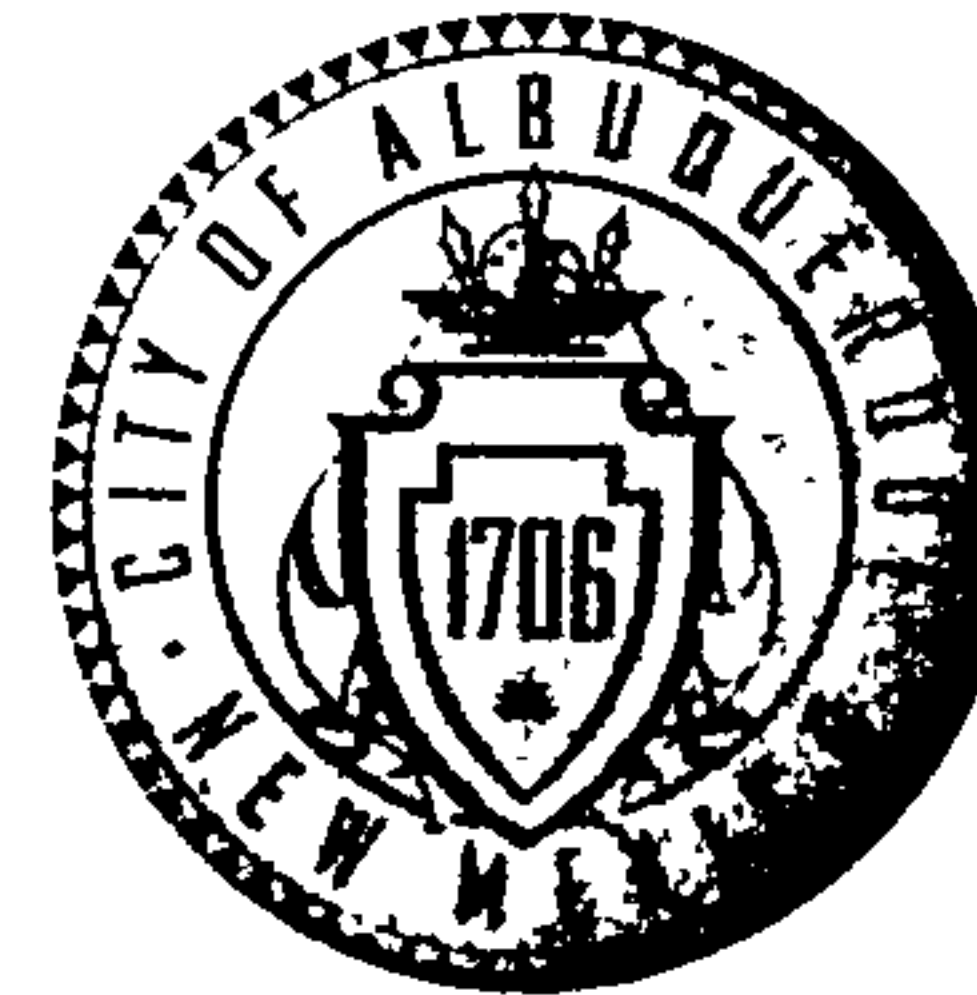


CITY OF ALBUQUERQUE



November 19, 2009

John M. MacKenzie, P.E.
Mark Goodwin & Associates, PA
P.O. Box 90606
Albuquerque, NM 87199

Re: Silver Tree Park Grading and Drainage Plan
Engineer's Stamp date 10-1-07 (N9/D010)

Dear Mr. MacKenzie,

Based upon the information provided in your submittal received 11-19-09, the above referenced plan is approved for Building Permit and Work Order.

✓ Please submit an Engineer Certification for our files.

PO Box 1293

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

Albuquerque

Sincerely,

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

NM 87103

www.cabq.gov

C: file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Silver Tree Park

DRB #: _____

EPC#: _____

ZONE MAP/DRG. FILE #: N-9/D-10

WORK ORDER#: _____

LEGAL DESCRIPTION: TR B PLAT FOR EL RANCHO GRANDE I UNIT 5A SUBDIVISION

CITY ADDRESS: Silver Tree Road

ENGINEERING FIRM: Mark Goodwin & Associates, PA

ADDRESS: PO Box 90606

CITY, STATE: Albuquerque, NM

CONTACT: John MacKenzie

PHONE: 828-2200

ZIP CODE: 87199

OWNER: CONSENSUS PLANNING

ADDRESS: 302 8th Street

CITY, STATE: Albuquerque, NM

CONTACT: Laurie Firor

PHONE: 764-9801

ZIP CODE: 87102

ARCHITECT: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

SURVEYOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

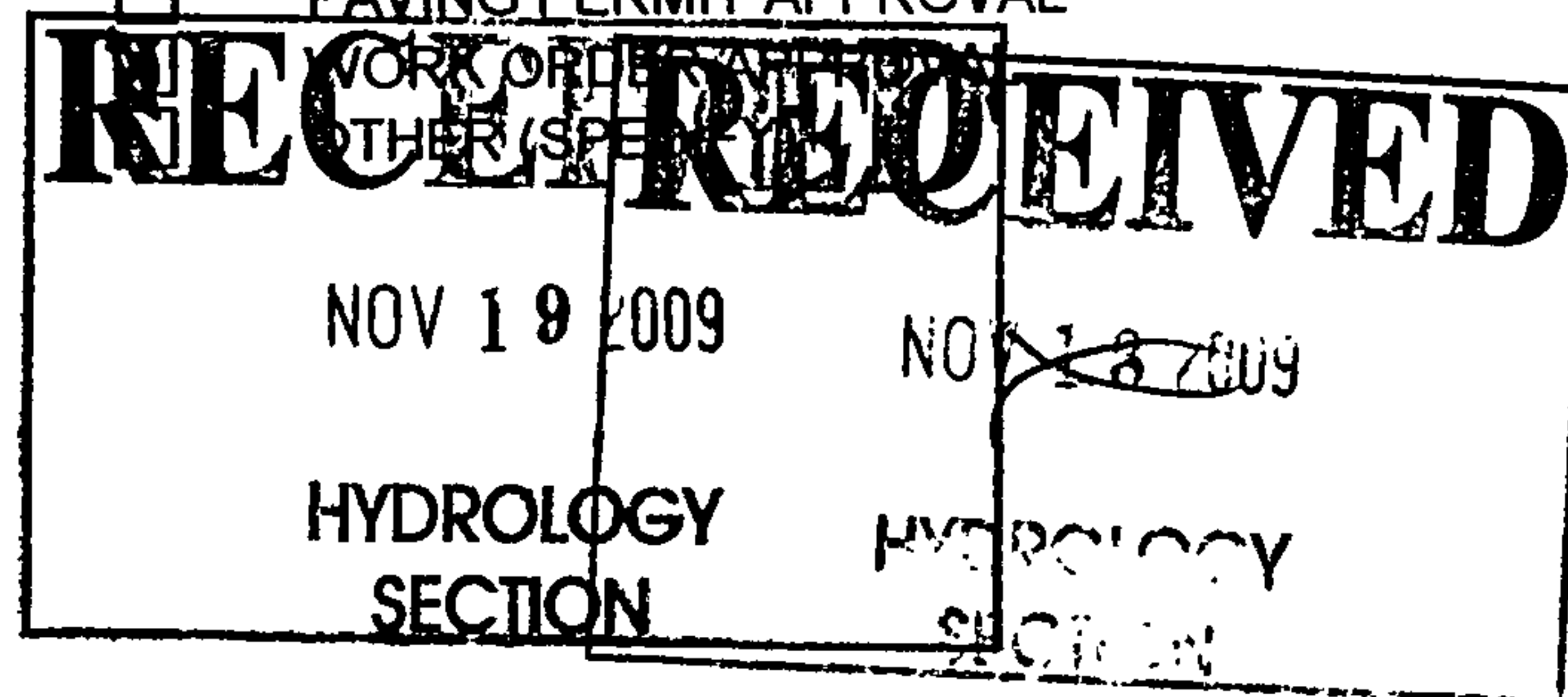
ZIP CODE: _____

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



WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☒ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: November 18, 2009

BY: John MacKenzie

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.



D. Mark Goodwin & Associates, P.A.
Consulting Engineers

P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 828-2200 FAX 797-9539

~ 2008 ACEC/NM Award Winner for Engineering Excellence, Small Firm ~

November 18, 2009

Mr. Brad Bingham, PE
Hydrology Department
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

Re: Silver Tree Park Grading & Drainage Plan w/Engineer's Stamp dated 10/01/07 (N9-D10)

Dear Mr. Bingham:

My office had previously received your approval letter for this project, dated May 3, 2007, which referred to a grading and drainage plan with an engineer's stamp date of the same day (attached). After that plan was approved it became part of a DRC set of construction plans for the park, which was then reviewed by DRC. During the DRC review there were comments issued requiring changes to the grading and drainage plan. We changed the plan to address those comments and re-stamped it 10/01/07. The comments were primarily traffic-related issues (HC ramp slopes and sidewalks) and the changes did not affect drainage.

Unfortunately, I failed to resubmit the plan to your office for your updated approval at that time, so I am making that submittal to you now. This deficiency has come to my attention only after the site has been constructed and I searched for the approved plan. Upon resubmittal of the 10/01/07 plan I will promptly submit an as-constructed grading and drainage plan.

Please contact our office if you have any questions.

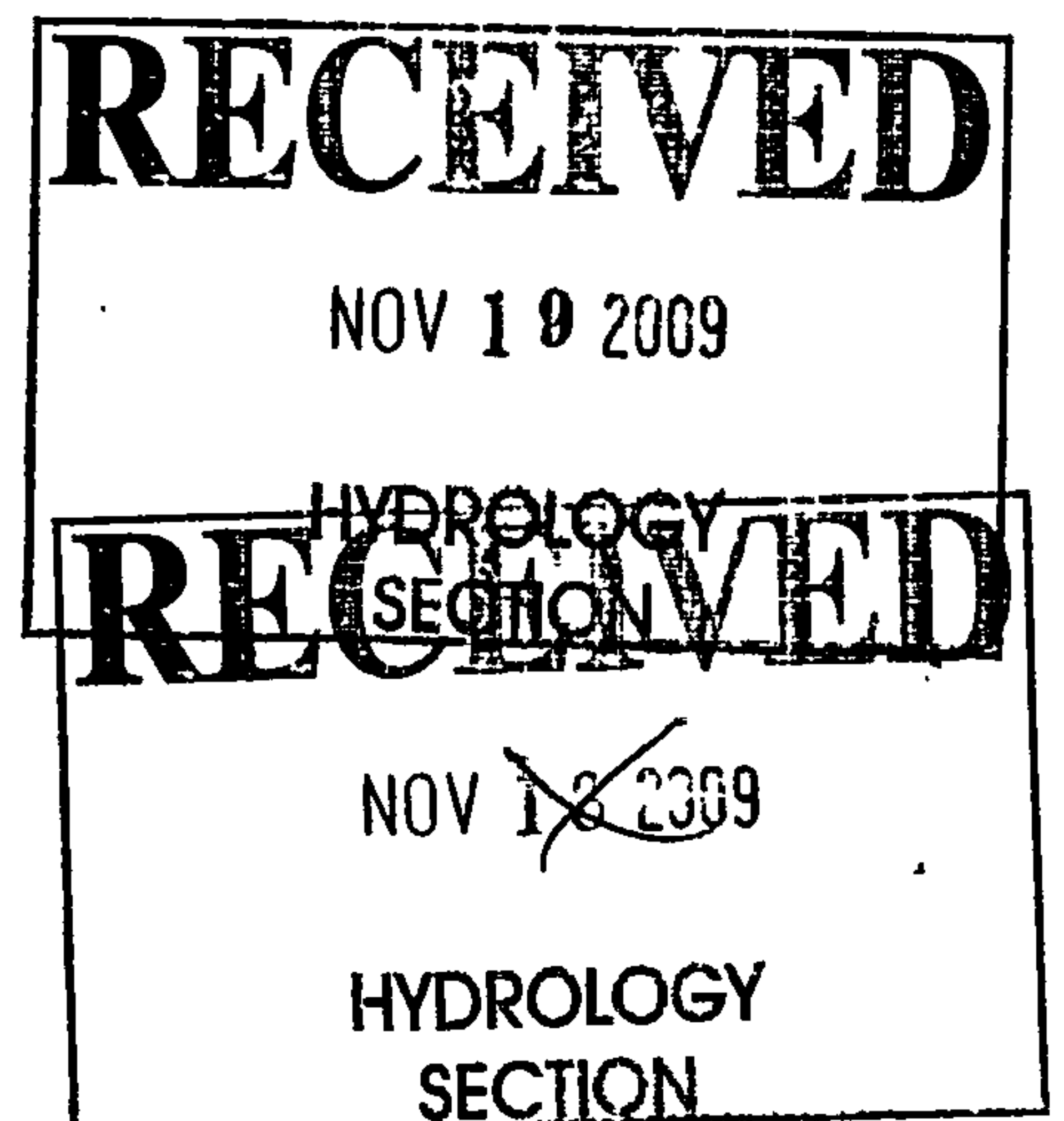
Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

John Mackenzie
John M. Mackenzie, PE
Vice President

JMM/jmm

Attachment



CITY OF ALBUQUERQUE



May 3, 2007

John M. Mackenzie, P.E.
D. Mark Goodwin & Associates, P.A.
PO Box 90606
Albuquerque, NM 87199

Re: Silver Tree Park, Engineer's Stamp dated 5-3-07, (N9/D10)

Dear Mr. Mackenzie,

Based upon the information provided in your submittal received on May 3, 2007, the above referenced plan is approved for Grading, Paving, and Building Permits. Please attach a copy of this letter and the approved plan to the construction sets prior to sign-off by Hydrology.

This project will also require a National Pollutant Discharge Elimination System (NPDES) permit. Inquiries regarding this permit should be directed to Sertil Kandar at 768-3645.

If you have any questions, you can contact me at 924-3990.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeremy Hoover".

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

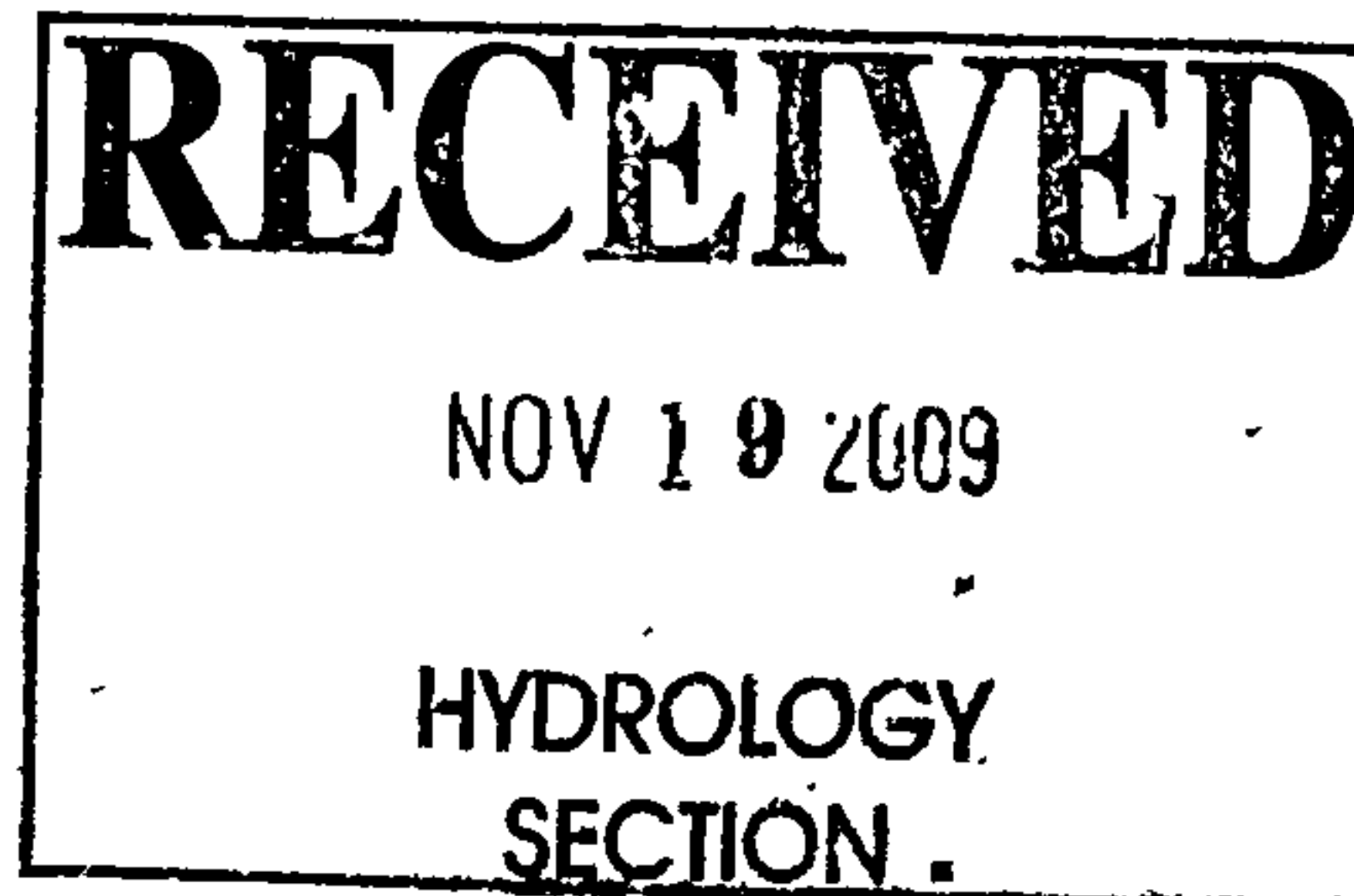
cc: file N9/D10

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov



CITY OF ALBUQUERQUE



December 7, 2009

John M. MacKenzie, P.E.
Mark Goodwin & Associates, P.A.
P.O. Box 90606
Albuquerque, NM 87199

**Re: Silver Tree Park, Grading Plan Certification,
Engineer's Stamp, 06/19/2009,
(N-09/D010)**

Dear Mr. MacKenzie,

Thank you for providing an Engineer Certification for the Grading/Drainage Plan, received on 12-02-09, for the above referenced plan. It will be placed in the project file.

If you have any questions, I can be contacted at 924-3982.

Sincerely,

Timothy E. Sims
Plan Checker, Planning Dept.-Hydrology
Development and Building Services

C: file

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Silver Tree Park

DRB #: _____

EPC#: _____

ZONE MAP/DRG. FILE #: N-9/D-10

WORK ORDER#: _____

LEGAL DESCRIPTION: TR B PLAT FOR EL RANCHO GRANDE I UNIT 5A SUBDIVISION

CITY ADDRESS: Silver Tree Road

ENGINEERING FIRM: Mark Goodwin & Associates, PA

ADDRESS: PO Box 90606

CITY, STATE: Albuquerque, NM

CONTACT: John MacKenzie

PHONE: 828-2200

ZIP CODE: 87199

OWNER: CONSENSUS PLANNING

ADDRESS: 302 8th Street

CITY, STATE: Albuquerque, NM

CONTACT: Laurie Firor

PHONE: 764-9801

ZIP CODE: 87102

ARCHITECT: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

SURVEYOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

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

Engr. Certification

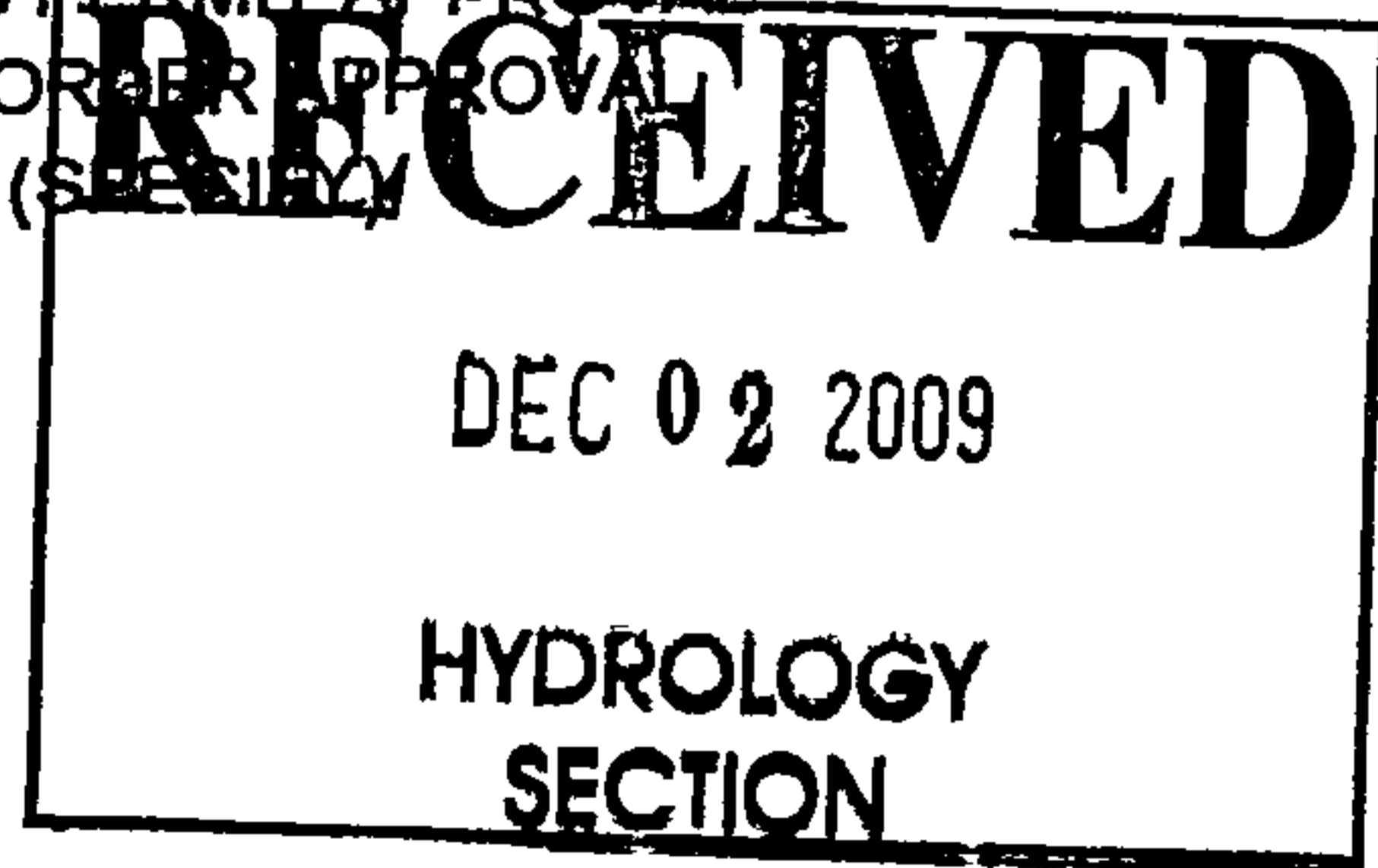
FOR HYDROLOGY

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☒ NO
- ☐ COPY PROVIDED

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)



DATE SUBMITTED: November 30, 2009

BY: John MacKenzie

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

acres.

CITY OF ALBUQUERQUE



May 3, 2007

John M. Mackenzie, P.E.
D. Mark Goodwin & Associates, P.A.
PO Box 90606
Albuquerque, NM 87199

Re: Silver Tree Park, Engineer's Stamp dated 5-3-07, (N9/D10)

Dear Mr. Mackenzie,

Based upon the information provided in your submittal received on May 3, 2007, the above referenced plan is approved for Grading, Paving, and Building Permits. Please attach a copy of this letter and the approved plan to the construction sets prior to sign-off by Hydrology.

This project will also require a National Pollutant Discharge Elimination System (NPDES) permit. Inquiries regarding this permit should be directed to Sertil Kandar at 768-3645.

If you have any questions, you can contact me at 924-3990.

Sincerely,

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

cc: file N9/D10

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

CITY OF ALBUQUERQUE



February 28, 2007

John M. Mackenzie, P.E.
D. Mark Goodwin & Associates, P.A.
PO Box 90606
Rio Rancho, NM 87199

Re: Silver Tree Park, Engineer's Stamp dated 1-31-07, (N9/D10)

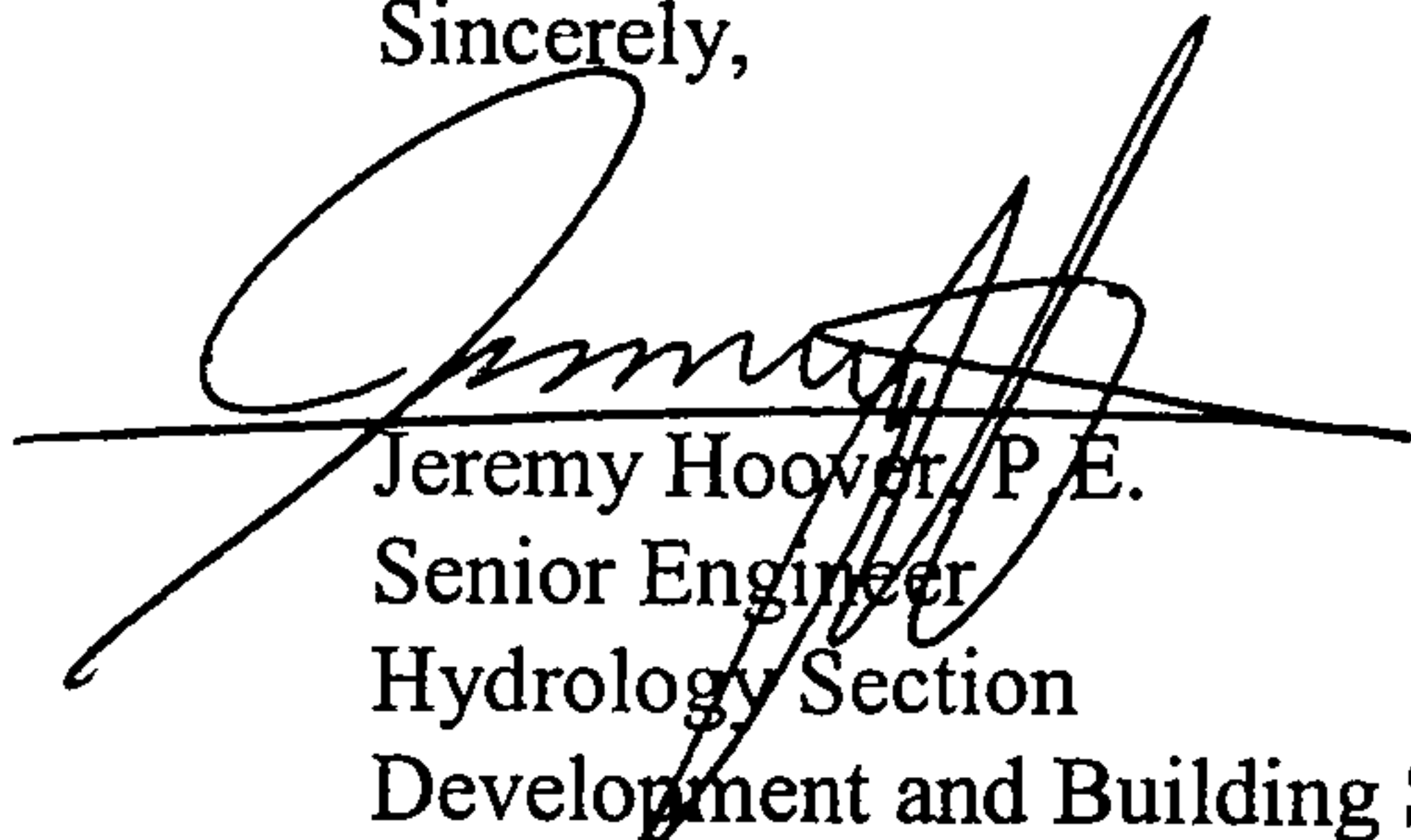
Dear Mr. Mackenzie,

Based upon the information provided in your submittal received on February 1, 2007, there are some additional items that must be addressed prior to permit approval. Those items are as follows.

- Please include a zone atlas page / vicinity map along with the site legal description.
- Please show the entire parcel and property line. Also include an excerpt from the El Rancho Grande Master Plan to indicate the allowable unit runoff or total allowable runoff from this site.
- What precipitation values are you using? Under the zone 1 criteria, I am obtaining significantly different values than what you shown on the plan. Please give a complete set of drainage calculations.
- If you choose to use AHYMO for the analysis in lieu of the 40-acre and smaller procedure, include the input and summary files. Why are you using any treatment 'A' for a disturbed, graded, and developed condition?
- Although you referenced a drawing detail for the entrance from Silver Tree, that detail was not shown on the plan. Will the private driveway conform to standard drawing #2426? Will it include valley gutter?
- Please revise the legend to define the various hatching and symbology. Also modify the text so that all of it can be read. Additional notes may help to improve clarity.

If you have any questions, you can contact me at 924-3990.

Sincerely,


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

cc: file N9/D10

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Silver Tree park
DRB #: _____

EPC#: _____

ZONE MAP/DRG. FILE #: N-9 / D010
WORK ORDER#: _____

LEGAL DESCRIPTION: TR B PLAT FOR EL RANCHO GRANDE I UNIT 5A SUBDIVISION
CITY ADDRESS: 2501 SILVER TREE DR SW

ENGINEERING FIRM: Mark Goodwin & Associates, PA
ADDRESS: PO Box 90606
CITY, STATE: Albuquerque, NM

CONTACT: Pavan toleti
PHONE: 828-2200
ZIP CODE: 87199

OWNER: _____
ADDRESS: _____
CITY, STATE: Albuquerque, NM

CONTACT: _____
PHONE: _____
ZIP CODE: _____

ARCHITECT: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: _____
ADDRESS: _____
CITY, STATE: Albuquerque, NM

CONTACT: _____
PHONE: _____
ZIP CODE: 87107

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

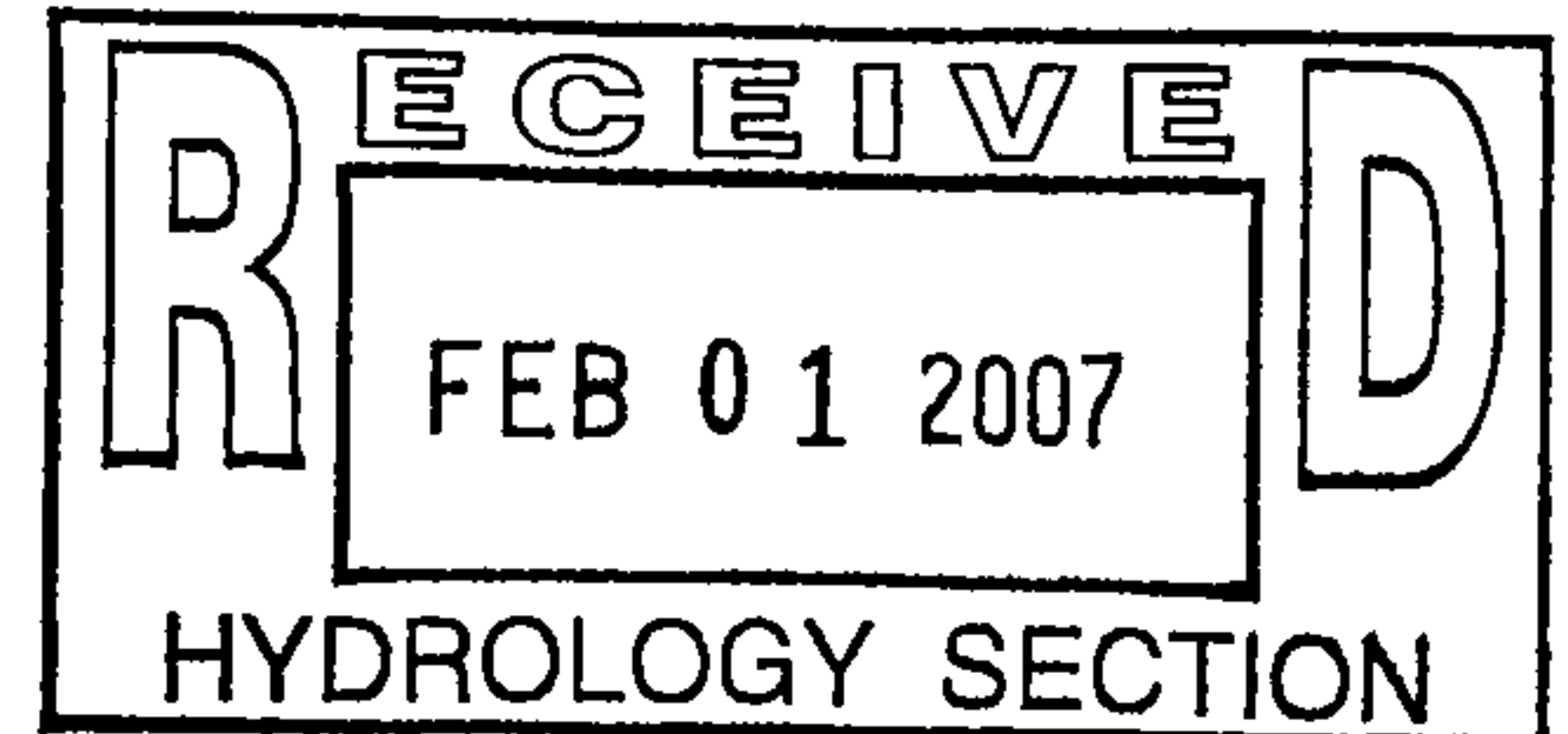
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL, *REQUIRES TCL or equal*
- ☒ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (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
- ☒ NO
- ☐ COPY PROVIDED



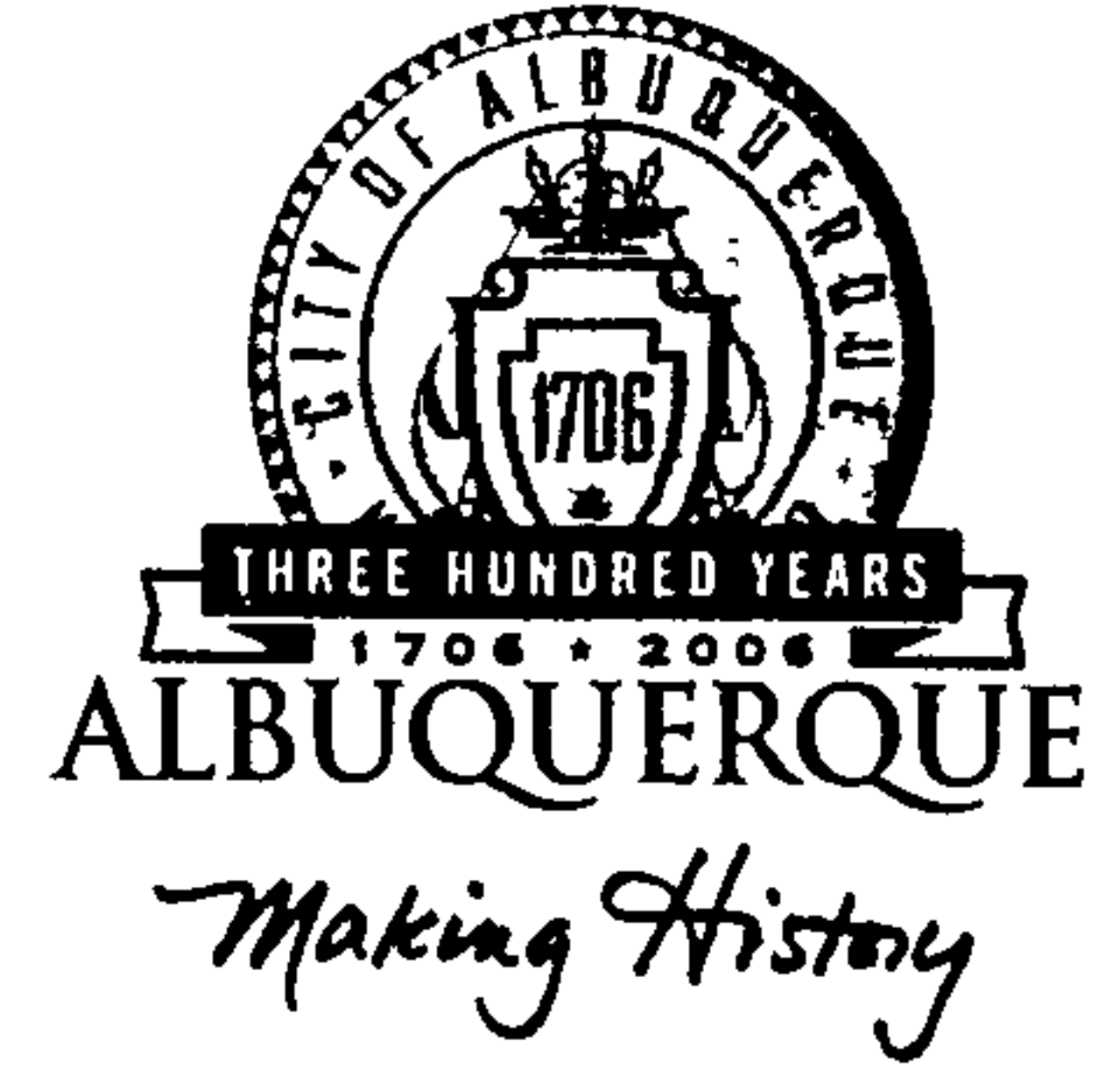
DATE SUBMITTED: 31st Jan 07

BY: T. Parankumar

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.

CITY OF ALBUQUERQUE



November 16, 2005

John M. McKenzie, P.E.
Mark Goodwin & Associates
PO Box 90606
Albuquerque, NM 87199

**Re: Silver Tree Park, Silver Tree Dr. & Stampede Dr. SW
Grading and Drainage Plan
Engineer's Stamp dated 11-07-05 (N9-D10)**

Dear Mr. McKenzie,

P.O. Box 1293
Albuquerque
New Mexico 87103

Based upon the information provided in your submittal received 11-07-05, the above referenced plan is approved for Grading Permit. The sidewalk or Trail in the Snow Vista Diversion Channel is not part of this approval. Grades and Elevations are needed to approve this area of the plan.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. If you have any questions regarding this permit please feel free to call the DMD Storm Drainage Design section at 768-3654 (Charles Caruso).

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

Sincerely,

Rudy E. Rael, Associate Engineer
Planning Department.
Development and Building Services

C: Charles Caruso, DMD Storm Drainage Design
File

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

N-9 / D10

PROJECT TITLE: Silver Tree Park

DRB #: _____

EPC#: _____

ZONE MAP/DRG. FILE #: N-9

WORK ORDER#: _____

LEGAL DESCRIPTION: _____

CITY ADDRESS: _____

ENGINEERING FIRM: Mark Goodwin & Associates

ADDRESS: PO Box 90606

CITY, STATE: Albuquerque, NM

CONTACT: Scott Davis

PHONE: 828-2200

ZIP CODE: 87199

OWNER: City of Albuquerque

ADDRESS: _____

CITY, STATE: _____

CONTACT: David Flores

PHONE: 768-3815

ZIP CODE: _____

ARCHITECT: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

SURVEYOR: Aldrich Land Surveying

ADDRESS: PO Box 30701

CITY, STATE: Albuquerque, NM

CONTACT: Tim Aldrich

PHONE: 884-1990

ZIP CODE: 87190-0701

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

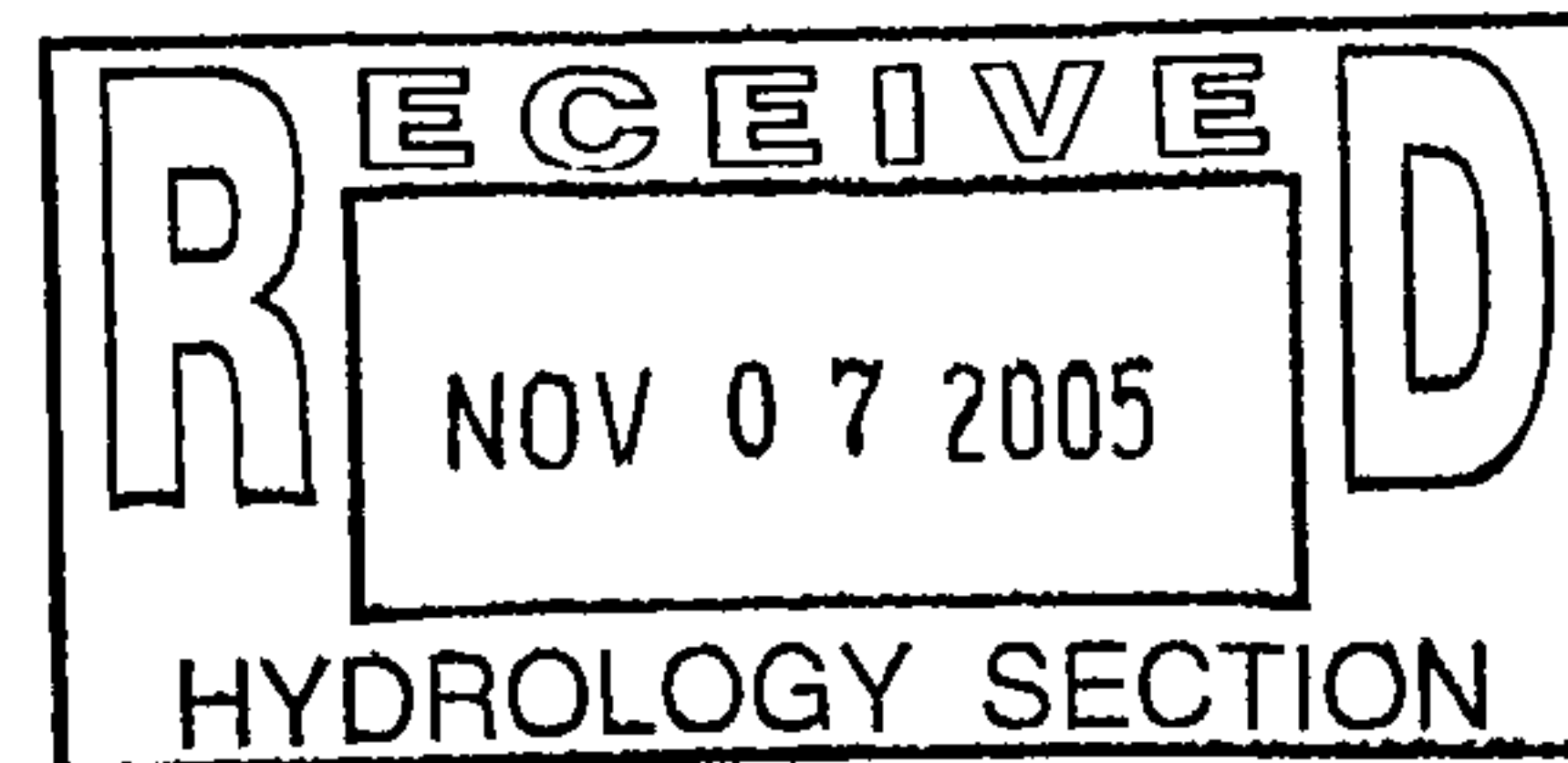
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL, **REQUIRES TCL or equal**
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (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
- ☒ NO
- ☐ COPY PROVIDED



DATE SUBMITTED: 11-7-05

BY: Scott Davis

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.

Snow Vista Diversion Channel
Sidewalk or Trail in ~~Area~~ Is
Not part of this Approval. Grades & Elevations
are needed.



D. Mark Goodwin & Associates, P.A.
Consulting Engineers

P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 828-2200 FAX 797-9539

April 23, 2007

*Mr. Jeremy Hoover
Hydrology Department
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103*

**Re: Silver Tree Park - Grading & Drainage Plan with
Engineer's Stamp dated April 23, 2007 (N9-D10)**

Dear Mr. Hoover:

Our office has received your comments letter, dated February 28, 2007, which asks for more information to be provided on our grading and drainage plan for the referenced site.

Your itemized comments have been addressed as follows:

- *We have shown the zone atlas page on the Grading & Drainage Plan*
- *We have shown the entire parcel and property line and also attached the copy of the Grading and Drainage Plan for El Rancho Grande Unit 4A, which shows the allowable runoff from the site.*
- *We have recalculated the runoff volumes with Zone 1 precipitation values; a copy of AHYMO is attached.*
- *We have added a detail on the Grading & Drainage Plan which shows the detail of the driveway entrance from Silver Tree.*
- *We have revised the legend that shows hatching.*

Please contact our office if you have any questions.

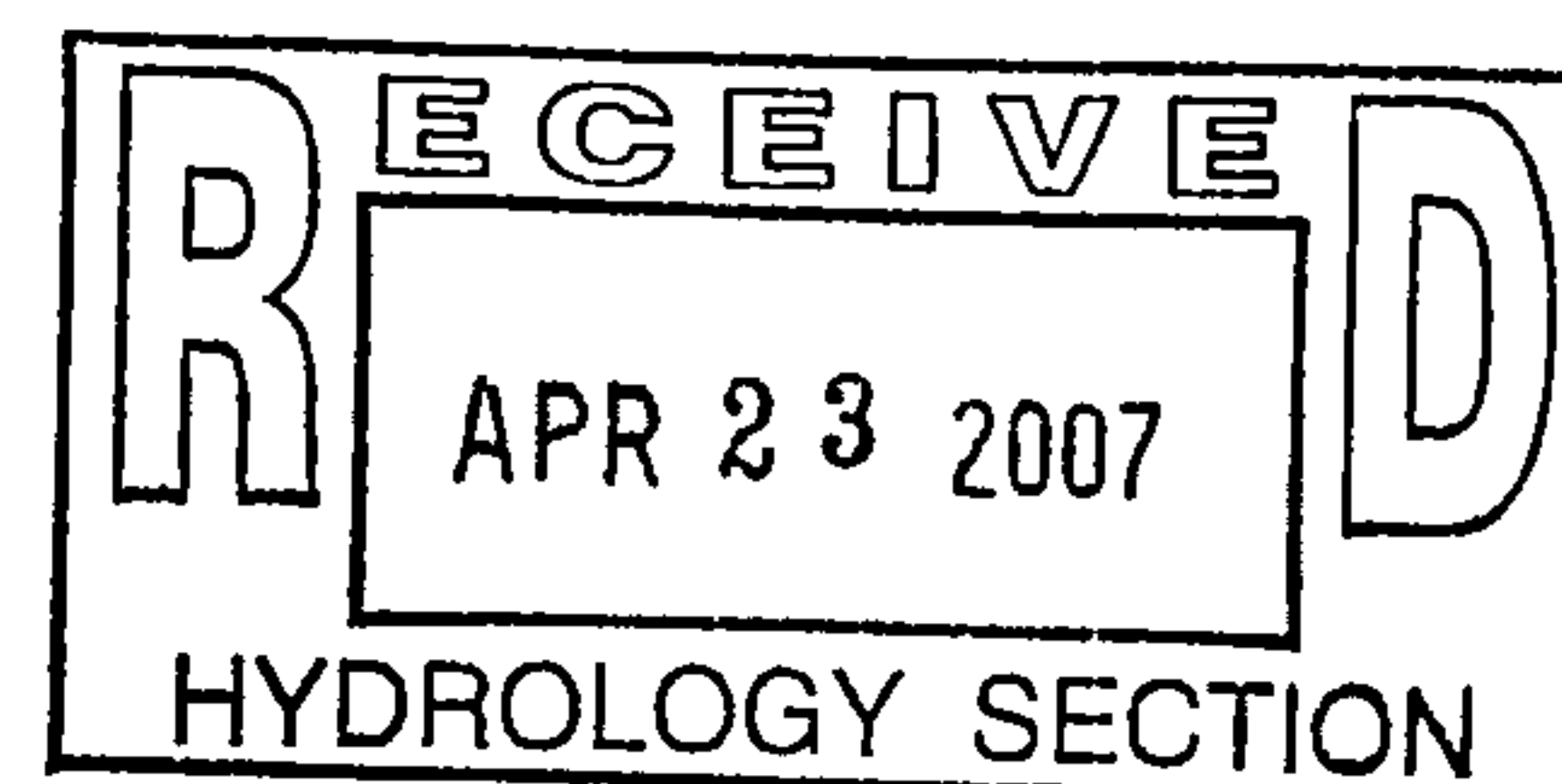
Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

T. Parankumar
Pavan K. Toleti
Project Engineer

PKT/la

Attachment



DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Silver Tree Park

DRB #: _____

EPC#: _____

ZONE MAP/DRG. FILE #: N-9-Z

WORK ORDER#: _____

1010

LEGAL DESCRIPTION: TR B PLAT FOR EL RANCHO GRANDE I UNIT 5A SUBDIVISION

CITY ADDRESS: Silver Tree Road

JA

ENGINEERING FIRM: Mark Goodwin & Associates, PA

ADDRESS: PO Box 90606

CITY, STATE: Albuquerque, NM

CONTACT: Pavan K. Toleti

PHONE: 828-2200

ZIP CODE: 87199

OWNER: CONSENSUS PLANNING

ADDRESS: 302 8th Street

CITY, STATE: Albuquerque, NM

CONTACT: Laurie Firor

PHONE: 764-9801

ZIP CODE: 87102

ARCHITECT: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

SURVEYOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

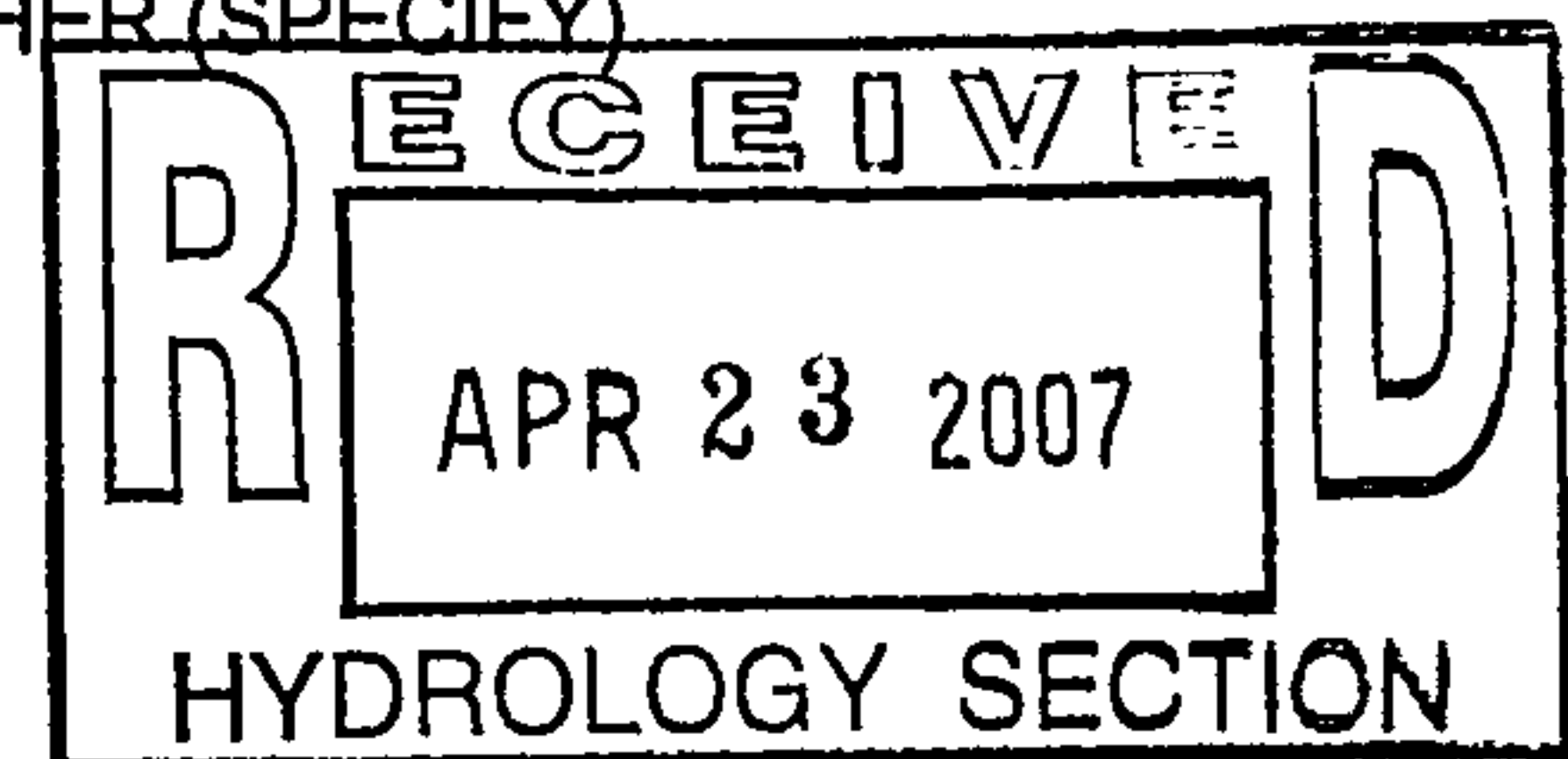
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL, **REQUIRES TCL or equal**
- ☒ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (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
- ☒ NO
- ☐ COPY PROVIDED



DATE SUBMITTED: April 23, 2007

BY: Pavan K. Toleti

(T. Parumbumar)

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:

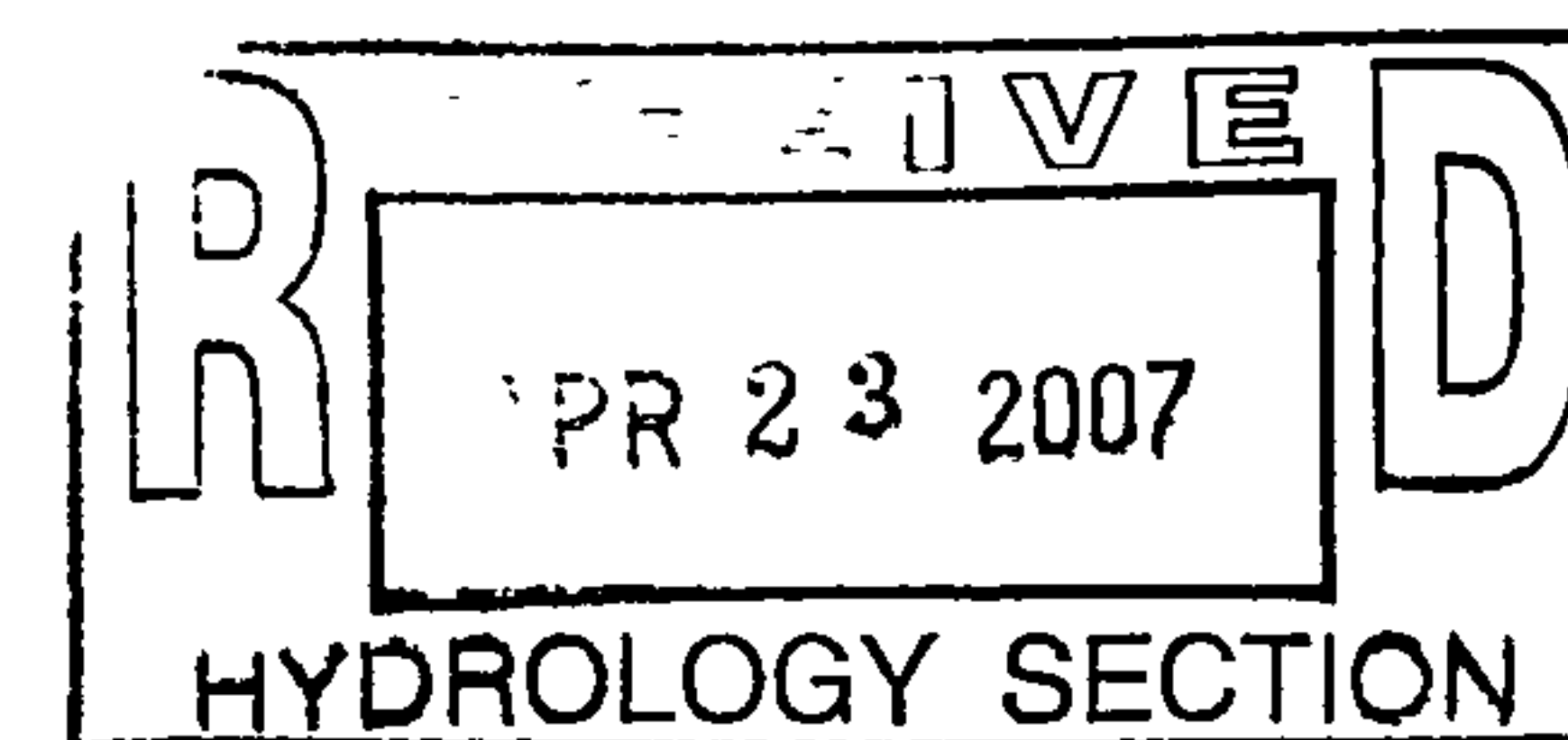
1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for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

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
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- VERSION: 1997.02d

RUN DATE (MON/DAY/YR) =03/13/2007
 USER NO.= AHYMO-I-9702dGoodwinM-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID	TO ID	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
*S	AHYMO_97 MODEL FOR: SILVER TREE PARK DRAINAGE REPORT									
*S	PREPARED FOR: CITY									
*S	PREPARED BY: MARK GOODWIN & ASSOCIATES									
*S	MODEL DESCRIPTION -									
*S	1. 100-YEAR 6-HOUR RAINFALL EVENT									
*S	2. THIS MODEL ASSUMES DEVELOPED AND EXISTING CONDITIONS									
*S										
START									TIME=	.00
*S***** AHYMO -Silver Tree City Park. DAT										
*S***** March 13, 2007										
*S***** HYDROLOGY FOR SILVER TREE ONSITE DEVELOPED AND UNDEVELOPED										
RAINFALL TYPE= 1										
*S***** BASIN 1 -ONSITE UN DEVELOPED (6.71 ACRES)										
COMPUTE NM HYD	101.00	-	1	.01030	11.44	.324	.58913	1.533	1.736 PER IMP=	2.00
*S***** BASIN 1 -ONSITE DEVELOPED (6.71 ACRES)										
COMPUTE NM HYD	102.00	-	2	.01030	16.96	.524	.95465	1.500	2.572 PER IMP=	20.00
FINISH										



*S AHYMO_97 MODEL FOR: SILVER TREE PARK DRAINAGE REPORT
*S PREPARED FOR: CITY
*S PREPARED BY: MARK GOODWIN & ASSOCIATES
*S
*S MODEL DESCRIPTION -
*S 1. 100-YEAR 6-HOUR RAINFALL EVENT
*S 2. THIS MODEL ASSUMES DEVELOPED AND EXISTING CONDITIONS
*S
START TIME=0.0
*S***** AHYMO -Silver Tree City Park. DAT
*S***** March 13, 2007
*S***** HYDROLOGY FOR SILVER TREE ONSITE DEVELOPED AND UNDEVELOPED

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.87 IN RAIN SIX=2.20 IN
IN DT=0.0333 HR

*S***** BASIN 1 -ONSITE UN DEVELOPED (6.71 ACRES)

COMPUTE NM HYD ID=1 HYD NO=101 AREA=0.0103 SQ MI
PER A=70 PER B=0 PER C=28 PER D=2
TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD ID=1 CODE=24

*S***** BASIN 1 -ONSITE DEVELOPED (6.71 ACRES)

COMPUTE NM HYD ID=2 HYD NO=102 AREA=0.0103 SQ MI
PER A=0 PER B=70 PER C=10 PER D=20
TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD ID=2 CODE=24

FINISH

AHYMO PROGRAM (AHYMO_97) - - Version: 1997.02d
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 START TIME (HR:MIN:SEC) = 13:08:27 USER NO.= AHYMO-I-9702dGoodwinM-AH
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*S AHYMO_97 MODEL FOR: SILVER TREE PARK DRAINAGE REPORT
 *S PREPARED FOR: CITY
 *S PREPARED BY: MARK GOODWIN & ASSOCIATES
 *S
 *S MODEL DESCRIPTION -
 *S 1. 100-YEAR 6-HOUR RAINFALL EVENT
 *S 2. THIS MODEL ASSUMES DEVELOPED AND EXISTING CONDITIONS
 *S
 START TIME=0.0
 *S***** AHYMO -Silver Tree City Park. DAT
 *S***** March 13, 2007
 *S***** HYDROLOGY FOR SILVER TREE ONSITE DEVELOPED AND UNDEVELOPED

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
 RAIN ONE=1.87 IN RAIN SIX=2.20 IN
 IN DT=0.0333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.

DT =	.033333 HOURS	END TIME =	5.999940 HOURS
.0000	.0016	.0033	.0050
.0067	.0085	.0103	.0122
.0141	.0160	.0180	.0201
.0222	.0243	.0266	.0289
.0312	.0337	.0362	.0388
.0415	.0443	.0472	.0502
.0534	.0567	.0601	.0637
.0675	.0715	.0758	.0810
.0865	.0924	.1051	.1335
.1773	.2400	.3257	.4384
.5820	.7607	.9789	1.1808
1.2652	1.3365	1.4000	1.4577
1.5108	1.5602	1.6063	1.6495
1.6902	1.7285	1.7648	1.7991
1.8316	1.8624	1.8917	1.9194
1.9458	1.9519	1.9576	1.9631
1.9683	1.9732	1.9780	1.9826
1.9870	1.9912	1.9953	1.9993
2.0031	2.0068	2.0105	2.0140
2.0174	2.0207	2.0240	2.0272
2.0303	2.0333	2.0363	2.0392
2.0420	2.0448	2.0476	2.0502
2.0529	2.0554	2.0580	2.0605
2.0629	2.0653	2.0677	2.0701
2.0724	2.0746	2.0769	2.0791
2.0812	2.0834	2.0855	2.0876
2.0896	2.0916	2.0936	2.0956
2.0976	2.0995	2.1014	2.1033
2.1052	2.1070	2.1088	2.1106
2.1124	2.1142	2.1159	2.1176
2.1193	2.1210	2.1227	2.1244
2.1260	2.1276	2.1292	2.1308
2.1324	2.1340	2.1355	2.1371
2.1386	2.1401	2.1416	2.1431
2.1446	2.1461	2.1475	2.1489
2.1504	2.1518	2.1532	2.1546
2.1560	2.1573	2.1587	2.1601
2.1614	2.1627	2.1641	2.1654
2.1667	2.1680	2.1693	2.1705
2.1718	2.1731	2.1743	2.1756
2.1768	2.1780	2.1793	2.1805
2.1817	2.1829	2.1841	2.1852
2.1864	2.1876	2.1887	2.1899
2.1911	2.1922	2.1933	2.1945
2.1956	2.1967	2.1978	2.1989
2.1999	2.2000		

*S***** BASIN 1 -ONSITE UN DEVELOPED (6.71 ACRES)

COMPUTE NM HYD ID=1 HYD NO=101 AREA=0.0103 SQ MI
PER A=70 PER B=0 PER C=28 PER D=2
TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = .81330 CFS UNIT VOLUME = .9862 B = 526.28 P60 = 1.8700
AREA = .000206 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

K = .147165HR TP = .133300HR K/TP RATIO = 1.104011 SHAPE CONSTANT, N = 3.202280
UNIT PEAK = 22.560 CFS UNIT VOLUME = .9995 B = 297.92 P60 = 1.8700
AREA = .010094 SQ MI IA = .56429 INCHES INF = 1.43000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=1 CODE=24

PARTIAL HYDROGRAPH 101.00

TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW
HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS
.000	.0	1.333	.2	2.667	.2	4.000	.0
.667	.0	2.000	1.1	3.333	.1	4.667	.0

RUNOFF VOLUME = .58913 INCHES = .3236 ACRE-FEET
PEAK DISCHARGE RATE = 11.44 CFS AT 1.533 HOURS BASIN AREA = .0103 SQ. MI.

*S***** BASIN 1 -ONSITE DEVELOPED (6.71 ACRES)

COMPUTE NM HYD ID=2 HYD NO=102 AREA=0.0103 SQ MI
PER A=0 PER B=70 PER C=10 PER D=20
TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 8.1330 CFS UNIT VOLUME = .9981 B = 526.28 P60 = 1.8700
AREA = .002060 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

K = .127851HR TP = .133300HR K/TP RATIO = .959124 SHAPE CONSTANT, N = 3.684007
UNIT PEAK = 20.617 CFS UNIT VOLUME = .9996 B = 333.52 P60 = 1.8700
AREA = .008240 SQ MI IA = .48125 INCHES INF = 1.19750 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=2 CODE=24

PARTIAL HYDROGRAPH 102.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	2.1	2.667	.3	4.000	.0	5.333	.0
.667	.0	2.000	2.4	3.333	.1	4.667	.0	6.000	.0

RUNOFF VOLUME = .95465 INCHES = .5244 ACRE-FEET
 PEAK DISCHARGE RATE = 16.96 CFS AT 1.500 HOURS BASIN AREA = .0103 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 13:08:27

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
 INPUT FILE = F:\PAVAN\AHYMOI~1\SILVER~1.DOC

- VERSION: 1997.02d

RUN DATE (MON/DAY/YR) =03/13/2007
 USER NO.= AHYMO-I-9702dGoodwinM-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID	TO ID	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
*S	AHYMO_97 MODEL FOR: SILVER TREE PARK DRAINAGE REPORT									
*S	PREPARED FOR: CITY									
*S	PREPARED BY: MARK GOODWIN & ASSOCIATES									
*S	MODEL DESCRIPTION -									
*S	1. 100-YEAR 6-HOUR RAINFALL EVENT									
*S	2. THIS MODEL ASSUMES DEVELOPED AND EXISTING CONDITIONS									
*S	START									
									TIME=	.00
*S*****	AHYMO -Silver Tree City Park. DAT									
*S*****	March 13, 2007									
*S*****	HYDROLOGY FOR SILVER TREE ONSITE DEVELOPED AND UNDEVELOPED									
	RAINFALL TYPE= 1									
*S*****	BASIN 1 -ONSITE UN DEVELOPED (6.71 ACRES)									
COMPUTE NM HYD	101.00	-	1	.01030	11.44	.324	.58913	1.533	1.736 PER IMP=	2.00
*S*****	BASIN 1 -ONSITE DEVELOPED (6.71 ACRES)									
COMPUTE NM HYD	102.00	-	2	.01030	16.96	.524	.95465	1.500	2.572 PER IMP=	20.00
FINISH										

DRAINAGE REPORT
FOR
EL RANCHO GRANDE UNITS 4A & 4B

Prepared for

Curb, Inc.
6301 Indian School Rd. NE
Albuquerque, NM 87110

Prepared by

Mark Goodwin & Associates, PA
P.O. Box 90606
Albuquerque, NM 87199

January 2001

D. MARK GOODWIN & ASSOCIATES

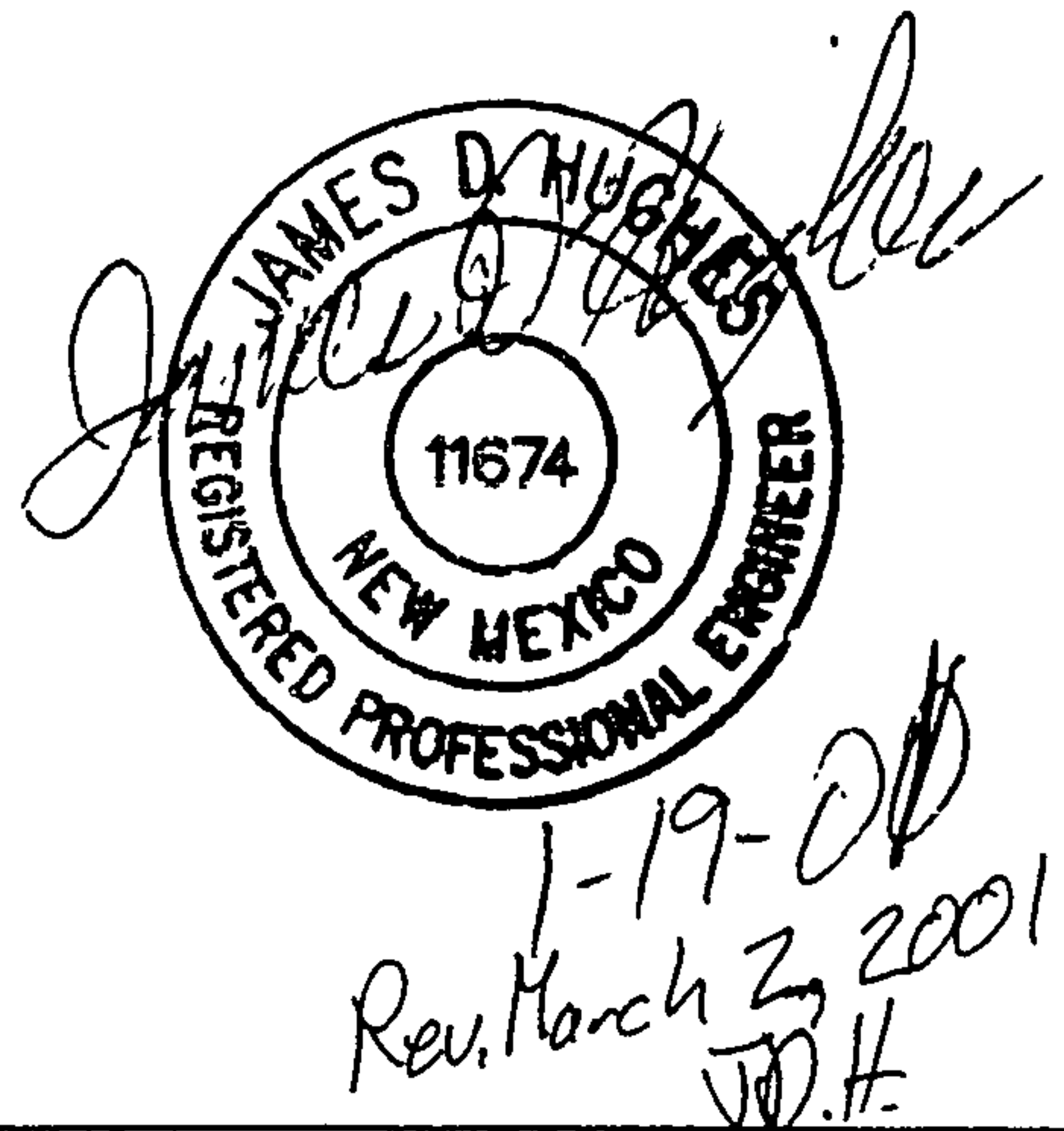


Table 1 - Summary of Hydrology

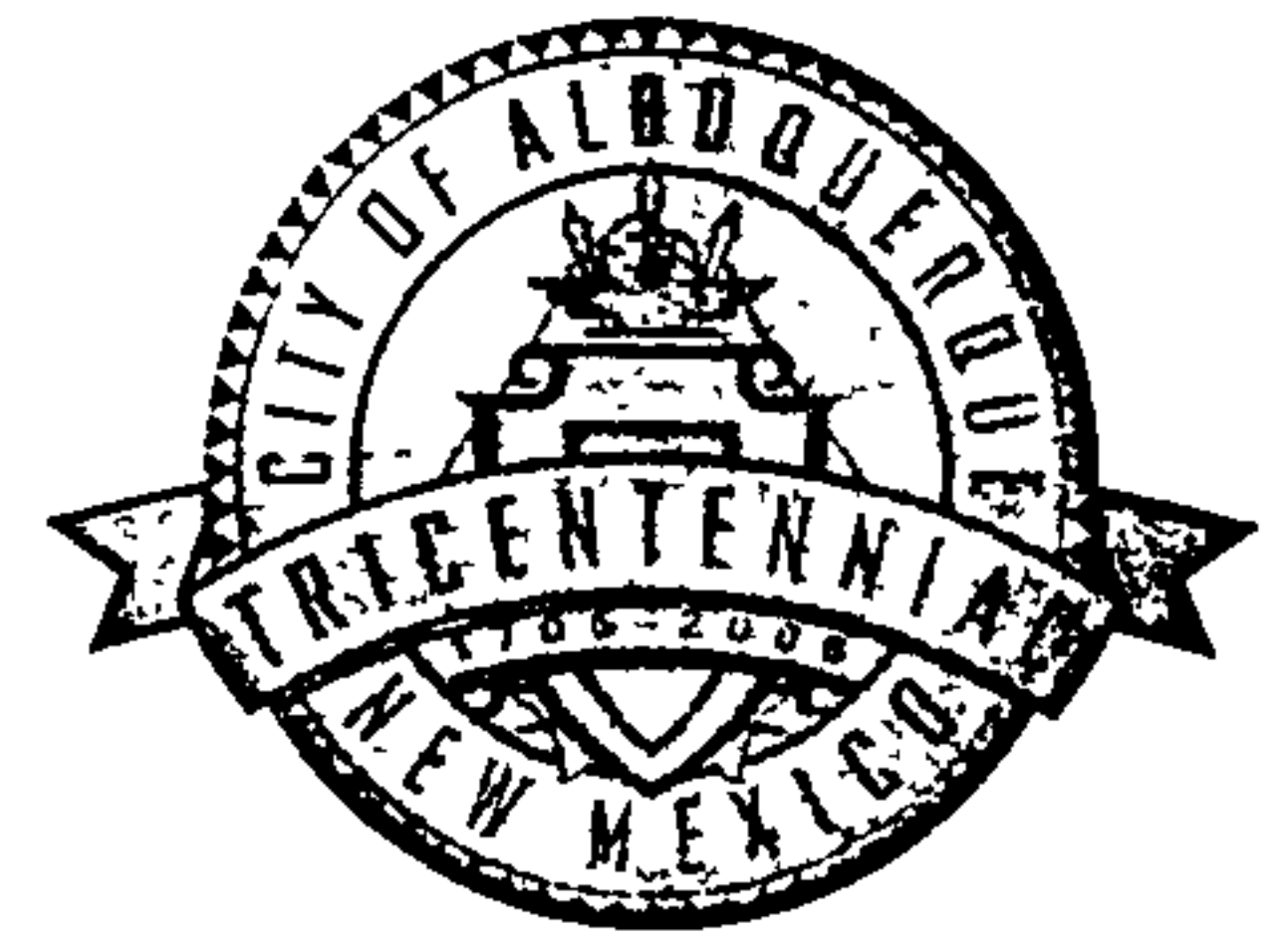
Description	Basin ID	Area	Area Sq. Mi.	Land Treatment				Hr. Tp	100YR Peak Flow		100YR Volume		10YR Peak Flow	
				A	B	C	D		Incrum.	Cumm.	6 hr	10 day	Incrum.	Cumm.
School Existing	101	20.9	0.0327	0	25	25	50	0.13	72.46	—	2.462	3.751	42.31	—
⁽¹⁾ 3.7 du/ac Existing	102 ⁽¹⁾	34.63	0.0541	0	24	20	56	0.27	82.42	122.89	4.254	6.646	48.68	68.39
⁽³⁾ 5.4 du/ac Existing	103	31.96	0.0499	0	25	20	55	0.17	99.23	208.87	3.889	6.057	58.63	118.71
⁽³⁾ 5.4 du/ac	104	34.07	0.0532	0	25	20	55	0.22	91.59	—	4.146	6.457	6.28	94.12
⁽²⁾ Commercial Existing	105	23.2	0.0363	0	0	10	90	0.14	96.87	47.06	3.658	6.233	63.10	36.51
Gibson Blvd.	111	2.87	0.0045	0	35	0	65	0.13	10.41	144.63	0.367	0.597	54.06	—
⁽³⁾ Commercial	106	15.38	0.0240	0	0	10	90	0.13	65.87	196.59 ⁽⁴⁾	2.418	4.125	42.96	127.15
⁽³⁾ 5.4 du/ac	107	32.05	0.0501	0	25	20	55	0.13	113.50	—	3.905	6.079	67.15	190.19
Pond In	108	2.9	0.0045	0	0	20	80	0.13	11.93	509.84	0.430	0.716	7.66	307.99
Pond Out	—	—	—	—	—	—	—	—	—	109.71	—	—	—	83.69
Unser @ Gibson	109	5.6	0.0088	0	35	0	65	0.13	12.95	111.82	0.457	0.906	7.81	84.74
Unser @ Gibson	110	1.1	0.0018	0	35	0	65	0.13	4.17	112.87	0.147	0.235	2.52	85.16
⁽¹⁾ Park — SITE	302	6.71	0.0105	0	70	10	20	0.13	17.61	17.61	0.546	0.712	8.48	8.48
⁽³⁾ 5.4 du/ac	205	22.39	0.0350	0	25	20	55	0.13	79.30	96.91	2.728	4.247	46.91	55.39
Unser Blvd.	204	3.3	0.0052	0	35	0	65	0.13	19.18	116.09	0.678	0.943	11.57	66.96
Blake Road	203	1.9	0.0030	0	15	0	85	0.13	7.86	123.95	0.287	0.486	5.02	71.98
⁽³⁾ 5.4 du/ac Future	202	22.9	0.0358	0	25	20	55	0.13	81.11	205.06	2.790	4.343	47.99	119.97
Unser Blvd.	201	3.8	0.0059	0	35	0	65	0.13	13.64	218.70	0.482	0.787	8.23	128.20

- ⁽¹⁾ Rear yard ponding areas are subtracted from total area (61.5 ac) @ 40% impervious and weighted impervious is based on composite calculations for 17 subareas as presented in the previously approved report for El Rancho Grande Units 1, 2 and 3 (see Basin Map and Composite Calcs).
- ⁽²⁾ Area currently zoned commercial, but will have limited discharge due to downstream capacity constraints.
- ⁽³⁾ Land treatments match the "Revision to the Master Drainage Plan for the Rio Bravo Sector Development Plan" March 2000.
- ⁽⁴⁾ The pond on Tract 12 (Basin #105) is sized such that 100 YR peak flows combined do not exceed 204.7 cfs as used in the original HGL calculations for the storm sewer in Gibson east of Barbados.

100 YEAR PRECIPITATION (From Figures D, E and F, and Eq. 28 of DPM 22.2)

$$P_{60} = 1.90", P_{360} = 2.22", P_{1440} = 2.67", P_{10 \text{ days}} = 10.0 - [24.9 / (2.67)^{1.4}] = 3.70"$$

CITY OF ALBUQUERQUE



February 28, 2007

John M. Mackenzie, P.E.
D. Mark Goodwin & Associates, P.A.
PO Box 90606
Rio Rancho, NM 87199

Re: Silver Tree Park, Engineer's Stamp dated 1-31-07, (N9/D10)

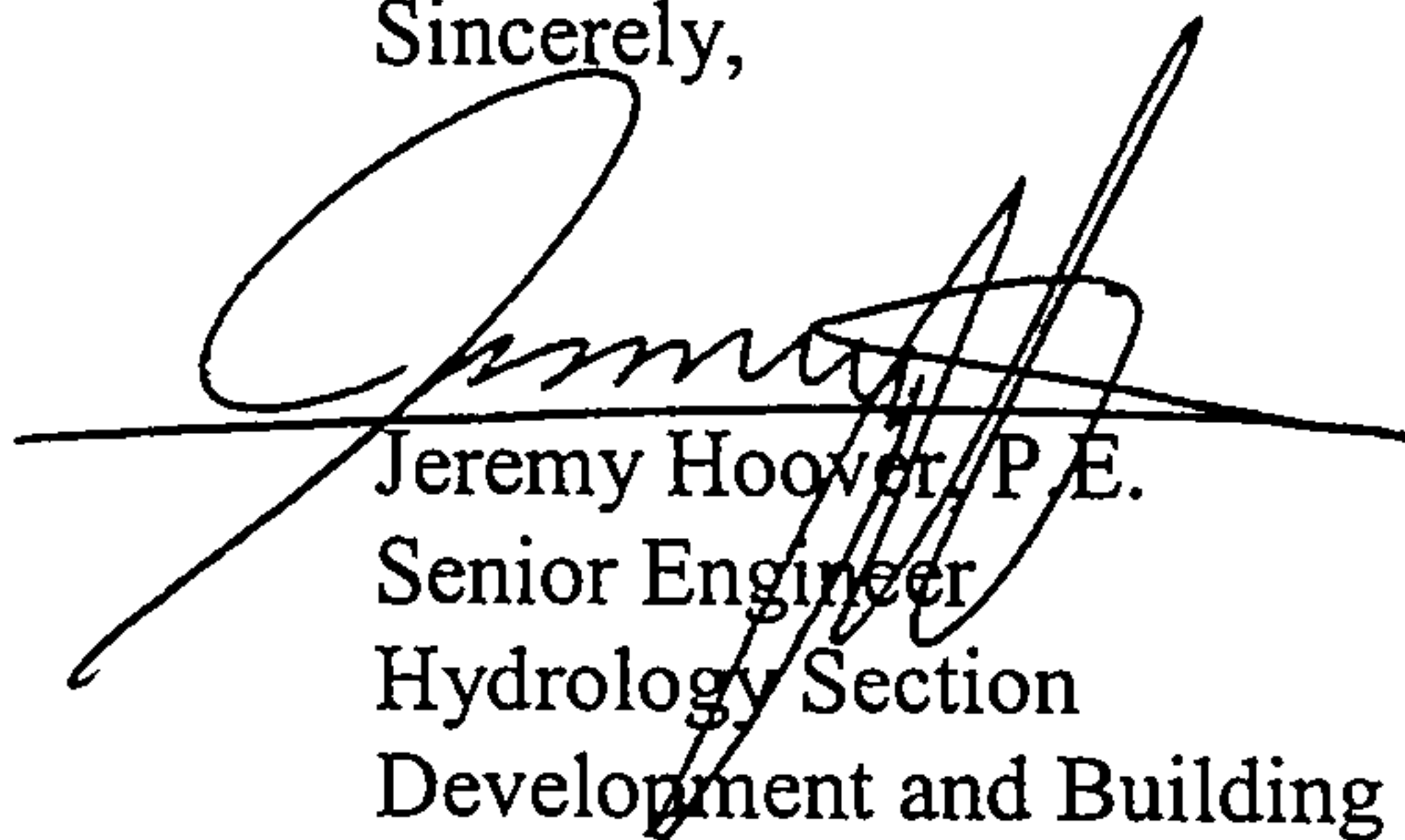
Dear Mr. Mackenzie,

Based upon the information provided in your submittal received on February 1, 2007, there are some additional items that must be addressed prior to permit approval. Those items are as follows.

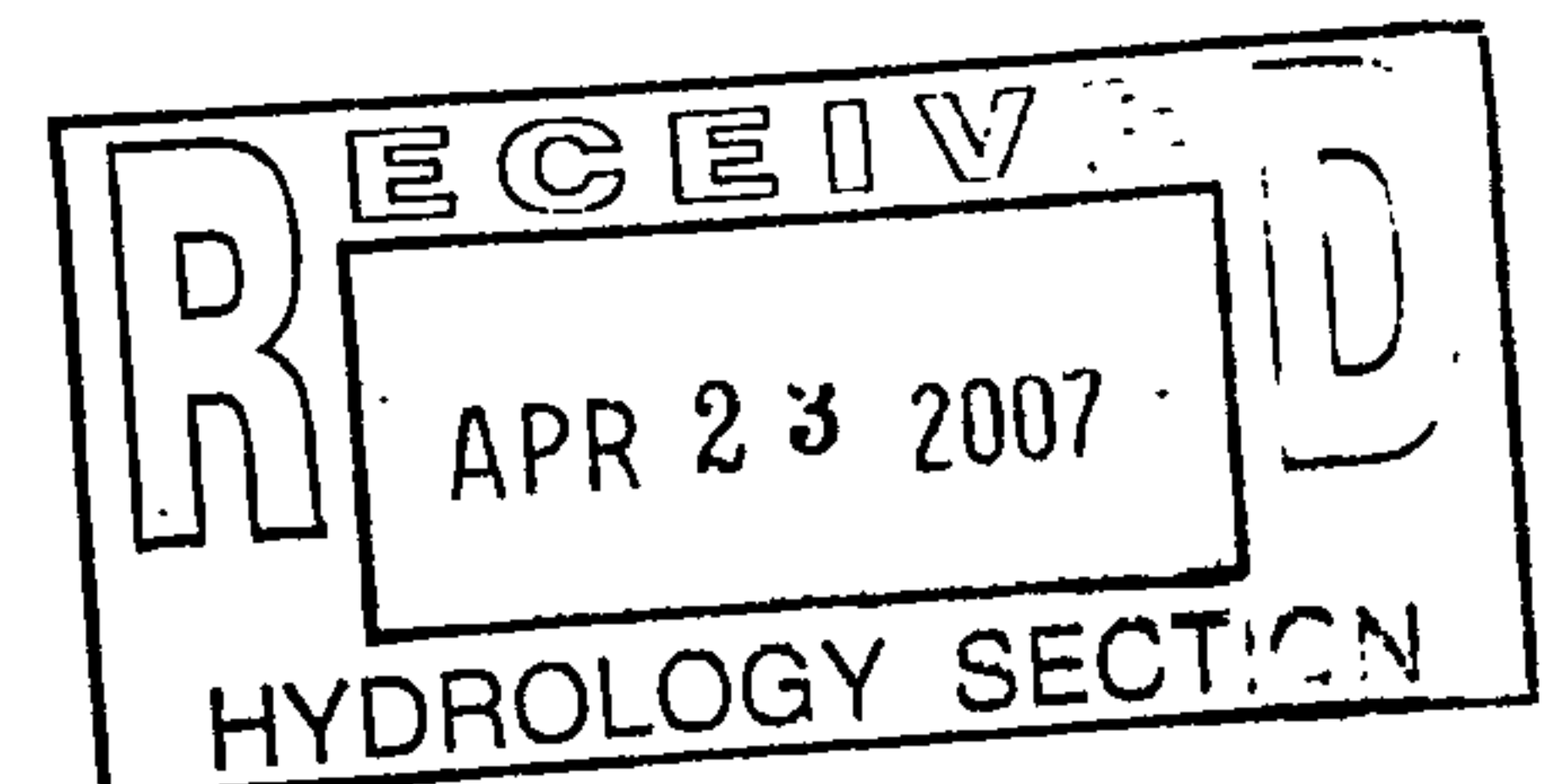
- ✓ Please include a zone atlas page / vicinity map along with the site legal description.
- Please show the entire parcel and property line. Also include an excerpt from the El Rancho Grande Master Plan to indicate the allowable unit runoff or total allowable runoff from this site.
- What precipitation values are you using? Under the zone 1 criteria, I am obtaining significantly different values than what you shown on the plan. Please give a complete set of drainage calculations.
- If you choose to use AHYMO for the analysis in lieu of the 40-acre and smaller procedure, include the input and summary files. Why are you using any treatment 'A' for a disturbed, graded, and developed condition?
- Although you referenced a drawing detail for the entrance from Silver Tree, that detail was not shown on the plan. Will the private driveway conform to standard drawing #2426? Will it include valley gutter?
- Please revise the legend to define the various hatching and symbology. Also modify the text so that all of it can be read. Additional notes may help to improve clarity.

If you have any questions, you can contact me at 924-3990.

Sincerely,


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

cc: file N9/D10



P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov