

CITY OF ALBUQUERQUE



July 10, 2008

Jeffrey L. Mulbery, P.E.
Bohannon 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.

P.O. Box 1293

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

Albuquerque

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

New Mexico 87103

Sincerely,

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

www.cabq.gov

C: file

5201
HAWKIDS DR. SE.

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

PROJECT TITLE: Schott Solar Phase 1 ZONE MAP/DRG. FILE # Q-16/DA 5000
DRB#: _____ EPC#: _____ WORK ORDER#: R16 and Q16

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: Bohannon 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: _____

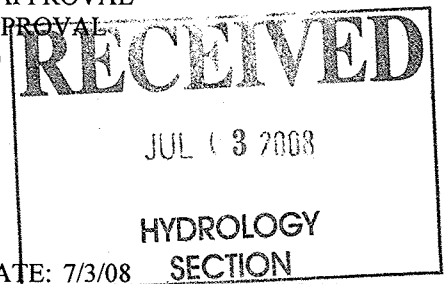
CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
☐ DRAINAGE REPORT
☒ DRAINAGE PLAN 1st SUBMITTAL
☐ DRAINAGE PLAN RESUBMITTAL
☐ 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) _____

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

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:

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.

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.

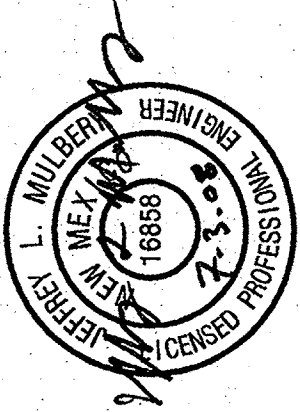
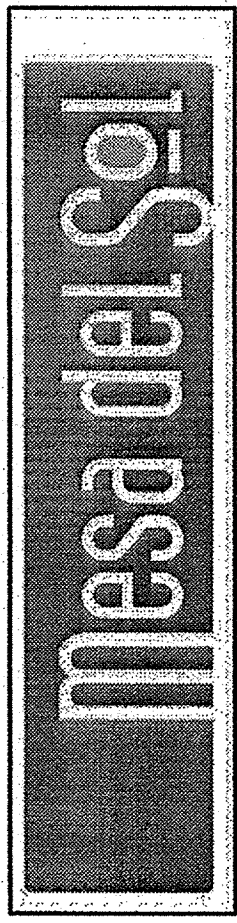
II. EXISTING HYDROLOGIC CONDITIONS
The site is approximately 80 acres and is currently undeveloped. The land is relatively flat with slopes ranging from 0.3% to 3% with a general trend sloping from the north to south. There is sparse vegetation cover. According to the FEMA Community Map Panel #3500100363E, 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 accommodate 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 occurring 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 built at a later time to accommodate 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 ATTACHED MAP Q-16



NO

DATE

BY

CHK

APPV

REVISION

DESIGNED BY

CHECKED BY

DATE

BOHANNAN & HUSTON

Consulting 7500 Jefferson St. NE Albuquerque, NM 87109-4335

ENGINEERING - SPATIAL DATA - ADVANCED TECHNOLOGIES

SHEET TITLE

SCHOTT SOLAR PHASE ONE DRAINAGE MANAGEMENT PLAN

SECTION

JOB NAME

SCHOTT solar

SUN RaMo

ALBUQUERQUE, NEW MEXICO

JOB NO.

366450

DATE

DMP - PHASE 1

SCALE

1"=100'

SCHOTT SOLAR Phase One - Proposed Conditions Basin Data Table									
This table is based on the Drain Section 22.2, Zone 2 Percentages									
Basin ID	Area (SQ. FT.)	Area (AC.)	A and B	C	D	Q(100) (cfs)	Q(100) (cfs)	WT E (inches)	Vires (cfs)
BSN 1	49584.3	11.38	75.0%	15.0%	5.0%	1.90	21.67	0.83	31279
BSN 2	46475.9	10.67	65.0%	15.0%	5.0%	2.22	23.66	0.84	27974
BSN 3	122729.6	28.17	30.0%	65.0%	5.0%	2.11	59.36	0.72	73863
BSN 4	37561.3	8.62	50.0%	50.0%	0.0%	2.35	20.26	0.63	25980
BSN 5	43116.3	9.90	30.0%	25.0%	15.0%	2.92	28.89	1.16	41681
BSN 6	45971.5	10.55	0.0%	10.0%	90.0%	4.54	47.96	2.02	77424
BSN 7	30221	0.69	65.0%	30.0%	5.0%	1.86	1.29	0.64	1759

Pond	Volume Req'd (CF)	Volume Provided (CF)
Pond 1	31,279	170,802
Pond 2	41,573	54,075
Pond 3 (natural ponding area)	73,863	276,115
Pond 4 (natural ponding area)	25,980	156,788
Pond 5 (natural ponding area)	58,008	61,638
Ponds 6+7+8+9	132,589	209,028
Pond 7	1,569	6,458

NOTE:
SEE OVERALL DRAINAGE MANAGEMENT PLAN FOR PONDING AND BASIN DETAILS

LEGEND

DRAINAGE AREA LINE

PHASE LINE

BASIN ID

PROPOSED STORM DRAIN

PROPOSED STORM INLET

EMERGENCY OVERFLOW ARROW

100

50

0

100

1"=100'

NOTE:
FINISHED FLOORS AND PROPOSED GRADING SHOWN IS CONCEPTUAL.

