CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services

March 20, 2015

Brian Warren, P.E.
Bohannan Huston
Courtyard 1
7500 Jefferson St., NE
Albuquerque, NM 87109

Re: NOVA Entrance (Formerly Schott Solar)
5201 Hawking Dr. SE
Traffic Circulation Layout
Engineer's/Architect's Stamp dated 3-5-15 (Q16-DA5000)

Dear Mr. Warren,

The TCL submittal received 3-9-15 is approved for Building Permit. A copy of the stamped and signed plan will be needed for each of the building permit plans. Please keep the original to be used for certification of the site for final C.O. for Transportation.

When the site construction is completed and a Certificate of Occupancy (C.O.) is requested, use the original City stamped approved TCL for certification. Redline any minor changes and adjustments that were made in the field. A NM registered architect or engineer must stamp, sign, and date the certification TCL along with indicating that the development was built in "substantial compliance" with the TCL. Submit this certification TCL with a completed Drainage and Transportation Information Sheet to front counter personnel for log in and evaluation by Transportation.

Once verification of certification is completed and approved, notification will be made to Building Safety to issue Final C.O. To confirm that a final C.O. has been issued, call Building Safety at 924-3306.

Sincerely,

Racquel M. Michel, P.E.
Senior Engineer, Planning Dept.
Development Review Services

C: CO Clerk
File

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

Brian Warren

From: Brian Warren
Sent: Thursday, March 05, 2015 3:44 PM
To: 'Michel, Racquel M.'
Cc: Jeff Mulbery
Subject: New Schott Entrance Q16/DA5000
Attachments: Transmittal_RMichel_03052015.pdf; TCLrevision_coverletter.pdf; Transportation Information Sheet.pdf; TCL_Cert_050609.pdf; OriginalTCL_05062009.pdf; GN-C-007 _REVISED_03052015.pdf; CommercialDrivePlan_03052015.pdf

Hi Racquel!

Please find attached our submittal for TCL revision and curb cut approval.

Please do not hesitate to call with any questions you may have.

Thanks!

Brian Warren, P.E.
Project Engineer
Community Development & Planning

Bohannan Huston
Courtyard I
7500 Jefferson St. NE
Albuquerque, NM 87109-4335
www.bhinc.com
voice: 505.823.1000 **facsimile:** 505.798.7988 **toll free:** 800.877.5332

bwarren@bhinc.com

~Please consider the environment before printing this e-mail~

City of Albuquerque

Planning Department
Development & Building Services Division
DRAINAGE AND TRANSPORTATIN INFORMATION SHEET
(REV 02/2013)

Project Title: NOVA Entrance (Formerly Schott Solar) City Drainage # Q16/DA5000
DRB#: _____ EPC #: _____ Work Order #: _____
Legal Description: Tract D of Mesa del Sol, Innovation Park II
City Address: 5201 Hawking Dr SE, 87106

Engineering Firm: Bohannan Huston, Inc. Contact: Brian Warren
Address: 7500 Jefferson St NE Courtyard 1
Phone #: 505-823-1000 Fax #: 505-798-7988 E-mail: bwarren@bhinc.com

Owner: _____ Contact: _____
Address: _____
Phone #: _____ Fax #: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone #: _____ Fax #: _____ E-mail: _____

Surveyor: _____ Contact: _____
Address: _____
Phone #: _____ Fax #: _____ E-mail: _____

Contractor: _____ Contact: _____
Address: _____
Phone #: _____ Fax #: _____ E-mail: _____

TYPE OF SUBMITTAL:

_____ DRAINAGE REPORT
_____ DRAINAGE PLAN 1ST SUBMITTAL
_____ DRAINAGE PLAN RESUBMITTAL
_____ CONCETUAL G&D PLAN
_____ GRADING PLAN
_____ EROSION & SEDIMENT CONROL PLAN (ESC)
_____ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
__X__ TRAFFIC CIRCULATION LAYOUT (TCL)
_____ ENGINEER'S CERT (TCL)
_____ ENGINEER'S CERT (DRB SITE PLAN)
_____ ENGINEER'S CERT (ESC)
_____ SO-19
__X__ OTHER (TCL Revision)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

_____ SIA/FINANCIAL GUARANTEE RELEASE
_____ PRELIMINARY PLAT APPROVAL
_____ S. DEV. PLAN FOR SUB'D APPROVAL
_____ S. DEV. FOR BLDG. PERMIT APPROVAL
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
_____ CERTIFICATE OF OCCUPANCY (PERM)
_____ CERTIFICATE OF OCCUPANCY (TCL TEMP)
_____ FOUNDATION PERMIT APPROVAL
_____ BUILDING PERMIT APPROVAL
_____ GRADING PERMIT APPROVAL
__X__ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ GRADING CERTIFICATION
_____ SO-19 APPROVAL
_____ ESC PERMIT APPROVAL
_____ ESC CERT. ACCEPTANCE
__X__ OTHER (Curb Cut Approval)

RECEIVED
MAR 09 2015
LAND DEVELOPMENT SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ YES __X__ NO _____ COPY PROVIDED
DATE SUBMITTED: 03/05/2015 By: Brian Warren

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed Development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan**: Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

Bohannan Huston INC.

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Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

May 6, 2009

Mr. Nilo Salgado
City of Albuquerque
600 Second Street NW, 2nd Floor West
Albuquerque, NM 87102

Re: Schott Solar Phase 1 Traffic Circulation Layout Certification

Dear Nilo:

I, Jeffrey L. Mulbery, NMPE 16858, of the firm Bohannan Huston inc., hereby certify that this project has been constructed in substantial compliance with and in accordance with the design intent of the approved site plan dated September 22, 2008. I further certify that I have personally visited the project site on May 4, 2009 and have determined by visual inspection that the data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for permanent certificate of occupancy.

The record information presented here on is not necessarily complete and intended only to verify substantial compliance of the traffic circulation layout aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Sincerely,

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

JLM/cc
Enclosure

Bohannan Huston

Engineering
Spatial Data
Advanced Technologies

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7500 Jefferson St. NE
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87109-4335
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CLIENT/COURIER TRANSMITTAL

To: Racquel Michel, P.E.
City of Albuquerque
Transportation Department
Plaza del Sol
600 2nd St
Albq. NM, 87102

Phone: 505-924-3630
Job No.: 20150374.001.01

Requested by: Brian Warren

Date: March 5, 2015

Time Due:
- ☐ This A.M.
- ☒ This P.M.
- ☐ Rush _____
- ☐ By Tomorrow

Job Name: NOVA Entrance

DELIVERY VIA

- ☒ Courier ☐ Federal Express
- ☐ Mail ☐ UPS
- ☒ Other E-Mail

PICK UP

Item: _____

ITEM NO.	QUANTITY	DESCRIPTION
1	1	Cover Letter
2	1	Transportation Info Sheet
3	1	Original TCL certification
4	1	Revised Sheet GN-C-007 for TCL submittal
5	1	Curb Cut Permit Sheet, Grading and Drainage Plan, stamped 3/5/2015

COMMENTS / INSTRUCTIONS

Racquel,
Please find attached our submittal for TCL revision, requesting curb cut approval. Thank you very much for your time and your cooperation!
Please don't hesitate to call me with any questions; 798-7844.
Brian

RECEIVED
MAR 0 9 2015
LAND DEVELOPMENT SECTION

REC'D BY:_____ **DATE:**_____ **TIME:**_____

Bohannan Huston

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7500 Jefferson St. NE
Albuquerque, NM
87109-4335

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voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

March 5, 2015

Mrs. Racquel Michel
City of Albuquerque
600 Second Street NW
2nd Floor West
Albuquerque, NM 87102

Re: NOVA Entrance (Formerly Schott Solar) - Traffic Circulation Layout Revision (Q16/DA5000)

Dear Racquel:

The purpose of this submittal is to obtain a revision to the traffic circulation layout certification. I have included the original certification, dated May 6, 2009, with this submittal along with the original plans.

These plans have been revised to indicate the location of the new commercial driveway we are requesting. This submittal also includes the proposed drive grading and design sheet for curb cut approval.

Should you have any questions, please contact me at (505) 798-7844 or at bwarren@bhinc.com.

Sincerely,

Brian H. Warren, P.E.
Engineer
Community Development and Planning

BHW/jcm
Enclosure

P:\20150374\Correspondence\Submittals\RMichel_TCL_03052015.docx

IC filed to BP.

Cherne, Curtis Can't get BP approval w/out SIA

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

---

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

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

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
Bohannan ▲ Huston
Courtyard One, 7500 Jefferson NE
Albuquerque, NM 87109-4335
Phone: (505) 823-1000 Fax: (505) 798-7988

Current DRC
Project No. _____

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: _____

Figure 12

REQUIRED INFRASTRUCTURE

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

DRB Project No. _____

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

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 appurtenant 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 guarantee. Likewise, if the DRC Chair determines that appurtenant 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 agent/owner. 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 Cnst 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 REQ'D (APPROX 2150LF)	CRICK AVE	WATSON DR	HAWKING DR	/	/	/
		Phase 2							
		12" DIA	SANITARY SEWER LINE, AS REQ'D (APPROX 1780LF)	HAWKING DR	CRICK AVE	NORTH SCHOTT PROPERTY LINE	/	/	/
		PUBLIC WATERLINE IMPROVEMENTS							
		Phase 1							
		12"-18" DIA	WATERLINE W/ NEC. VALVES, FH'S, MJ'S & RJ'S (APPROX 2180 LF)	CRICK AVE	WATSON DR	HAWKING DR	/	/	/
		18" DIA	WATERLINE W/ NEC. VALVES, FH'S, MJ'S & RJ'S (APPROX 1910 LF)	WATSON DR	CRICK AVE	EASTMAN AVE	/	/	/
		18" DIA	WATERLINE W/ NEC. VALVES, FH'S, MJ'S & RJ'S (APPROX 470 LF)	EASTMAN AVE	WATSON DR	EXISTING 18" WATER DISTRIBUTION IN EASTMAN AVE	/	/	/

SIA Sequence #	COA DRC Project #	Size	Type of Improvement	Location	From	To	Private Inspector	City Inspector	City Cnst Engineer
		PUBLIC WATERLINE IMPROVEMENTS (CONTINUED)							
		Phase 2 12" DIA	WATERLINE W/ NEC. VALVES, FH'S, MJ'S & RJ'S (APPROX 2410 LF)	HAWKING DR	CRICK AVE	NORTH SCHOTT PROPERTY LINE	/	/	/
		PUBLIC/PRIVATE STORM DRAIN IMPROVEMENTS							
		18"-42" DIA-SD	RCP W/ NEC. MH'S, LATERALS & INLETS	CRICK AVE	SUMP	RETENTION POND	/	/	/
		18"-24" DIA-SD	RCP W/ NEC. MH'S, LATERALS & INLETS	HAWKING DR	SUMP	RETENTION POND	/	/	/
		18"-24" DIA-SD	RCP W/ NEC. MH'S, 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.) - want to keep in tract 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.)				/	/	/

B SD don't have to move SD or dig new pond.

AGENT/OWNER	DEVELOPMENT REVIEW BOARD MEMBER APPROVALS			
MICHAEL J. BALASKOVITS PREPARED BY: PRINT NAME	6/19/2008 DATE	DRB 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	DRC CHAIR	USER DEPARTMENT	AGENT/OWNER

N

0 75 150 300

SCHOTT PROPERTY LINE

CONSTRUCT 1/2 STREET
36' F-F PLUS HALF MEDIAN
PHASE 2

18" WATER LINE
PHASE 2

TRACT OWNED

CONSTRUCT FULL STREET
28' F-F

CONSTRUCT 1/2 STREET
36' F-F PLUS HALF MEDIAN

TRACT D
80.0999 Ac

28' F-F

36' F-F

SCHOTT ENTRANCE ROAD

24" STORM DRAIN LINE
SUMP

SCHOTT SOLAR

TRACT E
0.9886 Ac

12" SANITARY SEWER
PHASE 2

WATSON DR. NORTH

TRACT F
12.2712 Ac

SUMP

HAWKING DRIVE

TRACT OS-2
2.0604 Ac

CONSTRUCT 1/2 STREET
36' F-F PLUS HALF MEDIAN

15" SANITARY SEWER

24" STORM DRAIN LINE

SUMP

CRICK AVE.

12" WATER LINE

18" WATER LINE

36" STORM DRAIN LINE

2.9 AC-FT
RETENTION POND

SCHOTT INFRASTRUCTURE EXHIBIT
ZONE ATLAS MAP R-16

Bohannan ▲ Huston INC.

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

DRAWN BY: JDS	DATE: 06/10/08
CHECKED BY: JLM	PROJECT NO. 080344 SHEET NO.

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	$V(100)_{360}$	$V(100)_{10day}$	$V(100)_{10day}$
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

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

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

Bohannan Huston INC.

Courtyard I
7500 Jefferson St NE
Albuquerque NM
87109-4335

voice: 505 823 1000
facsimile: 505 798 7988
toll free: 800 877 5332

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 11th, 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 fire grading plans. This is a dock area.

- *The grading in basin 4 will change the land treatment to "C". Update the calculations and provide the ponding limits/HWL for Pond 4*
  Land treatment and calculations have been updated.

- *What is the HWL for Pond 3?*
  This has been added.

- *It appears there is a approximately 2.4 cfs leaving the property at the southern end. This needs to be minimized. The Western half could be swaled into Pond 3 and the eastern portion could be ponded/harvested.*
  This will be addressed with the fine grading plans.

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

Cherne, Curtis

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.

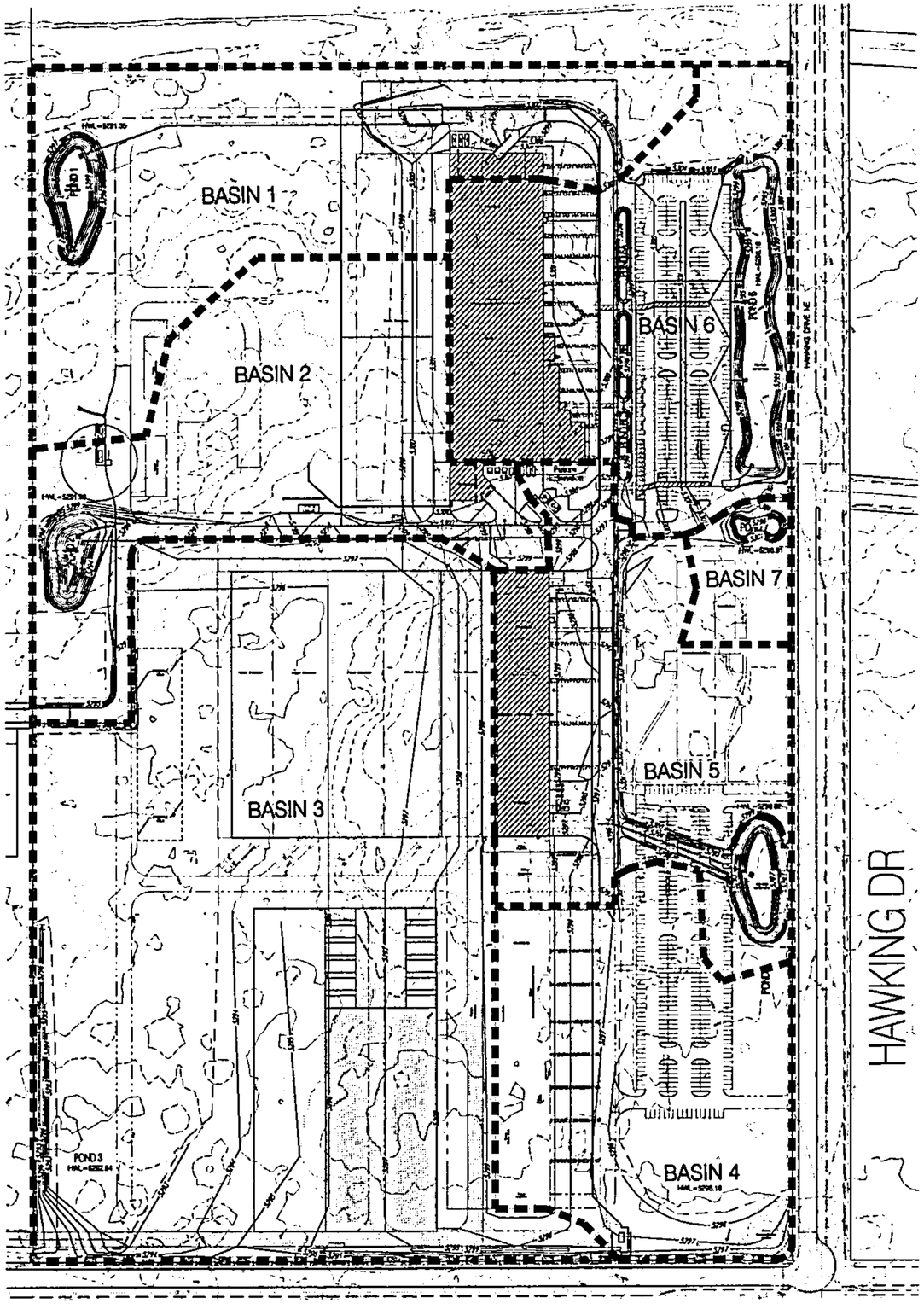
Jeff Mulbery, P.E.
Bohannan Huston, Inc.
voice: 823-1000
fax: 798-7988

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
Bohannan ▲ Huston
7500 Jefferson St. NE,
Courtyard 1
Albuquerque, NM 87109
Phone: 505.823.1000
Fax: 505.798.7988
bwarren@bhinc.com



DRAINAGE MANAGEMENT PLAN-PHASE ONE

I. INTRODUCTION

The purpose of this submittal is to present a grading and drainage plan for the proposed Schott Solar development site. The site is located at the northern end of the Innovation Park within Mesa del Sol. There is vacant land surrounding the site with an existing drag strip to the north of the site. The entire site will be constructed in phases. This first phase will include 2 buildings along with parking and landscaped areas. Future phases will include additional building expansions, parking, and landscaping. This drainage management plan is in full accordance with the Drainage Area Schott Drainage Management Plan. This submittal is in support of Mesa del Sol ARC approval, DRB approval, rough grading approval, foundation permit approval, grading permit approval, and building permit submittal for Phase One.

II. EXISTING HYDROLOGIC CONDITIONS

The site is approximately 80 acres and is currently undeveloped. The land is relatively flat with slopes ranging from 0.3% to 3% with a general trend sloping from the north to south. There is sparse vegetation cover. According to the FEMA Community Map Panel #35001C0363E, the site is not located within a floodplain.

III. PROPOSED HYDROLOGIC CONDITIONS

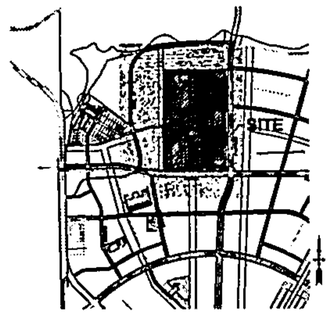
The 100 yr 10 day developed flows from the entire 80 acre site are retained onsite within retention ponds located on site. The site was divided into multiple basins (see basin table below) and drains both overland and through a system of storm drains to retention ponds. Each Basin has ponding which is designed to retain the volume of the 100 yr 10 day storm. This DMP for Phase One shows that only a portion of the ponds one, two, and five will be built to accomodate developed flows for the Phase One build-out. The final pond for Basin 3 and Basin 4 will not be built as part of Phase One, but will retain flows in the naturally occuring ponding area resulting from the existing topography and the Phase One grading. The ponds in Basin 6 will be fully built-out as part of Phase One. Ponds three and four will be build at a later time to accomodate future phases.

IV. OFFSITE FLOWS

Bordering the south and east of the site are proposed roadways which are not part of this project. The roadways will not contribute any offsite flows to the Schott Solar site and mitigate any offsite flows from entering the site. Bordering the west of the site is vacant land which does not contribute any offsite flows. At the north of the Schott site, the existing drag strip slopes from east to west and does not contribute any offsite flows to the site.

V. CONCLUSION

The total flow generated on site will be retained on site. These flows were computed in accordance with section 22.2 of the Development Process Manual. This drainage management plan is capable of safely passing the 100 year storm and meets city requirements. With this submittal we are seeking Mesa del Sol ARC approval, DRB approval, rough grading approval and foundation permit approval for Phase One.



LOCATION MAP
ZONE ATLAS INDEX MAP O-19

Mesa del Sol

SCHOTT SOLAR
Phase One - Proposed Conditions Basin Data Table
This table is based on the DPM Section 22.2, Zone 2

Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages A	B	C	D	Q(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	V=Weight (CF)	V=Weighted CF
BSN1	510128	11.71	75.0%	15.0%	5.0%	5.0%	1.90	22.30	0.68	28780	32181
BSN2	459477	10.54	65.0%	15.0%	5.0%	15.0%	2.22	23.42	0.84	31383	40732
BSN3	1227298	28.17	30.0%	65.0%	5.0%	0.0%	2.11	59.38	0.72	73883	73883
BSN4	375813	8.62	50.0%	0.0%	50.0%	0.0%	2.35	20.26	0.83	25980	25980
BSN5	408731	9.38	30.0%	25.0%	15.0%	30.0%	2.92	27.39	1.16	39484	55643
BSN6	459715	10.55	0.0%	0.0%	10.0%	90.0%	4.54	47.90	2.02	77424	132589
BSN7	52653	1.21	65.0%	30.0%	5.0%	0.0%	1.88	2.24	0.64	2788	2788

Pond	Volume Req'd (CF)	Volume Provided (CF)
Pond 1	32,181	95,729
Pond 2	40,362	54,672
Pond 3 (natural ponding area)	73,893	278,115
Pond 4 (natural ponding area)	25,980	158,765
Pond 5	56,843	151,314
Ponds 6+6A+6B+6C	132,545	184,364
Pond 7	2,788	9,194

NOTE:
SEE OVERALL DRAINAGE MANAGEMENT PLAN FOR PIPE SIZING AND BASIN DETAILS

LEGEND

- DRAINAGE AREA LINE
- PHASE LINE
- BASIN 3 — BASIN ID
- PROPOSED STORM DRAIN
- PROPOSED STORM INLET
- EMERGENCY OVERFLOW ARROW

NOTE:
FINISHED FLOORS AND PROPOSED GRADING SHOWN IS CONCEPTUAL.

N

100 50 0 100
1"=100'

Bohannan Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING SPATIAL DATA ADVANCED TECHNOLOGIES

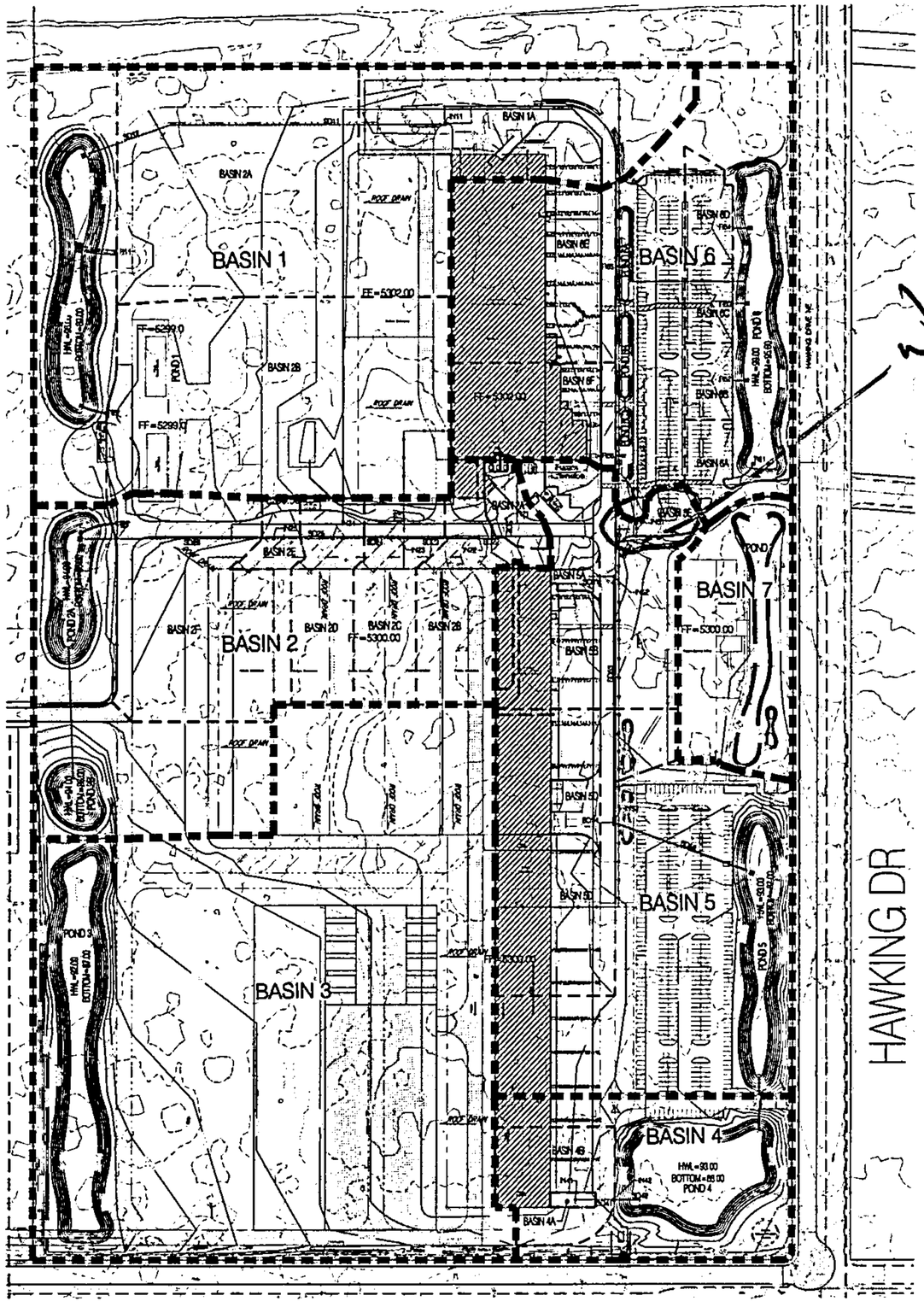
CH2MHILL
Spartanburg, South Carolina

SCHOTT SOLAR PHASE ONE
DRAINAGE MANAGEMENT PLAN

SCHOTT solar
SUN RaMa
ALBUQUERQUE, NEW MEXICO

366450
1"=100'
DMP-PHASE1

Drawing File = P:\080357\Working\GH-C-DMP01_PhaseOne.dwg
Plotted at 3:32pm on Jun 04 2008 by kupiec



DRAINAGE MANAGEMENT PLAN

I. INTRODUCTION

The purpose of this submittal is to present a grading and drainage plan for the proposed Schott Solar development site. The site is located at the northern end of the Innovation Park within Mesa del Sol. There is vacant land surrounding the site with an existing drag strip to the north of the site. The entire site will be constructed in phases. The first phase will include 2 buildings along with parking and landscaped areas. Future phases will include additional building expansions, parking, and landscaping. This drainage management plan has been prepared for the full build out of the Schott Solar site.

II. EXISTING HYDROLOGIC CONDITIONS

The site is approximately 80 acres and is currently undeveloped. The land is relatively flat with a slopes of ranging from 0.3% to 3% with a general trend sloping from the north to south. There is sparse vegetation cover. According to the FEMA Community Map Panel #35001C0363E, the site is not located within a floodplain.

III. PROPOSED HYDROLOGIC CONDITIONS

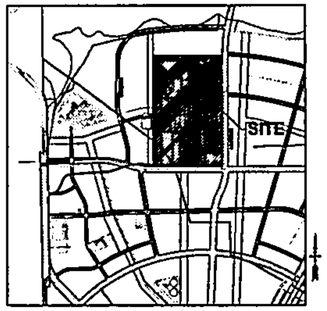
The 100 yr 10 day developed flows from the entire 80 acre site are retained onsite within retention ponds located on site. The site was divided into multiple basins and drains both overland or through a system of storm drains to retention ponds. Each Basin has ponding which is designed to retain the volume of the 100 yr 10 day storm. The two ponds in Basin 2 area hydraulically connected to function as one retention pond. Likewise, the ponds in Basin 6 are also hydraulically connected.

IV. OFFSITE FLOWS

Bordering the south and east of the site are proposed roadways which are not part of this project. The roadways will not contribute any offsite flows to the Schott Solar site and mitigate any offsite flows from entering the site. Bordering the west of the site is vacant land which does not contribute any offsite flows. The future development of the vacant land (not part of this project) is proposed drainage ponds which would border the Schott site at the western side. At the north of the Schott site, the existing drag strip slopes from east to west and does not contribute any offsite flows to the site.

V. CONCLUSION

The total flow generated on site will be retained on site. These flows were computed in accordance with section 22.2 of the Development Process Manual. This drainage management plan is capable of safely passing the 100 year storm and meets city requirements.



LOCATION MAP
ZONE ATLAS INDEX MAP D-18

Mesa del Sol

SCHOTT SOLAR
Proposed Conditions Basin Data Table
This table is based on the DPM Section 22.2, Zone: 2

Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages A	B	C	D	Q(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	Vreq'd (CF)	Vprovided CF
BSN1	743028	17.06	0.0%	10.0%	0.0%	90.0%	4.46	80.14	1.92	129591	223554
BSN2	481534	11.05	0.0%	10.0%	0.0%	90.0%	4.46	49.28	1.99	79694	127478
BSN3	895901	20.59	0.0%	10.0%	0.0%	90.0%	4.46	91.79	1.99	148437	256065
BSN4	183009	4.20	0.0%	10.0%	0.0%	90.0%	4.46	18.73	1.99	30287	52248
BSN5	582677	13.38	0.0%	10.0%	0.0%	90.0%	4.46	59.83	1.99	96833	166354
BSN6	445280	10.22	0.0%	10.0%	0.0%	90.0%	4.46	45.57	1.99	73694	127127
BSN7	112188	2.58	0.0%	10.0%	0.0%	90.0%	4.46	11.48	1.99	18567	32030

Basin	Pond	Volume Req'd (CF)	Volume Provided (CF)
BSN1	Pond 1	223,554	242,380
BSN2	Ponds 2A+2B	127,478	167,304
BSN3	Pond 3	256,065	286,700
BSN4	Pond 4	52,248	216,938
BSN5	Pond 5	166,354	166,867
BSN6	Ponds 6+6A+6B+6C	127,127	167,920
BSN7	Pond 7	32,030	35,613

STORM DRAIN PIPE TABLE

PIPE #	Basin/SD	Contributing Basin Area (SF)	Size in.	Slope	Capacity* cfs	ACTUAL FLOW cfs
BASIN 1						
SD11	1A	123379	24	0.50%	16.00	13.14
SD12	SD11	123379	24	0.50%	16.00	13.14
BASIN 2						
SD21	2A	14555	12	0.77%	3.13	1.49
SD22	SD21	14555	18	0.75%	9.10	1.49
SD23	2B	80203	18	0.75%	9.10	7.85
SD24	2C	53180	24	0.75%	19.58	13.10
SD25	2D	49575	24	0.76%	19.72	18.17
SD26	2E	12290	24	0.77%	19.85	19.43
BASIN 4						
SD41	4A	2520	18	2.60%	16.94	0.27
SD42	4B	46975	30	2.60%	66.14	4.81
BASIN 5						
SD51	5A	4400	12	1.00%	3.58	0.47
SD52	5E	11251	12	0.50%	2.52	1.15
SD53	5B	135187	24	0.50%	18.00	15.47
SD54	5C	11050	12	0.50%	2.52	1.19
SD55	5D	137634	30	0.80%	31.77	30.75

Capacity Based on Manning's Eq w/ N=0.013 - *

INLET TABLE

Inlet #	Inlet Type	Actual Flow	Avail Head ft	Capacity CFS
BASIN 1				
IN11	1-SGL COA TYPE D*	13.14	0.75	13.89
BASIN 2				
IN21	1-SGL COA TYPE D*	1.49	0.50	7.96
IN22	1-SGL COA TYPE D*	6.18	0.50	7.96
IN23	1-SGL COA TYPE D*	5.44	0.50	7.96
IN24	1-SGL COA TYPE D*	5.08	0.50	7.96
IN25	1-SGL COA TYPE D*	1.28	0.50	7.96
BASIN 4				
IN41	1-SGL COA TYPE D*	0.27	0.50	7.96
IN42	1-SGL COA TYPE D*	4.81	0.50	7.96
BASIN 5				
IN51	1-SGL COA TYPE D*	1.15	0.50	7.96
IN52	1-SGL COA TYPE C*	13.84	0.83	15.50
IN53	1-SGL COA TYPE C*	14.08	0.83	15.50

* - INLET IN SUMP CONDITION

CONCRETE RUNDOWN TABLE

Rundown #	Basin ID	Contributing Basin Area (SF)	Rundown/Weir Type	Actual Flow	Min Weir** Length ft	Bottom Width ft	Channel Height ft	Minimum Slope	Capacity* CFS
BASIN 1									
R11	1A	264799	Rectangular	27.11	12.00	10.00	0.50	0.75%	29.26
R12	1B	261181	Rectangular	29.74	11.00	4.00	0.50	5.37%	26.76
BASIN 2									
R21	2F	130980	Rectangular	13.41	6.00	4.00	0.50	4.47%	26.24
BASIN 5									
R51	5A	20564	Rectangular	2.21	1.00	1.00	0.50	2.52%	3.60
R52	5B	14458	Rectangular	1.58	1.00	1.00	0.50	8.73%	8.70
R53	5C	14458	Rectangular	1.56	1.00	1.00	0.50	8.83%	5.93
R54	5D	15632	Rectangular	2.61	1.00	1.00	0.50	5.95%	5.53
R55	5E	114356	Rectangular	12.34	5.00	2.00	0.50	8.83%	14.36
R56	5F	83597	Rectangular	8.66	3.00	2.00	0.50	5.95%	13.41

Weir Eq: Q=3.3P(H^1.5) - ** Capacity Based on Manning's Eq w/ N=0.013 - *

LEGEND
- DRAINAGE AREA LINE
- PHASE LINE
- BASIN 3 — BASIN ID
- PROPOSED STORM DRAIN
- PROPOSED STORM INLET
- EMERGENCY OVERFLOW ARROW

N

100 50 0 100
1"=100'

NOTE:
FINISHED FLOORS AND PROPOSED GRADING SHOWN IS CONCEPTUAL

Bohannan Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING SPATIAL DATA ADVANCED TECHNOLOGIES

CH2MHILL
Spartanburg, South Carolina

DRAINAGE AREA SCHOTT
DRAINAGE MANAGEMENT PLAN

SCHOTT solar
SUN ReMe
ALBUQUERQUE, NEW MEXICO

366450
1"=100'
DMP-OVERALL

Cherne, Curtis

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

Bohannan ▲ Huston Inc.

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

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".

RECEIVED
JUL 3 2008
HYDROLOGY SECTION

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

==========

Drainage Structure Analyzer

Culvert Hydraulic Analysis

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

==========

Input Data

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

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
```

```
                2.7415  2.7423  2.7431  2.7438  2.7446  2.7454  2.7462
                2.7469  2.7477  2.7485  2.7492  2.7500

**********************************************************************
*S    DRAINAGE BASIN 6F
COMPUTE NM HYD          ID=1  HYD NO=6F  AREA=0.00228 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 =   8.1197    CFS   UNIT VOLUME =    .9979       B =  526.28      P60 = 2.0100
     AREA =      .002052 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 =   .55698    CFS   UNIT VOLUME =    .9767       B =   324.91      P60 = 2.0100
     AREA =      .000228 SQ MI    IA =    .50000 INCHES    INF =   1.25000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .050000

PRINT HYD               ID=1     CODE=10

                                        HYDROGRAPH FROM AREA 6F

      TIME      FLOW          TIME      FLOW          TIME      FLOW          TIME      FLOW          TIME
FLOW
       HRS       CFS           HRS       CFS           HRS       CFS           HRS       CFS           HRS
CFS
      .000       .0          5.000       .0         10.000       .0         15.000       .0         20.000
.0
      .500       .0          5.500       .0         10.500       .0         15.500       .0         20.500
.0
     1.000       .0          6.000       .0         11.000       .0         16.000       .0         21.000
.0
     1.500      6.4          6.500       .0         11.500       .0         16.500       .0         21.500
.0
     2.000      1.5          7.000       .0         12.000       .0         17.000       .0         22.000
.0
     2.500       .2          7.500       .0         12.500       .0         17.500       .0         22.500
.0
     3.000       .1          8.000       .0         13.000       .0         18.000       .0         23.000
.0
     3.500       .0          8.500       .0         13.500       .0         18.500       .0         23.500
.0
     4.000       .0          9.000       .0         14.000       .0         19.000       .0         24.000
.0
     4.500       .0          9.500       .0         14.500       .0         19.500       .0

  RUNOFF VOLUME =     2.34321 INCHES     =        .2849 ACRE-FEET
  PEAK DISCHARGE RATE =       6.42 CFS  AT   1.500 HOURS   BASIN AREA =    .0023 SQ. MI.


*S
**********************************************************************
*S    DRAINAGE BASIN 6E
COMPUTE NM HYD          ID=2  HYD NO=6E  AREA=0.00410 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 =   14.601    CFS   UNIT VOLUME =    .9983       B =   526.28      P60 = 2.0100
     AREA =      .003690 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 =   1.0016    CFS   UNIT VOLUME =    .9881       B =   324.91      P60 = 2.0100
     AREA =      .000410 SQ MI    IA =    .50000 INCHES    INF =   1.25000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .050000

PRINT HYD               ID=2     CODE=10

                                        HYDROGRAPH FROM AREA 6E

      TIME      FLOW          TIME      FLOW          TIME      FLOW          TIME      FLOW          TIME
FLOW
       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
.0									

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

```
*S
*********************************************************************
*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
```

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.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	.0

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

```
*S
*********************************************************************
*********************************************************************
*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.

```
**********************************************************************************
**********************************************************************************
*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

                                        HYDROGRAPH FROM AREA IC.1200


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


PRINT HYD             ID=10 CODE=1

                                        HYDROGRAPH FROM AREA IC.1200


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


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

                                        HYDROGRAPH FROM AREA TO6C


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


*S
**********************************************************************************
**********************************************************************************
*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

  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

    TIME       INFLOW     ELEV       VOLUME    OUTFLOW
    (HRS)      (CFS)      (FEET)     (AC-FT)   (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

****
*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

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.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	.0

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

```
**************************************************************************
**************************************************************************
*S                  ADDING SD61 TO 1/36G
*
ADD HYD               ID=12  HYD=TO6B  ID I=9  ID II=31
PRINT HYD             ID=12  CODE=1

                                      HYDROGRAPH FROM AREA TO6B


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


*S
**************************************************************************
*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
 * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

  TIME       INFLOW     ELEV       VOLUME     OUTFLOW
  (HRS)      (CFS)      (FEET)     (AC-FT)    (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

**************************************************************************
```

```
*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

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.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	.0

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


**********************************************************************
*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.


*S
**********************************************************************
**********************************************************************
*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.

```
*S
*****************************************************************************
*S    ROUTE ABOVE THRU POND 6A
ROUTE RESERVOIR     ID=23  HYD=P6A   INFLOW ID=13   CODE=10
                    OUTFLOW           STORAGE          ELEV
                    (CFS)             (AC-FT)          (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      INFLOW    ELEV      VOLUME    OUTFLOW
    (HRS)     (CFS)     (FEET)    (AC-FT)   (CFS)

     .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

*****************************************************************************
*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       FLOW        FLOW        MAX
                                  SURFACE      AREA        RATE        WIDTH
                                   ELEV        SQ FT       CFS         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

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW 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	.0

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

****
*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

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW 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.


     *S
     ********************************************************************************
     *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.


     *S
     ********************************************************************************
     *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      INFLOW    ELEV      VOLUME    OUTFLOW
        (HRS)     (CFS)     (FEET)    (AC-FT)   (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

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW 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	.0

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

*S
****
*
*
FINISH

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

CITY OF ALBUQUERQUE

May 6, 2009

Jeffrey L. Mulbery, P.E.
Bohannan Huston, Inc.
7500 Jefferson St NE- Courtyard 1
Albuquerque, NM 87109

Re: Schott Solar Phase 1 Grading and Drainage Plan
Engineer's Stamp dated 4-17-09 (Q16/DA5000)

Dear Mr. Mulberry,

Based upon the information provided in your submittal received 4-22-09, the above referenced plan is approved for Building Permit. This plan has been submitted to facilitate the Certification process.

Please verify the amount of land treatment "A" on the DMP. It is expected that contractors may drive all over a site and therefore turning a land treatment "A" surface into a land treatment "B" or "C" surface. Update calculations and pond volumes as necessary.

Pond volumes have to be certified. You can certify the DMP or annotate the Volume Required and Volume Provided on the Grading Plan sheets.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: file

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/2005)

Q-16/D45500

PROJECT TITLE: Schott Solar Phase 1 ZONE MAP/DRG. FILE # R16 and Q16
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Tract D of Mesa del Sol, Innovation Park II
CITY ADDRESS: Northwest Corner of Crick and Hawking in Mesa del Sol

ENGINEERING FIRM: Bohannan Huston, Inc. CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson St. NE Courtyard 1 PHONE: 823-1000
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: Schott Solar, Inc. CONTACT: Christian Dzieia
ADDRESS: 4 Suburban Park Dr. PHONE: (978) 947-5983
CITY, STATE: Billerica, MA ZIP CODE: 01821

ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
_____ DRAINAGE REPORT
_____ DRAINAGE PLAN 1st SUBMITTAL
__X__ DRAINAGE PLAN RESUBMITTAL
_____ CONCEPTUAL G & D PLAN
__X__ GRADING PLAN
_____ EROSION CONTROL PLAN
_____ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
_____ ENGINEER CERT (TCL)
_____ ENGINEER CERT (DRB SITE PLAN)
_____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
_____ SIA/FINANCIAL GUARANTEE RELEASE
_____ PRELIMINARY PLAT APPROVAL
_____ S. DEV. PLAN FOR SUB'D APPROVAL
_____ S. DEV. FOR BLDG. PERMIT APPROVAL
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
_____ FOUNDATION PERMIT APPROVAL
__X__ BUILDING PERMIT APPROVAL
_____ CERTIFICATE OF OCCUPANCY (PERM)
_____ CERTIFICATE OF OCCUPANCY (TEMP)
_____ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:
_____ YES
_____ NO
_____ COPY PROVIDED

SUBMITTED BY: Jeff Mulbery DATE: 4/21/09

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

CITY OF ALBUQUERQUE

May 19, 2008

Jeffrey L. Mulbery, P.E.
Bohannan Huston, Inc.
7500 Jefferson St NE- Courtyard 1
Albuquerque, NM 87109

Re: Schott Solar Phase 1 Grading and Drainage Plan

Engineer's Stamp dated 4-29-08 (Q16/DA5000)

Dear Mr. Mulberry,

Based upon the information provided in your submittal received 5-19-08, the above referenced plan cannot be approved for Grading Permit until the following comments are addressed:

- How will runoff enter Pond 6D? The 5301 contour around the pond is at the same grade as the entrance road.
- What are the hatched/stone areas east of the buildings?
- North of the north Logistics building the area between the 99 contours will drain down to the 98 spot elevation at the building.
- 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.
- There is a ponding area in the west entrance that will outfall into the ROW. This has to drain into the site.
- Will runoff at the north end of the south building run west to the building at the 96 spot elevations?
- Provide a build note for rip-rap at Pond 2.
- How will the area at the south end of the building drain (spot 96)?
- The grading in Basin 4 will change the land treatment to "C". Update the calculations and provide the ponding limits/HWL for Pond 4.
- What is the HWL for Pond 3?
- It appears there is approximately 2.4 cfs leaving the property at the southern end. This needs to be minimized. The western half could be swaled into Pond 3 and the eastern portion could be ponded/harvested.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/2005)

Q-16/DA5000

PROJECT TITLE: Schott Solar Phase 1 ZONE MAP/DRG. FILE # R16 and Q16
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Tract D of Mesa del Sol, Innovation Park II
CITY ADDRESS: Northwest Corner of Crick and Hawking in Mesa del Sol

ENGINEERING FIRM: Bohannan Huston, Inc. CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson St. NE Courtyard 1 PHONE: 823-1000
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: Schott Solar, Inc. CONTACT: _____
ADDRESS: 4 Suburban Park Dr. PHONE: (978) 947-5983
CITY, STATE: Billerica, MA ZIP CODE: 01821

ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
_____ DRAINAGE REPORT
_____ DRAINAGE PLAN 1st SUBMITTAL
__X__ DRAINAGE PLAN RESUBMITTAL
__X__ CONCEPTUAL G & D PLAN
_____ GRADING PLAN
_____ EROSION CONTROL PLAN
_____ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
_____ ENGINEER CERT (TCL)
_____ ENGINEER CERT (DRB SITE PLAN)
_____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
_____ SIA/FINANCIAL GUARANTEE RELEASE
_____ PRELIMINARY PLAT APPROVAL
_____ S. DEV. PLAN FOR SUB'D APPROVAL
_____ S. DEV. FOR BLDG. PERMIT APPROVAL
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
__✓__ FOUNDATION PERMIT APPROVAL
_____ BUILDING PERMIT APPROVAL
_____ CERTIFICATE OF OCCUPANCY (PERM)
_____ CERTIFICATE OF OCCUPANCY (TEMP)
_____ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ OTHER (SPECIFY)

RECEIVED
MAY 19 2008
HYDROLOGY SECTION

RECEIVED
MAY - 9 2008
HYDROLOGY SECTION

RECEIVED
MAY - 9 2008
HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:
_____ YES
_____ NO
_____ COPY PROVIDED

SUBMITTED BY: Jeff Mulbery DATE: 5/9/08

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
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CITY OF ALBUQUERQUE

May 14, 2008

Jeffrey L. Mulbery, P.E.
Bohannan Huston, Inc.
7500 Jefferson St NE- Courtyard 1
Albuquerque, NM 87109

Re: Schott Solar Phase 1 Grading and Drainage Plan

Engineer's Stamp dated 4-29-08 (Q16/DA5000)

Dear Mr. Mulberry,

Based upon the information provided in your submittal received 5-9-08, the above referenced plan is approved for Foundation Permit.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: file

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/2005)

Q-16/DA5000

PROJECT TITLE: Schott Solar Phase 1 ZONE MAP/DRG. FILE # R16 and Q16
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Tract D of Mesa del Sol, Innovation Park II
CITY ADDRESS: Northwest Corner of Crick and Hawking in Mesa del Sol

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CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: Schott Solar, Inc. CONTACT: _____
ADDRESS: 4 Suburban Park Dr. PHONE: (978) 947-5983
CITY, STATE: Billerica, MA ZIP CODE: 01821

ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
_____ DRAINAGE REPORT
_____ DRAINAGE PLAN 1st SUBMITTAL
__X__ DRAINAGE PLAN RESUBMITTAL
__X__ CONCEPTUAL G & D PLAN
_____ GRADING PLAN
_____ EROSION CONTROL PLAN
_____ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
_____ ENGINEER CERT (TCL)
_____ ENGINEER CERT (DRB SITE PLAN)
_____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
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_____ S. DEV. FOR BLDG. PERMIT APPROVAL
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_____ FINAL PLAT APPROVAL
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_____ BUILDING PERMIT APPROVAL
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_____ CERTIFICATE OF OCCUPANCY (TEMP)
_____ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ OTHER (SPECIFY)

RECEIVED
MAY - 9 2008
HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:
_____ YES
_____ NO
_____ COPY PROVIDED

SUBMITTED BY: Jeff Mulbery DATE: 5/9/08

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

May 7, 2009

Jeffrey L. Mulberry, P.E.,
7500 Jefferson St. NE, Courtyard I
Albuquerque, NM 87109-4335

Re: Certification Submittal for Final Building Certificate of Occupancy for
Schott Solar Phase 1, [Q-16 / DA5000]
5201 Hawking Road SE
Engineer's Stamp Dated 05/06/09

Dear Mr. Mulberry:

The TCL / Letter of Certification submitted on May 7, 2009 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Bohannan ▲ Huston INC.

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

May 6, 2009

Mr. Nilo Salgado
City of Albuquerque
600 Second Street NW, 2nd Floor West
Albuquerque, NM 87102

Re: Schott Solar Phase 1 Traffic Circulation Layout Certification

Dear Nilo:

I, Jeffrey L. Mulbery, NMPE 16858, of the firm Bohannan Huston inc., hereby certify that this project has been constructed in substantial compliance with and in accordance with the design intent of the approved site plan dated September 22, 2008. I further certify that I have personally visited the project site on May 4, 2009 and have determined by visual inspection that the data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for permanent certificate of occupancy.

The record information presented here on is not necessarily complete and intended only to verify substantial compliance of the traffic circulation layout aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Sincerely,

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

JLM/cc
Enclosure

P:\080352\cdp\corres\Letters\TCL_Cert_050609.doc

RECEIVED
MAY 07 2009
HYDROLOGY SECTION

ENGINEERING ▲
SPATIAL DATA ▲
ADVANCED TECHNOLOGIES ▲

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/2005)

PROJECT TITLE: Schott Solar Phase 1 ZONE MAP/DRG. FILE #~~R16 and Q16~~ / DA 5000
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Tract D of Mesa del Sol, Innovation Park II
CITY ADDRESS: Northwest Corner of Crick and Hawking in Mesa del Sol 5201 Hawking Rd SE

ENGINEERING FIRM: Bohannan Huston, Inc. CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson St. NE Courtyard 1 PHONE: 823-1000
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: Schott Solar, Inc. CONTACT: Christian Dzieia
ADDRESS: 4 Suburban Park Dr. PHONE: (978) 947-5983
CITY, STATE: Billerica, MA ZIP CODE: 01821

ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
_____ DRAINAGE REPORT
_____ DRAINAGE PLAN 1st SUBMITTAL
_____ DRAINAGE PLAN RESUBMITTAL
_____ CONCEPTUAL G & D PLAN
_____ GRADING PLAN
_____ EROSION CONTROL PLAN
__X__ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
__X__ ENGINEER CERT (TCL)
_____ ENGINEER CERT (DRB SITE PLAN)
_____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
_____ SIA/FINANCIAL GUARANTEE RELEASE
_____ PRELIMINARY PLAT APPROVAL
_____ S. DEV. PLAN FOR SUB'D APPROVAL
_____ S. DEV. FOR BLDG. PERMIT APPROVAL
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
_____ FOUNDATION PERMIT APPROVAL
_____ BUILDING PERMIT APPROVAL
__X__ CERTIFICATE OF OCCUPANCY (PERM)
_____ CERTIFICATE OF OCCUPANCY (TEMP)
_____ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ OTHER (SPECIFY)

RECEIVED
MAY 07 2009
HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:
_____ YES
_____ NO
_____ COPY PROVIDED

SUBMITTED BY: Jeff Mulbery DATE: 5/6/09

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
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CITY OF ALBUQUERQUE

July 10, 2008

Jeffrey L. Mulbery, P.E.
Bohannan Huston, Inc.
7500 Jefferson St NE- Courtyard 1
Albuquerque, NM 87109

Re: Schott Solar Phase 1 Grading and Drainage Plan
Engineer's Stamp dated 7-3-08 (Q16/DA5000)

Dear Mr. Mulberry,

Based upon the information provided in your submittal received 7-3-08, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: file

5201 HAWKINS DR. SE.

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/2005)

Q-16 / DA 5000

PROJECT TITLE: Schott Solar Phase 1 ZONE MAP/DRG. FILE #~~R16 and Q16~~
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Tract D of Mesa del Sol, Innovation Park II
CITY ADDRESS: Northwest Corner of Crick and Hawking in Mesa del Sol

ENGINEERING FIRM: Bohannan Huston, Inc. CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson St. NE Courtyard 1 PHONE: 823-1000
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: Schott Solar, Inc. CONTACT: _____
ADDRESS: 4 Suburban Park Dr. PHONE: (978) 947-5983
CITY, STATE: Billerica, MA ZIP CODE: 01821

ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
_____ DRAINAGE REPORT
__X__ DRAINAGE PLAN 1st SUBMITTAL
_____ DRAINAGE PLAN RESUBMITTAL
_____ CONCEPTUAL G & D PLAN
__X__ GRADING PLAN
_____ EROSION CONTROL PLAN
_____ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
_____ ENGINEER CERT (TCL)
_____ ENGINEER CERT (DRB SITE PLAN)
_____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
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_____ PRELIMINARY PLAT APPROVAL
_____ S. DEV. PLAN FOR SUB'D APPROVAL
_____ S. DEV. FOR BLDG. PERMIT APPROVAL
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
_____ FOUNDATION PERMIT APPROVAL
__X__ BUILDING PERMIT APPROVAL
_____ CERTIFICATE OF OCCUPANCY (PERM)
_____ CERTIFICATE OF OCCUPANCY (TEMP)
_____ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ OTHER (SPECIFY)

5002

WAS A PRE-DESIGN CONFERENCE ATTENDED:
_____ YES
_____ NO
_____ COPY PROVIDED

RECEIVED
JUL 03 2008
HYDROLOGY SECTION

SUBMITTED BY: Jeff Mulbery DATE: 7/3/08

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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CITY OF ALBUQUERQUE

February 25, 2008

Jeffery L. Mulbery, P.E.
Bohannan Huston, Inc
7500 Jefferson St. NE
Albuquerque, NM 87109

Re: Schott Solar, S 1/2 Section 15, T9N R3E, Grading and Drainage Plan
Engineer's Stamp dated 2-15-08 (Q-16/DA4000)

Mr. Mulbery:

Based upon the information provided in your submittal received 2-21-08, the above referenced plan is approved for Rough Grading Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. In addition to submitting an NOI to the EPA and preparing a SWPPP, please, send a copy of the SWPPP on a CD in .pdf format to the following address:

Department of Municipal Development
Storm Drainage Division
P.O. Box 1293, One Civic Plaza, Rm. 301
Attn: Kathy Verhage
Albuquerque, NM 87103

If you have any questions regarding this permit please feel free to call the DMD Storm Drainage Design section at 768-3654 or 768-3645.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham
City Hydrologist, Planning Dept.
Development and Building Services

Cc: Kathy Verhage—DMD Storm Drainage Division
File

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

City of Albuquerque

P.O. Box 1293 Albuquerque, New Mexico 87103

Planning Department

Martin J. Chavez, Mayor **Richard Dineen, Director**

Interoffice Memorandum

DATE February 14, 2008

Subject: Albuquerque Archaeological Ordinance—Compliance Documentation

Project Number(s):
Case Number(s):
Agent: **Bohannan-Huston**
Applicant: **Forest City Covington**
Legal Description: **S ½ Section 15, T9N, R3E**
Acreage: **107.7 acres**
Zone Atlas Page: **Q-16**

CERTIFICATE OF NO EFFECT: Yes __X__ No _____

SUPPORTING DOCUMENTATION:
A Class I and Class III Survey of 43.6 Hectares (107.7 Acres) for the Project Light Substation on Mesa del Sol, Albuquerque, Bernalillo County, NM by McEnany, Brown, and Brown (Kenneth Brown PhD, P.I.) NMCRIS#109134.

RECOMMENDATION(S):

- ***CERTIFICATE OF NO EFFECT IS ISSUED (ref O-07-72 Section 4B(1)-- no significant sites in project area***

SUBMITTED:
Matthew Schmader, PhD
Superintendent, Open Space Division
Acting City Archaeologist

CITY OF ALBUQUERQUE

June 15, 2009

Jeffrey Mulbery, P.E.
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

Re: Schott Solar Phase 1, 5201 Hawking Rd SE
Permanent Certificate of Occupancy - Approved
Engineer's Stamp dated 7/3/08 (Q16/DA5000)
Certification dated 05/6/09

Dear Mr. Mulbery,

Based upon the information provided in your submittal received 06/15/09, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3982.

Sincerely,

Michael E. Peterson
Plan Checker, Intern—Hydrology
Development and Building Services

C: CO Clerk—Katrina Sigala
File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/2005)

Q16/DA5000

PROJECT TITLE: Schott Solar Phase 1 ZONE MAP/DRG. FILE# R16 and Q16
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Tract D of Mesa del Sol, Innovation Park II
CITY ADDRESS: Northwest Corner of Crick and Hawking in Mesa del Sol

5'201 Hawking St

ENGINEERING FIRM: Bohannan Huston, Inc. CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson St. NE Courtyard 1 PHONE: 823-1000
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: Schott Solar, Inc. CONTACT: Christian Dzieia
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CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
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_____ DRAINAGE PLAN 1st SUBMITTAL
_____ DRAINAGE PLAN RESUBMITTAL
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__X__ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
__X__ ENGINEER CERT (TCL)
_____ ENGINEER CERT (DRB SITE PLAN)
_____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
_____ SIA/FINANCIAL GUARANTEE RELEASE
_____ PRELIMINARY PLAT APPROVAL
_____ S. DEV. PLAN FOR SUB'D APPROVAL
_____ S. DEV. FOR BLDG. PERMIT APPROVAL
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
_____ FOUNDATION PERMIT APPROVAL
_____ BUILDING PERMIT APPROVAL
__X__ CERTIFICATE OF OCCUPANCY (PERM)
_____ CERTIFICATE OF OCCUPANCY (TEMP)
_____ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ OTHER (SPECIFY)

RECEIVED
MAY 07 2009
HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:
_____ YES
_____ NO
_____ COPY PROVIDED

RECEIVED
resubmit cc
JUN 15 2009
HYDROLOGY SECTION

SUBMITTED BY: Jeff Mulbery DATE: 5/6/09

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

CITY OF ALBUQUERQUE

FAX
798-7988

May 7, 2009

Jeffrey L. Mulberry, P.E.
Bohannan Huston, Inc.
7500 Jefferson NE Courtyard I
Albuquerque, NM 87109

Re: Schott Solar Phase 1, 5201 Hawking Rd SE
90 Day Temporary Certificate of Occupancy - Approved
Approved Engineer's Stamp Date 4-17-09
Certification dated 5-6-09 (Q16-DA5000)

Based upon the information provided in the Certification received 5-7-09, the above referenced Certification is approved for release of a 90-day Temporary Certificate of Occupancy by Hydrology.

The inlet grates south of the east-west site road were plugged with sediment.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer
Development and Building Services

C: CO Clerk
File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/2005)

Q16/DA5000

PROJECT TITLE: Schott Solar Phase 1 ZONE MAP/DRG. FILE# R16 and Q16
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Tract D of Mesa del Sol, Innovation Park II
CITY ADDRESS: Northwest Corner of Crick and Hawking in Mesa del Sol

5'201 Hawking St

ENGINEERING FIRM: Bohannan Huston, Inc. CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson St. NE Courtyard 1 PHONE: 823-1000
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: Schott Solar, Inc. CONTACT: Christian Dzieia
ADDRESS: 4 Suburban Park Dr. PHONE: (978) 947-5983
CITY, STATE: Billerica, MA ZIP CODE: 01821

ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
_____ DRAINAGE REPORT
_____ DRAINAGE PLAN 1st SUBMITTAL
_____ DRAINAGE PLAN RESUBMITTAL
_____ CONCEPTUAL G & D PLAN
_____ GRADING PLAN
_____ EROSION CONTROL PLAN
__X__ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
__X__ ENGINEER CERT (TCL)
_____ ENGINEER CERT (DRB SITE PLAN)
_____ OTHER (SPECIFY)

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_____ OTHER (SPECIFY)

RECEIVED
MAY 07 2009
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_____ NO
_____ COPY PROVIDED

SUBMITTED BY: Jeff Mulbery DATE: 5/6/09

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