvents, lumber, and other material as much as possible.

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***Suggested Protocols***

*Pressure Washing of Buildings, Rooftops, and Other Large Objects*

- In situations where soaps or detergents are used and the surrounding area is paved, pressure washers must use a waste water collection device that enables collection of wash water and associated solids. A sump pump, wet vacuum or similarly effective device must be used to collect the runoff and loose materials. The collected runoff and solids must be disposed of properly.

- If soaps or detergents are not used, and the surrounding area is paved, wash water runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in he catch basin to trap the particles in wash water runoff.

- If you are pressure washing on a grassed area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the grass and not drain to pavement. Ensure that this practice does not kill grass.

*Landscaping Activities*

- Do not apply any chemicals (insecticide, herbicide, or fertilizer) directly to surface waters, unless the application is approved and permitted by the state.

- Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage, or by composting. Do not dispose of collected vegetation into waterways or storm drainage systems.

- Use mulch or other erosion control measures on exposed soils.

- Check irrigation schedules so pesticides will not be washed away and to minimize non-stormwater discharge.

*Building Repair, Remodeling, and Construction*

- Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.

- Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.

- Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.

- Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer drain. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.

- Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at the beginning of the work day, and accumulated dirty runoff and solids must be collected and disposed of before removing the containment device(s) at the end of the work day.

- If you need to de-water an excavation site, you may need to filter the water before discharging to a catch basin or off-site. In which case you should direct the water through hay bales and filter fabric or use other sediment filters or traps.

- Store toxic material under cover with secondary containment during precipitation events and when not in use. A cover would include tarps or other temporary cover material.

*Mowing, Trimming, and Planting*

- Dispose of leaves, sticks, or other collected vegetation as garbage, by composting or at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.

- Use mulch or other erosion control measures when soils are exposed.

- Place temporarily stockpiled material away from watercourses and drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.

- Consider an alternative approach when bailing out muddy water; do not put it in the storm drain, pour over landscaped areas.

- Use hand or mechanical weeding where practical.

*Fertilizer and Pesticide Management*

- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.

- Follow manufacturers' recommendations and label directions. Pesticides must never be applied if precipitation is occuring or predicted. Do not apply insecticides within 100 feet of surface waters such as lakes, ponds, wetlands, and streams.

- Use less toxic pesticides that will do the job, whenever possible. Avoid use of copper-based pesticides if possible.

- Do not use pesticides if rain is expected.

- Do not mix or prepare pesticides for application near storm drains.

- Use the minimum amount needed for the job.

- Calibrate fertilizer distributors to avoid excessive application.

- Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.

- Apply pesticides only when wind speeds are low.
- Work fertilizers into the soil rather than dumping or broadcasting them onto the surface.
- Irrigate slowly to prevent runoff and then only as much as is needed.
- Clean pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
- Dispose of empty pesticide containers according to the instructions on the container label.
- Use up the pesticides. Rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Implement storage requirements for pesticide products with guidance from the local fire department and County Agricultural Commissioner. Provide secondary containment for pesticides.

*Inspection*

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering, and repair leaks in the irrigation system as soon as they are observed.

***Training***

- Educate and train employees on use of pesticides and in pesticide application techniques to prevent pollution.
- Train employees and contractors in proper techniques for spill containment and cleanup.
- Be sure the frequency of training takes into account the complexity of the operations and the nature of the staff.

***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

***Other Considerations***

- Alternative pest/weed controls may not be available, suitable, or effective in many cases.

## Requirements

### *Costs*

- Overall costs should be low in comparison to other BMPs.

### *Maintenance*

- Sweep paved areas regularly to collect loose particles, and wipe up spills with rags and other absorbent material immediately, do not hose down the area to a storm drain.

## Supplemental Information

### *Further Detail of the BMP*

*Fire Sprinkler Line Flushing*

Building fire sprinkler line flushing may be a source of non-stormwater runoff pollution. The water entering the system is usually potable water though in some areas it may be non-potable reclaimed wastewater. There are subsequent factors that may drastically reduce the quality of the water in such systems. Black iron pipe is usually used since it is cheaper than potable piping but it is subject to rusting and results in lower quality water. Initially the black iron pipe has an oil coating to protect it from rusting between manufacture and installation; this will contaminate the water from the first flush but not from subsequent flushes. Nitrates, poly-phosphates and other corrosion inhibitors, as well as fire suppressants and antifreeze may be added to the sprinkler water system. Water generally remains in the sprinkler system a long time, typically a year, between flushes and may accumulate iron, manganese, lead, copper, nickel and zinc. The water generally becomes anoxic and contains living and dead bacteria and breakdown products from chlorination. This may result in a significant BOD problem and the water often smells. Consequently dispose fire sprinkler line flush water into the sanitary sewer. Do not allow discharge to storm drain or infiltration due to potential high levels of pollutants in fire sprinkler line water.

## References and Resources

California's Nonpoint Source Program Plan http://www.swrcb.ca.gov/nps/index.html

King County - ftp://dnr.metrokc.gov/wlr/dss/spcm/Chapter%203.PDF

Orange County Stormwater Program
http://www.ocwatersheds.com/StormWater/swp_introduction.asp

Mobile Cleaners Pilot Program: Final Report. 1997. Bay Area Stormwater Management Agencies Association (BASSMA) http://www.basmaa.org/

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Association (BASMAA) http://www.basmaa.org/

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP) -
http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf

# Parking/Storage Area Maintenance SC-43



## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

| | |
|---|---|
| Sediment | ☑ |
| Nutrients | ☑ |
| Trash | ☑ |
| Metals | ☑ |
| Bacteria | ☑ |
| Oil and Grease | ☑ |
| Organics | ☑ |
| Oxygen Demanding | ☑ |

## Description

Parking lots and storage areas can contribute a number of substances, such as trash, suspended solids, hydrocarbons, oil and grease, and heavy metals that can enter receiving waters through stormwater runoff or non-stormwater discharges. The following protocols are intended to prevent or reduce the discharge of pollutants from parking/storage areas and include using good housekeeping practices, following appropriate cleaning BMPs, and training employees.

## Approach

### *Pollution Prevention*

- Encourage alternative designs and maintenance strategies for impervious parking lots. (See New Development and Redevelopment BMP Handbook).
- Keep accurate maintenance logs to evaluate BMP implementation.

### *Suggested Protocols*

*General*

- Keep the parking and storage areas clean and orderly. Remove debris in a timely fashion.
- Allow sheet runoff to flow into biofilters (vegetated strip and swale) and/or infiltration devices.
- Utilize sand filters or oleophilic collectors for oily waste in low concentrations.

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- Arrange rooftop drains to prevent drainage directly onto paved surfaces.
- Design lot to include semi-permeable hardscape.

*Controlling Litter*

- Post "No Littering" signs and enforce anti-litter laws.
- Provide an adequate number of litter receptacles.
- Clean out and cover litter receptacles frequently to prevent spillage.
- Provide trash receptacles in parking lots to discourage litter.
- Routinely sweep, shovel and dispose of litter in the trash.

*Surface cleaning*

- Use dry cleaning methods (e.g. sweeping or vacuuming) to prevent the discharge of pollutants into the stormwater conveyance system.
- Establish frequency of public parking lot sweeping based on usage and field observations of waste accumulation.
- Sweep all parking lots at least once before the onset of the wet season.
- If water is used follow the procedures below:
  - Block the storm drain or contain runoff.
  - Wash water should be collected and pumped to the sanitary sewer or discharged to a pervious surface, do not allow wash water to enter storm drains.
  - Dispose of parking lot sweeping debris and dirt at a landfill.
- When cleaning heavy oily deposits:
  - Use absorbent materials on oily spots prior to sweeping or washing.
  - Dispose of used absorbents appropriately.

*Surface Repair*

- Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- Apply concrete, asphalt, and seal coat during dry weather to prevent contamination form contacting stormwater runoff.
- Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc., where applicable. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal.

- Use only as much water as necessary for dust control, to avoid runoff.
- Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.

*Inspection*

- Have designated personnel conduct inspections of the parking facilities and stormwater conveyance systems associated with them on a regular basis.
- Inspect cleaning equipment/sweepers for leaks on a regular basis.

***Training***

- Provide regular training to field employees and/or contractors regarding cleaning of paved areas and proper operation of equipment.
- Train employees and contractors in proper techniques for spill containment and cleanup.

***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, nad implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

***Other Considerations***

- Limitations related to sweeping activities at large parking facilities may include high equipment costs, the need for sweeper operator training, and the inability of current sweeper technology to remove oil and grease.

## Requirements

***Costs***

Cleaning/sweeping costs can be quite large, construction and maintenance of stormwater structural controls can be quite expensive as well.

***Maintenance***

- Sweep parking lot to minimize cleaning with water.
- Clean out oil/water/sand separators regularly, especially after heavy storms.
- Clean parking facilities on a regular basis to prevent accumulated wastes and pollutants from being discharged into conveyance systems during rainy conditions.

## Supplemental Information

***Further Detail of the BMP***

*Surface Repair*

Apply concrete, asphalt, and seal coat during dry weather to prevent contamination form contacting stormwater runoff. Where applicable, cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal. Use only as much water as necessary for dust control, to avoid runoff.

## References and Resources

http://www.stormwatercenter.net/

California's Nonpoint Source Program Plan http://www.swrcb.ca.gov/nps/index.html

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Orange County Stormwater Program
http://www.ocwatersheds.com/StormWater/swp_introduction.asp

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Association (BASMAA) http://www.basma.org

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP)
http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf

# Drainage System Maintenance SC-44



**Objectives**

- Cover
- Contain
- Educate
- Reduce/Minimize

## Description

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff and stormwater that may contain certain pollutants. The protocols in this fact sheet are intended to reduce pollutants reaching receiving waters through proper conveyance system operation and maintenance.

**Targeted Constituents**

| | |
|---|---|
| Sediment | ✓ |
| Nutrients | |
| Trash | ✓ |
| Metals | |
| Bacteria | ✓ |
| Oil and Grease | |
| Organics | |

## Approach

### *Pollution Prevention*

Maintain catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

### *Suggested Protocols*

*Catch Basins/Inlet Structures*

- Staff should regularly inspect facilities to ensure compliance with the following:
  - Immediate repair of any deterioration threatening structural integrity.
  - Cleaning before the sump is 40% full. Catch basins should be cleaned as frequently as needed to meet this standard.
  - Stenciling of catch basins and inlets (see SC34 Waste Handling and Disposal).

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- Clean catch basins, storm drain inlets, and other conveyance structures before the wet season to remove sediments and debris accumulated during the summer.
- Conduct inspections more frequently during the wet season for problem areas where sediment or trash accumulates more often. Clean and repair as needed.
- Keep accurate logs of the number of catch basins cleaned.
- Store wastes collected from cleaning activities of the drainage system in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.
- Dewater the wastes if necessary with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not allowed, water should be pumped or vacuumed to a tank and properly disposed. Do not dewater near a storm drain or stream.

*Storm Drain Conveyance System*

- Locate reaches of storm drain with deposit problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.
- Collect and pump flushed effluent to the sanitary sewer for treatment whenever possible.

*Pump Stations*

- Clean all storm drain pump stations prior to the wet season to remove silt and trash.
- Do not allow discharge to reach the storm drain system when cleaning a storm drain pump station or other facility.
- Conduct routine maintenance at each pump station.
- Inspect, clean, and repair as necessary all outlet structures prior to the wet season.

*Open Channel*

- Modify storm channel characteristics to improve channel hydraulics, increase pollutant removals, and enhance channel/creek aesthetic and habitat value.
- Conduct channel modification/improvement in accordance with existing laws. Any person, government agency, or public utility proposing an activity that will change the natural (emphasis added) state of any river, stream, or lake in California, must enter into a Steam or Lake Alteration Agreement with the Department of Fish and Game. The developer-applicant should also contact local governments (city, county, special districts), other state agencies (SWRCB, RWQCB, Department of Forestry, Department of Water Resources), and Federal Corps of Engineers and USFWS.

*Illicit Connections and Discharges*

- Look for evidence of illegal discharges or illicit connections during routine maintenance of conveyance system and drainage structures:
  - Is there evidence of spills such as paints, discoloring, etc?

- Are there any odors associated with the drainage system?
- Record locations of apparent illegal discharges/illicit connections?
- Track flows back to potential dischargers and conduct aboveground inspections. This can be done through visual inspection of upgradient manholes or alternate techniques including zinc chloride smoke testing, fluorometric dye testing, physical inspection testing, or television camera inspection.
- Eliminate the discharge once the origin of flow is established.

- Stencil or demarcate storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as "Dump No Waste Drains to Stream" stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

*Illegal Dumping*

- Inspect and clean up hot spots and other storm drainage areas regularly where illegal dumping and disposal occurs.
- Establish a system for tracking incidents. The system should be designed to identify the following:
  - Illegal dumping hot spots
  - Types and quantities (in some cases) of wastes
  - Patterns in time of occurrence (time of day/night, month, or year)
  - Mode of dumping (abandoned containers, "midnight dumping" from moving vehicles, direct dumping of materials, accidents/spills)
  - Responsible parties
- Post "No Dumping" signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

### *Training*

- Train crews in proper maintenance activities, including record keeping and disposal.
- Allow only properly trained individuals to handle hazardous materials/wastes.
- Have staff involved in detection and removal of illicit connections trained in the following:
  - OSHA-required Health and Safety Training (29 CFR 1910.120) plus annual refresher training (as needed).

- OSHA Confined Space Entry training (Cal-OSHA Confined Space, Title 8 and Federal OSHA 29 CFR 1910.146).

- Procedural training (field screening, sampling, smoke/dye testing, TV inspection).

***Spill Response and Prevention***

- Investigate all reports of spills, leaks, and/or illegal dumping promptly.
- Clean up all spills and leaks using "dry" methods (with absorbent materials and/or rags) or dig up, remove, and properly dispose of contaminated soil.
- Refer to fact sheet SC-11 Spill Prevention, Control, and Cleanup.

***Other Considerations (Limitations and Regulations)***

- Clean-up activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.
- Storm drain flushing is most effective in small diameter pipes (36-inch diameter pipe or less, depending on water supply and sediment collection capacity). Other considerations associated with storm drain flushing may include the availability of a water source, finding a downstream area to collect sediments, liquid/sediment disposal, and prohibition against disposal of flushed effluent to sanitary sewer in some areas.
- Regulations may include adoption of substantial penalties for illegal dumping and disposal.
- Local municipal codes may include sections prohibiting discharge of soil, debris, refuse, hazardous wastes, and other pollutants into the storm drain system.

## Requirements

***Costs***

- An aggressive catch basin cleaning program could require a significant capital and O&M budget.
- The elimination of illegal dumping is dependent on the availability, convenience, and cost of alternative means of disposal. The primary cost is for staff time. Cost depends on how aggressively a program is implemented. Other cost considerations for an illegal dumping program include:

  - Purchase and installation of signs.

  - Rental of vehicle(s) to haul illegally-disposed items and material to landfills.

  - Rental of heavy equipment to remove larger items (e.g., car bodies) from channels.

  - Purchase of landfill space to dispose of illegally-dumped items and material.

- Methods used for illicit connection detection (smoke testing, dye testing, visual inspection, and flow monitoring) can be costly and time-consuming. Site-specific factors, such as the level of impervious area, the density and ages of buildings, and type of land use will determine the level of investigation necessary.

***Maintenance***

- Two-person teams may be required to clean catch basins with vactor trucks.
- Teams of at least two people plus administrative personnel are required to identify illicit discharges, depending on the complexity of the storm sewer system.
- Arrangements must be made for proper disposal of collected wastes.
- Technical staff are required to detect and investigate illegal dumping violations.

## Supplemental Information

***Further Detail of the BMP***

*Storm Drain Flushing*

Flushing is a common maintenance activity used to improve pipe hydraulics and to remove pollutants in storm drainage systems. Flushing may be designed to hydraulically convey accumulated material to strategic locations, such as an open channel, another point where flushing will be initiated, or the sanitary sewer and the treatment facilities, thus preventing resuspension and overflow of a portion of the solids during storm events. Flushing prevents "plug flow" discharges of concentrated pollutant loadings and sediments. Deposits can hinder the designed conveyance capacity of the storm drain system and potentially cause backwater conditions in severe cases of clogging.

Storm drain flushing usually takes place along segments of pipe with grades that are too flat to maintain adequate velocity to keep particles in suspension. An upstream manhole is selected to place an inflatable device that temporarily plugs the pipe. Further upstream, water is pumped into the line to create a flushing wave. When the upstream reach of pipe is sufficiently full to cause a flushing wave, the inflated device is rapidly deflated with the assistance of a vacuum pump, thereby releasing the backed up water and resulting in the cleaning of the storm drain segment.

To further reduce impacts of stormwater pollution, a second inflatable device placed well downstream may be used to recollect the water after the force of the flushing wave has dissipated. A pump may then be used to transfer the water and accumulated material to the sanitary sewer for treatment. In some cases, an interceptor structure may be more practical or required to recollect the flushed waters.

It has been found that cleansing efficiency of periodic flush waves is dependent upon flush volume, flush discharge rate, sewer slope, sewer length, sewer flow rate, sewer diameter, and population density. As a rule of thumb, the length of line to be flushed should not exceed 700 feet. At this maximum recommended length, the percent removal efficiency ranges between 65-75% for organics and 55-65% for dry weather grit/inorganic material. The percent removal efficiency drops rapidly beyond that. Water is commonly supplied by a water truck, but fire hydrants can also supply water. To make the best use of water, it is recommended that reclaimed water be used or that fire hydrant line flushing coincide with storm sewer flushing.

## References and Resources

California's Nonpoint Source Program Plan http://www.swrcb.ca.gov/nps/index.html

Clark County Storm Water Pollution Control Manual
http://www.co.clark.wa.us/pubworks/bmpman.pdf

Ferguson, B.K. 1991. Urban Stream Reclamation, p. 324-322, Journal of Soil and Water Conservation.

King County Storm Water Pollution Control Manual http://dnr.metrokc.gov/wlr/dss/spcm.htm

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program http://www.scvurppp.org

The Storm Water Managers Resource Center http://www.stormwatercenter.net

United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Storm Drain System Cleaning. On line:
http://www.epa.gov/npdes/menuofbmps/poll_16.htm