



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 12, 1990

Carlos Salazar, III  
A & E Engineering, Inc.  
1330 San Pedro Drive, NE #208  
Albuquerque, New Mexico 87110

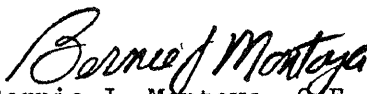
RE: CERTIFICATION FOR ST. JOSEPH'S HOSPITAL COMPLEX  
SLOPE EROSION CONTROL PORTION  
(K-15/D6) ENGINEER'S STAMP DATED MARCH 8, 1989

Dear Mr. Salazar:

We are in receipt of your letter and plan identifying the Certification for the slope stability at the referenced site.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

  
Bernie J. Montoya, C.E.  
Engineering Assistant

BJM/bsj  
(WP+555)

# DRAINAGE INFORMATION SHEET

PROJECT TITLE: St. Joseph's Hospital Complex ZONE ATLAS/DRNG. FILE #: J-K-15-Z

LEGAL DESCRIPTION: Tract One, St. Joseph's Hospital Complex

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

ENGINEERING FIRM: A & E Engineering Inc. CONTACT: John F. Esquibel

ADDRESS: 1330 San Pedro N.E., Suite 208 PHONE: 266-8791

OWNER: St. Joseph's Health Care CONTACT: Mary Lou Coors

ADDRESS: 500 Walter N.E. PHONE: 848-8169

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

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

SURVEYOR: A & E Engineering Inc. CONTACT: John F. Esquibel

ADDRESS: 1330 San Pedro N.E., Suite 208 PHONE: 266-8791

CONTRACTOR: Jaynes Corporation CONTACT: Gordon Burch

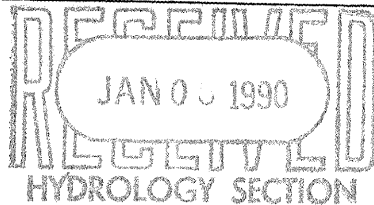
ADDRESS: 2906 Broadway N.E. PHONE: 345-8591

PRE-DESIGN MEETING:

☐ YES

☐ NO

☐ COPY OF CONFERENCE RECAP  
SHEET PROVIDED



DRB NO. \_\_\_\_\_

EPC NO. \_\_\_\_\_

PROJ. NO. \_\_\_\_\_

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☐ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☒ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☒ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☐ GRADING/PAVING PERMIT APPROVAL

☐ OTHER \_\_\_\_\_ (SPECIFY)

DATE SUBMITTED: Nov. 14, 1989

BY: A & E Engineering Inc.

FILE COPY



KEN SCHULTZ  
MAYOR

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 21, 1989

Carlos Salazar, III  
A & E Engineering, Inc.  
1330 San Pedro Drive, NE #208  
Albuquerque, New Mexico 87110

RE: REVISED CERTIFICATION FOR ST. JOSEPH'S HOSPITAL COMPLEX  
(K-15/D6) CERTIFICATE STATEMENT DATED MARCH 8, 1989

Dear Mr. Salazar:

Based on the information provided on your resubmittal of March 9, 1989, the revised Certification is acceptable. Please be advised that the problem of the erosion on the west slope of the new rehabilitation hospital must be corrected and certified prior to issuing the permanent Certificate of Occupancy.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

*Bernie J. Montoya*  
Bernie J. Montoya, C.E.  
Engineering Assistant

BJM/bsj  
(WP+555)



KEN SCHULTZ  
MAYOR

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 1, 1988

Carlos Salazar, III  
A & E Engineering, Inc.  
1330 San Pedro Drive, NE #208  
Albuquerque, New Mexico 87110

RE: CERTIFICATION FOR ST. JOSEPH'S HOSPITAL COMPLEX  
(K-15/D6) RECEIVED NOVEMBER 8, 1988 WITH ENGINEER'S STAMP  
DATED NOVEMBER 4, 1988

Dear Mr. Salazar:

Based on the information provided on your submittal of November 8, 1988, Certification is not acceptable until the following concerns are satisfied:

- ✓ 1. Copy of letter of acceptance for Work Order No. 3156.
- ✓ 2. Concurrence from the City Inspection Department for the work done under S.O. #19 process.
3. You must indicate on your plan all as-built structures that correspond to the site project. You indicate a 2' x 2' grated catch basin on the west side, but you do not indicate the 4" C.I. pipe. Please address.
4. Note indicating that Certification is only for the portion shown on the Certification plan and no other areas shown on the original approved drainage plan done by Bohannon-Huston, Inc.

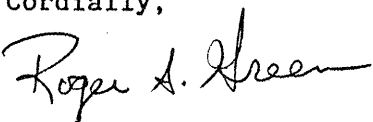


Carlos Salazar  
December 1, 1988  
Page 2

Please be advised that besides the above listed concerns, the problem of erosion on the west slope of the new Rehabilitation Hospital must be corrected and certified prior to issuing a permanent Certificate of Occupancy. Once the above four concerns are satisfied, a Temporary Certificate of Occupancy will be issued until Certification is received for work done for the erosion control.

If you have any further questions, call me at 768-2650.

Cordially,

  
for Bernie J. Montoya, C.E.  
Engineering Assistant

xc: Mary Lou Coors, Administrator  
St. Joseph Rehabilitation Center

BJM/bsj  
(WP+555)

RECEIVED BHI OCT 14 1988

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103



MAYOR  
KEN SCHULTZ

CHIEF  
ADMINISTRATIVE OFFICER  
GENE ROMO

DEPUTY CAO  
DEVELOPMENT & ENTERPRISE SERVICES  
LARRY LARRANAGA

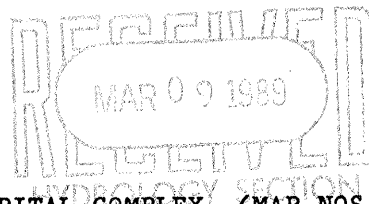
DEPUTY CAO  
PUBLIC SERVICES  
DAN WEAKS

October 6, 1988

## CERTIFICATE OF COMPLETION AND ACCEPTANCE \*\*\* REVISED \*\*\*

RECEIVED  
E.M.B.S.M. INC.

Mr. Ted Fries  
St. Joseph Healthcare Corp.  
500 Walter, N.E.  
Albuquerque, NM 87102



DEC 30 1988

RE: PROJECT NO. 3156, ST JOSEPH'S HOSPITAL COMPLEX, (MAP NOS. J-15, K-15)

Dear Mr. Fries:

This is to certify that the City of Albuquerque accepts Project No. 3156 as being completed according to approved plans and construction specifications. If all required right-of-ways and/or easements have been dedicated, the City of Albuquerque will accept for continuous maintenance all public infrastructure improvements constructed as part of Project No. 3156. If the required right-of-ways and/or easements have not been dedicated, the City of Albuquerque cannot accept the project for continuous maintenance and said maintenance will be the responsibility of the developer. When a final plat has been filed it will be the developer's responsibility to provide the Construction Management Division with a copy, at which time the City will fully accept Project No. 3156.

The project is described as follows:

- Installed water lines, sanitary sewer lines, curb, gutter, sidewalk, storm drain, and paving for the St. Joseph's Hospital Complex.
- The contractor's warranty begins on September 30, 1988, will be effective for a period of one (1) year.

Sincerely,

Russell B. Givler, P.E.  
Chief Construction Engineer  
Construction Mgmt. Division  
Engineering Group  
Public Works Department

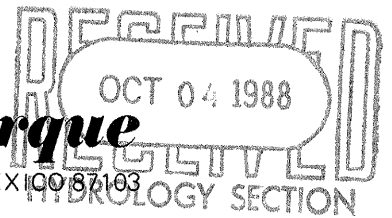
RBG:jla

AN EQUAL OPPORTUNITY EMPLOYER



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103



MAYOR  
KEN SCHULTZ

CHIEF  
ADMINISTRATIVE OFFICER  
GENE ROMO

DEPUTY CAO  
DEVELOPMENT & ENTERPRISE SERVICES  
LARRY LARRANAGA

DEPUTY CAO  
PUBLIC SERVICES  
DAN WEAKS

September 30, 1988

## CERTIFICATE OF COMPLETION AND ACCEPTANCE

Mr. Ted Fries  
St. Joseph Healthcare Corp.  
500 Walter, N.E.  
Albuquerque, NM 87102

RE: PROJECT NO. 3156, ST JOSEPH'S HOSPITAL COMPLEX, (MAP NOS. J-15, K-15) / DO

Dear Mr. Fries:

This is to certify that the City of Albuquerque accepts Project No. 3156 as being completed according to approved plans and construction specifications. If all required right-of-ways and/or easements have been dedicated, the City of Albuquerque will accept for continuous maintenance all public infrastructure improvements constructed as part of Project No. 3156. If the required right-of-ways and/or easements have not been dedicated, the City of Albuquerque cannot accept the project for continuous maintenance and said maintenance will be the responsibility of the developer. When a final plat has been filed it will be the developer's responsibility to provide the Construction Management Division with a copy, at which time the City will fully accept Project No. 3156.

The project is described as follows:

- Installed water lines, sanitary sewer lines, curb, gutter, sidewalk and paving for the St. Joseph's Hospital Complex.
- The contractor's warranty begins the date of this letter and will be effective for a period of one (1) year.

Sincerely,

Russell B. Givler, P.E.  
Chief Construction Engineer  
Construction Mgmt. Division  
Engineering Group  
Public Works Department

RBG:jla

FILE COPY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR  
KEN SCHULTZ

CHIEF  
ADMINISTRATIVE OFFICER

GENE ROMO

DEPUTY CAO  
PUBLIC SERVICES

FRANK MARTINEZ

DEPUTY CAO  
PLANNING/DEVELOPMENT

BILL MUELLER

March 7, 1988

James Topmiller, P.E.  
Bohannon-Huston, Inc.  
7500 Jefferson Street, NE  
Albuquerque, New Mexico 87109

RE: REVISED GRADING & DRAINAGE PLAN OF ST. JOSEPH'S HOSPITAL  
COMPLEX, RECEIVED FEBRUARY 25, 1988 FOR PAVING PERMIT APPROVAL  
(K-15/D6)

Dear Mr. Topmiller:

The above referenced submittal revised February 23, 1988, is approved. The contractor may proceed with the parking lot additional paving and grading in accordance with this approved plan. Contact the Drainage Inspector, Rick Duran, at 764-1699 upon completion so an inspection can be made.

If you have any further questions, call me at 768-2650.

Cordially,

Roger A. Green, P.E.  
C.E./Hydrology Section

RAG/bsj

FILE COPY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz  
Mayor

UTILITY DEVELOPMENT DIVISION  
HYDROLOGY SECTION  
(505) 768-2650

January 12, 1988

Laura Milne  
Bohannon-Huston, Inc.  
7500 Jefferson Street, NE  
Albuquerque, New Mexico 87109

RE: REVISED GRADING & DRAINAGE PLAN (PARKING AREA) OF ST. JOSEPH'S  
HOSPITAL COMPLEX, RECEIVED DECEMBER 15, 1987 FOR PAVING PERMIT  
APPROVAL (K-15/D6)

Dear Ms. Milne:

The above referenced submittal revised December 3, 1987, is approved.  
Consider this letter as the paving permit for the revised east parking  
area.

If you have any further questions, call me at 768-2560.

Cordially,

Roger A. Green, P.E.  
C.E./Hydrology Section

RAG/bsj

PUBLIC WORKS DEPARTMENT

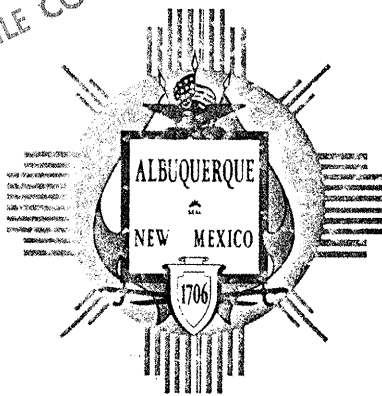
Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

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FILE COPY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz  
Mayor

UTILITY DEVELOPMENT DIVISION  
HYDROLOGY SECTION  
(505) 768-2650

March 11, 1987

James Topmiller, P.E.  
Bohannon-Huston, Inc.  
7500 Jefferson Street, NE  
Albuquerque, New Mexico 87109

RE: REVISED GRADING & DRAINAGE PLAN SUBMITTAL OF ST. JOSEPH  
HOSPITAL COMPLEX RECEIVED FEBRUARY 24, 1987 GRADING, PAVING  
AND BUILDING PERMIT APPROVALS (K-15/26)

Dear James:

The above referenced submittal revised February 24, 1987 is approved for  
the following permits:

1. Grading - Contractor may proceed with site grading  
in accordance with this approved plan.
2. Paving - Contractor may proceed with parking lot  
paving in accordance with this approved plan.
3. Building Permit - include this approved plan with  
the construction sets routed for Building Permit  
sign-off.
4. S.O. #19 - contractor can obtain the required  
excavation/construction permit for the catch basin  
and pipe construction within public right-of-way  
with this approval of the plan.

Prior to Hydrology's sign-off on the Certificate of Occupancy, all of the  
above items must be completed and have had a final Hydrology inspection.  
Also City Work Order 3156 must be completed and passed inspection.

If you have any questions, call me at 768-2650.

Cordially,

*Roger A. Green, P.E.*

Roger A. Green, P.E.  
C.E./Hydrology Section

cc: Becky Sandoval, Permits

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz  
Mayor

UTILITY DEVELOPMENT DIVISION  
HYDROLOGY SECTION  
(505) 768-2650

February 13, 1987

James Topmiller, P.E.  
Bohannon-Huston, Inc.  
7500 Jefferson Street, NE  
Albuquerque, New Mexico 87109

RE: REVISED GRADING & DRAINAGE PLAN SUBMITTAL OF ST. JOSEPH  
HOSPITAL COMPLEX RECEIVED JANUARY 29, 1987 FOR PLATTING,  
GRADING, PAVING AND BUILDING PERMIT APPROVALS (K-15/D6)

Dear James:

The above referenced submittal, revised January 28, 1987, is approved for Preliminary Plat. Final Plat can be signed-off by the City Engineer after the Subdivision Improvements Agreement is executed.

In regards to Grading/Paving Permit approval, the additional sheet provided does not show any existing or proposed elevations as previously required. Street flows from the parking lot are not allowed across sidewalks and should be directed to drive pads with the use of curbing or swales.

For Building Permit approval, provide two copies of the Drainage and Grading Plan for S.O. #19 approval of the drain into High Street.

Rough Grading approval prior to Building Permit approval requires an Erosion Control Plan and a note to contractor requiring a Topsoil Disturbance Permit.

If you have any questions, call me at 768-2650.

Cordially,

Roger A. Green, P.E.  
C.E./Hydrology Section

cc: Andre Houle, DRC

RAS/bsj

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

## HYDROLOGY SECTION

~~123 Central NW, Albuquerque, NM 87102~~  
~~(505) 766-7647~~

December 28, 1986

James Topmiller, P.E.  
 Bohannon - Huston Inc.  
 Courtyard 1, 7500 Jefferson St.  
 Albuquerque, NM 87109

RE: Grading and Drainage Plan submittal of St. Joseph Hospital Complex received November 25, 1986 for Platting, Building permit, and Rough Grading Permit approvals (K-15/D6)

Dear James,

I have reviewed the above referenced submittal dated November 25, 1986 and have the following comments:

1. The Drainage/Grading Plan and Drainage Report can be approved for Preliminary Plat when the following inconsistency is resolved:
  - a. On the previously approved Conceptual Drainage Plan the storm drain size in Marquette street to Roma Ave. is shown as a 24" diameter. The design calculations on the "Existing Conditions" drawing also show it as 24" RCP. Your new submittal show the existing storm drain size as 12" diameter and 15" diameter. Field verify the existing storm drain size, and if it is not 24" dia. as assumed by our previous approval, then additional storm drain improvements, will be required unless new design calculations can show that the existing storm drain has adequate capacity.
2. Before Grading/paving permit approval for the parking areas east of Elm Street, detailed plans are required showing spot elevations and exact limits for paving. Also show what treatment is proposed on the steep slope along the north edge of the existing parking area in Basin C. This parking area can be submitted and approved separate of the Building and Parking lot west of Elm Street.

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

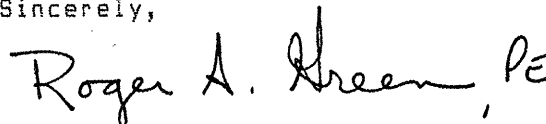
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3. Prior to Building approval by Hydrology the following items are required:
- a. An approved infrastructure listing from DRB for the required offsite street and drainage improvements.
  - b. Construction drawings submitted and reviewed at the DRC for the offsite street and drainage improvements.
  - c. Provide two copies of the Building Drainage Plan with the required S.O. #19 construction notes to contractor, with appropriate signature blocks since the catch basin and 6" outlet pipe to Roma Ave. requires a separate permit to construct private storm drain improvements within Public R.O.W. (S.O. #19). All the other storm drain improvements must be constructed under City Work order and should be identified as such on the Drainage Plan.

If you have any questions call me at 768-2650.

Sincerely,



Roger A. Green, P.E.  
Civil Engineer, Hydrology

RG/db  
Ref. K15DG

xc: Andre Houle, DRC



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION  
123 Central NW, Albuquerque, NM 87102  
(505) 766-7644

February 24, 1986

Brian Burnett, P.E.  
Bohannon-Huston, Inc.  
4125 Carlisle Blvd., NE  
Albuquerque, New Mexico 87107

RE: REVISED CONCEPTUAL DRAINAGE MASTERPLAN FOR ST. JOSEPH'S  
HOSPITAL COMPLEX (K-15/D6) RECEIVED JANUARY 21, 1986

Dear Mr. Burnett:

In accordance with my previous comments, the above referenced plan, dated January, 1986, is in compliance with my request and is hereby approved for Site Development Plan approval.

It is understood that subsequent drainage plans will be submitted for each individual Building Permit request. These plans will be required to be detail in nature such that the contractor can build the site solely by the drainage plan.

Should you have any questions or comments, please call me at 766-7644.

Cordially,

Billy J. Goolsby, P.E.  
C.E./Design Hydrology

BJG/bsj

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION  
123 Central NW, Albuquerque, NM 87102  
(505) 766-7644

December 19, 1985

Brian Burnett  
Bohannon-Huston, Inc.  
4125 Carlisle Blvd., NE  
Albuquerque, New Mexico 87107

RE: CONCEPTUAL DRAINAGE MASTERPLAN FOR ST. JOSEPH HOSPITAL  
COMPLEX RECEIVED NOVEMBER 27, 1985 (K-15/D6)

Dear Mr. Burnett:

I have reviewed the referenced submittal and forward the following discussion concerning the submittal.

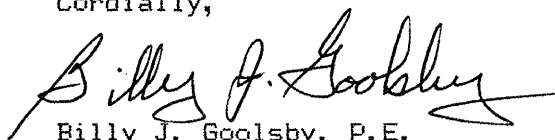
The concept of the drainage scheme is acceptable and was previously identified with Mr. Fred Aguirre in that the existing drainage pattern is to be respected.

However, the plan presented for the proposed construction activities does not show where the existing facilities are nor whether they will intercept the proposed flows in their current locations.

Will these facilities need to be relocated to accommodate the proposed construction? Have any of the basins been revised or re-directed due to proposed grading activities or roof-drain locations? Are the inlets and storm sewers adequate to handle the flows or will on-site ponding be required?

Should you have any questions or comments regarding my questions, please call.

Cordially,

  
Billy J. Goolsby, P.E.  
C.E./Design Hydrology

BJG/bsj

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 16, 1980

Yovan Stevanovich  
Allandale Insurance  
915 Harger Road  
Oakbrook, Illinois 60521

K15-06

REFERENCE: Flood Insurance Requirements, St. Joseph  
Hospital Albuquerque, New Mexico

Dear Mr. Stevanovich:

St. Joseph Hospital which is outlined in red on the attached copy of the Flood Hazard Boundary Map, published December 4, 1979 does not show said hospital in the Flood Hazard Areas.

Very truly yours,

Bruno Conegliano  
Assistant City Engineer/Hydrology

lc  
encl.

MUNICIPAL DEVELOPMENT DEPARTMENT



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 2, 1991

James Topmiller  
Bohannon-Huston, Inc.  
7500 Jefferson Street, NE  
Albuquerque, New Mexico 87109

RE: REVISED GRADING/PAVING PLAN FOR ST. JOSEPH HOSPITAL PARKING LOT EXPANSION  
(K-15/D6) ENGINEER'S STAMP DATED JULY 18, 1991

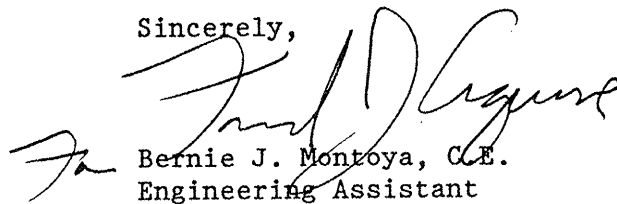
Dear Mr. Topmiller:

Based on the information provided on your July 23 1991 submittal, the above referenced site is approved for grading/paving.

Please advise your client that once the construction is completed, they will need to call and request an inspection.

If I can be of further assistance, please feel free to contact me at 768-2650.

Sincerely,



Bernie J. Montoya, C.E.  
Engineering Assistant

BJM:jc  
WP+555

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.  
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 16, 1991

James Topmiller  
Bohannon-Huston, Inc.  
7500 Jefferson Street, NE  
Albuquerque, New Mexico 87109

RE: GRADING/PAVING PLAN FOR ST. JOSEPH HOSPITAL PARKING LOT  
EXPANSION (K-15/D6) RECEIVED JUNE 28, 1991

Dear Mr. Topmiller:

Based on the information provided on your submittal of June 28, 1991, listed you will find concerns that will need to be addressed prior to final approval.

1. Please indicate an asphalt extruded curb all along the west perimeter of the parking lot.
2. Include your drainage calculations on the plan drawing.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

*Bernie J. Montoya*  
Bernie J. Montoya, C.E.  
Engineering Assistant

BJM/bsj  
(WP+555)

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.  
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

**DRAINAGE REPORT AND PRELIMINARY GRADING PLAN  
FOR  
ST. JOSEPH HOSPITAL COMPLEX**

**PURPOSE AND SCOPE**

The purpose of this report is to present the existing and proposed drainage conditions for St. Joseph's Hospital Complex, Parcel 1 and Parcel 2A of the Civic Auditorium Site. This report conforms to and references the previously approved "Conceptual Drainage Masterplan for St. Joseph's Hospital Complex" (file K15/D6).

**SITE LOCATION AND DESCRIPTION**

St. Joseph's Hospital Complex, as proposed, comprises Parcels 1 and 2A of the Civic Auditorium Site and is located at the northwest corner of Grand Avenue and Interstate 25 Frontage Road. The site currently has a mixture of buildings and paved parking areas. The enclosed "...Existing Drainage Conditions" plan accurately shows the current site conditions with the exception of the Civic Auditorium which has since been demolished.

**METHOD OF ANALYSIS**

Peak runoff flow rates were computed by means of the Rational Formula in accordance with the guidelines established in Chapter 22 of the City of Albuquerque Development Process Manual (DPM).

On-site inlet capacities were calculated using the orifice equation and the Neenah Catalog grating capacities charts. Street capacities were determined by using Manning's equation and the DPM charts.

All design calculations are contained in Appendix A. Calculations are not provided for situations where existing inlets have simply been replaced and/or relocated.

**EXISTING SITE DRAINAGE AND DRAINAGE FACILITIES**

The existing site drainage facilities and existing site drainage patterns are illustrated on the enclosed plates labeled "Conceptual Drainage Masterplan..." and "...Existing Drainage Conditions". The recommendations on the "...Existing Drainage Conditions" plan were approved by City Hydrology on August 15, 1984. Among these recommendations was that the existing drainage facilities should remain in place if possible and if they must be relocated, the capacity and line sizes of the new facilities shall be consistent with the system now in place. The system in place has been proven by time to be adequate to serve the site.

## PROPOSED SITE DRAINAGE AND DRAINAGE FACILITIES

The site is proposed to contain a rehabilitation hospital and parking areas. This development will affect the existing Basins A, B, and C. However, the relative size and the direction of flow discharge of the basins will remain the same resulting in very similar, but reduced, "C" values and runoff flows to those that existed prior to this new plan. The enclosed drainage/grading plan identifies the proposed conditions.

The proposed hospital building will create the divide between Basins B and C with approximately half the roof draining to Basin B and the other half to Basin C. A small portion of the roof and sidewalk will drain to Roma Street (to the west). As a flat-roofed structure with gutters, the building will tend to detain runoff and reduce the peak runoff flows.

Flows from the northern portion of the hospital site (Basin B) will be collected in the northwest corner by a manhole-type drop inlet with a grated lid. From there, runoff will flow by pipe to the relocated type Double "D" inlet at the southeast return of High Street and Elm Street and hence to the existing 24" storm drain in Fruit Street.

Runoff from the southern portion of the site (a part of Basin C) will be collected at the southwest corner in a manhole-type drop inlet with a grated lid which will replace the existing Double "D" and Single "C" inlets. From there it is directed to the 15" storm drain in Marquette.

The portion of the roof and sidewalk which drain westerly to Roma Street will be collected by a small drop inlet at the western property line and be directed to the street by means of a pipe and curb outlet.

The former Civic Auditorium site (Drainage Basin A) is proposed to contain a temporary asphalt parking lot. Runoff will flow westerly across the lot to Elm Street as sheet flow and drain to the existing storm drain system. In the site's ultimate development, a future hotel and medical offices are proposed and the temporary parking will be removed.

## CONCLUSIONS

St. Joseph's Hospital Complex will construct a rehabilitation hospital and new parking areas in this initial phase of development. All recommendations made within previous reports for the site have been met. Primarily, this means that the existing drainage system of the site will not be significantly altered. Some existing inlets and storm drain lines will be relocated and/or replaced as required for the new street and gutter locations. As agreed in the conceptual report, the existing system is adequate for the flows now being experienced. Since this new plan of development actually reduces impervious area of the site, peak runoff will be lessened and the impact to the existing system will be correspondingly reduced.



Runoff - Southwest corner

$$\text{Area} = 73,363 \text{ ft}^2 = 1.7 \text{ Acres}$$

$$Q_{100} = C_i A = (0.95)(4.86)(1.7)$$

$$Q_{100} = 7.85 \text{ cfs.}$$

$$\text{Runoff Volume}_{100} = 14,200 \text{ cuft}$$

Orifice eqn.

\* Assume available Head = 6"

$$Q = CA \sqrt{2gh}$$

$$\frac{Q}{C \sqrt{2gh}} = A = \frac{7.85 \text{ cfs}}{0.6 \sqrt{(2)(32.2)(0.5)}}$$

$$A = 2.31 \text{ ft}^2$$

|        |         |                      |         |
|--------|---------|----------------------|---------|
| Neenah | R-3227  | 29 1/8" x 21 5/8"    | A = 2.3 |
|        | R-3401  | 21 1/2" x 23 7/8"    | A = 1.9 |
|        | R-3401B | 23 7/8" x 2(21 1/2") | A = 3.8 |
|        | R-3404  | 21 1/2" x 21 1/2"    | A =     |
|        | R-3405  | 23 5/8" x 23 5/8"    | A =     |

3' Dia MH, R-1792/3 HG

$$A = 2.7 \text{ ft}^2$$



BOHANNAN-HUSTON INC.

PROJECT NAME St Joseph

SHEET 1  
BY KLS

OF 2  
DATE XI/86

Site Runoff

Runoff: Northwest corner

$$\text{Area} = 25,000 \text{ ft}^2 = 0.57 \text{ Ac}$$

$$Q_{100} = C_i A = (0.95)(4.86)(0.57) \\ = 2.63 \text{ cfs}$$

Orifice equation \* Assume Available Head = 6"

$$A = \frac{Q}{C \sqrt{2gh}} \\ = 0.77 \text{ ft}^2$$

Using Neenah Catalog "R" 9th Edition

a 2' grated manhole cover ~~will~~  
has an open area of  $\sim 1.0 \text{ ft}^2$   
and will be acceptable. ✓



BOHANNAN-HUSTON INC.

PROJECT NAME

St Joseph

SHEET

2

OF

2

PROJECT NO.

Site Runoff

BY

KLS

DATE

XI/86

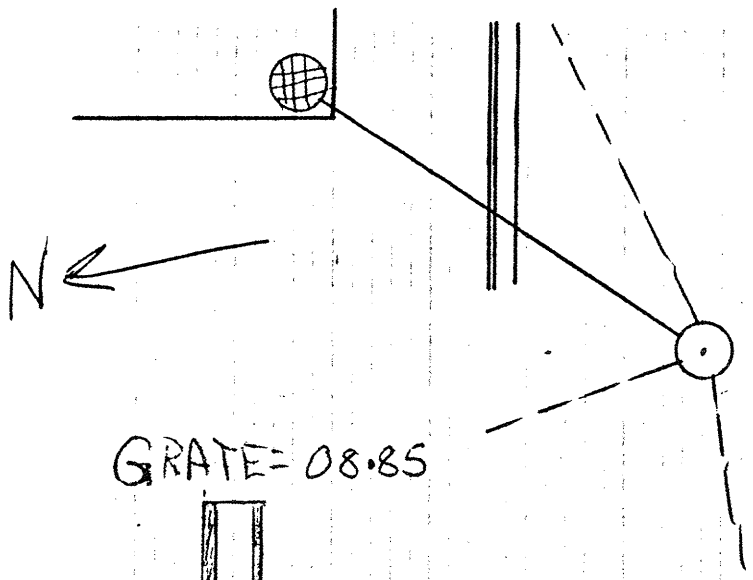
CH'D

DATE

NW Inlet  
SW

125' 12" RCP  
 $S = 0.0218'/ft$   
 $n = 0.013$   
 $Q_{100} = 7.85 \text{ CFS}$

Using 12" RCP  
 $Q = (0.0218)^{1/2} (35.7)$   
 $Q = 3.27 \text{ CFS}$   
 Using 15" RCP  
 $Q = 9.55 \text{ CFS}$



INV = 00.25

Rim = 02.90

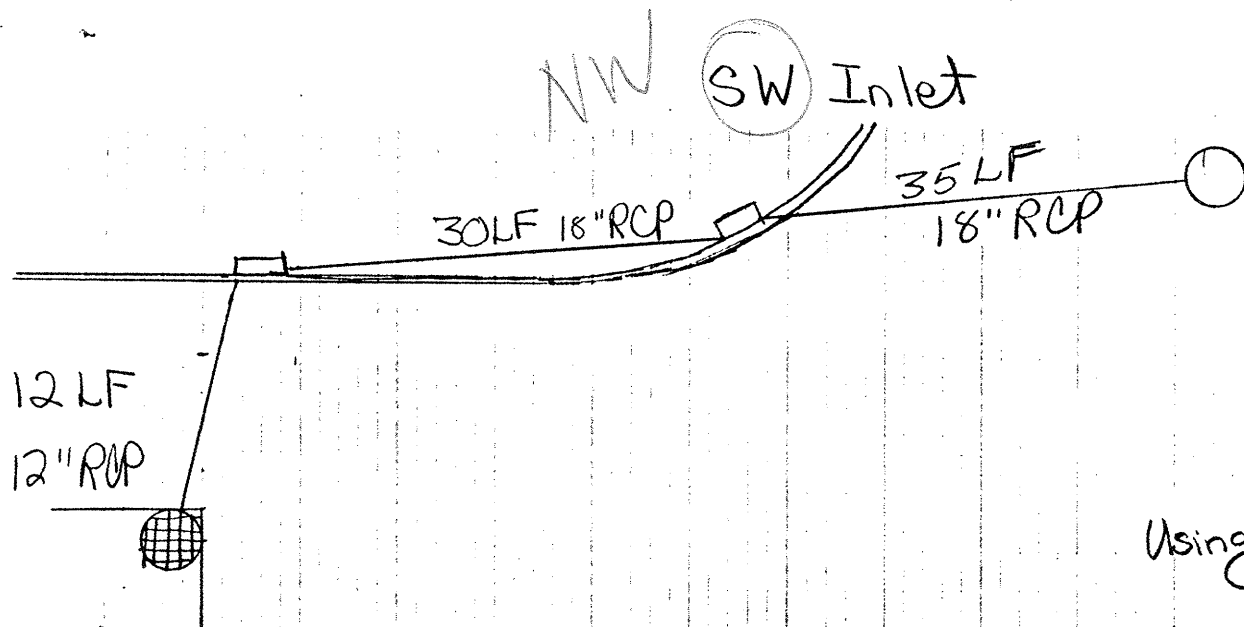
INV = 97.52

5005

5000

BOHANNAN-HUSTON INC.

PROJECT NAME St Joseph  
 PROJECT NO. 5005  
 SHEET 1 OF 2  
 BY KLS DATE 23/XI  
 CHD DATE



$$S = 0.0157 \text{ ft}$$

$$0.1568 \text{ ft}$$

$$n = 0.013$$

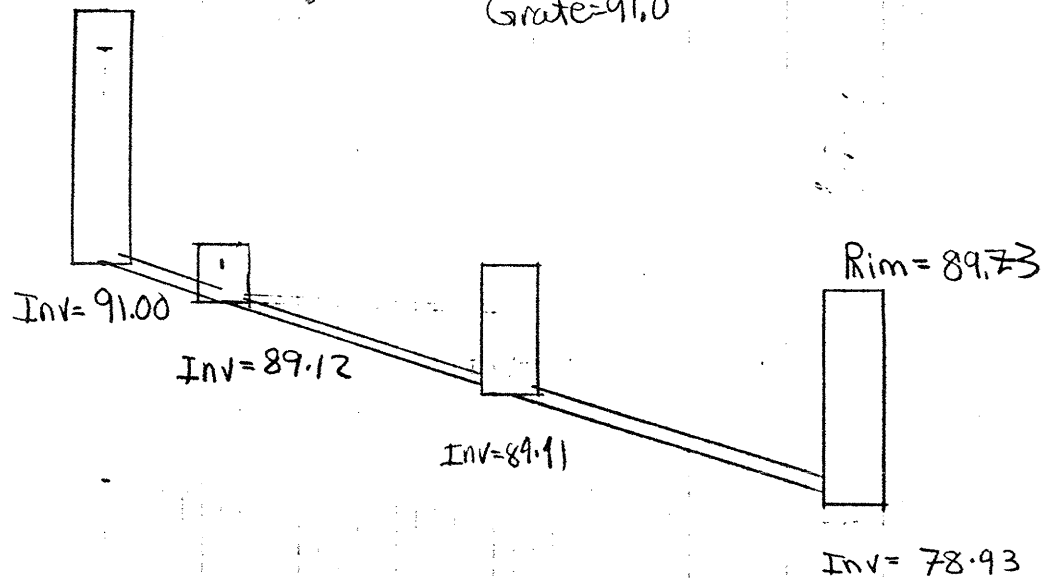
$$Q_{100} = 2.63 \text{ cfs}$$

Using 12" RCP

$$Q = 14.14$$

Grate = 94.00 Grate = 92.0

Grate = 91.0



BOHANNAN-HUSTON INC.

5000

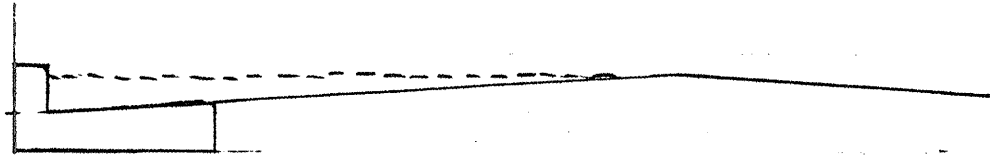
5000

4990

4980

Elm St.

$$S = 0.0212' / \text{Ft}$$



Using 0.5ft as maximum allowable depth in street.

$$Q = \frac{1.49}{n} (A R_h^{2/3} S_o^{1/2})$$

$$n = 0.017$$

$$A = 6.25 \text{ ft}^2$$

$$P_u = 50.505 \text{ ft}$$

$$Q = 19.81 \text{ cfs}$$

$$R_h = 0.1238 \text{ ft}$$

Also, see attached Plate 22.3 D-2 (DPM)

$$Q = 20.0 \text{ cfs}$$

The existing runoff from Basin A is 19.1 cfs (100 YR)  
therefore the street capacity is adequate.



BOHANNAN-HUSTON INC.

PROJECT NAME

St Joseph Hospital

SHEET

1

OF

PROJECT NO.

BY

KLS

DATE

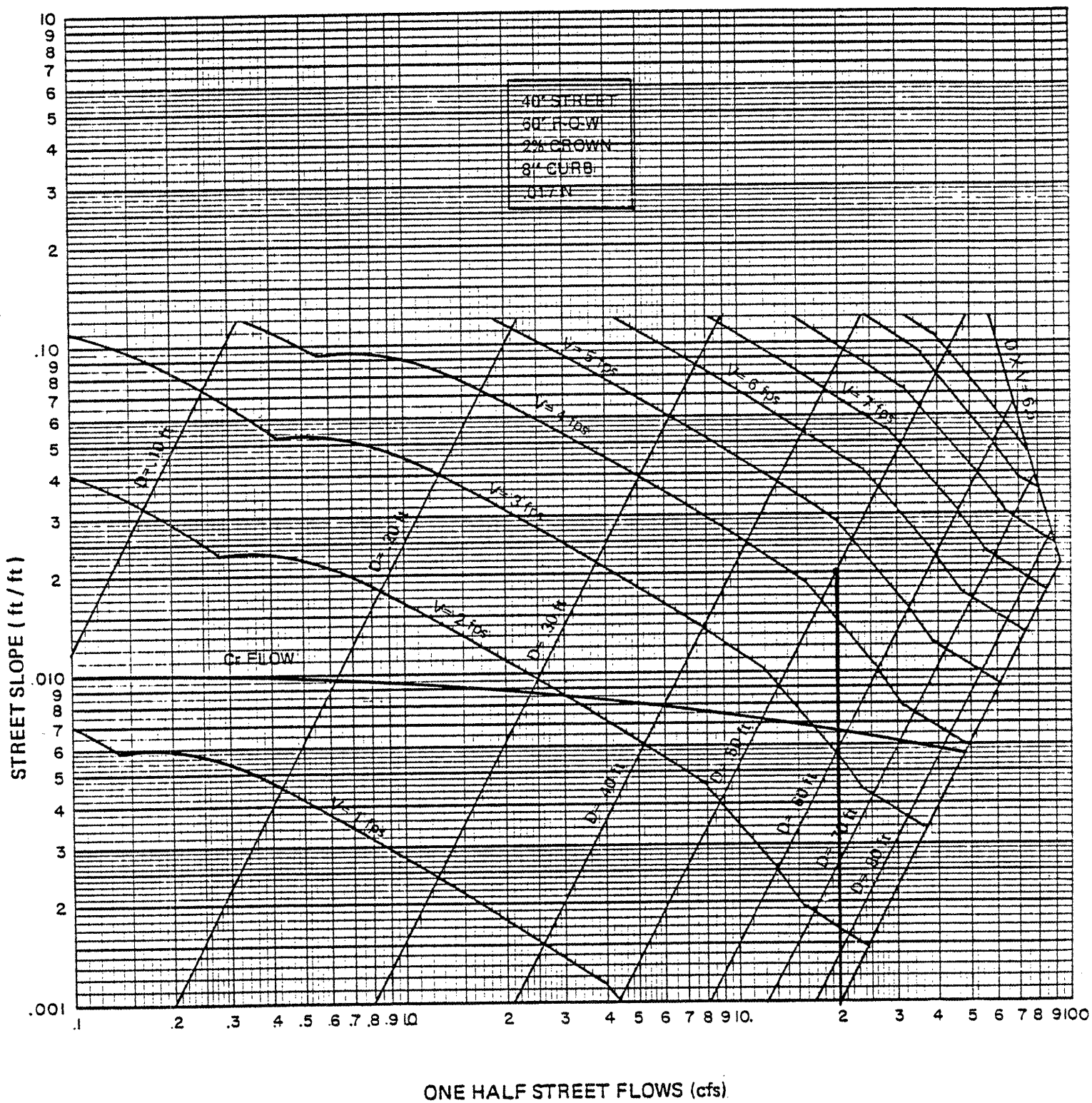
Elm St. Gutter Flow

ALL

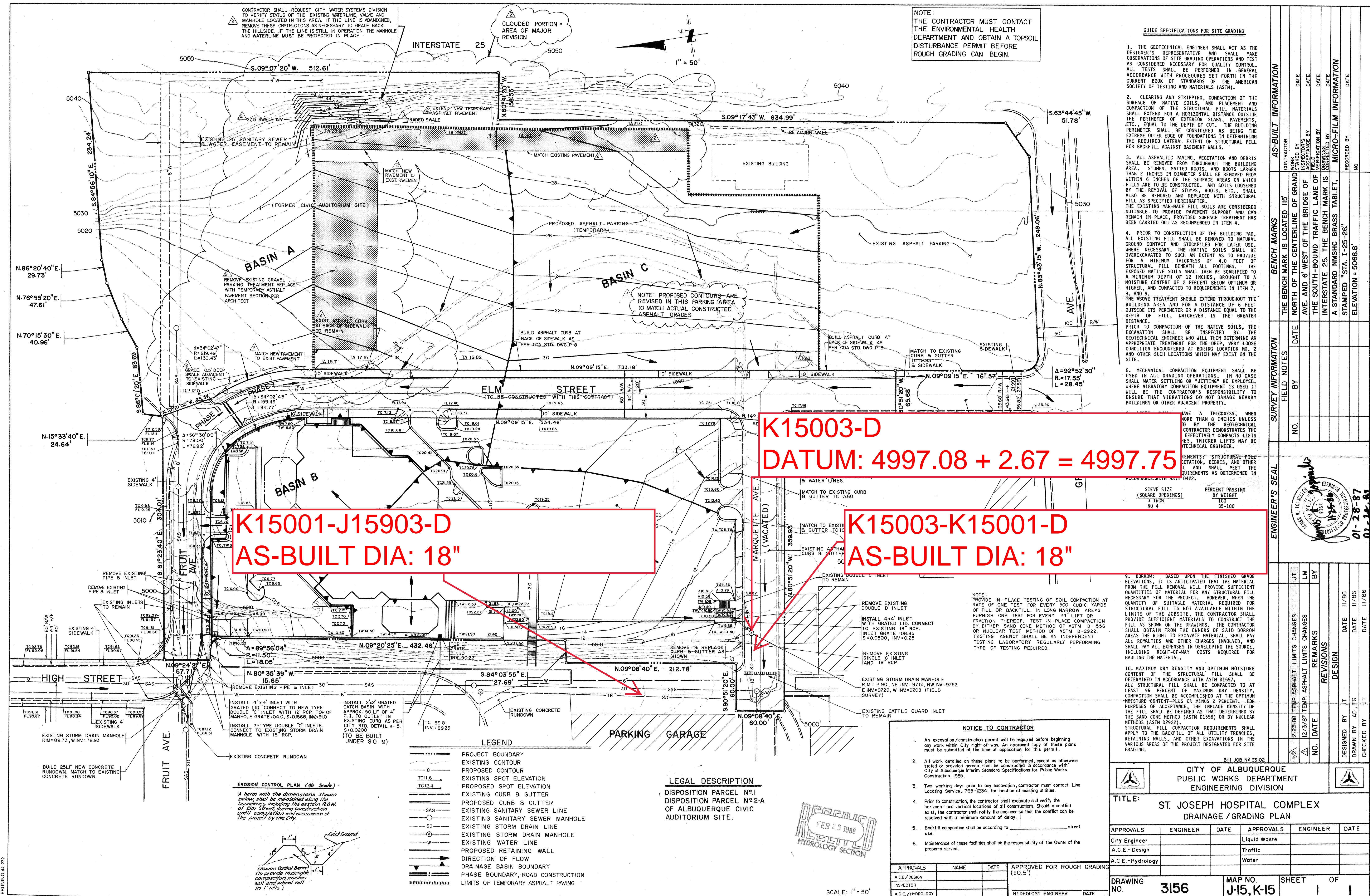
DATE

12/23/84

## STREET CAPACITY







NOTE:  
THE CONTRACTOR MUST CONTACT  
THE ENVIRONMENTAL HEALTH  
DEPARTMENT AND OBTAIN A TOPSOIL  
DISTURBANCE PERMIT BEFORE  
ROUGH GRADING CAN BEGIN.

GUIDE SPECIFICATIONS FOR SITE GRADING

1. THE GEOTECHNICAL ENGINEER SHALL ACT AS THE DESIGNER'S REPRESENTATIVE AND SHALL MAKE OBSERVATIONS OF SITE GRADING OPERATIONS AND TEST AS CONSIDERED NECESSARY FOR QUALITY CONTROL. ALL TESTS SHALL BE PERFORMED IN GENERAL ACCORDANCE WITH PROCEDURES SET FORTH IN THE CURRENT BOOK OF STANDARDS OF THE AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM).
2. CLEARING AND STRIPPING, COMPACTION OF THE SURGE OF NATIVE SOILS, AND PLACEMENT AND COMPACTION OF THE STRUCTURAL FILL MATERIALS SHALL EXTEND TO A HORIZONTAL DISTANCE OUTSIDE THE PERIMETER OF EXISTING SLABS, PAVEMENTS, ETC., EQUAL TO THE DEPTH OF CUT. THE BUILDING PERIMETER SHALL BE CONSIDERED AS BEING THE EXTREME OUTER EDGE OF FOUNDATIONS IN DETERMINING THE REQUIRED LATERAL EXTENT OF STRUCTURAL FILL FOR BACKFILL AGAINST BASEMENT WALLS.
3. ALL ASPHALTIC PAVING, VEGETATION AND DEBRIS SHALL BE REMOVED FROM THROUGHOUT THE BUILDING AREA, STUMPS, MATTED ROOTS, AND ROOTS LARGER THAN 2 INCHES IN DIAMETER SHALL BE REMOVED FROM WITHIN 6 INCHES OF THE SURFACE AREAS ON WHICH FILLS ARE TO BE CONSTRUCTED. ANY SOILS LOOSENED BY THE REMOVAL OF STUMPS, ROOTS, ETC., SHALL ALSO BE REMOVED AND REPLACED WITH STRUCTURAL FILL AS SPECIFIED HEREINAFTER. THE EXISTING MAN-MADE FILL SOILS ARE CONSIDERED SUITABLE TO PROVIDE PAVEMENT SUPPORT AND CAN REMAIN IN PLACE, PROVIDED SURFACE TREATMENT HAS BEEN CARRIED OUT AS RECOMMENDED IN ITEM 4.
4. PRIOR TO CONSTRUCTION OF THE BUILDING PAD, ALL EXISTING FILL SHALL BE REMOVED TO NATURAL GROUND CONTACT AND STOCKPILED FOR LATER USE. WHERE NECESSARY, THE NATIVE SOILS SHALL BE OVEREXCAVATED TO SUCH AN EXTENT AS TO PROVIDE FOR A MINIMUM THICKNESS OF 4.0 FEET STRUCTURAL FILL BENEATH ALL FOOTINGS. THE EXPOSED NATIVE SOILS SHALL THEN BE SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES, BROUGHT TO A MOISTURE CONTENT OF 2 PERCENT BELOW OPTIMUM OR HIGHER, AND COMPACTED TO REQUIREMENTS IN ITEM 7, 8, AND 9. THE ABOVE TREATMENT SHOULD EXTEND THROUGHOUT THE BUILDING AREA AND FOR A DISTANCE OF 6 FEET OUTSIDE ITS PERIMETER OR A DISTANCE EQUAL TO THE DEPTH OF FILL, WHICHEVER IS THE GREATER DISTANCE. PRIOR TO COMPACTION OF THE NATIVE SOILS, THE EXCAVATION SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER WHO WILL THEN DETERMINE AN APPROPRIATE TREATMENT FOR THE DEEP, VERY LOOSE CONDITION ENCOUNTERED AT BORING LOCATION NO. 2 AND OTHER SUCH LOCATIONS WHICH MAY EXIST ON THE SITE.
5. MECHANICAL COMPACTION EQUIPMENT SHALL BE USED IN ALL GRADING OPERATIONS. IN NO CASE SHALL WATER SETTLING OR "JETTING" BE EMPLOYED. WHERE VIBRATORY COMPACTION EQUIPMENT IS USED IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT VIBRATIONS DO NOT DAMAGE NEARBY BUILDINGS OR OTHER ADJACENT PROPERTY.

K15003-D  
DATUM: 4997.08 + 2.67 = 4997.75

K15001-J15903-D  
AS-BUILT DIA: 18"

K15003-K15001-D  
AS-BUILT DIA: 18"

| SIEVE SIZE<br>(SQUARE OPENINGS) | PERCENT PASSING<br>BY WEIGHT |
|---------------------------------|------------------------------|
| NO. 4                           | 35-100                       |

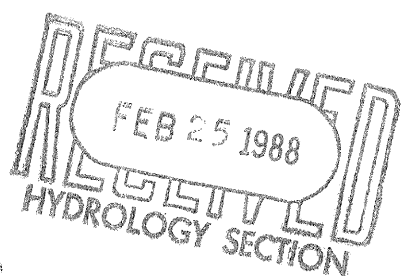
9. BORROW: BASED UPON THE FINISHED GRADE ELEVATIONS, IT IS ANTICIPATED THAT THE MATERIAL FROM THE FILL REMOVAL WILL PROVIDE SUFFICIENT QUANTITIES OF MATERIAL FOR ANY STRUCTURAL FILL NECESSARY FOR THE PROJECT. HOWEVER, WHEN THE QUANTITY OF SUITABLE MATERIAL REQUIRED FOR STRUCTURAL FILL IS NOT AVAILABLE WITHIN THE LIMITS OF THE JOBSITE, THE CONTRACTOR SHALL PROVIDE SUFFICIENT MATERIALS TO CONSTRUCT THE FILL AS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN FROM THE OWNERS OF SAID BORROW AREAS THE RIGHT TO EXCAVATE MATERIAL, SHALL PAY ALL ROYALTIES AND OTHER CHARGES INVOLVED, AND SHALL PAY ALL EXPENSES IN DEVELOPING THE SOURCE, INCLUDING RIGHT-OF-WAY COSTS REQUIRED FOR HAULING THE MATERIAL.

10. MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT OF THE STRUCTURAL FILL SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D1557. ALL STRUCTURAL FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY. COMPACTION SHALL BE ACCOMPLISHED AT THE OPTIMUM MOISTURE CONTENT PLUS OR MINUS 2 PERCENT. FOR PURPOSES OF ACCEPTANCE, THE INPLACE DENSITY OF THE FILL SHALL BE DEFINED AS THAT DETERMINED BY THE SAND CONE METHOD (ASTM D1556) OR BY NUCLEAR METHODS (ASTM D2922). STRUCTURAL FILL COMPACTION REQUIREMENTS SHALL APPLY TO THE BACKFILL OF ALL UTILITY TRENCHES, RETAINING WALLS, AND OTHER EXCAVATIONS IN THE VARIOUS AREAS OF THE PROJECT DESIGNATED FOR SITE GRADING.

| NOTICE TO CONTRACTOR                                                                                                                                                                                                                                                  |      |      |                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|---------------------------------------|
| 1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.                                                               |      |      |                                       |
| 2. All work detailed on these plans to be performed, except as otherwise stated or provided herein, shall be constructed in accordance with City of Albuquerque Interim Standard Specifications for Public Works Construction, 1985.                                  |      |      |                                       |
| 3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.                                                                                                                             |      |      |                                       |
| 4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all constructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay. |      |      |                                       |
| 5. Backfill compaction shall be according to _____ street use.                                                                                                                                                                                                        |      |      |                                       |
| 6. Maintenance of these facilities shall be the responsibility of the Owner of the property served.                                                                                                                                                                   |      |      |                                       |
| APPROVALS                                                                                                                                                                                                                                                             | NAME | DATE | APPROVED FOR ROUGH GRADING<br>(±0.5') |
| A.C.E./DESIGN                                                                                                                                                                                                                                                         |      |      |                                       |
| INSPECTOR                                                                                                                                                                                                                                                             |      |      |                                       |
| A.C.E./HYDROLOGY                                                                                                                                                                                                                                                      |      |      |                                       |

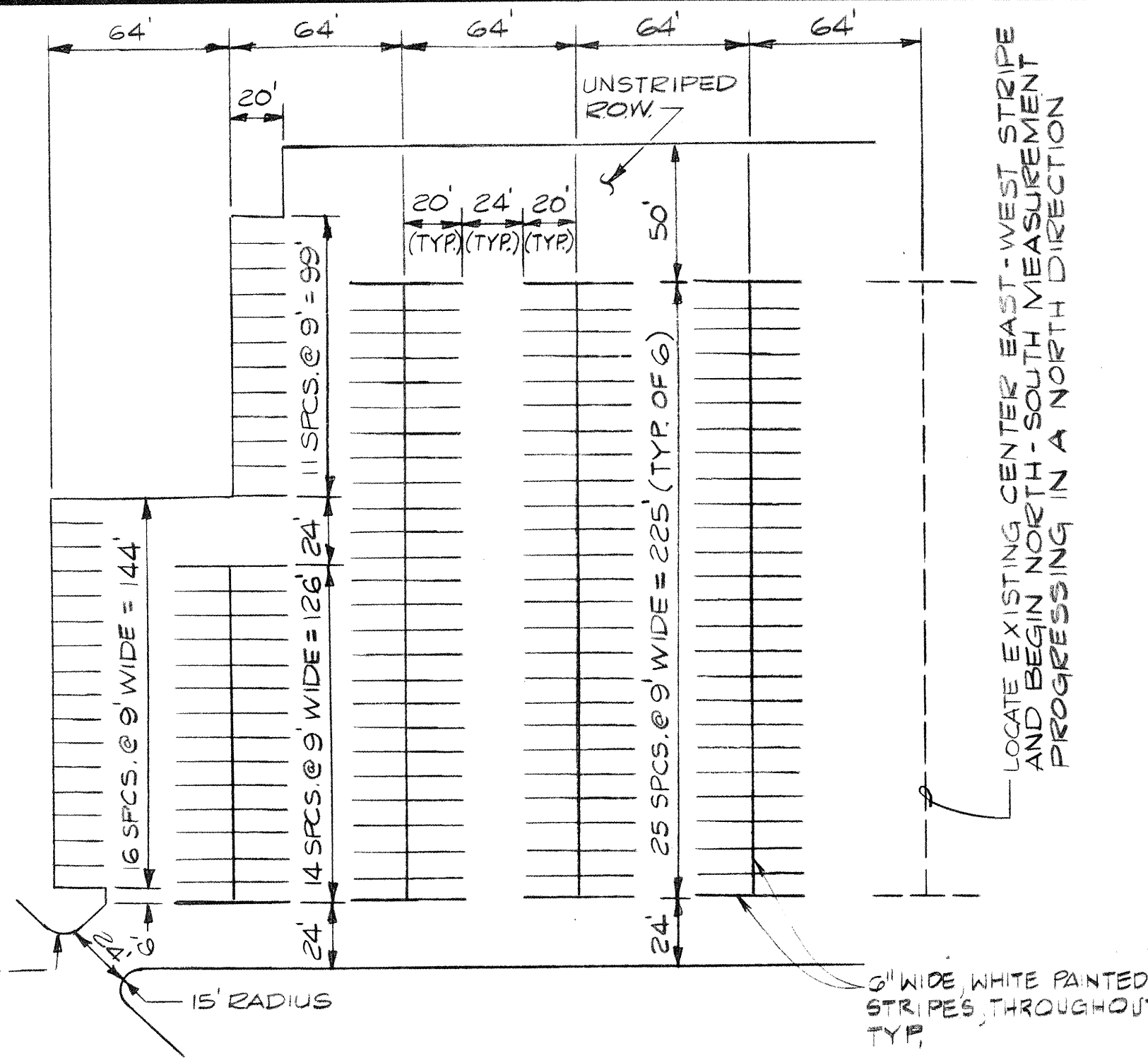
| LEGEND |                                    |
|--------|------------------------------------|
| -----  | PROJECT BOUNDARY                   |
| -----  | EXISTING CONTOUR                   |
| -----  | PROPOSED CONTOUR                   |
| -----  | EXISTING SPOT ELEVATION            |
| -----  | PROPOSED SPOT ELEVATION            |
| -----  | EXISTING CURB & GUTTER             |
| -----  | PROPOSED CURB & GUTTER             |
| -----  | EXISTING SANITARY SEWER LINE       |
| -----  | EXISTING SANITARY SEWER MANHOLE    |
| -----  | EXISTING STORM DRAIN LINE          |
| -----  | EXISTING STORM DRAIN MANHOLE       |
| -----  | EXISTING WATER LINE                |
| -----  | PROPOSED RETAINING WALL            |
| -----  | DIRECTION OF FLOW                  |
| -----  | DRAINAGE BASIN BOUNDARY            |
| -----  | PHASE BOUNDARY, ROAD CONSTRUCTION  |
| -----  | LIMITS OF TEMPORARY ASPHALT PAVING |

LEGAL DESCRIPTION  
DISPOSITION PARCEL NO.1  
DISPOSITION PARCEL NO.2-A  
OF ALBUQUERQUE CIVIC  
AUDITORIUM SITE.

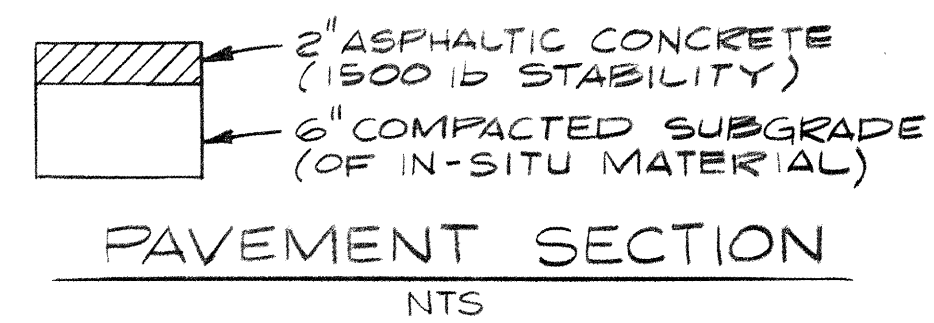


|                                                                        |                    |
|------------------------------------------------------------------------|--------------------|
| CITY OF ALBUQUERQUE<br>PUBLIC WORKS DEPARTMENT<br>ENGINEERING DIVISION |                    |
| TITLE: ST. JOSEPH HOSPITAL COMPLEX<br>DRAINAGE / GRADING PLAN          |                    |
| APPROVALS                                                              | ENGINEER           |
| City Engineer                                                          | Liquid Waste       |
| A.C.E. - Design                                                        | Traffic            |
| A.C.E. - Hydrology                                                     | Water              |
| DRAWING NO. 3156                                                       | MAP NO. J-15, K-15 |
| SHEET 1                                                                | OF 1               |





STRIPING PLAN & PAVEMENT DIMENSIONS  
1" = 50'



NOTE TO THE CONTRACTOR

THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, DISCUSSIONS WITH LOCAL UTILITIES, ENGINEERING OFFICIALS, AND PREVIOUS CONSTRUCTION DRAWINGS PROVIDED TO OR OBTAINED BY THE ENGINEER. IT IS POSSIBLE THAT THE EXACT LOCATION OF LINES IN THE IMMEDIATE VICINITY OF THE PROJECT MAY BE SLIGHTLY DIFFERENT FROM THE LOCATION SHOWN ON THIS DRAWING. IF ADDITIONAL LINES ARE ENCOUNTERED, THEY SHALL BE EXPOSED AND IDENTIFIED BY THIS CONTRACTOR. WHERE ADDITIONAL LINES AND/OR DIFFERING LOCATIONS ARE ENCOUNTERED, THIS CONTRACTOR SHALL REQUEST THAT THE ENGINEER MAKE A RULING AS TO ANY NECESSARY CHANGE OF MATERIALS, RE-ROUTING, ABANDONING OR RELOCATING OF SUCH LINES. GAS COMPANY, PNM, US WEST AND/OR CABLE TV SHALL BE THE SOLE AUTHORITY IN RULING ON THE DISPOSITION OF THEIR EXISTING LINES. ALL LINES ENCOUNTERED THAT INTERFERE WITH CONSTRUCTION SHALL BE RELOCATED TO CLEAR CONSTRUCTION (IF ACTIVE) AND SHALL BE REMOVED (IF INACTIVE) BY THIS CONTRACTOR UNDER THIS CONTRACT. ALL BIDDERS ARE CAUTIONED TO INVESTIGATE SITE CONDITIONS BEFORE SUBMITTING THEIR BIDS. ALL EXISTING PIPING SHALL HAVE A MINIMUM EARTH COVERAGE AND DEPTHS SHALL BE ADJUSTED AS REQUIRED TO PROVIDE MINIMUM COVERAGE DUE TO NEW GRADES OR CONSTRUCTION. CONTRACTOR SHALL PAY FOR ANY AND ALL COSTS OF PERMITS, LINE EXTENSIONS, FIRELINES, METER INSTALLATION, ETC., AS REQUIRED BY LOCAL GOVERNING UTILITIES ENGINEERING OFFICIALS.

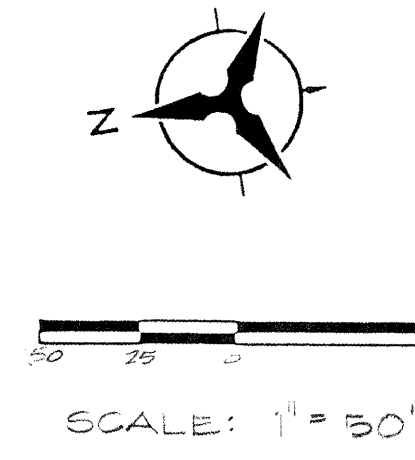
GRADING NOTES

- ALL GRADING AND CONSTRUCTION UNDER THIS PLAN TO BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", LATEST EDITION.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REFER TO PROJECT GEOTECHNICAL REPORT FOR INFORMATION RELATED TO GRADING, EXISTING SITE CONDITIONS, SUBSURFACE SOILS AND FOUNDATION CONSIDERATIONS. ALL SCARIFYING, EXCAVATION, COMPACTION AND REPLATTED SOILS WORK SHALL BE DONE UNDER SUPERVISION OF THE SOILS ENGINEER AND IN ACCORDANCE WITH THE ABOVE REFERENCED SITE SOILS REPORT.
- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED TO THE ELEVATIONS, AND IN ACCORDANCE WITH THE TYPICAL SECTIONS SHOWN ON THIS PLAN OR REFERENCED IN THE PROJECT OR GEOTECHNICAL SPECIFICATIONS.

- CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS AND GRADING OPERATIONS.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- UNLESS OTHERWISE SHOWN, DRAINAGE SWALES SHALL HAVE A MINIMUM 1% SLOPE IN THE DIRECTION OF FLOW.
- A GRADING EARTHWORK BALANCE IS NOT ACHIEVED UNDER THIS PLAN. MAXIMUM SLOPES SHALL BE 2:1 (HORIZONTAL) TO VERTICAL.
- AN ENGINEER'S DRAINAGE CERTIFICATION, IN ACCORDANCE WITH CITY DPM PROCEDURES, MAY BE REQUIRED FOR THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER OR ENGINEER THREE WEEKS PRIOR TO REQUESTING PERMANENT CERTIFICATES OF OCCUPANCY.
- WHERE DRAINAGE FLOWS ALONG A CONCRETE GUTTER (E.G., C & G OR VALLEY GUTTER), A SLOPE OF 0.5% SHALL BE PERMISSIBLE.
- UNLESS OTHERWISE SHOWN, DRAINAGE SWALES OUTSIDE PAVEMENT SHALL HAVE A MINIMUM 1% SLOPE IN THE DIRECTION OF FLOW. DRAINAGE COURSES WITHIN PAVEMENT AREAS SHALL BE CONSTRUCTED TO PROVIDE 1% MINIMUM SLOPES IN THE DIRECTION OF FLOW. ANY CONFLICTS ON THIS PLAN WITH THIS REQUIREMENT SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER FOR RESOLUTION.
- IT IS THE INTENT OF THIS PLAN THAT ALL AREAS OF THE PROJECT BE PROVIDED WITH ADEQUATE DRAINAGE. CONTRACTOR SHALL ENSURE THAT THIS CONDITION IS MET BY VERIFYING SLOPES PRIOR TO CONSTRUCTION. CONFLICTS WITH EXISTING FIELD CONDITIONS OR ERRORS WITHIN THESE PLANS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.

EROSION CONTROL MEASURES

- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO ADJACENT PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
- THE CONTRACTOR SHALL SECURE TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING CONSTRUCTION. THE COST OF REQUIRED EROSION CONTROL MEASURES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT COST.



DRAINAGE CALCULATIONS

SITE AREA (NEW PAVEMENT AREA) = 1.1 ACRES  
NOTE: DOES NOT INCLUDE THE EXISTING CHIP SEAL AREA

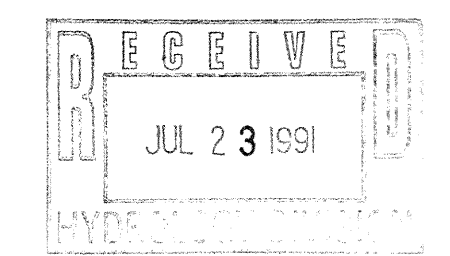
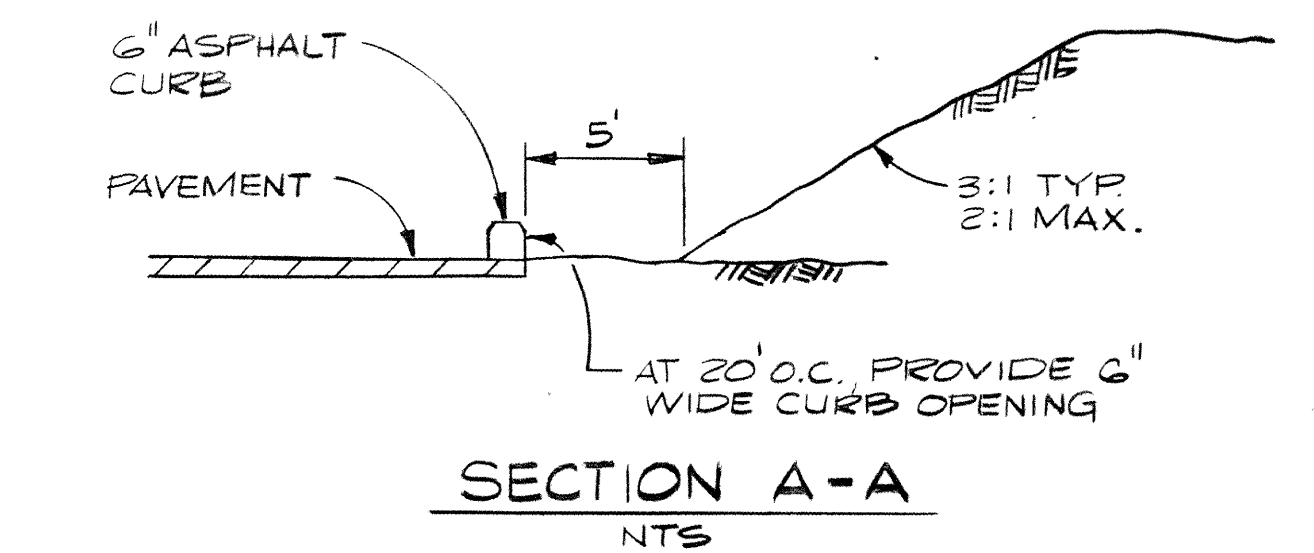
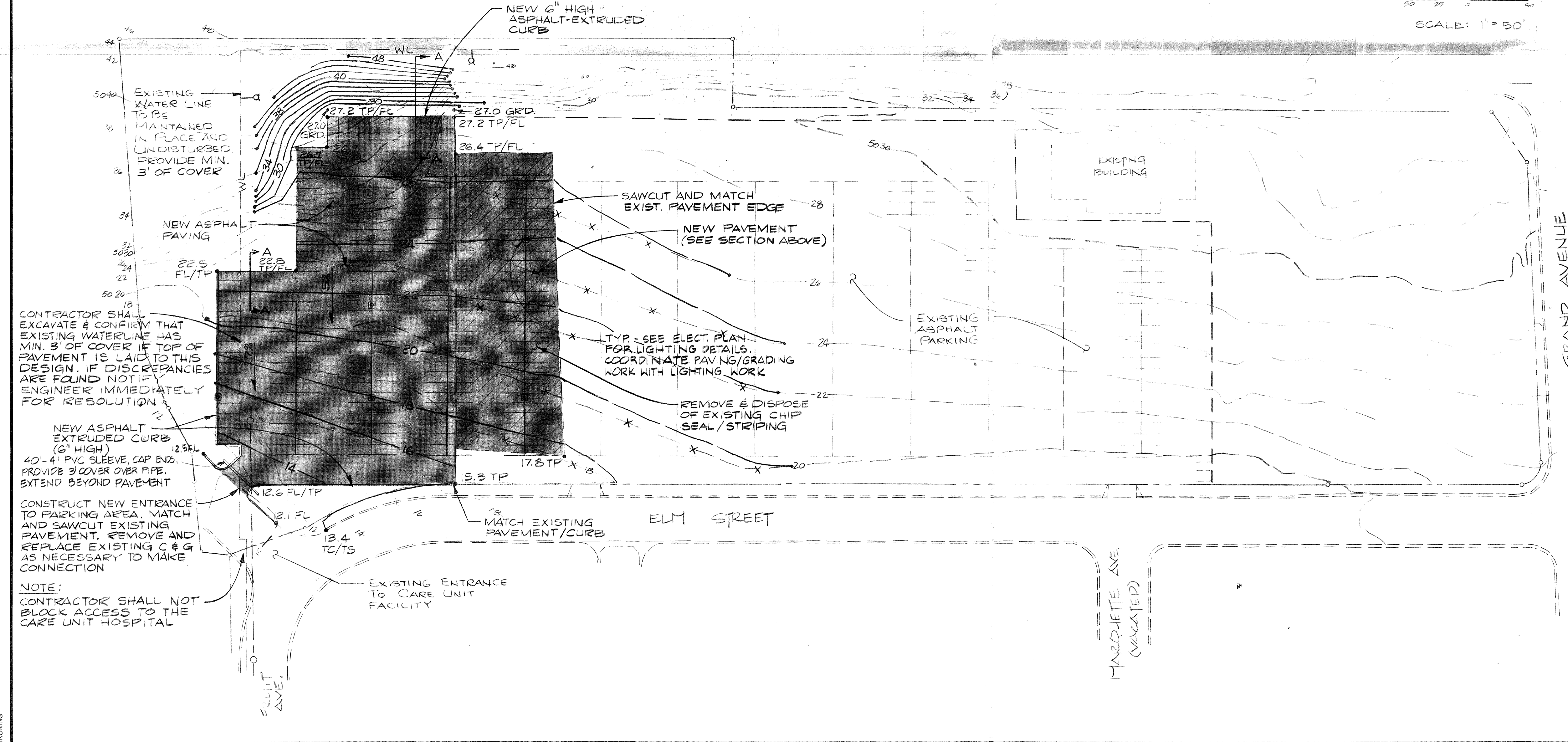
$T_c = 10$  MINUTES, INTENSITY = 4.86  $\frac{1}{4}$  IN/HR

$Q = CIA$  WHERE  $C = 0.40$  UNDEVELOPED (UNPAVED)  
 $C = 0.95$  DEVELOPED (PAVED)

EXISTING:  $Q_{UNPAVED} = 0.40(4.86)1.1 = 2.13$  cfs

PROPOSED:  $Q_{PAVED} = 0.95(4.86)1.1 = 5$  cfs

NOTE: THIS PAVING PLAN INCREASES STORM RUNOFF IN THE 100-YEAR STORM ONLY 2.9 cfs (5 - 2.1).



|                                            |                          |
|--------------------------------------------|--------------------------|
| ST. JOSEPH'S HOSPITAL<br>DOWNTOWN LOCATION |                          |
| Project No.                                | PARKING LOT<br>EXPANSION |
| Seal                                       | GRADING PLAN             |
| Job No. 20255-03                           | Sheet 2 of 2             |
| Drawn By: JRT                              | Date:                    |
| Checked By: JRT                            | Scale: 1" = 50'          |

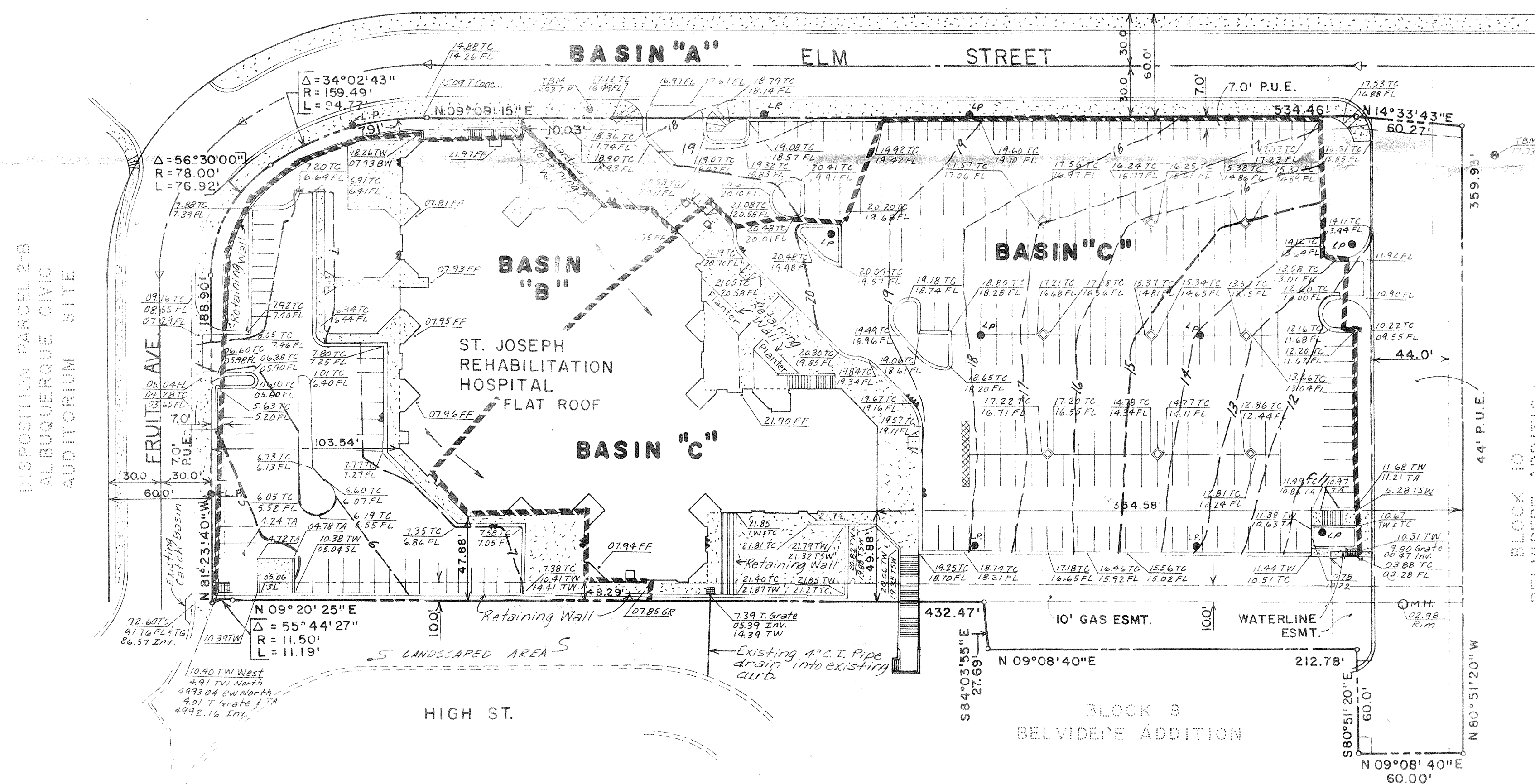




- LEGEND**
- ◁ CITY OF ALBUQUERQUE SURVEY CENTERLINE MONUMENTS
  - L.P. ● LIGHT POLE
  - GRATE
  - M.H. ○ MANHOLE
  - PROPERTY LINE
  - TEMPORARY BENCH MARK
  - ▲ ROOF DRAINS

NOTE:  
THIS DRAINAGE PLAN ASBUILT IS FOR  
BASIN "B" AND THE WEST HALF OF  
BASIN "C" (WEST OF ELM ST. N.E.) ONLY.

TRACT 2  
ST. JOSEPH'S HOSPITAL COMPLEX



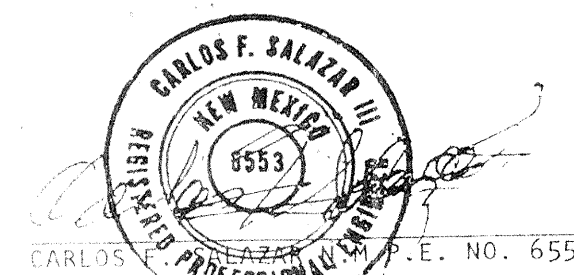
J. John F. Esquivel, New Mexico Registered Land Surveyor # 5949, certify that the data shown hereon was derived from an actual field survey performed by me or under my direct supervision and that the same is true and correct to the best of my knowledge and belief.

*John F. Esquivel*  
J.F. Esquivel  
N.M.L.S. # 5949  
4/7/88  
3/8/89

RECEIVED  
JAN 10 1990  
HYDROLOGY SECTION

RECORD DRAWING:

This drawing as modified shows private improvements as constructed. These modifications have been made using information and measurements obtained by field survey crews performed by A & E Engineering Inc. The modifications conform to the minimum requirements required by Section 8-3 of the Drainage Ordinance to the best of my knowledge and belief.



4-4-88-3-8-89

**DRAINAGE PLAN  
ASBUILT  
FOR  
TRACT 1  
ST. JOSEPH HOSPITAL COMPLEX  
ALBUQUERQUE, NEW MEXICO  
OCTOBER, 1988**

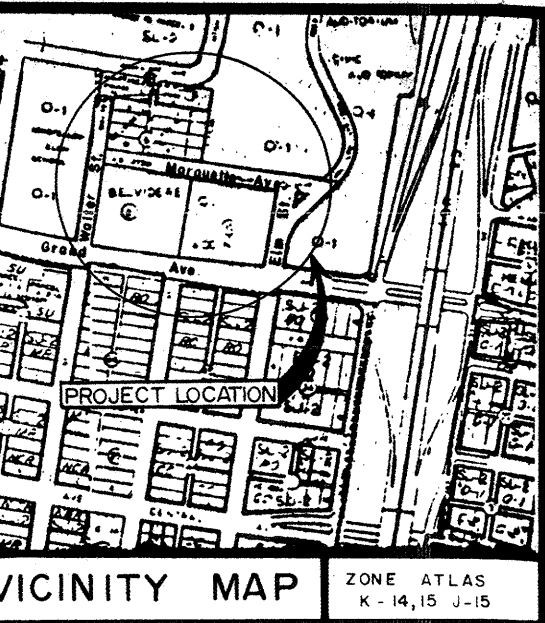


1330 SAN PEDRO NE - SUITE 208  
ALBUQUERQUE, NEW MEXICO 87110 (505) 266-8791



TOPOGRAPHIC SURVEY OF  
**ST. JOSEPH HOSPITAL SITE**  
(COMPRISING PORTIONS OF BLOCKS 8,9,10 AND VACATED PUBLIC THOROUGHFARES)  
BELVIDERE ADDITION  
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

AUG. 1983



SCALE 1" = 20'

- LEGEND**
- PROPERTY LINE
  - CONCRETE
  - ELECTRICAL TRANSMISSION LINE (OVERHEAD)
  - PP POWER POLE
  - LS LIGHT STANDARD
  - TCB TRAFFIC CONTROL BOX
  - FH FIRE HYDRANT
  - DS DRY STANDPIPE
  - WM WATER METER
  - WV WATER VALVE
  - SDI STORM DRAIN INLET
  - M MANHOLE
  - E EVERGREEN TREE
  - D DECIDUOUS TREE
  - S SHRUB
  - CO CLEAN CUT
  - TOP CURB & FLOW LINE
  - TOP CONC. & BACK OF SIDEWALK
  - TOP OF ASPHALT
  - TOP OF GRATE & NATURAL GROUND
  - TOP CONC. WALL & INVERT

- NOTES:**
1. UNDERGROUND TELEPHONE COMMUNICATION LINES LOCATIONS ARE BASED ON RECORDS OF UTILITY OWNERS, ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
  2. IRRIGATION (SPRINKLER) SYSTEM "AS CONSTRUCTED" PLANS HAVE NOT BEEN MADE AVAILABLE TO ALBUQUERQUE SURVEYING CO., INC. EVERY EFFORT IS BEING MADE TO OBTAIN COPIES OF THESE PLANS, SHOULD THEY BE MADE AVAILABLE SUCH LOCATIONS AS MAY BE DELINEATED THEREON SHALL BE ADDED TO THIS SURVEY.

**STORM SEWER MANHOLE DATA**

**MANHOLE "A"**  
N. Rim Elev. = 5002.90  
N. Inv. Elev. = 4997.51 - 12"  
NW Inv. Elev. = 4997.52 - 12"  
E. Inv. Elev. = 4997.29 - 12"  
S. Inv. Elev. = 4997.08 - 12"

**MANHOLE "B"**  
N. Rim Elev. = 4999.80  
N. Inv. Elev. = 4992.76 - 12"  
E. Inv. Elev. = 4993.10 - 12"  
SE Inv. Elev. = 4994.77 - 12"  
SE Inv. Elev. = 4993.35 - 10"

**MANHOLE "C"**  
N. Rim Elev. = 4987.57  
N. Inv. Elev. = 4980.24 - 24"  
NW Inv. Elev. = 4982.74 - 12"  
NE Inv. Elev. = 4981.60 - 12"  
E. Inv. Elev. = 4980.63 - 12"

**MANHOLE "D"**  
N. Rim Elev. = 4996.75  
N. Inv. Elev. = 4980.99 - 36"  
W. Inv. Elev. = 4981.02 - 36"

**MANHOLE "E"**  
N. Rim Elev. = 5000.16  
N. Inv. Elev. = 4996.01  
Top 12" Pipe N6S Elev. = 4996.71  
Top 18" Pipe Valve Elev. = 4996.51  
Bottom of MH Elev. = 4993.49

**MANHOLE "F"**  
N. Rim Elev. = 5022.21  
E. Inv. Elev. = 5017.81 - 12"  
S. Inv. Elev. = 5017.87 - 12"

**MANHOLE "G"**  
N. Rim Elev. = 5022.20  
N. Inv. Elev. = 5016.20 - 12"  
S. Inv. Elev. = 5012.59 - 12"  
W. Inv. Elev. = 5012.46 - 12"

**MANHOLE "H"**  
N. Rim Elev. = 5003.32  
N. Inv. Elev. = 4999.00 - 12"  
E. Inv. Elev. = 4999.45 - 6"  
W. Inv. Elev. = 4999.13 - 12"

**MANHOLE "J"**  
N. Rim Elev. = 5015.03  
NE Inv. Elev. = 5006.29 - 8"  
SW Inv. Elev. = 5006.16 - 8"  
NW Inv. Elev. = 5006.29 - 4"

**BENCH MARK:** STA. 1-25-25 IS A STANDARD CITY OF ALBUQUERQUE BRASS CAP LOCATED 68' EAST OF THE CENTERLINE OF I-25 AT THE LOMA OVERPASS. STA. 15 IS LOCATED AT THE NE CORNER OF THE BRIDGE. ELEV. = 5068.411.

ALL UNDERGROUND UTILITY LOCATIONS ARE AS PER CITY OF ALBUQUERQUE ENGINEERING DEPARTMENT RECORDS AND GAS COMPANY OF NEW MEXICO RECORDS.

**SURVEYOR'S CERTIFICATE**

I, FRED SANCHEZ, HEREBY CERTIFY THAT I AM A DULY QUALIFIED LAND SURVEYOR, REGISTERED UNDER THE LAWS OF THE STATE OF NEW MEXICO AND THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, SHOWS ACCURATE DIMENSIONS, LAND AREAS, SHOWS ALL EASEMENTS MADE KNOWN TO ME BY THE OWNER, UTILITY COMPANIES OR OTHER PARTIES EXPRESSING AN INTEREST AND THAT THE SURVEY MEETS THE MINIMUM REQUIREMENTS FOR MONUMENTATION AND SURVEYS OF THE ALBUQUERQUE SUBDIVISION ORDINANCE AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Fred Sanchez*  
FRED SANCHEZ, N.M.L.S. NO. 4078

Sanitary Sewer M.H. "F"

Sanitary Sewer M.H. "D"

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