

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 Comp	lex ZONE ATLAS/DRNG. FILE #: J-K-15-Z
LEGAL DESCRIPTION: Tract One, St. Joseph	h'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 2	208 PHONE: 266-8791
CONTRACTOR: Jaynes Corporation	CONTACT: Gordon Burch
ADDRESS: 2906 Broadway N.E.	PHONE: 345-8591
PRE-DESIGN MEETING: JANO 1990 YES NO HYDROLOGY SECTION 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 X 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 X CERTIFICATE OF OCCUPANCY APPROVAL ROUGH GRADING PERMIT APPROVAL GRADING/PAVING PERMIT APPROVAL OTHER (SPECIFY)
DATE SUBMITTED: Nov 14, 1989	
BY: A & E Engineering Inc.	



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:

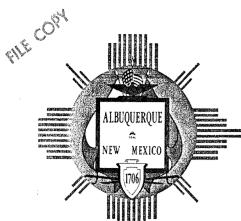
Based on the information provided on your resubmittal of March 9, 1989, the revised Certification is acceptable. Please be advised that the problem of the erosion on the west slope of the new rehabilitation hospital must be corrected and certified prior to issuing the permanent Certificate of Occupancy.

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

Cordially,

Bernie J. Montoya, C.E. Engineering Assistant

BJM/bsj (WP+555)



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 Bohannan-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)



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR
KEN SCHULTZ

CHIEF ADMINISTRATIVE OFFICER

DEVELOPMENT & ENTERPRISE SERVICES

DEPUTY CAO

GENE ROMO

LARRY LARRANAGA

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 MAR 0 9 1989

DFG 3 0 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



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR KEN SCHULTZ

CHIEF ADMINISTRATIVE OFFICER DEPUTY CAO DEVELOPMENT & ENTERPRISE SERVICES DEPUTY CAO
PUBLIC SERVICES

GENE ROMO

LARRY LARRANAGA

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)

5, 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 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



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR
KEN SCHULTZ

CHIEF ADMINISTRATIVE OFFICER

DEPUTY CAO PUBLIC SERVICES DEPUTY CAO PLANNING/DEVELOPMENT

LTZ GENE ROMO

FRANK MARTINEZ

BILL MUELLER

March 7, 1988

James Topmiller, P.E. Bohannan-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



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz Mayor UTILITY DEVELOPMENT DIVISION HYDROLOGY SECTION (505) 768-2650

January 12, 1988

Laura Milne Bohannan-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

Waiter Nickerson, P.E., City Engineer

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz Mayor UTILITY DEVELOPMENT DIVISION
HYDROLOGY SECTION
Hanch 11, 1987 (505) 768-2650

James Topmiller, P.E. Pohannan-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-15/06)

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.

Cordialty,

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

cci – Becky Bancoval, Permits

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP



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. Bohannan-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

Walter Nickerson, P.E., City Engineer

RAS/bsj

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

HYDROLOGY SECTION 123 Central NW, Albuquarque, NM 87482 (595) 765 7647

December 28, 1986

James Topmiller, P.E. Bohannan - 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 inconsistancy 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

ENGINEERING GROUP

- 3. Prior to Building approval by Hydrology be 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.
 - Provide two copies of the Building Drainage Plan with the required S.O. #19 constructions 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



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. Bohannan-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



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 Bohannan-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



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

X15-06

April 16, 1980

Yovan Stevanovich Allandale Insurance 915 Harger Road Oakbrook, Illinois 60521

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.



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 2, 1991

James Topmiller
Bohannan-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. Engineering Assistant

BJM:jc WP+555

PUBLIC WORKS DEPARTMENT



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 16, 1991

James Topmiller Bohannan-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, C.E. Engineering Assistant

BJM/bsj (WP+555)

PUBLIC WORKS DEPARTMENT

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 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 Area = $73.363 \, \text{ft}^2 = 1.7 \, \text{Acres}$ $Q_{\infty} = C_{i}A = (0.95)(4.86)(1.7)$ 9100 = 7.85 CFS.

Runoff Volume 100 = 14,200 CUFT

Orifice egn.

* Assume available Head = 6"

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

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

Neenah
$$R-3227$$
 $29\% \times 21\%$ $A=2.3$ $R-3401$ $21\% \times 23\% \times 2(21\%)$ $A=1.9$ $R-3401$ $23\% \times 2(21\%)$ $A=3.8$ $R-3404$ $21\% \times 21\% \times 21\%$ $A=1.9$ $R-3404$ $21\% \times 21\% \times 21\%$ $A=1.9$ $R-3405$ $23\% \times 28\% \times 4$

3' Dia MH, 1792/3 HG/

A=2.7ft2

BOHANNAN-HUSTON INC.

ST Joseph Site Runoff

Runoff: Northwest Corner

Area = $25,000 ft^2 = 0.57 Ac$

Q= C: A = (0.95) (4.86) (0.57)

= 2.63 crs

Orifice equation

* Assume Available Head = 6"

 $A = \frac{Q}{C\sqrt{Zgh}}$

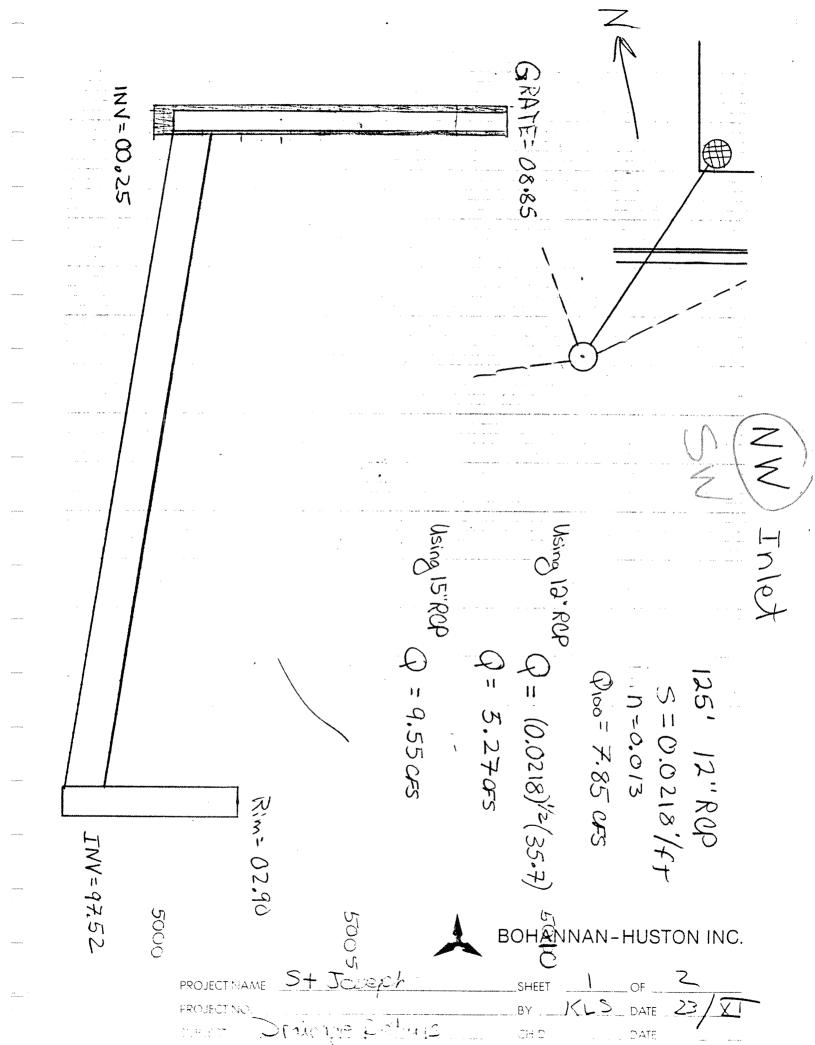
= 0.77 ft2

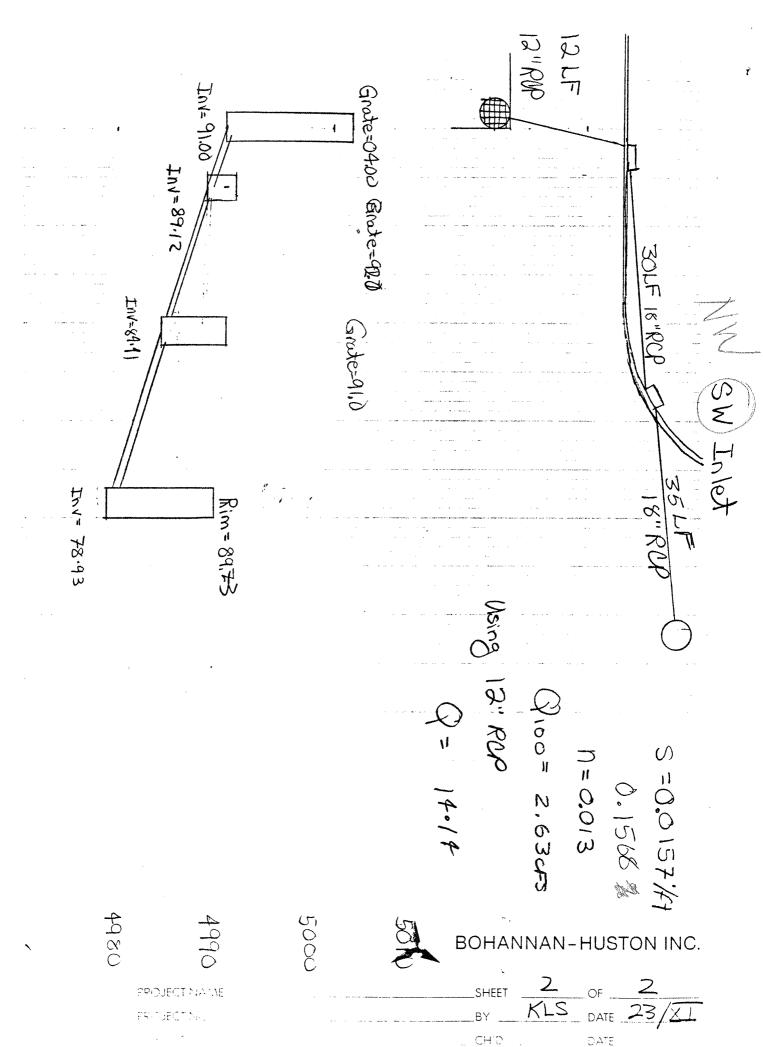
Using Neenah Catalog "R" 9th Edition

a 2' grated math hole-cover has an open area of ~1.0 fts and will be occeptable.

BOHANNAN-HUSTON INC.

Site Runoff CHID DATE







Using 0-5ft as maximum albumble depth in street.

$$Q = \frac{1.49}{n} (A Rh^{2/3} 5 o'z)$$

N = 0.017 $A = 6.25 ft^2$ $P_U = 50.505 ft$

Rn= 0.1238#

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

Q = 20.0 CFS

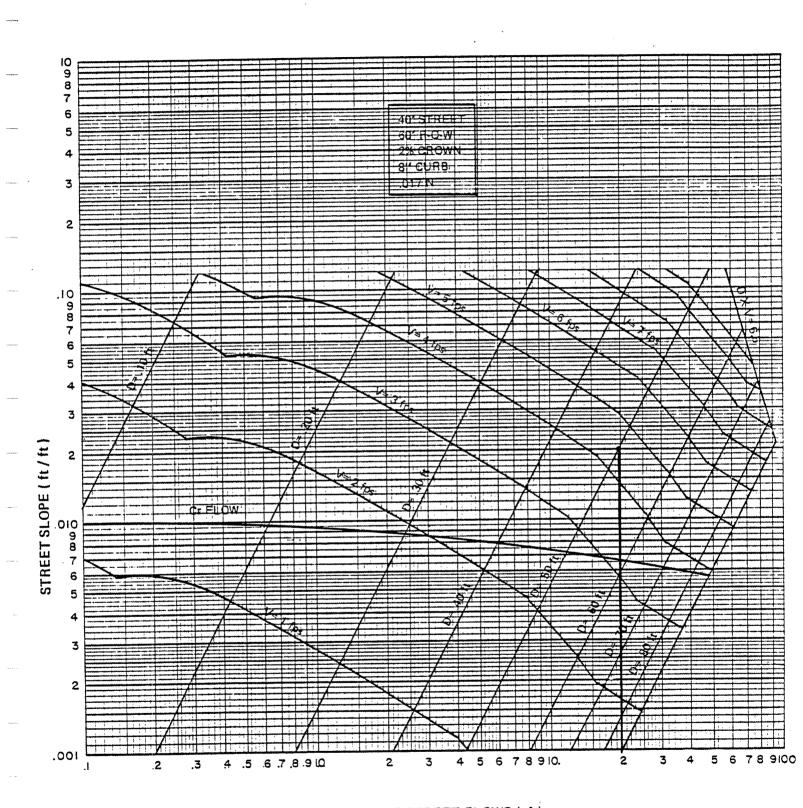
The existing runoff from Basin A is 19, 1cFs (100 VR) therefore the street capacity is adequate.



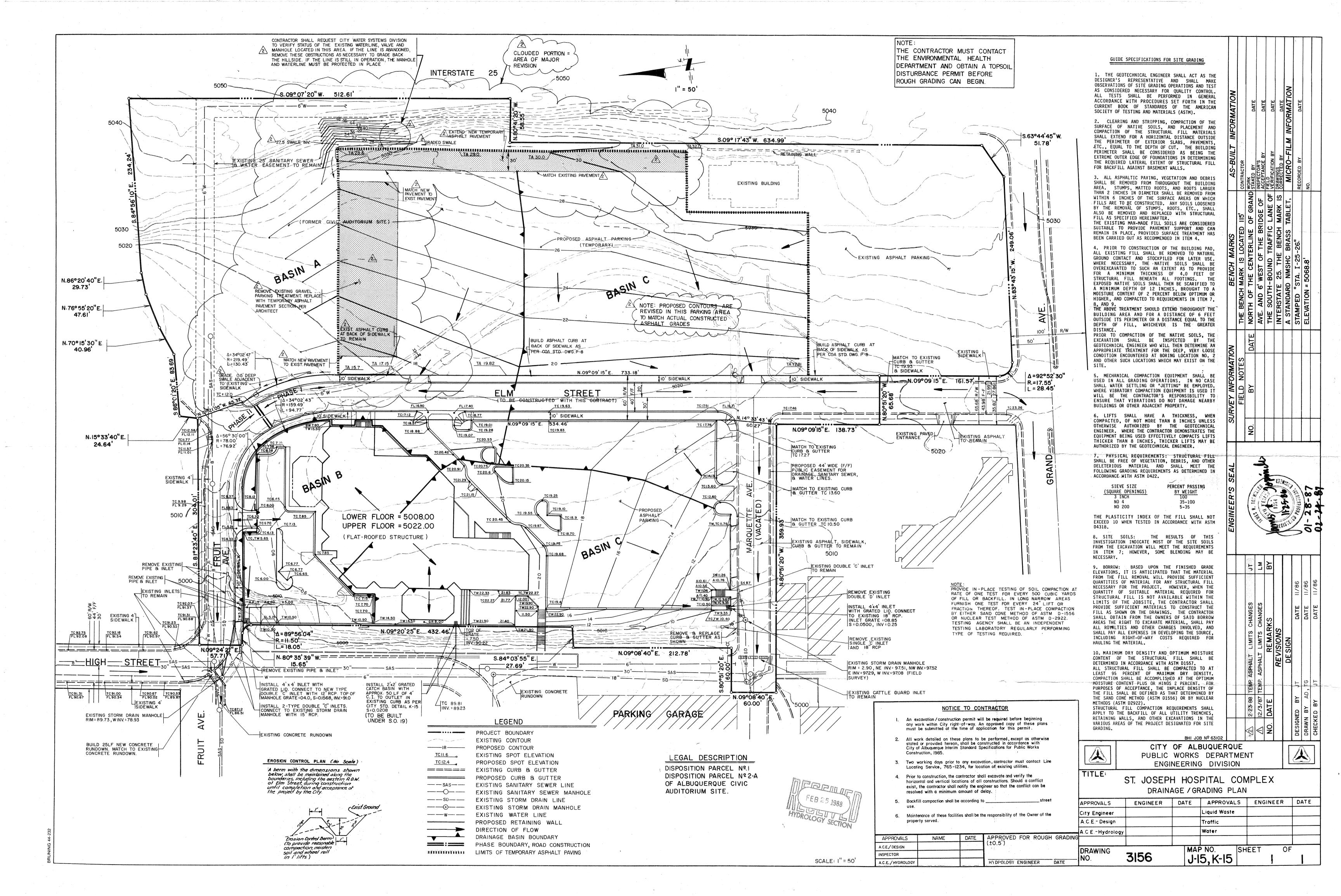
BOHANNAN-HUSTON INC.

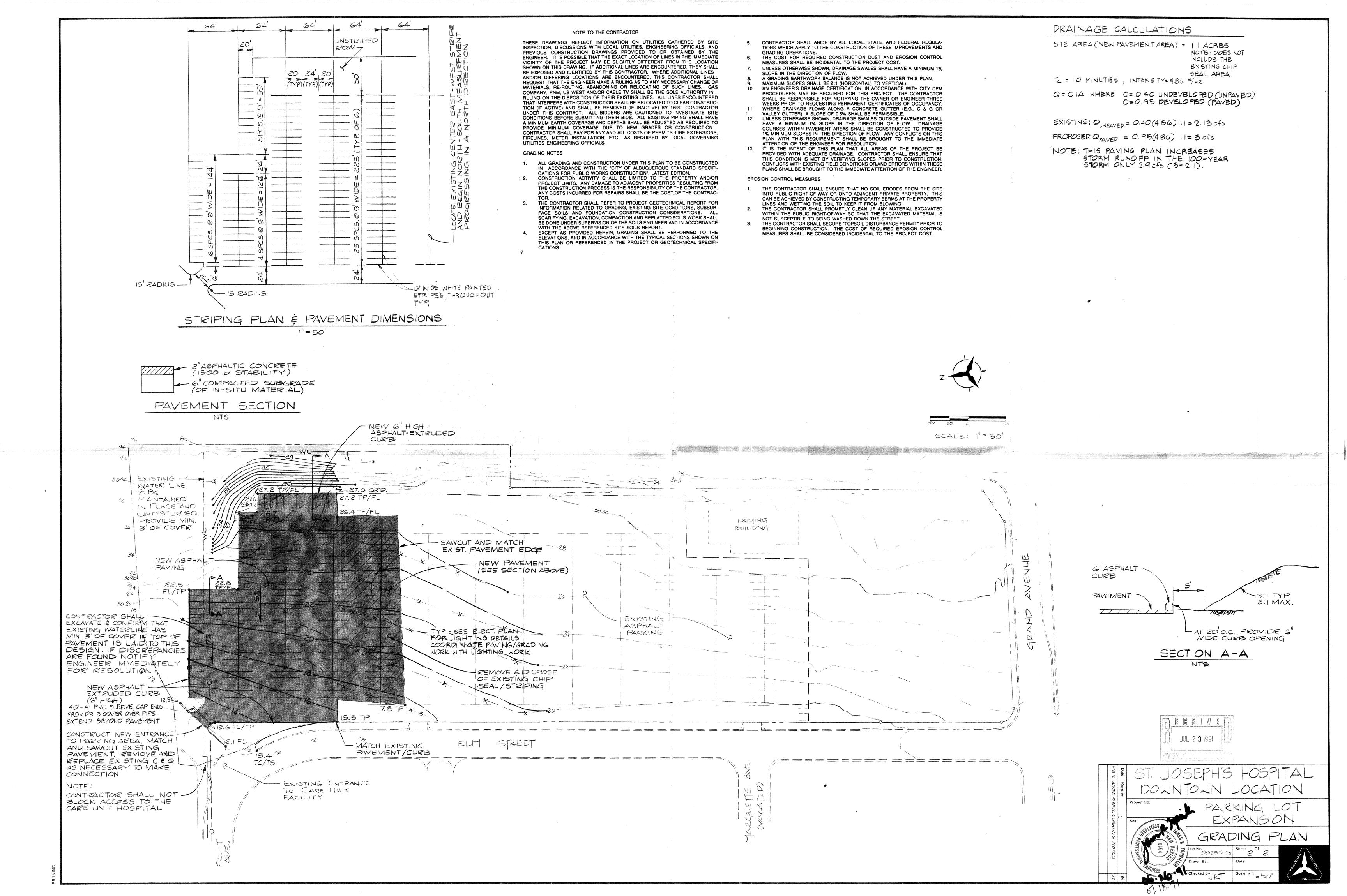
PROJECTION ST. JOSEPH TO PITCH SHEET 1 OF BY KLS DATE 19/22/8

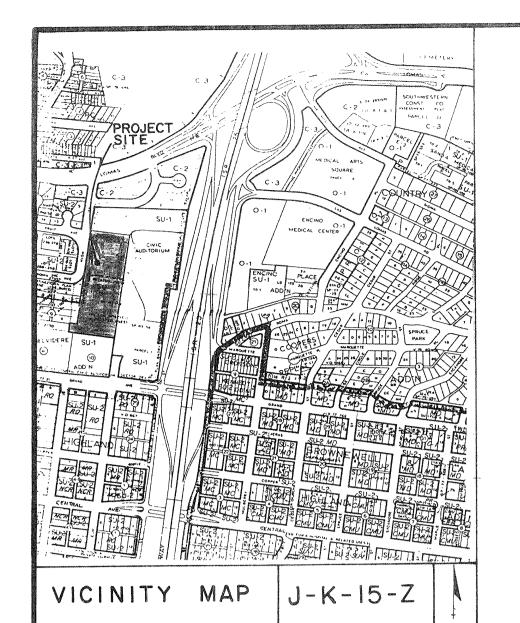
STREET CAPACITY



ONE HALF STREET FLOWS (cfs)









DRAINAGE PLAN ASBUILT FOR

ST. JOSEPH HOSPITAL COMPLEX
ALBUQUERQUE, NEW MEXICO
OCTOBER, 1988

CITY OF ALBUQUERQUE SURVEY CENTERLINE MONUMENTS

L.R.● LIGHT PQLE

GRATE

M.H.O MANHOLE

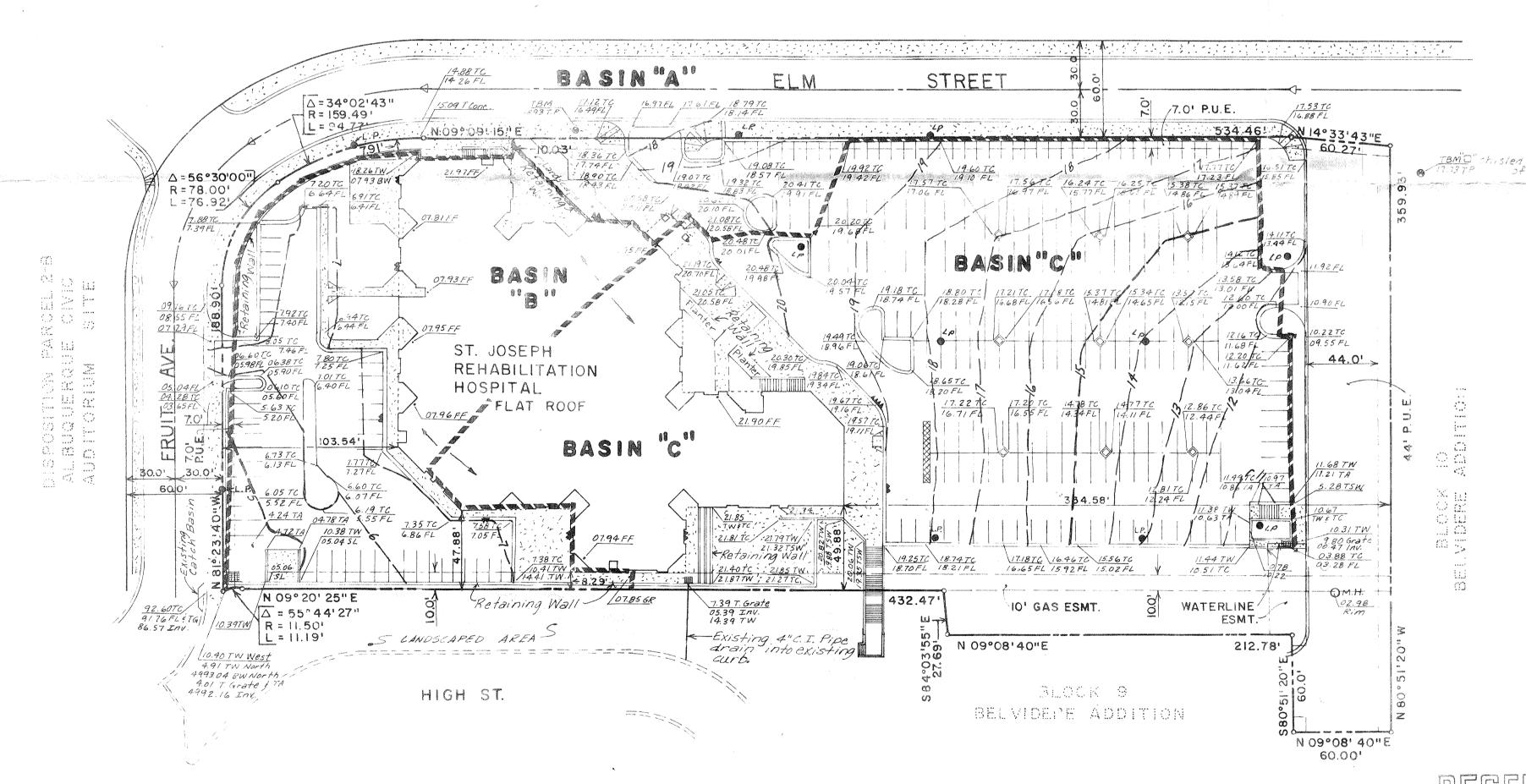
PROPERTY LINE

TEMPORARY BENCH MARK

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



I, John F. Esquibel, 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. Esquillel N.M.R.L.S. # 18949 -1/3/86 3/8/89 JANO J 1990) 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.



