

*IC tied to BP.*

**Cherne, Curtis**

*Can't get BP approval w/out SDA*

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**From:** Michael Balaskovits [mbalaskovits@bhinc.com]  
**Sent:** Tuesday, June 17, 2008 2:42 PM  
**To:** Cherne, Curtis  
**Cc:** Bingham, Brad L.; Dourte, Richard H.; James Topmiller; Jeff Mulbery  
**Subject:** RE: Mesa del Sol - Schott Solar Public Infrastructure list  
**Attachments:** Schott\_Infra\_List061708.pdf

Hi Curtis I got your email this morning, see my response below in red

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**From:** Cherne, Curtis [mailto:CCherne@cabq.gov]  
**Sent:** Monday, June 16, 2008 5:44 PM  
**To:** Michael Balaskovits  
**Cc:** Bingham, Brad L.; Dourte, Richard H.  
**Subject:** RE: Mesa del Sol - Schott Solar Public Infrastructure list

Mike,  
 I have comments on the Schott Infrastructure list;

1. I don't have any calcs to support the 2.9 ac-ft pond in DA6. The DA6 submittal didn't contain calcs for Basins 6A1, 6A2, and 6A3.

I'll get you some supplemental information showing the sizing of the 2.9 acre pond and the pond needed for the Schott entrance Road.

2. The Schott entrance Road and the northern portion of Hawking Dr. are in DA4. I have not received a submittal for DA4 and a pond will be required. Are you going to propose a temporary retention pond to drain the section of Hawking north of the high point?

Yes we are proposing a temporary pond and I will get you some supplemental information concerning this pond as well. In addition I'll be submitting the DA4 tomorrow morning for your review.

3. Show OS 5 and OS 6 on the Schott Infrastructure Exhibit.

OS-5 and OS-6 as called out on the infrastructure list was a typo. The ponds constructed with this infrastructure will be within public drainage easements which will be granted as OS-tracts at a later date. (See attached for revised infrastructure list eliminating OS-5 and OS-6 call out)

Hope this helps and if you have any other questions or comments don't hesitate to let me know. Thanks.

Curtis Cherne, P.E.  
 Senior Engineer  
 Development and Building Services  
 Planning Department, COA  
 924-3695

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**From:** Michael Balaskovits [mailto:mbalaskovits@bhinc.com]  
**Sent:** Friday, June 13, 2008 1:27 PM  
**To:** Metro, Kristal D.; Bingham, Brad L.; Green, Roger; Sandoval, Christina M.  
**Cc:** Cloud, Jack W.; Dourte, Richard H.; Jeff Mulbery; James Topmiller; Cherne, Curtis

6/18/2008

**Subject:** Mesa del Sol - Schott Solar Public Infrastructure list

Brad, Kristal, Kristina and Roger,

James Topmiller and Jeff Mulbery had a visit with Jack Cloud and Richard Dourte late last week to discuss the accelerated time frames and required infrastructure needed to support the new Schott Solar facility at Mesa del Sol. The question was what we would tie this required infrastructure to in order to begin the financial guarantee process and not hold up the Site Plan/Plat/Building Permit process. It was decided upon to have a stand alone Infrastructure list to be routed through the DRB members for approval, then proceed, ASAP, to an SIA.

I've attached a copy of the preliminary infrastructure list for review and comment. If this list appears satisfactory please let us know and we'll forward to you for signatures. If questions, please call or we can meet directly to address any questions or concerns next week.

Thanks for your time and if you have any questions don't hesitate to let myself, Jeff or James know.

Mike Balaskovits, P.E.

*Community Development and Planning*

**Bohannon ▲ Huston**

Courtyard One, 7500 Jefferson NE  
Albuquerque, NM 87109-4335

Phone: (505) 823-1000 Fax: (505) 798-7988

6/18/2008

Current DRC  
Project No. \_\_\_\_\_

Figure 12

REQUIRED INFRASTRUCTURE

Date Submitted: June 18, 2008  
Date Site Plan for Bldg Permit App: \_\_\_\_\_  
Date Site Plan for Sub. Approved: \_\_\_\_\_  
Date Preliminary Plat Approved: \_\_\_\_\_  
Date Preliminary Plat Expires: \_\_\_\_\_

EXHIBIT "A"

TO SUBDIVISION IMPROVEMENTS AGREEMENT  
DEVELOPMENT REVIEW BOARD (D.R.B.) REQUIRED INFRASTRUCTURE LIST

Schott Solar - PROPOSED TRACT D  
(Mesa del Sol, Innovation Park II)

DRB Project No. \_\_\_\_\_

Following is a summary of PUBLIC/PRIVATE Infrastructure required to be constructed or financially guaranteed for the above development. This listing is not necessarily a complete listing. During the SIA process and/or in the review of the construction drawings, if the DRC Chair determines that appropriate items and/or unforeseen items have not been included in the Infrastructure listing, the DRC Chair may include those items in the listing and related financial guarantees. Likewise, if the DRC Chair determines that appropriate or non-essential items can be deleted from the listing, those items may be deleted as well as the related portions of the financial guarantees. All such revisions require approval by the DRC Chair, the User Department and agreement. If such approvals are obtained, these revisions to the listing will be incorporated administratively. In addition, any unforeseen items which arise during construction which which are necessary to complete the project and which normally are the Subdivider's responsibility will be required as a condition of project acceptance and close out by the City.

SIA Sequence #	COA DRC Project #	Size	Type of Improvement	Location	From	To	Private Inspector	City Inspector	City Cmt Engineer
PUBLIC ROADWAY IMPROVEMENTS									
Phase 1									
		36' FC-FC PLUS HALF OF MEDIAN (9FT)	PAVED ROADWAY, STRIPING, CURB AND GUTTER, STREET LIGHTS (1/2 STREET IMPROVEMENT - 2120 LF APPROX)	CRICK AVE (NORTH SIDE OF ROW).	WATSON DR	HAWKING DR	/	/	/
		36' FC-FC PLUS HALF OF MEDIAN (9FT)	PAVED ROADWAY, STRIPING, CURB AND GUTTER, STREET LIGHTS, BULBS (APPROX. 1590 LF)	HAWKING DR	CRICK AVE	NORTH SCHOTT ENTRANCE	/	/	/
		28' FC-FC	PAVED ROADWAY, STRIPING, CURB AND GUTTER, STREET LIGHTS (APPROX 670LF)	SCHOTT WEST ENTRANCE ROAD	WATSON	WEST SCHOTT PROPERTY LINE	/	/	/
		TRAFFIC SIGNAL	TRAFFIC SIGNAL	CRICK AVE/UNIVERSITY BLVD.			/	/	/
Phase 2									
		36' FC-FC PLUS HALF OF MEDIAN	PAVED ROADWAY, STRIPING, CURB AND GUTTER, STREET LIGHTS, BULBS (APPROX. 780 LF)	HAWKING DR	NORTH SCHOTT ENTRANCE	NORTH SCHOTT PROPERTY LINE	/	/	/
PUBLIC SANITARY SEWER IMPROVEMENTS									
Phase 1									
		15" DIA	SANITARY SEWER LINE, AS RECD (APPROX 2150LF)	CRICK AVE	WATSON DR	HAWKING DR	/	/	/
Phase 2									
		12" DIA	SANITARY SEWER LINE, AS RECD (APPROX 1780LF)	HAWKING DR	CRICK AVE	NORTH SCHOTT PROPERTY LINE	/	/	/
PUBLIC WATERLINE IMPROVEMENTS									
Phase 1									
		12"-18" DIA	WATERLINE W/ NEC. VALVES, FHS, MJS & RJS (APPROX 2180 LF)	CRICK AVE	WATSON DR	HAWKING DR	/	/	/
		18" DIA	WATERLINE W/ NEC. VALVES, FHS, MJS & RJS (APPROX 1910 LF)	WATSON DR	CRICK AVE	EASTMAN AVE	/	/	/
		18" DIA	WATERLINE W/ NEC. VALVES, FHS, MJS & RJS (APPROX 470 LF)	EASTMAN AVE	WATSON DR	EXISTING 18" WATER DISTRIBUTION IN EASTMAN AVE	/	/	/

SIA  
Sequence #

COA DRG  
Project #

Size

Type of Improvement

Location

From

To

Private  
Inspector

City  
Inspector

City Cust  
Engineer

PUBLIC WATERLINE IMPROVEMENTS (CONTINUED)

Phase 2  
12" DIA  
WATERLINE W/ NEC. VALVES, FHS,  
M/S & RJS (APPROX 2410 LF)

HAWKING DR

CRICK AVE

NORTH SCHOTT  
PROPERTY LINE

PUBLIC/PRIVATE STORM DRAIN IMPROVEMENTS

18"-42" DIA-SD  
RCP W/ NEC. MHS. LATERALS &  
INLETS

CRICK AVE

SUMP

RETENTION POND

18"-24" DIA-SD

RCP W/ NEC. MHS. LATERALS &  
INLETS

HAWKING DR

SUMP

RETENTION POND

18"-24" DIA-SD

RCP W/ NEC. MHS. LATERALS &  
INLETS

SCHOTT ENTRANCE  
ROAD

SUMP

RETENTION POND

PRIVATE IMPROVEMENTS (NOT TO BE FINANCIALLY GUARANTEED)

RETENTION POND (SOUTH OF CRICK) FOR INFRASTRUCTURE AND OFFSITE OUTFALL - APPROX. 2.9 AC-FT WITHIN PUBLIC  
DRAINAGE EASEMENT AND COVENANT (PRIVATELY OWNED AND MAINTAINED)

RETENTION POND (NORTH OF SCHOTT ACCESS) FOR INFRASTRUCTURE AND OFFSITE OUTFALL - APPROX. 1.9 AC-FT WITHIN PUBLIC  
DRAINAGE EASEMENT AND COVENANT (PRIVATELY OWNED AND MAINTAINED)

AGENT/OWNER

DEVELOPMENT REVIEW BOARD MEMBER APPROVALS

MICHAEL J. BALASKOVITS  
PREPARED BY PRINT NAME

6/19/2008  
DATE

DRG CHAIR

DATE

PARKS & GENERAL SERVICES

DATE

BOHANNAN HUSTON INC.  
FIRM

TRANSPORTATION DEVELOPMENT

DATE

AMAFCA

DATE

SIGNATURE

UTILITY DEVELOPMENT

DATE

CITY ENGINEER

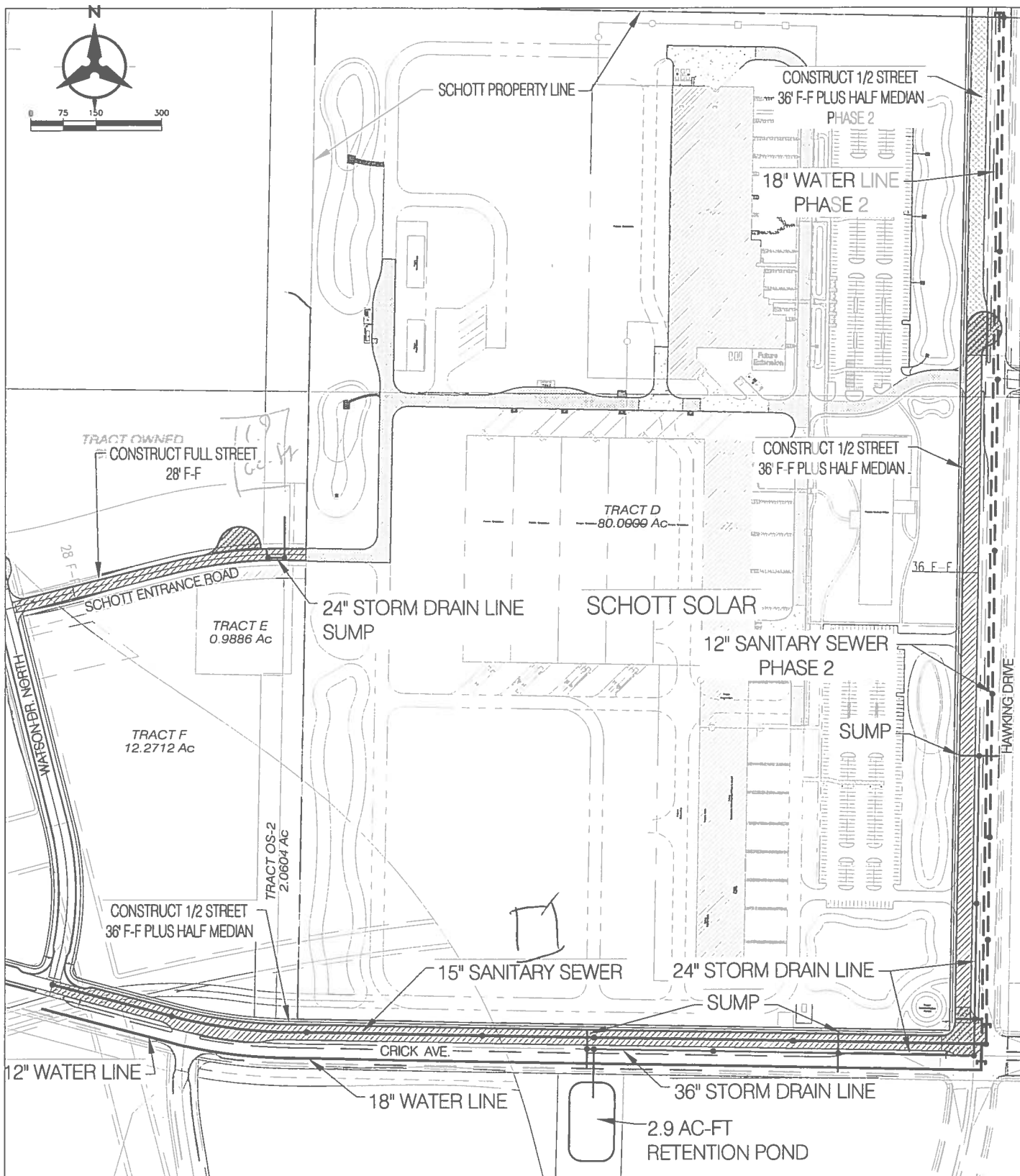
DATE

MAXIMUM TIME ALLOWED TO CONSTRUCT  
IMPROVEMENTS WITHOUT A DRB EXTENSION

DATE

DESIGN REVIEW COMMITTEE REVISIONS

REVISION	DATE	DRG CHAIR	USER DEPARTMENT	AGENT/OWNER



**TABLE 3**  
**Pond Sizing**

TABLE 3 Pond Sizing													
		This table is based on the DPM Section 22.2, Zone:2											
BASIN	Area	Area	Land Treatment Percentages				Q(100)	Q(100)	WT E	V(100) <sub>360</sub>	V(100) <sub>10day</sub>	V(100) <sub>10day</sub>	
ID	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac.)	(csf)	(inches)	(CF)	(CF)	(ACFT)	
CRICK POND B													
Crick Developed	107645	2.47	0.0%	0.0%	0.0%	100.0%	4.70	11.61	2.12	19017	33370	0.77	
Crick Undeveloped	108458	2.49	0.0%	0.0%	100.0%	0.0%	3.14	7.82	1.13	10213	10213	0.23	
Hawking Developed	89162	2.05	0.0%	0.0%	0.0%	100.0%	4.70	9.62	2.12	15752	27640	0.63	
Hawking Undeveloped	90786	2.08	0.0%	0.0%	100.0%	0.0%	3.14	6.54	1.13	8549	8549	0.20	
Undeveloped Off-site Basin	998862	22.93	100.0%	0.0%	0.0%	0.0%	1.56	35.77	0.53	44116	44116	1.01	
TOTAL	1,394,913	32.02						71.37		97,648	123,889	2.84	
								Total Interim Pond Required =		123,889			
								Total Interim Pond Provided =		129,303			
TEMPORARY INTERIM POND A													
Undeveloped Off-Site Basin	1679166	38.55	100.0%	0.0%	0.0%	0.0%	1.56	60.14	0.53	74163	74163	1.70	
Basin 4C (Access Road)	33330	0.77	0.0%	0.0%	0.0%	100.0%	4.70	3.60	2.12	5888	10332	0.24	
TOTAL	1,712,496	39.31						63.73		80,051	84,495	1.94	
								Total Interim Pond Required =		84,495			
								Total Interim Pond Provided =		87,976			

## Cherne, Curtis

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To: mulberry, jeff  
Subject: Schott review

Jeff,  
I have finished reviewing the DRAFT Schott plans. Comments will be listed per sheet:

100:  
The invert at the end section in the pond is 98.00. I figure you want 89.00.

At the first manhole upstream of the pond: is the invert in and out the same (89.86)?

The "Future concrete pads and Tanks" should be shown with a ghosted linetype if they are not to be built.

The gravel turnaround is in the pond.

101:  
There is a Note 5 on the furthest north rip rap cobble swale. Why aren't you using a sidewalk culvert like the other ones?

There is a Note 6 at the end of the rundown in the furthest north little pond. I figure you don't want a cmp end section on a rundown.

Do you want the "12'" note near a Note 6. Seems out of place.

Provide a pond hydrograph for the little ponds east of the building. If they over-top, the water is heading south.

102:  
Detail 2 has an "x" for the depth of rip-rap.

103:  
Part of Basin 7 is in Basin 5 (more of a DMP comment).

A couple of build notes in the northwest area are cut-off. The entire note should fit on one sheet.

One grate elevation is at 95.63 and surrounding grades are 98/99. Seems a little low.

Note 9. The curb cut detail is not on the sheet.

104:  
Looks like there is a road heading west onto the adjacent lot. You will need a x-lot access easement and a little water is going that way so you may as well throw in a x-lot drainage easement.

105:  
The "existing gravel road" isn't existing is it?

The "Future Storm Drain" should be in a ghosted linetype.

Are you building that thingy south of the "Future Storm Drain" note mentioned above?

Why is the road stub in the top-middle of the plan shown with that hatching? The same road north of the matchline is not hatched.

Curtis

**Cherne, Curtis**

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**To:** mulberry, jeff  
**Subject:** Schott revikew

Jeff,

Missed one comment:

In the inlet table in sheet DMP-Overall, Basin 1 has two inlets not just the one listed.

Curtis



June 2, 2008

Curtis Cherne, P.E.  
City of Albuquerque Hydrology  
600 Second Street NW, 2nd Floor West  
Albuquerque, NM 87102

Re: Schott Solar Phase 1 Grading and Drainage Plan

Dear Curtis:

This rough grading plan (stamp date 4/29/08) is being reviewed for grading permit approval (for storm drain installation), and we have reviewed your comment letter dated May 19, 2008. By June 11<sup>th</sup>, we plan to submit a fine grading plan showing in detail the remaining grading and drainage items not addressed in the rough grading plan. Outlined below, we have described how your review comments have been (or will be) addressed.

- How will runoff enter Pond 6D? The 5301 contour around the pond is at the same grade as the entrance road.  
Basin 7 has been added, and this is now a stand alone basin.
- What are the hatched/stone areas east of the buildings?  
Rip-rap rundowns for roof drainage, this will be detailed on the fine grading plans.
- North of the north Logistics building the area between the 99 contours will drain down to the 98 spot elevation at the building.  
An inlet will be added at the 97.5 spot elevation with the fine grading plans.
- Near the "Chemical Storage" area a retaining wall may be required or limits of grading may need to be changed because the flow line is at 99.50 and the existing grade is at 95.  
Tie back slopes will be added to the fine grading plans.
- There is a ponding area in the west entrance that will outfall into the ROW. This has to drain into the site.  
This area will outfall into the ponds via inlets and storm drain. These details will be shown on the fine grading plan.
- Will runoff at the north end of the south building run west at the 96 spot elevations?  
Future inlet to be provided with the fine grading plans. This is a dock area.
- Provide a build note for a rip-rap at Pond 2.  
A note for the concrete rundown will be on the fine grading plans.
- How will the area at the south end of the building drain (spot 96)?  
Future inlet to be provided with the fine grading plans. This is a dock area.

**Cherne, Curtis**

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**From:** Jeff Mulbery [jmulbery@bhinc.com]  
**Sent:** Wednesday, June 04, 2008 4:05 PM  
**To:** Cherne, Curtis  
**Subject:** FW: Schott DMPs  
**Attachments:** GN-C-DMP01\_060408.pdf; GN-C-DMP01\_PhaseOne\_060408.pdf

Curtis,

Per our phone conversation, here are the updated DMP's for your review. We plan to issue these officially (i.e. stamped and signed) on June 11 with the building permit review submittal. Please call to with questions, to discuss, or just to chat.

Thanks.

**Jeff Mulbery, P.E.**  
Bohannon Huston, Inc.  
voice: 823-1000  
fax: 798-7988

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**From:** Brian Warren  
**Sent:** Wednesday, June 04, 2008 4:00 PM  
**To:** Jeff Mulbery  
**Subject:** Schott DMPs

Here they are...

Thanks,

Brian Warren, E.I.

Community Development & Planning

**Bohannon ▲ Huston**

7500 Jefferson St. NE,  
Courtyard 1  
Albuquerque, NM 87109  
Phone: 505.823.1000  
Fax: 505.798.7988  
[bwarren@bhinc.com](mailto:bwarren@bhinc.com)

6/4/2008





## **Cherne, Curtis**

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**From:** Dourte, Richard H.  
**Sent:** Thursday, March 27, 2008 3:44 PM  
**To:** Topmiller, James (jtopmiller@bhiinc.com); Bingham, Brad L.; Rael, Jane E.; Cloud, Jack W.; Cherne, Curtis ; Dempsey, Harry C. (HDempsey@cabq.gov); Dineen, Richard W.; John Henderson (john.henderson2@ch2m.com); Montoya, Luz (lemontoya@cabq.gov); Sanders.Lee@ch2m.com; Weinberg, Neal P. (NWeinberg@cabq.gov)  
**Subject:** Next meeting for Schott?

John,

I understand that Schott is requesting a foundation permit. Please provide us the rough grades for the roadways so that we can verify the proposed finish floor elevation is correct. The grading plan has not yet been approved.

Should we have another to see where we are at? I believe that I was going to receive a time table for this project with milestones of City needed approval and submittals.

Thanks,

Richard



July 3, 2008

Curtis Cherne, P.E.  
City of Albuquerque Hydrology  
600 Second Street NW, 2nd Floor West  
Albuquerque, NM 87102

Re: Schott Solar Phase 1 Grading and Drainage Plan Comments

Dear Curtis:

We have reviewed your comments sent via email on Monday June 30, 2008, and we appreciate the time you have taken to informally review our plans. Enclosed is the Grading and Drainage Plans for building permit, as well as the site plans sheet for your information and reference. With this application for building permit, we have addressed your comments in the manner listed below.

Sheet 100:

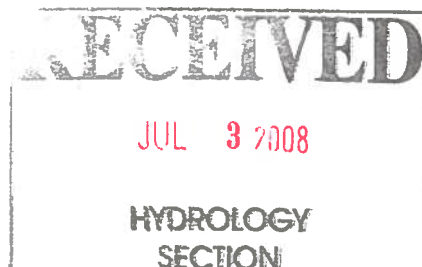
- ✓ • *The invert at the end section in the pond is 98.00. I figure you want 89.00.*  
This has been corrected to 89.00.
- ✓ • *At the first manhole upstream of the pond: is the invert in and out the same (89.86)?*  
This has been corrected.
- ✓ • *The "Future concrete pads and Tanks" should be shown with a ghosted line type if they are not to be built.*  
We have ghosted these lines.
- ✓ • *The gravel turnaround is in the pond.*  
The pond has been moved east.

Sheet 101:

- ✓ • *There is a Note 5 on the furthest north rip rap cobble swale. Why aren't you using a sidewalk culvert like the other ones?*  
The sidewalk does not extend this far north.
- ✓ • *There is a Note 6 at the end of the rundown in the furthest north little pond. I figure you don't want a cmp end section on a rundown.*  
This has been changed to Note 10, Rip Rap Blanket.
- ✓ • *Do you want the "12"" note near a Note 6. Seems out of place.*  
Yes, this refers to a 12" end section.
- ✓ • *Provide a pond hydrograph for the little ponds east of the building. If they over-top, the water is heading south.*  
This situation has been analyzed and revised. The pipe draining the small ponds has been resized to an 18". The AHYMO analysis is attached.

Sheet 102:

- *Detail 2 has an "x" for the depth of rip-rap.*  
This has been changed to 8".

**ENGINEERING** ▲  
**SPATIAL DATA** ▲

Sheet 103:

- *Part of Basin 7 is in Basin 5 (more of a DMP comment).*  
The boundary of Basin 7 has been adjusted and the calculations updated.
- *A couple of build notes in the northwest area are cut-off. The entire note should fit on one sheet.*  
The notes have been moved.
- *One grate elevation is at 95.63 and surrounding grades are 98/99. Seems a little low.*  
This grate elevation has been changed to 98.33.
- *Note 9. The curb cut detail is not on the sheet.*  
This has been corrected.

Sheet 104:

- *Looks like there is a road heading west onto the adjacent lot. You will need a x-lot access easement and a little water is going that way so you may as well throw in a x-lot drainage easement.*  
This is a temporary construction access road and it will be removed at the completion of construction.

Sheet 105:

- *The "existing gravel road" isn't existing is it?*  
This has been corrected.
- *The "Future Storm Drain" should be in a ghosted line type.*  
The line type has been changed to show future work.
- *Are you building that thingy south of the "Future Storm Drain" note mentioned above?*  
We are building a fire pump house south of that note.
- *Why is the road stub in the top-middle of the plan shown with that hatching? The same road north of the match line is not hatched.*  
This has been corrected.

DMP-Overall:

- *In the inlet table in sheet DMP-Overall, Basin 1 has two inlets not just the one listed.*  
The additional inlet has been noted on the plan and added to the calculations.

If you have any questions regarding this, please feel free to contact me.

Sincerely,



Jeffrey L. Mulbery, P.E.  
Project Manager  
Community Development and Planning

JLM/cc  
Enclosure

Analyzer Report

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Drainage Structure Analyzer

Culvert Hydraulic Analysis

Date: Thursday, July 03, 2008 11:05:00

=====

Input Data

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Shape	Circular
Material	RC C76-A
Roughness	0.013000
Entrance Edge	Groove end projecting
Number of Barrels	1
Length	230.55 ft
Slope	0.920%
Tailwater	1.68 ft
Inlet Control Equation	Regression
Size (W x T):	18.00 x 2.0000
Headwater	2.10 ft

Output Results

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Flow Rate	9.7 cfs
Control	Outlet
Capacity	10.1 cfs
Outlet Velocity	5.51 ft/s
Depth At Outlet	1.50 ft
Headwater	2.10 ft
Size (W x T):	18.00 x 2.0000



AHYMO PROGRAM (AHYMO\_97) - - Version: 1997.02c  
RUN DATE (MON/DAY/YR) = 07/03/2008  
START TIME (HR:MIN:SEC) = 10:52:29 USER NO.= AHYMO-S-9702c1BohanHu-AH  
INPUT FILE = Smlxl.hym

\*S AHYMO FILE FOR SCHOTT SOLAR TO ADDRESS COA COMMENTS  
\*S DEVELOPED CONDITIONS, 24HR, 100YR.

\*S  
\*S FILE:Smlxl.txt  
\*S REVISED: 07/01/08  
\*S

\*  
\* ASSUMPTIONS:  
\* 1. USED LAND TREATMENTS USED IN GRADING AND DRAINAGE PLAN  
\* 3. PRECIPITATION CALCULATED PER DPM FOR ZONE 2

\*S  
\* RAINFALL FOR MESA DEL SOL BASINS PER DPM TABLE A-2 AND A-3  
\* 100YR

RAINFALL TYPE=2 RAIN QUARTER=0.0 RAIN ONE=2.01  
RAIN SIX=2.35 RAIN DAY=2.75 DT=.05

COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.  
DT = .050000 HOURS END TIME = 24.000000 HOURS

.0000	.0024	.0049	.0075	.0102	.0130	.0158
.0188	.0219	.0252	.0286	.0321	.0358	.0397
.0439	.0482	.0529	.0578	.0631	.0689	.0751
.0836	.0930	.1201	.1842	.2944	.4649	.7103
1.0460	1.3107	1.4303	1.5302	1.6176	1.6959	1.7667
1.8313	1.8906	1.9452	1.9955	2.0421	2.0851	2.0946
2.1034	2.1115	2.1191	2.1262	2.1330	2.1394	2.1455
2.1513	2.1569	2.1622	2.1673	2.1723	2.1771	2.1817
2.1862	2.1905	2.1948	2.1989	2.2028	2.2067	2.2105
2.2142	2.2178	2.2213	2.2248	2.2282	2.2315	2.2347
2.2379	2.2410	2.2440	2.2470	2.2500	2.2529	2.2557
2.2585	2.2613	2.2640	2.2666	2.2693	2.2719	2.2744
2.2769	2.2794	2.2818	2.2842	2.2866	2.2889	2.2913
2.2935	2.2958	2.2980	2.3002	2.3024	2.3046	2.3067
2.3088	2.3109	2.3129	2.3150	2.3170	2.3190	2.3209
2.3229	2.3248	2.3267	2.3286	2.3305	2.3323	2.3342
2.3360	2.3378	2.3396	2.3414	2.3431	2.3449	2.3466
2.3483	2.3500	2.3517	2.3534	2.3551	2.3569	2.3586
2.3602	2.3619	2.3636	2.3653	2.3669	2.3686	2.3703
2.3719	2.3736	2.3752	2.3768	2.3785	2.3801	2.3817
2.3833	2.3849	2.3865	2.3881	2.3897	2.3913	2.3929
2.3944	2.3960	2.3976	2.3991	2.4007	2.4022	2.4038
2.4053	2.4068	2.4084	2.4099	2.4114	2.4129	2.4144
2.4159	2.4174	2.4189	2.4204	2.4219	2.4234	2.4248
2.4263	2.4278	2.4292	2.4307	2.4322	2.4336	2.4350
2.4365	2.4379	2.4394	2.4408	2.4422	2.4436	2.4450
2.4464	2.4478	2.4493	2.4506	2.4520	2.4534	2.4548
2.4562	2.4576	2.4589	2.4603	2.4617	2.4630	2.4644
2.4658	2.4671	2.4685	2.4698	2.4711	2.4725	2.4738
2.4751	2.4765	2.4778	2.4791	2.4804	2.4817	2.4830
2.4843	2.4856	2.4869	2.4882	2.4895	2.4908	2.4921
2.4934	2.4946	2.4959	2.4972	2.4984	2.4997	2.5010
2.5022	2.5035	2.5047	2.5060	2.5072	2.5085	2.5097
2.5109	2.5122	2.5134	2.5146	2.5158	2.5170	2.5183
2.5195	2.5207	2.5219	2.5231	2.5243	2.5255	2.5267
2.5279	2.5291	2.5303	2.5314	2.5326	2.5338	2.5350
2.5361	2.5373	2.5385	2.5396	2.5408	2.5420	2.5431
2.5443	2.5454	2.5466	2.5477	2.5488	2.5500	2.5511
2.5523	2.5534	2.5545	2.5556	2.5568	2.5579	2.5590
2.5601	2.5612	2.5623	2.5635	2.5646	2.5657	2.5668
2.5679	2.5690	2.5701	2.5711	2.5722	2.5733	2.5744
2.5755	2.5766	2.5776	2.5787	2.5798	2.5809	2.5819
2.5830	2.5841	2.5851	2.5862	2.5872	2.5883	2.5893
2.5904	2.5914	2.5925	2.5935	2.5946	2.5956	2.5966
2.5977	2.5987	2.5997	2.6008	2.6018	2.6028	2.6038
2.6049	2.6059	2.6069	2.6079	2.6089	2.6099	2.6109
2.6119	2.6129	2.6139	2.6149	2.6159	2.6169	2.6179
2.6189	2.6199	2.6209	2.6219	2.6229	2.6238	2.6248
2.6258	2.6268	2.6278	2.6287	2.6297	2.6307	2.6316
2.6326	2.6336	2.6345	2.6355	2.6364	2.6374	2.6384
2.6393	2.6403	2.6412	2.6421	2.6431	2.6440	2.6450
2.6459	2.6469	2.6478	2.6487	2.6497	2.6506	2.6515
2.6524	2.6534	2.6543	2.6552	2.6561	2.6571	2.6580
2.6589	2.6598	2.6607	2.6616	2.6625	2.6634	2.6644
2.6653	2.6662	2.6671	2.6680	2.6689	2.6698	2.6707
2.6715	2.6724	2.6733	2.6742	2.6751	2.6760	2.6769
2.6778	2.6786	2.6795	2.6804	2.6813	2.6821	2.6830
2.6839	2.6848	2.6856	2.6865	2.6874	2.6882	2.6891
2.6900	2.6908	2.6917	2.6925	2.6934	2.6942	2.6951
2.6959	2.6968	2.6976	2.6985	2.6993	2.7002	2.7010
2.7019	2.7027	2.7035	2.7044	2.7052	2.7061	2.7069
2.7077	2.7085	2.7094	2.7102	2.7110	2.7119	2.7127
2.7135	2.7143	2.7151	2.7160	2.7168	2.7176	2.7184
2.7192	2.7200	2.7209	2.7217	2.7225	2.7233	2.7241
2.7249	2.7257	2.7265	2.7273	2.7281	2.7289	2.7297
2.7305	2.7313	2.7321	2.7329	2.7337	2.7344	2.7352
2.7360	2.7368	2.7376	2.7384	2.7392	2.7399	2.7407

FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS
CFS	.000	.0	5.000	.1	10.000	.1	15.000	.1	20.000
.0	.500	.0	5.500	.1	10.500	.1	15.500	.0	20.500
.0	1.000	.0	6.000	.1	11.000	.1	16.000	.0	21.000
.0	1.500	11.5	6.500	.1	11.500	.1	16.500	.0	21.500
.0	2.000	2.8	7.000	.1	12.000	.1	17.000	.0	22.000
.0	2.500	.4	7.500	.1	12.500	.1	17.500	.0	22.500

.0	3.000	.1	8.000	.1	13.000	.1	18.000	.0	23.000
.0	3.500	.1	8.500	.1	13.500	.1	18.500	.0	23.500
.0	4.000	.1	9.000	.1	14.000	.1	19.000	.0	24.000
.0	4.500	.1	9.500	.1	14.500	.1	19.500	.0	24.500

RUNOFF VOLUME = 2.34321 INCHES = .5124 ACRE-FEET  
 PEAK DISCHARGE RATE = 11.54 CFS AT 1.500 HOURS BASIN AREA = .0041 SQ. MI.

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 \*S DRAINAGE BASIN 6G

COMPUTE NM HYD ID=6 HYD NO=6G AREA=0.00334 SQ MI  
 PER A=0 PER B=10 PER C=0 PER D=90  
 TP=0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
 UNIT PEAK = 11.895 CFS UNIT VOLUME = .9983 B = 526.28 P60 = 2.0100  
 AREA = .003006 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .131790HR TP = .133000HR K/TP RATIO = .990905 SHAPE CONSTANT, N = 3.563124  
 UNIT PEAK = .81593 CFS UNIT VOLUME = .9844 B = 324.91 P60 = 2.0100  
 AREA = .000334 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR  
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=6 CODE=10

#### HYDROGRAPH FROM AREA 6G

FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS
.0	.000	.0	5.000	.1	10.000	.1	15.000	.0	20.000
.0	.500	.0	5.500	.1	10.500	.1	15.500	.0	20.500
.0	1.000	.0	6.000	.1	11.000	.0	16.000	.0	21.000
.0	1.500	9.4	6.500	.1	11.500	.0	16.500	.0	21.500
.0	2.000	2.3	7.000	.1	12.000	.0	17.000	.0	22.000
.0	2.500	.3	7.500	.1	12.500	.0	17.500	.0	22.500
.0	3.000	.1	8.000	.1	13.000	.0	18.000	.0	23.000
.0	3.500	.1	8.500	.1	13.500	.0	18.500	.0	23.500
.0	4.000	.1	9.000	.1	14.000	.0	19.000	.0	24.000
.0	4.500	.1	9.500	.1	14.500	.0	19.500	.0	24.500

RUNOFF VOLUME = 2.34321 INCHES = .4174 ACRE-FEET  
 PEAK DISCHARGE RATE = 9.40 CFS AT 1.500 HOURS BASIN AREA = .0033 SQ. MI.

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\*S DIVIDE BASIN 6G

DIVIDE HYD ID=6 PER=-33 ID I=7 HYD=6G  
 ID II=8 HYD=6G

PRINT HYD ID=7 CODE=1

#### HYDROGRAPH FROM AREA 6G

RUNOFF VOLUME = 2.34312 INCHES = .1377 ACRE-FEET  
 PEAK DISCHARGE RATE = 3.10 CFS AT 1.500 HOURS BASIN AREA = .0011 SQ. MI.

PRINT HYD ID=8 CODE=1

#### HYDROGRAPH FROM AREA 6G

RUNOFF VOLUME = 2.34312 INCHES = .2796 ACRE-FEET  
 PEAK DISCHARGE RATE = 6.30 CFS AT 1.500 HOURS BASIN AREA = .0022 SQ. MI.

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*S  DIVIDE BASIN 6G AGAIN
DIVIDE HYD          ID=8 PER=-50  ID I=9 HYD=IC.1200
                   ID II=10 HYD=IC.1200
PRINT HYD          ID=9 CODE=1

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HYDROGRAPH FROM AREA IC.1200

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RUNOFF VOLUME =      2.34306 INCHES      =      .1398 ACRE-FEET
PEAK DISCHARGE RATE =      3.15 CFS AT 1.500 HOURS BASIN AREA = .0011 SQ. MI.

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PRINT HYD          ID=10 CODE=1

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HYDROGRAPH FROM AREA IC.1200

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RUNOFF VOLUME =      2.34306 INCHES      =      .1398 ACRE-FEET
PEAK DISCHARGE RATE =      3.15 CFS AT 1.500 HOURS BASIN AREA = .0011 SQ. MI.

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*S          ADDING 6F TO 1/36G
*
ADD HYD          ID=11 HYD=TO6C  ID I=7  ID II=1
PRINT HYD       ID=11 CODE=1

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HYDROGRAPH FROM AREA TO6C

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RUNOFF VOLUME =      2.34301 INCHES      =      .4226 ACRE-FEET
PEAK DISCHARGE RATE =      9.52 CFS AT 1.500 HOURS BASIN AREA = .0034 SQ. MI.

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*S  ROUTE 6F AND 6G THRU POND 6C
ROUTE RESERVOIR  ID=21 HYD=P6C  INFLOW ID=11  CODE=10
                  OUTFLOW      STORAGE      ELEV
                  (CFS)         (AC-FT)      (FT)
                  0.001         0.0000      5295.9
                  0.002         0.0013      5296.0
                  0.003         0.0503      5297.0
                  2.763         0.1196      5298.0
                  4.786         0.2105      5299.0

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\* \* \* \* \*

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5295.80	-.001	.00
.50	.00	5295.90	.000	.00
1.00	.00	5295.90	.000	.00
1.50	9.52	5297.73	.101	2.02
2.00	2.30	5298.31	.148	3.39
2.50	.30	5297.49	.084	1.35
3.00	.10	5297.14	.060	.38
3.50	.07	5297.05	.054	.13
4.00	.06	5297.03	.052	.07
4.50	.05	5297.02	.052	.06
5.00	.05	5297.02	.052	.05
5.50	.06	5297.02	.052	.06
6.00	.07	5297.02	.052	.06
6.50	.07	5297.02	.052	.07
7.00	.06	5297.02	.052	.06
7.50	.06	5297.02	.052	.06
8.00	.06	5297.02	.052	.06
8.50	.06	5297.02	.052	.06
9.00	.06	5297.02	.052	.06
9.50	.05	5297.02	.052	.06
10.00	.05	5297.02	.052	.05
10.50	.05	5297.02	.052	.05
11.00	.05	5297.02	.052	.05
11.50	.05	5297.02	.051	.05
12.00	.05	5297.02	.051	.05
12.50	.05	5297.02	.051	.05
13.00	.05	5297.02	.051	.05
13.50	.04	5297.02	.051	.05
14.00	.04	5297.02	.051	.04
14.50	.04	5297.01	.051	.04
15.00	.04	5297.01	.051	.04
15.50	.04	5297.01	.051	.04
16.00	.04	5297.01	.051	.04

16.50	.04	5297.01	.051	.04
17.00	.04	5297.01	.051	.04
17.50	.04	5297.01	.051	.04
18.00	.04	5297.01	.051	.04
18.50	.04	5297.01	.051	.04
19.00	.04	5297.01	.051	.04
19.50	.04	5297.01	.051	.04
20.00	.03	5297.01	.051	.03
20.50	.03	5297.01	.051	.03
21.00	.03	5297.01	.051	.03
21.50	.03	5297.01	.051	.03
22.00	.03	5297.01	.051	.03
22.50	.03	5297.01	.051	.03
23.00	.03	5297.01	.051	.03
23.50	.03	5297.01	.051	.03
24.00	.03	5297.01	.051	.03
24.50	.00	5297.00	.050	.01
25.00	.00	5297.00	.050	.00

PEAK DISCHARGE = 3.679 CFS - PEAK OCCURS AT HOUR 1.75  
 MAXIMUM WATER SURFACE ELEVATION = 5298.453  
 MAXIMUM STORAGE = .1608 AC-FT INCREMENTAL TIME= .050000HRS

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\*S\*\*\*\*\* ROUTE 6C THRU 30' OF 12" 'RCP' PIPE  
 COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=-1  
 SLP=0.0033  
 DIA=12 INCHES N=0.013

RATING CURVE PIPE SECTION 1.0			
WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.05	.02	.01	.44
.10	.04	.05	.61
.16	.08	.11	.73
.21	.12	.19	.81
.26	.16	.30	.88
.31	.21	.43	.93
.36	.26	.58	.96
.42	.31	.74	.99
.47	.36	.92	1.00
.52	.41	1.10	1.00
.57	.47	1.28	1.00
.63	.52	1.46	1.00
.68	.57	1.64	1.00
.73	.61	1.81	1.00
.78	.66	1.95	1.00
.83	.70	2.08	1.00
.89	.74	2.17	1.00
.94	.77	2.20	1.00
1.00	.79	2.20	1.00

ROUTE MCUNGE ID=31 HYD=SD61 INFLOW ID=21 DT=0HR L=30  
 NS=0 SLOPE=.0033 MATCODE=0 REGCODE=0 CCODE=0  
 ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED  
 PRINT HYD ID=31 CODE=10

HYDROGRAPH FROM AREA SD61

FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS
.0	.000	.0	6.000	.1	12.000	.0	18.000	.0	24.000
.0	.500	.0	6.500	.1	12.500	.0	18.500	.0	24.500
.0	1.000	.0	7.000	.1	13.000	.0	19.000	.0	25.000
.0	1.500	2.0	7.500	.1	13.500	.0	19.500	.0	25.500
.0	2.000	3.4	8.000	.1	14.000	.0	20.000	.0	26.000
.0	2.500	1.3	8.500	.1	14.500	.0	20.500	.0	26.500
.0	3.000	.4	9.000	.1	15.000	.0	21.000	.0	27.000
.0	3.500	.1	9.500	.1	15.500	.0	21.500	.0	27.500
.0	4.000	.1	10.000	.1	16.000	.0	22.000	.0	28.000
.0	4.500	.1	10.500	.1	16.500	.0	22.500	.0	28.500
.0	5.000	.1	11.000	.1	17.000	.0	23.000	.0	29.000
.0	5.500	.1	11.500	.0	17.500	.0	23.500	.0	29.500

RUNOFF VOLUME = 2.07160 INCHES = .3737 ACRE-FEET  
 PEAK DISCHARGE RATE = 3.68 CFS AT 1.750 HOURS BASIN AREA = .0034 SQ. MI.

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 \*S ADDING SD61 TO 1/36G  
 \*  
 ADD HYD ID=12 HYD=T06B ID I=9 ID II=31  
 PRINT HYD ID=12 CODE=1

HYDROGRAPH FROM AREA T06B

RUNOFF VOLUME = 2.13904 INCHES = .5135 ACRE-FEET  
 PEAK DISCHARGE RATE = 5.69 CFS AT 1.550 HOURS BASIN AREA = .0045 SQ. MI.

\*S  
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 \*S ROUTE SD61A DN 1/36G THRU POND 6B  
 ROUTE RESERVOIR ID=22 HYD=P6B INFLOW ID=12 CODE=10  
 OUTFLOW STORAGE ELEV  
 (CFS) (AC-FT) (FT)  
 0.001 0.0000 5295.9  
 0.002 0.0016 5296.0  
 0.003 0.0610 5297.0  
 3.269 0.1446 5298.0  
 5.095 0.2537 5299.0

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5295.80	-.002	.00
.50	.00	5295.90	.000	.00
1.00	.00	5295.90	.000	.00
1.50	5.17	5296.70	.043	.00
2.00	4.15	5298.10	.155	3.45
2.50	1.45	5297.85	.132	2.76
3.00	.41	5297.34	.089	1.10
3.50	.16	5297.12	.071	.40
4.00	.09	5297.05	.065	.17
4.50	.07	5297.03	.063	.10
5.00	.07	5297.02	.063	.08
5.50	.08	5297.02	.063	.08
6.00	.08	5297.02	.063	.08
6.50	.09	5297.03	.063	.09
7.00	.09	5297.03	.063	.09
7.50	.08	5297.02	.063	.08
8.00	.08	5297.02	.063	.08
8.50	.08	5297.02	.063	.08
9.00	.08	5297.02	.063	.08
9.50	.07	5297.02	.063	.07
10.00	.07	5297.02	.063	.07
10.50	.07	5297.02	.063	.07
11.00	.07	5297.02	.063	.07
11.50	.07	5297.02	.063	.07
12.00	.06	5297.02	.063	.07
12.50	.06	5297.02	.063	.06
13.00	.06	5297.02	.063	.06
13.50	.06	5297.02	.062	.06
14.00	.06	5297.02	.062	.06
14.50	.06	5297.02	.062	.06
15.00	.06	5297.02	.062	.06
15.50	.05	5297.02	.062	.06
16.00	.05	5297.02	.062	.05
16.50	.05	5297.02	.062	.05
17.00	.05	5297.02	.062	.05
17.50	.05	5297.01	.062	.05
18.00	.05	5297.01	.062	.05
18.50	.05	5297.01	.062	.05
19.00	.05	5297.01	.062	.05
19.50	.05	5297.01	.062	.05
20.00	.05	5297.01	.062	.05
20.50	.05	5297.01	.062	.05
21.00	.04	5297.01	.062	.04
21.50	.04	5297.01	.062	.04
22.00	.04	5297.01	.062	.04
22.50	.04	5297.01	.062	.04
23.00	.04	5297.01	.062	.04
23.50	.04	5297.01	.062	.04
24.00	.04	5297.01	.062	.04
24.50	.01	5297.01	.062	.02
25.00	.00	5297.00	.061	.01
25.50	.00	5297.00	.061	.00

PEAK DISCHARGE = 3.513 CFS - PEAK OCCURS AT HOUR 2.15  
 MAXIMUM WATER SURFACE ELEVATION = 5298.134  
 MAXIMUM STORAGE = .1592 AC-FT INCREMENTAL TIME= .050000HRS

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\*S\*\*\*\*\* ROUTE 6B THRU 32' OF 12" 'RCP' PIPE  
 COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=-1  
 SLP=0.0031  
 DIA=12 INCHES N=0.013

RATING CURVE PIPE SECTION 1.0			
WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.05	.02	.01	.44
.10	.04	.05	.61
.16	.08	.11	.73
.21	.12	.19	.81
.26	.16	.29	.88
.31	.21	.42	.93
.36	.26	.56	.96
.42	.31	.72	.99
.47	.36	.89	1.00
.52	.41	1.06	1.00
.57	.47	1.24	1.00
.63	.52	1.42	1.00
.68	.57	1.59	1.00
.73	.61	1.75	1.00
.78	.66	1.89	1.00
.83	.70	2.01	1.00
.89	.74	2.10	1.00
.94	.77	2.13	1.00
1.00	.79	2.13	1.00

ROUTE MCUNGE ID=32 HYD=SD62 INFLOW ID=22 DT=0HR L=32  
 NS=0 SLOPE=.0031 MATCODE=0 REGCODE=0 CCODE=0  
 ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED  
 PRINT HYD ID=32 CODE=10

HYDROGRAPH FROM AREA SD62

FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS
.0	.000	.0	6.000	.1	12.000	.1	18.000	.1	24.000
.0	.500	.0	6.500	.1	12.500	.1	18.500	.0	24.500
.0	1.000	.0	7.000	.1	13.000	.1	19.000	.0	25.000
.0	1.500	.0	7.500	.1	13.500	.1	19.500	.0	25.500
.0	2.000	3.5	8.000	.1	14.000	.1	20.000	.0	26.000
.0	2.500	2.8	8.500	.1	14.500	.1	20.500	.0	26.500
.0	3.000	1.1	9.000	.1	15.000	.1	21.000	.0	27.000
.0	3.500	.4	9.500	.1	15.500	.1	21.500	.0	27.500
.0	4.000	.2	10.000	.1	16.000	.1	22.000	.0	28.000
.0	4.500	.1	10.500	.1	16.500	.1	22.500	.0	28.500
.0	5.000	.1	11.000	.1	17.000	.1	23.000	.0	29.000
.0	5.500	.1	11.500	.1	17.500	.1	23.500	.0	29.500

RUNOFF VOLUME = 1.88495 INCHES = .4525 ACRE-FEET  
 PEAK DISCHARGE RATE = 3.51 CFS AT 2.150 HOURS BASIN AREA = .0045 SQ. MI.

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\*S ADDING 6E TO SD62  
 \*  
 ADD HYD ID=3 HYD=TO6A ID I=2 ID II=32  
 PRINT HYD ID=3 CODE=1

HYDROGRAPH FROM AREA TO6A

RUNOFF VOLUME = 2.10337 INCHES = .9649 ACRE-FEET  
 PEAK DISCHARGE RATE = 11.54 CFS AT 1.500 HOURS BASIN AREA = .0086 SQ. MI.

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\*S ADDING SD62 AND 6E TO 1/36G  
 \*  
 ADD HYD ID=13 HYD=TO6B ID I=10 ID II=3  
 PRINT HYD ID=13 CODE=1

## HYDROGRAPH FROM AREA TO6B

RUNOFF VOLUME = 2.13093 INCHES = 1.1047 ACRE-FEET  
 PEAK DISCHARGE RATE = 14.69 CFS AT 1.500 HOURS BASIN AREA = .0097 SQ. MI.

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\*S ROUTE ABOVE THRU POND 6A

ROUTE RESERVOIR	ID=23 HYD=P6A OUTFLOW (CFS)	INFLOW ID=13 STORAGE (AC-FT)	CODE=10 ELEV (FT)
	0.000	0.0000	5296.0
	1.966	0.0065	5297.0
	9.009	0.0977	5298.0
	12.58	0.2164	5299.0

\* \* \* \* \*

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
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.00	.00	5296.00	.000	.00
.50	.00	5296.00	.000	.00
1.00	.00	5296.00	.000	.00
1.50	14.69	5297.87	.086	8.12
2.00	6.99	5297.88	.087	8.18
2.50	3.23	5297.31	.035	4.16
3.00	1.26	5296.75	.005	1.47
3.50	.50	5296.27	.002	.54
4.00	.25	5296.13	.001	.26
4.50	.18	5296.09	.001	.18
5.00	.16	5296.08	.001	.16
5.50	.17	5296.08	.001	.17
6.00	.18	5296.09	.001	.18
6.50	.19	5296.10	.001	.19
7.00	.19	5296.09	.001	.19
7.50	.18	5296.09	.001	.18
8.00	.17	5296.09	.001	.17
8.50	.17	5296.09	.001	.17
9.00	.16	5296.08	.001	.16
9.50	.16	5296.08	.001	.16
10.00	.15	5296.08	.001	.16
10.50	.15	5296.08	.000	.15
11.00	.15	5296.07	.000	.15
11.50	.14	5296.07	.000	.14
12.00	.14	5296.07	.000	.14
12.50	.13	5296.07	.000	.14
13.00	.13	5296.07	.000	.13
13.50	.13	5296.07	.000	.13
14.00	.13	5296.06	.000	.13
14.50	.12	5296.06	.000	.12
15.00	.12	5296.06	.000	.12
15.50	.12	5296.06	.000	.12
16.00	.12	5296.06	.000	.12
16.50	.11	5296.06	.000	.11
17.00	.11	5296.06	.000	.11
17.50	.11	5296.06	.000	.11
18.00	.11	5296.05	.000	.11
18.50	.11	5296.05	.000	.11
19.00	.10	5296.05	.000	.10
19.50	.10	5296.05	.000	.10
20.00	.10	5296.05	.000	.10
20.50	.10	5296.05	.000	.10
21.00	.10	5296.05	.000	.10
21.50	.09	5296.05	.000	.09
22.00	.09	5296.05	.000	.09
22.50	.09	5296.05	.000	.09
23.00	.09	5296.05	.000	.09
23.50	.09	5296.04	.000	.09
24.00	.09	5296.04	.000	.09
24.50	.03	5296.01	.000	.03
25.00	.01	5296.00	.000	.01
25.50	.00	5296.00	.000	.00

PEAK DISCHARGE = 9.680 CFS - PEAK OCCURS AT HOUR 1.65

MAXIMUM WATER SURFACE ELEVATION = 5298.188

MAXIMUM STORAGE = .1200 AC-FT INCREMENTAL TIME= .050000HRS

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\*S\*\*\*\* ROUTE 6B THRU 230.55' OF 18" 'RCP' PIPE

COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=-1

SLP=0.0092

DIA=18 INCHES N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
--------------------------	-----------------------	---------------------	--------------------



.00	.00	.00	.00
.08	.04	.05	.67
.16	.10	.23	.92
.23	.18	.53	1.09
.31	.27	.96	1.22
.39	.37	1.50	1.32
.47	.47	2.14	1.39
.55	.58	2.86	1.44
.63	.70	3.66	1.48
.70	.81	4.51	1.50
.78	.93	5.40	1.50
.86	1.05	6.30	1.50
.94	1.16	7.20	1.50
1.02	1.27	8.07	1.50
1.09	1.38	8.89	1.50
1.17	1.48	9.62	1.50
1.25	1.57	10.23	1.50
1.33	1.66	10.66	1.50
1.41	1.72	10.84	1.50
1.50	1.77	10.84	1.50

ROUTE MCUNGE ID=33 HYD=SD63 INFLOW ID=23 DT=0HR L=230.55  
 NS=0 SLOPE=.0092 MATCODE=0 REGCODE=0 CCODE=0  
 ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED  
 PRINT HYD ID=33 CODE=10

HYDROGRAPH FROM AREA SD63

FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS
CFS	.000	.0	6.000	.2	12.000	.1	18.000	.1	24.000
.1	.500	.0	6.500	.2	12.500	.1	18.500	.1	24.500
.0	1.000	.0	7.000	.2	13.000	.1	19.000	.1	25.000
.0	1.500	8.1	7.500	.2	13.500	.1	19.500	.1	25.500
.0	2.000	8.2	8.000	.2	14.000	.1	20.000	.1	26.000
.0	2.500	4.2	8.500	.2	14.500	.1	20.500	.1	26.500
.0	3.000	1.5	9.000	.2	15.000	.1	21.000	.1	27.000
.0	3.500	.5	9.500	.2	15.500	.1	21.500	.1	27.500
.0	4.000	.3	10.000	.2	16.000	.1	22.000	.1	28.000
.0	4.500	.2	10.500	.2	16.500	.1	22.500	.1	28.500
.0	5.000	.2	11.000	.1	17.000	.1	23.000	.1	29.000
.0	5.500	.2	11.500	.1	17.500	.1	23.500	.1	29.500

RUNOFF VOLUME = 2.13091 INCHES = 1.1047 ACRE-FEET  
 PEAK DISCHARGE RATE = 9.68 CFS AT 1.650 HOURS BASIN AREA = .0097 SQ. MI.

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\*S DRAINAGE BASIN 6ABCD  
 COMPUTE NM HYD ID=4 HYD NO=6ABCD AREA=0.006470 SQ MI  
 PER A=0 PER B=10 PER C=0 PER D=90  
 TP=0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
 UNIT PEAK = 23.041 CFS UNIT VOLUME = .9986 B = 526.28 P60 = 2.0100  
 AREA = .005823 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .131790HR TP = .133000HR K/TP RATIO = .990905 SHAPE CONSTANT, N = 3.563124  
 UNIT PEAK = 1.5806 CFS UNIT VOLUME = .9922 B = 324.91 P60 = 2.0100  
 AREA = .000647 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR  
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=4 CODE=10

HYDROGRAPH FROM AREA 6ABCD

FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS
CFS	.000	.0	5.000	.1	10.000	.1	15.000	.1	20.000
.1	.500	.0	5.500	.1	10.500	.1	15.500	.1	20.500
.1	1.000	.0	6.000	.1	11.000	.1	16.000	.1	21.000

.1	1.500	18.2	6.500	.1	11.500	.1	16.500	.1	21.500
.1	2.000	4.4	7.000	.1	12.000	.1	17.000	.1	22.000
.1	2.500	.6	7.500	.1	12.500	.1	17.500	.1	22.500
.1	3.000	.2	8.000	.1	13.000	.1	18.000	.1	23.000
.1	3.500	.1	8.500	.1	13.500	.1	18.500	.1	23.500
.1	4.000	.1	9.000	.1	14.000	.1	19.000	.1	24.000
.1	4.500	.1	9.500	.1	14.500	.1	19.500	.1	24.500
.0									

RUNOFF VOLUME = 2.34321 INCHES = .8086 ACRE-FEET  
 PEAK DISCHARGE RATE = 18.20 CFS AT 1.500 HOURS BASIN AREA = .0065 SQ. MI.

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 \*S ADDING 6ABCD TO SD63  
 \*  
 ADD HYD ID=5 HYD=TO6 ID I=4 ID II=33  
 PRINT HYD ID=5 CODE=1

HYDROGRAPH FROM AREA TO6

RUNOFF VOLUME = 2.21573 INCHES = 1.9132 ACRE-FEET  
 PEAK DISCHARGE RATE = 26.31 CFS AT 1.500 HOURS BASIN AREA = .0162 SQ. MI.

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 \*S ROUTE ABOVE THRU POND 6  
 ROUTE RESERVOIR ID=24 HYD=P6 INFLOW ID=5 CODE=10  
 OUTFLOW STORAGE ELEV  
 (CFS) (AC-FT) (FT)  
 0.00 0.0000 5294.0  
 0.01 0.5880 5295.0  
 0.02 1.2941 5296.0  
 0.03 2.1208 5297.0  
 0.04 3.0702 5298.0  
 0.05 4.1447 5299.0

\* \* \* \* \*

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5294.00	.000	.00
.50	.00	5294.00	.000	.00
1.00	.00	5294.00	.000	.00
1.50	26.31	5294.49	.288	.00
2.00	12.57	5295.62	1.027	.02
2.50	4.74	5296.07	1.349	.02
3.00	1.67	5296.22	1.480	.02
3.50	.66	5296.28	1.522	.02
4.00	.37	5296.30	1.541	.02
4.50	.28	5296.31	1.553	.02
5.00	.27	5296.33	1.563	.02
5.50	.28	5296.34	1.574	.02
6.00	.31	5296.35	1.585	.02
6.50	.31	5296.37	1.597	.02
7.00	.31	5296.38	1.609	.02
7.50	.30	5296.39	1.620	.02
8.00	.29	5296.41	1.631	.02
8.50	.28	5296.42	1.642	.02
9.00	.27	5296.43	1.653	.02
9.50	.26	5296.45	1.663	.02
10.00	.26	5296.46	1.672	.02
10.50	.25	5296.47	1.682	.02
11.00	.24	5296.48	1.691	.02
11.50	.24	5296.49	1.700	.02
12.00	.23	5296.50	1.708	.03
12.50	.22	5296.51	1.717	.03
13.00	.22	5296.52	1.725	.03
13.50	.21	5296.53	1.733	.03
14.00	.21	5296.54	1.741	.03
14.50	.20	5296.55	1.748	.03
15.00	.20	5296.56	1.755	.03
15.50	.20	5296.57	1.763	.03
16.00	.19	5296.58	1.769	.03
16.50	.19	5296.58	1.776	.03
17.00	.18	5296.59	1.783	.03
17.50	.18	5296.60	1.789	.03
18.00	.18	5296.61	1.796	.03

18.50	.18	5296.61	1.802	.03
19.00	.17	5296.62	1.808	.03
19.50	.17	5296.63	1.814	.03
20.00	.17	5296.64	1.820	.03
20.50	.16	5296.64	1.825	.03
21.00	.16	5296.65	1.831	.03
21.50	.16	5296.66	1.836	.03
22.00	.16	5296.66	1.842	.03
22.50	.15	5296.67	1.847	.03
23.00	.15	5296.68	1.852	.03
23.50	.15	5296.68	1.857	.03
24.00	.14	5296.69	1.862	.03
24.50	.03	5296.69	1.864	.03
25.00	.01	5296.69	1.864	.03
25.50	.00	5296.69	1.863	.03
26.00	.00	5296.69	1.862	.03
26.50	.00	5296.69	1.861	.03
27.00	.00	5296.68	1.860	.03
27.50	.00	5296.68	1.859	.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
28.00	.00	5296.68	1.858	.03
28.50	.00	5296.68	1.857	.03
29.00	.00	5296.68	1.856	.03
29.50	.00	5296.68	1.855	.03

PEAK DISCHARGE = .027 CFS - PEAK OCCURS AT HOUR 24.55  
 MAXIMUM WATER SURFACE ELEVATION = 5296.689  
 MAXIMUM STORAGE = 1.8642 AC-FT INCREMENTAL TIME= .050000HRS

PRINT HYD ID=24 CODE=10

# HYDROGRAPH FROM AREA P6

FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS
CFS	.000	.0	6.000	.0	12.000	.0	18.000	.0	24.000
.0	.500	.0	6.500	.0	12.500	.0	18.500	.0	24.500
.0	1.000	.0	7.000	.0	13.000	.0	19.000	.0	25.000
.0	1.500	.0	7.500	.0	13.500	.0	19.500	.0	25.500
.0	2.000	.0	8.000	.0	14.000	.0	20.000	.0	26.000
.0	2.500	.0	8.500	.0	14.500	.0	20.500	.0	26.500
.0	3.000	.0	9.000	.0	15.000	.0	21.000	.0	27.000
.0	3.500	.0	9.500	.0	15.500	.0	21.500	.0	27.500
.0	4.000	.0	10.000	.0	16.000	.0	22.000	.0	28.000
.0	4.500	.0	10.500	.0	16.500	.0	22.500	.0	28.500
.0	5.000	.0	11.000	.0	17.000	.0	23.000	.0	29.000
.0	5.500	.0	11.500	.0	17.500	.0	23.500	.0	29.500

RUNOFF VOLUME = .06836 INCHES = .0590 ACRE-FEET  
 PEAK DISCHARGE RATE = .03 CFS AT 24.550 HOURS BASIN AREA = .0162 SQ. MI.

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 FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 10:52:29