RESOLUTION PC 17-041

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF EL PASO DE ROBLES RECOMMENDING APPROVAL TO THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES ADOPTING A NEGATIVE DECLARATION FOR GENERAL PLAN AMENDMENT 16-001, REZONE 16-002, VESTING TENTATIVE PARCEL MAP PR 16-0231 & PLANNED DEVELOPMENT 13-006 AMENDMENT APPLICANT – MICHAEL MULLAHEY APN: 025-423-005 and 023

WHEREAS, North Coast Engineering, on behalf of Michael Mullahey, has filed an application requesting consideration of the following land use changes and entitlements in connection with the Mullahey Chrysler Dealership General Plan Amendment (the "Project"):

- **General Plan Amendment 16-001**: to change the existing land use designations as follows:
 - Parcel 1 (PR 16-0231): Business Park to Commercial Services
 - Parcel 2 (PR 16-0231): no change, remains Business Park
- **Rezone 16-002:** to change the existing zoning designations as follows:
 - **Parcel 1 (PR 16-0231):** PM (Planned Industrial) to C3 (Commercial/Light Industrial)
 - Parcel 2 (PR 16-0231): no change, remains PM (Planned Industrial)
- Vesting Tentative Parcel Map 16-0231:

Request to subdivide a 1.8 acre site (APN 025-423-005) into two (2) parcels, where Parcel 1 would be .8 acres, and Parcel 2 would be 1 acre.

WHEREAS, pursuant to the Statutes and Guidelines of the California Environmental Quality Act (CEQA), Public Resources Code, Section 21000, et seq., and the City's Procedures for Implementing CEQA, an Initial Study and a Draft Negative Declaration ("ND") was prepared and circulated for a 20-day public review period beginning on September 5, 2017 and extended to October 3, 2017. The Draft ND/Initial Study dated September 5, 2017 is on file at the Paso Robles Community Development Department and available on line at http://www.prcity.com/government/departments/commdev/; and

WHEREAS, public notice of the proposed Draft ND was posted as required by Section 21092 of the Public Resources Code; and

WHEREAS, public hearings were conducted by the Planning Commission on September 12, 2017, to consider the Initial Study and the draft ND prepared for the proposed Project, and to accept public testimony on the proposed entitlements and environmental determination;

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Paso Robles, as follows:

Section 1. All of the recitals above are true and correct and incorporated herein.

Section 2. Based on the information and analysis contained in the Negative Declaration prepared for this project, the comments received during the public review period, and testimony received at the public hearing, the City Council finds that there is no substantial evidence supporting a fair argument that there would not be a significant impact on the environment. These findings are based on an independent review of the Initial Study, the Negative Declaration, and all comments received regarding the Negative Declaration, and based on the whole record. The City Council further finds that the Negative Declaration was prepared in compliance with CEQA and the CEQA Guidelines, that there is no substantial evidence that the Project will have a significant effect on the environment and the Negative Declaration reflects the independent judgment and analysis of the City Council.

<u>Section 3.</u> The City Council, based on its independent judgment and analysis, hereby adopts the Negative Declaration for the Mullahey Dealership General Plan Amendment Project, attached hereto as Exhibit A, including the comments received and responses thereto, attached hereto as Exhibit B, in accordance with the Statutes and Guidelines of the California Environmental Quality Act (CEQA) and the City's Procedures for Implementing CEQA. Exhibits A is hereby incorporated into this resolution.

PASSED AND ADOPTED by the Planning Commission of the City of Paso Robles this 12th day of September 2017 by the following vote:

AYES:Commissioners Barth, Davis, Agredano, Jorgensen, Brennan and Chairman DonaldsonNOES:Commissioner RollinsABSTAIN:ABSENT:

John Donaldson, Chairman ATTEST:

Warren Frace, Planning Commission Secretary

Exhibit A - Negative Declaration

EXHIBIT - A ENVIRONMENTAL INITIAL STUDY CHECKLIST FORM CITY OF PASO ROBLES

1. PROJECT TITLE:

Mullahey – Auto Service Expansion

Concurrent Entitlements:

General Plan Amendment 16-001, Rezone 16-002, PD 13-008 Amendment, and Vesting Tentative Parcel Map PR 16-0231

2. LEAD AGENCY:

City of Paso Robles 1000 Spring Street Paso Robles, CA 93446

Contact:	,
Phone:	(805) 237-3970
Email:	

3. PROJECT LOCATION: The subject 1.8 acre parcel (APN 025-423-005) is located at the south end of Danley Ct., south of Wisteria Lane, East of Golden Hill Road. The existing Mullahey dealership is located at 2520 Golden Hill Road, at the corner of Tractor Way.

4.	PROJECT PROPONENT:	Michael Mullahey
	Contact Person:	Same
	Phone: Email:	(805) 481-3673 mjmullahey@charter.net
5.	GENERAL PLAN DESIGNATION:	BP (Business Park)
6.	ZONING:	PM (Planned Industrial)

7. **PROJECT DESCRIPTION:**

The project consists of subdividing a 1.8 acre site (APN 025-423-005) into two (2) parcels, where Parcel 1 would be .8 acres, and Parcel 2 would be 1 acre. Along with the subdivision is a request to amend the General Plan and Zoning designations of new Parcel 1, and amend the existing development plan for the Mullahey Chrysler Dealership to add new Parcel 1 to as an expansion to the dealership.

In order to accommodate the proposed project, it is necessary to: (1) amend the General Plan - Land Use Element, land use designation diagram; (2) Zoning Map; (3) process Vesting Tentative Parcel Map PR 16-0231; and (4) amend PD 13-006 for the Mullahey Dealership as follows:

a) General Plan Amendment

To change the existing land use designations as follows:

- Parcel 1 (PR 16-0231): Business Park to Commercial Services
- Parcel 2 (PR 16-0231): no change, remains Business Park
- b) Zoning Amendment

To change the existing zoning designations as follows:

- Parcel 1 (PR 16-0231): PM (Planned Industrial) to C3 (Commercial/Light Industrial)
- Parcel 2 (PR 16-0231): no change, remains PM (Planned Industrial)
- c) Vesting Tentative Parcel Map 16-0231
 - Proposing to subdivide a 1.8 acre site (APN 025-423-005) into two (2) parcels, where Parcel 1 would be .8 acres, and Parcel 2 would be 1 acre. See Attachment 5 – Parcel Map.

d) PD 13-006 Amendment

- Amend the development plan establishing the Mullahey dealership to include new Parcel 1 to allow for an expansion to the dealership for service, repair and parking. See Attachment 6 Site Plan.
- 8. ENVIRONMENTAL SETTING: The 1.8 acre site is lot 5 of Tract 2269. The site is vacant site that was developed with curb, gutter, sidewalk and utilities with the original development of Tract 2269.

A Mitigated Negative Declaration (MND) was approved for Tract 2269 (Res. 98-001) that identified that with the development of Tract 2269, airport compatibility, circulation, water, drainage, open space, and aesthetics, would be impacts that would need further mitigation to reduce the impacts to less than significant. The mitigation measures are outlined in the Tentative Tract Resolution (Res. 98-014) and the Development Plan Resolution for PD 97-013 (Res. 98-002) and will be discussed in the corresponding section of this Initial Study Checklist. Generally, most of the mitigation measures listed in Res. 98-014 were completed with the public improvements and the recording of the tract map. This Initial Study indicates that the proposed Mullahey expansion project has no additional environmental impacts.

9. OTHER AGENCIES WHOSE APPROVAL IS REQUIRED (AND PERMITS NEEDED): None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture and Forestry Resources	Air Quality
Biological Resources	Cultural Resources	Geology /Soils
Greenhouse Gas Emissions	Hazards & Hazardous Materials	Hydrology / Water Quality
Land Use / Planning	Mineral Resources	Noise
Population / Housing	Public Services	Recreation
Transportation/Traffic	Utilities / Service Systems	Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

\square	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature:

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved. Answers should address off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. "Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significance

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. A	ESTHETICS: Would the project:				
a.	Have a substantial adverse effect on a scenic vista?				\boxtimes
	Discussion: The project site is not located within	n a scenic vista	l.		
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes
	Discussion: The site is not considered a scenic rethere are no historic buildings located on this site		not located along a	state scenic hig	hway, and
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?			\boxtimes	
	Discussion: Aesthetics was one of the impacts the 3 and 13 of the Res. 98-002 indicated the use Hill Road and the eastern tract boundary. Also materials. Condition No. 24 in the Res. 98-014 is tract eastern boundary.	of decorative 1 indicated was	masonry materials the requirement to	for any walls a use non-reflect	long Golden tive building
	Since this project is not adjacent to Golden Hill proposes to utilize mainly metal panels for sidin of the metal siding and roofing will prevent it f eastern boundary of Tract 2269, therefore the boundary would not apply to this project. How complement the site and building architecture.	ng and roofing rom being refle ne conditions in	for the new service ective. Lots 5 (proj related to the land	e building. The ect site) does no dscaping along	neutral color ot border the the eastern

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Sources: 1, 2, 10)

Discussion: Any new exterior lighting will be required to be shielded so that it does not produce off-site glare.

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

Convert Prime Farmland, Unique Farmland,				
or Farmland of Statewide Importance				
(Farmland), as shown on the maps prepared				\bowtie
pursuant to the Farmland Mapping and		—	_	
Monitoring Program of the California				
Resources Agency, to non-agricultural use?				
	or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California	or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California	or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California	or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Discussion: The project is not located on agricu taking place on the site.	ilturally zoned	land and there are n	o agricultural a	ctivities
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
	Discussion: See discussion section for Section	II.a.			
c.	Conflict with existing zoning for, or cause rezoning of, forest, land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 5114(g))?				
	Discussion: The project is not located on agricu taking place on the site.	ilturally zoned	land and there are n	o agricultural a	ctivities
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
	Discussion: The project is not located on land z	coned for forest	purposes.		
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				\boxtimes
	Discussion: This project would not result in the	e conversion of	farmland or forest l	and.	
	AIR QUALITY: Where available, the signific nt or air pollution control district may be relied u				
a.	Conflict with or obstruct implementation of the applicable air quality plan? (Source: 11)			\boxtimes	
	Discussion: The San Luis Obispo County area and suspended particulate matter. The SLO Co				

Discussion: The San Luis Obispo County area is a non-attainment area for the State standards for ozone and suspended particulate matter. The SLO County Air Pollution Control District (APCD) administers a permit system to ensure that stationary sources do not collectively create emissions which would cause local and state standards to be exceeded. The potential for future project development to create adverse air quality impacts falls generally into two categories: Short term and Long term impacts.

Short term impacts are associated with the grading and development portion of a project where earth work generates dust, but the impact ends when construction is complete. Long term impacts are related to the ongoing operational characteristics of a project and are generally related to vehicular trip generation and the level of offensiveness of the onsite activity being developed.

Potentially	Less Than	Less Than	No
Significant	Significant with	Significant	Impact
Impact	Mitigation	Impact	
	Incorporated		

There will be short term impacts associated with grading for the proposed construction, standard conditions required by the City as well as the APCD will be implemented.

When reviewing the grading of the 1.8-acre site, since the disturbed area of grading activity is approximately 1 acre, it falls under the 4-acre threshold described in footnote 2 of Table 2-1 of the APCD CEQA Handbook (April 2012), indicating that the pollutants produced as a result of construction activities is less than the 2.5 ton PM 10 quarterly threshold. Therefore impacts to air quality as a result of this grading project, are considered less than significant and no mitigation is required. Standard conditions related to dust control will be required with the issuance of a grading permit for this project.

Furthermore, a condition of approval will be added that requires the project be designed to incorporate all feasible standard measures outlined in condition No. 9 of Res. 98-002, related to site design measures related to energy efficiency.

b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Source: 11)		\boxtimes
	Discussion: See Section III.a		
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (Source: 11)		
	Discussion: See Section III.a		
d.	Expose sensitive receptors to substantial pollutant concentrations? (Source: 11)		\boxtimes

Discussion: Besides the short term impacts from the actual grading, there will not be a significant impact to sensitive receptors.

e. Create objectionable odors affecting a substantial number of people? (Source: 11)

Discussion: Based on the automotive repair and associated parking lot being in an industrial area, with significant setbacks to neighboring properties/buildings, and since auto repair use does not produce odor, is not anticipated that this project will have an affect a substantial number of people. Therefore, there is no impact.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV	. BIOLOGICAL RESOURCES: Would the pr	roject:			
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				\boxtimes
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

Discussion (a-f):

Any biological resource mitigation requirements that were required with the development of Tract 2269 have been completed. The subject lot was rough graded with the development of Tract 2269. The public improvements including streets, curb, gutter and sidewalk improvements have been completed for the projects frontage on Danley Court. Since this lot has been developed, including grading, street improvements and utilities and since the lot is flat and has no resources except for seasonal grasses, the development of Lot 5 of Tract 2269 will not have an impact on biological services.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
v.	CULTURAL RESOURCES: Would the proje	ect:			
a.	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				\boxtimes
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to \$15064.5?				\boxtimes
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes
d.	Disturb any human remains, including those interred outside of formal cemeteries?			\boxtimes	

Discussion (a-d):

An Archeological Survey was conducted in 1996, by Clay Singer, in relation to a 226 acre site that included the land within Tract 2269. The Study indicated that no prehistoric resources of any kind were identified and the Study concluded that development of the project at that time (Golf Course) should have no impact on known or cultural resources. The following standard condition will be applied to this project.

In the event that buried or otherwise unknown cultural resources are discovered during construction work in the area of the find, work shall be suspended and the City of Paso Robles should be contacted immediately, and appropriate mitigations measures shall be developed by qualified archeologist or historian if necessary, at the developers expense.

Additionally, in relation to AB18, the City sent a letter out to seven tribes inviting consultation pursuant to SB 18. The City received one request by Patti Dutton, Tribal Administrator for the Salinan Tribe of Monterey & San Luis Obispo Counties. Ms. Dutton requested that a Phase I cultural study be done for the project.

The project site is located in an area that is not adjacent to a creek or stream, or in an area that typically considered culturally significant.

Based on this project being evaluated as part of archeological survey in 1996, where no prehistoric resources of any kind were found, and since this particular parcel was rough graded in the early 2000, including the installation of road improvements and utilities to this site, the development of this parcel does not warrant a new cultural survey. The standard condition related to work being suspended if cultural resources are discovered, will be applied to the project. Therefore this projects impacts on Cultural Resources is less than significant.

_		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI	. GEOLOGY AND SOILS: Would the project:				
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (Sources: 1, 2, & 3)				
	Discussions The sector fielder and with anti-	an af imma a sta	1	6	1

Discussion: The potential for and mitigation of impacts that may result from fault rupture in the project area are identified and addressed in the General Plan EIR, pg. 4.5-8. There are two known fault zones on either side of the Salinas Rivers valley. The Rinconada Fault system runs on the west side of the valley, and grazes the City on its western boundary. The San Andreas Fault is on the east side of the valley and is situated about 30 miles east of Paso Robles. The City of Paso Robles recognizes these geologic influences in the application of the Uniform Building Code to all new development within the City. Review of available information and examinations indicate that neither of these faults is active with respect to ground rupture in Paso Robles. Soils and geotechnical reports and structural engineering in accordance with local seismic influences would be applied in conjunction with any new development proposal. Based on standard conditions of approval, the potential for fault rupture and exposure of persons or property to seismic hazards is not considered significant. There are no Alquist-Priolo Earthquake Fault Zones within City limits.

ii. Strong seismic ground shaking? (Sources: 1, 2, & 3)

Discussion: The proposed project will be constructed to current CBC codes. The General Plan EIR identified impacts resulting from ground shaking as less than significant and provided mitigation measures that will be incorporated into the design of this project including adequate structural design and not constructing over active or potentially active faults.

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 \boxtimes

iii.	Seismic-related ground failure,			
	including liquefaction? (Sources: 1, 2 &		X	
	3)			

Discussion: Per the General Plan EIR, the project site is located in an area with soil conditions that have a potential for liquefaction or other type of ground failure due to seismic events and soil conditions. To implement the EIR's mitigation measures to reduce this potential impact, the City has a standard condition to require submittal of soils and geotechnical reports, which include site-specific analysis of liquefaction potential for all building permits for new construction, and incorporation of the recommendations of said reports into the design of the project.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	iv. Landslides? Discussion: See discussions above.				\boxtimes
•	Result in substantial soil erosion or the loss of topsoil? (Sources: 1, 2, & 3)			\boxtimes	

b.

Discussion: Per the General Plan EIR the soil condition is not erosive or otherwise unstable. As such, no significant impacts are anticipated. A geotechnical/ soils analysis will be required prior to issuance of building permits that will evaluate the site specific soil stability and suitability of grading and retaining walls proposed. This study will determine the necessary grading techniques that will ensure that potential impacts due to soil stability will not occur. An erosion control plan shall be required to be approved by the City Engineer prior to commencement of site grading.

c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		
	Discussion: See response to item a.iii, above.		
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		
	Discussion: See response to item a.iii, above.		
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?		

Discussion: The building will be hooked up to the City's sanitary sewer system, therefore there is no impact.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
VII. GREENHOUSE GAS EMISSIONS: Would the project:						
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes		
b.	Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gasses?					

Discussion (a-b):

environment?

When reviewing the grading of the 4-acre site with the APCD CEQA Handbook (April 2012), the project would produce less than the 25 lbs/day of ROG+NOx and therefore be considered less than significant and no mitigation is required for operational or long-term impacts based on outdoor storage land use. Standard conditions related to dust control will be required with the issuance of a grading permit for this project.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the		\boxtimes	

Discussion (a-d): the project will include a parking lot area for employee and cars waiting for service, along with the construction of a 3,000 square foot, 5-bay service building. the transport of wine grapes, processed wine, and the byproduct of the wine (pumice). The auto repair facility will be required to comply with all local and State requirements for automotive related fluids handling and disposal. The site is vacant and not

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	included on a hazardous materials site list. The not create a hazard, or use/produce hazardous n State permitting for automotive repair facilities.	naterials, that a			
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
	Discussion (e): The project is in the vicinity of the 5 as outlined in the City's Airport Land Use Pla wineries are considered 'compatible' in Zone 5, from the airport would be less than significant.	in. According t	to the Airport Land	Use Compatibi	lity Matrix,
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? Discussion (f): There are no know private air stri impact.	rips in the vicit	nity of the project si	te, therefore the	⊠ ere is no
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? Discussion (g,h):				

The development of the facility within the existing industrial park will not expose people to wildland fires, and is not adjacent to wildlands, therefore there will not be an impact.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
IX.	. HYDROLOGY AND WATER QUALITY:	Would the proj	ect:				
a.	Violate any water quality standards or waste discharge requirements?			\boxtimes			
	Discussion: A preliminary grading and drainage plan has been designed for the project by North Coast Engineering. The proposed project is designed to retain stormwater on-site through installation of various low-impact development (LID) features. The project has been designed to reduce impervious surfaces, preserve existing vegetation, and promote groundwater recharge by employing bioretention through implementation of these measures. Thus, water quality standards will be maintained and discharge requirements will be in compliance with State and local regulations. Therefore, impacts to water quality and discharge will be less than significant.						
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., Would the production rate of pre-existing nearby wells drop to a level which would not support existing land uses or planned uses for which permits have been granted)? Would decreased rainfall infiltration or groundwater recharge reduce stream baseflow? (Source: 7)						
	Discussion: The addition of the auto repair building and parking lot area along with the associated landscaping will not deplete groundwater supplies or have a significant impact on groundwater. The project will be required to hook up to City water. This project impact on groundwater is less than significant.						
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off- site? (Source: 10)						
	See Discussion for IXa.						

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (Source: 10)

 \boxtimes

See Discussion for IXa.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Source: 10)				\boxtimes
	See Discussion for IXa.				
f.	Otherwise substantially degrade water quality?				\boxtimes
	See Discussion for IXa.				
g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j.	Inundation by mudflow?				\boxtimes
k.	Conflict with any Best Management Practices found within the City's Storm Water Management Plan?				
1.	Substantially decrease or degrade watershed storage of runoff, wetlands, riparian areas, aquatic habitat, or associated buffer zones?			\boxtimes	

Discussion (c-l):

The site is not located within a flood hazard area and the subject buildings will be utilizing City water and sewer systems. The projects impacts related to hydrological and water quality issues will be less than significant since the project will be required to comply with the City's standards related to site drainage, storm water run-off, water quality and water supply.

The Regional Water Quality Control Board adopted storm water management requirements for development projects in the Central Coast region. Upon the Board's direction, the City has adopted a Storm Water Ordinance requiring all projects to implement low impact development best management practices to mitigate impacts to the quality of storm water run-off and to limit the increase in the rate and volume of storm water

Potentially	Less Than	Less Than	No
Significant	Significant with	Significant	Impact
Impact	Mitigation	Impact	
	Incorporated		

run-off to the maximum extent practical.

this area of the City. Therefore there is no impact.

These new requirements include on-site retention of stormwater. The applicant has prepared a storm water control plan offering a site assessment of constraints and opportunities and corresponding storm water management strategies to meet stormwater quality treatment and retention requirements in compliance with the regulations. The grading plan refects these requirements with three bio-retention treatment areas.

Thus, water quality standards will be maintained and discharge requirements will be in compliance with State and local regulations. Therefore, impacts to water quality and discharge will be less than significant.

X.]	LAND USE AND PLANNING: Would the project	:				
a.	Physically divide an established community?				\boxtimes	
	Discussion: The project consists of subdividing a 1. Parcel 2 would be 2 acres. The land use and zoning Business Park to Commercial light-industrial. Then square foot auto repair building with associated part community.	designations for a development j	Parcel 1 would b plan is proposed to	e changed from o construct a 3,0	000	
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?					
	Discussion:					
	The project consists of subdividing a 1.8-acre site in would be 2 acres. The land use and zoning designat Commercial light-industrial. Then a development p building with associated parking lot.	ions for Parcel 1	would be change	d from Busines	s Park to	
	With the change in land use and zoning designations for Parcel 1, the auto repair use as an accessory to the new car dealership is permitted. Parcel 1 will remain with the business park designation and be consistent with the existing land use and zoning for the business park (Tract 2269). Therefore, there will not be a conflict with the City's General Plan, Zoning Ordinance.					
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes	
	Discussion: There are no habitat conservation plans	or natural comm	nunity conservation	on plans establis	shed in	

_		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	MINERAL RESOURCES: Would the project	:			
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (Source: 1)				
	Discussion: There are no known mineral resour	ces at this proj	ect site.		
b.	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (Source: 1)				
	Discussion: There are no known mineral resour	ces at this proj	ect site.		
XI	I. NOISE: Would the project result in:				
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Source: 1)			\boxtimes	
	Discussion:				
	There will be the generation of noise as a result and air compressors. That being said, the new a commercial/industrial uses. Since the auto repain noise from the business will be insignificant.	uto service bu	ilding will be surrou	nded by existing	g and future
	It is not anticipated that the noise generated from outlined in the Noise Element (Figure N-4) for thresholds listed in Table N-5. Therefore, the pr	industrial uses	, or exceed the static	onary noise deci	bel
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
	Discussion: There may be temporary vibrations preparation for construction. The construction p noise level requirements, including hours of con construction requirements, impacts from vibrati significant.	hase of the pro- nstruction activ	bject will be require vity, and as a result of	d to comply with of these standard	h the City's 1
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
	Discussion: See section XIIa				

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
	Discussion: See section XIIa				
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			\boxtimes	

Discussion: The project is located within Safety Zone 5 of the Airport Land Use Plan, and is just over 1 mile of the Airport property. Auto dealerships and auto repair are considered compatible uses with the Airport for Zone 5, and therefore impacts on customers and employees of the dealership from noise related to aircraft would be less than significant.

XI	XIII. POPULATION AND HOUSING: Would the project:					
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (Source: 1)					
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes	
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes	

Discussion (a-c):

(Sources: 1, 4)

The project will not create induce population growth, displace housing or people.

Potentially	Less Than	Less Than	No
Significant	Significant with	Significant	Impact
Impact	Mitigation	Impact	
	Incorporated		

XIV. PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a.	Fire protection? (Sources: 1,10)		\boxtimes
b.	Police protection? (Sources: 1,10)		
c.	Schools?		\boxtimes
d.	Parks?		\boxtimes
e.	Other public facilities? (Sources: 1,10)		\boxtimes

Discussion (a-e):

The project will be located within an existing industrial/business park. The addition of the building will not create a significant impact to public services.

XV. RECREATION

a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		\boxtimes
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? Discussion (a&b):		

The project will not impact recreational facilities.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
XV	/I. TRANSPORTATION/TRAFFIC: Would t	he project:				1
a.	Conflict with an applicable plan, ordinance or policy establishing measures or effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?					
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?					

Discussion (a,b):

The project consists of subdividing a 1.8-acre site into two parcels where Parcel 1 is .8 acre and Parcel 2 would be 2 acres. The land use and zoning designations for Parcel 1 would be changed from Business Park to Commercial light-industrial. Then a development plan is proposed to construct a 3,000 square foot auto repair building with associated parking lot.

Based on the proposed auto repair expansion to the existing dealership is a permitted use in the C3 zone, consistent with the CS land use designation, and subject to the standard condition of paying traffic impact fees, impacts from the development and operation of this project on the circulation system in the area of this project will be less than significant.

c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? Discussion (c):				
	The development of this project within the esta patterns or increase air traffic levels.	blished industri	ial subdivision wil	l not impact air t	traffic
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes

Discussion (d): The proposed project would utilize the exisiting driveways off of Danley Court and from Tractor Street. There will be no hazards from design features.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e.	Result in inadequate emergency access?				\boxtimes
	Discussion (e):				
	The project has been reviewed by the City's Em having multiple access points to multiple streets therefore considered adequate.				
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				
	Discussion (a-f):				
	The development of this project within an establ transit, bicycle or pedestrian facilities, or decrea				pted public
vv	II LITH ITTES AND SEDVICE SVOTEMS. W	Vould the mod	a a t		
	II. UTILITIES AND SERVICE SYSTEMS: W	vouid the proje			
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			\boxtimes	
	Discussion: The project will comply with all ap City, the Regional Water Quality Control Board significant impacts resulting from wastewater tre	, and the State	Water Board Ther		
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	Discussion:				
	The project consists of subdividing a 1.8-acre sit would be 2 acres. The land use and zoning desig Commercial light-industrial. Then a development building with associated parking lot. The project therefore, there is no impact.	nations for Pa plan is prop	rcel 1 would be cha osed to construct a 3	nged from Busi 3,000 square foc	ness Park to ot auto repair
c.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	Discussion: (c):				

The project is located within an existing industrial subdivision where the infrastructure including storm drain systems have been installed. No new off-site storm drainage facilities will be required to be constructed with this project, therefore there is no impact.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			\boxtimes	
	Discussion: As noted in section IX on Hydrolo allocations available and will not require expan				esource
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? Discussion: The auto repair use and parking lo facility.	□ t will not have	an impact on the C	ity's waste wate	⊠ r treatment
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				\boxtimes
	Discussion: Per the City's Landfill Master Plat construction-related and operational solid waster			capacity to accor	mmodate
g.	Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes
_	Discussion: The project will comply with all fe	ederal, state, an	d local solid waste	regulations.	
XV	'III. MANDATORY FINDINGS OF SIGNIFI	CANCE			
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or				

degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

	\boxtimes	

Discussion: The project consists of subdividing a 1.8-acre site into two parcels where Parcel 1 is .8 acre and Parcel 2 would be 2 acres. The land use and zoning designations for Parcel 1 would be changed from Business Park to Commercial light-industrial. Then a development plan is proposed to construct a 3,000 square foot auto repair building with associated parking lot. The site is routinely maintained and mowed, so impact to fish, wildlife, of plant habitat is less than significant.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				

Discussion: The project consists of subdividing a 1.8-acre site into two parcels where Parcel 1 is .8 acre and Parcel 2 would be 2 acres. The land use and zoning designations for Parcel 1 would be changed from Business Park to Commercial light-industrial. Then a development plan is proposed to construct a 3,000 square foot auto repair building with associated parking lot.

Therefore, the project will not have impacts that are individually limited, but cumulatively considerable.

c.	Does the project have environmental effects		
	which will cause substantial adverse effects		\boxtimes
	on human beings, either directly or		
	indirectly?		

Discussion: The project consists of subdividing a 1.8-acre site into two parcels where Parcel 1 is .8 acre and Parcel 2 would be 2 acres. The land use and zoning designations for Parcel 1 would be changed from Business Park to Commercial light-industrial. Then a development plan is proposed to construct a 3,000 square foot auto repair building with associated parking lot.

Therefore, the project will not cause substantial adverse effects to human beings, either directly or indirectly.

EARLIER ANALYSIS AND BACKGROUND MATERIALS.

Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D).

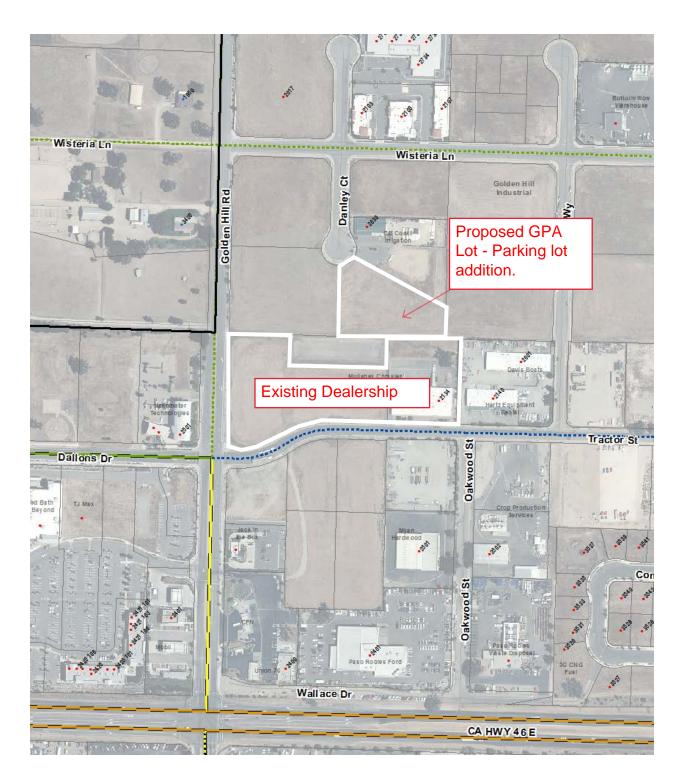
Earlier Documents Prepared and Utilized in this Analysis and Background / Explanatory Materials

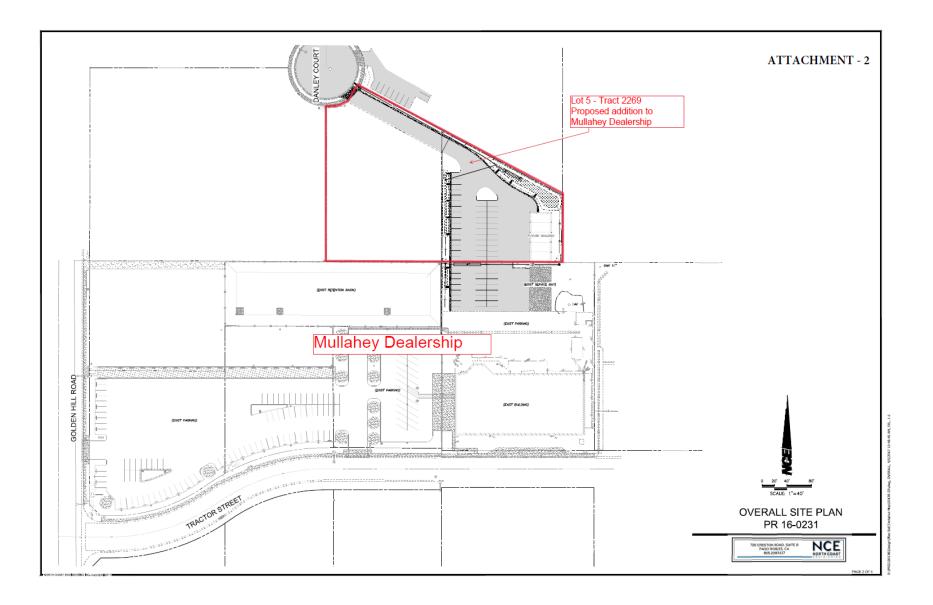
<u>Reference #</u>	Document Title	Available for Review at:
1	City of Paso Robles General Plan	City of Paso Robles Community Development Department 1000 Spring Street Paso Robles, CA 93446
2	City of Paso Robles Zoning Code	Same as above
3	City of Paso Robles Environmental Impact Report for General Plan Update	Same as above
4	2005 Airport Land Use Plan	Same as above
5	City of Paso Robles Municipal Code	Same as above
6	City of Paso Robles Water Master Plan	Same as above
7	City of Paso Robles Urban Water Management Plan 2005	Same as above
8	City of Paso Robles Sewer Master Plan	Same as above
9	City of Paso Robles Housing Element	Same as above
10	City of Paso Robles Standard Conditions of Approval for New Development	Same as above
11	San Luis Obispo County Air Pollution Control District Guidelines for Impact Thresholds	APCD 3433 Roberto Court San Luis Obispo, CA 93401
12	San Luis Obispo County – Land Use Element	San Luis Obispo County Department of Planning County Government Center San Luis Obispo, CA 93408
13	USDA, Soils Conservation Service, Soil Survey of San Luis Obispo County, Paso Robles Area, 1983	Soil Conservation Offices Paso Robles, Ca 93446
14	Resolution 98-001, MND for Tract 2269	City of Paso Robles Community Development Department

Attachments:

- 1. Vicinity Map
- 2. Site Plan
- 3. Storm Water Quality Management Plan

Attachment - 1 Exhibit A





ATTACHMENT - 3 Exhibit A Mullahey Dodge Storm Water Control Plan

STORMWATER CONTROL PLAN AND STORM DRAIN REPORT For

Mullahey Dodge Paso Robles, CA

Michael Mullahey 330 Traffic Way Arroyo Grande, CA 93420 (805) 481-3673



Prepared BY:



North Coast Engineering, Inc. 725 Creston Road, Suite B Paso Robles, CA 93446

April 2017

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Table 1: Pervious/Impervious Area Summary
Table 2: Performance Requirement Summary
Table 3: Drainage Management Areas Breakdown
Table 4: Retention Volume Summary
Table 5: Retention Volume Summary
Table 6: Detention Flow Summary (Northern Lot)
Table 7: Detention Flow Summary (Southern Lot)

EXHIBITS :

Exhibit A: Vicinity and Location Maps
Exhibit B: Watershed Management Zones (WMZs)
Exhibit C: Groundwater Basin
Exhibit D: 85th & 95th Percentile Rainfall
Exhibit E: Drainage Management Areas (DMAs)
Exhibit F: Stormwater Control Measures (SCMs)
Exhibit G: Detailed SSA Results
Exhibit H: Project Plans
Exhibit I: Infiltration Testing Report

I. Introduction			
Project Name:	Mullahey Dodge		
Application Number:			
Name of Applicant:	Michael Mullahey		
The Property			
Location:	The proposed commercial parking lot expansion is located on a 1.11 acre, 48,564 ft ² lot north of Highway 46 between Golden Hill Road and Oakwood Street. (See Exhibit A – Vicinity and Location Maps)		
Address:	2630 Danley Court Paso Robles, CA 93446		
Assessor's Parcel Numbers:	025-425-013 and 025-421-009		
Existing property description:	The southern lot of the two-lot project site is comprised of a decomposed granite parking lot and a concrete truck pad that was part of the existing Mullahey Dodge commercial project that was completed in 2015. The southern lot is relatively flat and generally slopes towards the existing detention basin with a design volume of 179,308 ft ³ . A 12-foot emergency water passage was designed to allow overflow to discharge to Golden Hill Road. Included in the sizing of the existing basin was the 2015 southern lot improvements. The northern lot of the project site generally slopes to the northwest at 0.5% to 1.5% with site runoff discharging to Danley Court. The runoff travels north along Danley Court to Wisteria Lane to Golden Hill Road to a manmade channel at the end of Golden Hill Road then sheet flows to the Salinas River.		

The Project

Project Type: Commercial, Uncovered parking lot and car service bays

Project Description: The proposed Mullahey Dodge project in located on two lots in Paso Robles, CA and involves the development of a 62 stall, HMA parking lot, an 81-foot x 35foot car service building. Development will include a 24 – foot access drive from Danley Court to the project site and the associated frontage improvements at the cul-de-sac. Project development will also include the construction of one 77foot and one 42-foot underground stormwater storage chamber system.

Area Breakdown

The total project site was designed with two different systems. One system was designed to handle the development to occur on the northern lot of the Mullahey Dodge site and one system was designed for the replacement of impervious material on the southern lot developed in 2015.

Northern Lot (new development)

Impervious Area, (HMA pavement and car service building): 27,142 s.f. = 0.62 ac			
Landscape and Bioswale Areas:	10,081 s.f. = 0.23 acres		
Southern Lot (existing development)			
Impervious Area (HMA pavement):	10,310 s.f. = 0.24 acres		
Landscape and Bioswale Areas:	1,030 s.f. = 0.02 acres		

Total Project Area:

48,563 s.f. = 1.11 acres

Table 1 -Pervious/Impervious Area Summary

PRE-CONSTRUCTION

Condition	Pre-Construction Area (af)/(acres)	Post- Construction Area (sf)/(acres)
Impervious: (Building, Flatwork, Paving) ⁽¹⁾	10,153 / 0.23	37,340 / 0.86
Vegetation: (Lawns, Landscaping)	38,411 / 0.88	11,224 / 0.25
Total Area	48,564 / 1.11	48,564 / 1.11

Notes:

1) Impervious area includes replaced paving area

The Purpose

The purpose of this Stormwater Control Plan is to outline the site planning, Low Impact Development (LID) concepts, best management practices (BMP's) and Stormwater Control Measures (SCMs) that will be employed in the design and development of the private commercial parking lot expansion at 2630 Danley Court. This report will demonstrate that the Post-Construction Stormwater Management Requirements (PCRs) will be met, as outlined in the Central Coast Region Resolution No. R3-2013-0032 prepared by the California Regional Water Quality Control Board Central Coast Region. These requirements went into effect on March 6, 2014. The requirements, methodology of analysis and results will be outlined in the remainder of this report.

Compliance with these requirements maintains the hydrologic function of the site, promotes groundwater recharge and mitigates water quality impacts caused by the addition of impervious surfaces.

The peak flows and runoff volumes were calculated using the SCS methodology in the Autodesk Storm and Sanitary Sewer Program (SSA). The underground storage basins were analyzed using a conservative 0.5 in/hr infiltration rate. In November 2013, Earth Systems Pacific performed infiltration testing in 3 locations on the recently developed site to the south with tested infiltration rates ranging from 3.00 in/hr to > 10.00 in/hr. The results of the testing are presented in a report by Earth Systems Pacific, dated November 20, 2013; this report has been included for reference (See Exhibit I – Geotechnical Engineering Report).

II. <u>Requirements</u>

Post-Construction Stormwater Management Requirements (PCRs)

Site statistics:

The total new and/or replaced impervious surface area is **48,561 sf** (See Table 1: Pervious/Impervious Areas Summary).

The project site is in Water Management Zone 1 (See Exhibit B - Watershed Management Zones (WMZs)).

The project is in the Salinas Valley Ground Water Basin (See Exhibit C - Ground Water Basin).

Because the proposed redevelopment creates or replaces more than 2,500 s.f. of impervious surface the project is considered a Regulated Project and may be subject to the following Performance Requirements:

Performance Requirement	Impervious	Applies:
	Threshold	
No. 1 Site Design and Runoff Reduction	> 5,500 s.f.	Yes
No. 2 Water Quality Treatment	> 5,000 s.f.	Yes
No. 3 Runoff Retention	> 15,000 s.f.	Yes
No. 4 Peak Management	> 22,500 s.f.	Yes

Table 2 - Performance Requirement Summary

Drainage Management Areas (DMAs)

Drainage Management Areas (DMAs) were delineated to support a decentralized approach to stormwater management. Points of Interest (POIs) were identified at critical discharge points or important stormwater drainage locations (see Exhibit E - Drainage Management Areas (DMAs) and Table 3: DMA Breakdown).

Drainage Management Areas (DMAs)

Drainage Management Areas (DMAs) were delineated to support the decentralized approach to storm water management. Points of interest (POIs) were identified at critical discharge points or important storm water drainage locations (see Exhibit E – Drainage Management Areas (DMAs) and Table 3: DMA Breakdown).

Condition	DMA-1	DMA-2	DMA-3	DMA-4	DMA-5	Total
condition	(ft²)	(ft²)	(ft²)	(ft²)	(ft²)	(ft²)
Impervious Surfaces	4,320	1,418	15,651	5,754	1,831.3	37,340
Vegetation	3,862	1,577	3,275	1,367	585.3	11,224
Total	8,182	2,995	18,926	7,121	2,416.6	48,564
AREA (AC)	0.19	0.07	0.43	0.16	0.06	1.11
CN	87.43	85.34	93.85	93.39	95.28	91.06

Table 3 – DMA Break Down

Retention Volumes Summary

The retention volumes of the two subsurface storage basins are summarized in Table 4. These volumes do not reflect additional storage due to infiltration. Additional storage due to infiltration is approximately 2,192 ft³.

Basin	Physical Retention Storage (ft ³)
1	590
2	510
Total	1,100

III. Methodology

The onsite DMA boundaries and off-site watershed boundaries were determined using the grading from the project plans and topographic map of the existing surface, and by a visual inspection of the watershed. The existing ground cover was determined by a visual inspection of the watershed.

Existing and proposed on-site impervious areas were determined from the topographic map and from the project plans.

24-hour rainfall totals for the 85th and 95th percentile storms were determined from the City Standard Drawing 1010, Section 5.2, and the 2-year, 10-year and 100-year rainfall totals were determined from NOAA Atlas 14 (See Exhibit-E).

Hydrology was calculated using the SCS unit hydrograph method within the Autodesk Storm and Sanitary Sewer (SSA) computer program. The SSA program was also employed to route runoff through the proposed storm drain system and model detention and retention. Detailed Calculation are provided for reference as Exhibit H.

Method 2 (Routing Method) was used to determine that SCM capture volume, as prescribed in Attachment D of the PCRs.

An average infiltration rate of 0.5 in/hr was used in modeling the system. This was based on the infiltration test results provide in Exhibit I.

Performance Requirement No. 1

Site Design and Runoff Reduction

Since the project is a Regulated Project, it is subject to this performance requirement; the following components will be utilized to satisfy this requirement.

Site assessment summary:

The following site assessment measures were used to identify opportunities and constraints to implement LID Stormwater Control Measures. The site plan was developed and designed taking the following into account (See Exhibit H - Project Plans):

- Site topography
- Hydrologic features including contiguous natural areas
- Soil types and hydrologic soil groups
- Vegetative cover/trees
- Run-on characteristics (source and estimated runoff from offsite which discharge to the project area)
- Existing drainage infrastructure for the site and nearby areas including the location of municipal storm drains
- Utilities
- Easements
- Zoning/Land Use
- Setbacks
- Other pertinent overlay(s)

Site design measures used:

- Define development envelope and identify areas that are most suitable for development
- Construct streets and parking lot aisles to the minimum widths necessary, provided that public safety or mobility uses are not compromised
- Conform the site layout along natural topography to the maximum extent practicable
- Preserve native vegetation where practicable

Runoff Reduction Measures:

- Direct runoff from parking areas and circulation improvements safely onto vegetated areas and/or bio-retention areas to the maximum extent practicable
- Infiltrate runoff in subsurface storage area.

Performance Requirement No. 2 Water Quality Treatment

Projects that create and/or replace 5,000 square feet or more of impervious surface must treat stormwater runoff from existing, new, and replaced impervious surfaces on sites where runoff from existing impervious surfaces cannot be separated from runoff from new and replaced impervious surfaces. Water Quality Treatment must be treated onsite and designed to treat stormwater runoff equal to the volume of runoff generated by the 85th percentile 24-hour storm event, of 1 inch. Water Quality Treatment may implement a treatment system that use multiple systems to complete Water Quality Treatment.

- The Water Quality Treatment system must first implement Low Impact Development T reatment Systems
- Then may implement Bio-filtration Systems
- Then, finally may implement Non-Retention Based Treatment Systems.

Projects subject to Performance Requirement No. 2 must also include design strategies required by Performance Requirement No. 1.

1. Low Impact Development Treatment System

The project bio-filtration basin, underdrain system, and subsurface storage chambers have been designed to retain and infiltrate the entire 95th percentile storm to meet requirement 3, runoff retention. The 85th percentile volume requirement is 1,819 ft³, which is less than the 95th percentile retention requirement of 2,923 ft³. Therefore, the proposed system meets water quality treatment requirements. Elements from the following systems were employed in the project for an extra level of water quality treatment, but are not required to meet these requirements.

2. Bio-filtration treatment systems with the following design parameters:

Small localized bio-filtration ponds and swales have been incorporated into the design. The bio-filtration basins have an approximate retention volume of 1,930 ft³ combined.

a Minimum surface reservoir volume equal to the bio-filtration treatment system surface area times a depth of 6 inches.

The localized bio-filtration swales and ponds generally have a surface depth of 6", and the biofiltration basin has a surface storage depth of 18". b. Minimum planting medium depth of 24 inches.

The BSM is 24" deep in the bio-filtration basin.

The planting medium must sustain a minimum infiltration rate of 5 inches per hour throughout the life of the project and must maximize runoff retention and pollutant removal. A mixture of:

- i. Sand 60% to 70% meeting ASTM C33
- ii. Compost 30% to 40% may be used

This soil mixture has been specified in the project plans and is assumed to have a minimum infiltration rate of 5 in/hr.

c Proper plant selection

Proper plans have been selected per the Landscape plans

d. No compaction of soils beneath the bio-filtration facility (ripping/loosening of soils required if compacted).

Provided in all facilities

e. No liners or other barriers interfering with infiltration, except for situations where lateral infiltration is not technically feasible.

The liner for the proposed underground storage chambers is intended to prevent migration of runoff towards the building foundation or up into the paving subgrade but doesn't impeded infiltration downward into the underlying soil.

2. Non-Retention Based Treatment Systems must collectively achieve at least one of the following hydraulic sizing criteria:

The proposed system is a retention based system, Hydraulic Design Criteria does not apply

- a Hydraulic Sizing Criteria for Non-Retention Based Treatment Systems:
- i. Volume Hydraulic Design Basis must be based on the 85th percentile 24-hour storm event of 1 inch.

ii. Flow Hydraulic Design Basis must be based on the flow of runoff resulting from a rain event equal to at least 0.2 inches per hour intensity.

iii. See Performance Requirement No. 3: Runoff Retention for information to calculate the required water quality volume.

Requirement 2 Volume Calculations

85TH PERCENTILE RETENTION REQUIREMENT ⁽⁴⁾	1,819	ft³
85 th Percentile Rainfall	0.89	in
Post-Developed C ⁽³⁾	0.56	
Post Developed i ⁽²⁾	0.77	
POST CONSTRUCT IMPERVIOUS AREA ⁽¹⁾	37,340	ft²
RETENTION TRIBUTARY AREA	43,488	ft²
ENTIRE PROJECT AREA	48,564	ft²

(1) Includes AC paving, concrete flatwork, and buildings.

(2) i = Post Construction Impervious Area / Entire Project Area

(3) C = 0.858i³-0.78i²+0.774i + 0.04

(4) 85th Retention Requirement (ft^3) = C x 85th percentile rainfall (ft.) x Retention Tributary Area (ft^2)

Performance Requirement No. 3

Runoff Retention

Projects that create and/or replace 1 5,000 square feet or more of impervious surface must retain runoff for optimal management of watershed processes. Projects subject to Performance Requirement No. 3 must also include design strategies required by Performance Requirement No. 2 and 1.

- Adjustments for Redevelopment Replaced impervious surface, shall be multiplied by 0.5 when calculating the volume of runoff subject to Runoff Retention Performance Requirements.
- 2. Retention must meet the following performance requirements:
 - a. Prevent offsite discharge from events up to the 95th percentile 24-hour rainfall event, 1.43 inches.
 - b. Achieve retention by:
 - **i.** optimizing soil infiltration

Employed by installing BSM and gravel.

ii. Storage

Employed in surface and sub-surface retention

iii. rainwater harvesting

Not used

iv. evapotranspiration

Employed in vegetated bio-filtration swales, ponds and basins

The 95th percentile storage requirements were calculated in accordance with the procedures outlined in Appendix D of the PCRs. These calculations are included below.

Table 5– Retention Volume Summary

Basin	Physical Retention Storage	Total Retention Storage
	(ft ³)	including Infiltration (ft ³)
1	1,100	3,030

Retention Analysis Summary

The retention system is comprised of two underground storage chambers, 6" and 8" pipes connecting the inlets to the storage chambers, the gravel bed at 40% porosity, the BSM layer at

40% porosity, and surface storage between 6" and 18" depth in the flat lower portion of the retention basin. The total storage volume of this system is 1,100 cubic feet. This volume does not reflect additional storage due to infiltration. Per the analysis results the retention basin infiltrated 2,370 ft³ during the 95th percentile storm, draining the basin completely in less than 72 hours. Detailed SSA results are provided as Exhibit E.

Storage Volume with Infiltration = 3,030 ft³ > 2,923 ft³

Therefore, Performance Requirement No. 3 is satisfied.

Requirement 3 Volume Calculations

ENTIRE PROJECT AREA	48,564	ft²
EXISTING IMPERVIOUS AREA	10,153	ft²
REPLACED IMPERVIOUS AREA	10,153	ft²
UNDISTURBED OR PLANTED AREAS (defined per B.4.d.iv.1)	0	ft²
IMPERVIOUS SURFACE AREAS THAT DISCHARGE TO INFILTRATING AREAS (defined per B.4.d.iv.2)	0	ft²
	0	
REDEVELOPMENT AREA ADJUSTMENT		
(per Appendix D 1.b)	5,077	ft²
RETENTION TRIBUTARY AREA	43,488	ft²
POST CONSTRUCT IMPERVIOUS AREA ⁽¹⁾	37,340	ft²
95 th Percentile Rainfall	1.43	in
Post Developed i ⁽²⁾	0.77	
Post-Developed C ⁽³⁾	0.56	
95TH PERCENTILE RETENTION REQUIREMENT ⁽⁴⁾	2,923	ft³

(1) Includes AC paving, concrete flatwork, and buildings.

(2) i = Post Construction Impervious Area / Entire Project Area

(3) C = $0.858i^3 - 0.78i^2 + 0.774i + 0.04$

(4) 95th Retention Requirement (ft^3) = C x 95th percentile rainfall (ft.) x Retention Tributary Area (ft^2)

The proposed system provides 3,030 ft³ of storage, exceeding the 2,923 ft³ requirement , therefore Performance Requirement No. 3 is satisfied.

Performance Requirement No. 4 Peak Management

Since the project is a Regulated Project, is in WMZ 1 and creates greater than 22,500 Projects that create and/or replace 22,500 square feet or more of impervious surface must retain runoff for the optimal management of watershed processes. Projects subject to Performance Requirement No. 4 must also include design strategies required by Performance Requirement No. 3, 2 and 1. Post-development peak flows, discharged from the site, shall not exceed preproject peak flows for the 2 through 10-year storm events.

The following rainfall totals were used in the analysis to model the 2-year and 10-year design storms in the SSA model:

- 2-Year 24-hour Rainfall Depth = 2.11 inches
- 10-Year 24-hour Rainfall Depth = <u>3.68 inches</u>
 - 2-Year and 10-Year Rainfall depths were determined from NOAA Atlas 14 (See Exhibit D)

Runoff from the project is routed through the bio-filtration basin and storage chambers. The northern lot is discharged through 2' wide. 0.5' sidewalk underdrain to Danley Court and the southern lot is discharged into the exist detention pond located adjacent to the site. The results of the SSA analysis of the 2- and 10- year pre-developed and post-developed design storms are summarized in Table 3. Detailed analysis results are provided in Exhibit G - Detailed SSA Results.

Design Storm	Pre-Developed	Post-Developed
	(cfs)	(cfs)
2 Year	0.90	0.27
10 Year	1.89	0.76

Table 6 – Detention Flow Summary (Northern Lot)

Table 7 – Detention	Flow Summary	y (Southern Lot)
---------------------	--------------	------------------

Design Storm	Pre-Developed	Post-Developed
	(cfs)	(cfs)
2 Year	0.34	0.16
10 Year	0.66	0.55

Performance requirement 4 is meet by reducing the 2-year and 10-year peak flows to a level lower than the pre-developed rate.

IV. Conclusions

The project incorporates the Runoff Reduction Measures and Structural Storm Water Control Measures (SCMs) described in this report.

- Performance Requirement No. 1 is satisfied
- Performance Requirement No. 2 is satisfied
- Performance Requirement No. 3 is satisfied
- Performance Requirement No. 4 is satisfied
- City Drainage requirements are satisfied.

The selection, sizing, and design of the Storm Water Control Measures (SCMs) meet all of the applicable Water Quality Treatment, Runoff Retention and Peak Management Performance Requirements

Statement of Compliance

There is no documentation needed to demonstrate infeasibility where on-site compliance cannot be achieved because it doesn't apply because all RWQCB were met.

The Water Quality Treatment, Runoff Retention and Peak Management Performance Requirements will be met on-site.

Operations and Maintenance (O&M) Plan

The following inspection schedule and operation and maintenance plan must be followed to ensure the long-term operation of the proposed structural control measures (SCMs). The owner of the facilities must provide the means to finance operation and maintenance of the facilities in perpetuity.

Inspection and maintenance items include:

- Bio-infiltration basin surface and plantings.
- Sub-surface storage chambers
- Drain Inlets
- Drain Inlet Filters

Routine Maintenance to be performed on a continuous basis.

- Remove leaves and debris from drain inlet grates and inlet filters.
- Remove trash and debris from the bio-filtration basin.
- Observe health of biofiltration plants and apply fertilizer and adjust irrigation as required.
- Remove and replace dead landscape plantings from bio-filtration basin.
- Sweep parking lots and remove trash and debris.

Annual Inspection and Maintenance to be performed before the rainy season.

- Inspect drain inlet catch basins for debris and sedimentation. Remove debris and trash. Remove siltation if greater that 2" deep.
- Inspect inlet filters and remove silt and debris. Replace filter medium pouch annually.
- Inspect silt traps and remove trash and debris. If silt is greater than 2" deep the silt trap shall be jetted with water and vacuumed.
- Inspect the silt trap sorbent pads, remove when pads are a uniform dark color per manufacturer's recommendations. The sorbent pads shall be replaced at a maximum 5-year interval regardless of the pad color.
- Inspect the underdrain system with a fiber optics camera and determine sediment depth using a stadia rod. Remove silt by water jetting and vacuuming when silt exceeds 1" in depth.

Inspect underground storage chambers with fiber optics camera and determine sediment depth by stadia rod. Remove silt by jetting with water and vacuuming, when silt depth exceeds 2".

Owner of facilities

The owner of the facilities is:

Michael Mullahey



Exhibit A: Vicinity Map and Location Map



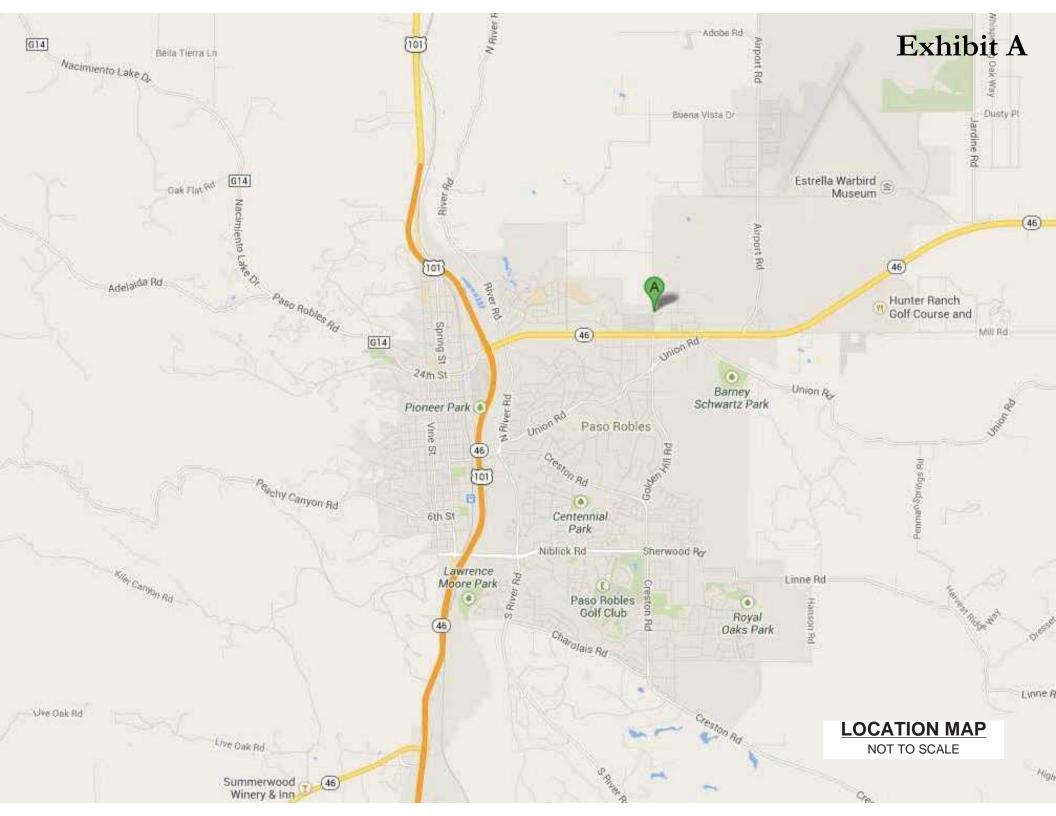




Exhibit B: Watershed Management Zone (WMZs)

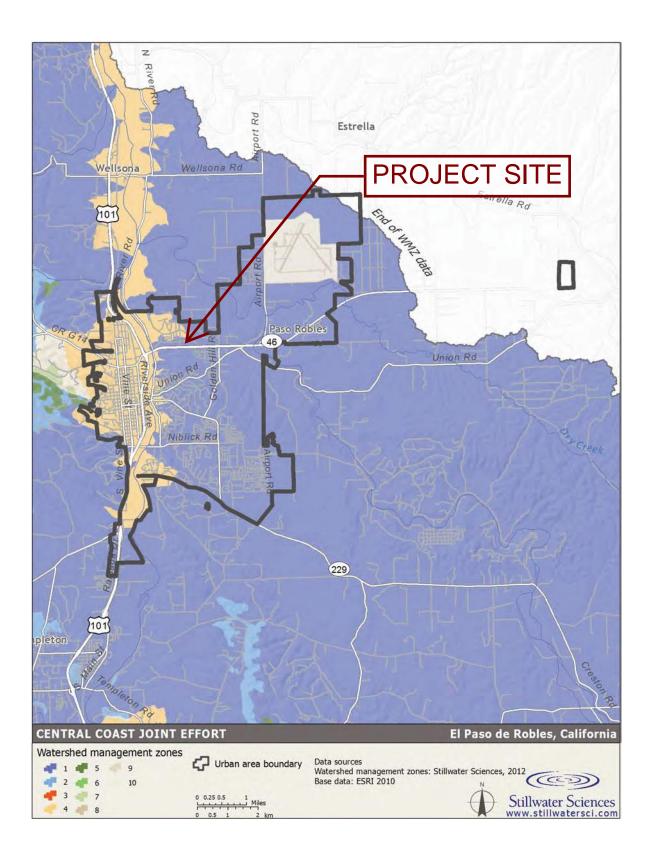




Exhibit C: Groundwater Basin

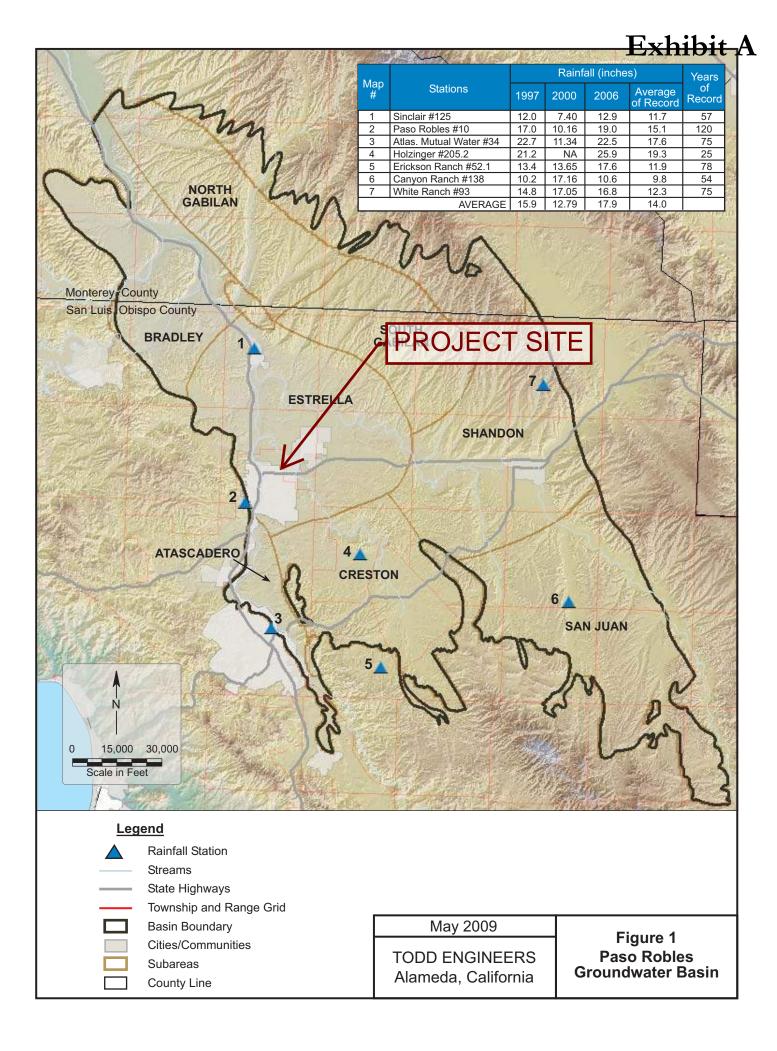
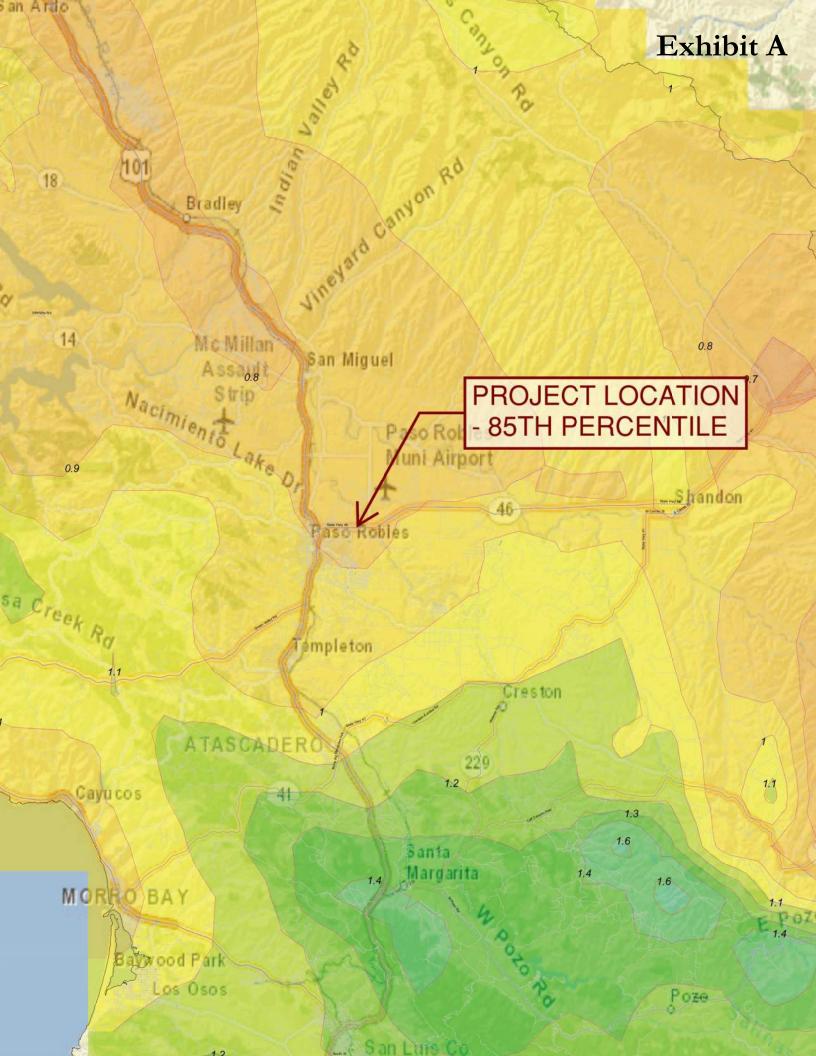




Exhibit D: 85th & 95th Percentile Rainfall



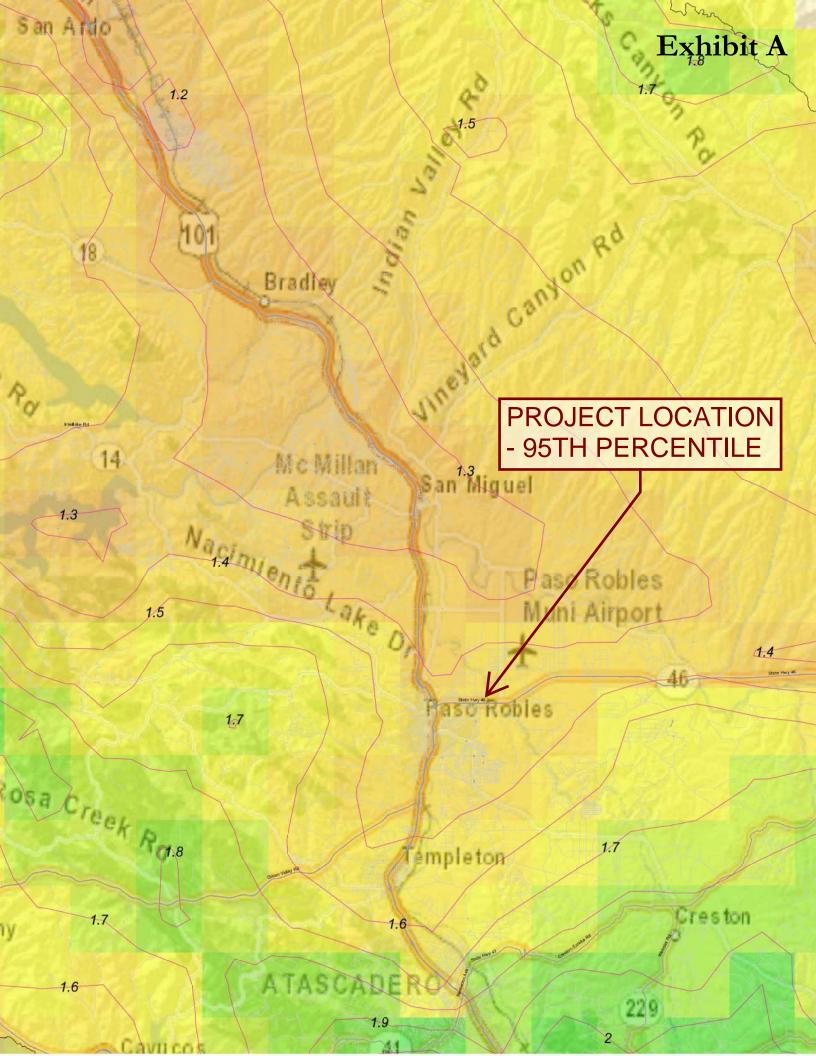




Exhibit E: Drainage Management Areas (DMAs)

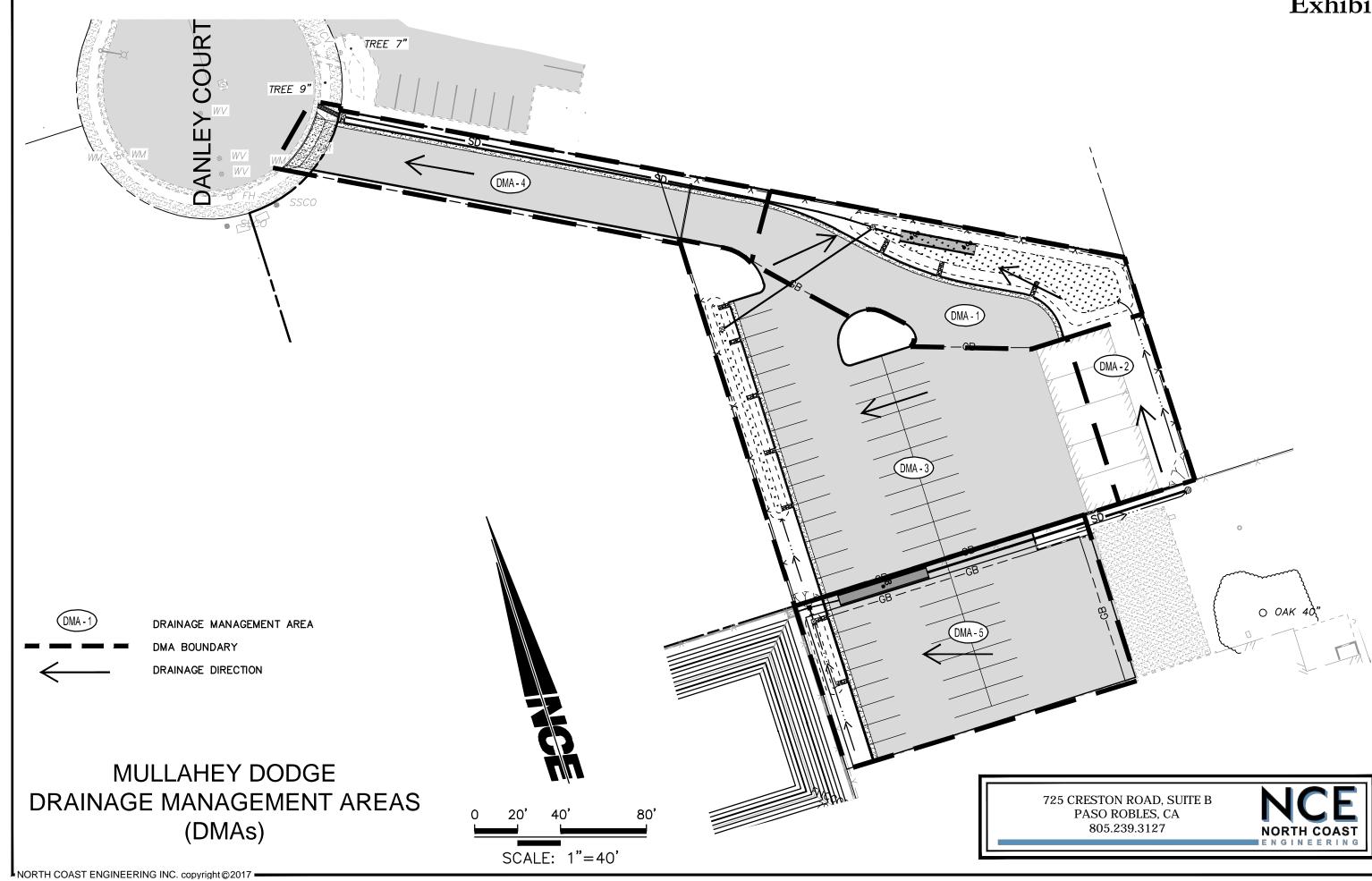
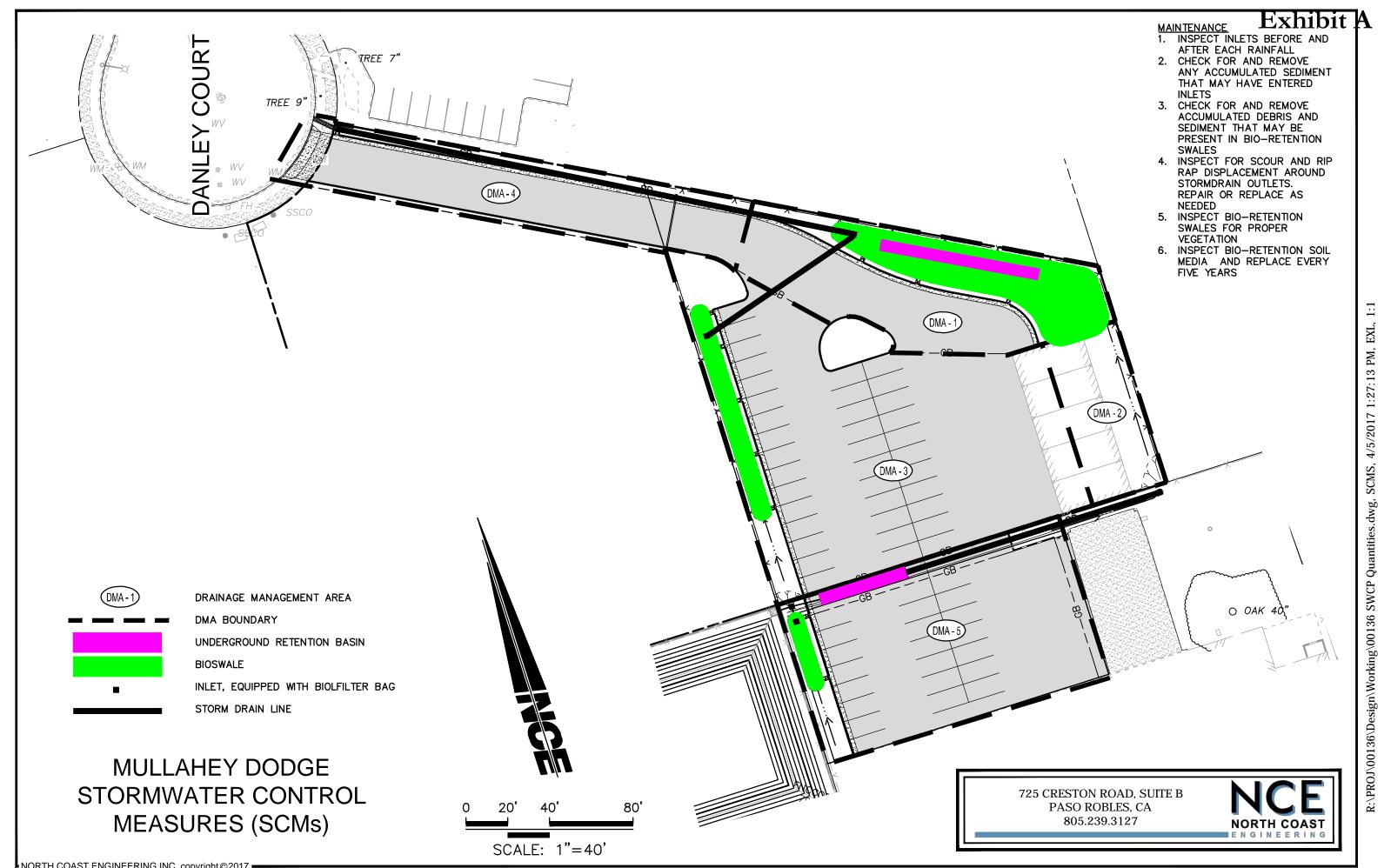


Exhibit F: Stormwater Control Measures (SCMs)



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Exhibit G: Detailed SSA Results

Project Description

File Name 2017-02-21_00136 SWCP.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	User-Defined
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	YES

Analysis Options

Start Analysis On End Analysis On Start Reporting On Antecedent Dry Days Runoff (Dry Weather) Time Step Runoff (Wet Weather) Time Step Reporting Time Step Routing Time Step	Jan 04, 2020 Jan 01, 2020 0 0 01:00:00 0 00:05:00 0 00:05:00	00:00:00 00:00:00 days days hh:mm:ss days hh:mm:ss days hh:mm:ss seconds
---	---	--

Number of Elements

	Qty
Rain Gages	1
Subbasins	5
Nodes	7
Junctions	2
Outfalls	2
Flow Diversions	0
Inlets	0
Storage Nodes	3
Links	5
Channels	0
Pipes	3
Pumps	0
Orifices	1
Weirs	1
Outlets	0
Pollutants	0
Land Uses	0
	-

Rainfall Details

SN	I Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County		Rainfall Depth	Rainfall Distribution
								(years)	(inches)	
1		Time Series	95TH	Cumulative	inches	California	San Luis Obispo (Atascadero)	2	1.43	SCS Type I 24-hr

Exhibit A

Subbasin Summary

SN Subbasin	Area	Weighted	Total	Total	Total	Peak	Time of
ID		Curve	Rainfall	Runoff	Runoff	Runoff	Concentration
		Number			Volume		
	(ac)		(in)	(in)	(ac-in)	(cfs)	(days hh:mm:ss)
1 DMA-1	0.19	87.43	1.43	0.51	0.09	0.07	0 00:04:25
2 DMA-2	0.07	85.34	1.43	0.40	0.03	0.02	0 00:04:08
3 DMA-3	0.43	93.85	1.43	0.86	0.37	0.29	0 00:05:46
4 DMA-4	0.16	93.39	1.43	0.83	0.14	0.11	0 00:06:16
5 PRE-SUB	0.85	91.43	1.43	0.71	0.60	0.50	0 00:02:18

Node Summary

SN Element ID	Element Type	Invert Elevation	(-)	Initial Water Elevation					Surcharge		Peak	Flooded	
									Attained		Occurrence		
		(ft)	(ft)	(ft)	(ft)	(ft ²)	(cfs)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
1 DI-2	Junction	789.15	794.90	789.15	0.00	50.00	0.24	793.45	0.00	1.45	0 00:00	0.00	0.00
2 Jun-04	Junction	788.67	794.60	788.67	0.00	0.00	0.32	793.45	0.00	1.15	0 00:00	0.00	0.00
3 OUT-POST	Outfall	793.30					0.03	793.30					
4 OUT-PRE	Outfall	0.00					0.48	0.00					
5 DI-4*	Storage Node	790.60	794.10	790.60		0.00	0.10	793.45				0.00	0.00
6 SUB-1	Storage Node	788.10	795.10	788.10		0.00	0.33	793.45				0.00	0.00
7 SURF-WST	Storage Node	793.90	794.90	793.90		0.00	0.29	794.45				0.00	0.00

Link Summary

SN Element	Element	From	To (Outlet)	Length	Inlet	Outlet	Average	Diameter or	Manning's	Peak	Design Flow	Peak Flow/	Peak Flow	Peak Flow	Peak Flow	Total Time Reported
ID	Туре	(Inlet)	Node		Invert	Invert	Slope	Height	Roughness	Flow	Capacity	Design Flow	Velocity	Depth	Depth/	Surcharged Condition
		Node			Elevation E	Elevation						Ratio			Total Depth	
															Ratio	
				(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)
1 Link-11	Pipe	Jun-04	DI-4*	245.00	789.90	790.60	-0.2900	8.000	0.0150	0.09	0.56	0.17	1.26	0.67	1.00	3209.00 SURCHARGED
2 Link-16	Pipe	DI-2	Jun-04	85.00	789.15	788.67	0.5600	8.000	0.0150	0.23	0.79	0.29	0.92	0.67	1.00	3713.00 SURCHARGED
3 Link-17	Pipe	SUB-1	Jun-04	13.00	788.60	788.67	-0.5400	8.000	0.0150	0.25	0.77	0.32	0.91	0.67	1.00	3717.00 SURCHARGED
4 Orfice-01	Orifice	SURF-WST	DI-2		793.90	789.15		18.000		0.24						
5 UNDR	Weir	DI-4*	OUT-POST		790.60	793.30				0.03						

Subbasin Hydrology

Exhibit A

Subbasin : DMA-1

Input Data

Area (ac)	0.19
Weighted Curve Number	87.43
Rain Gage ID	NOAA

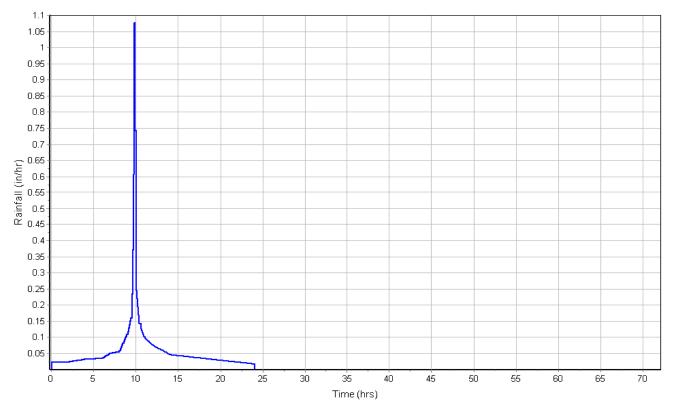
Composite Curve Number

	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.11	-	98.00
-	0.08	-	74.00
Composite Area & Weighted CN	0.19		87.43

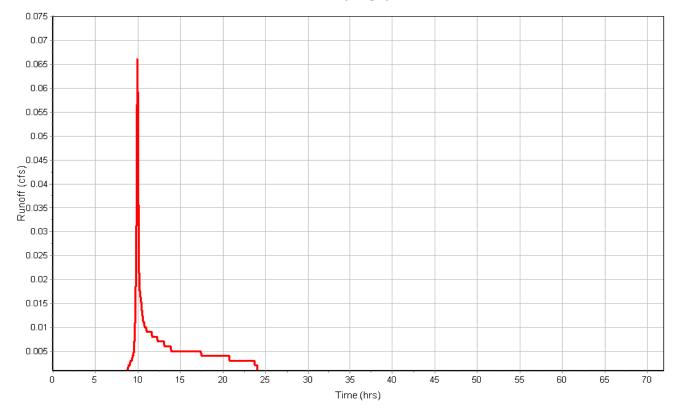
Subbasin Runoff Results

Total Rainfall (in)	1.43
Total Runoff (in)	0.51
Peak Runoff (cfs)	0.07
Weighted Curve Number	87.43
Time of Concentration (days hh:mm:ss)	0 00:04:26

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : DMA-2

Input Data

Area (ac)	0.07
Weighted Curve Number	85.34
Rain Gage ID	NOAA

Composite Curve Number

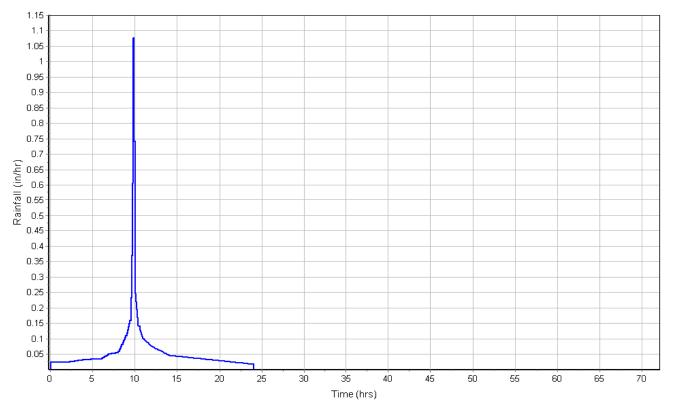
Area	Soil	Curve	
(acres)	Group	Number	
0.03	-	98.00	
0.04	-	74.00	
0.07		85.34	
	(acres) 0.03 0.04	(acres) Group 0.03 - 0.04 -	(acres) Group Number 0.03 - 98.00 0.04 - 74.00

Subbasin Runoff Results

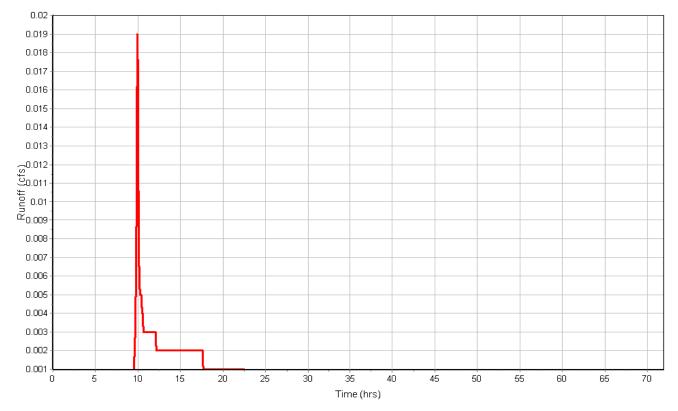
Total Rainfall (in)	1.43
Total Runoff (in)	0.40
Peak Runoff (cfs)	0.02
Weighted Curve Number	85.34
Time of Concentration (days hh:mm:ss)	0 00:04:08

Exhibit A

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : DMA-3

Input Data

Area (ac)	0.43
Weighted Curve Number	93.85
Rain Gage ID	NOAA

Composite Curve Number

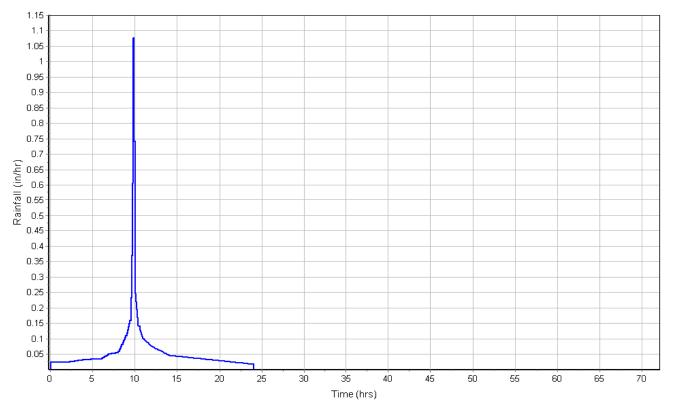
mposite Curve Number				
	Area	Soil	Curve	
Soil/Surface Description	(acres)	Group	Number	
-	0.36	-	98.00	
-	0.08	-	74.00	
Composite Area & Weighted CN	0.44		93.85	

Subbasin Runoff Results

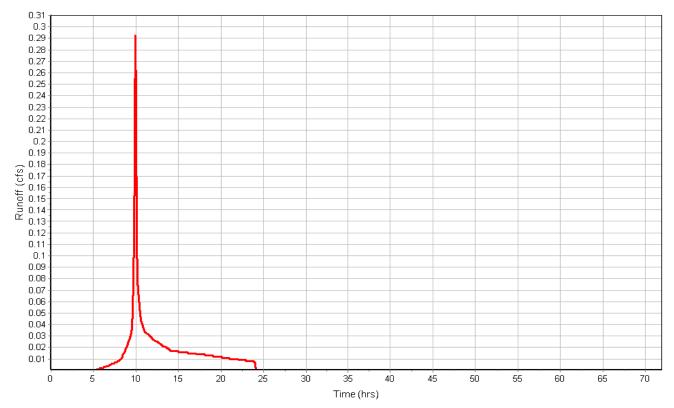
Total Rainfall (in)	1.43
Total Runoff (in)	0.86
Peak Runoff (cfs)	0.29
Weighted Curve Number	93.85
Time of Concentration (days hh:mm:ss)	0 00:05:46

Exhibit A

Rainfall Intensity Graph







Subbasin : DMA-4

Input Data

Area (ac)	0.16
Weighted Curve Number	93.39
Rain Gage ID	NOAA

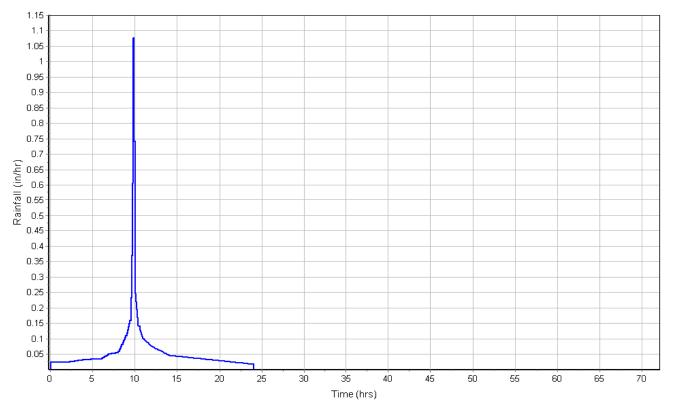
Composite Curve Number

Area	Soil	Curve
(acres)	Group	Number
0.13	-	98.00
0.03	-	74.00
0.16		93.39
	(acres) 0.13 0.03	(acres) Group 0.13 - 0.03 -

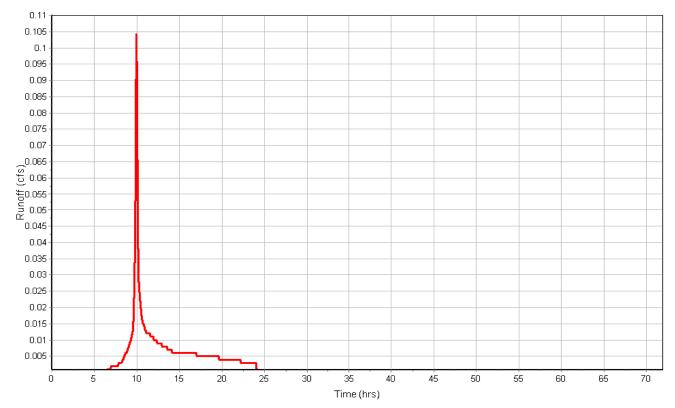
Subbasin Runoff Results

Total Rainfall (in)	1.43
Total Runoff (in)	0.83
Peak Runoff (cfs)	0.11
Weighted Curve Number	93.39
Time of Concentration (days hh:mm:ss)	0 00:06:17

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : PRE-SUB

Input Data

Area (ac)	0.85
Weighted Curve Number	91.43
Rain Gage ID	NOAA

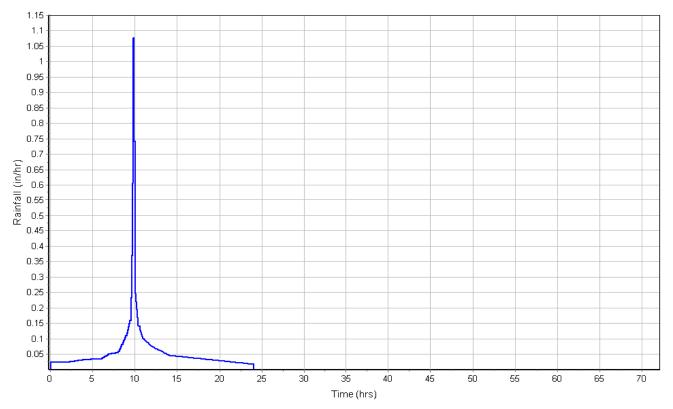
Composite Curve Number

mposite Curve Number				
	Area	Soil	Curve	
Soil/Surface Description	(acres)	Group	Number	
-	0.62	-	98.00	
-	0.23	-	74.00	
Composite Area & Weighted CN	0.85		91.43	

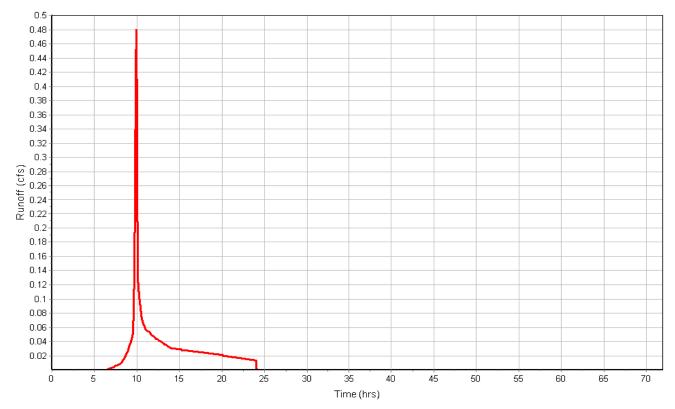
Subbasin Runoff Results

Total Rainfall (in)	1.43
Total Runoff (in)	0.71
Peak Runoff (cfs)	0.50
Weighted Curve Number	91.43
Time of Concentration (days hh:mm:ss)	0 00:02:18

Rainfall Intensity Graph



Runoff Hydrograph



Junction Input

SN Element	Invert	Ground/Rim	Ground/Rim	Initial	Initial	Surcharge	Surcharge	Ponded	Minimum
ID	Elevation	(Max)	(Max)	Water	Water	Elevation	Depth	Area	Pipe
		Elevation	Offset	Elevation	Depth				Cover
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft ²)	(in)
1 DI-2	789.15	794.90	5.75	789.15	0.00	0.00	-794.90	50.00	0.00
2 Jun-04	788.67	794.60	5.93	788.67	0.00	0.00	-794.60	0.00	0.00

Junction Results

SN EI	lement	Peak	Peak	Max HGL	Max HGL	Max	Min	Average HGL	Average HGL	Time of	Time of	Total	Total Time
ID)	Inflow	Lateral	Elevation	Depth	Surcharge	Freeboard	Elevation	Depth	Max HGL	Peak	Flooded	Flooded
			Inflow	Attained	Attained	Depth	Attained	Attained	Attained	Occurrence	Flooding	Volume	
						Attained					Occurrence		
		(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)	(days hh:mm)	(ac-in)	(min)
1 D	I-2	0.24	0.00	793.45	4.30	0.00	1.45	791.92	2.77	0 12:53	0 00:00	0.00	0.00
2 Ju	un-04	0.32	0.00	793.45	4.78	0.00	1.15	791.86	3.19	0 12:53	0 00:00	0.00	0.00

Pipe Input

SN Element	Length	Inlet	Inlet	Outlet	Outlet	Total	Average Pipe	Pipe	Pipe	Manning's	Entrance	Exit/Bend	Additional	Initial Flap	No. of
ID		Invert	Invert	Invert	Invert	Drop	Slope Shape	Diameter or	Width	Roughness	Losses	Losses	Losses	Flow Gate	Barrels
		Elevation	Offset	Elevation	Offset			Height							
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)	(in)	(in)					(cfs)	
1 Link-11	245.00	789.90	1.23	790.60	0.00	-0.70	-0.2900 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1
2 Link-16	85.00	789.15	0.00	788.67	0.00	0.48	0.5600 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1
3 Link-17	13.00	788.60	0.50	788.67	0.00	-0.07	-0.5400 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1

Pipe Results

SN Element ID	Peak Flow	Time of Peak Flow Occurrence	0	Peak Flow/ Design Flow Ratio	Peak Flow Velocity		Peak Flow Depth			Froude Reported Number Condition
	(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)	
1 Link-11	0.09	0 10:04	0.56	0.17	1.26	3.24	0.67	1.00	3209.00	SURCHARGED
2 Link-16	0.23	0 10:03	0.79	0.29	0.92	1.54	0.67	1.00	3713.00	SURCHARGED
3 Link-17	0.25	0 10:03	0.77	0.32	0.91	0.24	0.67	1.00	3717.00	SURCHARGED

Storage Nodes

Exhibit A

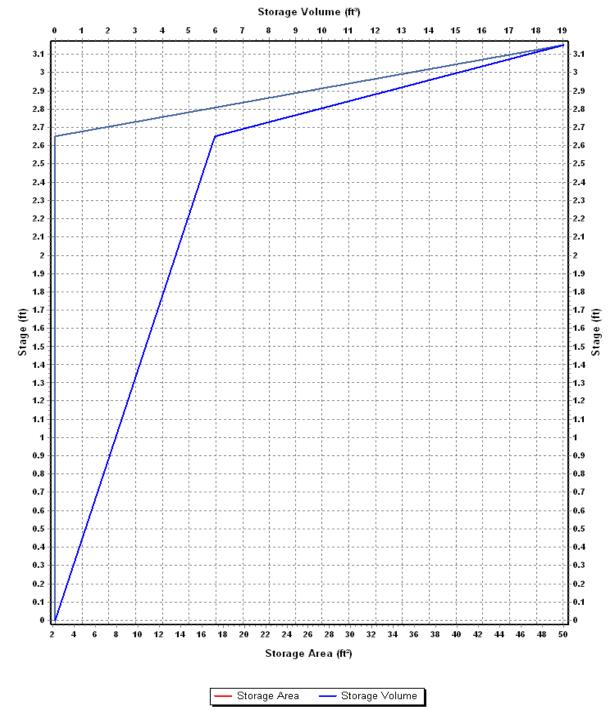
Storage Node : DI-4*

Input Data

Invert Elevation (ft)	790.60
Max (Rim) Elevation (ft)	794.10
Max (Rim) Offset (ft)	3.50
Initial Water Elevation (ft)	790.60
Initial Water Depth (ft)	0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Storage Area Volume Curves Storage Curve : DI-4

Stage	Storage	Storage
	Area	Volume
(ft)	(ft²)	(ft ³)
0	2.25	0.000
1.33	2.25	2.99
2.65	2.25	5.96
3.15	50	19.02



Storage Area Volume Curves

Storage Node : DI-4* (continued)

Outflow Weirs

SN Element	Weir	Flap	Crest	Crest	Length	Weir Total	Discharge
ID	Туре	Gate	Elevation	Offset		Height	Coefficient
			(ft)	(ft)	(ft)	(ft)	
 1 UNDR	Rectangular	No	793.40	2.80	1.00	0.50	3.33

Output Summary Results

Peak Inflow (cfs)	0.10
Peak Lateral Inflow (cfs)	0.10
Peak Outflow (cfs)	0.09
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	793.45
Max HGL Depth Attained (ft)	2.85
Average HGL Elevation Attained (ft)	792.13
Average HGL Depth Attained (ft)	1.53
Time of Max HGL Occurrence (days hh:mm)	0 12:53
Total Exfiltration Volume (1000-ft ³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	

Storage Node : SUB-1

Input Data

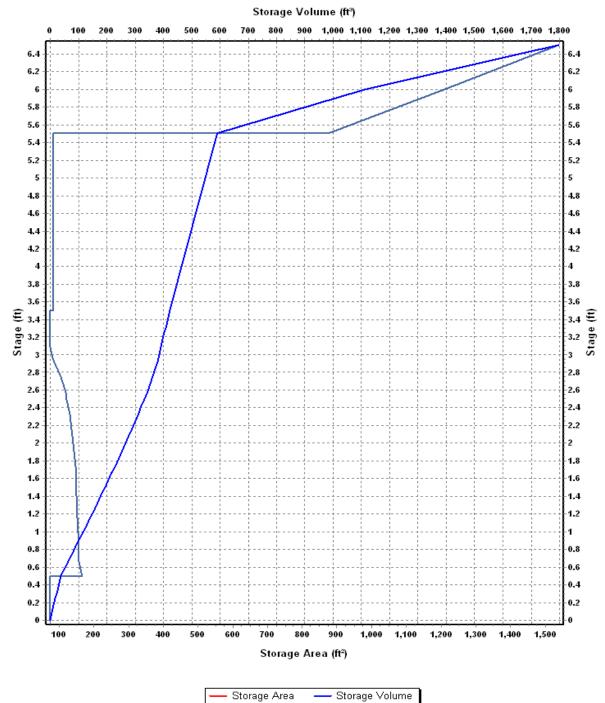
Invert Elevation (ft)	788.10
Max (Rim) Elevation (ft)	795.10
Max (Rim) Offset (ft)	7.00
Initial Water Elevation (ft)	. 788.10
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : UNDERGROUND

Stage	Storage	Storage
	Area	Volume
(ft)	(ft²)	(ft ³)
0.000	74.7600	0.000
0.083	74.7600	6.21
0.167	74.7600	12.49
0.250 0.333	74.7600 74.7600	18.70 24.91
0.333	74.7600	31.19
0.500	74.760	37.40
0.500	165.7740	37.52
0.667	157.1640	64.32
0.750	156.6600	77.34
0.833	156.4080	90.33
0.917	156.1560	103.46
1.000	155.9040	116.41
1.083	155.6520	129.34
1.167	153.6360	142.33
1.250	151.8720	155.01
1.333	151.3680	167.59
1.417	151.1160	180.29
1.500	150.6120	192.81
1.583	150.1080	205.29
1.667	149.3520	217.87
1.750	148.8480	230.25
1.833	146.0760	242.49
1.917	143.0520	254.63
2.000	141.2880	266.43
2.083	138.7680	278.05
2.167	136.2480	289.60
2.250	133.4760	300.79
2.333	130.4520	311.74
2.417	126.9240	322.55
2.500	122.8920	332.92
2.583 2.667	118.3560 112.5600	342.93 352.63
2.007	106.0080	352.63 361.70
2.833	95.9280	370.08
2.000	87.6120	377.79
3.000	79.5480	384.73
3.083	74.7600	391.13
3.167	74.7600	397.41
3.250	74.7600	403.62
3.333	74.7600	409.83
3.417	74.7600	416.11
3.500	74.7600	422.32
3.501	84	422.40
5.5	84	590.32
5.501	876	590.80
6	1207	1110.51
6.5	1538	1796.76



Storage Area Volume Curves

Storage Node : SUB-1 (continued)

Output Summary Results

Peak Inflow (cfs)	0.33
Peak Lateral Inflow (cfs)	0.08
Peak Outflow (cfs)	0.01
Peak Exfiltration Flow Rate (cfm)	0.12
Max HGL Elevation Attained (ft)	793.45
Max HGL Depth Attained (ft)	5.35
Average HGL Elevation Attained (ft)	791.78
Average HGL Depth Attained (ft)	3.68
Time of Max HGL Occurrence (days hh:mm)	0 12:53
Total Exfiltration Volume (1000-ft ³)	0.439
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : SURF-WST

Input Data

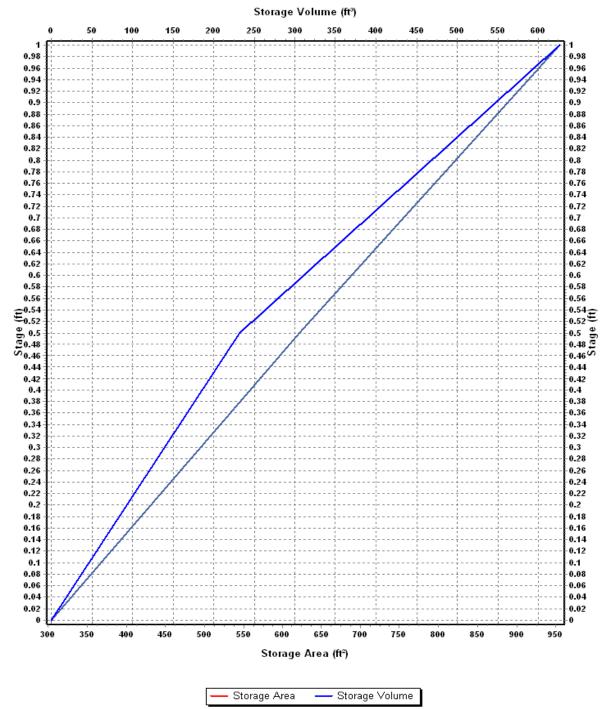
Invert Elevation (ft)	. 793.90
Max (Rim) Elevation (ft)	794.90
Max (Rim) Offset (ft)	1.00
Initial Water Elevation (ft)	. 793.90
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : SURF-1

Stage	Storage	Storage
	Area	Volume
(ft)	(ft ²)	(ft ³)
0	304	0.000
.5	622	231.50
1	955	625.75



Storage Area Volume Curves

Storage Node : SURF-WST (continued)

Outflow Orifices

SN Element	Orifice	Orifice	Flap	Circular	Rectangular	Rectangular	Orifice	Orifice
ID	Туре	Shape	Gate	Orifice	Orifice	Orifice	Invert	Coefficient
				Diameter	Height	Width	Elevation	
				(in)	(in)	(in)	(ft)	
1 Orfice-01	Bottom	Rectangular	No		18.00	18.00	794.40	0.63

Output Summary Results

Peak Inflow (cfs)	0.29
Peak Lateral Inflow (cfs)	0.29
Peak Outflow (cfs)	0.24
Peak Exfiltration Flow Rate (cfm)	0.46
Max HGL Elevation Attained (ft)	794.45
Max HGL Depth Attained (ft)	0.55
Average HGL Elevation Attained (ft)	794.04
Average HGL Depth Attained (ft)	0.14
Time of Max HGL Occurrence (days hh:mm)	0 10:04
Total Exfiltration Volume (1000-ft ³)	0.680
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Project Description

File Name 2017-02-21_00136 SWCP.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	User-Defined
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	YES

Analysis Options

Start Analysis On End Analysis On Start Reporting On Antecedent Dry Days Runoff (Dry Weather) Time Step Runoff (Wet Weather) Time Step Reporting Time Step Routing Time Step	Jan 04, 2020 Jan 01, 2020 0 01:00:00 0 00:05:00 0 00:05:00	00:00:00 00:00:00 days days hh:mm:ss days hh:mm:ss days hh:mm:ss seconds
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Number of Elements

	Qty
Rain Gages	1
Subbasins	5
Nodes	7
Junctions	2
Outfalls	2
Flow Diversions	0
Inlets	0
Storage Nodes	3
Links	5
Channels	0
Pipes	3
Pumps	0
Orifices	1
Weirs	1
Outlets	0
Pollutants	0
Land Uses	0
	-

Rainfall Details

S	N Rain Gage	Data	Data Source	Rainfall	Rain	State	County	Return	Rainfall	Rainfall
	ID	Source	ID	Туре	Units			Period	Depth	Distribution
								(years)	(inches)	
1		Time Series	2-YEAR	Cumulative	inches	California	San Luis Obispo (Paso Rob	es) 2	2.11	SCS Type I 24-hr

Subbasin Summary

	SN Subbasin	Area	Weighted	Total	Total	Total	Peak	Time of
	ID		Curve	Rainfall	Runoff	Runoff	Runoff	Concentration
			Number			Volume		
_		(ac)		(in)	(in)	(ac-in)	(cfs)	(days hh:mm:ss)
-	1 DMA-1	0.19	87.43	2.11	1.02	0.19	0.15	0 00:04:25
	2 DMA-2	0.07	85.34	2.11	0.89	0.06	0.05	0 00:04:08
	3 DMA-3	0.43	93.85	2.11	1.49	0.65	0.51	0 00:05:46
	4 DMA-4	0.16	93.39	2.11	1.45	0.24	0.19	0 00:06:16
	5 PRE-SUB	0.85	91.43	2.11	1.29	1.10	0.95	0 00:02:18

Node Summary

SN Element ID	Element Type	Invert Elevation	()	Initial Water Elevation					Surcharge	Freeboard		Flooded	
									Attained		Occurrence		
		(ft)	(ft)	(ft)	(ft)	(ft ²)	(cfs)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
1 DI-2	Junction	789.15	794.90	789.15	0.00	50.00	0.48	793.77	0.00	1.13	0 00:00	0.00	0.00
2 Jun-04	Junction	788.67	794.60	788.67	0.00	0.00	0.45	793.68	0.00	0.92	0 00:00	0.00	0.00
3 OUT-POST	Outfall	793.30					0.27	793.30					
4 OUT-PRE	Outfall	0.00					0.90	0.00					
5 DI-4*	Storage Node	790.60	794.10	790.60		0.00	0.47	793.59				0.00	0.00
6 SUB-1	Storage Node	788.10	795.10	788.10		0.00	0.56	793.68				0.00	0.00
7 SURF-WST	Storage Node	793.90	794.90	793.90		0.00	0.51	794.48				0.00	0.00

Link Summary

SN Element	Element	From	To (Outlet)	Length	Inlet	Outlet	Average	Diameter or	Manning's	Peak	Design Flow	Peak Flow/	Peak Flow	Peak Flow	Peak Flow	Total Time Reported
ID	Туре	(Inlet)	Node		Invert	Invert	Slope	Height	Roughness	Flow	Capacity	Design Flow	Velocity	Depth	Depth/	Surcharged Condition
		Node			Elevation E	Elevation						Ratio			Total Depth	
															Ratio	
				(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)
1 Link-11	Pipe	Jun-04	DI-4*	245.00	789.90	790.60	-0.2900	8.000	0.0150	0.29	0.56	0.52	1.18	0.67	1.00	1281.00 SURCHARGED
2 Link-16	Pipe	DI-2	Jun-04	85.00	789.15	788.67	0.5600	8.000	0.0150	0.45	0.79	0.58	1.30	0.67	1.00	1795.00 SURCHARGED
3 Link-17	Pipe	SUB-1	Jun-04	13.00	788.60	788.67	-0.5400	8.000	0.0150	0.38	0.77	0.49	1.08	0.67	1.00	1964.00 SURCHARGED
4 Orfice-01	Orifice	SURF-WST	DI-2		793.90	789.15		18.000		0.48						
5 UNDR	Weir	DI-4*	OUT-POST		790.60	793.30				0.27						

Subbasin Hydrology

Exhibit A

Subbasin : DMA-1

Input Data

Area (ac)	0.19
Weighted Curve Number	87.43
Rain Gage ID	NOAA

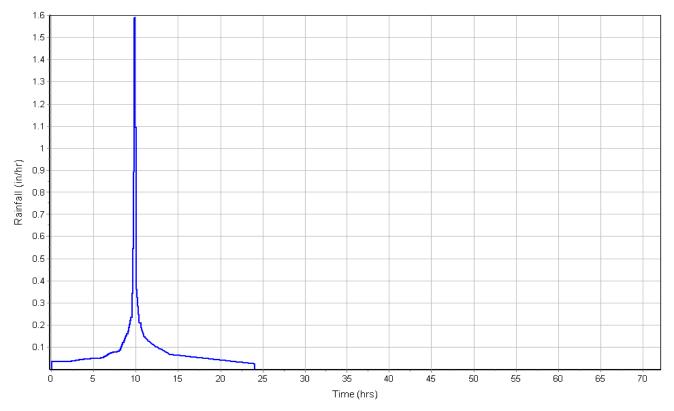
Composite Curve Number

	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.11	-	98.00
-	0.08	-	74.00
Composite Area & Weighted CN	0.19		87.43

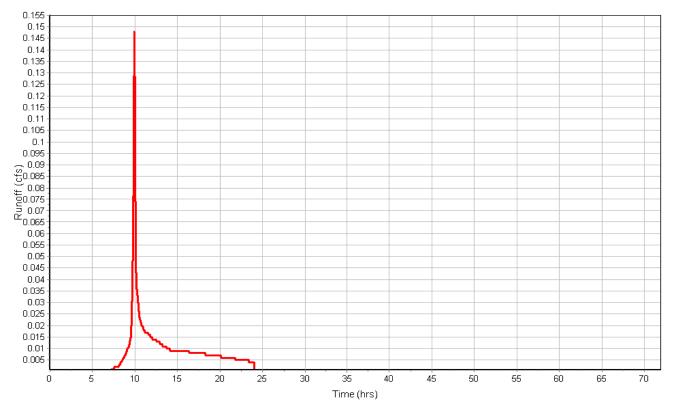
Subbasin Runoff Results

Total Rainfall (in)	2.11
Total Runoff (in)	1.02
Peak Runoff (cfs)	0.15
Weighted Curve Number	87.43
Time of Concentration (days hh:mm:ss)	0 00:04:26

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : DMA-2

Input Data

Area (ac)	0.07
Weighted Curve Number	85.34
Rain Gage ID	NOAA

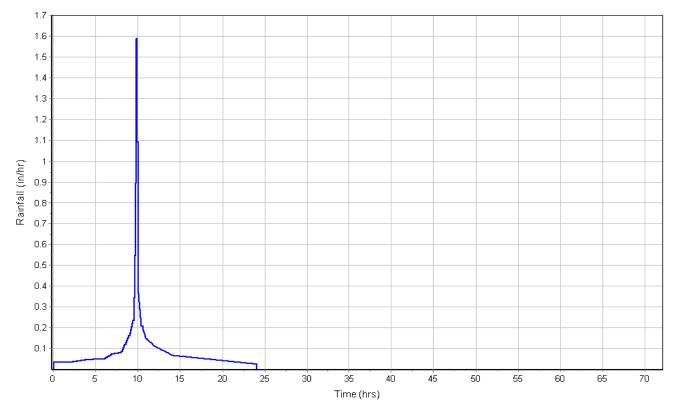
Composite Curve Number

mposite Curve Number			
	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.03	-	98.00
-	0.04	-	74.00
Composite Area & Weighted CN	0.07		85.34

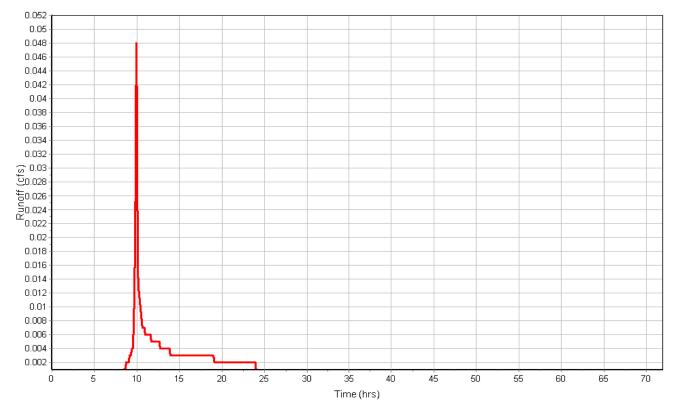
Subbasin Runoff Results

Total Rainfall (in)	2.11
Total Runoff (in)	0.89
Peak Runoff (cfs)	0.05
Weighted Curve Number	85.34
Time of Concentration (days hh:mm:ss)	0 00:04:08

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : DMA-3

Input Data

Area (ac)	0.43
Weighted Curve Number	93.85
Rain Gage ID	NOAA

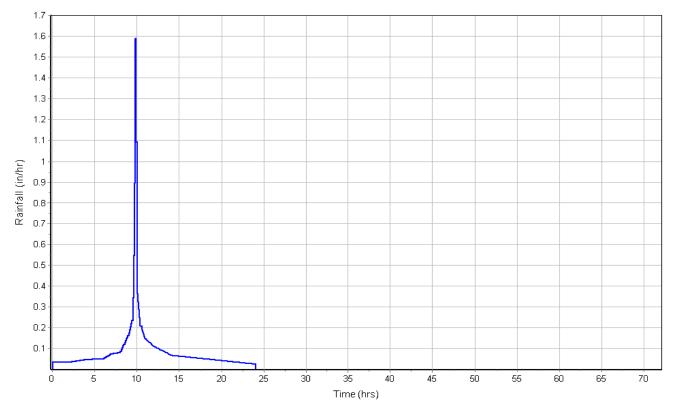
Composite Curve Number

mposite Curve Number				
	Area	Soil	Curve	
Soil/Surface Description	(acres)	Group	Number	
-	0.36	-	98.00	
-	0.08	-	74.00	
Composite Area & Weighted CN	0.44		93.85	

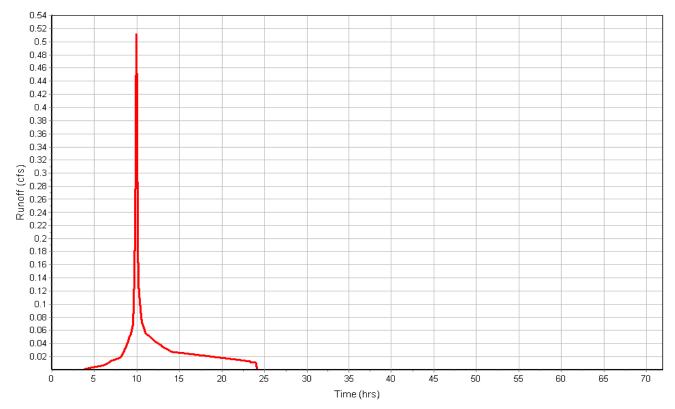
Subbasin Runoff Results

Total Rainfall (in)	2.11
Total Runoff (in)	1.49
Peak Runoff (cfs)	0.51
Weighted Curve Number	93.85
Time of Concentration (days hh:mm:ss)	0 00:05:46

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : DMA-4

Input Data

Area (ac)	0.16
Weighted Curve Number	93.39
Rain Gage ID	NOAA

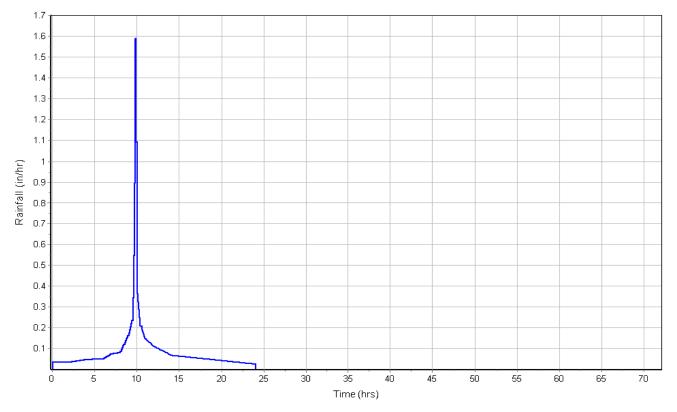
Composite Curve Number

mposite Curve Number			
	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.13	-	98.00
-	0.03	-	74.00
Composite Area & Weighted CN	0.16		93.39

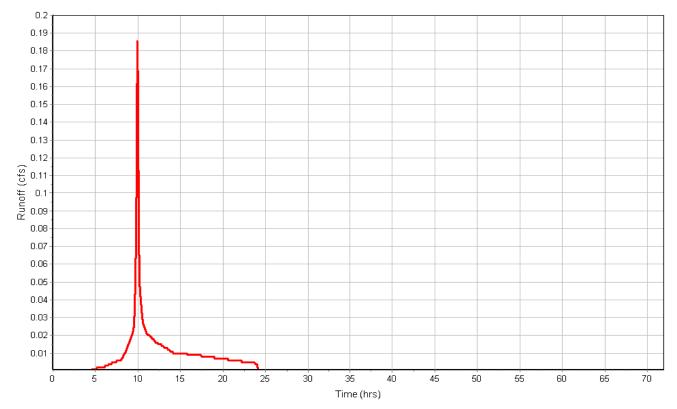
Subbasin Runoff Results

Total Rainfall (in)	2.11
Total Runoff (in)	1.45
Peak Runoff (cfs)	0.19
Weighted Curve Number	93.39
Time of Concentration (days hh:mm:ss)	0 00:06:17

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : PRE-SUB

Input Data

Area (ac)	0.85
Weighted Curve Number	91.43
Rain Gage ID	NOAA

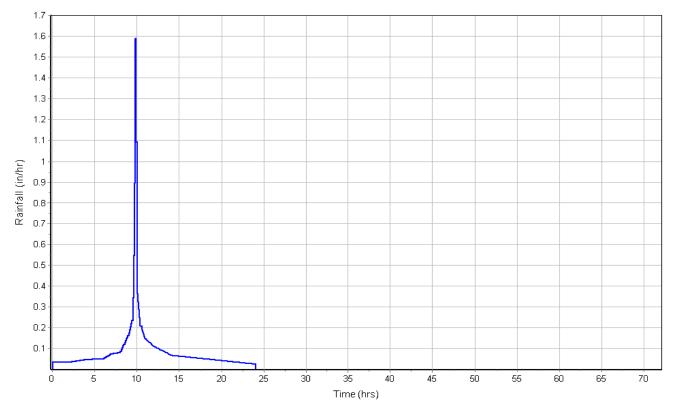
Composite Curve Number

mposite Curve Number			
	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.62	-	98.00
-	0.23	-	74.00
Composite Area & Weighted CN	0.85		91.43

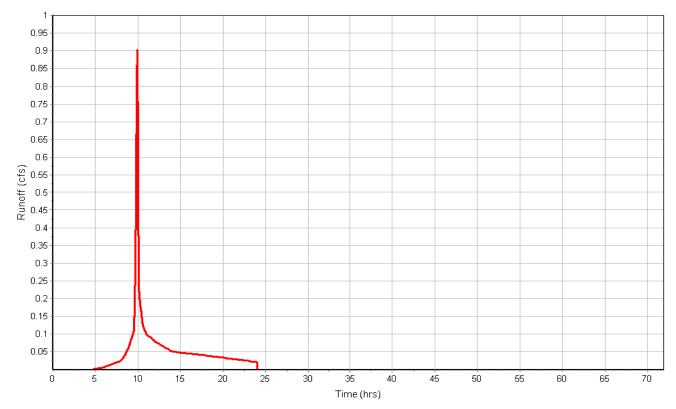
Subbasin Runoff Results

Total Rainfall (in)	2.11
Total Runoff (in)	1.29
Peak Runoff (cfs)	0.95
Weighted Curve Number	91.43
Time of Concentration (days hh:mm:ss)	0 00:02:18

Rainfall Intensity Graph



Runoff Hydrograph



Junction Input

SN Element	Invert	Ground/Rim	Ground/Rim	Initial	Initial	Surcharge	Surcharge	Ponded	Minimum
ID	Elevation	(Max)	(Max)	Water	Water	Elevation	Depth	Area	Pipe
		Elevation	Offset	Elevation	Depth				Cover
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft ²)	(in)
1 DI-2	789.15	794.90	5.75	789.15	0.00	0.00	-794.90	50.00	0.00
2 Jun-04	788.67	794.60	5.93	788.67	0.00	0.00	-794.60	0.00	0.00

Junction Results

;	SN Element	Peak	Peak	Max HGL	Max HGL	Max	Min	Average HGL	Average HGL	Time of	Time of	Total	Total Time
	ID	Inflow	Lateral	Elevation	Depth	Surcharge	Freeboard	Elevation	Depth	Max HGL	Peak	Flooded	Flooded
			Inflow	Attained	Attained	Depth	Attained	Attained	Attained	Occurrence	Flooding	Volume	
						Attained					Occurrence		
_		(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)	(days hh:mm)	(ac-in)	(min)
	1 DI-2	0.48	0.00	793.77	4.62	0.00	1.13	790.49	1.34	0 10:06	0 00:00	0.00	0.00
	2 Jun-04	0.45	0.00	793.68	5.01	0.00	0.92	790.25	1.58	0 10:14	0 00:00	0.00	0.00

Pipe Input

SN Element	Length	Inlet	Inlet	Outlet	Outlet	Total	Average Pipe	Pipe	Pipe	Manning's	Entrance	Exit/Bend	Additional	Initial Flap	No. of
ID		Invert	Invert	Invert	Invert	Drop	Slope Shape	Diameter or	Width	Roughness	Losses	Losses	Losses	Flow Gate	Barrels
		Elevation	Offset	Elevation	Offset			Height							
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)	(in)	(in)					(cfs)	
1 Link-11	245.00	789.90	1.23	790.60	0.00	-0.70	-0.2900 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1
2 Link-16	85.00	789.15	0.00	788.67	0.00	0.48	0.5600 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1
3 Link-17	13.00	788.60	0.50	788.67	0.00	-0.07	-0.5400 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1

Pipe Results

SN Element ID	Peak Flow	Time of Peak Flow Occurrence		Peak Flow/ Design Flow Ratio	Peak Flow Velocity		Peak Flow Depth			Froude Reported Number Condition
	(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)	
1 Link-11	0.29	0 09:59	0.56	0.52	1.18	3.46	0.67	1.00	1281.00	SURCHARGED
2 Link-16	0.45	0 09:59	0.79	0.58	1.30	1.09	0.67	1.00	1795.00	SURCHARGED
Z LINK-10	0.10	0 00.00	0.10	0.00	1.00	1.00				CONCOLUCIÓN ALCOLD

Storage Nodes

Exhibit A

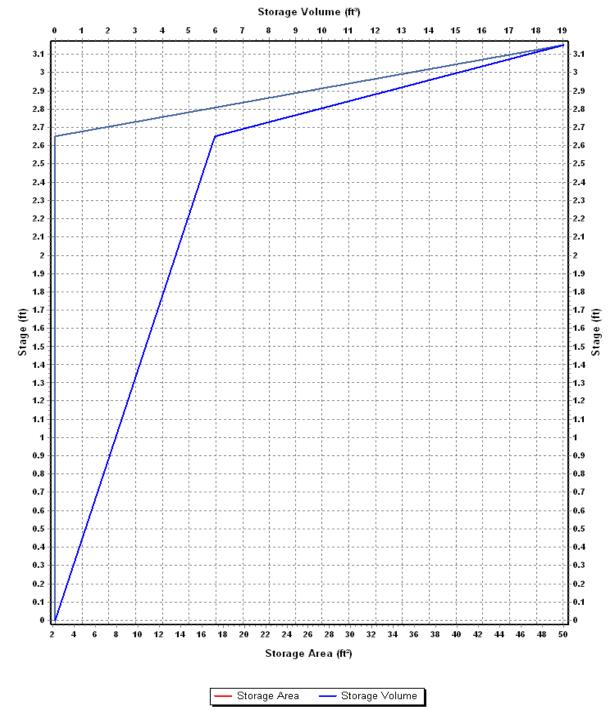
Storage Node : DI-4*

Input Data

Invert Elevation (ft)	790.60
Max (Rim) Elevation (ft)	794.10
Max (Rim) Offset (ft)	3.50
Initial Water Elevation (ft)	790.60
Initial Water Depth (ft)	0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Storage Area Volume Curves Storage Curve : DI-4

Stage	Storage	Storage
	Area	Volume
(ft)	(ft²)	(ft ³)
0	2.25	0.000
1.33	2.25	2.99
2.65	2.25	5.96
3.15	50	19.02



Storage Area Volume Curves

Storage Node : DI-4* (continued)

Outflow Weirs

SN Element	Weir	Flap	Crest	Crest	Length	Weir Total	Discharge
ID	Туре	Gate	Elevation	Offset		Height	Coefficient
			(ft)	(ft)	(ft)	(ft)	
 1 UNDR	Rectangular	No	793.40	2.80	1.00	0.50	3.33

Output Summary Results

Peak Inflow (cfs)	0.47
Peak Lateral Inflow (cfs)	0.19
Peak Outflow (cfs)	0.27
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	793.59
Max HGL Depth Attained (ft)	2.99
Average HGL Elevation Attained (ft)	791.35
Average HGL Depth Attained (ft)	0.75
Time of Max HGL Occurrence (days hh:mm)	0 10:11
Total Exfiltration Volume (1000-ft ³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : SUB-1

Input Data

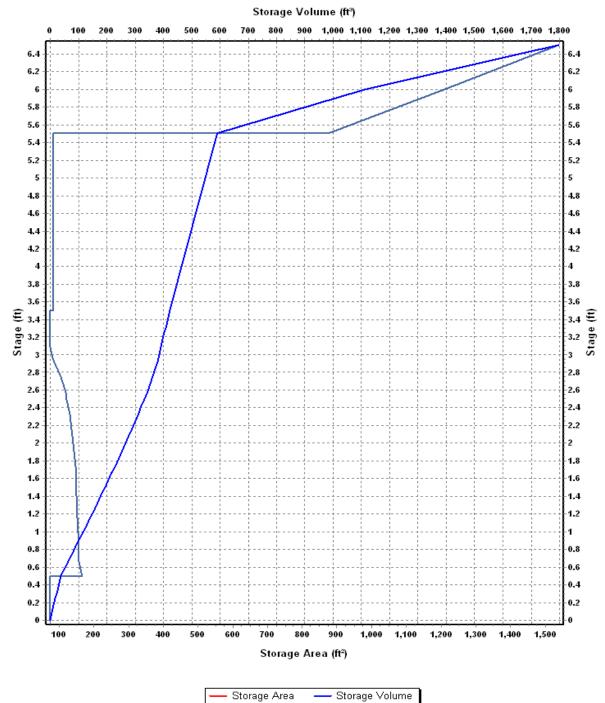
Invert Elevation (ft)	788.10
Max (Rim) Elevation (ft)	795.10
Max (Rim) Offset (ft)	7.00
Initial Water Elevation (ft)	. 788.10
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : UNDERGROUND

Stage	Storage	Storage
	Area	Volume
(ft)	(ft²)	(ft ³)
0.000	74.7600	0.000
0.083	74.7600	6.21
0.167	74.7600	12.49
0.250 0.333	74.7600 74.7600	18.70 24.91
0.333	74.7600	31.19
0.500	74.760	37.40
0.500	165.7740	37.52
0.667	157.1640	64.32
0.750	156.6600	77.34
0.833	156.4080	90.33
0.917	156.1560	103.46
1.000	155.9040	116.41
1.083	155.6520	129.34
1.167	153.6360	142.33
1.250	151.8720	155.01
1.333	151.3680	167.59
1.417	151.1160	180.29
1.500	150.6120	192.81
1.583	150.1080	205.29
1.667	149.3520	217.87
1.750	148.8480	230.25
1.833	146.0760	242.49
1.917	143.0520	254.63
2.000	141.2880	266.43
2.083	138.7680	278.05
2.167	136.2480	289.60
2.250	133.4760	300.79
2.333	130.4520	311.74
2.417	126.9240	322.55
2.500	122.8920	332.92
2.583 2.667	118.3560 112.5600	342.93 352.63
2.007	106.0080	352.63 361.70
2.833	95.9280	370.08
2.000	87.6120	377.79
3.000	79.5480	384.73
3.083	74.7600	391.13
3.167	74.7600	397.41
3.250	74.7600	403.62
3.333	74.7600	409.83
3.417	74.7600	416.11
3.500	74.7600	422.32
3.501	84	422.40
5.5	84	590.32
5.501	876	590.80
6	1207	1110.51
6.5	1538	1796.76



Storage Area Volume Curves

Storage Node : SUB-1 (continued)

Output Summary Results

Peak Inflow (cfs)	0.56
Peak Lateral Inflow (cfs)	0.20
Peak Outflow (cfs)	0.09
Peak Exfiltration Flow Rate (cfm)	0.65
Max HGL Elevation Attained (ft)	793.68
Max HGL Depth Attained (ft)	5.58
Average HGL Elevation Attained (ft)	789.99
Average HGL Depth Attained (ft)	1.89
Time of Max HGL Occurrence (days hh:mm)	0 10:14
Total Exfiltration Volume (1000-ft ³)	1.465
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : SURF-WST

Input Data

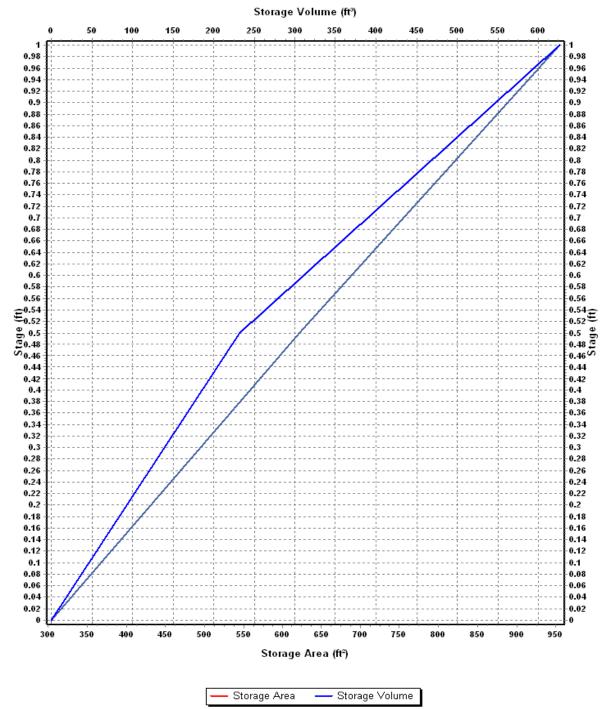
Invert Elevation (ft)	. 793.90
Max (Rim) Elevation (ft)	794.90
Max (Rim) Offset (ft)	1.00
Initial Water Elevation (ft)	. 793.90
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : SURF-1

Stage	Storage	Storage
	Area	Volume
(ft)	(ft ²)	(ft ³)
0	304	0.000
.5	622	231.50
1	955	625.75



Storage Area Volume Curves

Storage Node : SURF-WST (continued)

Outflow Orifices

SN Element	Orifice	Orifice	Flap	Circular	Rectangular	Rectangular	Orifice	Orifice
ID	Туре	Shape	Gate	Orifice	Orifice	Orifice	Invert	Coefficient
				Diameter	Height	Width	Elevation	
				(in)	(in)	(in)	(ft)	
1 Orfice-01	Bottom	Rectangular	No		18.00	18.00	794.40	0.63

Output Summary Results

Peak Inflow (cfs)	0.51
Peak Lateral Inflow (cfs)	0.51
Peak Outflow (cfs)	0.48
Peak Exfiltration Flow Rate (cfm)	0.47
Max HGL Elevation Attained (ft)	794.48
Max HGL Depth Attained (ft)	0.58
Average HGL Elevation Attained (ft)	794.05
Average HGL Depth Attained (ft)	0.15
Time of Max HGL Occurrence (days hh:mm)	0 10:01
Total Exfiltration Volume (1000-ft ³)	0.732
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Project Description

File Name 2017-02-21_00136 SWCP.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	User-Defined
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	YES

Analysis Options

Start Analysis On End Analysis On Start Reporting On Antecedent Dry Days Runoff (Dry Weather) Time Step Runoff (Wet Weather) Time Step Reporting Time Step Routing Time Step	Jan 04, 2020 Jan 01, 2020 0 01:00:00 0 00:05:00 0 00:05:00	00:00:00 00:00:00 days days hh:mm:ss days hh:mm:ss days hh:mm:ss seconds
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Number of Elements

	Qty
Rain Gages	1
Subbasins	5
Nodes	7
Junctions	2
Outfalls	2
Flow Diversions	0
Inlets	0
Storage Nodes	3
Links	5
Channels	0
Pipes	3
Pumps	0
Orifices	1
Weirs	1
Outlets	0
Pollutants	0
Land Uses	0
	-

Rainfall Details

SN	Rain Gage	Data	Data Source	Rainfall	Rain	State	County	Return	Rainfall	Rainfall
	ID	Source	ID	Туре	Units			Period	Depth	Distribution
								(years)	(inches)	
1		Time Series	10-YEAR	Cumulative	inches	California	San Luis Obispo (Paso Robles)	10	3.68	SCS Type I 24-hr

Subbasin Summary

SN Subbasin	Area	Weighted	Total	Total	Total	Peak	Time of
ID		Curve	Rainfall	Runoff	Runoff	Runoff	Concentration
		Number			Volume		
	(ac)		(in)	(in)	(ac-in)	(cfs)	(days hh:mm:ss)
1 DMA-1	0.19	87.43	3.68	2.38	0.45	0.36	0 00:04:25
2 DMA-2	0.07	85.34	3.68	2.19	0.15	0.13	0 00:04:08
3 DMA-3	0.43	93.85	3.68	3.00	1.30	1.03	0 00:05:46
4 DMA-4	0.16	93.39	3.68	2.95	0.48	0.38	0 00:06:16
5 PRE-SUB	0.85	91.43	3.68	2.75	2.35	2.02	0 00:02:18

Node Summary

SN Element ID	Element Type	Invert Elevation	(-)	Initial Water Elevation					Surcharge		Peak	Flooded	
									Attained		Occurrence		
		(ft)	(ft)	(ft)	(ft)	(ft ²)	(cfs)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
1 DI-2	Junction	789.15	794.90	789.15	0.00	50.00	0.68	794.59	0.00	0.31	0 00:00	0.00	0.00
2 Jun-04	Junction	788.67	794.60	788.67	0.00	0.00	0.68	794.34	0.00	0.26	0 00:00	0.00	0.00
3 OUT-POST	Outfall	793.30					0.76	793.30					
4 OUT-PRE	Outfall	0.00					1.89	0.00					
5 DI-4*	Storage Node	790.60	794.10	790.60		0.00	0.76	793.77				0.00	0.00
6 SUB-1	Storage Node	788.10	795.10	788.10		0.00	0.76	794.35				0.00	0.00
7 SURF-WST	Storage Node	793.90	794.90	793.90		0.00	1.02	794.70				0.00	0.00

Link Summary

SN Element	Element	From	To (Outlet)	Length	Inlet	Outlet	Average	Diameter or	Manning's	Peak	Design Flow	Peak Flow/	Peak Flow	Peak Flow	Peak Flow	Total Time Reported
ID	Туре	(Inlet)	Node		Invert	Invert	Slope	Height	Roughness	Flow	Capacity	Design Flow	Velocity	Depth	Depth/	Surcharged Condition
		Node			Elevation E	Elevation						Ratio			Total Depth	
															Ratio	
				(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)
1 Link-11	Pipe	Jun-04	DI-4*	245.00	789.90	790.60	-0.2900	8.000	0.0150	0.51	0.56	0.92	1.47	0.67	1.00	1205.00 SURCHARGED
2 Link-16	Pipe	DI-2	Jun-04	85.00	789.15	788.67	0.5600	8.000	0.0150	0.68	0.79	0.86	1.94	0.67	1.00	1596.00 SURCHARGED
3 Link-17	Pipe	SUB-1	Jun-04	13.00	788.60	788.67	-0.5400	8.000	0.0150	0.34	0.77	0.45	0.99	0.67	1.00	1733.00 SURCHARGED
4 Orfice-01	Orifice	SURF-WST	DI-2		793.90	789.15		18.000		0.68						
5 UNDR	Weir	DI-4*	OUT-POST		790.60	793.30				0.76						

Subbasin Hydrology

Exhibit A

Subbasin : DMA-1

Input Data

Area (ac)	0.19
Weighted Curve Number	87.43
Rain Gage ID	NOAA

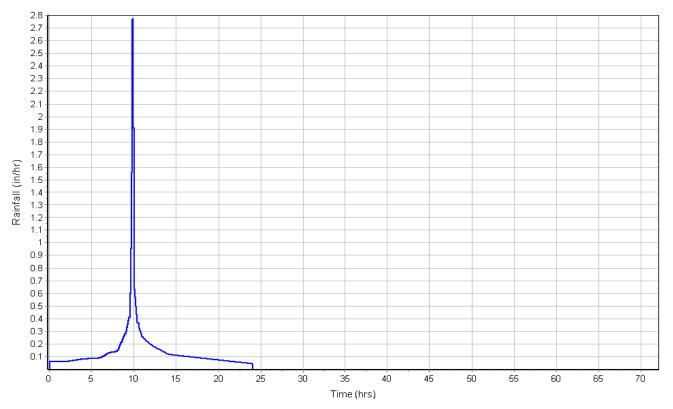
Composite Curve Number

	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.11	-	98.00
-	0.08	-	74.00
Composite Area & Weighted CN	0.19		87.43

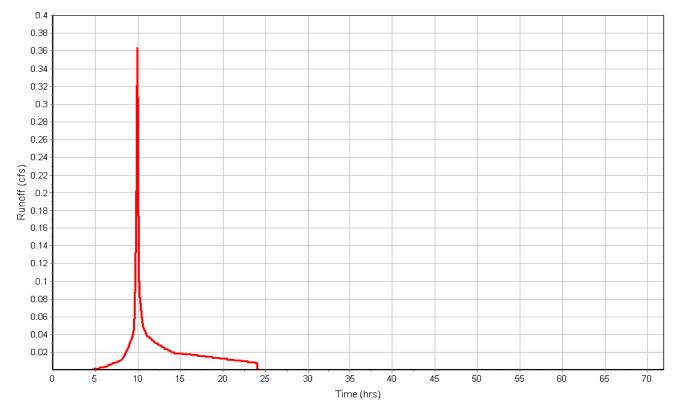
Subbasin Runoff Results

Total Rainfall (in)	3.68
Total Runoff (in)	2.38
Peak Runoff (cfs)	0.36
Weighted Curve Number	87.43
Time of Concentration (days hh:mm:ss)	0 00:04:26

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : DMA-2

Input Data

Area (ac)	0.07
Weighted Curve Number	85.34
Rain Gage ID	NOAA

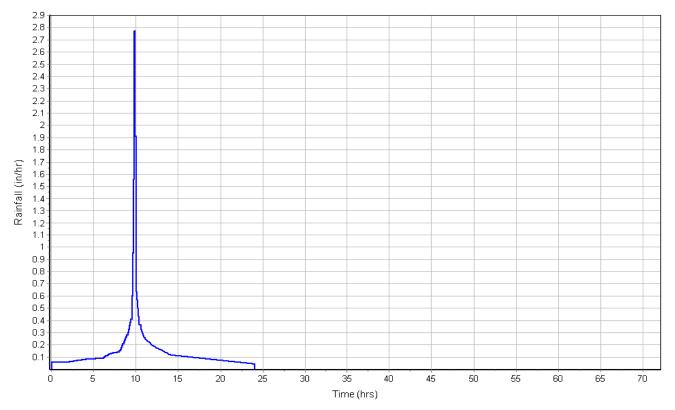
Composite Curve Number

Area	Soil	Curve	
(acres)	Group	Number	
0.03	-	98.00	
0.04	-	74.00	
0.07		85.34	
	(acres) 0.03 0.04	(acres) Group 0.03 - 0.04 -	(acres) Group Number 0.03 - 98.00 0.04 - 74.00

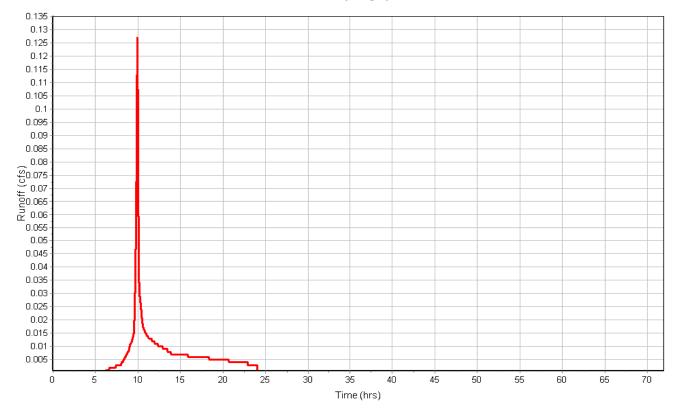
Subbasin Runoff Results

Total Rainfall (in)	3.68
Total Runoff (in)	2.19
Peak Runoff (cfs)	0.13
Weighted Curve Number	85.34
Time of Concentration (days hh:mm:ss)	0 00:04:08

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : DMA-3

Input Data

Area (ac)	0.43
Weighted Curve Number	93.85
Rain Gage ID	NOAA

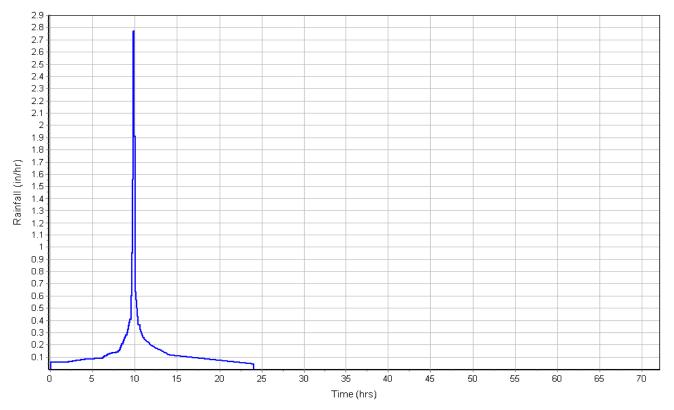
Composite Curve Number

Area	Soil	Curve
(acres)	Group	Number
0.36	-	98.00
0.08	-	74.00
0.44		93.85
	(acres) 0.36 0.08	(acres) Group 0.36 - 0.08 -

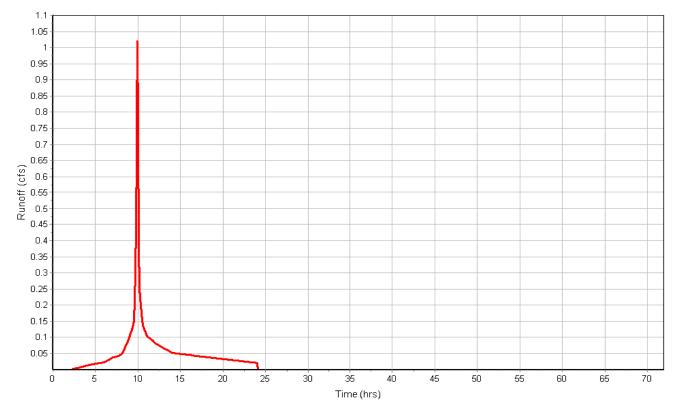
Subbasin Runoff Results

Total Rainfall (in)	3.68
Total Runoff (in)	3.00
Peak Runoff (cfs)	1.03
Weighted Curve Number	93.85
Time of Concentration (days hh:mm:ss)	0 00:05:46

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : DMA-4

Input Data

Area (ac)	0.16
Weighted Curve Number	93.39
Rain Gage ID	NOAA

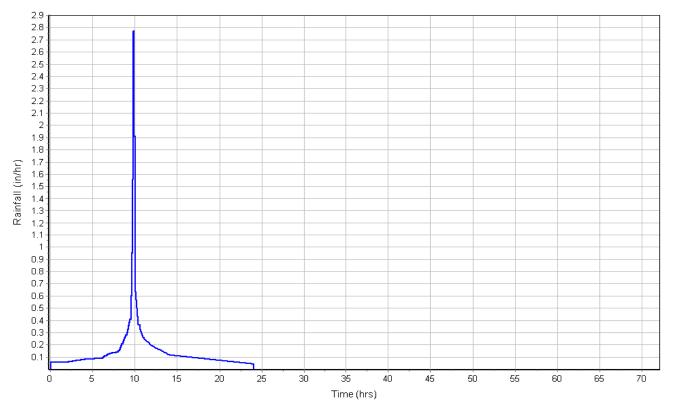
Composite Curve Number

Area	Soil	Curve
(acres)	Group	Number
0.13	-	98.00
0.03	-	74.00
0.16		93.39
	(acres) 0.13 0.03	(acres) Group 0.13 - 0.03 -

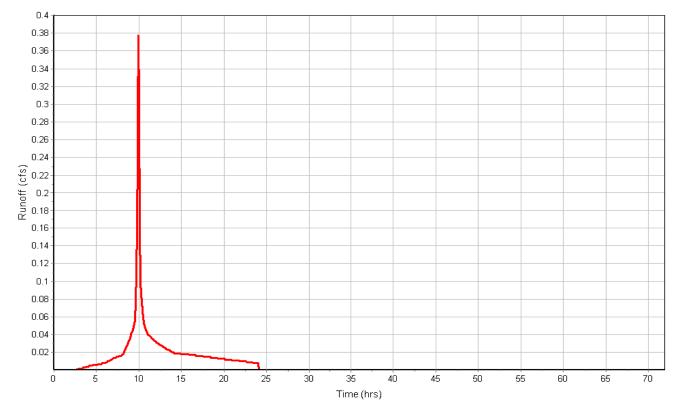
Subbasin Runoff Results

Total Rainfall (in)	3.68
Total Runoff (in)	2.95
Peak Runoff (cfs)	0.38
Weighted Curve Number	93.39
Time of Concentration (days hh:mm:ss)	0 00:06:17

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : PRE-SUB

Input Data

Area (ac)	0.85
Weighted Curve Number	91.43
Rain Gage ID	NOAA

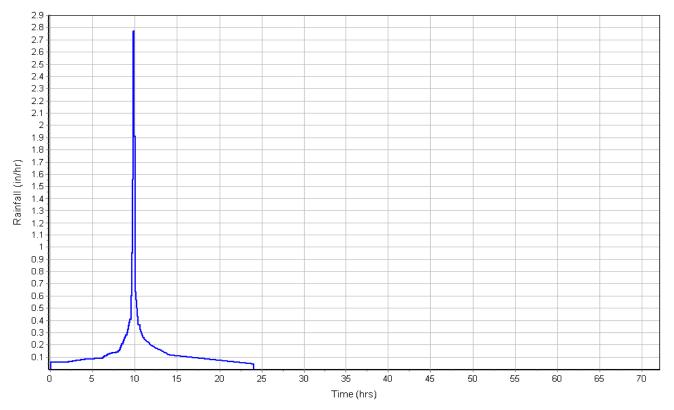
Composite Curve Number

mposite Curve Number			
	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.62	-	98.00
-	0.23	-	74.00
Composite Area & Weighted CN	0.85		91.43

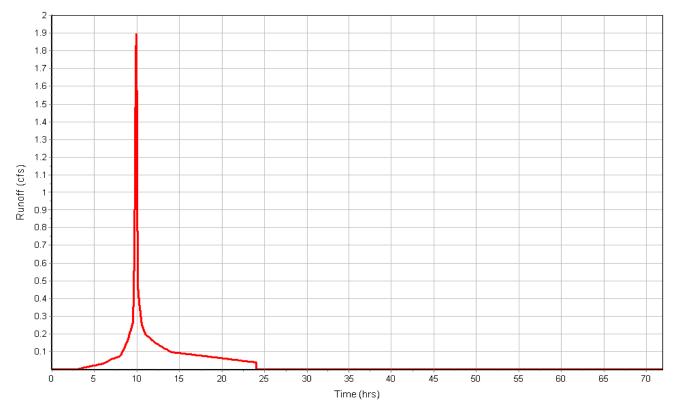
Subbasin Runoff Results

Total Rainfall (in)	3.68
Total Runoff (in)	2.75
Peak Runoff (cfs)	2.02
Weighted Curve Number	91.43
Time of Concentration (days hh:mm:ss)	0 00:02:18

Rainfall Intensity Graph



Runoff Hydrograph



Junction Input

SN Element	Invert	Ground/Rim	Ground/Rim	Initial	Initial	Surcharge	Surcharge	Ponded	Minimum
ID	Elevation	(Max)	(Max)	Water	Water	Elevation	Depth	Area	Pipe
		Elevation	Offset	Elevation	Depth				Cover
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft ²)	(in)
1 DI-2	789.15	794.90	5.75	789.15	0.00	0.00	-794.90	50.00	0.00
2 Jun-04	788.67	794.60	5.93	788.67	0.00	0.00	-794.60	0.00	0.00

Junction Results

SN	Element	Peak	Peak	Max HGL	Max HGL	Max	Min	Average HGL	Average HGL	Time of	Time of	Total	Total Time
	ID	Inflow	Lateral	Elevation	Depth	Surcharge	Freeboard	Elevation	Depth	Max HGL	Peak	Flooded	Flooded
			Inflow	Attained	Attained	Depth	Attained	Attained	Attained	Occurrence	Flooding	Volume	
						Attained					Occurrence		
		(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)	(days hh:mm)	(ac-in)	(min)
1	DI-2	0.68	0.00	794.59	5.44	0.00	0.31	790.42	1.27	0 10:08	0 00:00	0.00	0.00
2	Jun-04	0.68	0.00	794.34	5.67	0.00	0.26	790.15	1.48	0 10:17	0 00:00	0.00	0.00

Pipe Input

SN Element	Length	Inlet	Inlet	Outlet	Outlet	Total	Average Pipe	Pipe	Pipe	Manning's	Entrance	Exit/Bend	Additional	Initial Flap	No. of
ID		Invert	Invert	Invert	Invert	Drop	Slope Shape	Diameter or	Width	Roughness	Losses	Losses	Losses	Flow Gate	Barrels
		Elevation	Offset	Elevation	Offset			Height							
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)	(in)	(in)					(cfs)	
1 Link-11	245.00	789.90	1.23	790.60	0.00	-0.70	-0.2900 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1
2 Link-16	85.00	789.15	0.00	788.67	0.00	0.48	0.5600 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1
3 Link-17	13.00	788.60	0.50	788.67	0.00	-0.07	-0.5400 CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	0.00 No	1

Pipe Results

SN Element ID	Peak Flow	Time of Peak Flow Occurrence	0	Peak Flow/ Design Flow Ratio	Peak Flow Velocity		Peak Flow Depth			Froude Reported Number Condition
	(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)	
1 Link-11	0.51	0 10:18	0.56	0.92	1.47	2.78	0.67	1.00	1205.00	SURCHARGED
2 Link-16	0.68	0 09:57	0.79	0.86	1.94	0.73	0.67	1.00	1596.00	SURCHARGED

Storage Nodes

Exhibit A

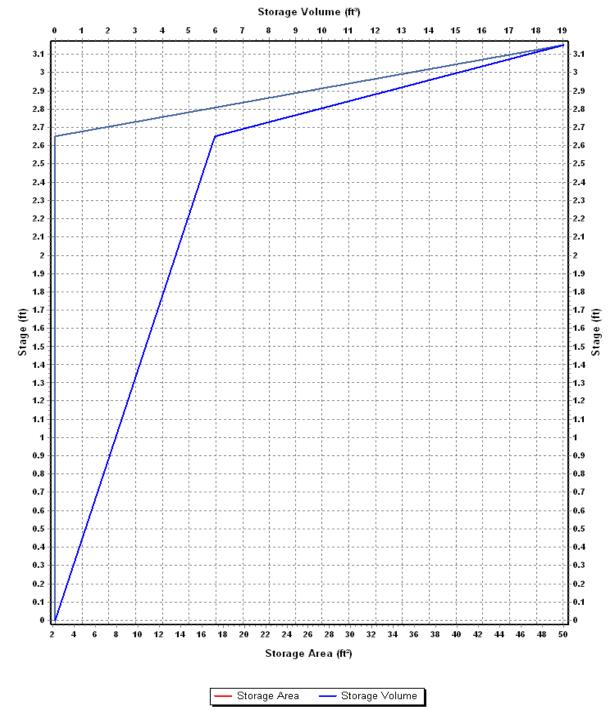
Storage Node : DI-4*

Input Data

Invert Elevation (ft)	790.60
Max (Rim) Elevation (ft)	794.10
Max (Rim) Offset (ft)	3.50
Initial Water Elevation (ft)	790.60
Initial Water Depth (ft)	0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Storage Area Volume Curves Storage Curve : DI-4

Stage	Storage	Storage
	Area	Volume
(ft)	(ft²)	(ft ³)
0	2.25	0.000
1.33	2.25	2.99
2.65	2.25	5.96
3.15	50	19.02



Storage Area Volume Curves

Storage Node : DI-4* (continued)

Outflow Weirs

	SN Element	Weir	Flap	Crest	Crest	Length	Weir Total	Discharge
	ID	Туре	Gate	Elevation	Offset		Height	Coefficient
_				(ft)	(ft)	(ft)	(ft)	
_	1 UNDR	Rectangula	r No	793.40	2.80	1.00	0.50	3.33

Output Summary Results

Peak Inflow (cfs)	0.76
Peak Lateral Inflow (cfs)	0.38
Peak Outflow (cfs)	0.76
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	793.77
Max HGL Depth Attained (ft)	3.17
Average HGL Elevation Attained (ft)	791.34
Average HGL Depth Attained (ft)	0.74
Time of Max HGL Occurrence (days hh:mm)	0 10:05
Total Exfiltration Volume (1000-ft ³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	

Storage Node : SUB-1

Input Data

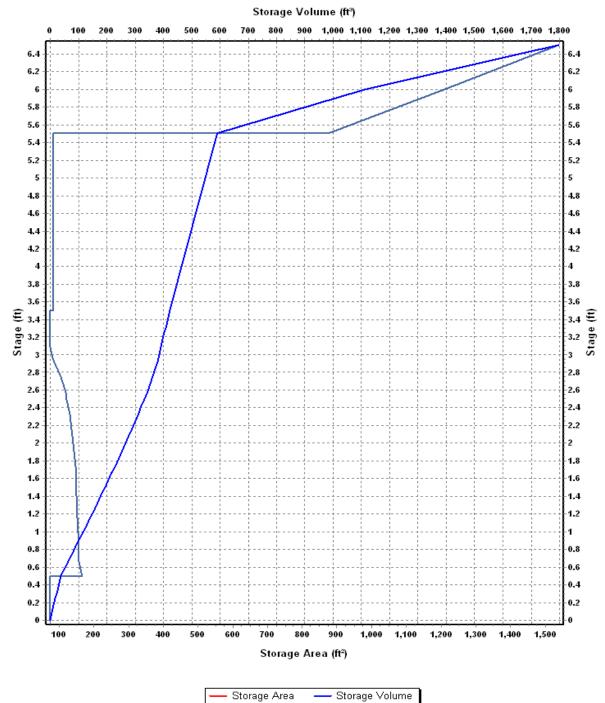
Invert Elevation (ft)	788.10
Max (Rim) Elevation (ft)	795.10
Max (Rim) Offset (ft)	7.00
Initial Water Elevation (ft)	. 788.10
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : UNDERGROUND

Stage	Storage	Storage
	Area	Volume
(ft)	(ft²)	(ft ³)
0.000	74.7600	0.000
0.083	74.7600	6.21
0.167	74.7600	12.49
0.250 0.333	74.7600 74.7600	18.70 24.91
0.333	74.7600	31.19
0.500	74.760	37.40
0.500	165.7740	37.52
0.667	157.1640	64.32
0.750	156.6600	77.34
0.833	156.4080	90.33
0.917	156.1560	103.46
1.000	155.9040	116.41
1.083	155.6520	129.34
1.167	153.6360	142.33
1.250	151.8720	155.01
1.333	151.3680	167.59
1.417	151.1160	180.29
1.500	150.6120	192.81
1.583	150.1080	205.29
1.667	149.3520	217.87
1.750	148.8480	230.25
1.833	146.0760	242.49
1.917	143.0520	254.63
2.000	141.2880	266.43
2.083	138.7680	278.05
2.167	136.2480	289.60
2.250	133.4760	300.79
2.333	130.4520	311.74
2.417	126.9240	322.55
2.500	122.8920	332.92
2.583 2.667	118.3560 112.5600	342.93 352.63
2.007	106.0080	352.63 361.70
2.833	95.9280	370.08
2.000	87.6120	377.79
3.000	79.5480	384.73
3.083	74.7600	391.13
3.167	74.7600	397.41
3.250	74.7600	403.62
3.333	74.7600	409.83
3.417	74.7600	416.11
3.500	74.7600	422.32
3.501	84	422.40
5.5	84	590.32
5.501	876	590.80
6	1207	1110.51
6.5	1538	1796.76



Storage Area Volume Curves

Storage Node : SUB-1 (continued)

Output Summary Results

Peak Inflow (cfs)	0.76
Peak Lateral Inflow (cfs)	0.49
Peak Outflow (cfs)	0.31
Peak Exfiltration Flow Rate (cfm)	0.95
Max HGL Elevation Attained (ft)	794.35
Max HGL Depth Attained (ft)	6.25
Average HGL Elevation Attained (ft)	789.85
Average HGL Depth Attained (ft)	1.75
Time of Max HGL Occurrence (days hh:mm)	0 10:18
Total Exfiltration Volume (1000-ft ³)	1.760
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	

Storage Node : SURF-WST

Input Data

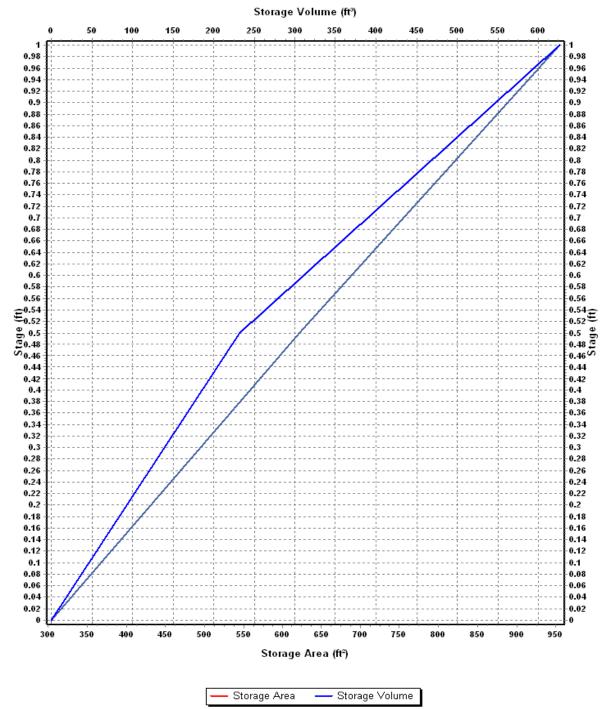
Invert Elevation (ft)	. 793.90
Max (Rim) Elevation (ft)	794.90
Max (Rim) Offset (ft)	1.00
Initial Water Elevation (ft)	. 793.90
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : SURF-1

Stage	Storage	Storage
	Area	Volume
(ft)	(ft ²)	(ft ³)
0	304	0.000
.5	622	231.50
1	955	625.75



Storage Area Volume Curves

Storage Node : SURF-WST (continued)

Outflow Orifices

SN Elemer	t Orifice	Orifice	Flap	Circular	Rectangular	Rectangular	Orifice	Orifice
ID	Туре	Shape	Gate	Orifice	Orifice	Orifice	Invert	Coefficient
				Diameter	Height	Width	Elevation	
				(in)	(in)	(in)	(ft)	
1 Orfice-	01 Bottom	Rectangular	No		18.00	18.00	794.40	0.63

Output Summary Results

Peak Inflow (cfs)	1.02
Peak Lateral Inflow (cfs)	1.02
Peak Outflow (cfs)	0.68
Peak Exfiltration Flow Rate (cfm)	0.57
Max HGL Elevation Attained (ft)	794.70
Max HGL Depth Attained (ft)	0.8
Average HGL Elevation Attained (ft)	794.06
Average HGL Depth Attained (ft)	0.16
Time of Max HGL Occurrence (days hh:mm)	0 10:08
Total Exfiltration Volume (1000-ft ³)	0.874
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Project Description

File Name 2017-03-23_00136 SWCP - Southern Lot.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	User-Defined
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	YES

Analysis Options

Start Analysis On End Analysis On Start Reporting On Antecedent Dry Days Runoff (Dry Weather) Time Step Runoff (Wet Weather) Time Step Reporting Time Step	Jan 04, 2020 Jan 01, 2020 0 0 01:00:00 0 00:05:00	00:00:00 00:00:00 00:00:00 days days hh:mm:ss days hh:mm:ss days hh:mm:ss
	0 00:05:00	

Number of Elements

	Qty
Rain Gages	1
Subbasins	2
Nodes	5
Junctions	1
Outfalls	2
Flow Diversions	0
Inlets	0
Storage Nodes	2
Links	3
Channels	0
Pipes	2
Pumps	0
Orifices	1
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

SI	N Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County		Rainfall Depth	Rainfall Distribution
								(years)	(inches)	
1		Time Series	95TH	Cumulative	inches	California	San Luis Obispo (Atascadero)	2	1.43	SCS Type I 24-hr

Exhibit A

Subbasin Summary

SN Subbasin	Area	Weighted	Total	Total	Total	Peak	Time of	
ID		Curve	Rainfall	Runoff	Runoff	Runoff	Concentration	
		Number			Volume			
	(ac)		(in)	(in)	(ac-in)	(cfs)	(days hh:mm:ss)	
1 POST-SOUTH	0.26	95.28	1.43	0.97	0.25	0.16	0 00:15:09	
2 PRE-SOUTH	0.26	94.98	1.43	0.94	0.25	0.16	0 00:15:00	

Node Summary

SI	N Element	Element	Invert	Ground/Rim	Initial	Surcharge	Ponded	Peak	Max HGL	Max	Min	Time of	Total	Total Time
	ID	Туре	Elevation	(Max)	Water	Elevation	Area	Inflow	Elevation	Surcharge	Freeboard	Peak	Flooded	Flooded
				Elevation	Elevation				Attained	Depth	Attained	Flooding	Volume	
										Attained		Occurrence		
			(ft)	(ft)	(ft)	(ft)	(ft ²)	(cfs)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
	1 BOX	Junction	790.16	794.00	790.16	6.00	0.00	0.16	790.31	0.00	3.69	0 00:00	0.00	0.00
	2 POST-DEVEL	Outfall	790.10					0.08	790.10					
	3 PRE-DEVEL	Outfall	0.00					0.15	0.00					
	4 CULTEC	Storage Node	788.46	792.00	788.46		0.00	0.08	789.85				0.00	0.00
	5 SURF-SOUTHERN	Storage Node	790.20	794.20	790.20		20.00	0.16	790.46				0.00	0.00

Link Summary

SN Element	t Element	From	To (Outlet)	Length	Inlet	Outlet	Average	Diameter or	Manning's	Peak	Design Flow	Peak Flow/	Peak Flow	Peak Flow	Peak Flow	Total Time Reported
ID	Туре	(Inlet)	Node		Invert	Invert	Slope	Height	Roughness	Flow	Capacity	Design Flow	Velocity	Depth	Depth/	Surcharged Condition
		Node			Elevation	Elevation		•	•			Ratio			Total Depth	•
															Ratio	
				(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)
1 DI	Pipe	SURF-SOUTHERN	BOX	4.00	790.20	790.16	1.0000	6.000	0.0150	0.16	0.49	0.32	2.08	0.20	0.41	0.00 Calculated
2 Link-UG	Pipe	CULTEC	BOX	14.00	790.02	790.16	-1.0000	6.000	0.0150	0.08	0.49	0.16	1.68	0.14	0.28	0.00 Calculated
3 OUT	Orifice	BOX	POST-DEVEL		790.16	790.10		6.000		0.08						

Subbasin : POST-SOUTH

Input Data

Area (ac)	0.26
Weighted Curve Number	95.28
Rain Gage ID	NOAA

Composite Curve Number

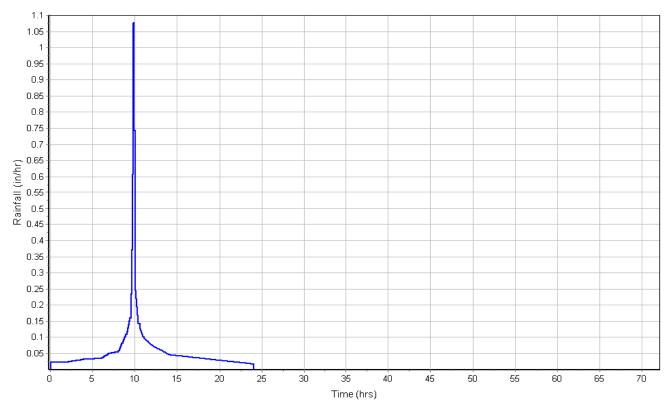
	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.03	-	72.00
-	0.23	-	98.00
Composite Area & Weighted CN	0.26		95.28

Subbasin Runoff Results

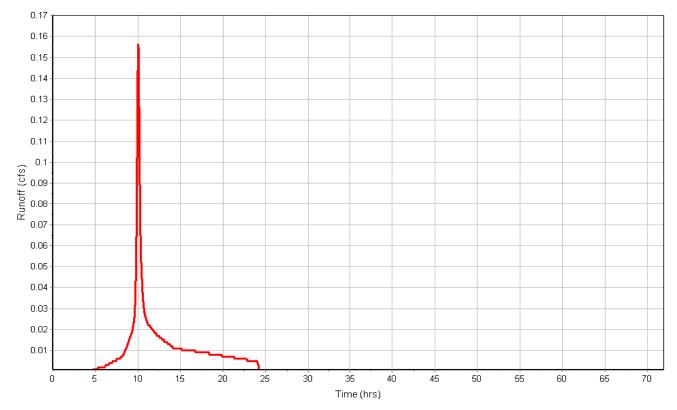
Total Rainfall (in)	1.43
Total Runoff (in)	0.97
Peak Runoff (cfs)	0.16
Weighted Curve Number	95.28
Time of Concentration (days hh:mm:ss)	0 00:15:09

Subbasin : POST-SOUTH

Rainfall Intensity Graph



Runoff Hydrograph



Input Data

Area (ac)	0.26
Weighted Curve Number	94.98
Rain Gage ID	NOAA

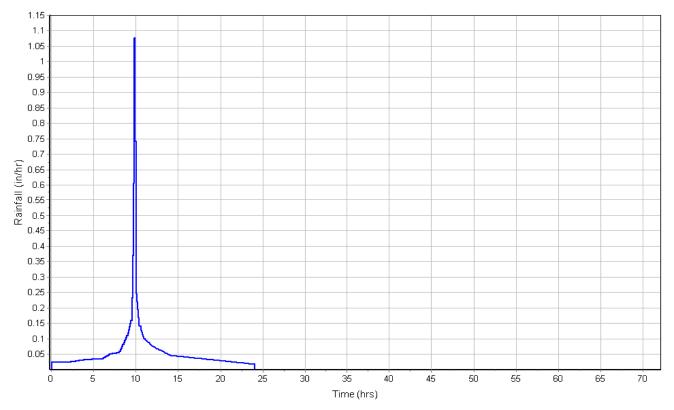
Composite Curve Number

mposite Curve Number			
	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.03	-	72.00
-	0.23	-	98.00
Composite Area & Weighted CN	0.26		94.98

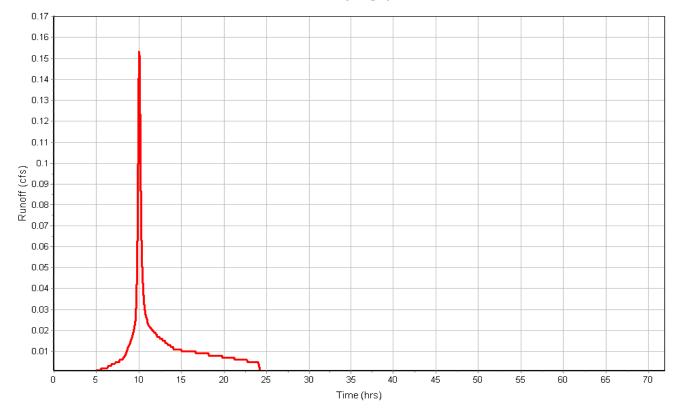
Subbasin Runoff Results

Total Rainfall (in)	1.43
Total Runoff (in)	0.94
Peak Runoff (cfs)	0.16
Weighted Curve Number	94.98
Time of Concentration (days hh:mm:ss)	0 00:15:00

Rainfall Intensity Graph



Runoff Hydrograph



Junction Input

ŝ	SN Element ID	Invert Elevation	Ground/Rim (Max)	Ground/Rim (Max)			Surcharge Elevation	0	Ponded Area	Minimum Pipe
			Elevation	Offset	Elevation	Depth				Cover
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft ²)	(in)
_	1 BOX	790.16	794.00	3.84	790.16	0.00	6.00	-788.00	0.00	0.00

Junction Results

SN Element	Peak	Peak	Max HGL	Max HGL	Max	Min	Average HGL	Average HGL	Time of	Time of	Total	Total Time
ID	Inflow	Lateral	Elevation	Depth	Surcharge	Freeboard	Elevation	Depth	Max HGL	Peak	Flooded	Flooded
		Inflow	Attained	Attained	Depth	Attained	Attained	Attained	Occurrence	Flooding	Volume	
					Attained					Occurrence		
	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)	(days hh:mm)	(ac-in)	(min)
1 BOX	0.16	0.00	790.31	0.15	0.00	3.69	790.17	0.01	0 10:07	0 00:00	0.00	0.00

Pipe Input

;	SN Element	Length	Inlet	Inlet	Outlet	Outlet	Total	Average Pipe	Pipe	Pipe	Manning's	Entrance	Exit/Bend	Additional	Initial Flap	No. of
	ID		Invert	Invert	Invert	Invert	Drop	Slope Shape	Diameter or	Width	Roughness	Losses	Losses	Losses	Flow Gate	Barrels
			Elevation	Offset	Elevation	Offset			Height							
_		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)	(in)	(in)					(cfs)	
	1 DI	(ft) 4.00	(ft) 790.20	17	(ft) 790.16		()	(%) 1.0000 CIRCULAR	()	(in) 6.000	0.0150	0.5000	0.5000	0.0000	()	1

Pipe Results

SN Element	Peak	Time of	Design Flow	Peak Flow/	Peak Flow	Travel	Peak Flow	Peak Flow	Total Time	Froude Reported
ID	Flow	Peak Flow	Capacity	Design Flow	Velocity	Time	Depth	Depth/	Surcharged	Number Condition
		Occurrence		Ratio				Total Depth Ratio	-	
	(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)	
1 DI	0.16	0 10:05	0.49	0.32	2.08	0.03	0.20	0.41	0.00	Calculated
2 Link-UG	0.08	0 10:07	0.49	0.16	1.68	0.14	0.14	0.28	0.00	Calculated

Storage Nodes

Exhibit A

Storage Node : CULTEC

Input Data

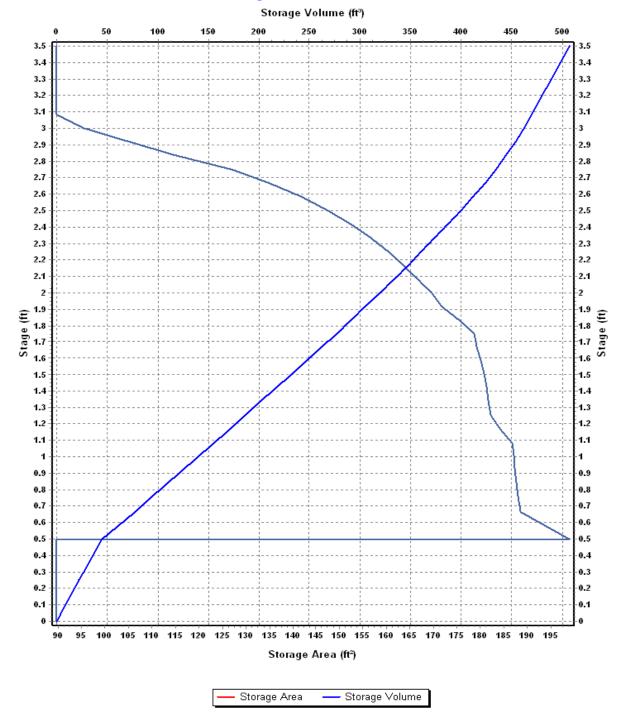
Invert Elevation (ft)	. 788.46
Max (Rim) Elevation (ft)	. 792.00
Max (Rim) Offset (ft)	. 3.54
Initial Water Elevation (ft)	788.46
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr)		0.5000
---------------------------	--	--------

Storage Area Volume Curves Storage Curve : SOUTH-UG

0			
	Stage	Storage	Storage
	- - -	Area	Volume
	(ft)	(ft ²)	(ft ³)
	0.000	89.7120	0.000
	0.083	89.7120	7.45
	0.167	89.7120	14.99
	0.250	89.7120	22.44
	0.333	89.7120	29.89
	0.417	89.7120	37.43
	0.500	89.712	44.88
	.501	198.9288	45.02
	0.667	188.5968	77.18
	0.750	187.9920	92.81
	0.833		108.40
	0.917	187.3872	124.15
	1.000		139.69
	1.083		155.21
	1.167		170.80
	1.250		186.01
	1.333	181.6416	201.11
	1.417		216.36
	1.500	180.7344	231.39
	1.583 1.667	180.1296 179.2224	246.37 261.46
	1.750	179.2224	201.40
	1.833		291.00
	1.033	175.2912	305.57
	2.000	169.5456	319.73
	2.000	166.5216	333.68
	2.003	163.4976	347.54
	2.250	160.1712	360.97
	2.333	156.5424	374.11
	2.417	152.3088	387.08
	2.500	147.4704	399.52
	2.583	142.0272	411.53
	2.667	135.0720	423.17
	2.750	127.2096	434.05
	2.833	115.1136	444.11
	2.917	105.1344	453.36
	3.000	95.4576	461.68
	3.083	89.7120	469.36
	3.167	89.7120	476.90
	3.250	89.7120	484.35
	3.333	89.7120	491.80
	3.417	89.7120	499.34
	3.500	89.7120	506.79



Storage Area Volume Curves

Storage Node : CULTEC (continued)

Output Summary Results

Peak Inflow (cfs)	0.08
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	0.00
Peak Exfiltration Flow Rate (cfm)	0.14
Max HGL Elevation Attained (ft)	789.85
Max HGL Depth Attained (ft)	1.39
Average HGL Elevation Attained (ft)	788.98
Average HGL Depth Attained (ft)	0.52
Time of Max HGL Occurrence (days hh:mm)	0 18:34
Total Exfiltration Volume (1000-ft ³)	0.333
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : SURF-SOUTHERN

Input Data

Invert Elevation (ft)	790.20
Max (Rim) Elevation (ft)	794.20
Max (Rim) Offset (ft)	4.00
Initial Water Elevation (ft)	790.20
Initial Water Depth (ft)	0.00
Ponded Area (ft ²)	20.00
Evaporation Loss	0.00

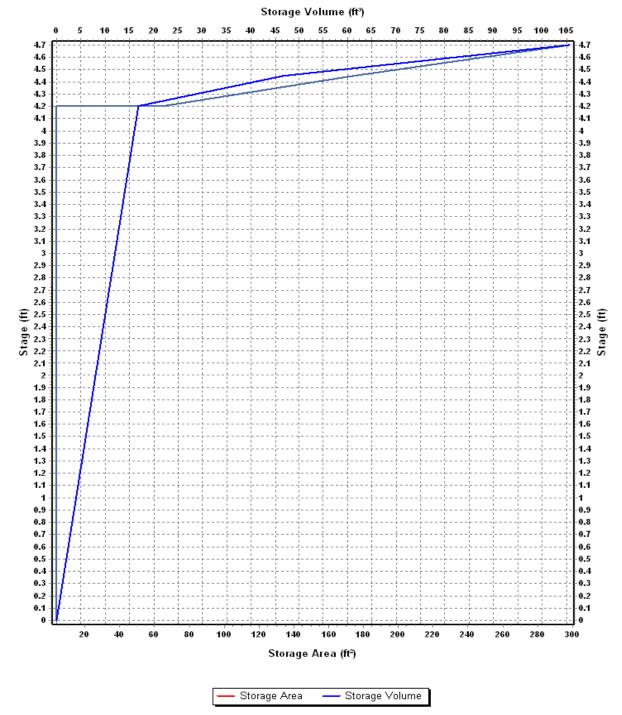
Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : SURF-SOUTH

Stage	Storage	Storage
	Area	Volume
(ft)	(ft ²)	(ft ³)
0	4	0.000
4.2	4	16.80
4.201	65	16.83
4.45	174	46.59
4.7	298	105.59

Exhibit A



Storage Area Volume Curves

Storage Node : SURF-SOUTHERN (continued)

Output Summary Results

Peak Inflow (cfs)	0.16
Peak Lateral Inflow (cfs)	0.16
Peak Outflow (cfs)	0.16
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	790.46
Max HGL Depth Attained (ft)	0.26
Average HGL Elevation Attained (ft)	790.22
Average HGL Depth Attained (ft)	0.02
Time of Max HGL Occurrence (days hh:mm)	0 10:05
Total Exfiltration Volume (1000-ft ³)	0.003
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Project Description

File Name 2017-03-23_00136 SWCP - Southern Lot.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	User-Defined
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	YES

Analysis Options

Start Analysis On	Jan 01, 2020	00:00:00
End Analysis On	Jan 04, 2020	00:00:00
Start Reporting On	Jan 01, 2020	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	1
Subbasins	2
Nodes	5
Junctions	1
Outfalls	2
Flow Diversions	0
Inlets	0
Storage Nodes	2
Links	3
Channels	0
Pipes	2
Pumps	0
Orifices	1
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

S	N Rain Gage	Data	Data Source	Rainfall	Rain	State	County	Return	Rainfall	Rainfall
	ID	Source	ID	Туре	Units			Period	Depth	Distribution
								(years)	(inches)	
1		Time Series	2-YEAR	Cumulative	inches	California	San Luis Obispo (Paso Robles)	2	2.11	SCS Type I 24-hr

Exhibit A

Subbasin Summary

SN Subbasin	Area	Weighted	Total	Total	Total	Peak	Time of
ID		Curve	Rainfall	Runoff	Runoff	Runoff	Concentration
		Number			Volume		
	(ac)		(in)	(in)	(ac-in)	(cfs)	(days hh:mm:ss)
1 POST-SOUTH	0.26	95.28	2.11	1.61	0.42	0.35	0 00:03:54
2 PRE-SOUTH	0.26	94.98	2.11	1.59	0.41	0.35	0 00:03:54

Node Summary

S	N Element	Element	Invert	Ground/Rim	Initial	Surcharge	Ponded	Peak	Max HGL	Max	Min	Time of	Total	Total Time
	ID	Туре	Elevation	(Max)	Water	Elevation	Area	Inflow	Elevation	Surcharge	Freeboard	Peak	Flooded	Flooded
				Elevation	Elevation				Attained	Depth	Attained	Flooding	Volume	
										Attained		Occurrence		
			(ft)	(ft)	(ft)	(ft)	(ft ²)	(cfs)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
	1 BOX	Junction	790.16	794.00	790.16	6.00	0.00	0.35	790.40	0.00	3.60	0 00:00	0.00	0.00
	2 POST-DEVEL	Outfall	790.10					0.17	790.10					
	3 PRE-DEVEL	Outfall	0.00					0.34	0.00					
	4 CULTEC	Storage Node	788.46	792.00	788.46		0.00	0.18	790.27				0.00	0.00
	5 SURF-SOUTHERN	Storage Node	790.20	794.20	790.20		20.00	0.35	790.62				0.00	0.00

Link Summary

SN Element	Element	From	To (Outlet)	Length	Inlet	Outlet	Average	Diameter or	Manning's	Peak	Design Flow	Peak Flow/	Peak Flow	Peak Flow	Peak Flow	Total Time Reported
ID	Туре	(Inlet)	Node		Invert	Invert	Slope	Height	Roughness	Flow	Capacity	Design Flow	Velocity	Depth	Depth/	Surcharged Condition
		Node			Elevation	Elevation		-	-			Ratio			Total Depth	-
															Ratio	
				(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)
1 DI	Pipe	SURF-SOUTHERN	BOX	4.00	790.20	790.16	1.0000	6.000	0.0150	0.35	0.49	0.72	2.51	0.33	0.67	0.00 Calculated
2 Link-UG	Pipe	CULTEC	BOX	14.00	790.02	790.16	-1.0000	6.000	0.0150	0.18	0.49	0.36	2.04	0.22	0.45	0.00 Calculated
3 OUT	Orifice	BOX	POST-DEVEL		790.16	790.10		6.000		0.17						

Subbasin : POST-SOUTH

Input Data

Area (ac)	0.26
Weighted Curve Number	95.28
Rain Gage ID	NOAA

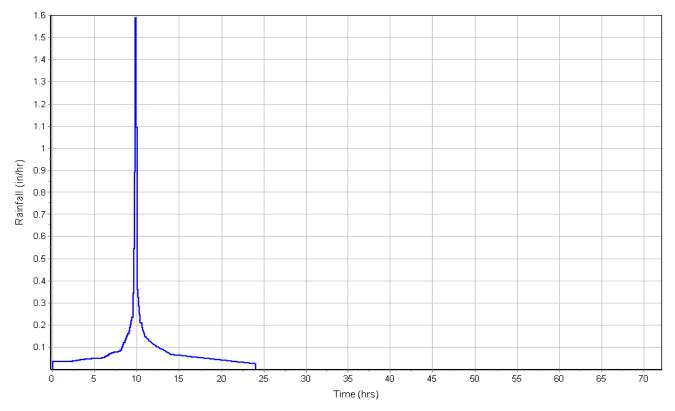
Composite Curve Number

	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.03	-	72.00
-	0.23	-	98.00
Composite Area & Weighted CN	0.26		95.28

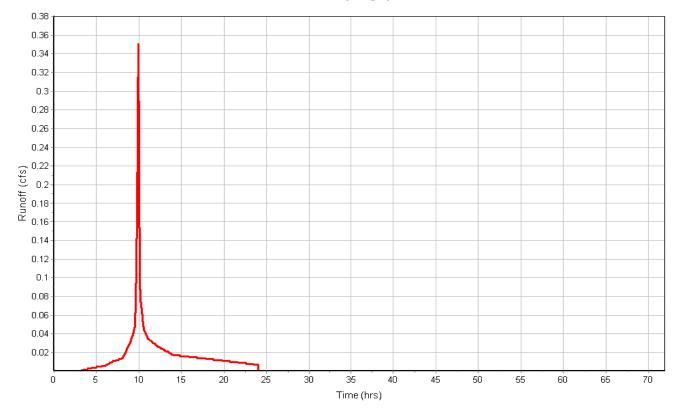
Subbasin Runoff Results

Total Rainfall (in)	2.11
Total Runoff (in)	1.61
Peak Runoff (cfs)	0.35
Weighted Curve Number	95.28
Time of Concentration (days hh:mm:ss)	0 00:03:54

Rainfall Intensity Graph



Runoff Hydrograph



Input Data

Area (ac)	0.26
Weighted Curve Number	94.98
Rain Gage ID	NOAA

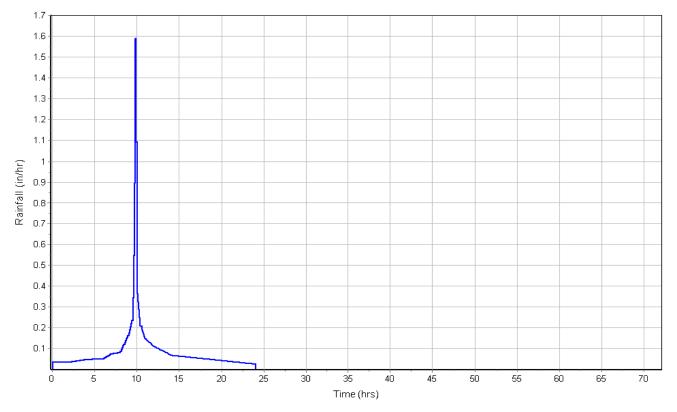
Composite Curve Number

mposite Curve Number			
	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.03	-	72.00
-	0.23	-	98.00
Composite Area & Weighted CN	0.26		94.98

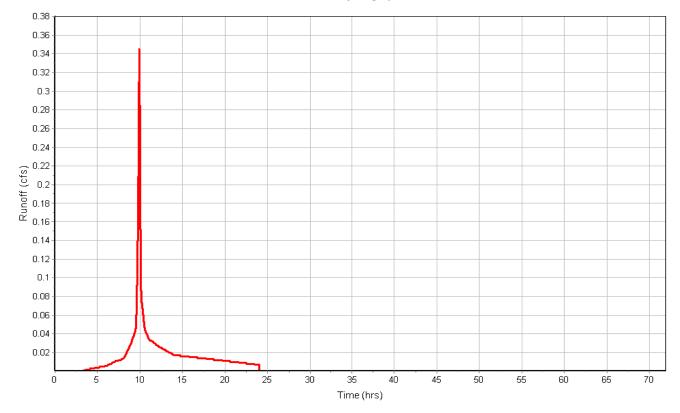
Subbasin Runoff Results

Total Rainfall (in)	2.11
Total Runoff (in)	1.59
Peak Runoff (cfs)	0.35
Weighted Curve Number	94.98
Time of Concentration (days hh:mm:ss)	0 00:03:54

Rainfall Intensity Graph



Runoff Hydrograph



Junction Input

ŝ	SN Element ID	Invert Elevation	Ground/Rim (Max)	Ground/Rim (Max)			Surcharge Elevation	0	Ponded Area	Minimum Pipe
			Elevation	Offset	Elevation	Depth				Cover
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft ²)	(in)
_	1 BOX	790.16	794.00	3.84	790.16	0.00	6.00	-788.00	0.00	0.00

Junction Results

SN Element	Peak	Peak	Max HGL	Max HGL	Max	Min	Average HGL	Average HGL	Time of	Time of	Total	Total Time
ID	Inflow	Lateral	Elevation	Depth	Surcharge	Freeboard	Elevation	Depth	Max HGL	Peak	Flooded	Flooded
		Inflow	Attained	Attained	Depth	Attained	Attained	Attained	Occurrence	Flooding	Volume	
					Attained					Occurrence		
	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)	(days hh:mm)	(ac-in)	(min)
1 BOX	0.35	0.00	790.40	0.24	0.00	3.60	790.17	0.01	0 10:00	0 00:00	0.00	0.00

Pipe Input

;	SN Element	Length	Inlet	Inlet	Outlet	Outlet	Total	Average Pipe	Pipe	Pipe	Manning's	Entrance	Exit/Bend	Additional	Initial Flap	No. of
	ID		Invert	Invert	Invert	Invert	Drop	Slope Shape	Diameter or	Width	Roughness	Losses	Losses	Losses	Flow Gate	Barrels
			Elevation	Offset	Elevation	Offset			Height							
_		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)	(in)	(in)					(cfs)	
	1 DI	(ft) 4.00	(ft) 790.20	17	(ft) 790.16		()	(%) 1.0000 CIRCULAR	()	(in) 6.000	0.0150	0.5000	0.5000	0.0000	()	1

Pipe Results

SN Element	Peak	Time of	Design Flow	Peak Flow/	Peak Flow	Travel	Peak Flow	Peak Flow	Total Time	Froude Reported
ID	Flow	Peak Flow	Capacity	Design Flow	Velocity	Time	Depth	Depth/	Surcharged	Number Condition
		Occurrence		Ratio				Total Depth Ratio		
	(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)	
1 DI	0.35	0 10:00	0.49	0.72	2.51	0.03	0.33	0.67	0.00	Calculated
2 Link-UG	0.18	0 10:00	0.49	0.36	2.04	0.11	0.22	0.45	0.00	Calculated

Storage Nodes

Exhibit A

Storage Node : CULTEC

Input Data

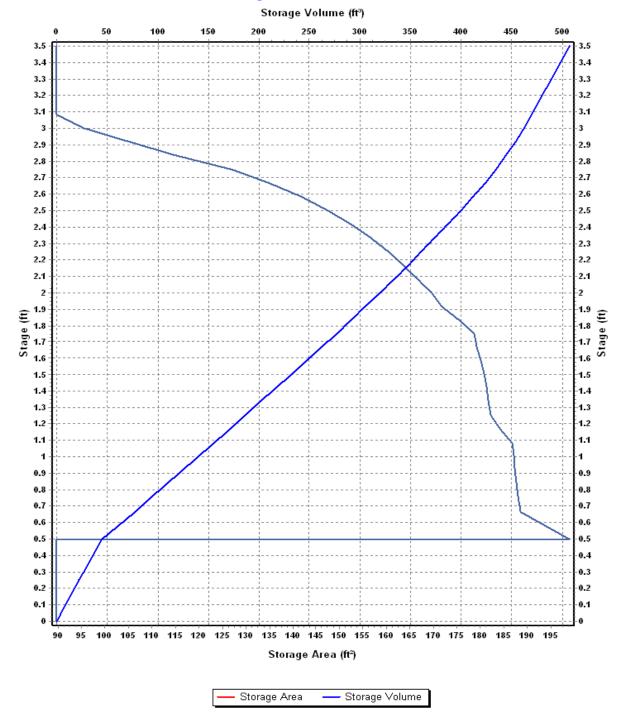
Invert Elevation (ft)	. 788.46
Max (Rim) Elevation (ft)	. 792.00
Max (Rim) Offset (ft)	. 3.54
Initial Water Elevation (ft)	788.46
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr)		0.5000
---------------------------	--	--------

Storage Area Volume Curves Storage Curve : SOUTH-UG

0			
	Stage	Storage	Storage
	- - -	Area	Volume
	(ft)	(ft ²)	(ft ³)
	0.000	89.7120	0.000
	0.083	89.7120	7.45
	0.167	89.7120	14.99
	0.250	89.7120	22.44
	0.333	89.7120	29.89
	0.417	89.7120	37.43
	0.500	89.712	44.88
	.501	198.9288	45.02
	0.667	188.5968	77.18
	0.750	187.9920	92.81
	0.833		108.40
	0.917	187.3872	124.15
	1.000		139.69
	1.083		155.21
	1.167		170.80
	1.250		186.01
	1.333	181.6416	201.11
	1.417		216.36
	1.500	180.7344	231.39
	1.583 1.667	180.1296 179.2224	246.37 261.46
	1.750	179.2224	201.40
	1.833		291.00
	1.033	175.2912	305.57
	2.000	169.5456	319.73
	2.000	166.5216	333.68
	2.003	163.4976	347.54
	2.250	160.1712	360.97
	2.333	156.5424	374.11
	2.417	152.3088	387.08
	2.500	147.4704	399.52
	2.583	142.0272	411.53
	2.667	135.0720	423.17
	2.750	127.2096	434.05
	2.833	115.1136	444.11
	2.917	105.1344	453.36
	3.000	95.4576	461.68
	3.083	89.7120	469.36
	3.167	89.7120	476.90
	3.250	89.7120	484.35
	3.333	89.7120	491.80
	3.417	89.7120	499.34
	3.500	89.7120	506.79



Storage Area Volume Curves

Storage Node : CULTEC (continued)

Output Summary Results

Peak Inflow (cfs)	0.18
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	0.00
Peak Exfiltration Flow Rate (cfm)	0.14
Max HGL Elevation Attained (ft)	790.27
Max HGL Depth Attained (ft)	1.81
Average HGL Elevation Attained (ft)	789.25
Average HGL Depth Attained (ft)	0.79
Time of Max HGL Occurrence (days hh:mm)	0 10:35
Total Exfiltration Volume (1000-ft ³)	0.413
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : SURF-SOUTHERN

Input Data

Invert Elevation (ft)	790.20
Max (Rim) Elevation (ft)	794.20
Max (Rim) Offset (ft)	4.00
Initial Water Elevation (ft)	790.20
Initial Water Depth (ft)	0.00
Ponded Area (ft ²)	20.00
Evaporation Loss	0.00

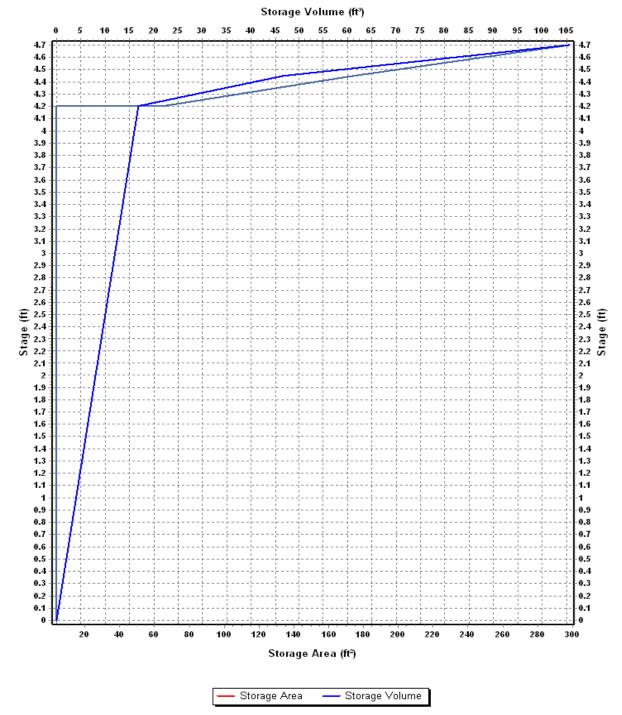
Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : SURF-SOUTH

Stage	Storage	Storage
	Area	Volume
(ft)	(ft ²)	(ft ³)
0	4	0.000
4.2	4	16.80
4.201	65	16.83
4.45	174	46.59
4.7	298	105.59

Exhibit A



Storage Area Volume Curves

Storage Node : SURF-SOUTHERN (continued)

Output Summary Results

Peak Inflow (cfs)	0.35
Peak Lateral Inflow (cfs)	0.35
Peak Outflow (cfs)	0.35
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	790.62
Max HGL Depth Attained (ft)	0.42
Average HGL Elevation Attained (ft)	790.22
Average HGL Depth Attained (ft)	0.02
Time of Max HGL Occurrence (days hh:mm)	0 10:00
Total Exfiltration Volume (1000-ft ³)	0.004
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Project Description

File Name 2017-03-23_00136 SWCP - Southern Lot.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	User-Defined
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	
Skip Steady State Analysis Time Periods	YES

Analysis Options

Start Analysis On	Jan 01, 2020	00:00:00
End Analysis On	Jan 04, 2020	00:00:00
Start Reporting On	Jan 01, 2020	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	1
Subbasins	2
Nodes	5
Junctions	1
Outfalls	2
Flow Diversions	0
Inlets	0
Storage Nodes	2
Links	3
Channels	0
Pipes	2
Pumps	0
Orifices	1
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

	SN	Rain Gage	Data	Data Source	Rainfall	Rain	State	County	Return	Rainfall	Rainfall
		ID	Source	ID	Туре	Units			Period	Depth	Distribution
									(years)	(inches)	
-	1		Time Series	10-YEAR	Cumulative	inches	California	San Luis Obispo (Paso Robles)	10	3.68	SCS Type I 24-hr

Exhibit A

Subbasin Summary

SN Subbasin	Area	Weighted	Total	Total	Total	Peak	Time of
ID		Curve	Rainfall	Runoff	Runoff	Runoff	Concentration
		Number			Volume		
	(ac)		(in)	(in)	(ac-in)	(cfs)	(days hh:mm:ss)
1 POST-SOUTH	0.26	95.28	3.68	3.15	0.82	0.67	0 00:03:54
2 PRE-SOUTH	0.26	94.98	3.68	3.11	0.81	0.67	0 00:03:54

Node Summary

SN Element ID	Element Type	Invert Elevation	Ground/Rim (Max)	Initial Water	Surcharge Elevation				Max Surcharge	Min Freeboard	Time of Peak	Total Flooded	Total Time Flooded
			Elevation	Elevation				Attained	Depth	Attained	Flooding	Volume	
									Attained		Occurrence		
		(ft)	(ft)	(ft)	(ft)	(ft ²)	(cfs)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
1 BOX	Junction	790.16	794.00	790.16	6.00	0.00	0.66	790.76	0.00	3.24	0 00:00	0.00	0.00
2 POST-DEVEL	Outfall	790.10					0.57	790.10					
3 PRE-DEVEL	Outfall	0.00					0.66	0.00					
4 CULTEC	Storage Node	788.46	792.00	788.46		0.00	0.18	790.76				0.00	0.00
5 SURF-SOUTHERN	Storage Node	790.20	794.20	790.20		20.00	0.67	790.97				0.00	0.00

Link Summary

SN Element	Element	From	To (Outlet)	Length	Inlet	Outlet	Average	Diameter or	Manning's	Peak	Design Flow	Peak Flow/	Peak Flow	Peak Flow	Peak Flow	Total Time Reported
ID	Туре	(Inlet)	Node		Invert	Invert	Slope	Height	Roughness	Flow	Capacity	Design Flow	Velocity	Depth	Depth/	Surcharged Condition
		Node		E	Elevation E	Elevation						Ratio			Total Depth	
															Ratio	
				(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)
1 DI	Pipe	SURF-SOUTHERN	BOX	4.00	790.20	790.16	1.0000	6.000	0.0150	0.66	0.49	1.35	3.34	0.50	1.00	9.00 SURCHARGED
2 Link-UG	Pipe	CULTEC	BOX	14.00	790.02	790.16	-1.0000	6.000	0.0150	0.18	0.49	0.36	1.95	0.50	1.00	9.00 SURCHARGED
3 OUT	Orifice	BOX	POST-DEVEL		790.16	790.10		6.000		0.57						

Subbasin : POST-SOUTH

Input Data

Area (ac)	0.26
Weighted Curve Number	95.28
Rain Gage ID	NOAA

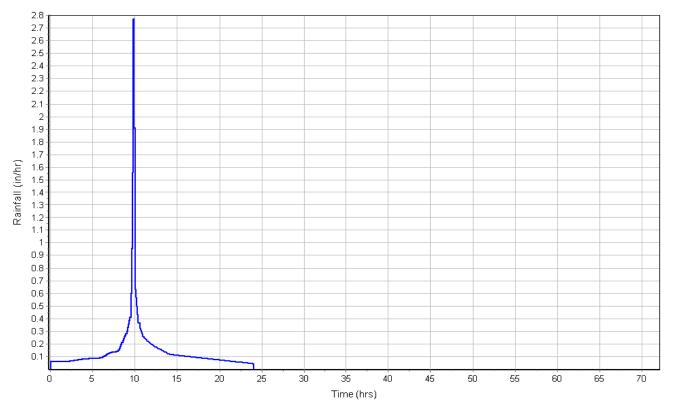
Composite Curve Number

	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.03	-	72.00
-	0.23	-	98.00
Composite Area & Weighted CN	0.26		95.28

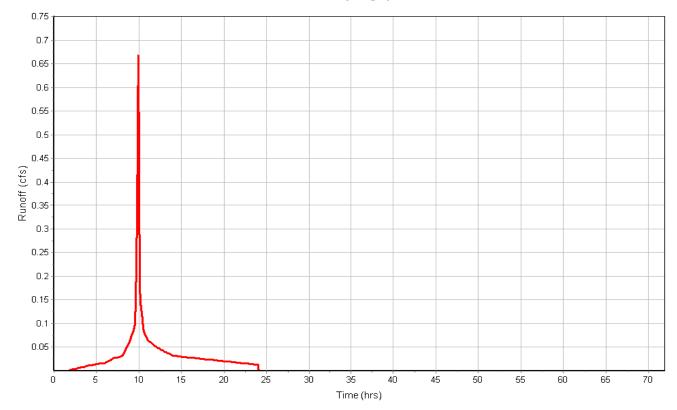
Subbasin Runoff Results

Total Rainfall (in)	3.68
Total Runoff (in)	3.15
Peak Runoff (cfs)	0.67
Weighted Curve Number	95.28
Time of Concentration (days hh:mm:ss)	0 00:03:54

Rainfall Intensity Graph



Runoff Hydrograph



Input Data

Area (ac)	0.26
Weighted Curve Number	94.98
Rain Gage ID	NOAA

Composite Curve Number

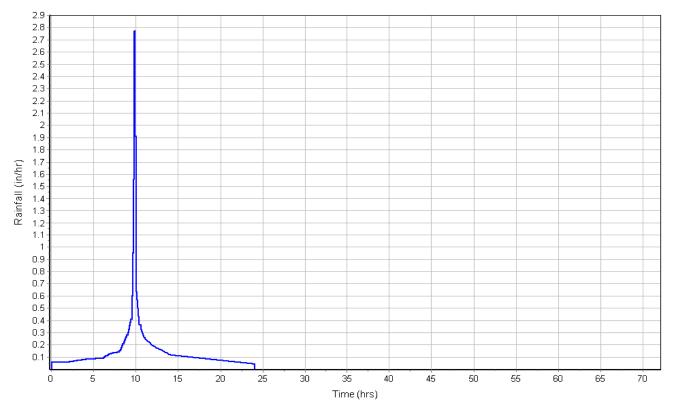
mposite Curve Number			
	Area	Soil	Curve
Soil/Surface Description	(acres)	Group	Number
-	0.03	-	72.00
-	0.23	-	98.00
Composite Area & Weighted CN	0.26		94.98

Subbasin Runoff Results

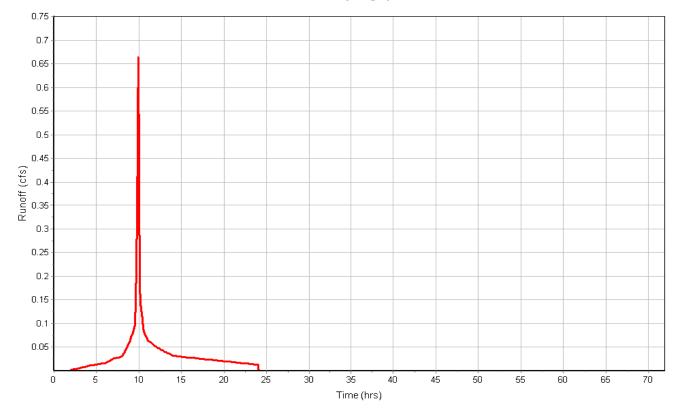
Total Rainfall (in)	3.68
Total Runoff (in)	
Peak Runoff (cfs)	0.67
Weighted Curve Number	94.98
Time of Concentration (days hh:mm:ss)	0 00:03:54

Subbasin : PRE-SOUTH

Rainfall Intensity Graph



Runoff Hydrograph



Junction Input

ŝ	SN Element ID	Invert Elevation	Ground/Rim (Max)	Ground/Rim (Max)			Surcharge Elevation	0	Ponded Area	Minimum Pipe
			Elevation	Offset	Elevation	Depth				Cover
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft ²)	(in)
_	1 BOX	790.16	794.00	3.84	790.16	0.00	6.00	-788.00	0.00	0.00

Junction Results

SN Element	Peak	Peak	Max HGL	Max HGL	Max	Min	Average HGL	Average HGL	Time of	Time of	Total	Total Time
ID	Inflow	Lateral	Elevation	Depth	Surcharge	Freeboard	Elevation	Depth	Max HGL	Peak	Flooded	Flooded
		Inflow	Attained	Attained	Depth	Attained	Attained	Attained	Occurrence	Flooding	Volume	
					Attained					Occurrence		
	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)	(days hh:mm)	(ac-in)	(min)
1 BOX	0.66	0.00	790.76	0.60	0.00	3.24	790.18	0.02	0 10:02	0 00:00	0.00	0.00

Pipe Input

;	SN Element	Length	Inlet	Inlet	Outlet	Outlet	Total	Average Pipe	Pipe	Pipe	Manning's	Entrance	Exit/Bend	Additional	Initial Flap	No. of
	ID		Invert	Invert	Invert	Invert	Drop	Slope Shape	Diameter or	Width	Roughness	Losses	Losses	Losses	Flow Gate	Barrels
			Elevation	Offset	Elevation	Offset			Height							
_		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)	(in)	(in)					(cfs)	
	1 DI	(ft) 4.00	(ft) 790.20	17	(ft) 790.16		()	(%) 1.0000 CIRCULAR	()	(in) 6.000	0.0150	0.5000	0.5000	0.0000	()	1

Pipe Results

SN Element	Peak	Time of	Design Flow	Peak Flow/	Peak Flow	Travel	Peak Flow	Peak Flow	Total Time	Froude I	Reported
ID	Flow	Peak Flow	Capacity	Design Flow	Velocity	Time	Depth	Depth/	Surcharged	Number (Condition
		Occurrence		Ratio				Total Depth			
								Ratio			
	(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)		
1 DI	0.66	0 10:00	0.49	1.35	3.34	0.02	0.50	1.00	9.00	0	SURCHARGED
2 Link-UG	0.18	0 09:51	0.49	0.36	1.95	0.12	0.50	1.00	9.00	9	SURCHARGED

Storage Nodes

Exhibit A

Storage Node : CULTEC

Input Data

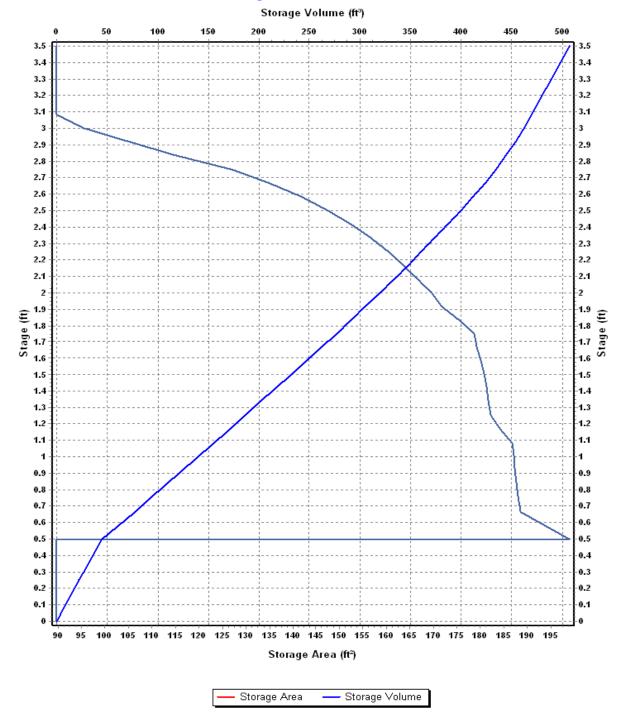
Invert Elevation (ft)	. 788.46
Max (Rim) Elevation (ft)	. 792.00
Max (Rim) Offset (ft)	. 3.54
Initial Water Elevation (ft)	788.46
Initial Water Depth (ft)	. 0.00
Ponded Area (ft ²)	0.00
Evaporation Loss	0.00

Infiltration/Exfiltration

Exfiltration Rate (in/hr)		0.5000
---------------------------	--	--------

Storage Area Volume Curves Storage Curve : SOUTH-UG

0			
	Stage	Storage	Storage
	- - -	Area	Volume
	(ft)	(ft ²)	(ft ³)
	0.000	89.7120	0.000
	0.083	89.7120	7.45
	0.167	89.7120	14.99
	0.250	89.7120	22.44
	0.333	89.7120	29.89
	0.417	89.7120	37.43
	0.500	89.712	44.88
	.501	198.9288	45.02
	0.667	188.5968	77.18
	0.750	187.9920	92.81
	0.833		108.40
	0.917	187.3872	124.15
	1.000		139.69
	1.083		155.21
	1.167		170.80
	1.250		186.01
	1.333	181.6416	201.11
	1.417		216.36
	1.500	180.7344	231.39
	1.583 1.667	180.1296 179.2224	246.37 261.46
	1.750	179.2224	201.40
	1.833		291.00
	1.033	175.2912	305.57
	2.000	169.5456	319.73
	2.000	166.5216	333.68
	2.003	163.4976	347.54
	2.250	160.1712	360.97
	2.333	156.5424	374.11
	2.417	152.3088	387.08
	2.500	147.4704	399.52
	2.583	142.0272	411.53
	2.667	135.0720	423.17
	2.750	127.2096	434.05
	2.833	115.1136	444.11
	2.917	105.1344	453.36
	3.000	95.4576	461.68
	3.083	89.7120	469.36
	3.167	89.7120	476.90
	3.250	89.7120	484.35
	3.333	89.7120	491.80
	3.417	89.7120	499.34
	3.500	89.7120	506.79



Storage Area Volume Curves

Storage Node : CULTEC (continued)

Output Summary Results

Peak Inflow (cfs)	0.18
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	0.10
Peak Exfiltration Flow Rate (cfm)	0.14
Max HGL Elevation Attained (ft)	790.76
Max HGL Depth Attained (ft)	2.3
Average HGL Elevation Attained (ft)	789.31
Average HGL Depth Attained (ft)	0.85
Time of Max HGL Occurrence (days hh:mm)	0 10:02
Total Exfiltration Volume (1000-ft ³)	0.432
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Storage Node : SURF-SOUTHERN

Input Data

Invert Elevation (ft)	790.20
Max (Rim) Elevation (ft)	794.20
Max (Rim) Offset (ft)	4.00
Initial Water Elevation (ft)	790.20
Initial Water Depth (ft)	0.00
Ponded Area (ft ²)	20.00
Evaporation Loss	0.00

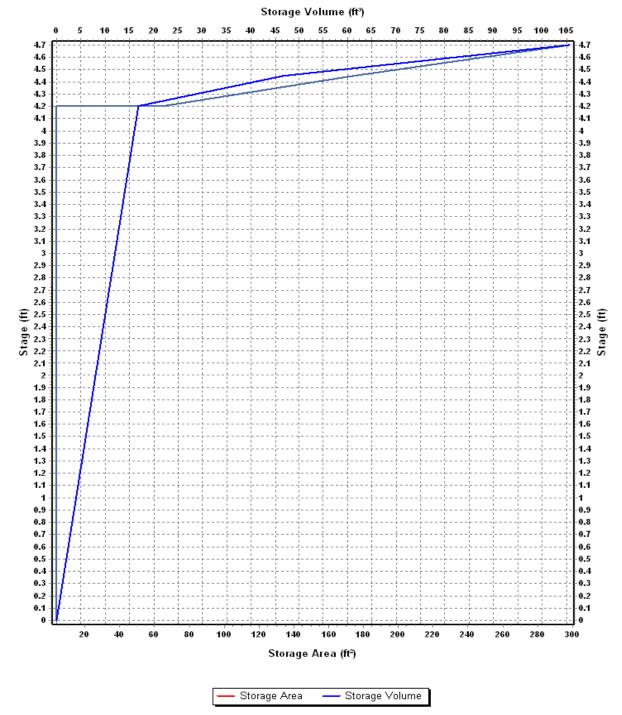
Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.5000

Storage Area Volume Curves Storage Curve : SURF-SOUTH

Stage	Storage	Storage
	Area	Volume
(ft)	(ft ²)	(ft ³)
0	4	0.000
4.2	4	16.80
4.201	65	16.83
4.45	174	46.59
4.7	298	105.59

Exhibit A

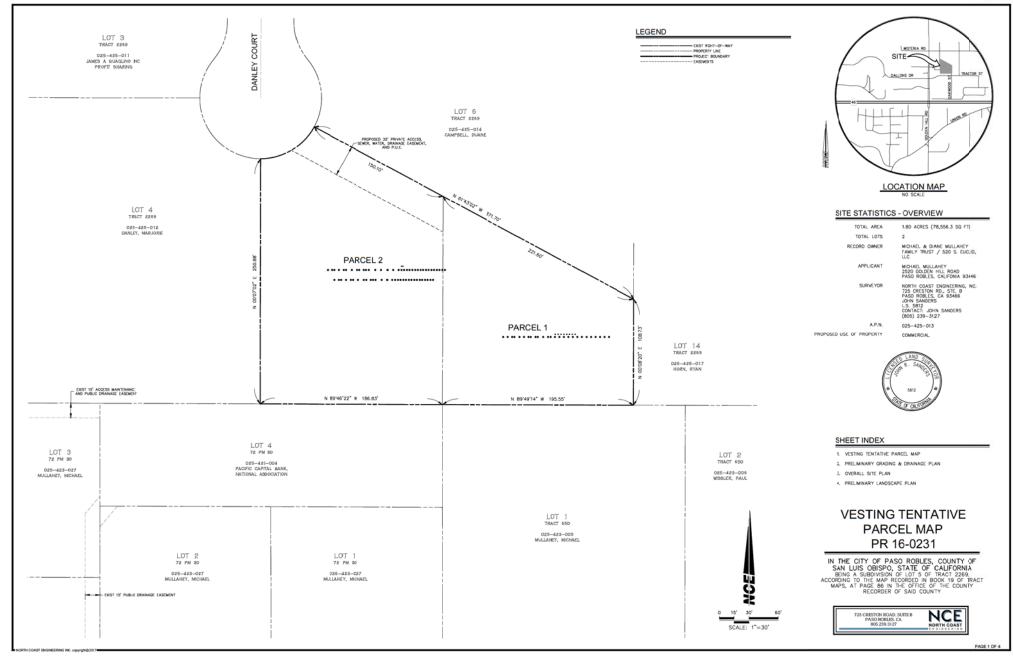


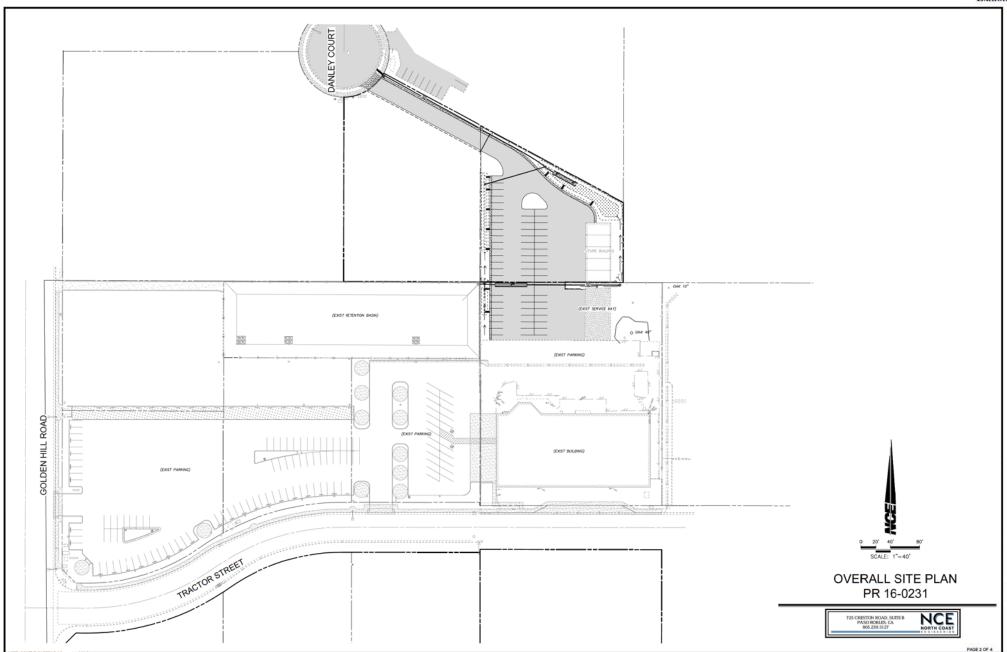
Storage Area Volume Curves

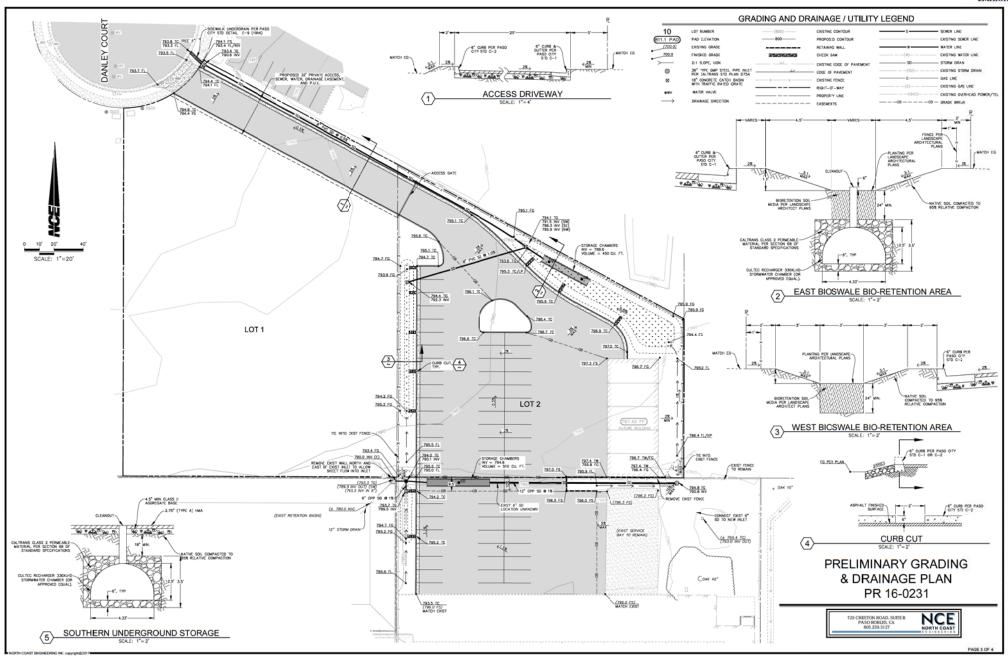
Storage Node : SURF-SOUTHERN (continued)

Output Summary Results

Peak Inflow (cfs)	0.67
Peak Lateral Inflow (cfs)	0.67
Peak Outflow (cfs)	0.66
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	790.97
Max HGL Depth Attained (ft)	0.77
Average HGL Elevation Attained (ft)	790.23
Average HGL Depth Attained (ft)	0.03
Time of Max HGL Occurrence (days hh:mm)	0 10:00
Total Exfiltration Volume (1000-ft ³)	0.004
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00









Brachychiton acerifolius Flame Tree



Ulmus parvifolia Evergreen Elm



Arbutus 'Marina' Strawberry Tree

*WUCOLS RATING

Gleditsia triacanthos Honey Locust

Chilopsis linearis Desert Willow

Quercus agrifolia Coast Live Oak

	MURPHY & PART		Mullahey	Dodge	12/12/2014	3
	rozone Cha		cape wate			
Maximum	Annual Water	Allowance			(MAWA)	1
		tal square foxtage list. ETo for the are		10,275	5.F.	
			MAWA =	334 249,832	ocfiyr galiyr	
		Hydrozor	ne Chart			
1	drozone impation el	otage of hydrozon ficiency = 0.9		0.2	Low)	
hy	square fo drozona intgation al EAWU = [otage of hydinzon ficiency = 0.9 93 cd / yr	e = 10,275		2	
hy	square fo drozone impation et	otage of hydinzon ficiency = 0.9 93 cd / yr	e = 10,275		Lowd (EAWU)	1
Estimated	square fo drozona intgation al EAWU = [otage of hydinzon ficiency = 0.9 93 cd / yr	e = 10,275		2	1
Estimated	square fo drozone inigation at EAWU = [d Annual Wate Sub Total EAWU = EAWU = EAWU = EAWU =	otage of hydrizon fickincy = 0.5 93 cd / yr er Use 93 cd / yr 0.85 % 109 cd / yr	e = 10.275		2	1
ng Estimated Ampution Synt	square fo drozona impation al EAWU = d Annual Wate SubTotal EAWU = EAWU = EAWU = EAWU = EAWU = EAWU =	obje of Jydrizon Tolency = 0.5 93 off yr or Use 93 off yr 93 off yr 94 off yr 95 off yr 96 off yr 97 off yr 96 off yr 96 off yr 96 off yr 97 off yr 96	er Use Sumi	mary	(EAWU)	1
Po Estimated Emigration Synt EAWA 2	square fo drozone inigation at EAWU = [d Annual Wate Sub Total EAWU = EAWU = EAWU = EAWU =	otage of Jystinzon ficiency = 0.5 93 cof / yr er Use 93 cof / yr 0.85 % 109 cof / yr 81,840 gs/ / yr	r Use Sum EAWU <		(EAWU)	1

Statement of Water Conserving Irrigation Design

The following principles of irrigation design utilized on this project are directed specifically as conserving water and improving the efficiency of the irrigation system:

- · All irrigation shall be drip or dripline emitters. No overhead spray heads will be used.
- · Irrigation hydrozones shall be adjusted according to water needs and
- · Utilization of irrigation system master valve.
- · Utilization of irrigation system "smart controller" with water budgeting feature
- Utilization of irrigation system flow sensor.

· Utilization of rain shut-off device connected to irrigation controller.

To help maintain the irrigation efficiency as intended in the design, Irrigation system shall be tested and maintained on a monthly basis by the maintenance staff.

Plant List ACCENT TREES BRACHYCHITON ACERIFOLIUS / FLAME TREE PISTACIA CHINENSIS / OUNESE PISTACHE ULMUS PARVIFOLIA / EVERGREEN ELM

PARKING LOT / GROVE TREES ARBUTUS 'MARINA' / STRAWBERRY TREE OHLOPSIS LINEARS / DESERT WILLOW GLEDTSIA TRIACATINOS / HONEY LOCU QUERCUS AGRIPOLIA / COAST LIVE OAK

ACCENT SHRUBS BOUGAIN/LILEA SPF. / BOUGAIN/LILEA CISTIS SPF. / BOUGAIN/LILEA CISTIS SPF. / BOCKROE ECHING ANELONG / RED GOT MADEIRA MINIGRA UNALA / RED HOT FORER PENSIONA HETESCHMULUS TANKCANTA BOP / BLUE BEDDER PENSIONA HETESCHMULUS TANKCANTA SOC

SHRUBS and PERENNIALS SHRUBS and PERENNIALS ARDITUS UNEDO 'ULTIN KING'/ DWARF STRAWBERRY TREE CALISTEMON 'LITILE JOIN' / DWARF BOTTLERRUSH HETBROMELES ARDITIOLIA / TOYON RHAMNUS CALIFORICA 'VEV CASE' / COFFERERRY RHAPHIOLEPIS INDICA 'PDRK LADY' / INDIA HWITHORN (PINK)

GROUNDCOVERS BACQARDS PULLARIS VIGEON POINT / DWARF COYOTE BRUSH ERIGERON KARVINGKLANUS / RLEARAME NYOYOKUM PARVINGLAWI 'BYTAH CREEK' / TRALLING HYOPORUM ROSMARINUS OFF: JINALS 'HUNTINGTON CARVET / (NCN) SALVA 'DWARS OHOLE' J JOANS CHOICE SAGE

BIOFILTRATION BASINS (use Bioretention Soil Media per City Standard): ACHILEA MILLEFO.IUM SUMW SEDUCTION / YELLOW YARROW CAREX DIVULSA / BERKELEY SEDGE IRIS DOUGLASIANA / DOUGLAS IRIS INS DOUGLASIAN / DOUGLASIAS JUNCIS PATENS 'EIK BLIE' / CALIFORNIA GRAY RUSH MUHEINERGIA LIZOHEIMERI / LINDHEIMER'S MUHLY SALVIA SPATHACEA / HUMMINGBRD SAGE SATUREJA DOUGLASII / YERBA BUENA

MULCH MULCH ALL GROUND COVER AND PLANTER AREAS WITH 3" MINIMUM LAYER WALK-ON' BARK.

*WATER-USE EVALUATION OF PLANT MATERIALS WATER USE OF PRIORSD PLANTS HAVE BEEN EVALUATED USING THE "WATER USE CLASSIFICATION OF LANSCARE SPECIES" (WHICES IT, UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION.)

Water Conservation Notes

The following water conservation techniques shall be employed in this Project:

- Water conserving plants, defined as "Low" or "Very Low" in the "Water Use Classification of Landscape Species" (WUCOLS IV, University of California Cooperative Extension), shall be utilized in 100% of the total plant area plant area
- Irrigation system shall be separated into distinct hydrozones based on plant material types, exposure and orientation.
- · Soil amendments and mulch shall be utilized to improve water holding capacity of soil.
- Automatic irrigation system shall utilize "smart controller" technology with water budgeting feature to adjust water application based on soil moisture and/or local weather data.

· Lawn is not used.



Exhibit I: Infiltration Testing Report



17.122 197.0 2006 2016 2006 2016 2008 2016 TADE TOPY

22.56 MD.77.

RAM ROFT. NAME SOFT. 11394 SQFT. 265 SPCCS

SVENDLE EVPLIDIE BIPACIUS

105.200

PROPOSED SITE PLAN

CALIFIC CONTRACT

HOUTSTON

ED

Ţ, EXERTING

LODING UNIT

INTER STATE

ACON ROUTS



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CHRYSLER CAPACITY REQUIREMENTS

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Earth Systems Pacific

LOGGED BY: R. Gorman DRILL RIG: Mobile B-53 AUGER TYPE: 6" Hollow Stem Auger Boring No. 1 PAGE 1 OF 1 JOB NO.: SL-17161-SA DATE: 10/24/13

	s		PASO ROBLES CHRYSLER DEALERSHIP	SAMPLE DATA				
DEPTH (feet)	USCS CLASS	SYMBOL	Tractor Street and Golden Hill Road Paso Robles, California SOIL DESCRIPTION	INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0 - 1 - 2	SC		CLAYEY SAND WITH GRAVEL: light brown, medium dense, dry (Fill)	1.0 - 3.0 2.0 - 3.5	0	U		29 20
- 3 - 4 - 5 - 6		ANN AN		5.0 - 6.5	-			20 5 6 9
- 7 - 8 - 9 - 10	SP		POORLY GRADED SAND: light brown, loose, moist (Older Alluvium)	10.0 - 11.5		8		11 11
- 11 - 12 - 13	SW		medium dense, coarse grained	10.0 - 11.0				13
- 14 - 15 - 16 -			medium dense, moist	15.0 - 16.5	•			16 16 17
17 - 18 - 19 - 20 - 21 - 22 - 23 - 23 - 24			End of Boring @ 16.5' No subsurface water encountered					
- 25 - 26 -								

LEGEND: Ring Sample O Grab Sample Shelby Tube Sample SPT NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Boring No. 2 PAGE 1 OF 1

DATE: 10/24/13

JOB NO .: SL-17161-SA



Earth Systems Pacific

/		
	LOGGED BY: R. Gorman	
	DRILL RIG: Mobile B-53	
	AUGER TYPE: 6" Hollow Stem Auger	

			PASO ROBLES CHRYSLER DEALERSHIP	SAMPLE DATA				
DEPTH (feet)	USCS CLASS	SYMBOL	Tractor Street and Golden Hill Road Paso Robles, California	INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
			SOIL DESCRIPTION	Z	S	DRY	MO	
0 - 1 - 2 -	SP		POORLY GRADED SAND: light brown, loose, dry (Fill)	2.0 - 3.5				5 8 7
3 - 4								<i>ें प</i>
- 5 - 6	SC		CLAYEY SAND WITH GRAVEL: brown, loose, moist, fine gravel (Older Alluvium)	5.0 - 6.5				9 13 20
- 7 - 8			medium dense					
9 - 10	sw			10.0 - 11.5	•			3 5
- 11 - 12 - 13 -	200		WELL GRADED SAND: light brown, loose, moist					8
14 - 15 - 16 - 17 - 18	SC		CLAYEY SAND: brown, medium dense, very moist	15.0 - 16.5	•			12 18 18
- 19 - 20 - 21 -				20.0 - 21.5	•			¹³ 10 10
22 - 23 - 24 - 25			End of Boring @ 21.5' No subsurface water encountered					
- 26 -								

LEGEND: Ring Sample O Grab Sample Shelby Tube Sample SPT NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.



Earth Systems Pacific

LOGGED BY: R. Gorman DRILL RIG: Mobile B-53 AUGER TYPE: 6" Hollow Stem Auger Boring No. 3 PAGE 1 OF 1 JOB NO.: SL-17161-SA DATE: 10/24/13

	T		DATE: 10/24				L. 10/24/13	
	S		PASO ROBLES CHRYSLER DEALERSHIP		SA	MPLE	DATA	
DEPTH (feet)	USCS CLASS	SYMBOL	Tractor Street and Golden Hill Road Paso Robles, California	INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
	Š		SOIL DESCRIPTION	E.	SI	DRY	MO	BB
	SW		WELL GRADED SAND: light brown, loose, moist (Fill)	2.0 - 3.5				5 5 4
- 4 - 5 -	SP		POORLY GRADED SAND: brown, loose, moist (Older Alluvium) dense	5.0 - 6.5				9 12 50/5.0"
6 - 7 - 8 - 9 - 10				10.0 - 11.5			a.	9
10 - 11 - 12 - 13 - 14 -	SW		WELL GRADED SAND: light brown, medium dense, very moist	10.0 - 11.5			4	12 15
15 - 16 -	SC		CLAYEY SAND: brown, medium dense, moist, fine grained	15.0 - 16.5	•			4 7 9
17 - 18 -			End of Boring @ 16.5' No subsurface water encountered					
19 - 20 -								
21 - 22 -								
23 - 24 - 25								
- 26 -								

LEGEND: Ring Sample O Grab Sample Shelby Tube Sample SPT NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.



Earth Systems Pacific

LOGGED BY: R. Gorman DRILL RIG: Mobile B-53 AUGER TYPE: 6" Hollow Stem Auger Boring No. 4 PAGE 1 OF 1 JOB NO.: SL-17161-SA DATE: 10/24/13

	s		PASO ROBLES CHRYSLER DEALERSHIP	SAMPLE DATA				
DEPTH (feet)	USCS CLASS	SYMBOL	Tractor Street and Golden Hill Road Paso Robles, California	INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
			SOIL DESCRIPTION	Z	0	DRY	MQ	ш <u>с</u>
- 1 - 2 - 3 - 4 -	SP		POORLY GRADED SAND: light brown, loose, moist (Fill)					
5 - 6 - 7			dense					
7 	SW		WELL GRADED SAND WITH GRAVEL: brown, loose, very moist (Older Alluvium)					e S
12 - 13 - 14 - 15		[[[[]]	SANDY LEAN CLAY: brown, medium dense, very moist				2	
- 16 - 17 - 18 - 19 - 20 - 21 - 21 - 22 - 23 - 23 - 24 - 25			End of Boring @ 15.0' No subsurface water encountered					
- 26 -								

PROJECT: Paso Robles Chysler Dealership

INFILTRATION TEST RESULTS

INFILTRATION TEST: C

DATE DRILLED: 10/24/2013

DATE TESTED:10/24/2013

TECHNICIAN: PF

CONSTANT HEAD DATA

Time of Constant Head:

30 minutes

Volume Added During Constant Head: 16.0 ft^{3*}

^{*}Could not fill above 8 feet with gravity fed garden hose

FALLING HEAD DATA

INTERVAL (Minutes)	READING (Feet)	INCREMENTAL FALL	INFILTRATION RATE	INFILTRATION RATE
(ivinaces)	(1000)	(Feet)	(Minutes / Inch)	(Inches / Hour)
	8.00			
2	9.70	1.70	0.10	612
10	15.00	5.30	0.16	382

TEST HOLE DIAMETER: 8 inches

TEST HOLE DEPTH: 15.0 feet

TEST DURATION: .75 hours

SL-17164-SA

PROJECT: Paso Robles Chysler Dealership

INFILTRATION TEST RESULTS

INFILTRATION TEST: B

DATE DRILLED: 10/24/2013

DATE TESTED:10/24/2013

TECHNICIAN: PF

CONSTANT HEAD DATA

Time of Constant Head:	30 minutes
Volume Added During Constant Head:	1.1 ft ³

FALLING HEAD DATA

INTERVAL	READING	INCREMENTAL	INFILTRATION	INFILTRATION
(Minutes)	(Feet)	FALL	RATE	RATE
		(Feet)	(Minutes / Inch)	(Inches / Hour)
(0.97			
15	1.18	0.21	5.95	10
15	1.30	0.12	10.42	6
15	1.45	0.15	8.33	7
15	1.51	0.06	20.83	3
	20 20			
		3		

TEST HOLE DIAMETER: 8 inches TEST HOLE DEPTH: 4.5 feet

TEST DURATION: 1.5 hours

SL-17164-SA

PROJECT: Paso Robles Chysler Dealership

INFILTRATION TEST RESULTS

INFILTRATION TEST: A

DATE DRILLED: 10/24/2013

DATE TESTED:10/24/2013

TECHNICIAN: PF

CONSTANT HEAD DATA

Time of Constant Head:	30 minutes
Volume Added During Constant Head:	0.2 ft ³

FALLING HEAD DATA

INTERVAL (Minutes)	READING (Feet)	INCREMENTAL FALL (Foot)	INFILTRATION RATE (Minutes / Inch)	INFILTRATION RATE
		(Feet)	(Winutes / Inch)	(Inches / Hour)
	0.97			
15	1.18	0.21	5.95	10
15	1.30	0.12	10.42	6
15	1.45	0.15	8.33	7
15	1.51	0.06	20.83	3

TEST HOLE DIAMETER: 8 inches TEST HOLE DEPTH: 4.5 feet TEST DURATION: 1.5 hours

SL-17164-SA