

CITY OF ALBUQUERQUE



July 21, 2006

Mr. Hugh Floyd, PE
EASTERLING CONSULTANTS, LLC
3613 NM 528 NW, Suite E-2
Albuquerque, NM 87114

Re: COLDWELL OFFICE BUILDING
10300 Cottonwood Park NW
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 11/15/2005 (A-14/D16)
Certification dated 07/19/2006

P.O. Box 1293

Dear Hugh,

Albuquerque

Based upon the information provided in your submittal received 07/21/2006, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

New Mexico 87103

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

www.cabq.gov

Sincerely,

Arlene V. Portillo

Arlene V. Portillo
Plan Checker, Planning Dept. - Hydrology
Development and Building Services

C: CO Clerk:
File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Coldwell Office Building ZONE MAP/DRG. FILE #: A-14/D10D
DRB # Proj#1001831 App#05DRB01588EPC#: WORK ORDER#:

LEGAL DESCRIPTION: Tract-G1A-1 Seven Bar Ranch, Tract-G1A-2C SBR
CITY ADDRESS: 10300 Cottonwood Park NW

ENGINEERING FIRM: Easterling Consultants LLC
ADDRESS: 3613 NM 528 NW, Suite E-2
CITY, STATE: Albuquerque, NM

CONTACT: Hugh Floyd
PHONE: (505) 821-6646
ZIP CODE: 87114

OWNER: Momentum West LLC
ADDRESS: 3777 American Road, Suite 200
CITY, STATE: Albuquerque, NM

CONTACT: Kerry West
PHONE: (505) 890-2110
ZIP CODE: 87114

ARCHITECT: Claudio Vigil Architects
ADDRESS: 1801 Rio Grande
CITY, STATE: Albuquerque, NM

CONTACT: Louisa Hollson
PHONE: (505) 842-1113
ZIP CODE: 87104

SURVEYOR: Precision Survey
ADDRESS: 8414-D Jefferson St NW
CITY, STATE: Albuquerque, NM

CONTACT: Larry Mondrano
PHONE: (505) 856-5700
ZIP CODE: 87117

CONTRACTOR: Gerald Martin Contractor
ADDRESS: 8501 Jefferson NE
CITY, STATE: Albuquerque, NM

CONTACT: Fred Gorenz
PHONE: (505) 823-6850
ZIP CODE: 87113

CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL, **REQUIRES TCL or equal**
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☒ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

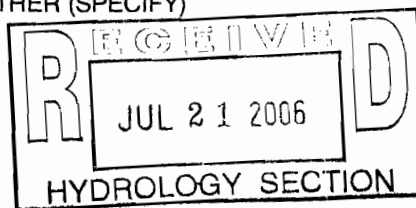
- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☒ CERTIFICATE OF OCCUPANCY (PERM.)
- ☐ CERTIFICATE OF OCCUPANCY (TEMP.)
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☒ YES Phone Call
- ☐ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: 07-19-06

BY: Hugh Floyd



Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of 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 subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

Easterling Consultants LLC

3613 NM 528 NW, Suite E-2
Albuquerque, NM 87114
Phone (505) 821-6646
Fax (505) 897-2965

TRANSMITTAL

To: City of Albuquerque
600 2nd Street NW
Albuquerque, New Mexico
87102

Attn: Kristal D. Metro

Date: July 21, 2006	Job No.: 480501
Re: Coldwell Office Building	
Drainage and Grading Certification	

WE ARE SENDING YOU ☐ Attached ☐ Under Separate Cover via _____ the following items:

☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☒ Grading and Drainage Sheets

Copies	Date	Pages/Sheets	Description
1	07/19/06	6	Grading and Drainage Certification (1 original + 2 copies each)
1	07/19/06	1	Drainage and Transportation Information Sheet

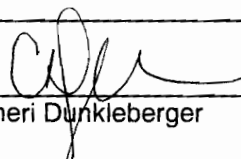
THESE ARE TRANSMITTED AS CHECKED BELOW:

- | | | |
|---|---|---|
| <input type="checkbox"/> For approval/signature | <input type="checkbox"/> Approved as submitted | <input type="checkbox"/> Resubmit _____ copies for approval |
| <input type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Submit _____ copies for distribution |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Return _____ copies | <input type="checkbox"/> Return _____ corrected prints |
| <input type="checkbox"/> For review and comment | <input checked="" type="checkbox"/> Approval/Revision | <input type="checkbox"/> FOR BIDS DUE _____ |
- ☐ PRINTS ON LOAN – RETURN TO EC AFTER BID

Remarks:

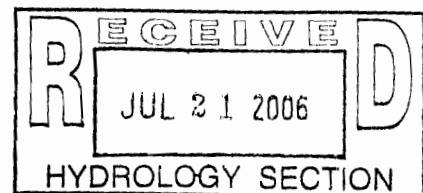
COPY TO:

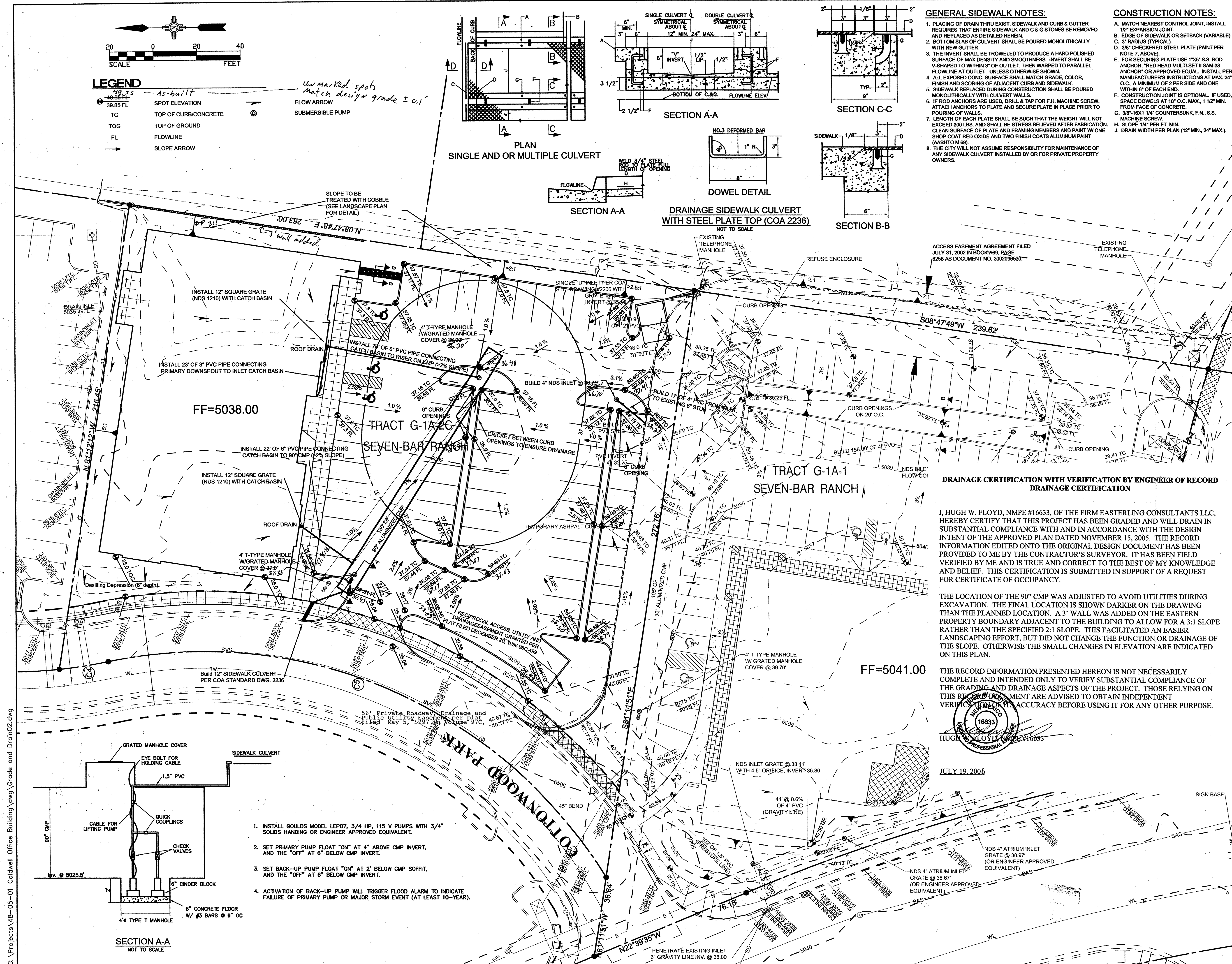
SIGNED:


Cheri Dunkleberger

RECEIVED BY:

DATE:



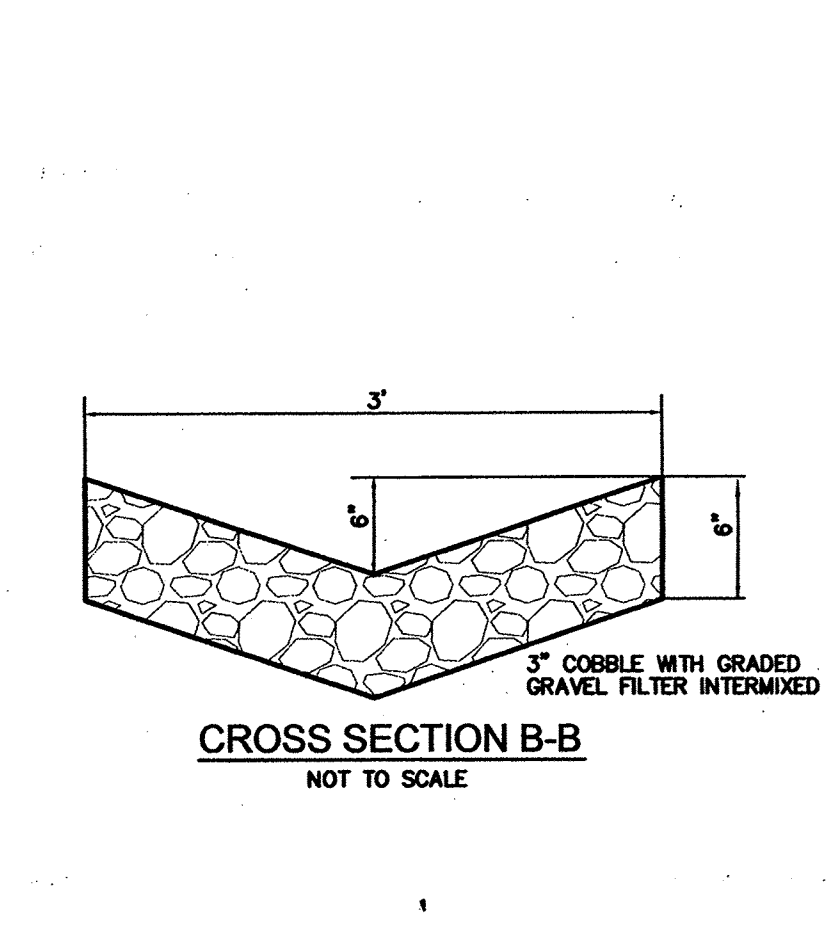
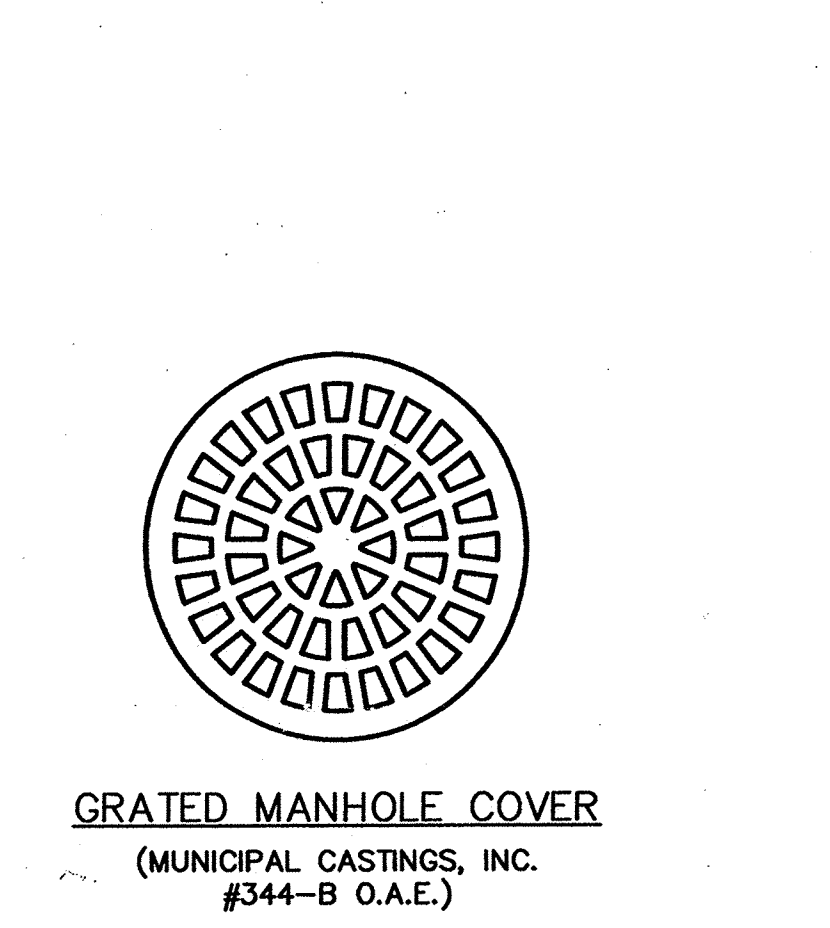
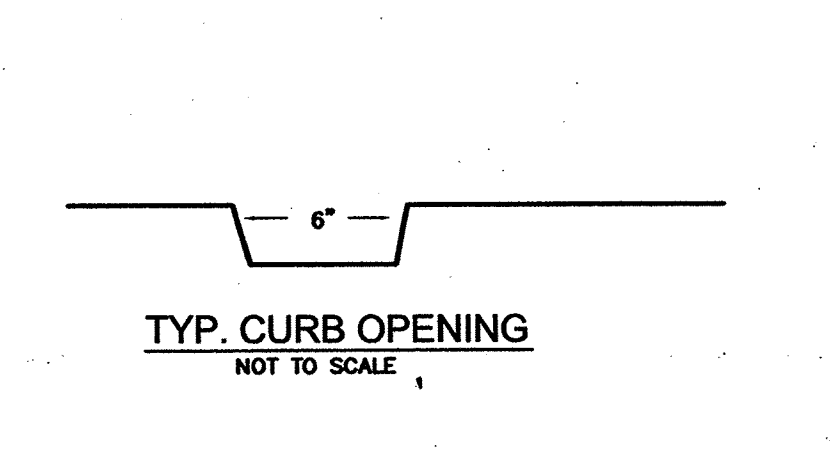
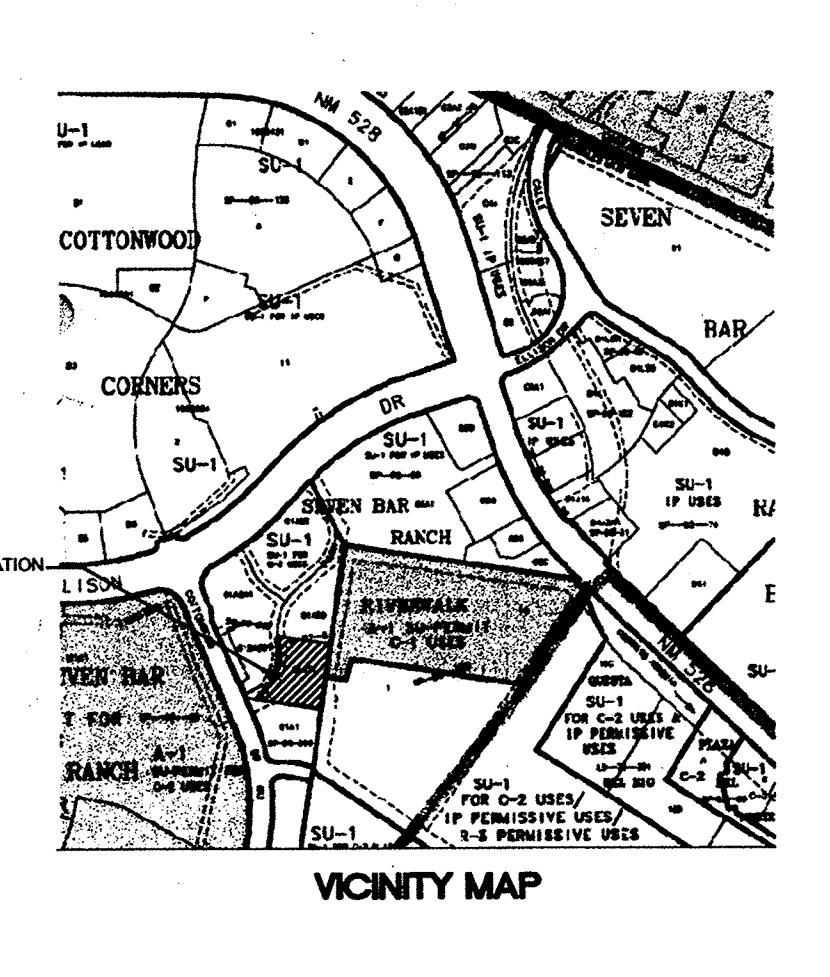


GENERAL SIDEWALK NOTES:

1. PLACING OF DRAIN THRU EXIST. SIDEWALK AND CURB & GUTTER REQUIRES THAT ENTIRE SIDEWALK AND C & G STONES BE REMOVED AND REPLACED AS DETAILED HEREIN.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. THE INVERT SHALL BE TROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAX DENSITY AND SMOOTHNESS. INVERT SHALL BE V-SHAPED TO WITHIN 3" OF OUTLET. THEN WARPED TO PARALLEL FLOWLINE AT OUTLET. UNLESS OTHERWISE SHOWN.
4. ALL EXPOSED CONC. SURFACE SHALL MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK.
5. SIDEWALK REPLACED DURING CONSTRUCTION SHALL BE POURED MONOLITHICALLY WITH CULVERT WALLS.
6. IF ROD ANCHORS ARE USED, DRILL & TAP FOR F.H. MACHINE SCREW. ATTACH ANCHORS TO PLATE AND SECURE PLATE IN PLACE PRIOR TO POURING OF WALLS.
7. LENGTH OF EACH PLATE SHALL BE SUCH THAT THE WEIGHT WILL NOT EXCEED 300 LBS. AND SHALL BE STRESS RELIEVED AFTER FABRICATION. CLEAN SURFACE OF PLATE AND FRAMING MEMBERS AND PAINT W/ ONE SHOP COAT RED OXIDE AND TWO FINISH COATS ALUMINUM PAINT (ASHTO M 69).
8. THE CITY WILL NOT ASSUME RESPONSIBILITY FOR MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

CONSTRUCTION NOTES:

- A. MATCH NEAREST CONTROL JOINT, INSTALL 1/2" EXPANSION JOINT.
- B. EDGE OF SIDEWALK OR SETBACK (VARIABLE).
- C. 3" RADIUS (TYPICAL).
- D. 3/8" CHECKERED STEEL PLATE (PAINT PER NOTE 7, ABOVE).
- E. FOR SECURING PLATE USE 1"x9" S.S. ROD ANCHOR, "RIB HEAD MULTI-SET 8 SNAKE" ANCHOR OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS AT MAX. 24" O.C. A MINIMUM OF 2 PER SIDE AND ONE WITHIN 6" OF EACH END.
- F. CONSTRUCTION JOINT IS OPTIONAL. IF USED, SPACE DOWELS AT 18" O.C. MAX. 1 1/2" MIN. FROM FACE OF CONCRETE.
- G. 3/8" 16X1 1/4" COUNTERSUNK, F.N., S.S. MACHINE SCREW.
- H. SLOPE 1/4" PER FT. MIN.
- J. DRAIN WIDTH PER PLAN (12" MIN., 24" MAX.).



DRAINAGE CERTIFICATION WITH VERIFICATION BY ENGINEER OF RECORD

DRAINAGE CERTIFICATION

I, HUGH W. FLOYD, NMPE #16633, OF THE FIRM EASTERLING CONSULTANTS LLC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED NOVEMBER 15, 2005. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN PROVIDED TO ME BY THE CONTRACTOR'S SURVEYOR. IT HAS BEEN FIELD VERIFIED BY ME AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

THE LOCATION OF THE 90° CMP WAS ADJUSTED TO AVOID UTILITIES DURING EXCAVATION. THE FINAL LOCATION IS SHOWN DARKER ON THE DRAWING THAN THE PLANNED LOCATION. A 3" WALL WAS ADDED ON THE EASTERN PROPERTY BOUNDARY ADJACENT TO THE BUILDING TO ALLOW FOR A 3:1 SLOPE RATHER THAN THE SPECIFIED 2:1 SLOPE. THIS FACILITATED AN EASIER LANDSCAPING EFFORT, BUT DID NOT CHANGE THE FUNCTION OR DRAINAGE OF THE SLOPE. OTHERWISE THE SMALL CHANGES IN ELEVATION ARE INDICATED ON THIS PLAN.

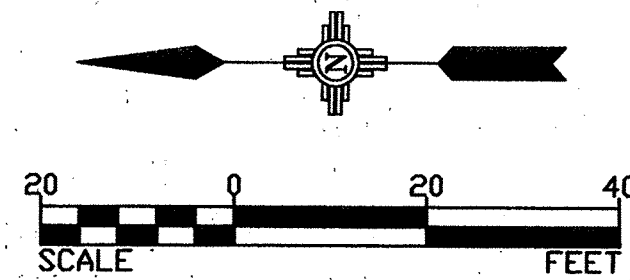
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THE PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

HUGH W. FLOYD, NMPE #16633
PROFESSIONAL ENGINEER
JULY 19, 2006

COLDWELL OFFICE BUILDING
GRADING PLAN
JUL 21 2006
HYDROLOGY SECTION

Easterling Consultants, LLC
CONSULTING ENGINEERS
3613 NM 528 NW, Suite E-2
Albuquerque, New Mexico 87114
(505) 821-6646 FAX (505) 897-2965

DESIGNED BY: HWF
DRAWN BY: HWF
CHECKED BY: CME
DATE: 15 NOV. 2005
C-103
OF 22

**LEGEND**

40.37 40.36 FL	SPOT ELEVATION	As-built - unmarked spots match design grade $\pm 0.1'$
TC	TOP OF CURB/CONCRETE	
TOG	TOP OF GROUND	
FL	FLOWLINE	
→	SLOPE ARROW	
→	FLOW ARROW	
	SUBMERSIBLE PUMP	
	BASIN BOUNDARY	
	100 YEAR STORM PONDING EXTENTS	

HYDROLOGY SUMMARY											
PROJECT NAME	Col dwell	bui l di ng						10 YEAR			
JOB NUMBER	48-05-01	AREA	LAND TREATMENTS				Q	VOLUME (ac.ft.)		Q	100 YEAR
BASIN	COND.	(acres)	A	B	C	D	(cfs)	6 HR	24 HR	(cfs)	VOLUME (ac.ft.)
Sub 1	DEV	0.17	0.0%	0.0%	6.0%	94.0%	0.5	0.017	0.021	0.73	0.027
Sub 2	DEV	0.91	0.0%	4.0%	3.7%	92.3%	2.5	0.089	0.110	3.84	0.143
Sub 3	DEV	0.07	0.0%	0.0%	100.0%	0.0%	0.1	0.003	0.003	0.20	0.006
Sub 4	DEV	0.08	0.0%	6.5%	6.0%	87.5%	0.2	0.008	0.009	0.33	0.012
Exist. to East	Undev	0.10	50.0%	0.0%	25.0%	25.0%	0.1	0.004	0.004	0.25	0.008
Sub 5		0.06	0.0%	50.0%	50.0%	0.0%	0.1	0.002	0.002	0.15	0.004
Just Roof	DEV	0.30	0.0%	0.0%	0.0%	100.0%	0.9	0.031	0.039	1.33	0.050

COLDWELL OFFICE BUILDING

The project area is designated as Tract G-1A-2C Seven Bar Ranch. It is covered by SAD223 and has a maximum permissible discharge rate as found in "SAD NO. 223 Cabezón Channel Capacity Analysis" (June 1993), prepared by Easterling & Associates, Inc., for COA PWD. The permissible flow rate from TRACT G-1A is 0.73 cfs per acre. Tract G-1A-2C is 1.2868 acres and therefore has a permissible discharge rate of 0.98 cfs.

Tract G-1A-2C was originally planned to share an underground pipe/pump system with the adjacent Tract G-1A-1, however Tract G-1A-1 has developed independently. Therefore, Tract G-1A-2C will discharge the allowed 0.98 cfs into the existing curb and gutter provided in Cottonwood Park, which is contained within a 50' private utility, drainage, and access easement.

Hydrology calculations were performed based on the Albuquerque DPM Chapter 22.2. Tract G-1A-2C is in Zone 1 (Figure A-1 of DPM). Therefore, a rainfall of 2.66" is used for the 100-yr 24-hr storm. The site is broken into five sub-basins for analysis. The areas and calculated runoff volumes and peak flow rates are shown in the adjacent table along with an existing sub-basin and the roof area which is included for sizing inlets.

Existing condition

The existing site slopes primarily to the east and north, except that portion contained in the existing Cottonwood Park Rd. which slopes northward. Currently there is a small ponding area in the northeast corner of the property that holds the runoff from most of the site. There is 0.1 acres of the existing site that directly runoff to the adjacent site to the east. This portion includes an existing portion of an old asphalt roadway. The table below shows this existing sub-basin with the discharge and volume associated with the 100-yr, 24-hr storm. For the proposed plan, only a 10' strip along the eastern edge of the property (Sub-basin 3) is permitted to discharge to the east. This strip yields only 252 cu. ft at 0.2 cfs in the design storm which is less than the existing sub-basin.

Proposed Conditions

The majority of the site (Sub-basin 2) drains to a 130' long buried 90" CMP which houses a 40 GPM (0.09 cfs) duplex pumping system. This system pumps the runoff to a 12" sidewalk culvert which discharges to Cottonwood Park. All building runoff is to the front of the building. Two roof drains shown on the plan each receive approximately half of the roof area. Each of these drains go into a 12" by 12" grate/catch basin which in turn directs flow to a 6" PVC pipe running to the 90" CMP. A smaller drain catches a very small portion of the roof near the main entrance and is directed to the eastern of the two grates. The small roof coming from the main building in the south east corner drains from a scupper to the cobble swale shown on the plan which drains to the parking lot. The 90" CMP holds 5733 cu. ft (0.13 ac-ft) which is more than the 10-year volume for Sub-basin 2 (4,800 cu. ft.). The remainder of the 100-yr, 24-hr storm (1915 cu. ft.) is contained in the ponding area in the parking lot. The maximum depth of this ponding area is 0.5' and this area will only be flooded for a short duration during a storm larger than the 10-yr, 24-hr storm.

The portion of the site included in the roadway (Sub-basin 1) discharges as part of the roadway drainage system to the north. This sub-basin uses the majority of the allowable discharge. Sub-basin 4 is primarily made up of a basin from the Tract G-1A-1 site plan, therefore, an inlet in the adjacent median takes this area to the existing stub at the easement line. Sub-basin 2 is made up partly of area from the adjacent site and all discharge from Sub-basin 3 comes to the grate manhole cover at the eastern end of the buried 90" CMP, so this compensates for Sub-basin 4. Sub-basin 5, made up of only landscaped areas, sheet flows over the adjacent sidewalk into Cottonwood Park.

In summary, the total discharge of the site to Cottonwood Park is the discharge from Sub-basins 1 & 5 and the discharge of the pump system which catches Sub-basin 3. The total is 0.73 cfs + 0.15 cfs + 0.09 cfs = 0.97 cfs. This is below the 0.98 cfs allowable discharge.

As shown in the plan, the site has between 1 and 3% grades except at the short transition on the eastern side where slopes become as steep as 2:1. These steep areas will be protected by cobble treatment of the slope to prevent erosion.

**DRAINAGE CERTIFICATION WITH VERIFICATION BY ENGINEER OF RECORD
DRAINAGE CERTIFICATION**

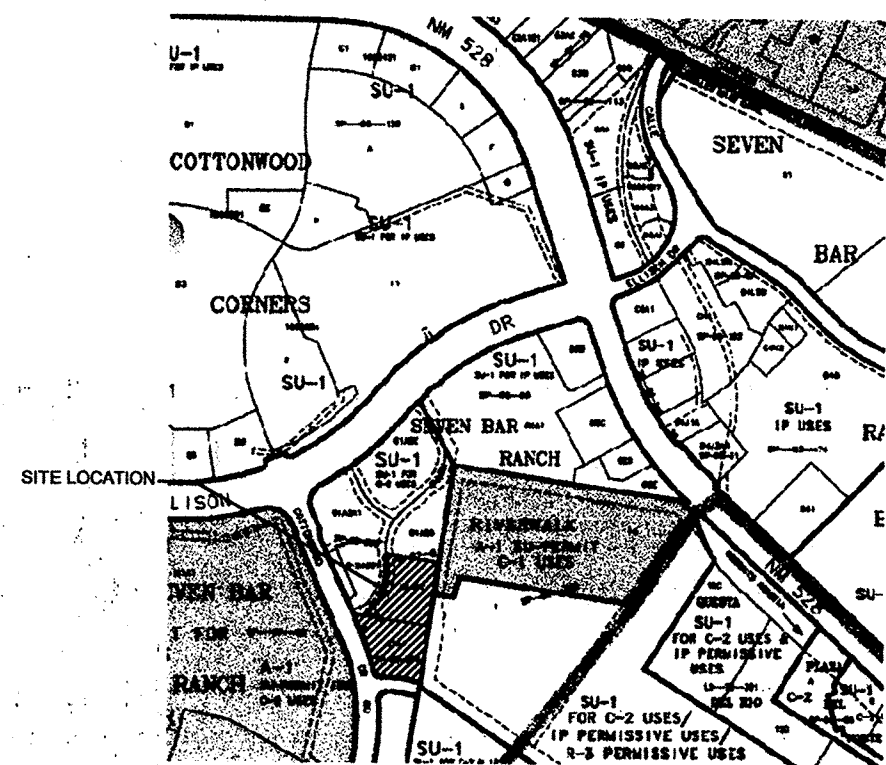
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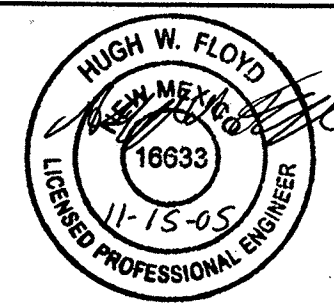
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HUGH W. FLOYD, NMPE #16633
REGISTERED PROFESSIONAL ENGINEER

JULY 19, 2006



VICINITY MAP-NO FLOOD PLAIN PER PANEL 35001C0100F

**COLDWELL
OFFICE BUILDING
DRAINAGE PLAN
(FOR INFORMATION ONLY)**

Easterling Consultants, LLC
CONSULTING ENGINEERS
3613 NM 528 NW, Suite E-2
Albuquerque, New Mexico 87114
(505) 821-6646 FAX (505) 897-2965

DESIGNED BY: HWF DRAWN BY: HWF CHECKED BY: CME
JOB NO: 48-05-01 DATE: 15 NOV. 2005 C-102 OF 22