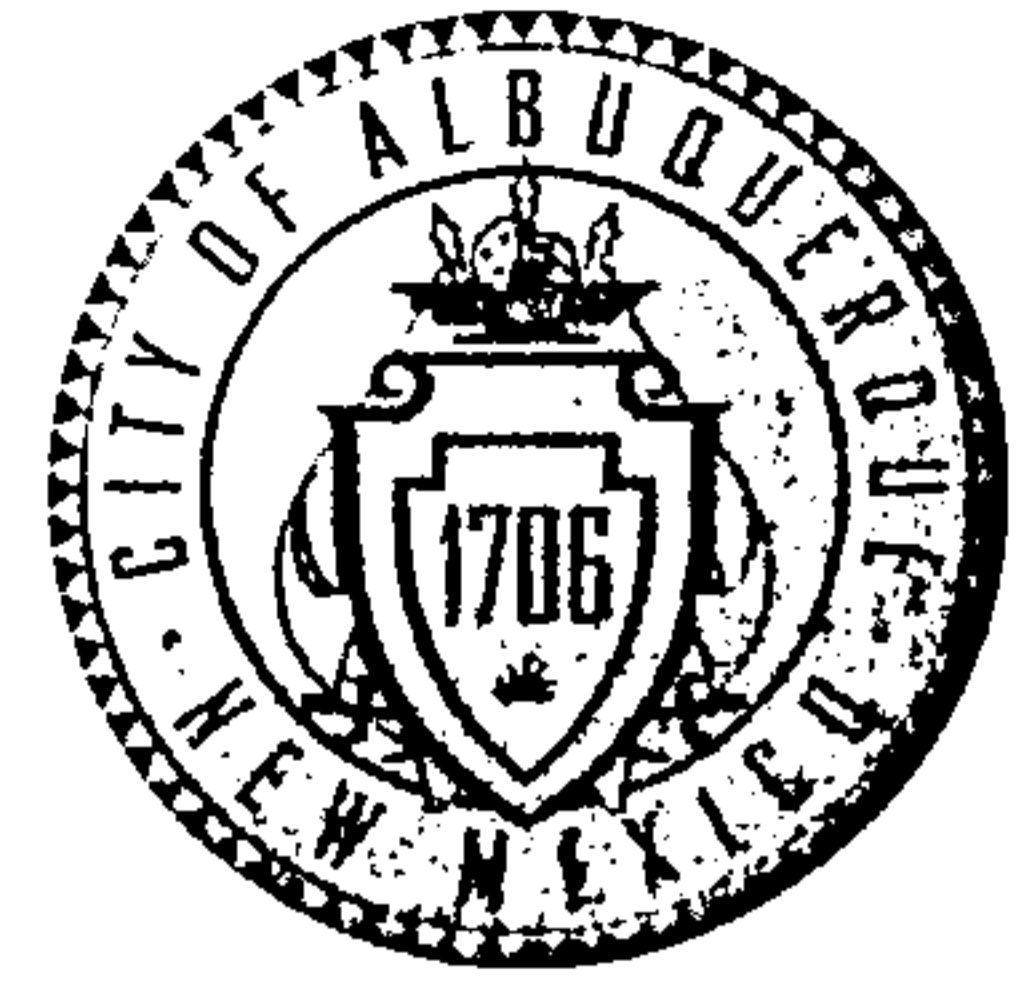


# CITY OF ALBUQUERQUE



March 13, 2009

Mario Juarez-Infante, P.E.  
**Wilson & Company, Inc.**  
4900 Lang Ave. NW  
Albuquerque, NM 87109

**Re: Madison Middle School, 3501 Moon NE,  
(G-20/D034)  
Approval of Permanent Certificate of Occupancy,  
Engineer's Revised Stamp Dated: 9-27-09  
Engineer's Certification Date: 3-12-09**

Dear Mr. Infante,

PO Box 1293

Based upon the information provided by our visual inspection on 3/13/09, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

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

NM 87103

Sincerely,

www.cabq.gov

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

C: CO Clerk—Katrina Sigala  
file

# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003)

PROJECT TITLE: MADISON MIDDLE SCHOOL ZONE MAP/DRG. FILE#: G-20/D039

DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: LOT A BLOCK MADISON JR HIGH SCHOOL, 0000, MADISON JR HIGH SCHOOL

CITY ADDRESS: 3501 MOON NE

ENGINEERING FIRM: WILSON & COMPANY CONTACT: MARIO JUAREZ-INFANTE

ADDRESS: 4900 LANG AVENUE, NE PHONE: (505) 348-4193

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87109

OWNER: ALBUQUERQUE PUBLIC SCHOOLS CONTACT: KAREN ALARID

ADDRESS: 915 OAK ST., SE PHONE: (505) 242-5865

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87106

ARCHITECT: DESIGN PLUS CONTACT: RUPAL ENGINEER

ADDRESS: 209 GOLD AVENUE, SW PHONE: (505) 842-6789

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87102

SURVEYOR: WILSON & COMPANY CONTACT: Ben Aragon

ADDRESS: 4900 LANG AVENUE, NE PHONE: (505) 348-4035

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87109

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CITY, STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

## CHECK TYPE OF SUBMITTAL:

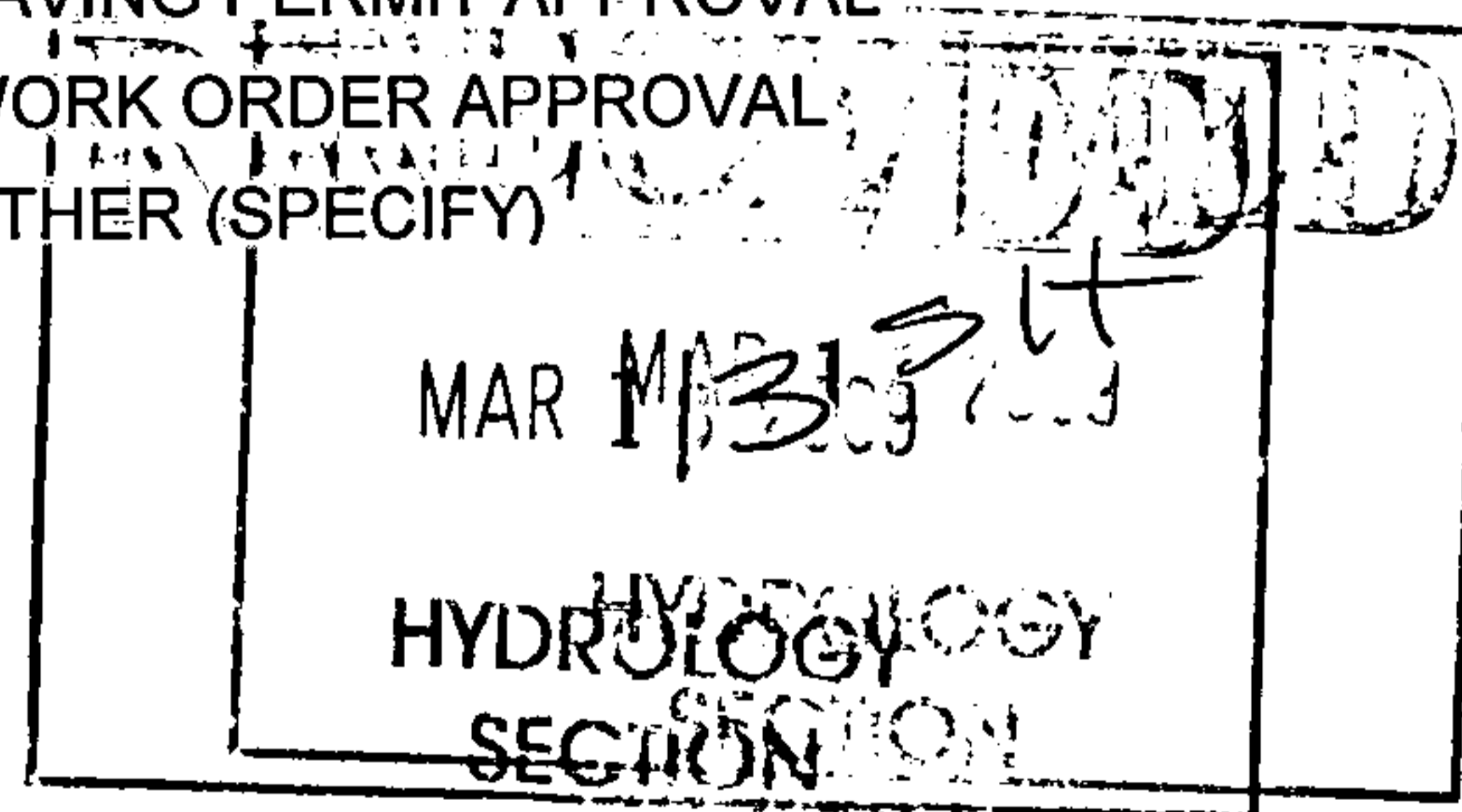
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL, REQUIRES TCL OR EQUAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☒ ENGINEERS CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS 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
- ☐ CERTIFICATION OF OCCUPANCY (PERM.)
- ☐ CERTIFICATION 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: March 12, 2009 By: Mario Juarez-Infante

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
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5)
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

17  
G-20/D34 G20-012  
629481

#2  
(NO PUBLIC EASEMENT)

### DRAINAGE COVENANT

2-11-08

This Drainage Covenant, between Albuquerque Public School ("Owner"), whose address is 915 Locust SE 87106, and the City of Albuquerque, New Mexico municipal corporation ("City"), whose address is P.O. Box 1293, Albuquerque, New Mexico 87103, is made in Albuquerque, Bernalillo County, New Mexico and is entered into as of the date Owner signs this Covenant.

1. Recital. Owner is the owner of certain real property described as: 3501 Moon St. NE Legal description: Lot A/Block/Subdivision: A/Madison Jr. High School UPC #: 102006022220031524 in Bernalillo County, New Mexico (the "Property"). (Give legal description and filing information).

Pursuant to City ordinances, regulations and other applicable laws, the Owner is required to construct and maintain certain Drainage Facilities on the Property, and the parties wish to enter into this Agreement to establish the obligations and responsibilities of the parties.

2. Description and Construction of Drainage Facilities. Owner shall construct the following "Drainage Facility" within the Property at Owner's sole expense in accordance with the standard plans and specifications approved by the City pursuant to Drainage File No. G20-D34:

Re-grade existing detention ponds located on the west side on the school site to accommodate volumetric storage as identified in the approved Wilson & Company Inc., Drainage Report dated 6/10/05.

The Drainage Facility is more particularly described in the attached Exhibit A. The Owner will not permit the Drainage Facility to constitute a hazard to the health or safety of the general public.

3. Maintenance of Drainage Facility. The Owner will maintain the Drainage Facility at Owner's cost in accordance with the approved Drainage Report and plans.

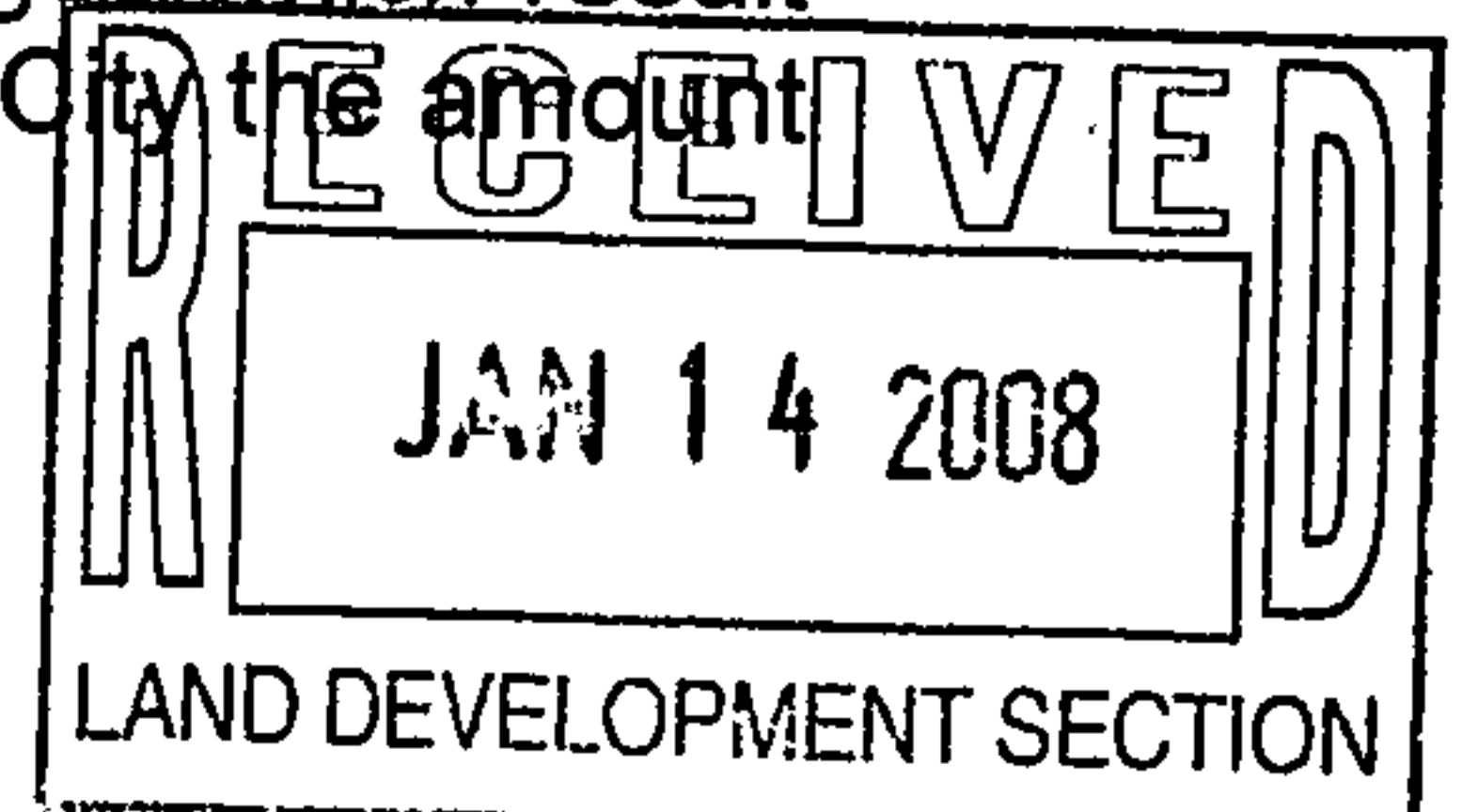
4. City's Right of Entry. The City has the right to enter upon the Property at anytime and perform whatever inspection, maintenance or repair of the Drainage Facility it deems appropriate, without liability to the Owner.

5. Demand for Construction or Repair. The City may send written notice ("Notice") to the Owner requiring the Owner to construct or repair the Drainage Facility within 30 days ("Deadline") of receipt of the Notice, as provided in Section 11, and the Owner will comply promptly with the requirements of the Notice. The Owner will perform all required work by the Deadline, at Owner's sole expense.

6. Failure to Perform by Owner and Emergency Work by City. If the Owner fails to comply with the terms of the Notice by the Deadline, or if the City determines that an emergency condition exists, the City may perform the work itself. The City may assess the Owner for the cost of the work and for any other expenses or damages which result from Owner's failure to perform. The Owner agrees promptly to pay the City the amount

Doc# 2008016276

02/12/2008 02:07 PM Page: 1 of 5  
COV R:\$17.00 M. Toulouse, Bernalillo County



assessed. If the Owner fails to pay the City within thirty (30) days after the City gives the Owner written notice of the amount due, the City may impose a lien against Owner's Property for the total resulting amount.

7. Liability of City for Repair after Notice or as a Result of Emergency. The City shall not be liable to the Owner for any damages resulting from the City's repair or maintenance following notice to the Owner as required in this agreement or in an emergency unless the damages are the result of the reckless conduct or gross negligence of the City.

8. Indemnification. Owner agrees to indemnify and save the City, its officials, agents and employees harmless from all claims, actions, suits and proceedings arising out of or resulting from the Owner's negligent maintenance, construction, repair or use of the Drainage Facility. To the extent, if at all, Section 56-7-1 NMSA 1978 is applicable to this Agreement, this Agreement to indemnify will not extend to liability, claims, damages, losses or expenses, including attorney's fees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications by the indemnitee, or the agents or employees of the indemnitee; or (2) the giving of or the failure to give direction or instructions by the indemnitee, where such giving or failure to give directions or instructions is the primary cause of bodily injury to persons or damage to property.

9. Cancellation of Agreement and Release of Covenant. This Agreement may be released if the Drainage Facility is no longer required for the protection of the public health, safety and welfare by the City filing "Notice of Release" with the Bernalillo County Clerk. The Notice of Release must be signed by the City's Chief Administrative Officer, or his designee, and the approval of the City Hydrologist must be endorsed thereon.

10. Assessment. Nothing in this agreement shall be construed to relieve the Owner, his heirs, assigns, and successors from an assessment against Owner's Property for improvements to the property under a duly authorized and approved Special Assessment District. The parties specifically agree that the value of the Drainage Facility will not reduce the amount assessed by the City.

11. Notice. For purposes of given formal written notice to the Owner, Owner's address is :

Attn: Mr. Martin W. Eckert  
APS Real Estate  
915 Locust SE 87106

Notice may be given to the Owner either in person or by mailing the notice by regular U.S. mail, postage paid. Notice will be considered to have been received by the Owner within three days after the notice is mailed if there is no actual evidence of receipt. The Owner may change Owner's address by given written notice of the change by Certified Mail, return receipt requested, to the City Public Works Department, P.O. Box 1293, Albuquerque, New Mexico, 87103.

12. Term. This Agreement shall continue until terminated by the City pursuant to Section 9 above.

13. Binding on Owner's Property. The covenants and obligations of the Owner said forth herein shall be binding on Owner, its heirs, personal representatives, assigns and successors and on Owner's Property and shall constitute covenants running the Owner's Property until released by the City.

14. Entire Agreement. This Agreement contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith regarding this subject matter.

15. Changes to Agreement. Changes to this Agreement are not binding unless made in writing, signed by both parties.

16. Construction and Severability. If any part of this Agreement is held to be invalid or unenforceable, the remainder of the Agreement will remain valid and enforceable if the remainder is reasonably capable of completion.

17. Captions. The captions to the sections or paragraphs of this Agreement are not part of this Agreement and will not affect the meaning of construction of any of its provisions.

CITY OF ALBUQUERQUE:

OWNER:

By: *James Lewis*  
James Lewis  
Chief Administrative Officer  
Dated: 2-11-08

By: *Brad Winter*  
Its: *Brad Winter*  
Dated: 1/11/08

REVIEWED BY:

*James Lewis* *KL 2/5/08*  
City Engineer

*W 2-8-08*

CITY'S ACKNOWLEDGEMENT

STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) ss

This instrument was acknowledged before me on February 11, 2008, *Richard Daurte for*  
~~James Lewis, Chief~~ *Bruce Perlman, Chief*  
Administrative Officer for the City of Albuquerque, a New Mexico municipal corporation, on behalf of the  
corporation.

*Linda Gans*  
Notary Public

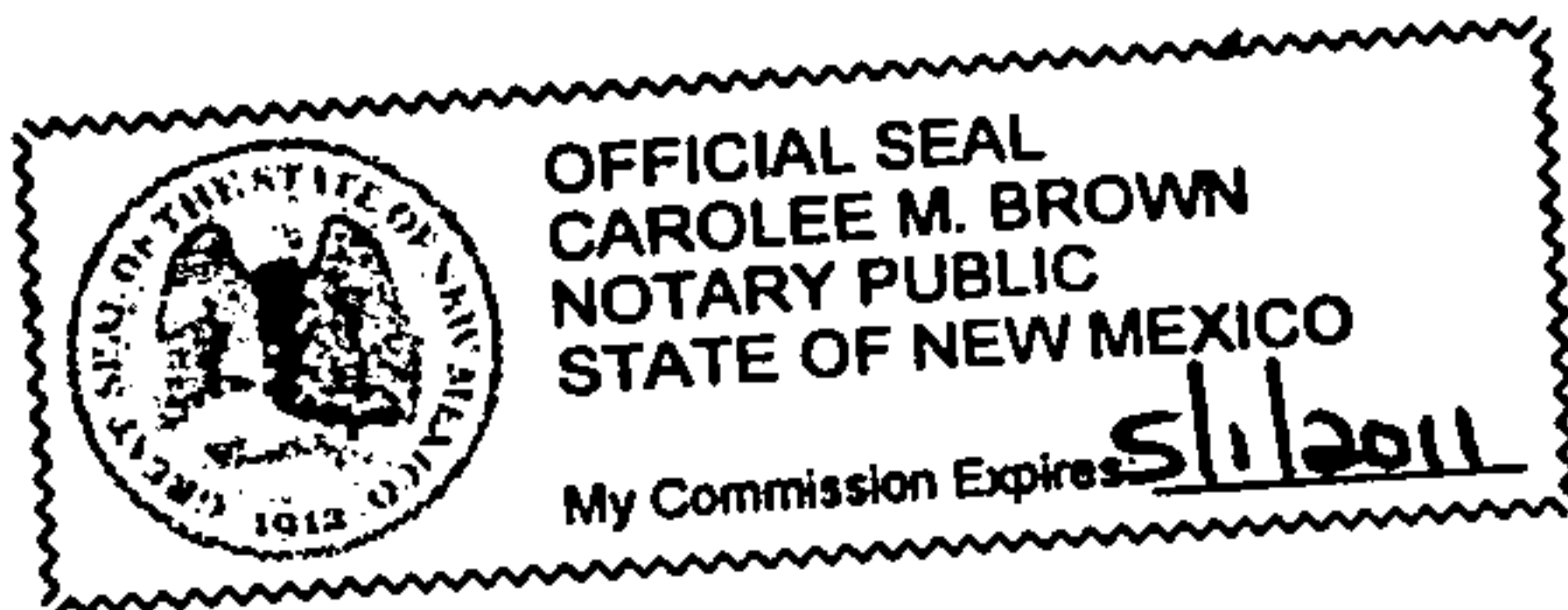
My Commission Expires:

10-7-08

OWNER'S ACKNOWLEDGMENT

STATE OF NEW MEXICO )  
 )ss  
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on January 11, 2008, by  
Boad Winter, on behalf of Albuquerque Public Schools



Carollee M. Brown  
Notary Public

My Commission Expires:

May 1, 2011





5452.08  
5452.76

INSTALL 2'-0"  
CURB CUT WITH  
6'-0" WIDE  
RIPRAP RUNDOWN

TOB54.50

INSTALL 6'-0"  
WIDE  
RIPRAP RUNDOWN  
ALL ACROSS POND

INSTALL 6'-0"  
WIDE  
RIPRAP RUNDOWN  
ALL ACROSS POND

BUS DROP-OFF/  
PICK-UP LANES

TOB54.50

TOG=53.62  
EXISTING DROP INLET  
INV(OUT)=51.08  
10" PVC=50.79



EXISTING DISCHARGE  
PIPE TO BE EXTENDED  
BEYOND RIGHT OF  
WAY TO EXISTING  
ROADWAY SEE EXHIBIT  
'A'. INV(OUT) TO  
MATCH EXISTING TOP  
OF ASPHALT

INSTALL 49.75LF 18"  
CLASS III RCP  
W/STD END SECTIONS  
INSTALL  
10W15'LONGX18"H  
TYPE VL RIPRAP  
INV(UP)=57.00  
INV(DN)=53.57

TOB54.50

INSTALL 2'-0"  
CURB CUT WITH  
6'-0" WIDE RIPRAP  
RUNDOWN TO  
BOTTOM OF POND

TOB54.50

INSTALL  
5'-0" CHAINLINK  
FENCE

24" ADS SD

INSTALL  
1-TYPE 'A' INLET  
TOG=55.28  
INV=53.25

12:1  
INSTALL 1-  
12"x24"x24"  
WYE  
INSTALL 1-  
12" 45° BEND

INSTALL 1- 12" 45°  
BEND

INSTALL  
1-TYPE 'D' INLET  
TOG=58.52  
INV (OUT)=55.52

INSTALL 1-  
12"x12"x12" WYE

INSTALL 1-  
12" 45° BEND

INSTALL  
1-18"x18" INLET  
TOG=61.55  
INV (OUT)=58.55

INSTALL  
1-18"x18" INLET  
TOG=62.50  
INV (OUT)=59.50

INSTALL 1- 45° BEND

INSTALL 1-  
PLANTERS

PLANTERS

TC55.98  
FL55.31

TC57.98  
FL57.29

TC58.28  
FL57.81

INSTALL 1-  
12"x24"x24" WYE  
24" ADS SD

FF59.50

NEW  
CLASS ROOMS

FF. ELEV.  
5462.83

NORTH POND

VOL=1.06 AC FT

USELEV=53.78

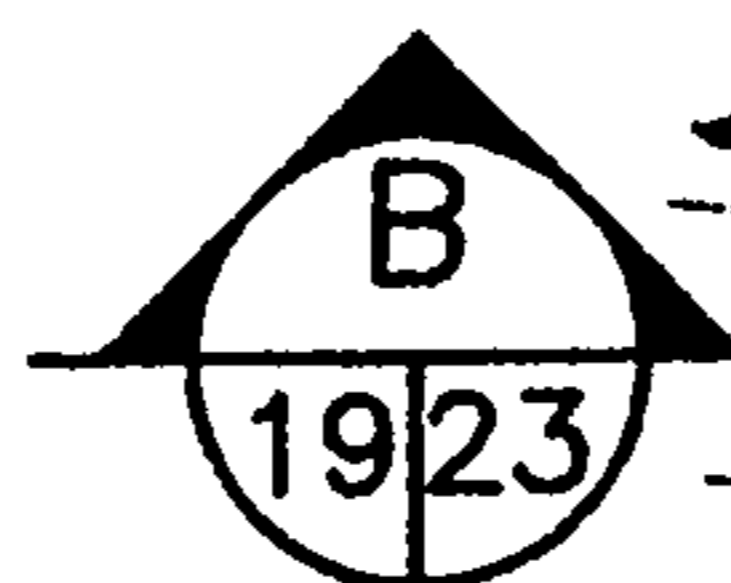
BOTTOM OF POND ELEV=5451.08

5457.80

5457.89

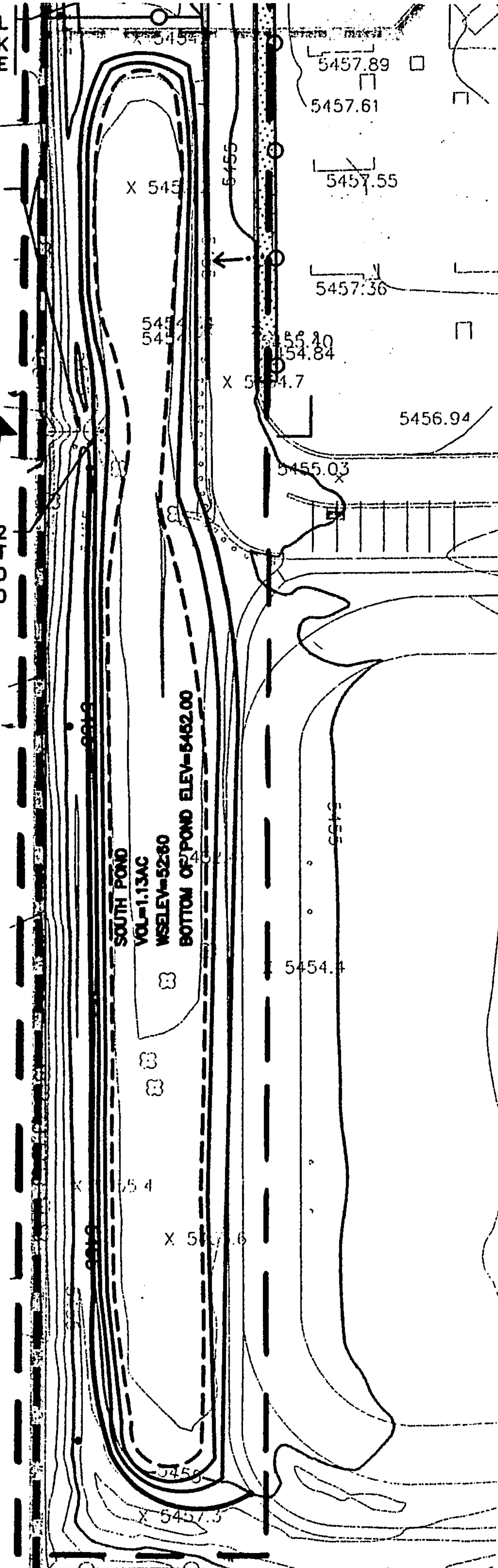
5459.34

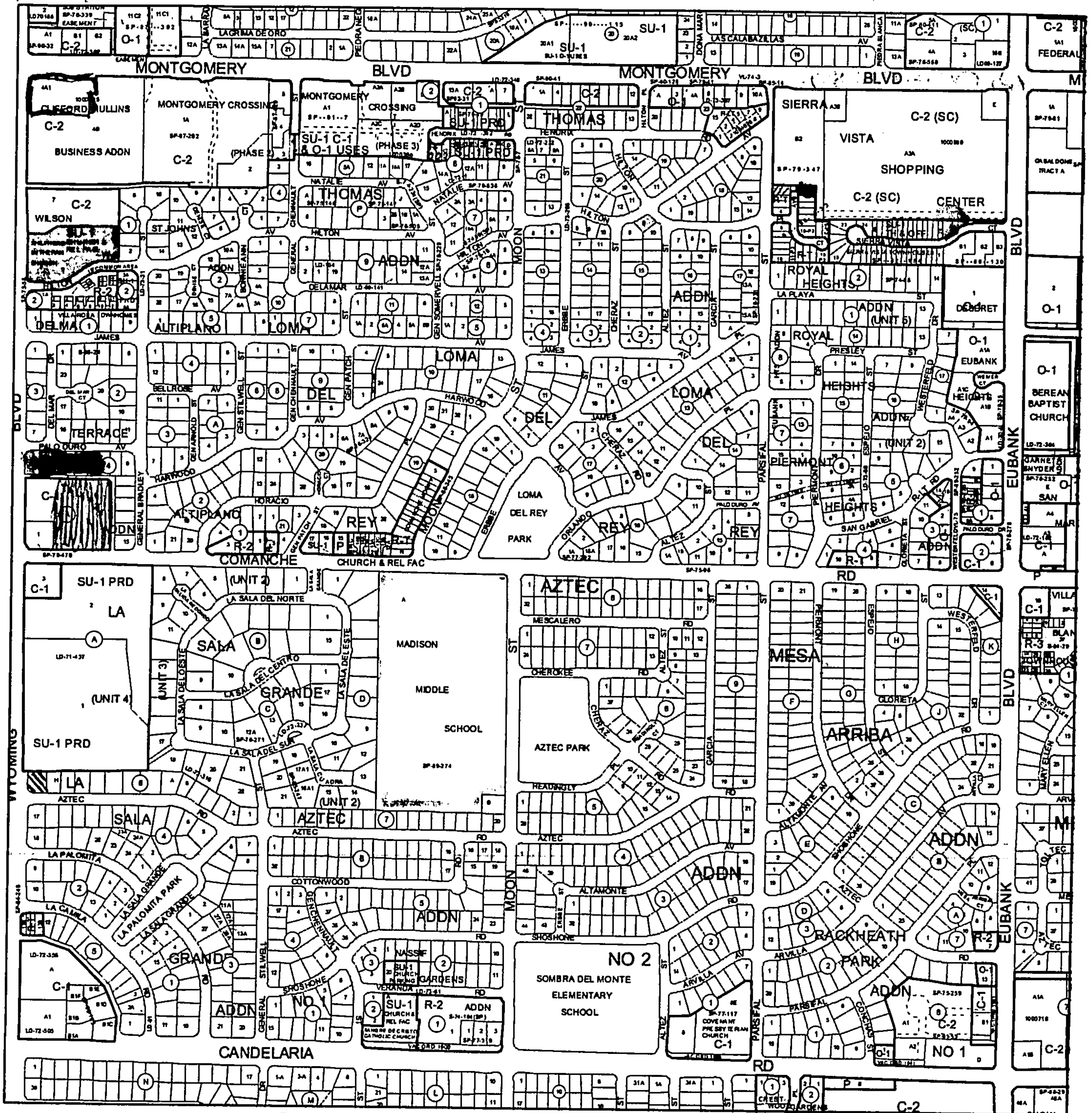
EXISTING DISCHARGE  
PIPE TO BE EXTENDED  
BEYOND RIGHT OF  
WAY TO EXISTING  
ROADWAY SEE EXHIBIT  
'B'. INV(OUT) TO  
MATCH EXISTING TOP  
OF ASPHALT



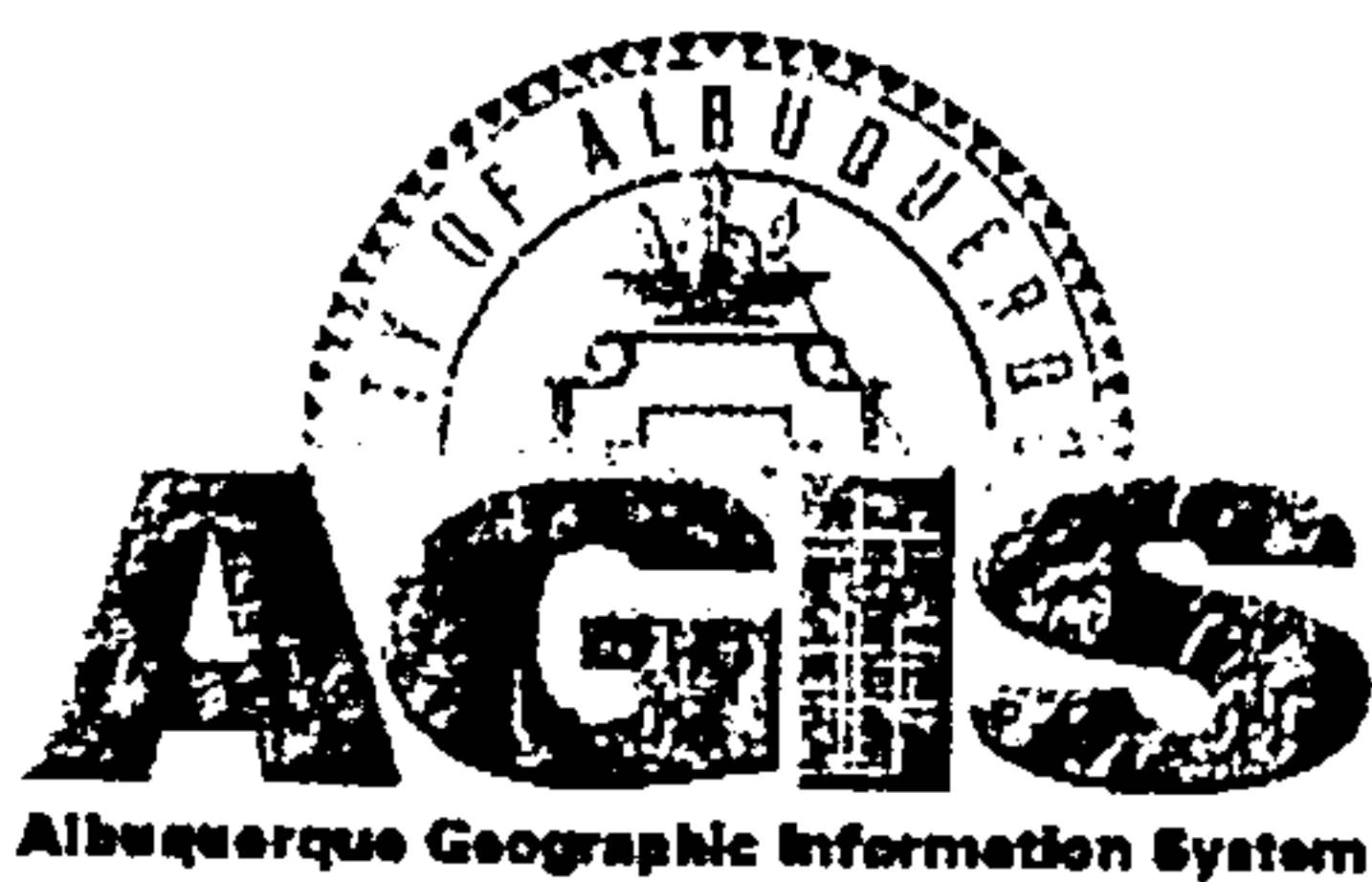
TOG=52.92  
 EXISTING DROP INLET  
 INV(OUT)=49.70  
 18" CMP=49.00

SOUTH POND  
VOL=1.13AC  
WSELEV=52.80  
BOTTOM OF POND ELEV=5452.00



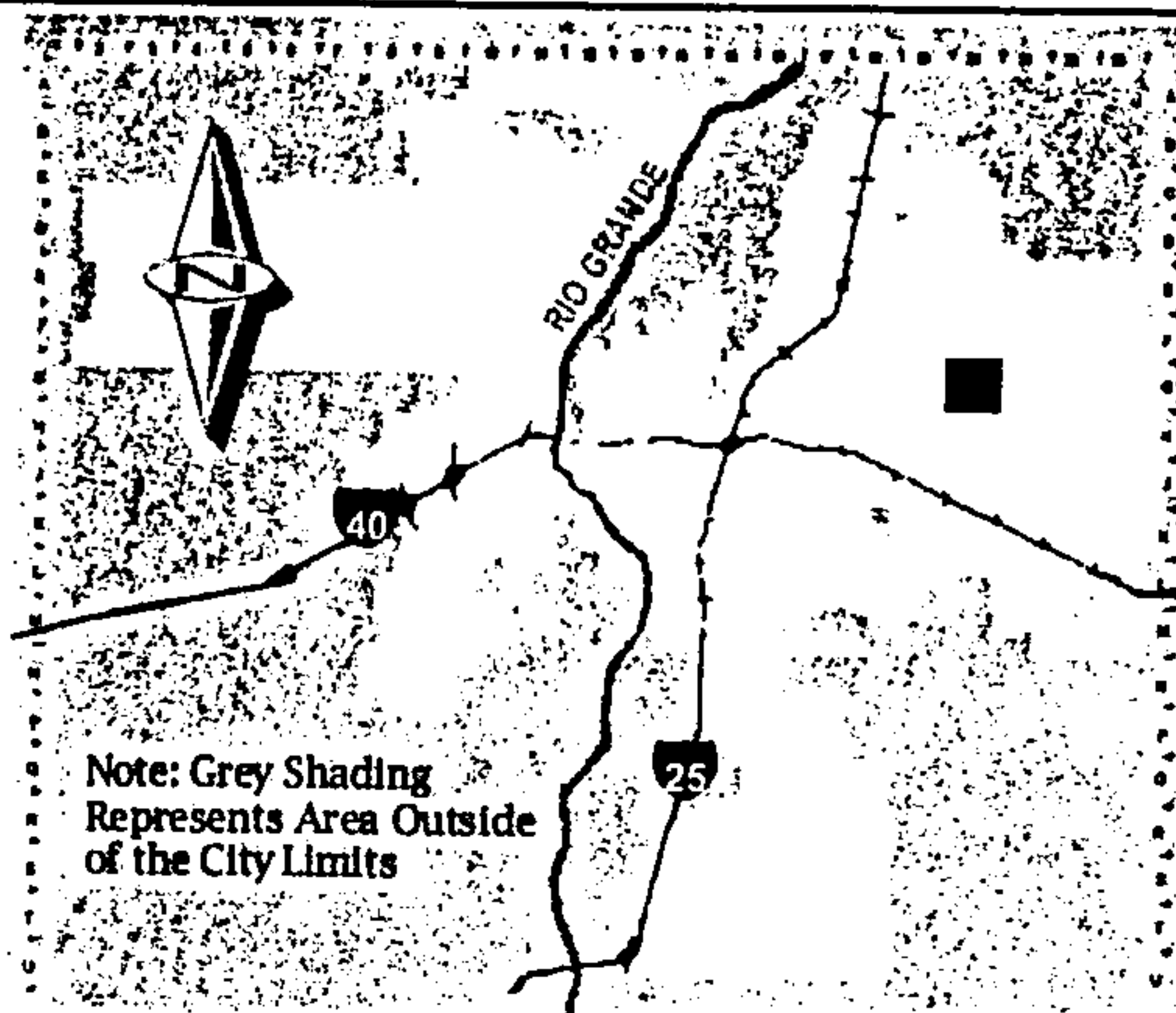


For more current information and more details visit: <http://www.cabq.gov/gis>



Albuquerque Geographic Information System

Map amended through: 5/1/2006



Note: Grey Shading  
Represents Area Outside  
of the City Limits

Zone Atlas Page:

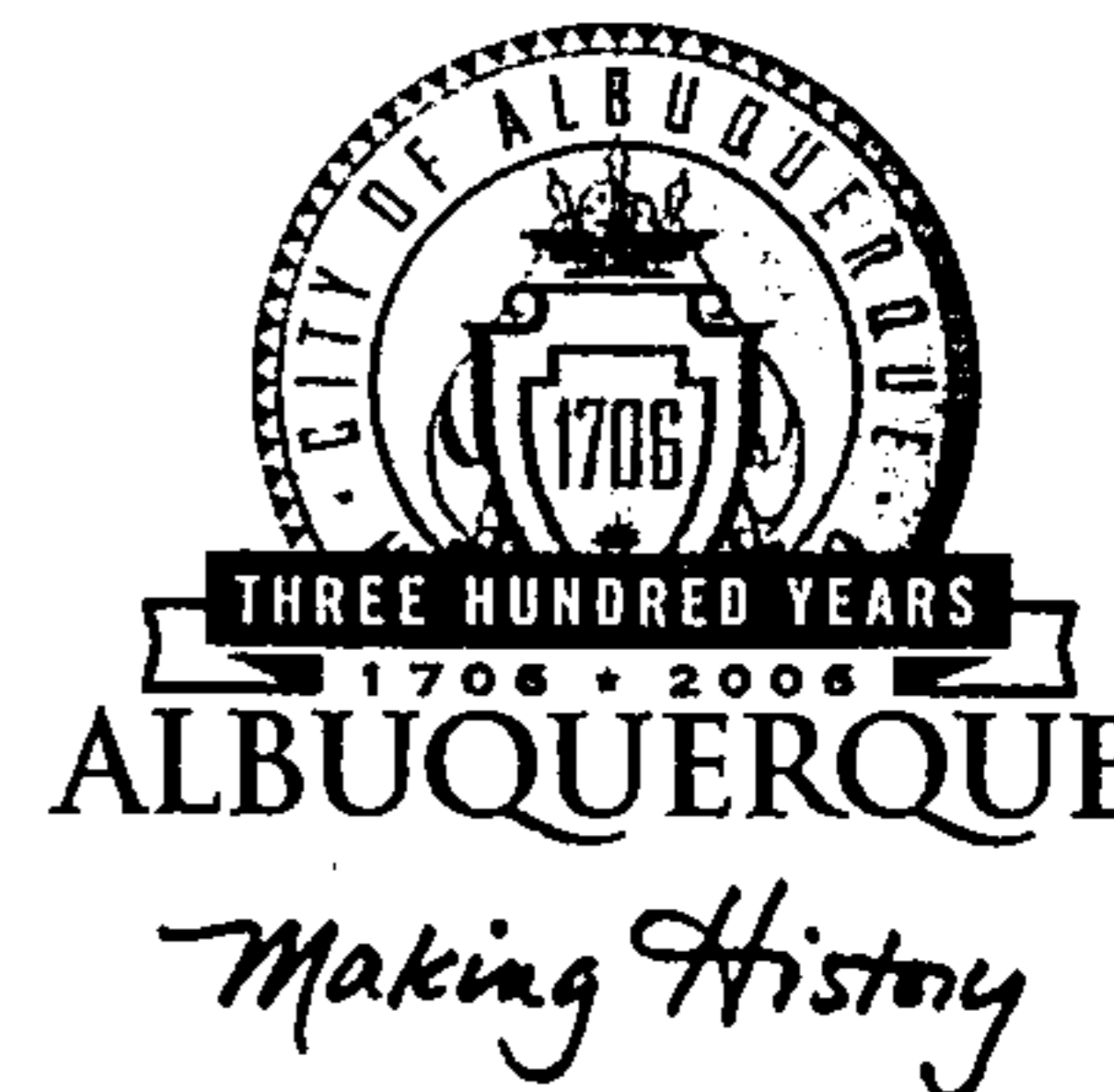
**G-20-Z**

Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

0 750 1,500 Feet

# CITY OF ALBUQUERQUE



May 27, 2005

John A. Tellez, P.E.  
Wilson & Company  
4900 Lang Ave. NE  
Albuquerque, NM 87109

**Re: Madison Middle School, 3501 Moon NE, Traffic Circulation Layout  
Engineer's Stamp dated 5-25-05 (G20-D34)**

Dear Mr. Tellez,

The TCL submittal received 5-25-05 is approved for Building Permit. The plan is stamped and signed as approved. A copy of this plan shall be inserted into each set of the building permit plans. Please keep the original to be used for final C.O. certification of the site required by Transportation.

If a temporary CO is needed, a copy of the original TCL that was stamped as approved by the City will be needed. This plan must include a statement that identifies the outstanding items that need to be constructed or the items that have not been built in "substantial compliance," as well as the signed and dated stamp of a NM registered architect or engineer. Submit this TCL with a completed Drainage and Transportation Information Sheet to Hydrology at the Development Services Center of Plaza Del Sol Building.

When the site is completed and a final C.O. is requested, use the original City stamped approved TCL for certification. A NM registered architect or engineer must stamp, sign, and date the certification TCL along with indicating that the development was built in "substantial compliance" with the TCL. Submit this certification TCL with a completed Drainage and Transportation Information Sheet to Hydrology at the Development Services Center of Plaza Del Sol Building.

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

Sincerely,

Phillip J. Lovato  
Engineering Associate, Planning Dept.  
Development and Building Services

Cc: file

# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003)

PROJECT TITLE: MADISON MIDDLE SCHOOL ZONE MAP/DRG. FILE#: G-20/D34

DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: LOT A BLOCK MADISON JR HIGH SCHOOL, 0000, MADISON JR HIGH SCHOOL

CITY ADDRESS: 3501 MOON NE

ENGINEERING FIRM: WILSON & COMPANY CONTACT: JOHN A. TELLEZ

ADDRESS: 4900 LANG AVENUE, NE PHONE: (505) 348-4193

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87109

OWNER: ALBUQUERQUE PUBLIC SCHOOLS CONTACT: KAREN ALARID

ADDRESS: 915 OAK ST., SE PHONE: (505) 242-5865

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87106

ARCHITECT: DESIGN PLUS CONTACT: RUPAL ENGINEER

ADDRESS: 209 GOLD AVENUE, SW PHONE: (505) 842-6789

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87102

SURVEYOR: WILSON & COMPANY CONTACT: SCOTT CROSHAW

ADDRESS: 4900 LANG AVENUE, NE PHONE: (505) 348-4035

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87109

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CITY, STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

## CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL. REQUIRES TCL OR EQUAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEERS CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☒ TRAFFIC CIRCULATION LAYOUT (TCL) *Resub.*
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB. APPR. SITE PLAN)
- ☐ OTHER: RESUBMITTAL

## 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
- ☐ CERTIFICATION OF OCCUPANCY (PERM.)
- ☐ CERTIFICATION OF OCCUPANCY (TEMP.)
- ☒ GRADING PERMIT APPROVAL
- ☒ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ OTHER (SPECIFY)

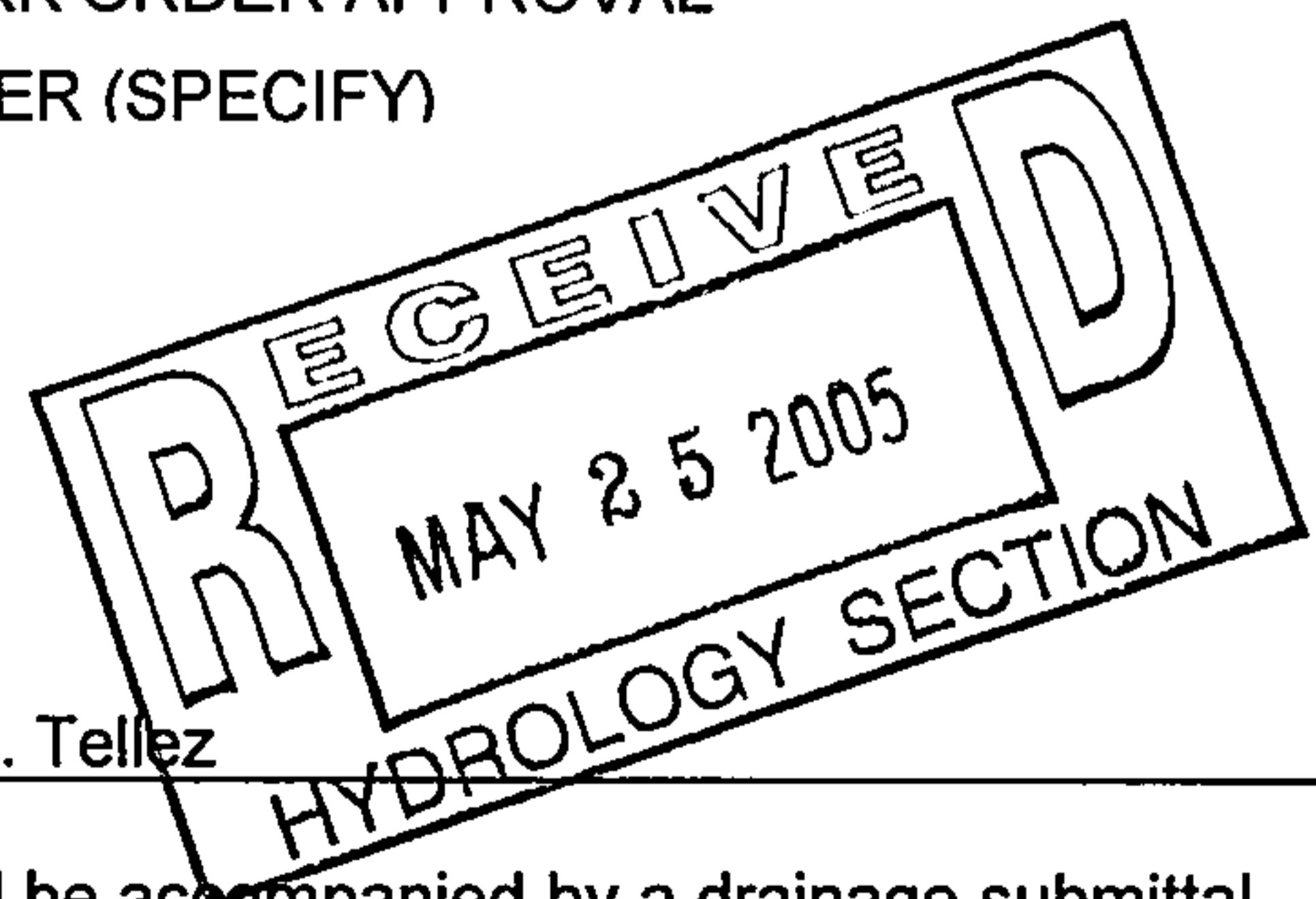
## WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☒ YES
- ☐ NO
- ☐ COPY PROVIDED

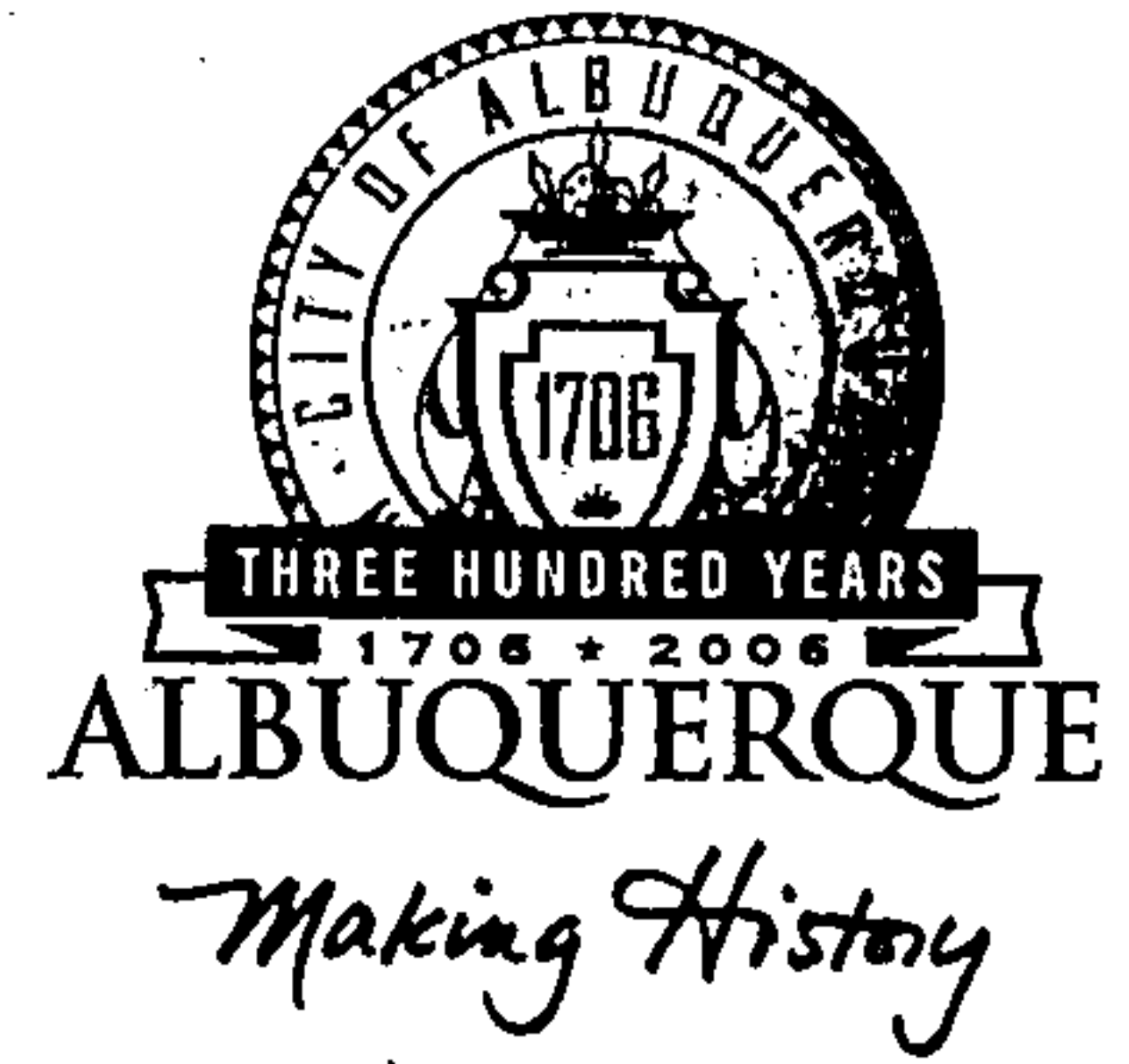
Date Submitted: May 25, 2005 By: John A. Tellez

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
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5)
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.



# CITY OF ALBUQUERQUE



RECEIVED  
MAY 05 2005

WILSON & COMPANY, INC  
RIO RANCHO, NM

May 3, 2005

John Tellez, P.E.  
Wilson & Company  
2600 The American Rd. SE, Suite 100  
Rio Rancho, NM 87124

**Re: Madison Middle School, 3501 Moon St NE, Traffic Circulation Layout  
Engineer's Stamp dated 4-29-05 (G20-D34)**

Dear Mr. Tellez,

Based upon the information provided in your submittal received 4-29-05, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

P.O. Box 1293

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

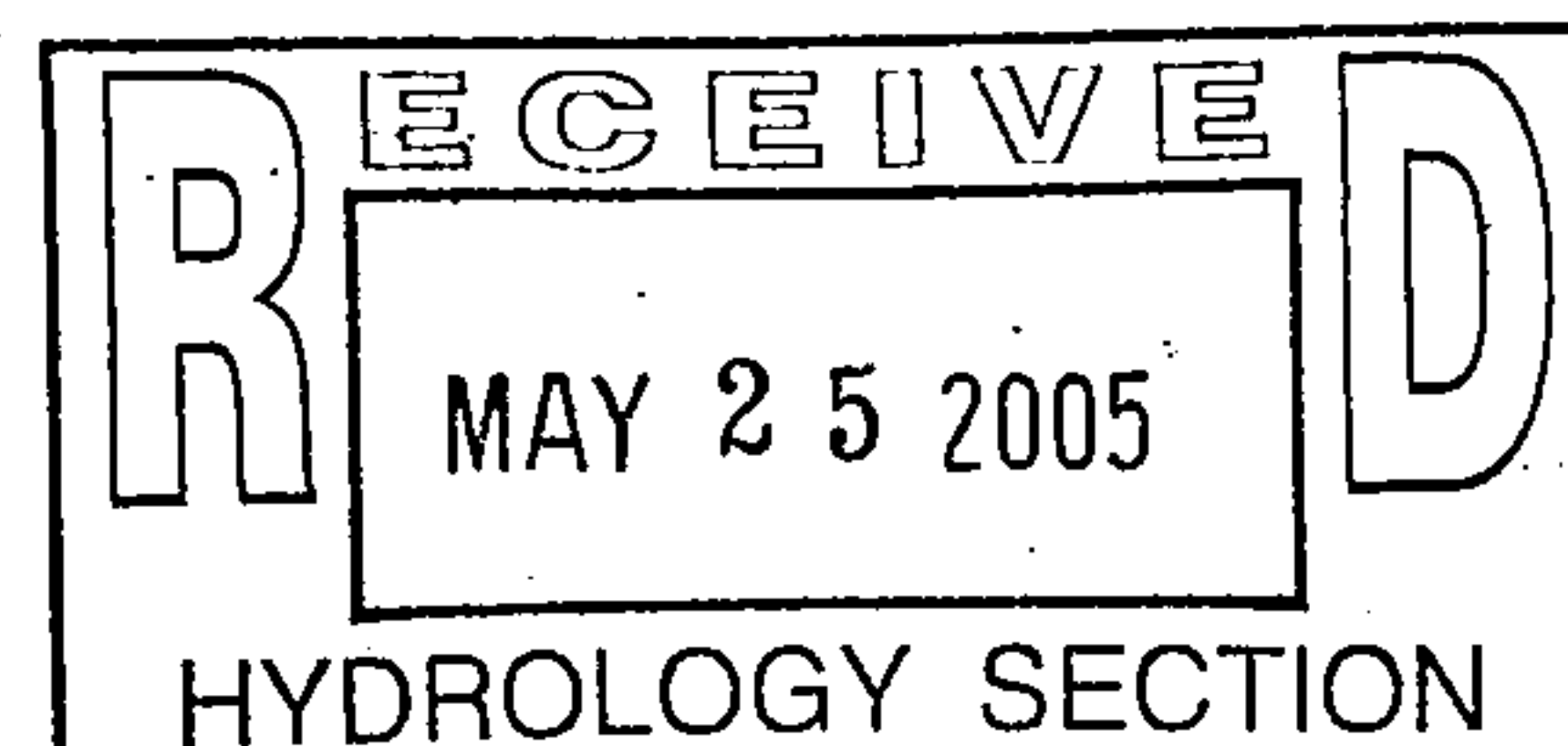
1. Provide the specific angle, length, and width of the angled parking spaces.
2. All sidewalk must be removed and replaced in order to prevent settlement differentials.
3. What is the aisle width along the angled parking spaces?
4. Please list the length of all parking spaces.
5. To abide by the ADA standards, please ensure a 2% cross slope for 3 feet at drivepads.
6. Provide length and width information for the parallel spaces shown along the one-way lane.

If you have any questions, you can contact me at 924-3991.

Sincerely,

Wilfred A. Gallegos, P.E.  
Traffic Engineer, Planning Dept.  
Development and Building Services

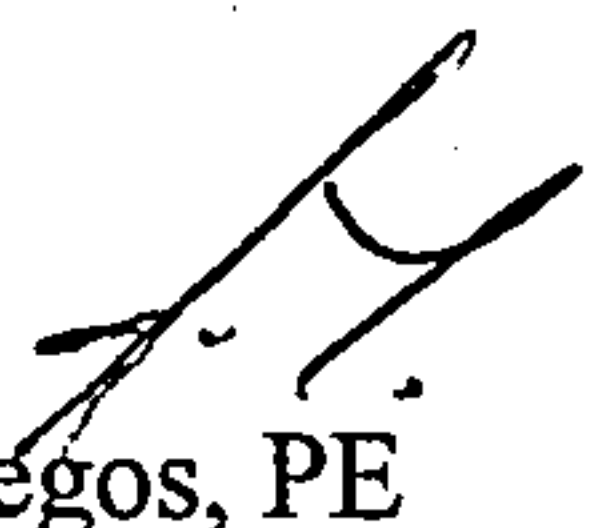
C: file



**Memo**

Albuquerque  
Colorado Springs  
Colton  
Commerce  
Denver  
Durango  
Houston

Kansas City  
Lenexa  
Oklahoma City  
Phoenix  
Salina  
Wichita

From: John Tellez, PE   
To: Wilfred A. Gallegos, PE  
Copies To: File  
Subject: Madison Middle School, Traffic Circulation Layout

Date: May 20, 2005

Based on your letter dated May 3, 2005 we have the following responses:

1. Provide the specific angle, length, and width of the angled parking spaces.

**Response:** Noted. Please see attached drawings.

2. All sidewalk must be removed and replaced in order to prevent settlement differentials.

**Response:** Noted. Please see attached drawings.

3. What is the aisle width along the angled parking spaces?

**Response:** Noted. Please see attached drawings.

4. Please list the length of all parking spaces.

**Response:** Noted. Please see attached drawings.

5. To abide by the ADA standards, please ensure a 2% cross slope for 3 feet at drivepads.

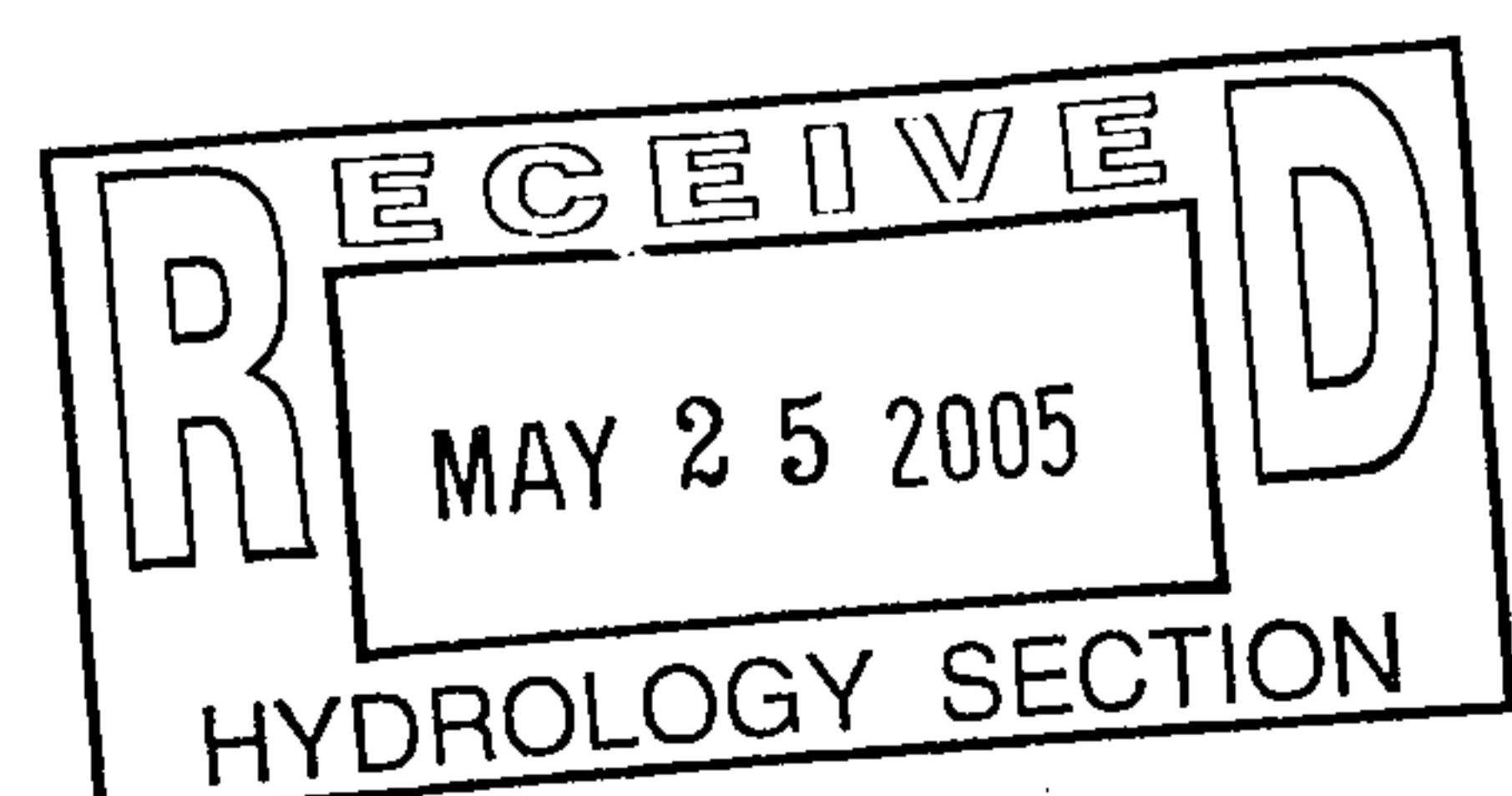
**Response:** Noted. Please see attached drawings.

6. Provide length and width information for the parallel spaces shown along the one-way lane.

**Response:** Noted. Please see attached drawings.

If you have any further questions, please do not hesitate to contact me at 348-4193.

Thank you.



# CITY OF ALBUQUERQUE



**Planning Department  
Transportation Development Services Section**

July 24, 2009

Mario Juarez-Infante, P.E.,  
Wilson & Company  
4900 Lang Avenue NE  
Albuquerque, NM 87109

Re: Approval of Permanent Certificate of Occupancy (C.O.) for  
Madison Middle School, [G-20 / D034]  
3501 Moon NE  
Engineer's Stamp Dated 03/16/09

PO Box 1293

Dear Mr. Juarez-Infante:

Albuquerque

The TCL / Letter of Certification submitted on July 24, 2009 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

NM 87103

Sincerely,

[www.cabq.gov](http://www.cabq.gov)

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

c: Engineer  
Hydrology file  
CO Clerk—Katrina Sigala

**Sims, Timothy E.**

---

**From:** Bennett, Nicole L. [Nicole.Bennett@wilsonco.com]  
**Sent:** Friday, July 24, 2009 10:22 AM  
**To:** Sims, Timothy E.  
**Cc:** Juarez-Infante, Mario G.  
**Subject:** Madison Middle School TCL

Hi Tim,

As per our conversation today please find the attached pictures of the wheel chair ramp at Madison Middle School. Please verify that these photos conclude what is needed to obtain a CO and if so what is the next step to pick up the CO?

Thank you

**Nicole Bennett**  
*Administrative Assistant*

**Wilson & Company, Inc., Engineers & Architects**  
4900 Lang Ave. NE  
Albuquerque, New Mexico 87109  
505-348-4006 direct 505-348-4072 fax  
[www.wilsonco.com](http://www.wilsonco.com)

Please consider the environment before printing this e-mail.

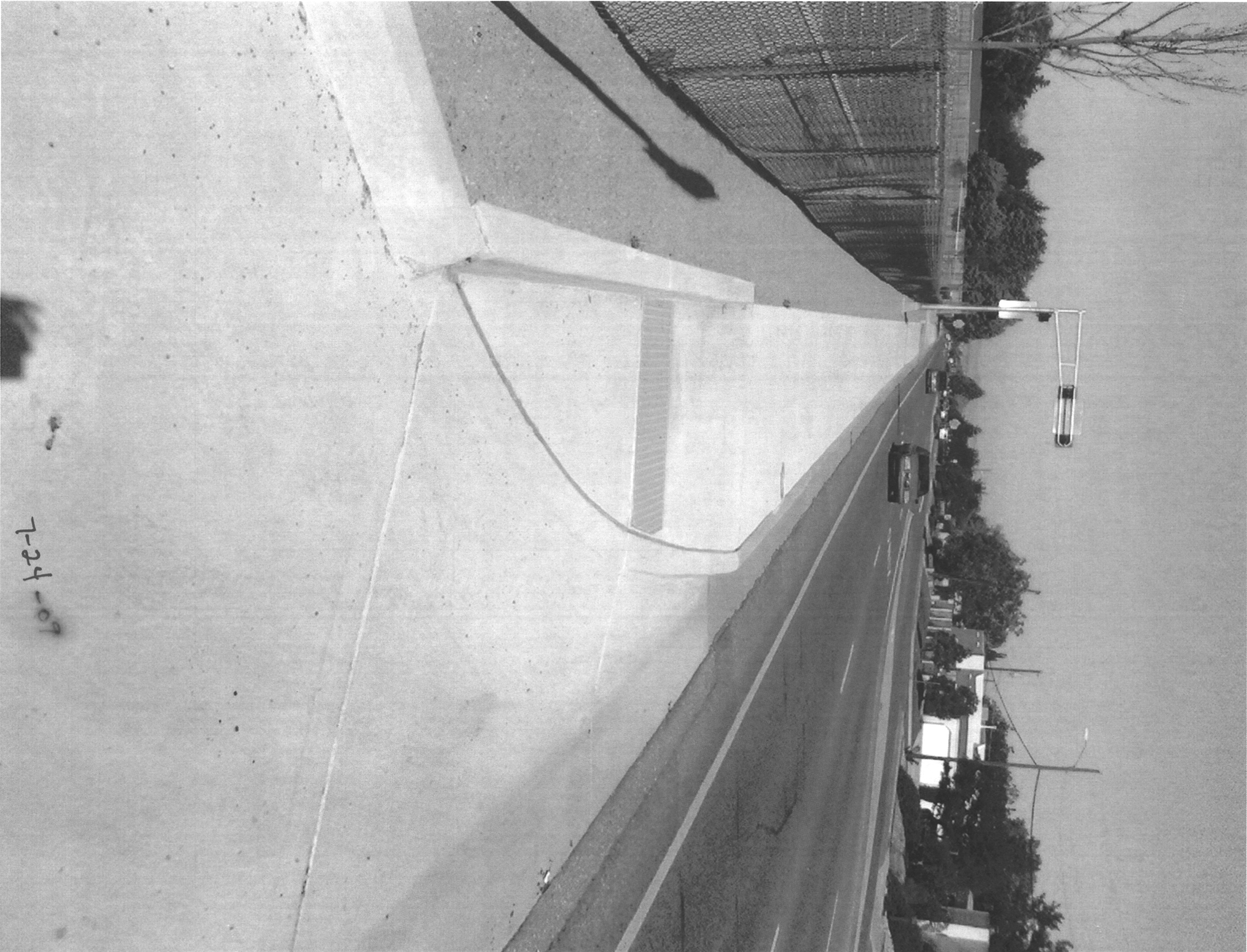
\*\*\*\*\*

Confidential/Proprietary Note:

The information in this email is confidential and may be legally privileged. Access to this email by anyone other than the intended addressee is unauthorized. If you are not the intended recipient of this message, any review, disclosure, copying, distribution, retention, or any action taken or omitted to be taken in reliance on it is prohibited and may be unlawful. If you are not the intended recipient, please reply to or forward a copy of this message to the sender and delete the message, any attachments, and any copies thereof from your system. Thank you.

Rec  
7-24-09

7/24/2009

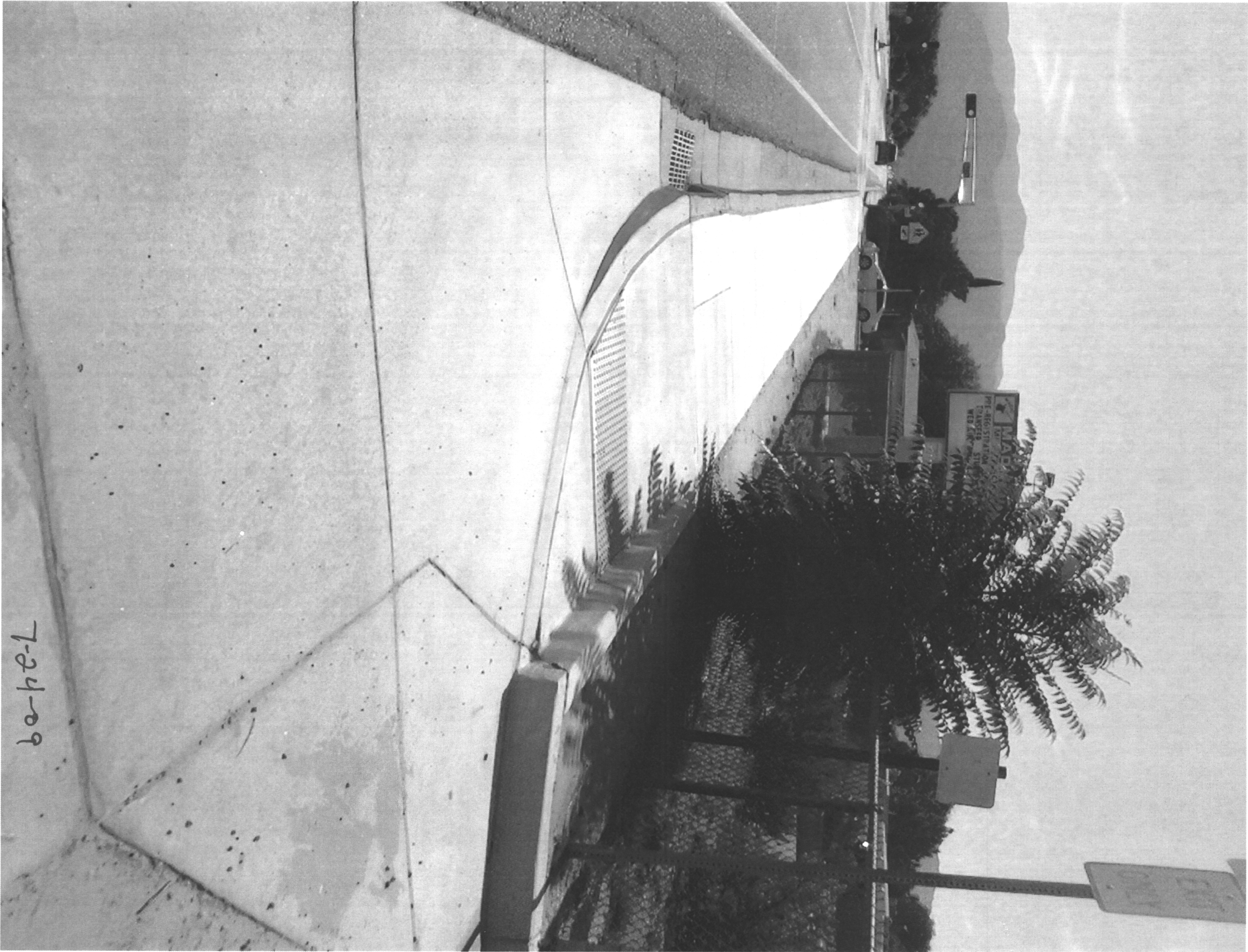


7-24-09

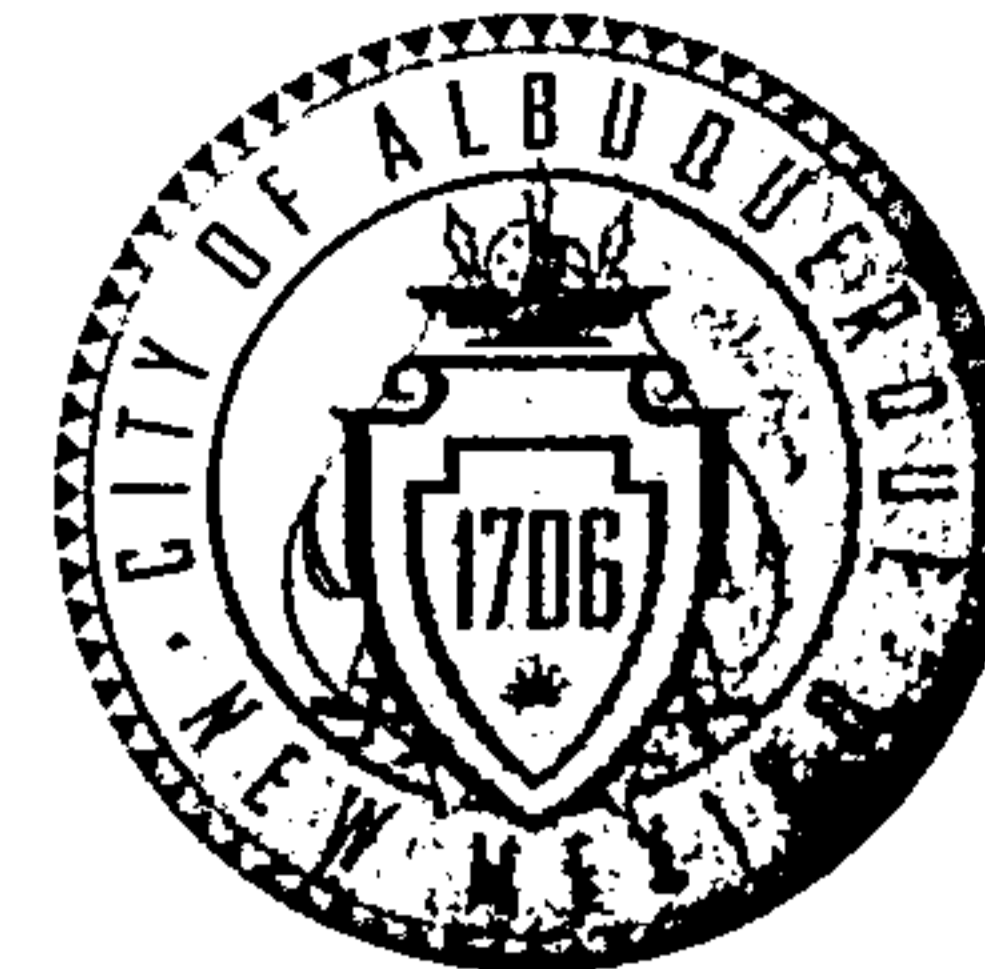


7-24-09

7-24-89



# CITY OF ALBUQUERQUE



*Planning Department  
Transportation Development Services Section*

March 18, 2009

Mario Juarez-Infante, P.E.,  
Wilson & Company  
4900 Lang Avenue NE  
Albuquerque, NM 87109

Re: Approval of Temporary Certificate of Occupancy (C.O.) for  
Madison Middle School, [G-20 / D034]  
3501 Moon NE  
Engineer's Stamp Dated 03/16/09

Dear Mr. Juarez-Infante:

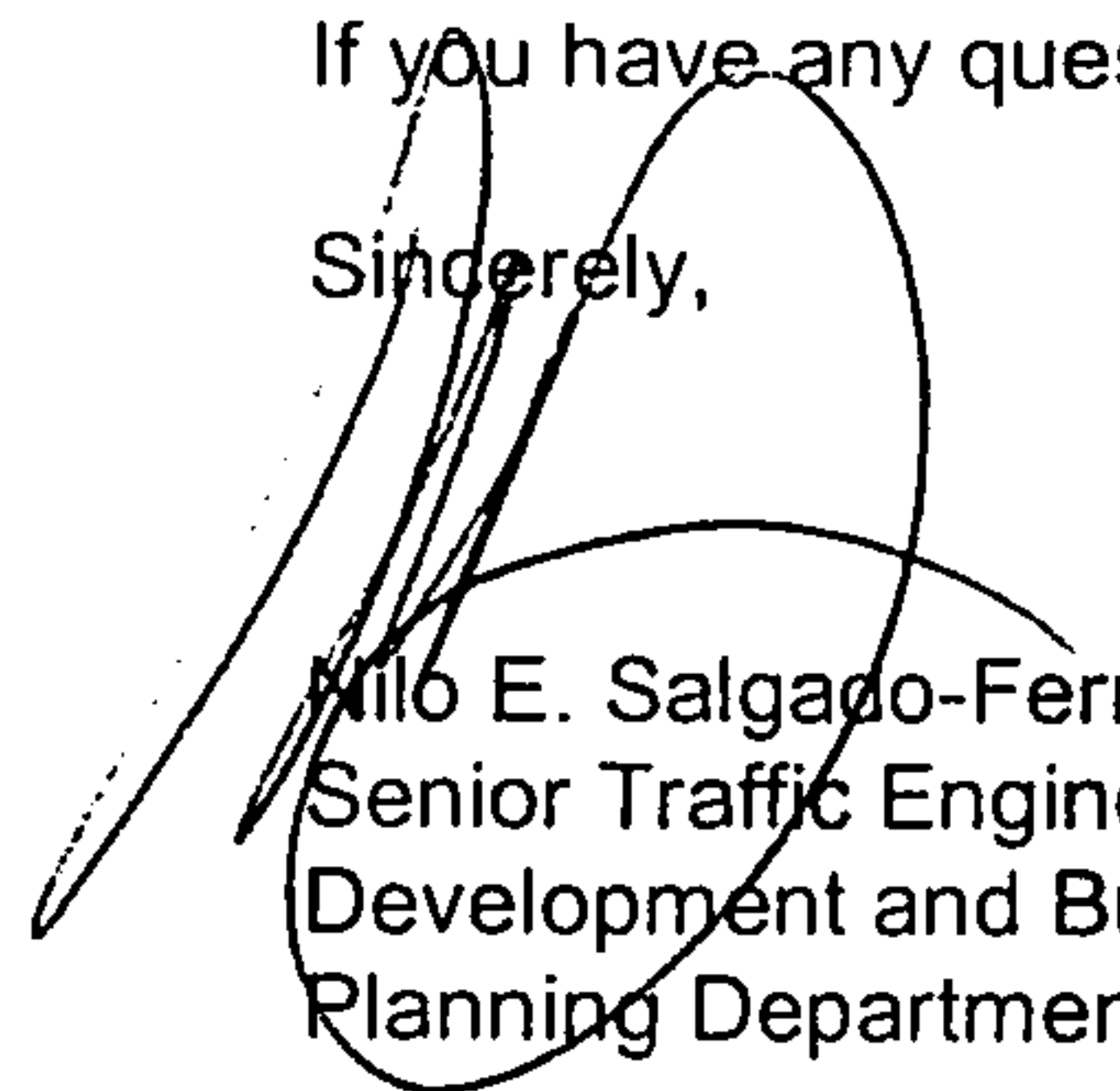
Based on the information provided on your submittal dated March 17, 2009, the above referenced project is approved for a 90-day Temporary C.O.

A Temporary C.O. has been issued allowing the outstanding truncated domes (need to provide on wc ramps fronting Comanche) and parking configuration/circulation (traffic circulation is different from site plan to site, provide redlines in site plan to reflect current circulation) issues to be completed within this time period. When these remaining issues have been fully completed, are in substantial compliance, and a final Certification for Transportation has been resubmitted to the City's Hydrology office for approval, a Permanent C.O. will be issued.

The Certification package for Final C.O. must include an **exact** copy of the approved TCL, or signed off D.R.B. Site Plan, which is in each of the two City Permit Plan Sets—the contractor's City field set and the City's plan set in the basement of the Plaza Del Sol building. Package also must include a letter of certification on designer's letterhead-stamped with his seal, signed, and dated. Submit package along with fully completed Drainage Information Sheet to front counter personnel for log in and evaluation by Transportation.

If you have any questions, please call me at 924-3630.

Sincerely,

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

c: Engineer  
Hydrology file  
CO Clerk

# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003)

PROJECT TITLE: MADISON MIDDLE SCHOOL . ZONE MAP/DRG. FILE#: G-20/10036

DRB#: \_\_\_\_\_ EPC#: 12 WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: LOT A BLOCK MADISON JR HIGH SCHOOL, 0000, MADISON JR HIGH SCHOOL

CITY ADDRESS: 3501 MOON NE

ENGINEERING FIRM: WILSON & COMPANY CONTACT: MARIO JUAREZ-INFANTE

ADDRESS: 4900 LANG AVENUE, NE PHONE: (505) 348-4000

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87109

OWNER: ALBUQUERQUE PUBLIC SCHOOLS CONTACT: KAREN ALARID

ADDRESS: 915 OAK ST., SE PHONE: (505) 242-5865

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87106

ARCHITECT: DESIGN PLUS CONTACT: RUPAL ENGINEER

ADDRESS: 209 GOLD AVENUE, SW PHONE: (505) 842-6789

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87102

SURVEYOR: WILSON & COMPANY CONTACT: Ben Aragon

ADDRESS: 4900 LANG AVENUE, NE PHONE: (505) 348-4067

CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87109

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CITY, STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

## CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL, REQUIRES TCL OR EQUAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEERS CERTIFICATION (HYDROLOGY)
- ☐ CLOMRL/OMR
- ☒ 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
- ☒ CERTIFICATION OF OCCUPANCY (PERM.)
- ☐ CERTIFICATION OF OCCUPANCY (TEMP.)
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ OTHER (SPECIFY) \_\_\_\_\_

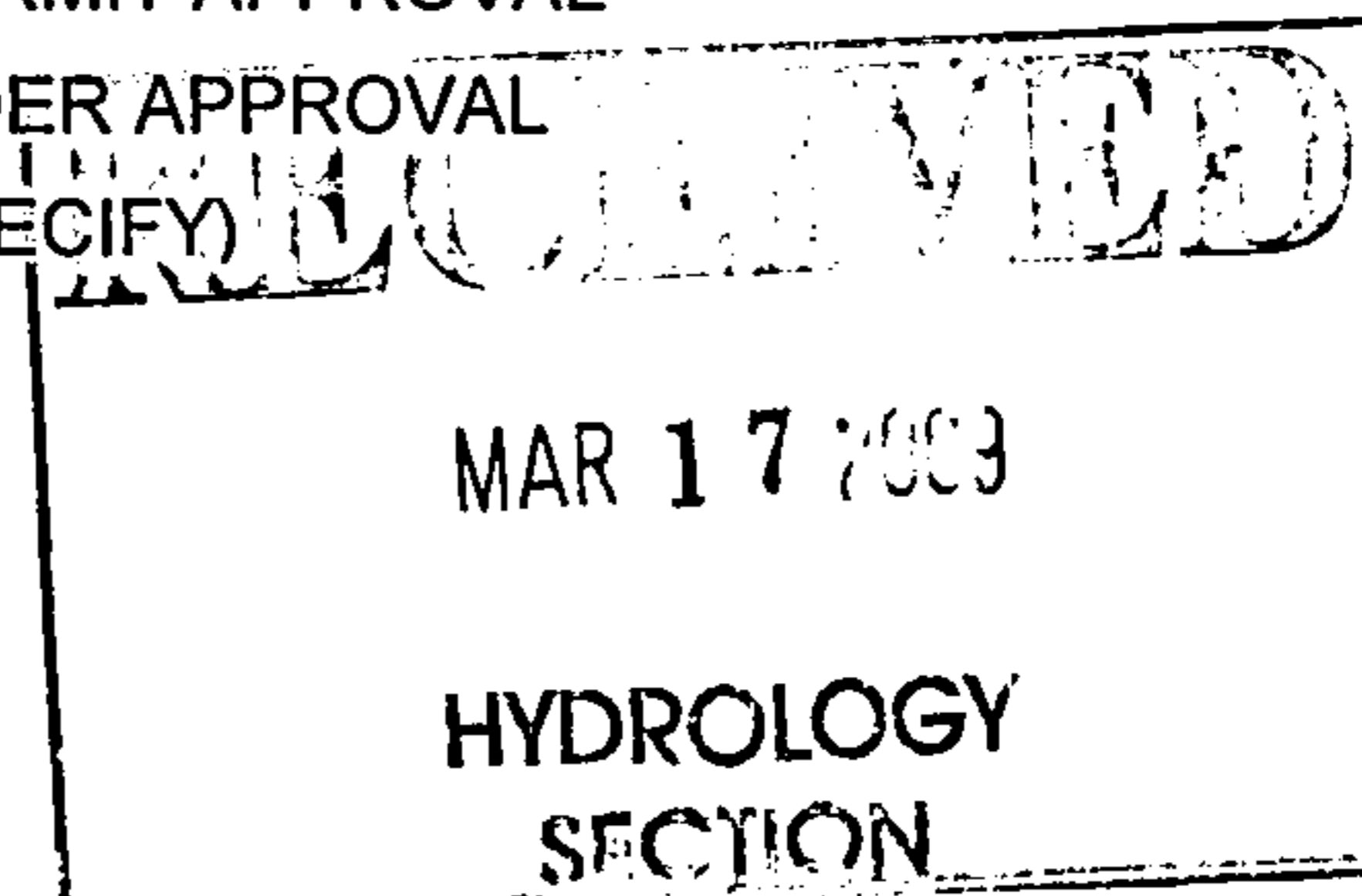
## WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

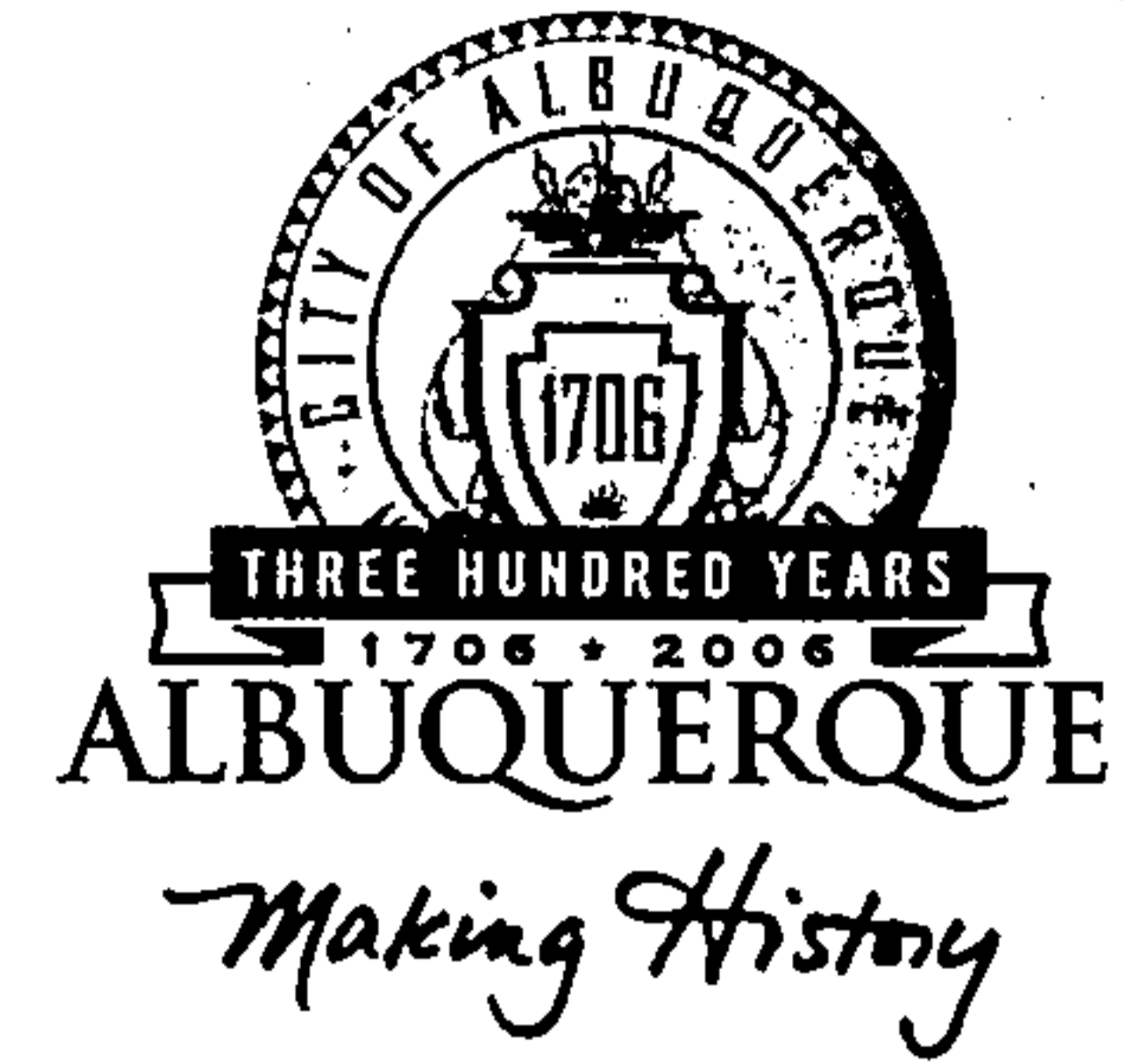
Date Submitted: March 17, 2009 By: Mario Juarez-Infante

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
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5)
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.



# CITY OF ALBUQUERQUE



December 9, 2005

Mario Juarez-Infante, P.E.  
Wilson and Company  
4900 Lang Avenue, NE  
Albuquerque, NM 87109

**Re: Madison Middle School Renovation, 3500 Moon NE  
Grading & Drainage Plan-Engineer's Stamp dated 9-27-05 (G20-D34)**

Dear Mr. Juarez-Infante,

Based upon the information provided in your submittal dated 12-9-05, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Additionally, prior to release of the Certificate of Occupancy an Engineer's Certification of the grading plan per the DPM checklist and a copy of the recorded Maintenance Covenant with Albuquerque Public Schools will be required.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. Refer to the attachment that is provided with this letter for details. If you have any questions please feel free to call the Municipal Development Department Hydrology section at 768-3654 (Charles Caruso).

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

Sincerely,

Phillip J. Lovato, E.I., C.F.M.  
Engineering Associate, Hydrology,  
Development and Building Services,  
Planning Department

cc: Charles Caruso, DMD  
file

P.O. Box 1293

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

**DRAINAGE AND TRANSPORTATION INFORMATION SHEET**

(REV. 1/28/2003)

PROJECT TITLE: MADISON MIDDLE SCHOOL Renovation ZONE MAP/DRG. FILE#: G-20 / D34  
 DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: LOT A BLOCK MADISON JR HIGH SCHOOL, 0000, MADISON JR HIGH SCHOOL

CITY ADDRESS: 3501 MOON NE

ENGINEERING FIRM: WILSON & COMPANY

CONTACT: MARIO JUAREZ-INFANTE

ADDRESS: 4900 LANG AVENUE, NE

PHONE: (505) 348-4064

CITY, STATE: ALBUQUERQUE, NM

ZIP CODE: 87109

OWNER: ALBUQUERQUE PUBLIC SCHOOLS

CONTACT: KAREN ALARID

ADDRESS: 915 OAK ST., SE

PHONE: (505) 242-5865

CITY, STATE: ALBUQUERQUE, NM

ZIP CODE: 87106

ARCHITECT: DESIGN PLUS

CONTACT: RUPAL ENGINEER

ADDRESS: 209 GOLD AVENUE, SW

PHONE: (505) 842-6789

CITY, STATE: ALBUQUERQUE, NM

ZIP CODE: 87102

SURVEYOR: WILSON & COMPANY

CONTACT: SCOTT CROSHAW

ADDRESS: 4900 LANG AVENUE, NE

PHONE: (505) 348-4035

CITY, STATE: ALBUQUERQUE, NM

ZIP CODE: 87109

CONTRACTOR: \_\_\_\_\_

CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

CITY, STATE: \_\_\_\_\_

ZIP CODE: \_\_\_\_\_

**CHECK TYPE OF SUBMITTAL:**

- ☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL. REQUIRES TCL OR EQUAL  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
☐ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEERS CERTIFICATION (HYDROLOGY)  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ ENGINEERS CERTIFICATION (TCL)  
☐ ENGINEERS CERTIFICATION (DRB, APPR. SITE PLAN)  
☒ OTHER: DRAINAGE AS-BUILT SUBMITTAL

**CHECK TYPE OF APPROVAL SOUGHT:**

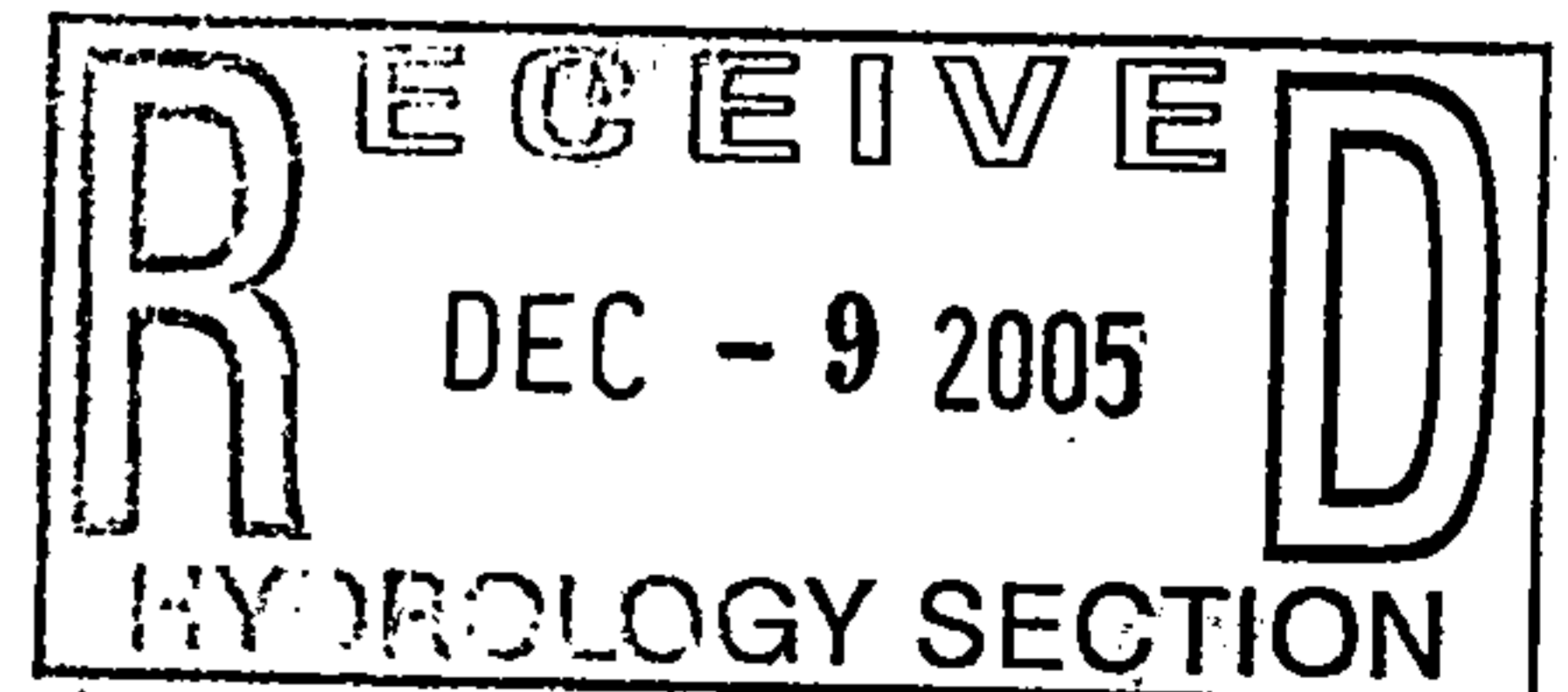
- ☐ SIA / FINANCIAL GUARANTEE RELEASE  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D. APPROVAL  
☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATION OF OCCUPANCY (PERM.)  
☐ CERTIFICATION 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: October 04, 2005

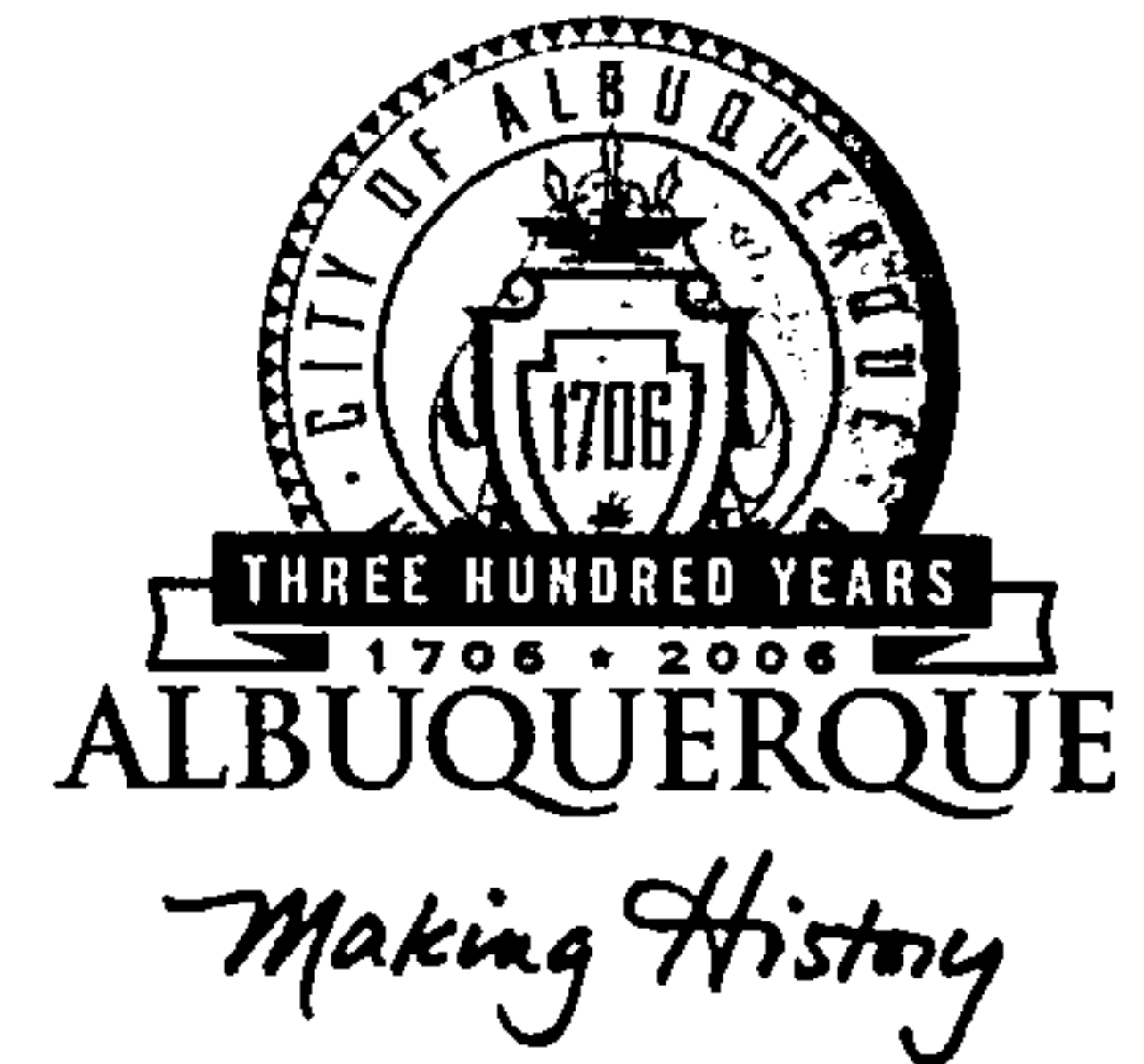
By: Mario Juarez-Infante



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
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5)
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

# CITY OF ALBUQUERQUE



June 17, 2005

John A. Tellez, P.E.  
Wilson and Company  
4900 Lang Avenue, NE  
Albuquerque, NM 87109

**Re: Madison Middle School, 3500 Moon NE, Grading & Drainage Plan  
Engineer's Stamp dated 6-10-05 (G20-D34)**

Dear Mr. Tellez,

Based upon the information provided in your submittal dated 6-10-05, the above referenced plan is approved for Grading and Paving Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. Refer to the attachment that is provided with this letter for details. If you have any questions please feel free to call the Municipal Development Department, Hydrology section at 768-3654 (Charles Caruso).

Additionally, at the completion of this project please provide Certified As-builts for the file.

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

Sincerely,

Phillip J. Lovato, E.I., C.F.M.  
Engineering Associate, Hydrology,  
Development and Building Services,  
Planning Department

C: Charles Caruso, DMD  
file

# CITY OF ALBUQUERQUE



June 2, 2005

John A. Tellez, P.E.  
Wilson & Company  
4900 Lang Ave. NE  
Albuquerque, NM 87109

**Re: Madison Middle School, 3501 Moon NE, Grading & Drainage Plan  
Engineer's Stamp dated 5-25-05 (G20-D34)**

Dear Mr. Tellez,

Based upon the information provided in your submittal dated 5-25-05, the above referenced plan cannot be approved for Grading Permit or Paving Permit until the following comments are addressed:

P.O. Box 1293

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

- Delineate the portion of the project you are seeking Grading and Paving Permit approval (Phase I) for. Please note that the Phase 2 work will also require a Grading and Drainage Plan for a Building Permit submittal.
- For your reference the Flood Hazard Zone in the northern portion of the site still exists. The only way to remove the flood plain is to make a formal LOMR submittal to FEMA.
- Reference City of Albuquerque Standard Drawings for inlets and drive pads called out on plan (Per C.O.A. Std. Dwg. #####).
- Show where runoff from bus drop-off lane outlets.
- Provide top of grate and inverts for storm inlets.
- Provide detail for 18"x18" inlets.
- Provide detail for new outlets to pond.

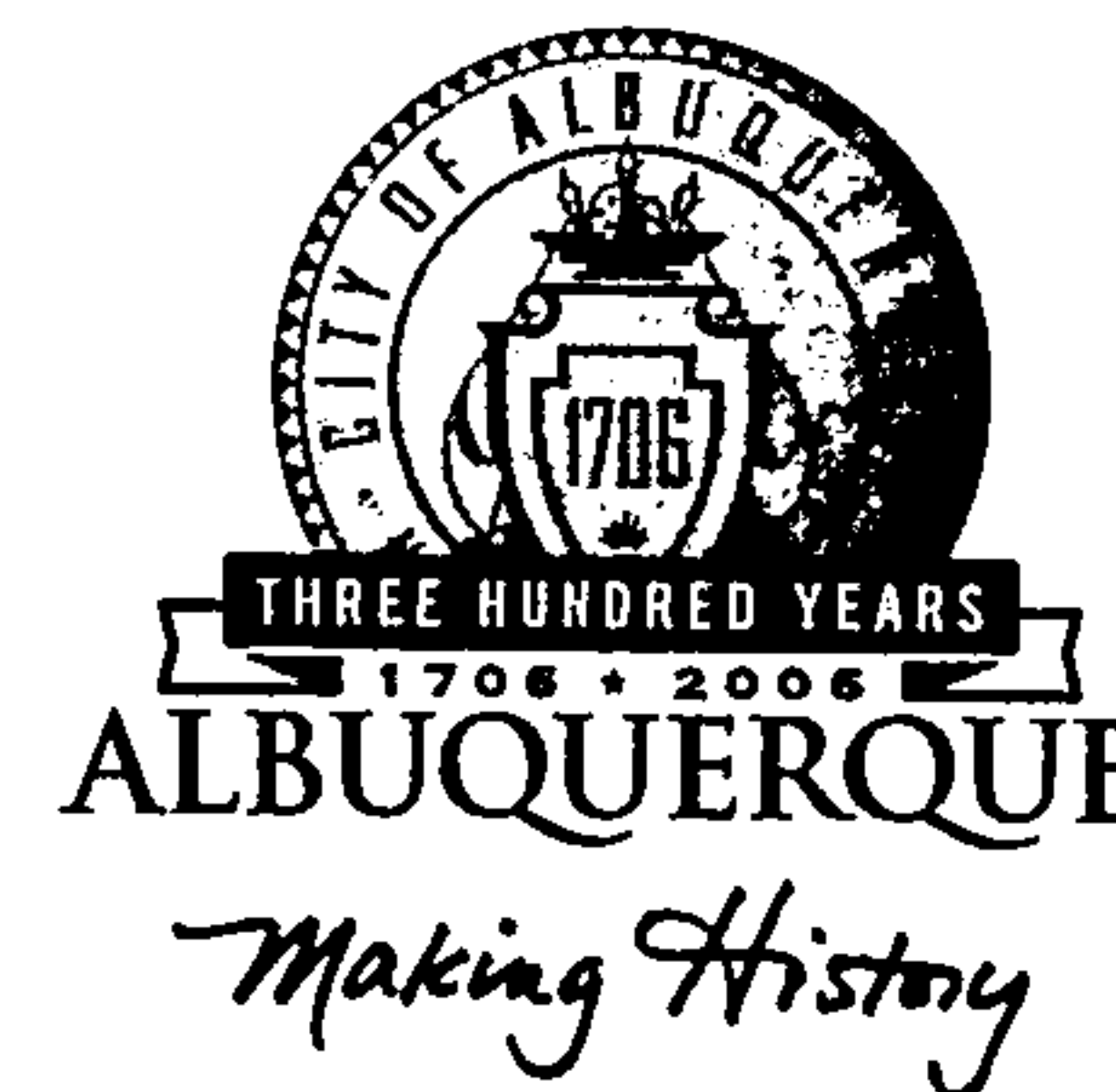
If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, P.E.  
Principal Engineer, Planning Dept.  
Development and Building Services

Cc: file

# CITY OF ALBUQUERQUE



May 5, 2005

John Tellez, P.E.  
Wilson & Company  
2600 The American Rd. SE, Suite 100  
Rio Rancho, NM 87124

**Re: Madison Middle School, 3501 Moon Street NE, Grading and Drainage Plan  
Engineer's Stamp dated 4-29-05 (G20-D34)**

Dear Mr. Tellez,

Based upon the information provided in your submittal received 4-29-05, the above referenced plan cannot be approved for Paving Permit or Grading Permit until the following comments are addressed:

1. Show the flood plain crossing the site. A LOMR may be prudent.
2. Classroom and library additions are shown on the grading and drainage plan. To build these additions, you must first apply for a building permit, not just a paving permit. Please apply for a building permit, which includes a \$50 review fee, at your next submittal.
3. Provide the finish floor elevations for the proposed building additions.
4. Define existing versus proposed drainage infrastructure.
5. Please add the dimensions of the new north pond and show the infrastructure that drains this pond. What street does the south pond drain to?
6. The inlet at the end of Curve E will have to be relocated.
7. Reference is made to the Monte Vista Elementary School in your conclusion; please rectify this.
8. How was the north pond sized? Did you do a stage-discharge hydrograph? Please include a copy of this hydrograph with your next submittal.

P.O. Box 1293

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

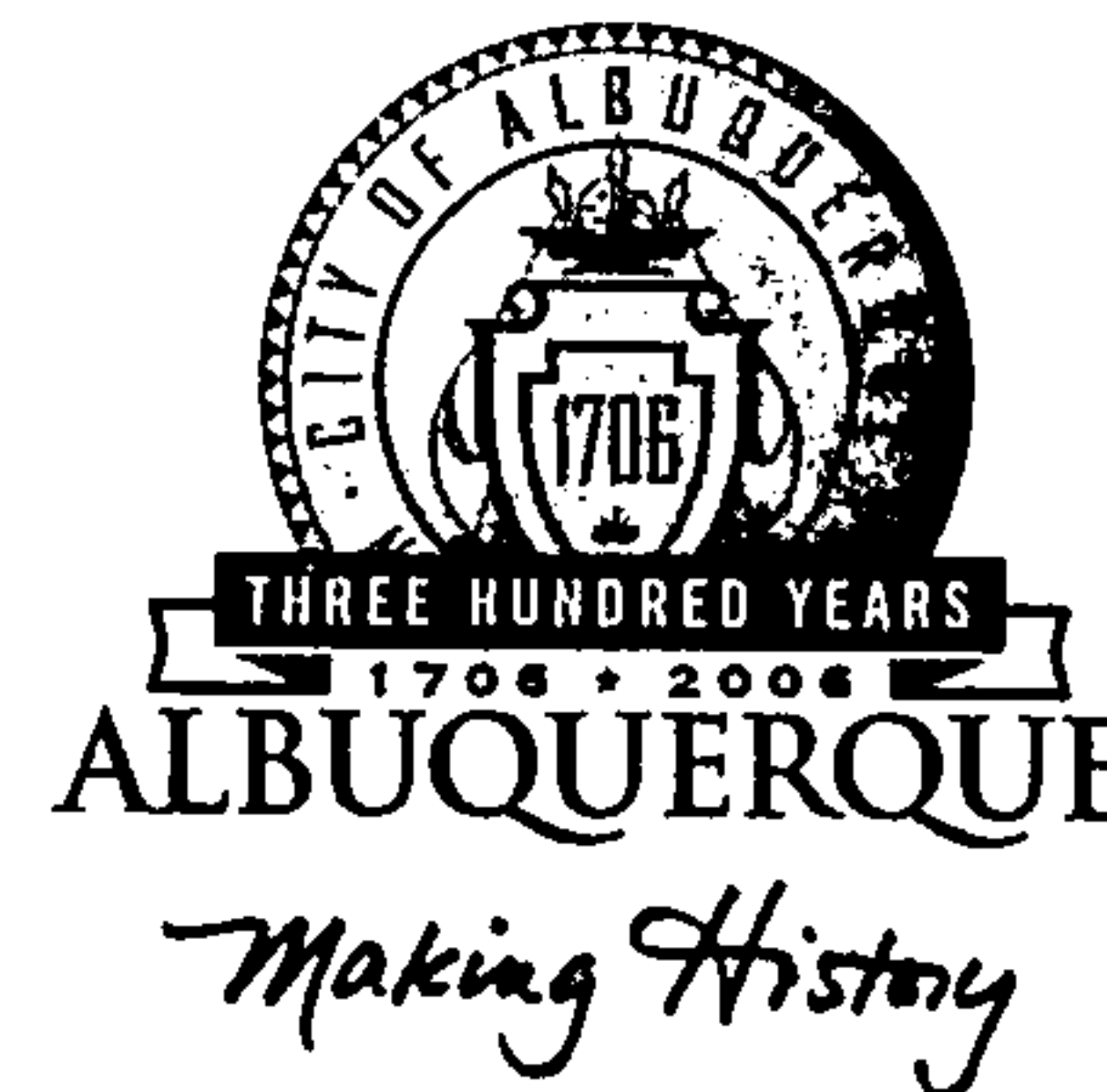
If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE  
Principal Engineer, Planning Dept.  
Development and Building Services

C: file

# CITY OF ALBUQUERQUE



May 3, 2005

John Tellez, P.E.  
Wilson & Company  
2600 The American Rd. SE, Suite 100  
Rio Rancho, NM 87124

**Re: Madison Middle School, 3501 Moon St NE, Traffic Circulation Layout  
Engineer's Stamp dated 4-29-05 (G20-D34)**

Dear Mr. Tellez,

Based upon the information provided in your submittal received 4-29-05, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

P.O. Box 1293

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

1. Provide the specific angle, length, and width of the angled parking spaces.
2. All sidewalk must be removed and replaced in order to prevent settlement differentials.
3. What is the aisle width along the angled parking spaces?
4. Please list the length of all parking spaces.
5. To abide by the ADA standards, please ensure a 2% cross slope for 3 feet at drivepads.
6. Provide length and width information for the parallel spaces shown along the one-way lane.

If you have any questions, you can contact me at 924-3991.

Sincerely,

Wilfred A. Gallegos, P.E.  
Traffic Engineer, Planning Dept.  
Development and Building Services

C: file



# ***City of Albuquerque***

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 27, 1995

Jeff Mortensen  
Jeff Mortensen & Associates  
6010-B Midway Park Blvd. NE  
Albuquerque, NM 87109

RE: DRAINAGE PLAN FOR MADISON MIDDLE SCHOOL PARK IMPROVEMENTS  
(G20-D34) ENGINEER'S STAMP DATED 11/10/95.

Dear Mr. Mortensen:

Based on the information provided on your November 14, 1995 submittal, the above referenced site is approved for Building Permit, Grading, Paving, and Work Order.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Also, prior to Certificate of Occupancy release, Engineer Certification per the D.P.M. checklist will be required.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE  
Engineering Associate

BJM/dl

c: Andrew Garcia  
File



# ***City of Albuquerque***

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 14, 1994

Mike Walla  
Chaves-Grieves  
5639 Jefferson St. NE  
Albuquerque, NM 87109

Re: Madison Mid School, Moon St. Storm Drain

I have reviewed the As-Built drawing for the referenced project. The changes made in the field for the pipe configuration and inlet types are acceptable as constructed per the sheet 5 of 12 certified by Jeff Mortensen of January 12, 1994.

Final inspection for the project should be coordinated with the Construction Division.

If you have any questions, call me at 768-3654.

Loren Mainz, PE  
PWD/Engineering-Hydrology

cc. Jeff Mortensen

wp+8238

PUBLIC WORKS DEPARTMENT



# *City of Albuquerque*

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 19, 1994

Mike Walla  
Chavez-Grievess Engineering  
5639 Jefferson St. NE  
Albuquerque, NM 87109

RE: REVISED ENGINEER CERTIFICATION FOR MADISON MIDDLE SCHOOL SCIENCE  
BUILDING ADDITION & RENOVATIONS (G20-D34) REVISED ENGINEER STATEMENT  
DATED 4/11/94.

Dear Mr. Walla:

Based on the information provided on your April 13, 1994 resubmittal, listed are some concerns that will need to be addressed prior to final Certificate of Occupancy release:

1. More as-built spot elevations on the west side of the ponding areas.
2. Pipe inverts for both inlets & outlets.
3. Emergency spillway as-built spot elevations and top of rundowns.
4. More spot elevations at the bottom of the ponds.
5. As-built elevations on the drivepad (key note #6) to assure that the 1' foot water block exists.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE  
Engineering Associate

BJM/d1/WPHYD/7477

c: ~~File~~



September 25, 1998

Jeff Mortensen, P.E.  
Jeff Mortensen & Associates  
6040-B Midway Park Blvd. NE  
Albuquerque, NM 87109

Attn: Gary Bittner

**RE: MADISON MIDDLE SCHOOL PARK - DRAINAGE UPDATE (G20-D34).  
GRADING AND DRAINAGE PLAN FOR BUILDING PERMIT APPROVAL.  
ENGINEER'S STAMP DATED AUGUST 26, 1998.**

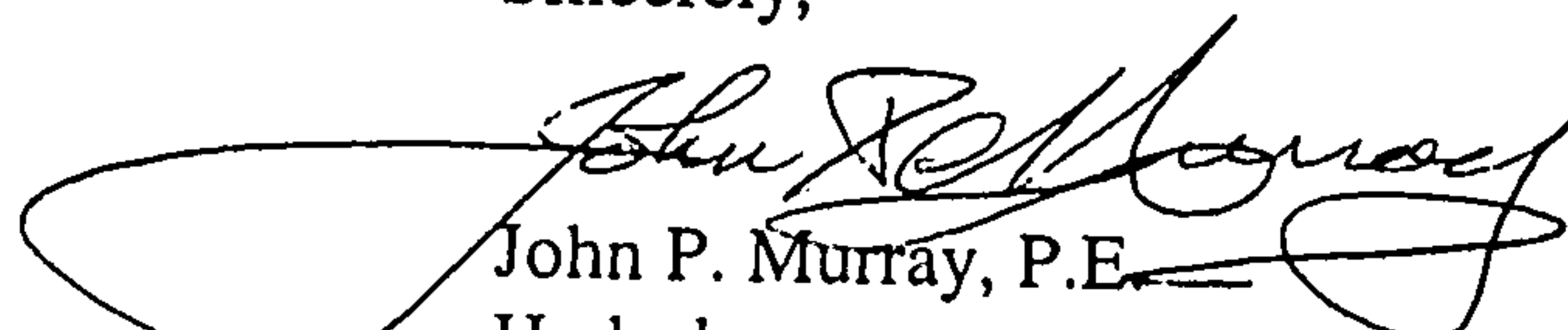
Dear Mr. Mortensen:

Based on the information provided on your August 27, 1998 submittal, the above referenced project is approved for Building Permit.

Prior to Certificate of Occupancy approval, an Engineer's Certification will be required.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,

  
John P. Murray, P.E.  
Hydrology

c: ~~Andrew Garcia~~  
✓ File

Good for You, Albuquerque!





# *City of Albuquerque*

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 29, 1992

Mike J. Walla  
Chavez Grieves  
4600-C Montomergy Blvd., NE  
Albuquerque, New Mexico

RE: MADISON MID SCHOOL  
DRAIANGE REPORT REVIEW

## MOON STREET DRAINAGE

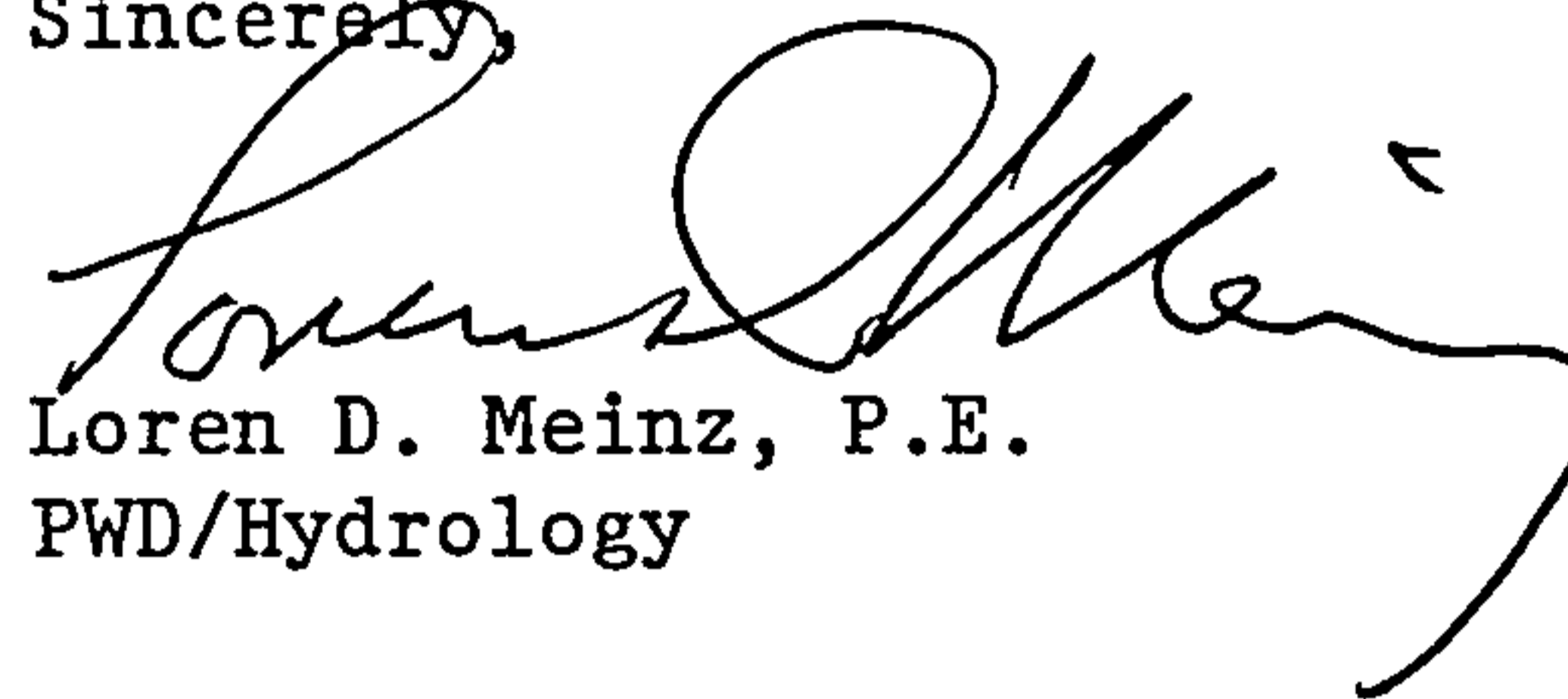
1. Basin map may need additional area IV added since it appears in the field that this area drains to the Moon St. system.
2. Use Excess Precipitation for calculation of 100 yr. and 10 year runoff volumes. Use the Peak Discharge figures in Table 9 to calculate both 100 yr. and 10 yr. peak discharges.
3. Verify all existing storm sewer inverts in the field by survey, and show existing data on the plan.
3. Use Manning Equation to compute storm sewer capacities. Pressure flow should not be used unless the pressure head is available in the worst case assumption for the downstream condition. Use Manning Equation for all new storm sewer sizing.
4. Street information must be included for calculation of street flows. Include street calcs for Cherokee Rd and Cheraz Rd. to check capacities. Include all physical street data, ie. slope, curb to curb width, curb height, max. whter depth.
5. For Moon Street capacities, use the school driveway height (the water block height) as the maximum water depth in the street. Inlets must then pick up the excess water to prevent overtopping the curb, or show the downstream systems that will receive the overflow.

PUBLIC WORKS DEPARTMENT

Mike J. Walla  
April 30, 1992  
Page two

6. Check and show calcs for the 10 year street flow, (maximum water depth of 0.5 feet).
7. Plans address offsite conditions only. Onsite drainage will be reviewed for the site improvements.

Sincerely,

A handwritten signature in cursive script, appearing to read "Loren D. Mainz".

Loren D. Mainz, P.E.  
PWD/Hydrology

wp+3312

Job MADISON MID SCHOOL  
Subject MOON ST. STORM DRAIN  
Client APS

Sheet No. I-1 of       
Job. No.       
By MTW Date 4/6/92



CHAVEZ - GRIEVES / CONSULTING ENGINEERS, Inc.

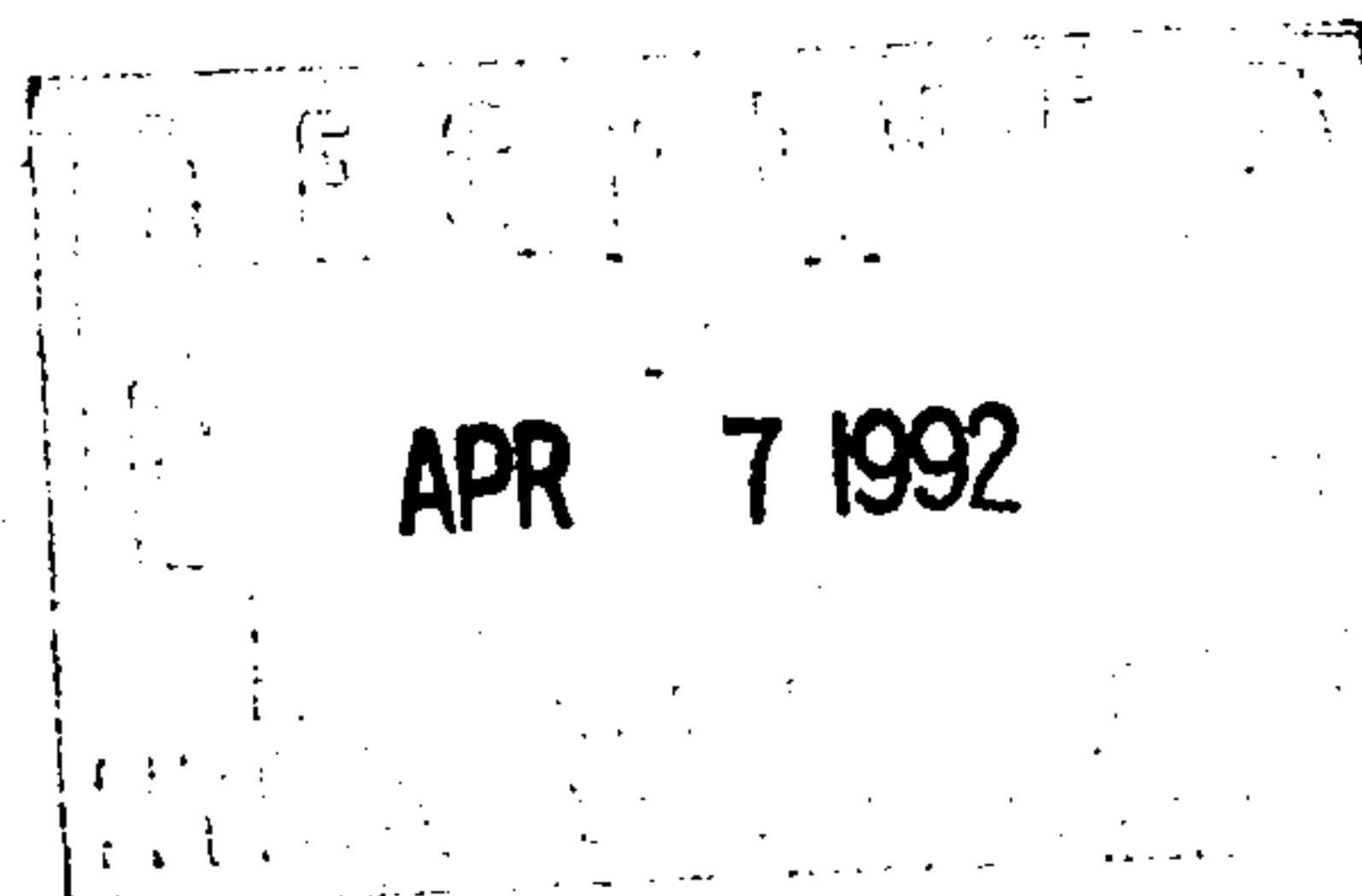
Albuquerque, NM

## DESIGN REPORT

# MOON STREET STORM DRAIN

### DESCRIPTION OF WORK

- NEW 36"  $\phi$  STORM DRAIN IN MOON ST. BTWN COMMANCHE RD. AND CHEROKEE RD. N.E.
- INSTALL 7 NEW TYPE 'A' CATCH BASINS IN MOON ST.
- THESE IMPROVEMENTS WILL INTERCEPT SURFACE RUNOFF TO PREVENT FLOOD PLAIN PROBLEMS IN MADISON MID SCHOOL SITE.



[M] <sub>0</sub>	R <sub>p</sub> / [M] <sub>0</sub>
0	0
10	150
40	50
100	100
200	100

II

11/11/11

100 PER CENT HAZARD ARE

10 - 343 FOOD HAZARD ARE

# PROPOSED STORM DRAINAGE IMPROVEMENTS

## ANALYSIS POINT

COMPLETED BY GEOGRAPHICAL UNIT  
TAKEN DECEMBER 1972 & PARTIAL  
BY ASSOCIATES OF AIRCRAFT

Job MADISON MID SCHOOL  
Subject MOON ST. IMPROVEMENTS  
Client APS

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### ☒ BASIN I CHEROKEE RD. - AREAS

$$\begin{aligned} 1000(280) &= 280,000 \text{ ft}^2 = 6.428 \text{ AC} \\ + 260(360) &= 93,600 \text{ ft}^2 = 2.149 \text{ AC} \\ + (440)^2/2 &= 96,800 \text{ ft}^2 = 2.222 \text{ AC} \\ + 160(440) &= 70,400 \text{ ft}^2 = 1.6162 \text{ AC} \\ + 800(200) &= 160,000 \text{ ft}^2 = 3.673 \text{ AC} \\ + 200(340) &= 68,000 \text{ ft}^2 = 1.561 \text{ AC} \end{aligned}$$

$$\text{TOTAL} = \underline{\underline{17.65 \text{ AC}}}$$

### ☐ BASIN II MESCALERO RD. - AREAS

$$\begin{aligned} 1040(160) &= 166,400 \text{ ft}^2 = 3.820 \text{ AC} \\ 140(800) &= 112,000 \text{ ft}^2 = 2.571 \text{ AC} \end{aligned}$$

$$\text{TOTAL} = \underline{\underline{6.391 \text{ AC}}}$$

### ☒ BASIN III MOON ST. - AREAS (@ PARK)

$$\begin{aligned} (400)^2 &= 160,000 \text{ ft}^2 = 3.673 \text{ AC} \\ (200)^2/2 &= 20,000 \text{ ft}^2 = 0.459 \text{ AC} \end{aligned}$$

$$\text{TOTAL} = 4.13 \text{ AC}$$

$$\begin{aligned} \text{TREATMENT B} &= &= 3.30 \text{ AC} \\ \text{TREATMENT D} &= 300(120) = 36,000 \text{ ft}^2 = 0.83 \text{ AC} \end{aligned}$$

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TOTAL BASIN AREA = I 17.65 AC  
II 6.39 AC  
III 4.13 AC

TOTAL = 28.17 AC. ✓

⇒ PART A. OF DPM SECTION 22.2 - HYDROLOGY <sup>Hydrology</sup>  
IS ACCEPTABLE SINCE BASIN IS ≤ 40 AC

PRECIPITATION ZONE - FIGURE A & TABLE 1 ✓

③ BTWN SAN MATEO + EUBANK  
NORTH OF I-40

DESIGN STORM

FROM TABLE 2: 100-YR STORM DEPTH  $P_{360} = 2.60$  IN ✓  
FROM TABLE 3: 10-YR STORM DEPTH  $P_{360-10} = 2.6(1.667) = 1.73$  ✓

LAND TREATMENT - TABLE 4 & TABLE 5

- MULTIPLE UNIT RESIDENTIAL - DETACHED  
= 60% TREATMENT D (INCLUDES LOCAL STREETS) ✓  
SO 40% TREATMENT B ✓ could be C
- ASSUME NO BACKYARD PONDING
- PARKS = TREATMENT D ✓
- TENNIS COURTS = TREATMENT D ✓

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## INITIAL ABSTRACTIONS (IA): - TABLE 6

TREATMENT B = 0.50 IN ✓

TREATMENT D = 0.10 IN ✓

## INFILTRATION (INF): TABLE 7

TREATMENT B = 1.25 IN/HR ✓

TREATMENT D =

0.04	IN/HR	0-3 HRS
0.03	IN/HR	3-4 HRS
0.02	IN/HR	4-5 HRS
0.01	IN/HR	5-6 HRS
0	AFTER	6 HRS

} IGNORE  
FOR  
DESIGN  
PURPOSES

## EXCESS PRECIPITATION, E, 6-HR STORM

FROM TABLE 8: ZONE (3)

- TREATMENT B

- 100-YR E = 0.92 IN ✓

- 10-YR E = 0.36 IN ✓

- TREATMENT D

- 100-YR E = 2.36 IN ✓

- 10-YR E = 1.50 IN ✓

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## RUNOFF VOLUMES

### BASIN I:

$$\text{TREATMENT B} = .40 (17.65 \text{ AC}) = 7.06 \text{ AC}$$

$$\text{TREATMENT D} = .6 (17.65 \text{ AC}) = 10.59 \text{ AC}$$

$$\text{100-YR: WEIGHTED E} = \frac{2.36 (10.59 \text{ AC}) + 0.92 (7.06 \text{ AC})}{17.65 \text{ AC}} = 1.784 \text{ IN}$$

$$\text{VOLUME} = \frac{1.784}{12 \text{ IN/FT}} (17.65 \text{ AC}) = 2.624 \text{ AC-FT} = V_{360}$$

$$\Rightarrow 2.624 \text{ AC-FT} (43,560 \text{ #/AC}) = 114,300 \text{ CF}$$

$$\text{10-YR: } V_{360-10} = \frac{76,238 \text{ CF}}{66,888} = 1.1385 \text{ (weighted E}_{10\text{-yr}} = 1.044 \text{ in)}$$



### BASIN II

$$\text{TREATMENT B} = .4 (6.39 \text{ AC}) = 2.556 \text{ AC}$$

$$\text{TREATMENT D} = .6 (6.39 \text{ AC}) = 3.834 \text{ AC}$$

$$\text{100-YR WTD E} = \frac{2.36 (3.834 \text{ AC}) + 2.556 (0.92)}{6.39 \text{ AC}} = 1.784 \text{ IN}$$

$$\text{VOLUME} = \frac{1.784}{12} (6.39) = 0.95 \text{ AC-FT} = V_{360}$$

$$\Rightarrow 0.95 (43,560) = 41,380 \text{ CF}$$

$$\text{10-YR: } V_{360-10} = 27,600 \text{ CF}$$



### BASIN III

$$\text{WEIGHTED E} = \frac{2.36 (0.83 \text{ AC}) + 3.50 (0.92)}{4.13 \text{ AC}} = 1.21 \text{ IN}$$

$$\text{100-YR: } V_{360} = \frac{1.21}{12} (4.13) = 0.416 \text{ AC-FT} = 18,130 \text{ CF}$$

$$\text{10-YR: } V_{360-10} = 12,090 \text{ CF}$$

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## PEAK DISCHARGE - TABLE 9

- TREATMENT B
  - 100-YR = 2.60 CFS/AC ✓
  - 10-YR = 1.19 CFS/AC ✓
- TREATMENT D
  - 100-YR = 5.02 CFS/AC ✓
  - 10-YR = 3.39 CFS/AC ✓

### ■ BASIN I

$$\begin{aligned} \text{PEAK } Q_{360} &= 7.06 \text{ AC} (2.6 \text{ CFS/AC}) + 10.59 \text{ AC} (5.02 \text{ CFS/AC}) \\ &= 18.356 \text{ CFS} + 53.162 \text{ CFS} = \underline{\underline{71.518 \text{ CFS}}} \Rightarrow 100\text{-YR} \end{aligned}$$

$$\begin{aligned} Q_{360-10} &= .667 (71.518 \text{ CFS}) = 47.70 \text{ CFS} \\ &\quad 7.06 (1.19) + 10.59 (3.39) = 44.3 \text{ CFS} \end{aligned}$$

### □ BASIN II

$$\begin{aligned} -100\text{-YR: } Q_p(360) &= 2.6 \text{ CFS/AC} (2.556 \text{ AC}) + 5.02 \text{ CFS/AC} (3.834 \text{ AC}) \\ &= \underline{\underline{25.89 \text{ CFS}}} \checkmark \end{aligned}$$

$$\begin{aligned} -10\text{-YR } Q_{360-10} &= .667 (25.89) = 17.27 \text{ CFS} \\ &\quad 1.19 (2.556) + 3.39 (3.834) = 16.04 \text{ CFS} \end{aligned}$$

### ■ BASIN III

$$\begin{aligned} -100\text{-YR } Q_p(360) &= 2.6 \text{ CFS/AC} (3.30) + 5.02 (0.83) = \\ &= \underline{\underline{12.896 \text{ CFS}}} \end{aligned}$$

$$\begin{aligned} -10\text{-YR } Q_{360-10} &= 8.60 \text{ CFS} \\ &\quad 1.19 (3.30) + 3.39 (0.83) = 6.74 \text{ CFS} \end{aligned}$$

Job MADISON MID SCHOOL  
Subject \_\_\_\_\_  
Client \_\_\_\_\_

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TOTAL  $Q_{360-100}$  @ MOON = 110.29 CFS

EXISTING STORM DRAIN CAPACITY:

$$24" \phi \text{ RCP, } S = \frac{61.0 - 55.6}{150'} = 0.036 = 3.6\%$$

$$L = 150' (169.9')$$

$$H-W \text{ COEFF} = 135$$

$$\begin{aligned} (\text{SEE C-6A}) - Q &= 38,365.5 \text{ GPM} \left( \frac{1 \text{ CF}}{7.48 \text{ GAL}} \right) \left( \frac{1 \text{ MIN}}{60 \text{ SEC}} \right) \\ &= \underline{\underline{85.48 \text{ CFS}}} \end{aligned}$$

Verify in field.  
plans say  
 $S = 0.003$

NEW STORM DRAIN CAPACITY:

$$36" \phi \text{ RCP, } S = .001, L = 594 \text{ FT}$$

$$H-W \text{ COEFF} = 135$$

$$(\text{SEE C-6B}) \quad Q = 39,169.86 \text{ GPM} \left( \frac{1}{7.48(60)} \right) = \underline{\underline{87.28 \text{ CFS}}}$$

For 36",  $S = 0.001$   
RCP:  $Q = 21 \text{ CFS}$

normal full flow  
2  
e

TOTAL S.D. CAP. = 172.75 CFS

STREET: DOES NOT SLOPE - BUT POUNDS WATER

Pressure Pipe Analysis & Design  
Circular Pipe

C-6A

Worksheet Name: madison

Comment:

Solve For Discharge

Given Input Data:

Elevation @ 1.....	66.00 ft
Pressure @ 1.....	25.00 psi
Elevation @ 2.....	55.60 ft
Pressure @ 2.....	25.00 psi
Diameter.....	24.00 in
Length.....	150.00 ft
Hazen-Williams C..	135.00

Computed Results:

Discharge.....	38365.49 gpm
Velocity.....	27.21 fps
Headloss.....	10.40 ft
Energy Grade @ 1..	135.18 ft
Energy Grade @ 2..	124.78 ft
Friction Slope....	69.333 ft/1000 ft

Pressure condition may not exist.  
The Comanche Storm Sewer  
may be full flow  
so no pressure in  
side sewers will  
develop.

C-6B

Pressure Pipe Analysis & Design  
Circular Pipe

Worksheet Name: MADISON @ MOON ST.

Comment: NEW 36" DIA LINE

Solve For Discharge

Given Input Data:

Elevation @ 1. ....	61.67 ft
Pressure @ 1. ....	25.00 psi
Elevation @ 2. ....	55.73 ft
Pressure @ 2. ....	25.00 psi
Diameter .....	36.00 in
Length .....	594.00 ft
Hazen-Williams C. ....	135.00

Computed Results:

Discharge .....	39169.86 gpm
Velocity .....	12.35 fps
Headloss .....	5.94 ft
Energy Grade @ 1. ....	121.71 ft
Energy Grade @ 2. ....	115.77 ft
Friction Slope .....	10.000 ft/1000 ft

Job MADISON MID SCHOOL  
Subject MOON ST.  
Client APS

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## DROP INLET / CATCH BASIN

### GRATE CAPACITY:

#### - EXISTING INLETS:

$$100\text{-YR } H_2O \text{ DEPTH} = 71.52 + 25.89 + 12.90 = 110.31 \text{ CFS}$$

$$- \text{EXISTING PIPE CAP} = 87.28 \text{ CFS}$$

$$23.03 \text{ CFS}$$

85.48

Field  
Verify  
IE's

$$\text{STREET SLOPE} = 0.0015$$

$$\text{FROM PLATE 22.3 D-2: DEPTH} = 0.64 \text{ FT}$$

SO:

$$\text{FROM PLATE 22.3 D-5 } Q_{\text{GRATE}} = 6.0 \text{ CFS - TYPE 'A'}$$

$$\text{FROM PLATE 22.3 D-6 } Q_{\text{GRATE}} = 8.0 \text{ CFS - TYPE DOUBLE}$$

TOTAL EXISTING CAP:

$$2(6) + 2(8 \text{ CFS}) = \underline{\underline{28 \text{ CFS}}} < 87.28 \text{ CFS } \underline{\underline{N.G.}}$$

#### - PROPOSED CONDITIONS:

$$\text{SLOPE} = 0.002 \text{ (MESC. ALERO TO CHEROKEE)}$$

$$\text{MAX. DEPTH} = 0.67 \text{ FT}$$

$$\text{GRATE CAP. (FROM PLATE 22.3 D-5) } Q = 7.0 \text{ CFS}$$

$$\text{PROPOSED ADD'L CAP} = 7EA(7) = \underline{\underline{49 \text{ CFS}}}$$

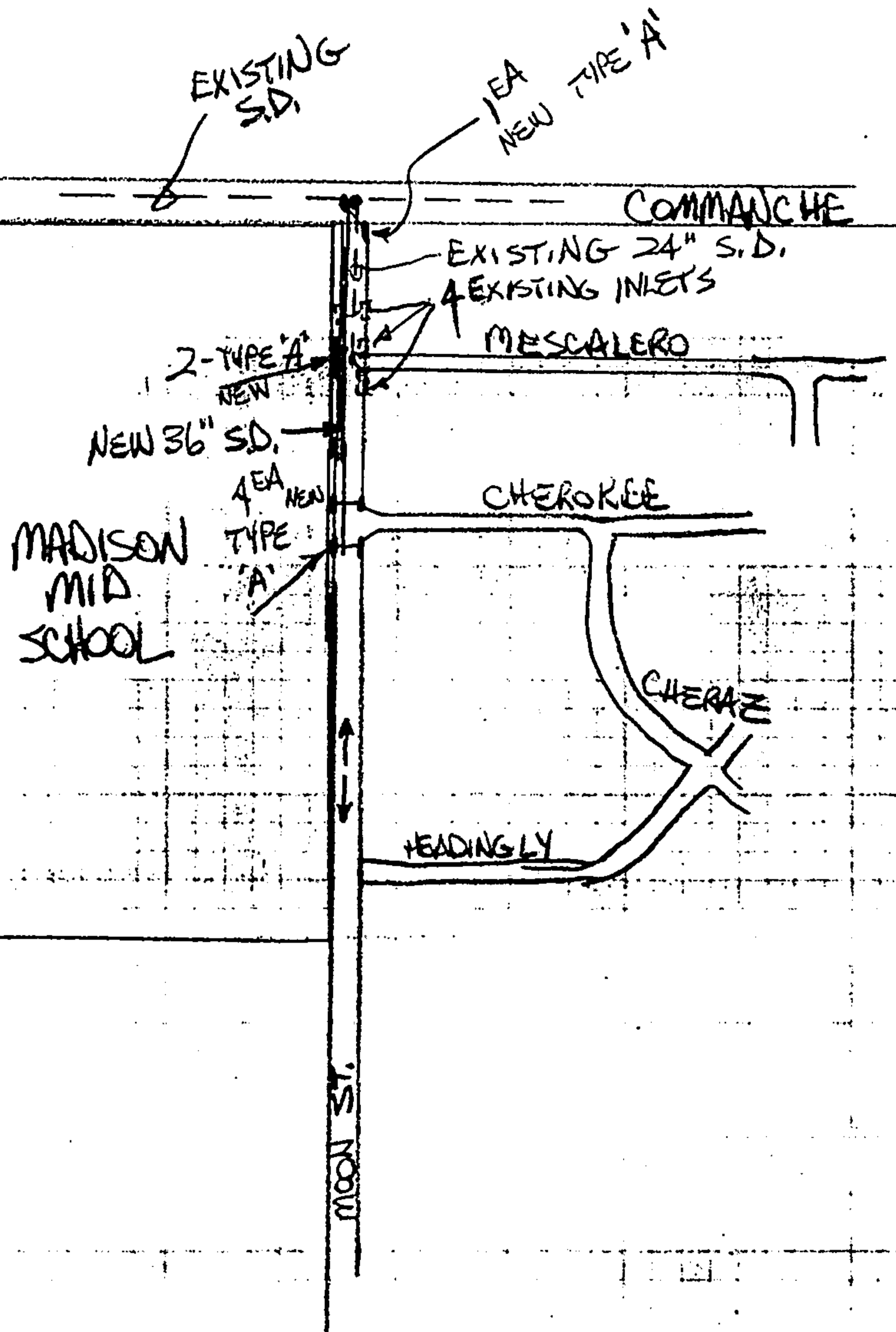
Job MADISON MID SCHOOL  
Subject MOON ST. STORM DRAIN  
Client HPS

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Job MADISON MID SCHOOL  
Subject MOON ST.  
Client APS

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TOTAL INLET CAPACITY:

EXIST'G 28 CFS

PROPOSED 49 CFS

77 CFS

< PIPE CAPACITY = 172.75 CFS  
(SEE C-6)

STREET CAPACITY : 40' ROADWAY

FROM PLATE 22.3 D-2:  $\frac{1}{2}$  STREET FLOW  $S=0.002$

$D=0.67$  FT

THEN  $Q=16.5$  CFS

TOTAL STREET  $Q=2(16.5 \text{ CFS}) = \underline{33.0 \text{ CFS}}$

TOTAL MOON ST. CAPACITY:

INLETS/PIPE/GRATE = 77 CFS

ROADWAY

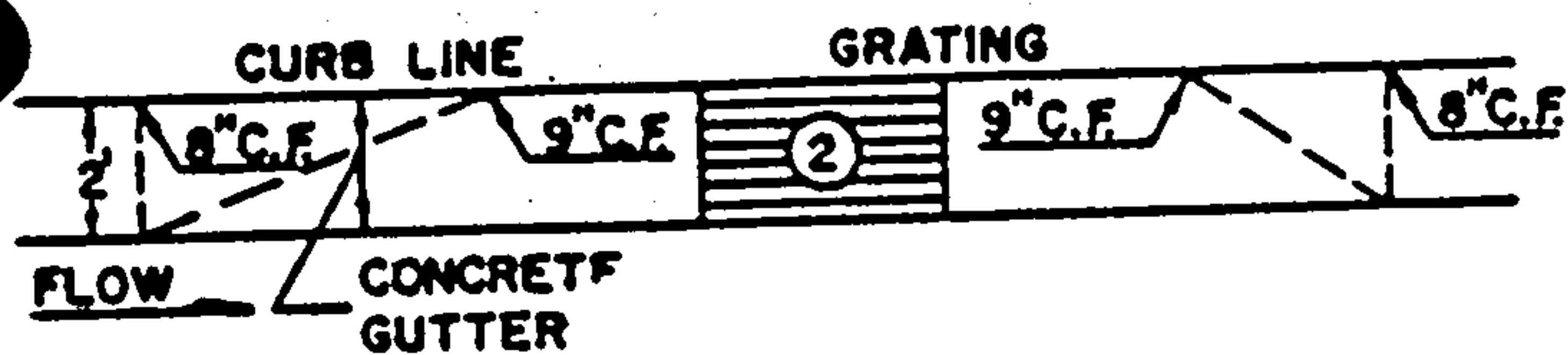
= 33 CFS

REQ'D CAP. =

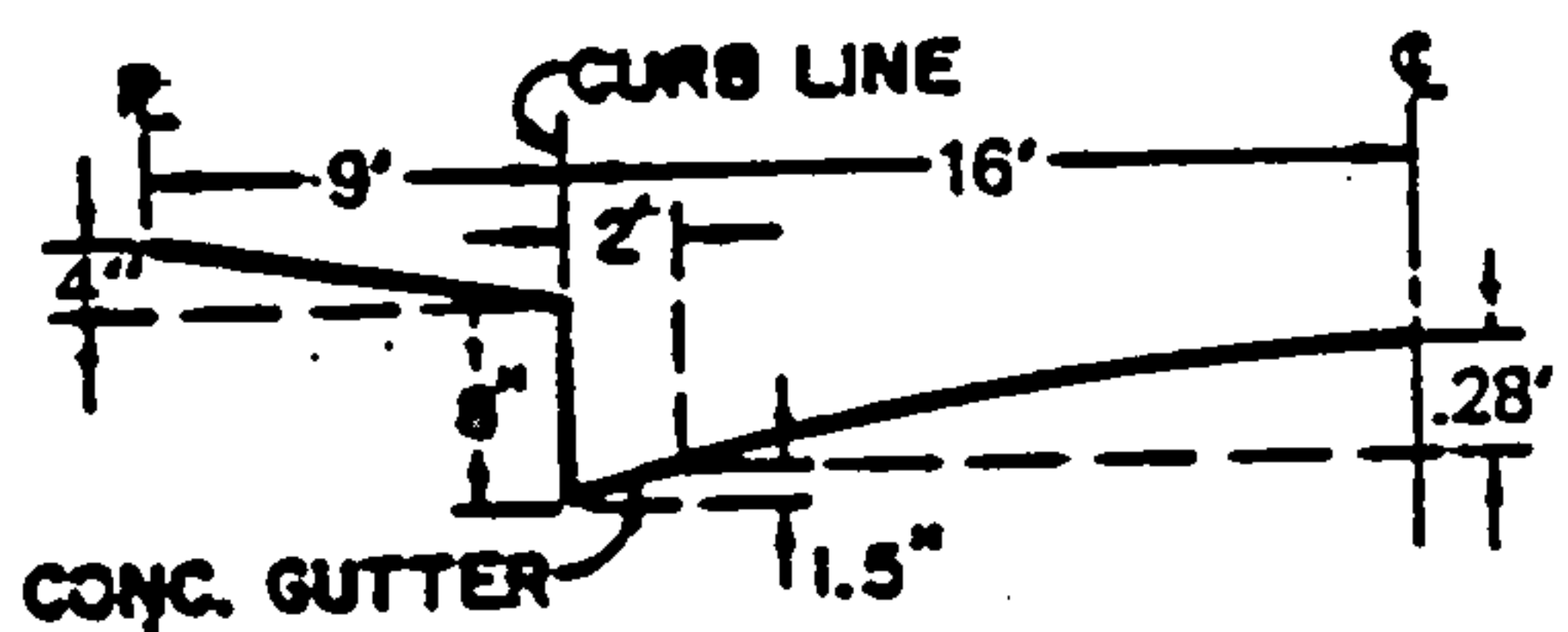
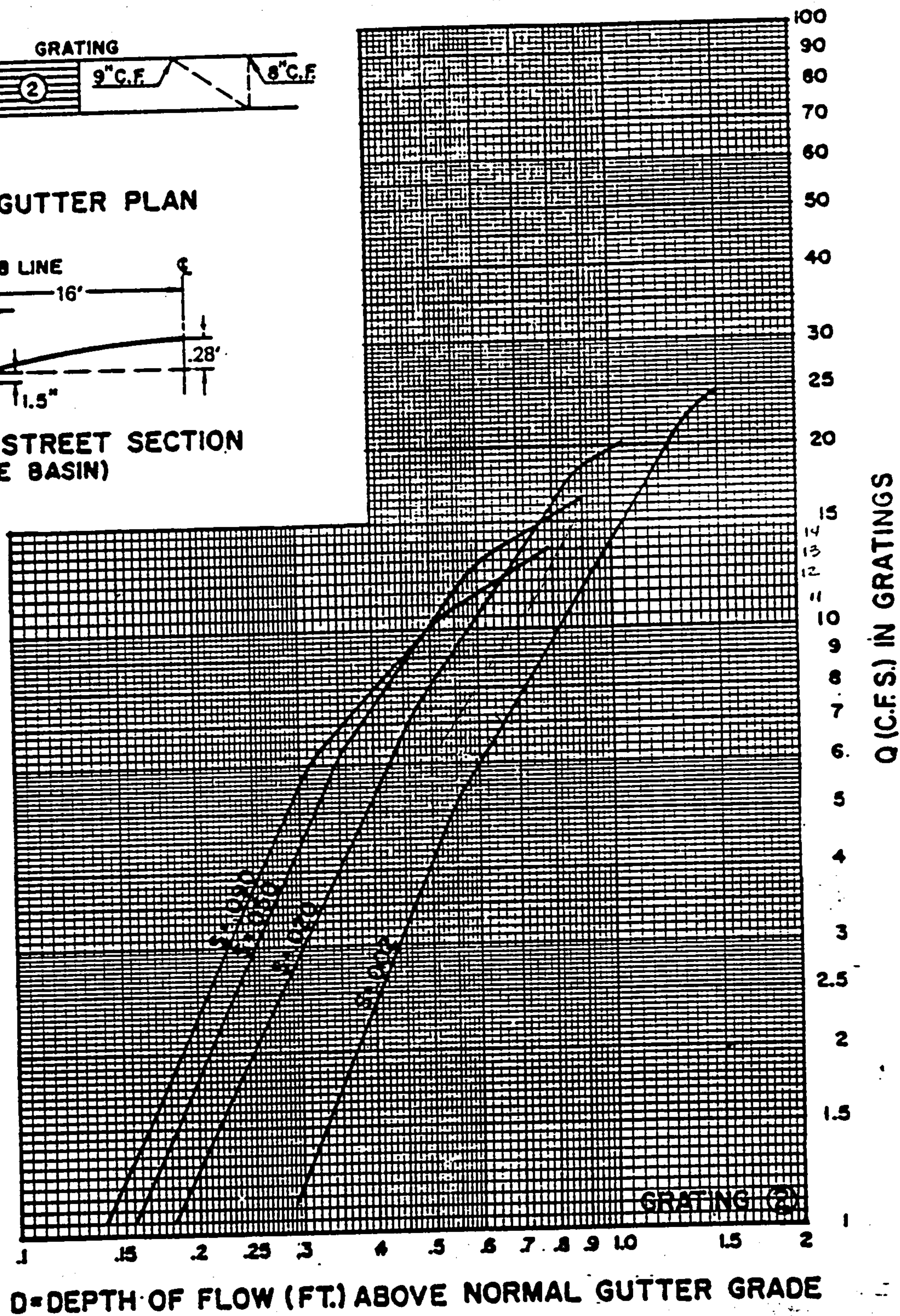
110 CFS

110.31 CFS

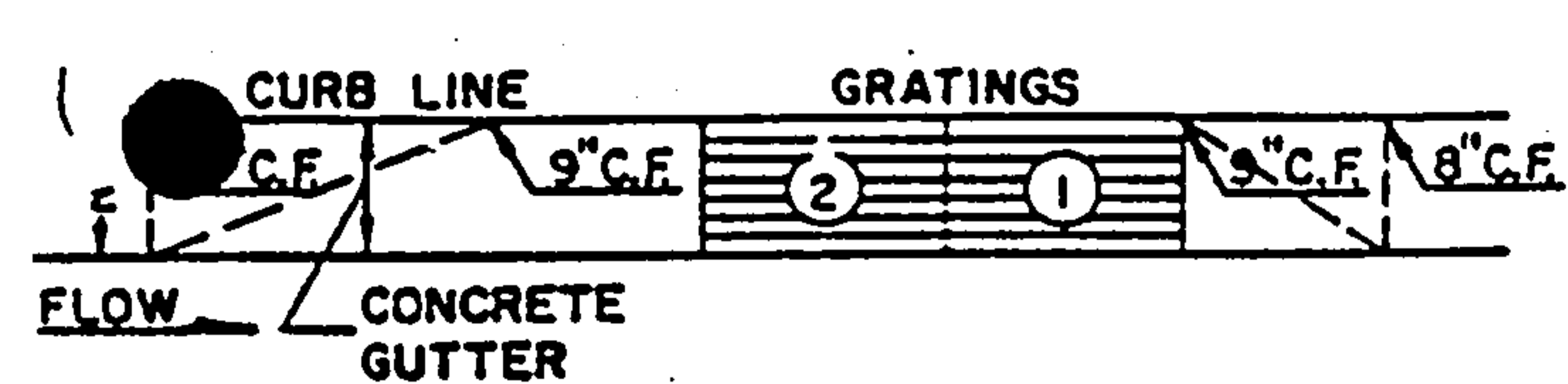
## GRATING CAPACITIES FOR TYPE "A", "C" and "D"



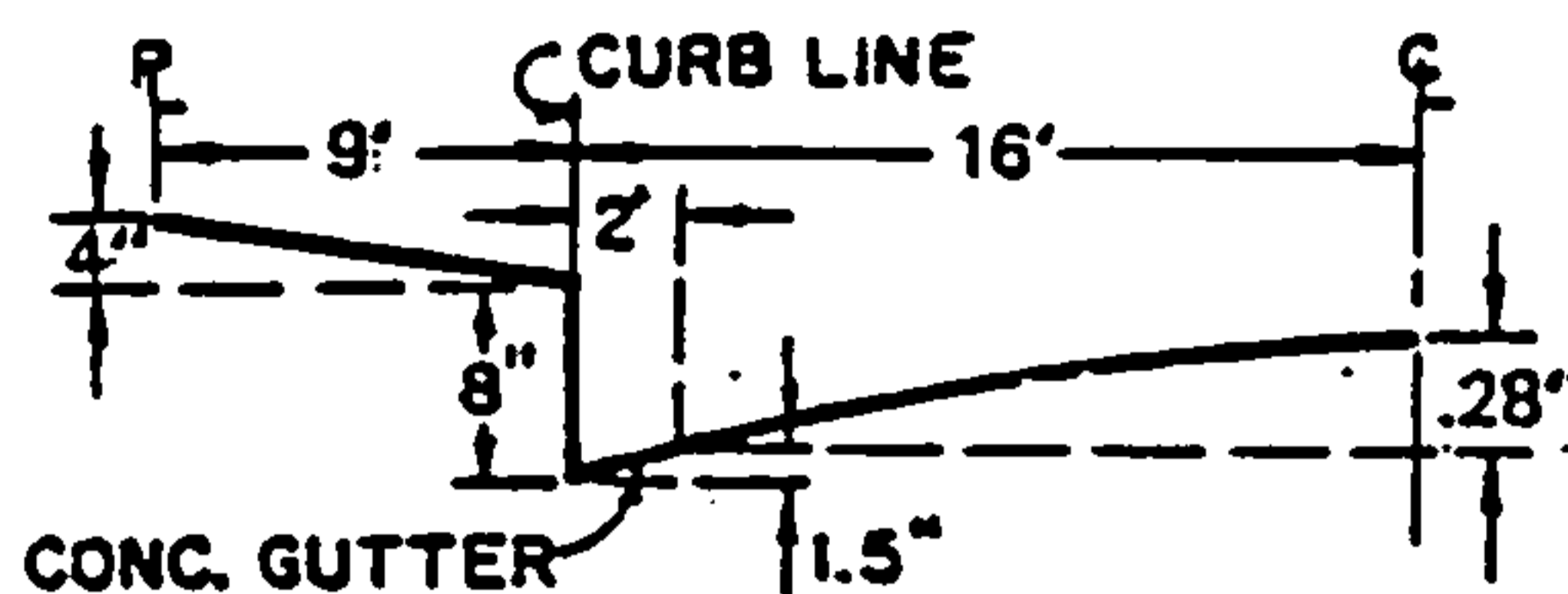
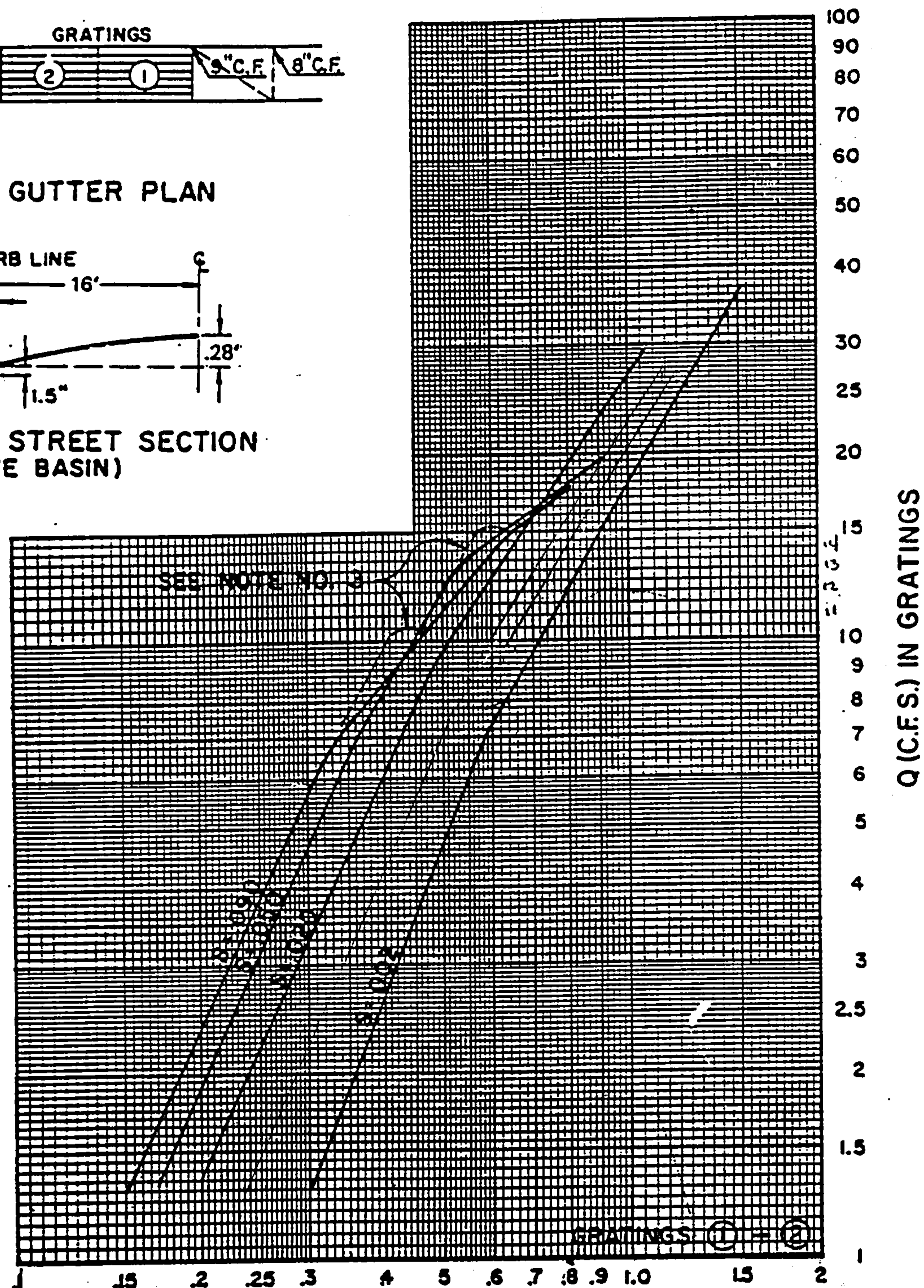
GRATING &amp; GUTTER PLAN

TYPICAL HALF STREET SECTION  
(ABOVE BASIN)

## GRATING CAPACITIES FOR TYPE DOUBLE "C," AND "D"

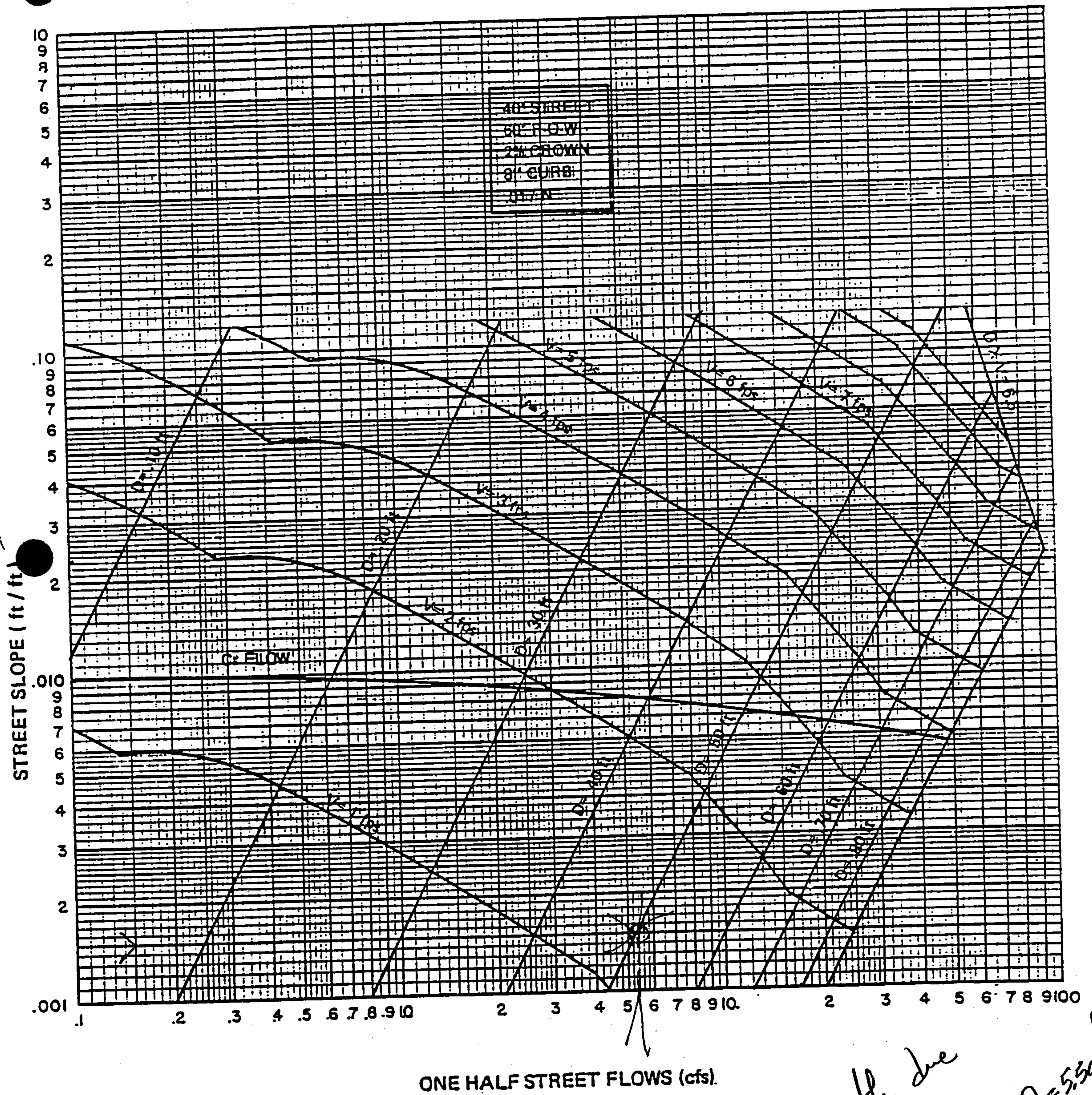


GRATING &amp; GUTTER PLAN

TYPICAL HALF STREET SECTION  
(ABOVE BASIN)

D = DEPTH OF FLOW (FT.) ABOVE NORMAL GUTTER GRADE

## STREET CAPACITY



max street depth due  
to school  
D/w's.

1/2 street flow =  $Q_{1/2} = 5.5 \text{ cfs}$