

CITY OF ALBUQUERQUE



October 18, 2007

J. Arthur Blessen, P.E.
J. Arthur Blessen Engineering
11930 Menaul NE Suite 109
Albuquerque, NM 87112

Re: Romero Office Building, Engineer's Stamp dated 10-10-07 (J14/D105A)
Lot 8A Block N of the Mandel Business and Residence Addition

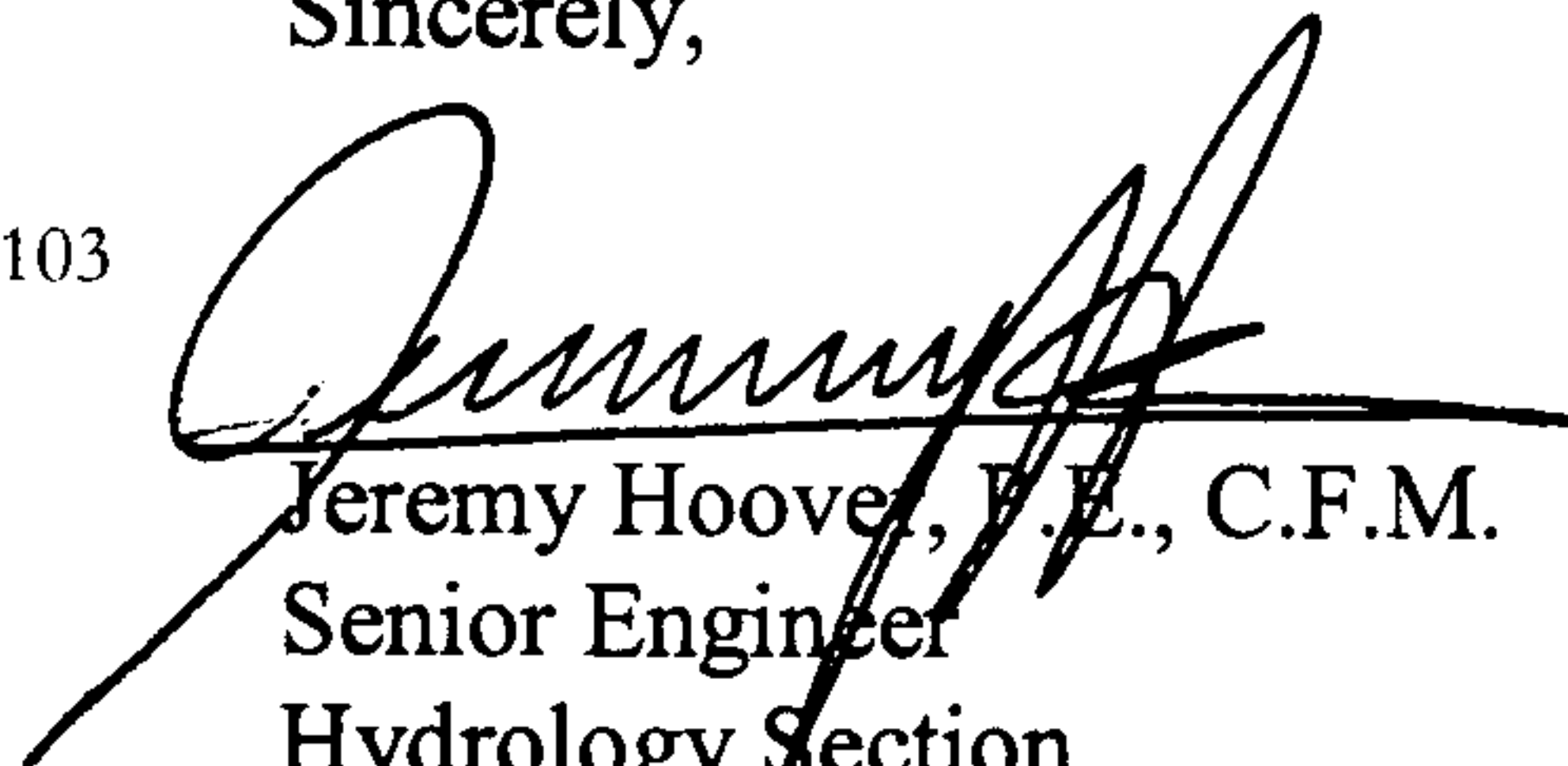
Dear Mr. Blessen,

Based upon the information provided in your submittal received on October 12, 2007, the above referenced plan is approved for both Building Permit and SO-19 permit. Please attach a copy of this letter and the approved plan to the construction sets to obtain sign-off by Hydrology. A copy of this approval letter must be on hand when applying for the excavation permit.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required. Be advised that no Certificate of Occupancy, temporary or permanent, will be released prior to inspection and approval of the sidewalk culverts by the Storm Drain Maintenance department. Contact Duane Schmitz at 235-8016 to schedule an inspection.

If you have any questions or need additional information, you can contact me at 924-3990.

Sincerely,


Jeremy Hoover, P.E., C.F.M.
Senior Engineer
Hydrology Section
Development and Building Services

cc: file J14/D105A

Antoinette Baldonado, Construction Services
Duane Schmitz, DMD Street / Storm Maintenance

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(REV 12/2005)

PROJECT TITLE: ROMERO OFFICE BUILDING ZONE MAP: J-14/D105A
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LOT 8-A BLOCK N MANDEL BUSINESS & RESIDENCE ADDITION
CITY ADDRESS: 804 5TH STREET NW

ENGINEERING FIRM: J Arthur Bleszen Engineering CONTACT: Arthur Bleszen
ADDRESS: 11930 Menqui Suite 109 PHONE: 293-1477
CITY, STATE: Albuquerque NM ZIP CODE: 87112

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

ARCHITECT: Peter Butterfield Architect CONTACT: Peter Butterfield
ADDRESS: 13013 GLENWOOD HILLS CT. NE PHONE: 298-3099
CITY, STATE: Albuquerque, NM ZIP CODE: 87111

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'S CERT (TCL)
☐ ENGINEER'S CERT (DRB SITE PLAN)
☐ OTHER (SPECIFY) _____

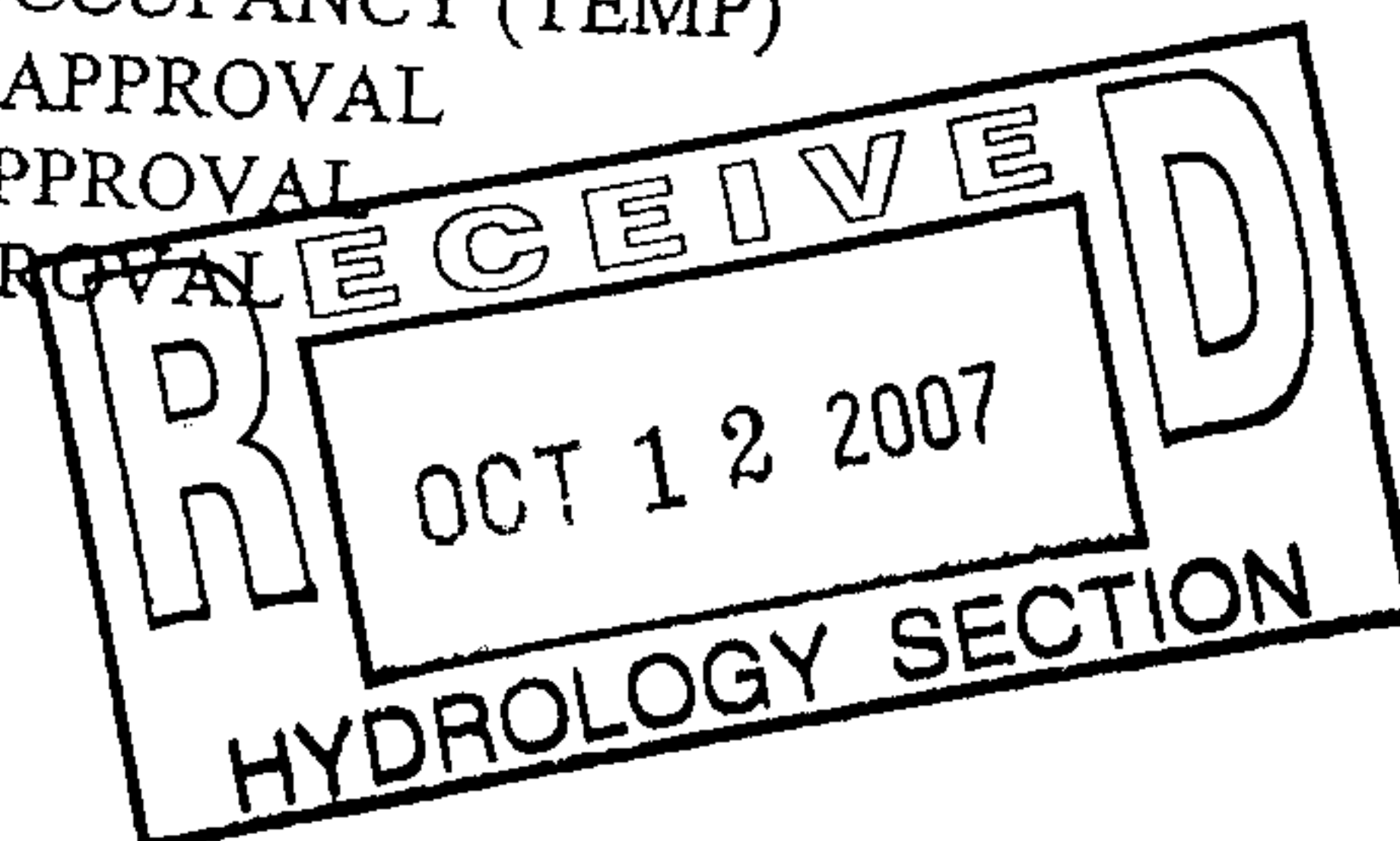
CHECK TYPE OF APPROVAL SOUGHT:

- ☐ 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

DATE SUBMITTED: 10-12-07 BY: Arthur Bleszen
10-12-07



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.

j arthur blessen engineering
architect engineer
11930 Menaul Suite 109
Albuquerque, NM 87112
tel 293-1477

October 10, 2007

Jeremy Hoover, PE, Senior Engineer
City of Albuquerque Development and Building Section
PO Box 1293
Albuquerque, New Mexico 87103

re: Romero Office Building Lot 8A Block N Mandel Business & Residence Addition
file: J14/D105A

Dear Mr Hoover,

I have received your comments of October 5, 2007, to follow are the responses to those comments:

1. A sidewalk culvert has been added along the west side and a gravel swale to direct the flows.
2. The requested information has been added to direct the flow away from the handicap ramp.

Should you have any questions or require additional information please call (505) 293-1477.

J Arthur Blessen, PE



CITY OF ALBUQUERQUE



October 5, 2007

J. Arthur Blessen, P.E.
J. Arthur Blessen Engineering
11930 Menaul NE Suite 109
Albuquerque, NM 87112

Re: Romero Office Building, Engineer's Stamp dated 10-2-07 (J14/D105A)
Lot 8A Block N of the Mandel Business and Residence Addition

Dear Mr. Blessen,

Based upon the information provided in your submittal received on October 3, 2007, additional revision is required prior to SO-19 or Building Permit approval. The elements in need of revision are as follows.

- An outfall must be provided for the western trench drains. On-site runoff cannot be transported across the sidewalk via surface flow. You will need to either provide additional sidewalk culverts or direct the runoff north to your proposed swale.
- The eastern roof drains appear to drain across the wheelchair ramp. This cannot be allowed due to potential icing problems. The alley may be used as an outfall without additional sidewalk culverts but please provide additional spot elevations and / or a drainage swale to ensure that the ramp is not the point of discharge.

P.O. Box 1293

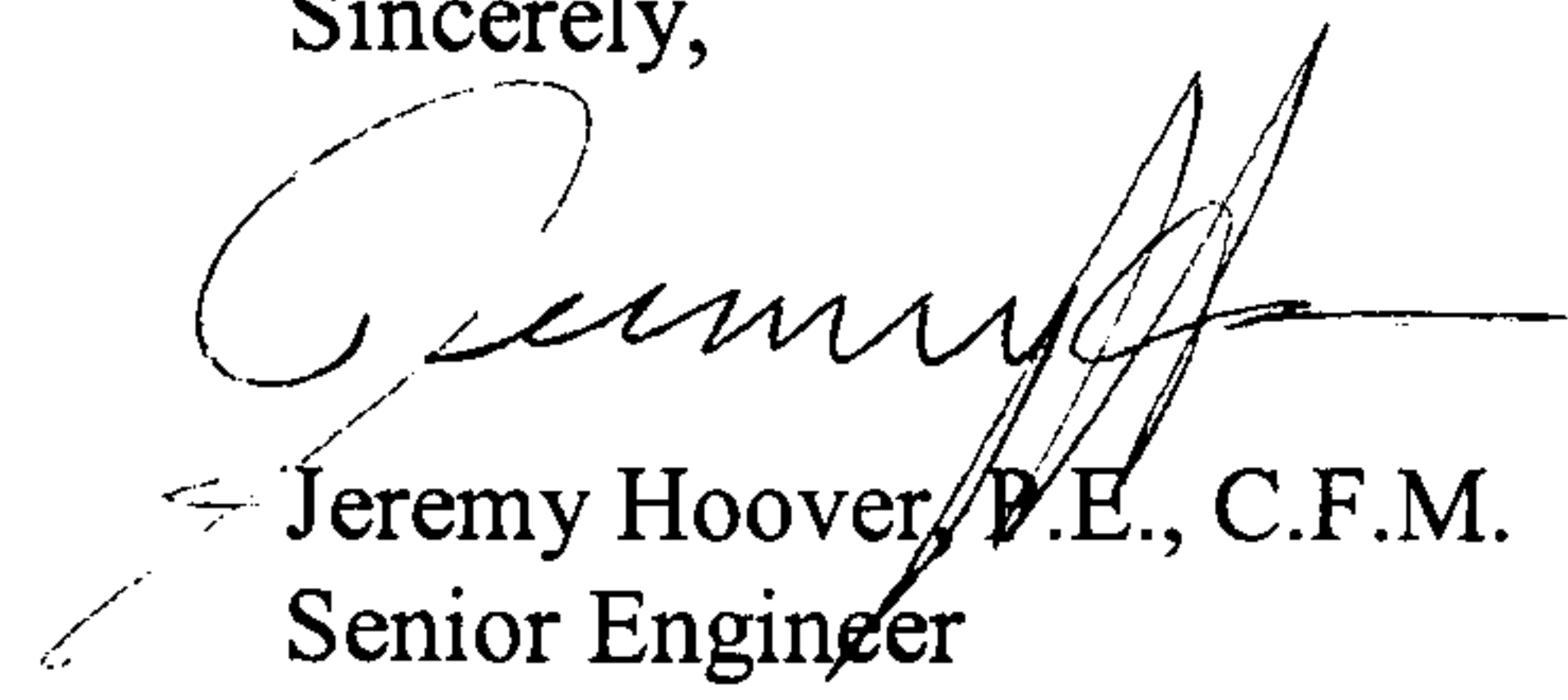
Albuquerque

New Mexico 87103

With your revised submittal, please provide two (2) copies of the plan in order to obtain SO-19 Permit approval. If you have any questions or need additional information, you can contact me at 924-3990.

Sincerely,

www.cabq.gov


Jeremy Hoover, P.E., C.F.M.
Senior Engineer
Hydrology Section
Development and Building Services

cc: file J14/D105A

j arthur blessen engineering
architect engineer
11930 Menaul Suite 109
Albuquerque, NM 87112
tel 293-1477

October 2, 2007

Jeremy Hoover, PE, Senior Engineer
City of Albuquerque Development and Building Section
PO Box 1293
Albuquerque, New Mexico 87103

re: Romero Office Building Lot 8A Block N Mandel Business & Residence Addition
file: J14/D105A

Dear Mr Hoover,


I have received your comments of August 10, 2007, to follow are the responses to those comments:

1. The calculations have been revised to reflect the existing conditions as requested.
2. The sidewalk culvert has been extend to the curb line.
3. A copy of the sheet A002 has been attached, and the top of grate and inverts elevations of the trench drains have been added as requested.
4. The elevations if with in the building are the existing ground elevations. The line work for this points has been revised.
5. The roof drain locations have been added to the plan as requested. The top of slab elevations at the door and slope of sidewalks have been added as requested.
6. The benchmark information has bee added to the plan.

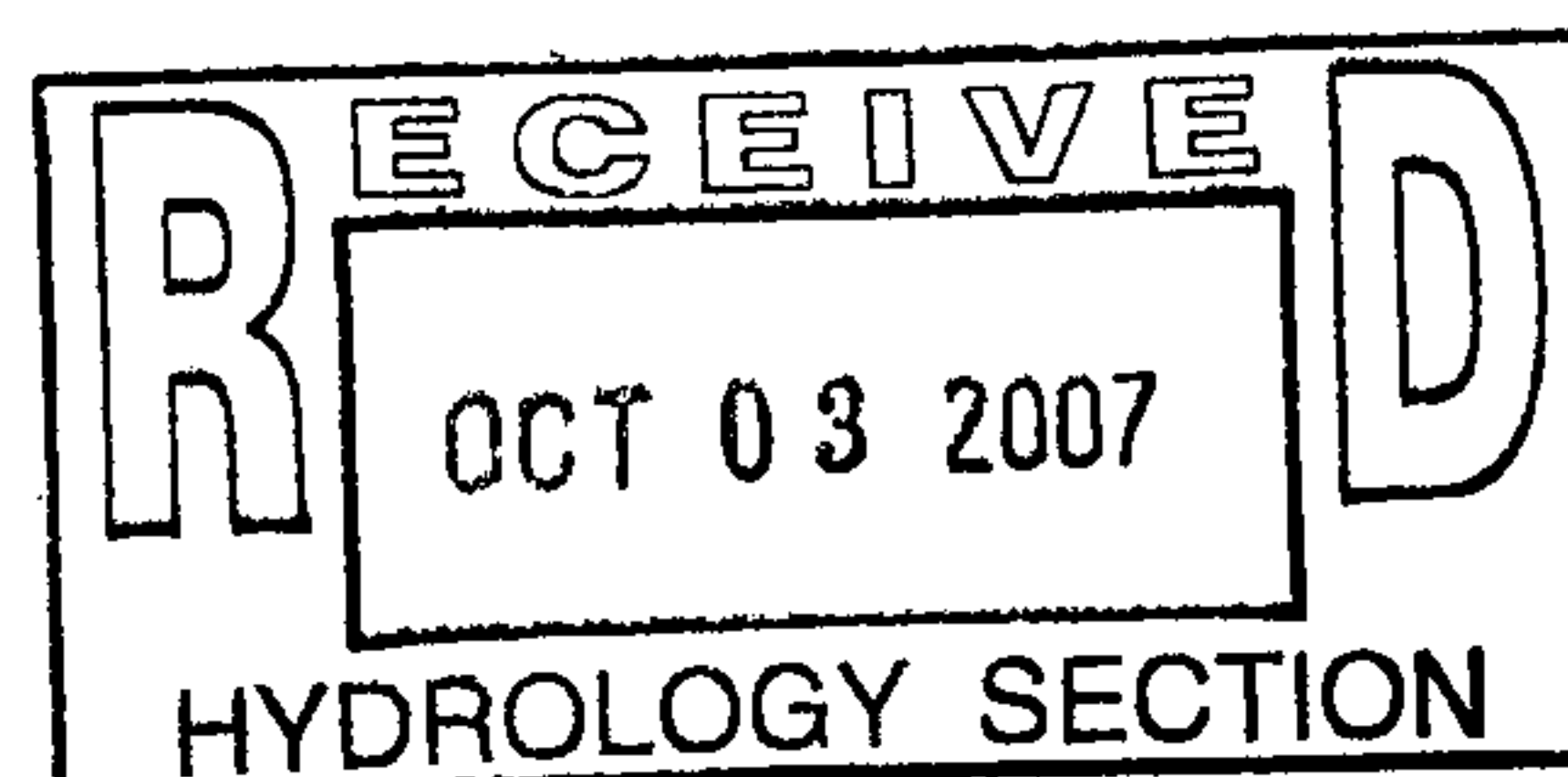
Please send future correspondence to my new address:

J Arthur Blessen Engineering
11930 Menaul Suite 109
Albuquerque, NM 87112

Should you have any questions or require additional information please call (505) 293-1477.



J Arthur Blessen, PE



DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(REV 12/2005)

PROJECT TITLE: ROMERO OFFICE BUILDING ZONE MAP: J-14/D105A
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LOT 8-A BLOCK N MANDEL BUSINESS & RESIDENCE ADDITION
CITY ADDRESS: 804 5TH STREET NW

ENGINEERING FIRM: J Arthur Blessen Engineering CONTACT: Arthur Blessen
ADDRESS: 11930 Menqui SUITE 109 PHONE: 293-1477
CITY, STATE: Albuquerque NM ZIP CODE: 87112

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

ARCHITECT: Peter Butterfield Architect CONTACT: Peter Butterfield
ADDRESS: 13013 GLENWOOD HILLS CT. NE PHONE: 298-3099
CITY, STATE: Albuquerque, NM ZIP CODE: 87111

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

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

TYPE OF SUBMITTAL:

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☐ 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'S CERT (TCL)
☐ ENGINEER'S CERT (DRB SITE PLAN)
☐ OTHER (SPECIFY) _____

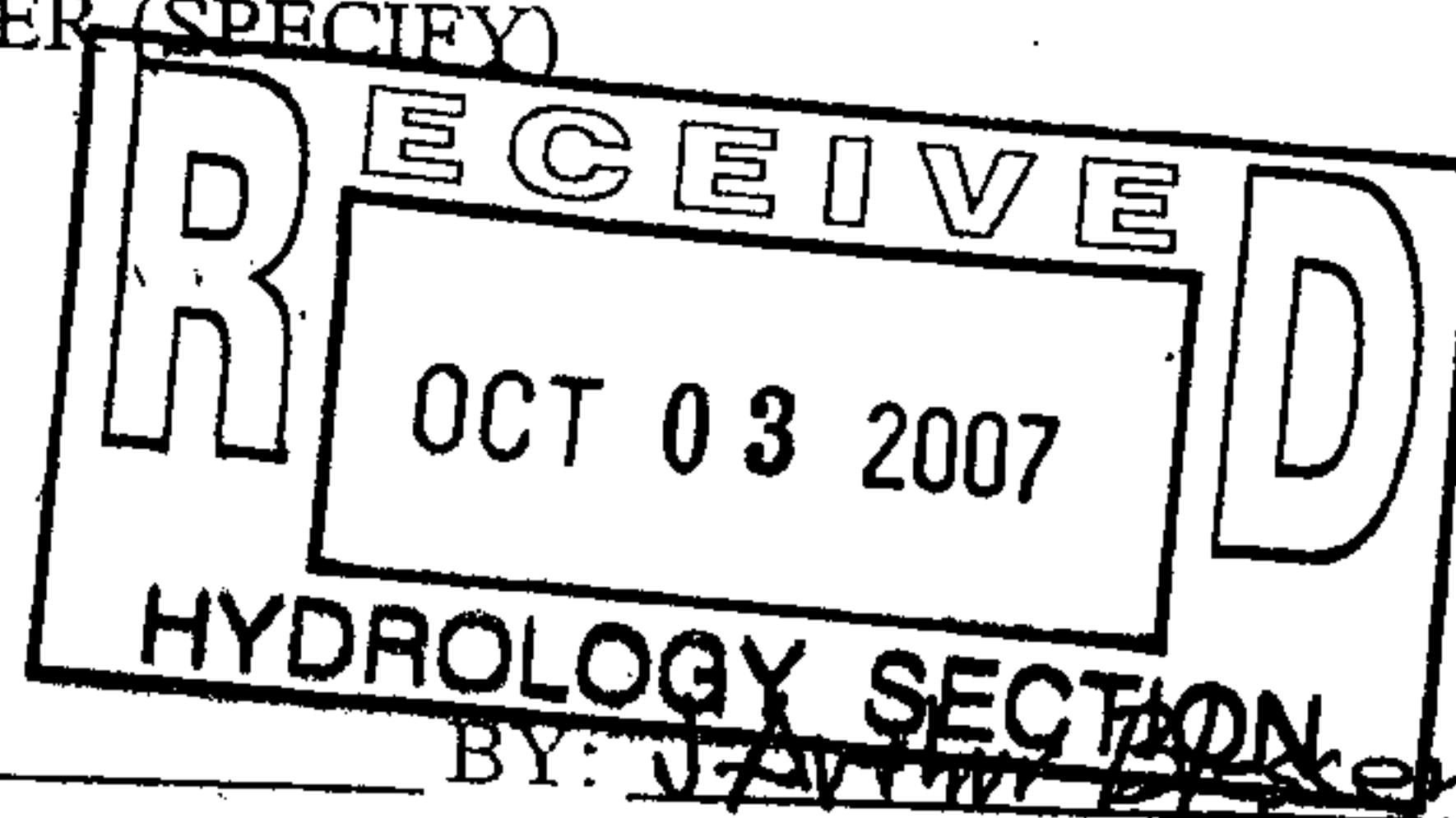
CHECK TYPE OF APPROVAL SOUGHT:

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☐ S. DEV. FOR BLDG. PERMIT APPROVAL
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☐ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☐ OTHER (SPECIFY) _____

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
☒ NO
☐ COPY PROVIDED

DATE SUBMITTED: _____



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.

CITY OF ALBUQUERQUE



August 10, 2007

J. Arthur Blessen, P.E.
Claudio Vigil Architects
1809 Rio Grande Blvd. NW
Albuquerque, NM 87104

Re: Romero Office Building, Engineer's Stamp dated 8-2-07 (J14/D105A)
Lot 8A Block N of the Mandel Business and Residence Addition

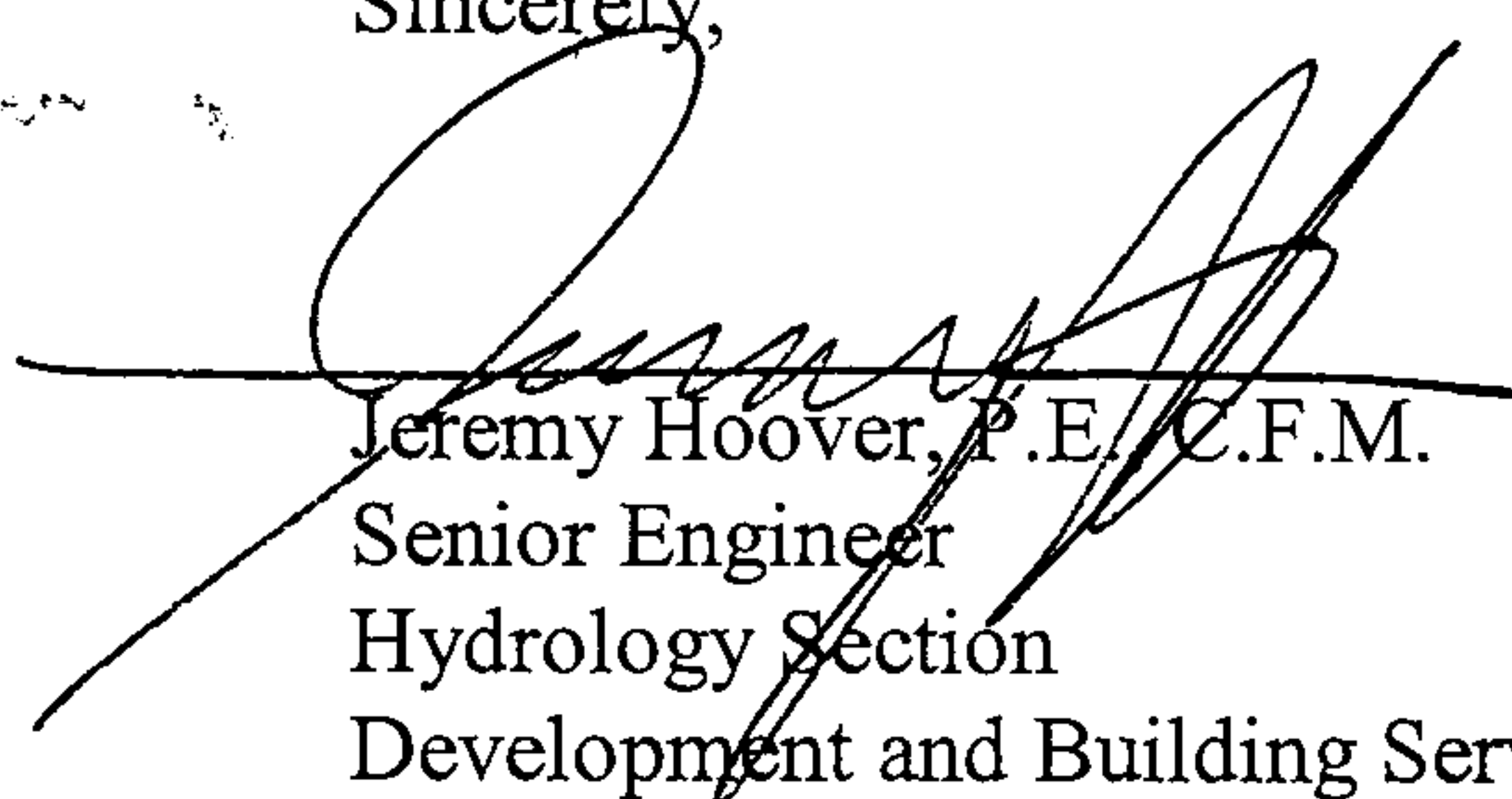
Dear Mr. Blessen,

Based upon the information provided in your submittal received on August 3, 2007, there are some additional items that must be revised prior to permit approval. Those items are as follows.

- Your calculations indicate that the current land treatment is 100%, 'A' which suggests that there has been no compaction of the on-site soils by human activity. Please revise the land treatment percentages and subsequent drainage calculations to accurately reflect the existing conditions.
- The proposed gravel lined swale at the northwest corner of the site must be revised to a standard sidewalk culvert from the property line to the outlet at 5th Street. A separate SO-19 Permit will therefore be necessary.
- Include all of the details referenced on the plan. To where and how will the proposed trench drains discharge? Please provide the grate and invert elevations.
- Why are there multiple spot elevations given within the building footprint? Based on the legend, font, and line weights, these are new elevations, not existing. Please clarify.
- Please show the roof drains so as to better define the proposed flow conditions. Also include the top of sidewalk elevations for the onsite slabs. To what slopes will these sidewalks be constructed?
- From what permanent benchmark were the site elevations derived?

With your revised submittal, please provide two (2) copies of the plan in order to obtain SO-19 Permit approval. If you have any questions or need additional information, you can contact me at 924-3990.

Sincerely,


Jeremy Hoover, P.E., C.F.M.
Senior Engineer
Hydrology Section
Development and Building Services

cc: file J14/D105A

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(REV 12/2005)

PROJECT TITLE: ROMERO OFFICE BUILDING ZONE MAP: J-14/105A
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LOT 8A BLOCK N MANDEL BUSINESS & RESIDENCE ADDITION
CITY ADDRESS: 804 5TH STREET NW

ENGINEERING FIRM: J Arthur Bleszen Engineering CONTACT: Arthur Bleszen
ADDRESS: 11930 Menqui SUITE 109 PHONE: 293-1477
CITY, STATE: Albuquerque NM ZIP CODE: 87112

OWNER: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
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ARCHITECT: Peter Butterfield Architect CONTACT: Peter Butterfield
ADDRESS: 13013 GLENWOOD HILLS CT. NE PHONE: 298-3099
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ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

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

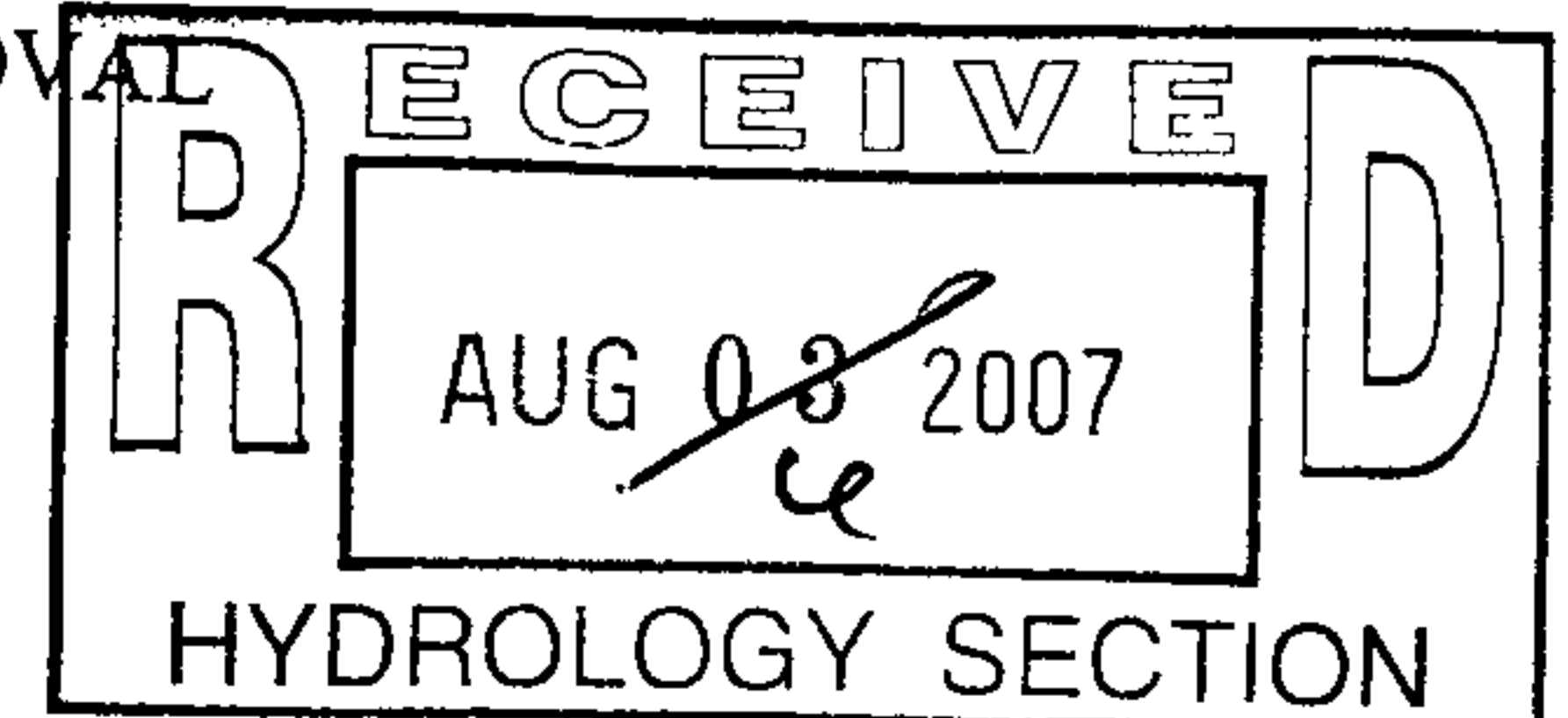
TYPE OF SUBMITTAL:

- ☒ 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'S CERT (TCL)
- _____ ENGINEER'S CERT (DRB SITE PLAN)
- _____ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL SOUGHT:

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- _____ PRELIMINARY PLAT APPROVAL
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- _____ 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



DATE SUBMITTED: 8-3-07 BY: J Arthur Bleszen

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:

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3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Metro Court Parking Structure ZONE ATLAS/DRWG. FILE # J-14 / D 105A

DRB#: _____ EPC # _____ WORK ORDER # 653581

LEGAL DESCRIPTION: Lots 1-6 & 10-11, Block N and Lots 1-9 & 13-15, Block K, Mandell Business & Residence Add.

CITY ADDRESS: Northeast corner of 4th Street and Marble Avenue

ENGINEERING FIRM: BPLW CONTACT: Nicole Losack

ADDRESS: 6200 Uptown Blvd., Suite 220 PHONE: 880-9670

OWNER: Metro Court CONTACT: (See Engineer)

ADDRESS: (See Engineer) PHONE: (See Engineer)

ARCHITECT: DCSW CONTACT: Richard Braun

ADDRESS: 6200 Uptown Blvd., Suite 400 PHONE: 881-2759

SURVEYOR: JMA CONTACT: Chuck Cala

ADDRESS: 6010B Midway Park Blvd. PHONE: 345-4250

CONTRACTOR: --- CONTACT: _____

ADDRESS: --- PHONE: _____

TYPE OF SUBMITTAL:

CHECK TYPE OF APPROVAL SOUGHT:

- ☒ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION
- ☐ OTHER _____

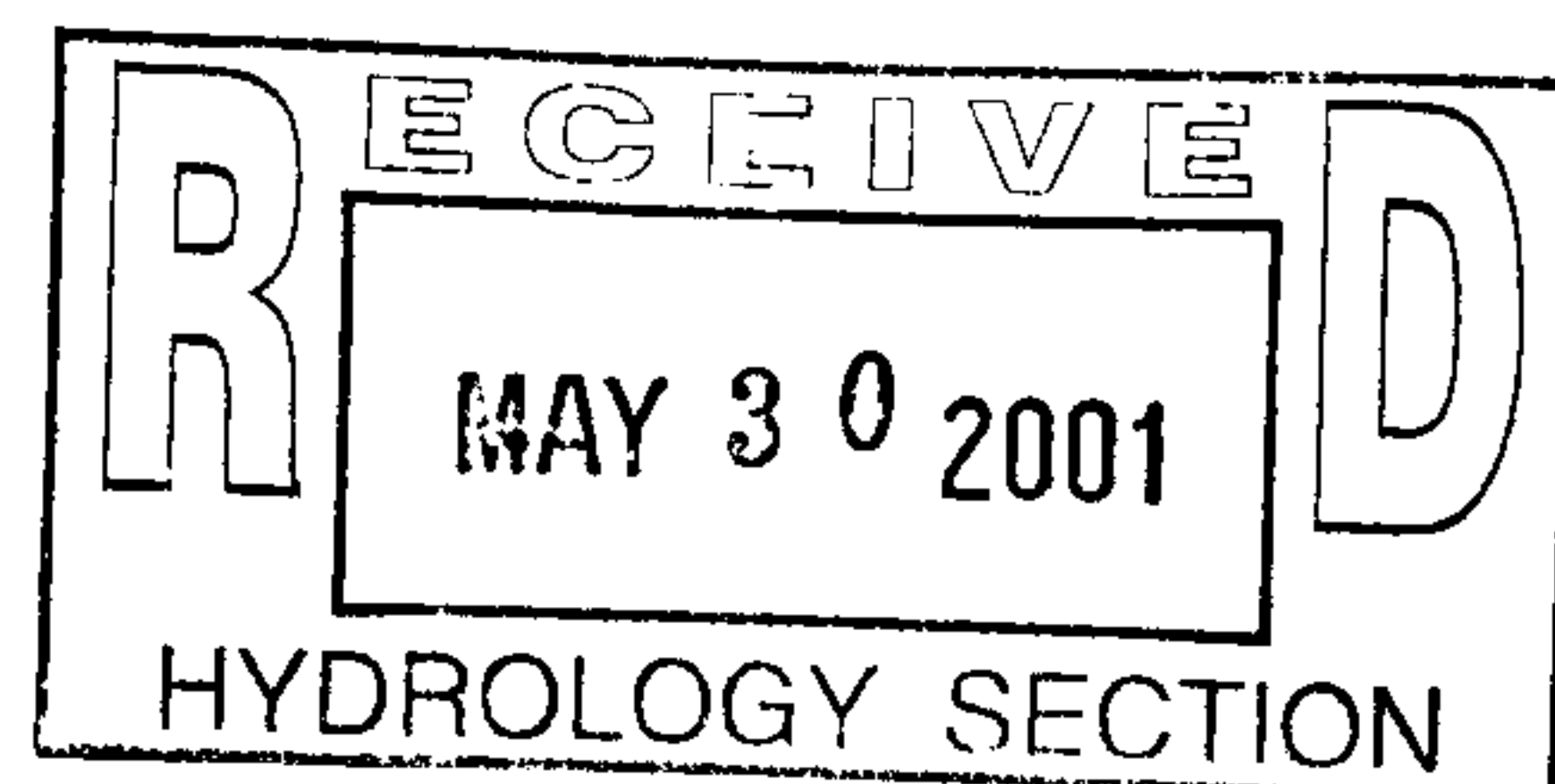
- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY APPROVAL
- ☐ GRADING PERMIT APPROVALS
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.B. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☒ OTHER SO-19 (SPECIFY)

PRE-DESIGN MEETING:

- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: May 25, 2001

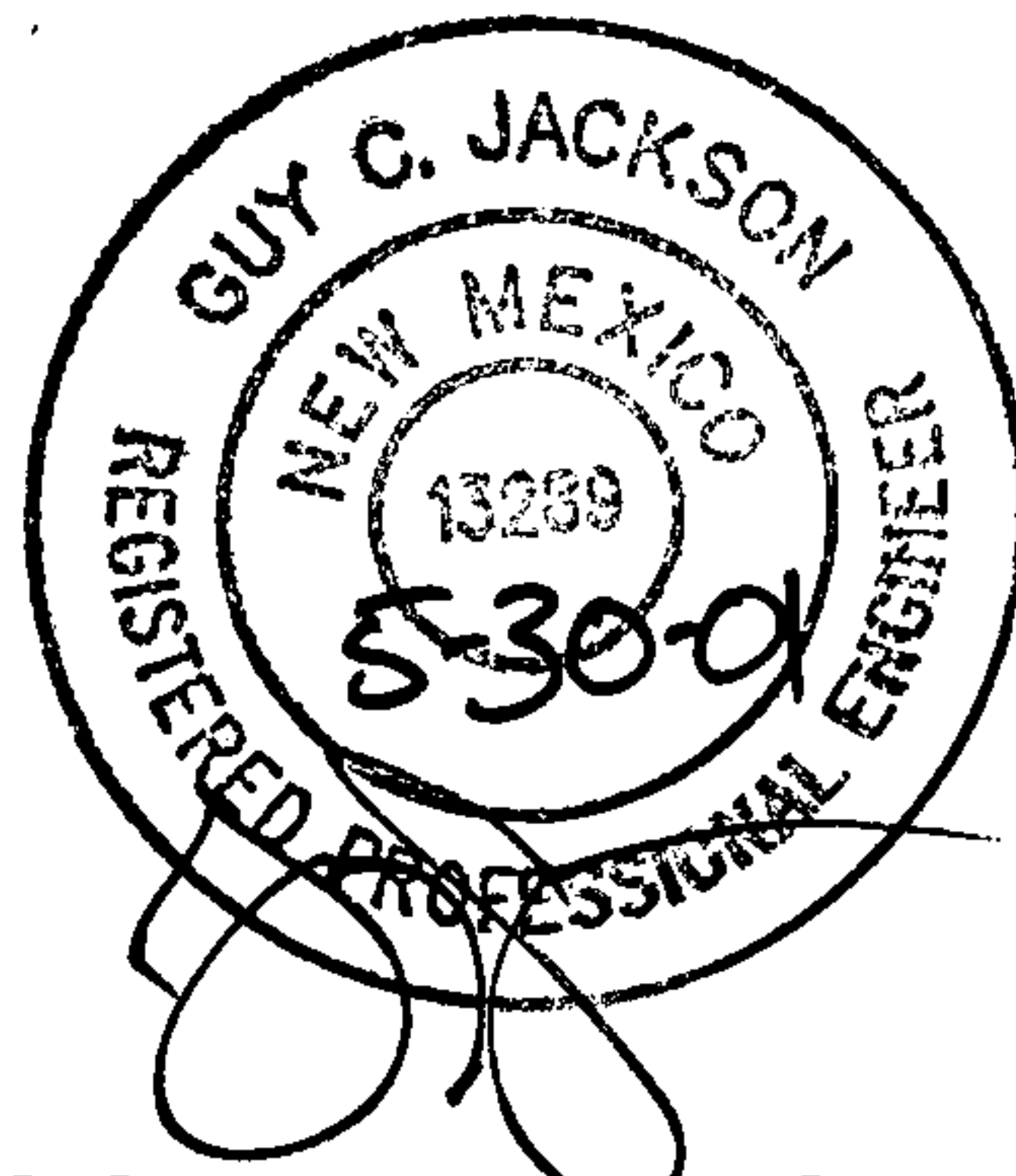
BY: Nicole M. Losack



Metro Court Parking Structure

Marble Avenue & 4th Street

Grading and Drainage Plan (J-14)



BPLW Architects & Engineers

May 25, 2001

The following items pertaining to the Metro Court Parking Structure Drainage Plan are contained herein: 1) Vicinity Map; 2) Flood Hazard Map; 3) Calculations; & 4) Grading Plan

As shown by the Vicinity Map, the site is located on the west side of 4th Street between Marble and Slate Avenues.

Per flood insurance rate map 334 of 825 for Bernalillo County, dated September 20, 1996, the site does not lie within a flood hazard zone area. The nearest flood zone, Zone AO – depth 1, is located one block northeast of the site at the corner of Marble Ave. and 3rd Street.

The grading plan shows existing and proposed spot elevations, the limit and character of existing features not being removed and proposed improvements as well as the continuity between the two. As shown by this plan, the proposed construction consists of a parking garage, two associated entrances, alley improvements, a reconfigured and resurfaced exterior parking lot, and sidewalk improvements.

Existing Conditions:

As shown by the Vicinity Map, the 1.65-acre site contains lots 1-6 & 10-11 of block N and lots 1-9 & 13-15 of block K of the Mandell Business & Residence Addition. This area is currently being re-platted by Jeff Mortensen & Associates. The Property is bounded on the east by 4th Street, on the south by Slate Ave., on the north by Marble Ave., and on the west by private property as well as 5th Street. The majority of the site consists of various structures and an associated asphalt parking lot of which are currently being removed. The existing site drainage is characterized by five basins, which are described as follows:

- Basin EX1, with a developed discharge rate of 0.91cfs, conveys runoff to onto 5th Street by means of a drivepad. The existing alley in addition to various on site areas, characterized as Basin EX2 carries its developed runoff of 1.58cfs, onto Slate Avenue, where it crests, and divides the flow along this roadway along the curb and gutter. Additional flow from Basin EX 4 is conveyed to the drop inlet at the southwest corner of Slate and 4th Street. Basin EX5 discharges onto 4th Street, where it is conveyed to a drop inlet at the northwest corner of Slate and 4th Street. The remainder of the site, comprised of the northern portion of the site (Basins EX3 & EX6), discharges onto Marble Avenue and is conveyed to a drop inlet at the southwest corner of Marble Ave. and 4th Street.
- There are no offsite flows entering the site.

The existing site was fully developed and was comprised of various structures, paved parking areas, sidewalk, and a paved alley. Only 0.24 acres of the site were landscaped or pervious area.

Marble Avenue currently has a discharge rate of 1.73 cfs being routed to a drop inlet at the corner of Marble and 4th. Slate Avenue accepts a total rate of 2.07cfs with 0.79 cfs being conveyed west to a drop inlet. The remainder is conveyed east to a drop inlet. Both drop inlets are located along storm drain line that runs along Slate Ave. 4th Street accepts 2.66cfs, which travels south into a drop inlet. 5th Street accepts 0.91cfs, yielding a total runoff of 7.37cfs.

Proposed Conditions:

In the proposed condition, the site will follow the existing drainage patterns as the majority of the site will consist of the proposed structure. The remainder of the site will follow similar drainage patterns to existing conditions.

- The developed runoff from the proposed parking structure will gravity drain via roof drains into two proposed sidewalk culverts located along 4th street (Basin PRO5). The storm water will be combined with the sidewalk discharge (Basin PRO7) and continue down 4th Street to the previously mentioned drop inlet on 4th Street.
- The runoff from the reconfigured, resurfaced parking lot will be conveyed to 5th Street in a similar manner as previously discussed. (Basin PRO1)
- The alley accepts storm water along its length and conveys it to Slate Ave. where it is divided towards each end of the street. (Basin PRO2)
- Developed runoff from the sidewalks will continue to discharge onto the adjacent streets. Basin PRO4 discharges onto Slate Avenue and Basin PRO6 onto Marble Avenue.
- Offsite flows do not enter the site under developed conditions.

In summary, the majority of the site will discharge onto 4th Street due to the proposed parking structure. All sidewalks surrounding the structure will continue to drain into their adjacent streets. The alley will continue to convey flows onto Slate Avenue, and the reconfigured parking lot will discharge, similar to the existing condition, onto 5th Street.

Marble Avenue will accept a total of 0.44 cfs, which will be conveyed via curb and gutter to the east, and into the existing drop inlet. Slate Avenue will accept 0.69cfs entering the street and being conveyed to the drop inlet system. A discharge of 0.26 cfs will be conveyed to the west, and to an existing drop inlet, while the remaining portion will be conveyed to the east with the runoff ultimately running through the existing storm drain piping within Slate. 4th Street will accept 5.22cfs being conveyed to the existing drop inlet and storm drain piping within 4th Street. 5th Street will accept 1.23 cfs, resulting in a total runoff of 7.58cfs.

Conclusions:

The calculations contained in this report analyze the developed conditions for the 100-yr 6-hour rainfall event. The procedure for the 40 acre or smaller basins as established by section 22.2 Hydrology of the Development Process Manual, Volume 2, Design Criteria, Dated January 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. Although a negligible increase in runoff will be generated by the proposed improvements, the existing storm drainage system appears to be adequately sized to handle the slight increase. Historic drainage patterns will remain unaltered with the exception of minor improvements associated with the proposed construction. Due to the similarity between land treatments in the existing and proposed conditions, as well as the existence of storm drain improvements and the fact that this site lies within an infill area, the continued free discharge of runoff is appropriate.

Drainage Summary

Drainage Summary

Project: State of NM Metropolitan Court Parking Structure
 Project Number: 20018
 Date: 04/10/01
 By: Nicole M. Losack

Site Location

Precipitation Zone 2 Per Table A-1 COA DPM Section 22.2

Existing summary

Basin Name	EX1	EX2	EX3	EX4	EX5	EX6	
Soil Treatment (acres)							
Area "A"	0.00	0.00	0.00	0.00	0.00	0.00	
Area "B"	0.00	0.00	0.00	0.00	0.00	0.00	
Area "C"	0.00	0.16	0.07	0.00	0.00	0.01	
Area "D"	0.19	0.23	0.00	0.11	0.57	0.31	
Excess Runoff (acre-feet)							
100yr. 6hr.	0.0340	0.0559	0.0069	0.0186	0.0999	0.0563	acre-ft. 0.2716
10yr. 6hr.	0.0215	0.0328	0.0032	0.0117	0.0631	0.0355	acre-ft.
2yr. 6hr.	0.0127	0.0173	0.0009	0.0069	0.0372	0.0208	acre-ft.
100yr. 24hr.	0.0404	0.0636	0.0069	0.0221	0.1187	0.0668	acre-ft.
Peak Discharge (cfs)							
100 yr.	0.91	1.58	0.23	0.49	2.66	1.50	cfs
10yr.	0.60	1.00	0.12	0.33	1.77	1.00	cfs
2yr.	0.36	0.53	0.04	0.20	1.05	0.59	cfs

Proposed summary

Basin Name	Pro 1	Pro 2	Pro 3	Pro 4	Pro 5	Pro 6	Pro 7	
Soil Treatment (acres)								
Area "A"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Area "B"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Area "C"	0.06	0.03	0.02	0.00	0.00	0.00	0.00	
Area "D"	0.22	0.00	0.09	0.04	0.97	0.08	0.14	
Excess Runoff (acre-feet)								
100yr. 6hr.	0.0448	0.0027	0.0190	0.0065	0.1710	0.0133	0.0254	0.2827
10yr. 6hr.	0.0274	0.0012	0.0116	0.0041	0.1081	0.0084	0.0160	
2yr. 6hr.	0.0154	0.0004	0.0065	0.0024	0.0637	0.0049	0.0095	
100yr. 24hr.	0.0522	0.0027	0.0221	0.0078	0.2033	0.0158	0.0302	
Peak Discharge (cfs)								
100 yr.	1.23	0.09	0.52	0.17	4.55	0.35	0.67	
10yr.	0.80	0.05	0.34	0.12	3.04	0.24	0.45	
2yr.	0.45	0.02	0.19	0.07	1.80	0.14	0.27	

BPLW

Architects and Engineers

PROJECT State of NM Metropolitan Court Parking Structure
PROJECT NO. 20018.00
DATE 04/10/01
BY Nicole M. Losack

DPM Section 22.2 - Hydrology

Part A-Watersheds less than 40 acres.
January, 1993

INSTRUCTIONS

- * Spread sheet requires three input areas (dark cells):
 - Location
 - >A.1 Precipitation Zone
 - >A.3 Land Treaments
- * Values from the tables are automatically placed using "if" statements.
- * Table values should be checked for correctness for each use.

SUMMARY

Location	EX1		
Precipitation Zone		2	
Land Area		0.19	acres
Excess Precipitation Volume			
>>> 100-year 6-hour (design)		0.03	acre-ft.
10-year 6-hour		0.02	acre-ft.
2-year 6-hour		0.01	acre-ft.
100-year 24-hour		0.04	acre-ft.
Peak Discharge Rates (DPM)			
>>> Q100 (design)		0.91	cfs
Q10		0.60	cfs
Q2		0.36	cfs
Peak Discharge Rates (DPM-Rational Method)			
>>> Q100 (design)		0.90	cfs
Q10		0.60	cfs
Q2		0.36	cfs

CALCULATIONS FOLLOW

INPUT AND CALCULATIONS

LOCATION			EX1
>A.1 PRECIPITATION ZONE (from Table A-1)			2
>A.2 DEPTHS			
(from Table A-2)			
100-YEAR STORM (P60)	2.01	inches	
100-YEAR STORM (P360)	2.35	inches	
100-YEAR STORM (P1440)	2.75	inches	
10-YEAR (P360) (Calculated: P360*RPF10)	1.57	inches	
2-YEAR (P360) (Calculated: P360*RPF2)	1.02	inches	
>A.3 LAND TREATMENTS (Ai)			
Treatment A	0.00	acres	
Treatment B	0.00	acres	
Treatment C	0.00	acres	
Treatment D	0.19	acres	

Total Area	0.19	acres	
	=====		
>A.4 ABSTRACTIONS		See A.5	

CALCULATIONS FOLLOW

INPUT AND CALCULATIONS (CON'T)

>A.5 EXCESS PRECIPITATION 6 HOUR AND 24 HOUR (Ei)			
from Table A-8			
100-year 6-hour			
Treatment A	0.53	inches	
Treatment B	0.78	inches	
Treatment C	1.13	inches	
Treatment D	2.12	inches	

WEIGHTED E (Sum Ei*Ai/A)	2.12	inches	

VOLUME V100:6h (E*A)	0.03	acre-ft.	
	1,482.17	ft^3	
	=====		
10-year 6-hour			
Treatment A	0.13	inches	
Treatment B	0.28	inches	
Treatment C	0.52	inches	
Treatment D	1.34	inches	

WEIGHTED E (Sum Ei*Ai/A)	1.34	inches	

VOLUME V10:6h (E*A)	0.02	acre-ft.	
	936.84	ft^3	
	=====		
2-year 6-hour			
Treatment A	0.00	inches	
Treatment B	0.02	inches	
Treatment C	0.15	inches	
Treatment D	0.79	inches	

WEIGHTED E (Sum Ei*Ai/A)	0.79	inches	

VOLUME V2:6h (E*A)	0.01	acre-ft.	
	552.32	ft^3	
	=====		
100-year 24-hour			
VOLUME V100:24h			
(V100-6h+Ad*P1440-P360)/12)	0.04	acre-ft.	
	1,761.83	ft^3	
	=====		

CALCULATIONS FOLLOW

INPUT AND CALCULATIONS (CON'T)

>A.6 PEAK DISCHARGE RATE FOR SMALL WATERSHEDS (Qi)			
from Table A-9			
100-year			
Treatment A	1.56	cfs/acre	
Treatment B	2.28	cfs/acre	
Treatment C	3.14	cfs/acre	
Treatment D	4.70	cfs/acre	
Q100 (Sum Qi*Ai)	0.91	cfs	
10-year			
Treatment A	0.38	cfs/acre	
Treatment B	0.95	cfs/acre	
Treatment C	1.71	cfs/acre	
Treatment D	3.14	cfs/acre	
Q10 (Sum Qi*Ai)	0.60	cfs	
2-year			
Treatment A	0.00	cfs/acre	
Treatment B	0.08	cfs/acre	
Treatment C	0.60	cfs/acre	
Treatment D	1.86	cfs/acre	
Q2 (Sum Qi*Ai)	0.36	cfs	

CALCULATIONS FOLLOW

Existing hyd.

RATIONAL METHOD

PEAK INTENSITY (in/hr at tc=0.2 hour)			
from Table A-10			
Peak Intensity (I) 100-year	5.05		
Peak Intensity (I) 10-year	3.41		
Peak Intensity (I) 2-year	2.04		
RATIONAL METHOD COEFFICIENT, C			
from Table A-11			
100-year			
Treatment A	0.31	cfs/acre	
Treatment B	0.45	cfs/acre	
Treatment C	0.62	cfs/acre	
Treatment D	0.93	cfs/acre	
Q100 (Sum Qi*I*Ai)	0.90	cfs	
10-year			
Treatment A	0.11	cfs/acre	
Treatment B	0.28	cfs/acre	
Treatment C	0.50	cfs/acre	
Treatment D	0.92	cfs/acre	
Q10 (Sum Qi*I*Ai)	0.60	cfs	
2-year			
Treatment A	0.00	cfs/acre	
Treatment B	0.04	cfs/acre	
Treatment C	0.29	cfs/acre	
Treatment D	0.91	cfs/acre	
Q2 (Sum Qi*I*Ai)	0.36	cfs	



BPLW

Architects and Engineers

PROJECT **State of NM Metropolitan Court Parking Structure**
PROJECT NO. **20018**
DATE **04/10/01**
BY **Nicole M. Losack**

DPM Section 22.2 - Hydrology

Part A-Watersheds less than 40 acres.
January, 1993

INSTRUCTIONS

- * Spread sheet requires three input areas (dark cells):
 Location
 >A.1 Precipitation Zone
 >A.3 Land Treaments
- * Values from the tables are automatically placed using "if" statements.
- * Table values should be checked for correctness for each use.

SUMMARY

Location	Pro 1		
Precipitation Zone		2	
Land Area		0.28	acres
Excess Precipitation Volume			
>>> 100-year 6-hour (design)		0.04	acre-ft.
10-year 6-hour		0.03	acre-ft.
2-year 6-hour		0.02	acre-ft.
100-year 24-hour		0.05	acre-ft.
Peak Discharge Rates (DPM)			
>>> Q100 (design)		1.23	cfs
Q10		0.80	cfs
Q2		0.45	cfs
Peak Discharge Rates (DPM-Rational Method)			
>>> Q100 (design)		1.23	cfs
Q10		0.80	cfs
Q2		0.45	cfs

CALCULATIONS FOLLOW

INPUT AND CALCULATIONS

LOCATION		Pro 1	
>A.1 PRECIPITATION ZONE (from Table A-1)		2	
>A.2 DEPTHS			
(from Table A-2)			
100-YEAR STORM (P60)	2.01	inches	
100-YEAR STORM (P360)	2.35	inches	
100-YEAR STORM (P1440)	2.75	inches	
10-YEAR (P360) (Calculated: P360*RPF10)	1.57	inches	
2-YEAR (P360) (Calculated: P360*RPF2)	1.02	inches	
>A.3 LAND TREATMENTS (Ai)			
Treatment A	0.00	acres	
Treatment B	0.00	acres	
Treatment C	0.06	acres	
Treatment D	0.22	acres	

Total Area	0.28	acres	
	=====		
>A.4 ABSTRACTIONS		See A.5	

CALCULATIONS FOLLOW

INPUT AND CALCULATIONS (CON'T)

>A.5 EXCESS PRECIPITATION 6 HOUR AND 24 HOUR (Ei)		
from Table A-8		
100-year 6-hour		
Treatment A	0.53	inches
Treatment B	0.78	inches
Treatment C	1.13	inches
Treatment D	2.12	inches

WEIGHTED E (Sum Ei*Ai/A)	1.92	inches

VOLUME V100:6h (E*A)	0.04	acre-ft.
	1,950.07	ft^3
=====		
10-year 6-hour		
Treatment A	0.13	inches
Treatment B	0.28	inches
Treatment C	0.52	inches
Treatment D	1.34	inches

WEIGHTED E (Sum Ei*Ai/A)	1.18	inches

VOLUME V10:6h (E*A)	0.03	acre-ft.
	1,193.17	ft^3
=====		
2-year 6-hour		
Treatment A	0.00	inches
Treatment B	0.02	inches
Treatment C	0.15	inches
Treatment D	0.79	inches

WEIGHTED E (Sum Ei*Ai/A)	0.66	inches

VOLUME V2:6h (E*A)	0.02	acre-ft.
	671.66	ft^3
=====		
100-year 24-hour		
VOLUME V100:24h		
(V100-6h+Ad*P1440-P360)/12)	0.05	acre-ft.
	2,274.74	ft^3
=====		

CALCULATIONS FOLLOW

INPUT AND CALCULATIONS (CON'T)

>A.6 PEAK DISCHARGE RATE FOR SMALL WATERSHEDS (Qi)		
from Table A-9		
100-year		
Treatment A	1.56	cfs/acre
Treatment B	2.28	cfs/acre
Treatment C	3.14	cfs/acre
Treatment D	4.70	cfs/acre

Q100 (Sum Qi*Ai)	1.23	cfs
=====		
10-year		
Treatment A	0.38	cfs/acre
Treatment B	0.95	cfs/acre
Treatment C	1.71	cfs/acre
Treatment D	3.14	cfs/acre

Q10 (Sum Qi*Ai)	0.80	cfs
=====		
2-year		
Treatment A	0.00	cfs/acre
Treatment B	0.08	cfs/acre
Treatment C	0.60	cfs/acre
Treatment D	1.86	cfs/acre

Q2 (Sum Qi*Ai)	0.45	cfs
=====		

CALCULATIONS FOLLOW

RATIONAL METHOD

PEAK INTENSITY (in/hr at $t_c=0.2$ hour)		
from Table A-10		
Peak Intensity (I) 100-year	5.05	
Peak Intensity (I) 10-year	3.41	
Peak Intensity (I) 2-year	2.04	
RATIONAL METHOD COEFFICIENT, C		
from Table A-11		
100-year		
Treatment A	0.31	cfs/acre
Treatment B	0.45	cfs/acre
Treatment C	0.62	cfs/acre
Treatment D	0.93	cfs/acre

Q100 (Sum $Q_i \cdot I \cdot A_i$)	1.23	cfs
	=====	
10-year		
Treatment A	0.11	cfs/acre
Treatment B	0.28	cfs/acre
Treatment C	0.50	cfs/acre
Treatment D	0.92	cfs/acre

Q10 (Sum $Q_i \cdot I \cdot A_i$)	0.80	cfs
	=====	
2-year		
Treatment A	0.00	cfs/acre
Treatment B	0.04	cfs/acre
Treatment C	0.29	cfs/acre
Treatment D	0.91	cfs/acre

Q2 (Sum $Q_i \cdot I \cdot A_i$)	0.45	cfs
	=====	



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 5, 2001

Mr. Guy Jackson, P.E.
BPLW Engineers
6200 Uptown Blvd. NE
Suite 400
Albuquerque, NM 87110

**Re: Grading and Drainage Plan for Metro Court Parking Structure,
(J-14/D105A), Engineer stamp dated 5/30/2001.**

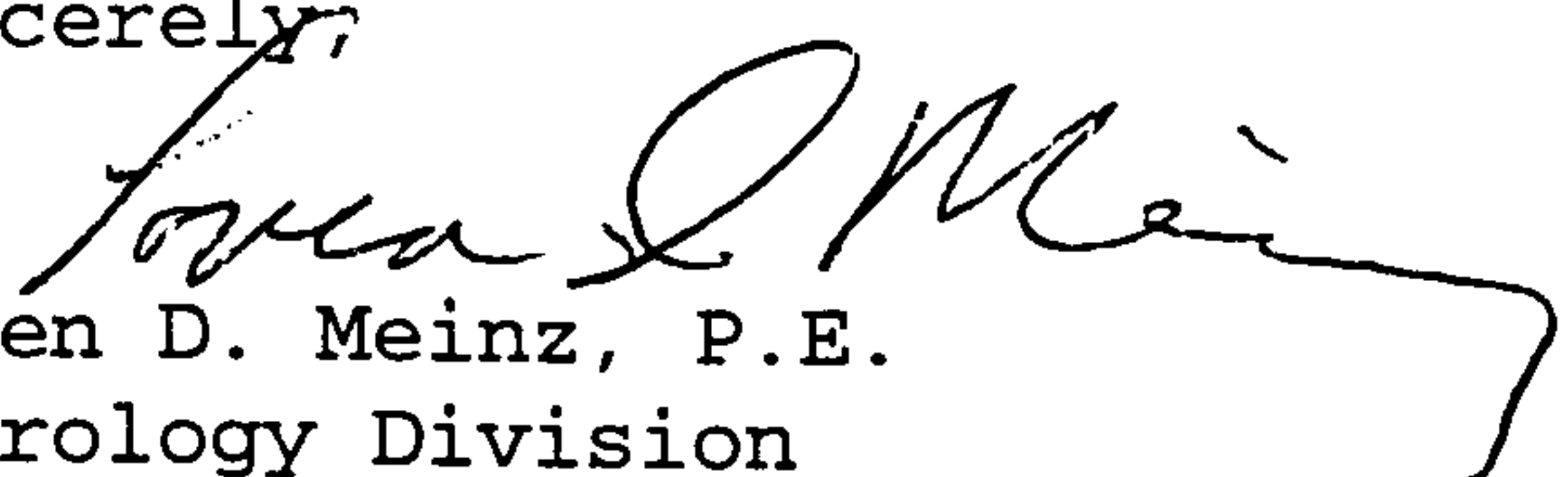
Dear Mr. Jackson,

The above referenced report is not approved as submitted, and the following comments will need to be addressed.

1. The driveway approach on 5th Street needs to be designed with a curb-height water block at the right-of-way line. I suggest that you investigate installing an inlet in the parking lot and making direct connection to the storm drain in 5th Street.
2. The landscape area adjacent to the east side of the residential units parking area should be designed with a drainage swale draining to Marble Ave. to prevent runoff from draining to the west.
3. Show the roof drains for the building draining to 4th Street, as planned.

If you have any questions, please call me at 924-3980.

Sincerely,


Loren D. Mainz, P.E.
Hydrology Division

c: Terri Martin
File

Date: 5-29-01

BPLW



ATTN: Loren Mainz
COA Hydrology

Architects & Engineers, Inc.

6200 Uptown Blvd. NE, Suite 400
Albuquerque, New Mexico 87110
(505) 881-2759 FAX (505) 881-1230
e-mail: bplwnm@bplw.com
web address: www.bplw.com

49 West First Street, Suite 100
Mesa, Arizona 85201
(480) 827-BPLW (2759) FAX (480) 827-0386
e-mail: bplwnm@bplw.com
web address: www.bplw.com

2000 East Lamar, Suite 600
Arlington, Texas 76006
(817) 588-3036 FAX (817) 462-4036
e-mail: bplwnm@bplw.com
web address: www.bplw.com

Martin Building, Suite 501
215 North Stanton Street
El Paso, Texas 79901
e-mail: bplwnm@bplw.com
web address: www.bplw.com

PROJECT: (name, address)

METRO Court PS

PROJECT NO: 20018

() Acknowledge receipt
of enclosures.

() Return enclosures to us.

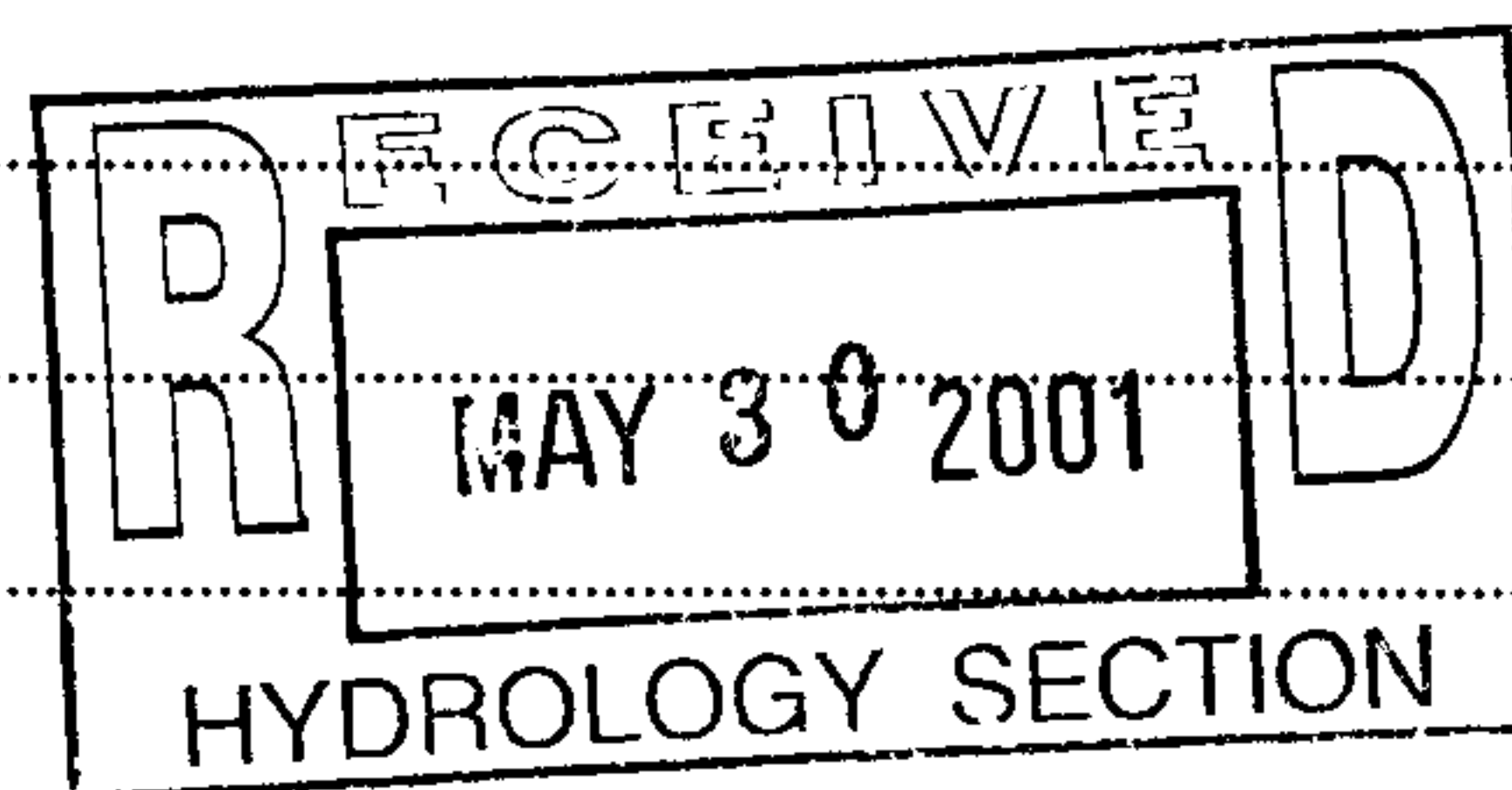
() Via facsimile
fax number: _____

Original will be mailed:
() Yes () No

We Transmit the Following:

Copies	Date	Description
1		Drainage report w/ SO19

If enclosures are not noted, please inform us immediately.



Remarks:

Loren
Here is the information
requested Thanks,
Nicole ☺

Ps: Cool name! My brother is a Loren w/ an i

By Nicole Losack

Copies to:

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Metro Court Parking Structure

ZONE ATLAS/DRWG. FILE # J-14 / D105A

DRB#: _____

EPC # _____

WORK ORDER # 653581

LEGAL DESCRIPTION: Lots 1-6 & 10-11, Block N and Lots 1-9 & 13-15, Block K, Mandell Business & Residence Add.

CITY ADDRESS: Northeast corner of 4th Street and Marble Avenue

ENGINEERING FIRM: BPLW

CONTACT: Nicole Losack

ADDRESS: 6200 Uptown Blvd., Suite 220

PHONE: 880-9670

OWNER: Metro Court

CONTACT: (See Engineer)

ADDRESS: (See Engineer)

PHONE: (See Engineer)

ARCHITECT: DCSW

CONTACT: Richard Braun

ADDRESS: 320 Central Ave. SW

PHONE: 843-9639

SURVEYOR: JMA

CONTACT: Chuck Cala

ADDRESS: 6010B Midway Park Blvd.

PHONE: 345-4250

CONTRACTOR: ---

CONTACT: _____

ADDRESS: ---

PHONE: _____

TYPE OF SUBMITTAL:

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION
- ☐ OTHER _____

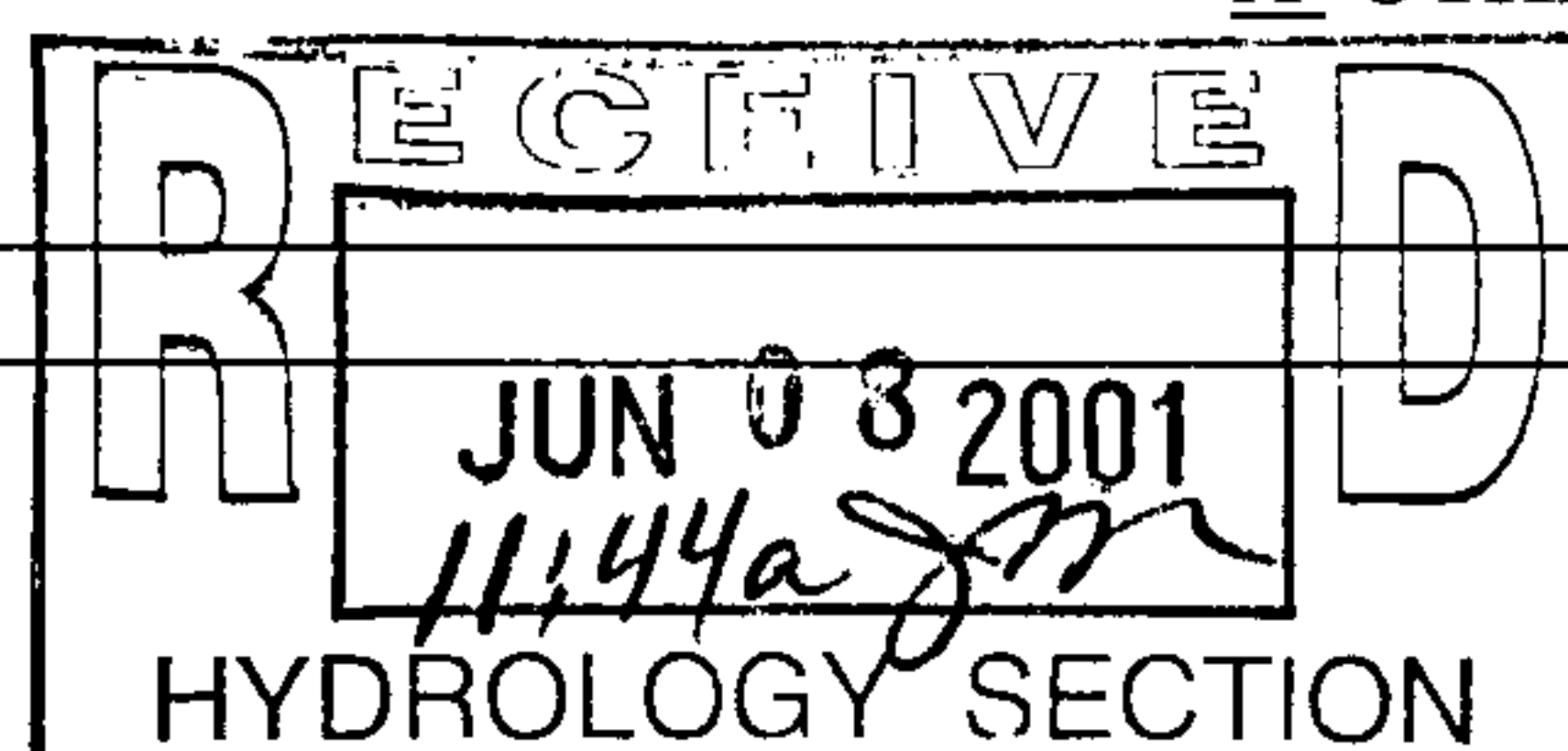
- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY APPROVAL
- ☐ GRADING PERMIT APPROVALS
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.B. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☒ OTHER SO-19 & DRC approval (SPECIFY)

PRE-DESIGN MEETING:

- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: June 8, 2001

BY: Nicole M. Losack



Date: 6/8/01

ATTN: Loren Meinz
COA Hydrology

PROJECT: Bernalillo County Metropolitan Court Parking Structure

PROJECT NO: **20018**

We Transmit the Following:

Copies	Date	Description
1	6/7/01	Revised SO19 Sheet

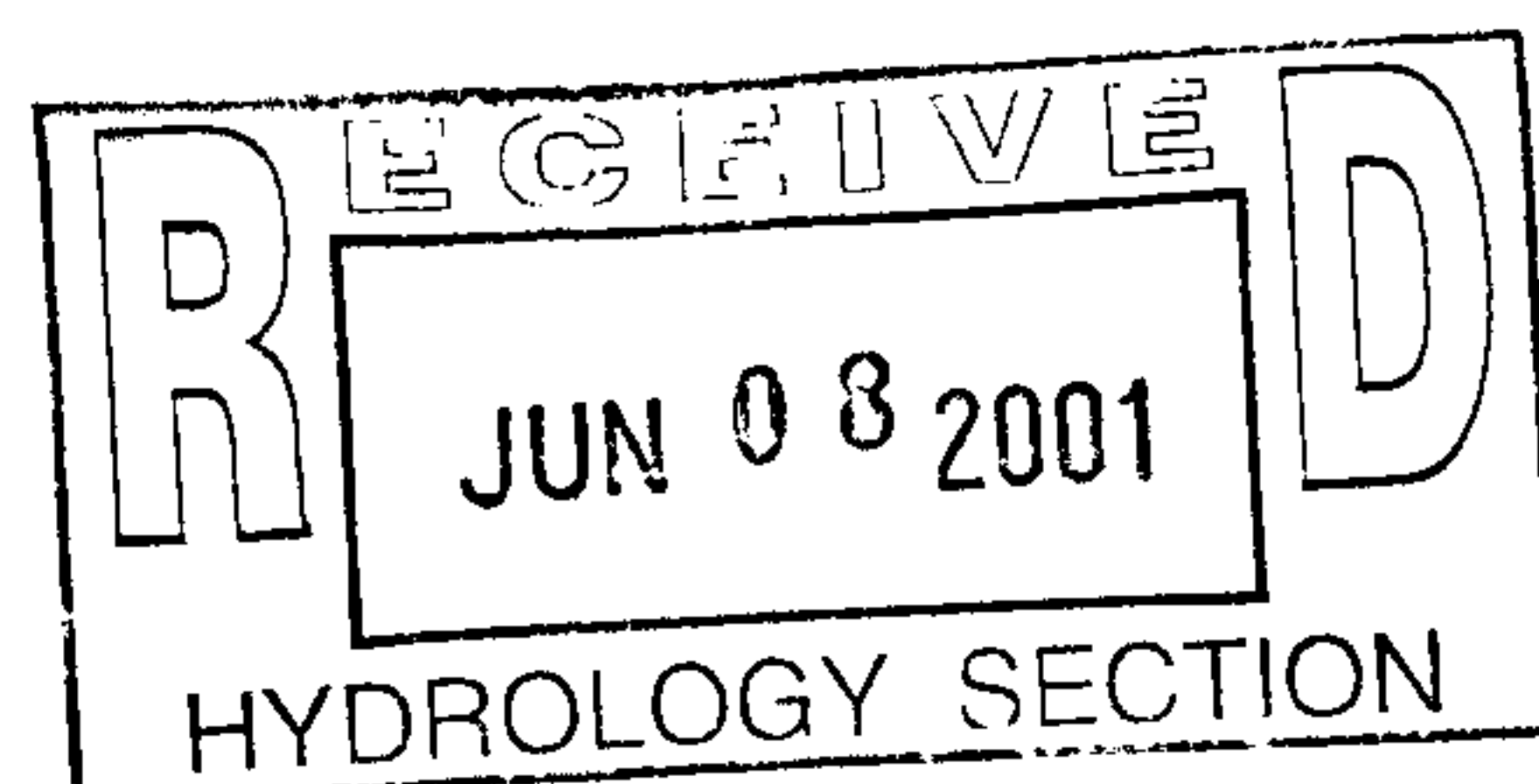
If enclosures are not as noted, please inform us immediately.

Remarks:

Loren,

Here is the revised grading sheet showing the 6" water block at the property line as discussed. We have managed to make the site still drain without the addition of a storm drain inlet and connection to the line. There is a swale at the west side of the structure that drains into a new SW culvert. Also, the roof drainage pattern is shown.

If you should have any additional questions, or if I may be of further assistance, do not hesitate to call.



By: Nicole M. Losack, EI

cc: file, gjackson

BPLW

Architects & Engineers, Inc.

6200 Uptown Blvd. NE
Suite 220
Albuquerque, New Mexico 87110
(505)881-2759 FAX (505)881-1230

49 West First Street
Suite 100
Mesa, Arizona 85201
(602)827-2759
FAX (602)827-0386

☐ Acknowledge receipt of enclosures.
☐ Return enclosures to us.
☐ Via facsimile
fax number:
Original will be mailed:
☐ Yes ☐ No

City of Albuquerque Planning Department
One Stop Shop – Development and Building Services

08/03/2007 Issued By: PLNABG

Permit Number: 2007 060 012

Category Code 970

Application Number: 07REV-60012, Review - Drainage Plan Or Traffic Impact

Address:

Location Description:

Project Number: null

Applicant
Peter Butterfield

Agent / Contact
J Authur Blessen

13013 Glenwood Hills Ct Ne
Albuquerque, NM 87112
293-1477

11930 Menaul Hills Ne Ste 109
.
293-1477

Application Fees

441006/4983000 REV Actions

TOTAL: \$50.00

City Of Albuquerque
Treasury Division

8/3/2007 12:41PM LOC: ANN
WSH 006 TRANSH 0017
RECEIPT# 00080444-00080444
PERMIT# 2007060012 TRSCCS
Trans Amt \$50.00
REV Actions \$50.00
CN \$0.00
CHANGE
Thank You



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 5, 2001

Mr. Guy Jackson, P.E.
BPLW Engineers
6200 Uptown Blvd. NE
Suite 400
Albuquerque, NM 87110

**Re: Grading and Drainage Plan for Metro Court Parking Structure,
(J-14/D105A), Engineer stamp dated 5/30/2001.**


Dear Mr. Jackson,

The above referenced report is not approved as submitted, and the following comments will need to be addressed.

1. The driveway approach on 5th Street needs to be designed with a curb-height water block at the right-of-way line. I suggest that you investigate installing an inlet in the parking lot and making direct connection to the storm drain in 5th Street.
2. The landscape area adjacent to the east side of the residential units parking area should be designed with a drainage swale draining to Marble Ave. to prevent runoff from draining to the west.
3. Show the roof drains for the building draining to 4th Street, as planned.

If you have any questions, please call me at 924-3980.

Sincerely,


Loren D. Mainz, P.E.
Hydrology Division

c: Terri Martin
File



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 21, 2001

Mr. Guy Jackson, P.E.
BPLW Engineers
6200 Uptown Blvd. NE
Suite 400
Albuquerque, NM 87110

**Re: Grading and Drainage Plan for Metro Court Parking Structure,
(J-14/D105A), Engineer stamp dated 6/8/2001.**

Dear Mr. Jackson,

The above referenced plan is approved for Building Permit.

The plan is also approved for SO-19 permit for work in the public right-of-way. Contact Pam Lujan, 768-3650, for excavation permits for SO-19 work.

Prior to release of Certificate of Occupancy, Engineer Certification of the grading and drainage plan per the DPM checklist, and inspection sign-off on the plan for the SO-19 work, will be required.

If you have any questions, please call me at 924-3980.

Sincerely,

Loren D. Meinz, P.E.
Hydrology Division

c: Terri Martin
Pam Lujan
File